ARCADIS Design & Consultancy for natural and built assets

Bureau of Case Assignment & Initial Notice
Site Remediation Program
New Jersey Department of Environmental Protection
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Trenton, New Jersey 08625-0420

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ENVIRONMENT

Subject:
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
NJDEP PI# 004156
REMEDIAL INVESTIGATION REPORT
NJDEP CASE #s 04-08-02-2350-16 & 10-04-16-1649-11

Date:
August 16, 2017

Contact:
Glenn Palmer

Phone:
732-236-2294

Email:
glenn.palmer@arcadis.com

Our ref:
NP000603.0014

To Whom it May Concern:

Arcadis U.S., Inc. on behalf of PSEG Nuclear, LLC (PSEG) herby transmits this Remedial Investigation Report for activities performed at PSEG Salem Generating Station. This report summarizes the soil and groundwater remedial investigation activities performed as part of the NJDEP Case Nos. 04-08-02-2350-16 and 10-04-16-1649-11.

Should you have any questions, or require additional information, please contact Helen Gregory at 856-339-1341 or the Licensed Site Remediation Professional on record, Gregory Albright at 609-366-9067.

Sincerely,

Arcadis U.S., Inc.

Glenn Palmer
Senior Scientist

New Jersey Department of Environmental Protection
Site Remediation Program

COVER/CERTIFICATION FORM

(Submit with Remedial Phase Report, Receptor Evaluation, and CEA Forms)

Date Stamp
(For Department use only)

SECTION A. SITE INFORMATION

Site Name: Salem Generating Station

AKAs: PSEG Nuclear

Street Address: PO Box 236

Municipality: Hancocks Bridge (*Township, Borough or City*)

County: Salem Zip Code: 08038

Program Interest (PI) Number(s): 004156

Case Tracking Number(s) for this submission: 04-08-02-2350-16 and 10-0416-1649-11

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2: 08/02/2004

State Plane Coordinates for a central location at the site: Easting: 199,503 Northing: 230,881

List current Municipal Block and Lot Numbers of the Site:

Block # 26	Lot #(s) 4.01	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)

SECTION B. SUBMISSION STATUS

1. Indicate how the Electronic Data Deliverable (EDD) for this submission is being provided to the NJDEP:
   - ☒ Via Email at srpedd@dep.state.nj.us (attach NJDEP confirmation email); or
   - ☐ CD (attach to this submission)
   - ☐ Not Applicable – No EDD
2. Complete the following Submission and Permit Status Table:

Remedial Phase Documents	N/A	Included in this Submission	Previously Submitted	Date of Submission	Date of Revised Submission	Date of Previous NJDEP Approval	Date of Document Withdrawal
Preliminary Assessment Report	☐	☐	☒	01/28/2005			
Site Investigation Report	☐	☐	☒	01/28/2005			
Remedial Investigation Report	☐	☒	☐	06/03/2005			
Remedial Action Work Plan	☐	☐	☒	06/03/2005			
Remedial Action Report	☒	☐	☐				
Response Action Outcome	☒	☐	☐				
Other Submissions							
Alternative Soil Remediation Standard and/or Screening level Application Form	☒	☐	☐				
Case Inventory Document		☒					
Classification Exception Area / Well Restriction Area (CEA/WRA)	☐	☒	☐				
Discharge to Ground Water Permit by Rule Authorization Request	☒	☐	☐				

IEC Engineered System Response Action Report	☒	☐	☐				
Immediate Environmental Concern Report	☒	☐	☐				
LNAPL Interim Remedial Measure Report	☐	☐	☒	06/03/2005			
Public Notification	☐	☐	☒	01/17/2017			
Receptor Evaluation	☐	☒	☐	02/25/2011			
Technical Impracticability Determination	☒	☐	☐				
Vapor Concern Mitigation Report	☒	☐	☐				
Permit Application – list:	☐						
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
Radionuclide Remedial Action Report	☒	☐	☐				
Radionuclide Remedial Action Workplan	☒	☐	☐				
Radionuclide Remedial Investigation Report	☒	☐	☐				
Radionuclide Remedial Investigation Workplan	☒	☐	☐				

SECTION C. SITE USE

Current Site Use: (*check all that apply*)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Agricultural
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Other: _____

Intended Future Site Use, if known: (*check all that apply*)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Future site use unknown
- ☐ Other: _____

SECTION D. CASE TYPE: (*check all that apply*)

- ☐ Administrative Consent Order (ACO)
- ☐ Brownfield Development Area (BDA)
- ☐ Child Care Facility
- ☐ Chrome Site (Chromate chemical production waste)
- ☐ Coal Gas
- ☐ Due Diligence with RAO
- ☐ Hazardous Discharge Remediation Fund (HDSRF) Grant/Loan
- ☐ ISRA
- ☐ Landfill (SRP subject only)
- ☐ Regulated Underground Storage Tank (UST)
- ☐ Remediation Agreement (RA)/Remediation Certification
- ☐ School Development Authority (SDA)
- ☐ School facility
- ☐ Spill Act Defense – Government Entity
- ☒ Spill Act Discharge
- ☐ UST Grant/Loan
- ☐ Other: _____

Federal Case (*check all that apply*)

☐ RCRA GPRA 2020 ☐ CERCLA/NPL ☐ USDOD ☐ USDOE

1. Is the party conducting remediation a government entity? ..... ☐ Yes ☒ No

If "Yes," check one: ☐ Federal ☐ State ☐ Municipal ☐ County

SECTION E. PUBLIC FUNDS

Did the remediation utilize public funds? ..... ☐ Yes ☒ No

If "Yes," check applicable:

- ☐ UST Grant
- ☐ HDSRF Grant
- ☐ Spill Fund
- ☐ UST Loan
- ☐ HDSRF Loan
- ☐ Schools Development Authority
- ☐ Brownfield Reimbursement Program
- ☐ Landfill Reimbursement Program
- ☐ Environmental Infrastructure Trust

SECTION F. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: PSEG Nuclear, LLC

Representative First Name: David Representative Last Name: Mannai

Title: Senior Director Regulatory Operations

Phone Number: (856) 339-2061 Ext: Fax:

Mailing Address: Alloway Creek Neck Rd.

City/Town: Hancocks Bridge State: NJ Zip Code: 08038

Email Address: David.Mannai@pseg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 8/14/17

Name/Title: David Mannai/Sr. Dir. Regulatory Operations

For CEA Submissions:

☒ Check this box if the person above is also the property owner of the site or their representative. If this person is not the site property owner, please ensure the site property owner's name and address is in the first line of the table in Section E.2 of the Classification Exception Area / Well Restriction Area (CEA/WRA) Fact Sheet Form.

SECTION G. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 585761

First Name: Gregory Last Name: Albright

Phone Number: (609) 366-9067 Ext: Fax: (609) 860-8007

Mailing Address: 6033 Long Breach Boulevard

City/Town: Long Beach Township State: NJ Zip Code: 08008-3738

Email Address: gregory.albright@arcadis-us.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with section 14 of P.L.2009 c.60 (N.J.S.A. 58:10C-14), and paragraphs (1) and (2) of subsection b. of section 30 of P.L.2009 c.60 (N.J.S.A. 58:10B=1.3b(1) and (2)).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☒ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: Date: August 16, 2017

LSRP Name/Title: Gregory R. Albright / Principal Geologist

Company Name: Arcadis U.S., Inc.

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Case Name: Salem Generating Station

PI #: 004156

IMPORTANT: *1) Do not delete or copy and paste across multiple columns because it can disrupt hidden equations.*
2) If pasting from a Word document, use the Paste option: ***Match Destination Formatting***
3) If the text turns red you have exceeded the character limit for that column

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
Unit 1 Diesel Release	Storage tank and appurtenance - Piping, above/below ground pump station, sump/pit	Area includes piping that supplies diesel from bulk storage tanks to diesel/generator storage tanks	Yes	RAR	2/6/2006	04-08-02-2350-16		Ground Water	VO	BN		Remediation Standards	Ground Water		LNAPL skimming				On August 2, 2004, site workers observed a diesel odor in a catch basin. Source investigation focused on underground piping that supplies diesel from bulk storage tanks to diesel/generator tanks. In January 2005, an RIWP was submitted to NJDEP. A Site Investigation Report was submitted in January 2005. A Remedial Investigation Report and interim RAR submitted in June 2005. In February 2006, PSEG submits a Remedial Action Report. On March 24, 2008, NJDEP approves semi-annually groundwater monitoring. On June 21, 2010, NJDEP issues a NOD to PSEG requiring installation of a shallow well near Well AI for further delineation. In December 2010, PSEG installs Well CG, no SPH detected.
Unit 2 Diesel Release	Storage tank and appurtenance - Piping, above/below ground pump station, sump/pit	Area includes a historical release caused by overflow from a bulk storage AST system	Yes	RAW	9/9/2011	10-04-16-1649-11		Soil	TPHC			Remediation Standards	Ingestion/Dermal						On April 16, 2010. diesel odors and staining are observed in a soil boring during a independent investigation. On July 12, 2010, PSEG submitts Site Investigation / Remedial Investigation Workplan. On May 17, 2011, PSEG submitted a Remedial Investigation Report. On September 9, 2011 a Remedial Action Workplan was submitted showing the excavation area around the TPHC impacts and indicating groundwater monitoring next to the soil impacts will continue until remedial action is completed. DEP approved both the RIR and the RAWP in a letter dated December 16, 2011.
Sodium Hypochlorite Release	Other areas of concern - Discolored area or spill area	A release of approximately 1,000 gallons of water containing sodium hypochlorite was release into the waters of the State.	No	RAO-A (Unrestricted Use)	4/25/2017	12-05-16-2210-44		None	Not Applicable			Remediation Standards							As discussed in the Preliminary Assessment / Site Investigation Report, no further action is required based on the surface water investigation results which show that either constituents were not detected or they were detected at concentratoins less than NJDEP Surface Water Ecological Screening Criteria. On April 25, 2017, the LSRP issued a RAO-A (unrestricted use) for the AOC indicating no impacts persist.
Ammonia in Groundwater	Other areas of concern - Open area away from production operations	Ammonia was detected in groundwater within an excavation at concentrations greater than NJDEP GWQC.	Yes	RAO-A (Unrestricted Use)	4/25/2017	12-07-11-1157-10		Ground Water	Other			Remediation Standards	Ground Water		No Remedial Action				As discussed in the Preliminary Assessment / Site Investigation Report, ammonia, total dissolved solids, and sodium were detected at concentrations greater than NJDEP GWQS. Additional groundwater investigation was conducted as part of a remedial investigation. The results presented in the RIR show the source of the COCs is naturally occuring background conditions. On April 25, 2017, the LSRP issued a RAO-A (unrestricted use) for the AOC indicating the COCs are associated with background conditions.
Vegetable Oil Release Area	Environmental media - Media Surface water	One pint of hydro safe hydraulic (vegetable) oil was released from the Circulating Water Intake Structure trash rakes into the Delaware River.	No	No Sampling Trigger	4/14/2015	14-04-16-0922-51		None	Not Applicable			Remediation Standards							As discussed in the Preliminary Assessment / Site Investigation Report, a leak occurred from a trash rake hydraulic hose located within circulating water intake structure. The leak released approximately one pint of vegetable based oil into the Delaware River. Sampling was not performed based on the emulsification and breakdown of the oil. The report recommended no additional investigation is required. On April 14, 2015, the site's LSRP (Gregory Albright) submitted the PA/SIR to the NJDEP via email following a conversation with NJDEP who instructed him that the NJDEP closed out the case. The NJDEP instructed PSEG that no further action is required for this AOC.

ARCADIS Design & Consultancy for natural and built assets

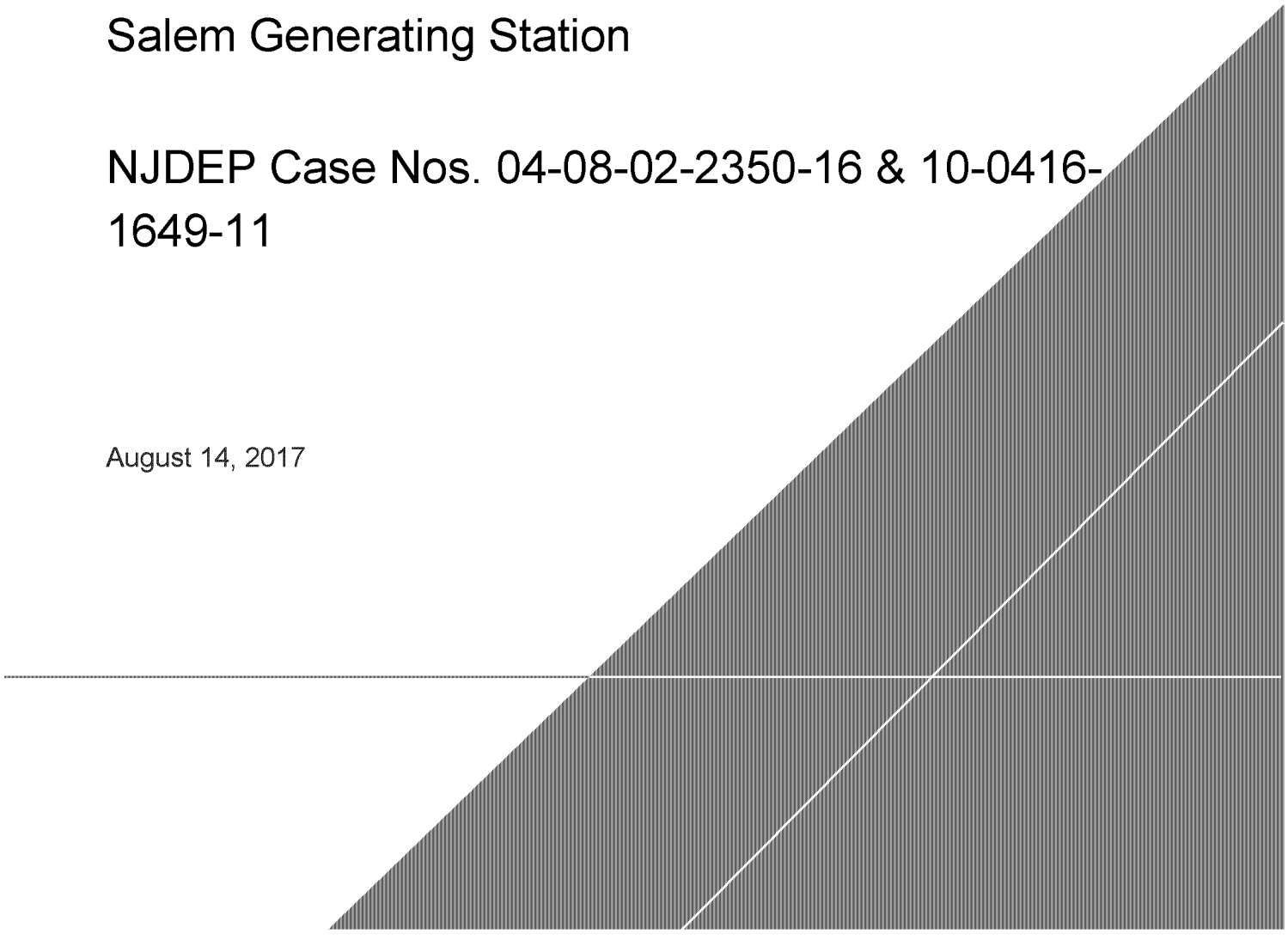
PSEG Nuclear, LLC

REMEDIAL INVESTIGATION REPORT

Salem Generating Station

NJDEP Case Nos. 04-08-02-2350-16 & 10-0416-1649-11

August 14, 2017



REMEDIAL INVESTIGATION REPORT

Salem Generating Station

Prepared for:
PSEG Nuclear, LLC

Glenn C. Palmer
Senior Scientist

Jonathan Shafer
Project Scientist

Ankit Balaria
Staff Engineer

Prepared by:
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Our Ref.:
NP000603.0015

Date:
August 14, 2017

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1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis), on behalf of PSEG Nuclear, LLC (PSEG), prepared this *Remedial Investigation Report* (RIR) to present the results of remedial investigation (RI) activities in association with the release of diesel fuel at the PSEG Salem Generating Station (SGS) Unit 1 (Incident No. 04-08-02-2350-16) and potential diesel fuel discharge at SGS Unit 2 (Incident No. 10-0416-1649-11). SGS and Hope Creek Generating Station (HCGS) (collectively, the Station) are located on Artificial Island in Hancocks Bridge, Salem County, New Jersey (**Figure 1**). The investigation areas are shown on **Figure 2**.

The remedial investigation for the SGS Unit 1 release (Incident No. 04-08-02-2350-16) was conducted in accordance with the Remedial Investigation Work Plan (RIWP) that was submitted to the New Jersey Department of Environmental Protection (NJDEP) in January 2005 (Arcadis 2005a) and the remedial investigation for the SGS Unit 2 potential release (Incident No. 10-0416-1649-11) was conducted in accordance with the Site Investigation Report (SIR)/Remedial Investigation Workplan (RIWP; Arcadis 2010) that was submitted to NJDEP in July 2010. The scope of work outlined in the RIWPs was designed to investigate the extent of diesel fuel constituents in the shallow, water-bearing unit at the SGS.

Results of the RI activities performed under the guidance and oversight of NJDEP (Case Manager, Linda Range) are summarized in this report. Details of these investigations were previously submitted to NJDEP. Relevant case history for SGS Unit 1 and Unit 2 is provided in **Appendices A** and **B**, respectively. NJDEP either conditionally approved the reports (March 14, 2006 NJDEP letter to PSEG) or approved the reports without comment (December 16, 2011 NJDEP approval letter). PSEG subsequently corrected all deficiencies without further comment from NJDEP (December 16, 2011 NJDEP approval letter), however, NJDEP administrative records do not accurately reflect the RIR was completed. Furthermore, NJDEP approved the SGS Unit 1 interim remedial measures (March 14, 2006 NJDEP letter to PSEG) and the SGS Unit 2 Remedial Action Work Plan (RAWP) (December 16, 2011 NJDEP approval letter). Additional detail on the case history (document submissions and approvals) is provided is Sections 1.1.1 and 1.1.2. On June 9, 2017 as directed by Raymond Strassler of NJDEP, PSEG developed this comprehensive RIR to document past activities so that the RIR recorded is administratively complete. Based on results of previous investigations, sufficient data has been collected to determine the extent of constituents of concern (COCs) in soil and groundwater. Additionally, with the submission of the RIR, PSEG satisfies the requirement to complete a remedial investigation for these cases.

The RI activities were performed in compliance with the NJDEP's Site Remediation Program's (SRP) requirements established in the Administrative Requirements for Remediation of Contaminated Sites (ARRCS) (N.J.A.C. 7:26C), the Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E) and the NJDEP's *Field Sampling Procedures Manual* last updated in April 2011. Arcadis' activities have been conducted under the supervision of a Licensed Site Remediation Professional (LSRP), Mr. Gregory Albright, P.G. (LSRP License No. 585761) of Arcadis, since being retained in 2012. This report has been prepared in accordance with N.J.A.C. 7:26E (NJDEP 2012).

Pursuant to the requirements of N.J.A.C. 7:26E (NJDEP 2012), the Cover/Certification Form and a Case Inventory Document (CID) are included at the front of the RIR. A copy of the Cover Form is provided in **Appendix C** also. The Receptor Evaluation Form is included in **Appendix D**.

1.1 Project Background

1.1.1 SGS Unit 1

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the stormwater collection system just to the south of the SGS Unit 1 Fuel Handling Building. Investigation of the catch basin, which is identified as "Catch Basin 27" on **Figure 2**, revealed the presence of a red-dyed diesel fuel (the red-dye is more typical of a recent release of diesel fuel). At the time, PSEG notified the NJDEP through its spill hotline (Incident No. 10-0416-1649-11).

To prevent the migration of diesel fuel within the stormwater collection system, the storm drains upstream and downstream of Catch Basin 27 were temporarily blocked to isolate the affected section of piping. Further, a cover was placed over Catch Basin 27 to prevent rain water from entering. Investigations of the remainder of the stormwater system indicated that the diesel fuel had not migrated beyond Catch Basin 27, no diesel fuel was released to the Delaware River, and the diesel fuel in the catch basin was removed.

Investigations into the source of the diesel fuel focused on the underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tanks to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. The location of the underground piping is shown on **Figure 2**. PSEG performed a pressure test on this underground piping. The results revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot section of piping, PSEG subcontracted Praxair Services, Inc. to perform a "Tracer Tight" gas analysis. The results of this test showed that the location of the leak was directly adjacent to Catch Basin 27. The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). Soil excavated from the piping area was stockpiled by PSEG pending waste characterization. Following characterization, the soil was disposed of by Clean Harbors. Separate-phase hydrocarbons (SPH) was observed on standing water within the excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation.

In November 2004, PSEG initiated remedial investigation and interim product recovery actions. In accordance with the scope of work presented within the RIWP (Arcadis 2005a), soil borings were advanced at locations downgradient of the source area to delineate the horizontal extent of diesel related COCs in soil. The soil borings were converted to monitoring/product recovery wells to facilitate the collection of groundwater samples and for the recovery of SPH, if present. Interim remedial actions completed to date in this area include the installation of a Spill Buster® Product Recovery System, a passive product skimmer, and the use of absorbent socks. In June 2005, PSEG submitted *Salem Unit 1 Remedial Investigation/Interim Remedial Action Report* (RIR/IRAR; Arcadis 2005b) to document the investigation findings and an update on the interim remedial action. The RIR/IRAR was conditionally approved by NJDEP, contingent with a well installation south of well AY. The requested well was installed and the well installation details were summarized in a Remedial Action Progress Report (RAPR)

submitted in February 2007 (Arcadis 2007). In the March 24, 2008 letter from the NJDEP to PSEG, NJDEP approves the February 2007 RAPR. On June 21, 2010, NJDEP issues a Notice of Deficiency requiring the installation of a well near well AI to delineate SPH. August 25, 2010 PSEG and NJDEP participate in a technical meeting to discuss the project status and path forward. In November 2011, PSEG submits a RAPR (Arcadis 2011a) including a summary of the installation of well CG. On December 16, 2011, NJDEP issues an approval of the November 2011 RAPR. No further indication of additional investigation or remedial action was mentioned from NJDEP. A summary of the RI activities, showing where delineation is achieved, are presented in Section 3.2.

1.1.2 SGS Unit 2

On April 16, 2010, while completing groundwater investigation activities associated with a separate and independent investigation, PSEG personnel observed suspected diesel-related odors and staining in soil and groundwater during the opening of a temporary utility clearance, identified as TW-2 on **Figure 2**. At this time, PSEG notified the NJDEP through its spill hotline (incident No. 10-0416-1649-11).

The temporary utility clearance consisted of a Schedule 40 PVC sleeve installed to an approximate depth of 10 feet bgs using vacuum excavation equipment. The utility clearance was installed to allow the safe advancement of direct-push borings for the collection of groundwater samples. During the advancement of the vacuum excavation, diesel fuel odors were noted and suspected petroleum hydrocarbon sheen was observed on the water once the water table was encountered. To facilitate the collection of a groundwater sample and to evaluate the presence of SPH at the location of TW-2, and subsequently at the locations of TW-37 and TW-50 (see **Figure 2**), PVC well screen was installed in lieu of the solid PVC sleeve. The three locations were then identified as temporary observation point TW-2, TW-37, and TW-50. Over the next several days, the temporary observation points were evaluated for the presence of SPH and groundwater samples were collected for laboratory analysis. The details and results of these initial groundwater investigation activities are provided in Section 3.

Investigations into the source of the suspected diesel fuel revealed the presence of the following components of the SGS Unit 2 Diesel Fuel Oil System within the vicinity of TW-2:

1. Diesel fuel above ground storage tanks (AST);
2. Diesel fuel underground piping;
3. An emergency fill valve; and;
4. An overflow tank.

The locations of these system components are identified on **Figure 2,** except for the Diesel fuel AST, which is located immediately south of the investigation area inside the Auxiliary Building. PSEG performed both a pressure test and a guided wave test on the underground piping and the results of the tests did not identify any integrity issues associated with the piping. In addition, initial soil and groundwater investigation activities were completed in association with the emergency fill valve and the overflow tank, at the three temporary observation points (TW-2, TW-37, and TW-50), and in an area that was excavated to expose the underground piping during the guided wave testing. The details and results of these investigation activities were provided in the July 12, 2010 SIR/RIWP (Arcadis 2010). Based on the results of the investigation activities, additional soil and groundwater investigation activities were conducted in accordance with SIR/RIWP as amended in a letter dated October 28, 2010 and verbally agreed upon in meeting with NJDEP on August 25, 2010. On May 17, 2011 and September 9, 2011,

PSEG submitted the SGS Unit 2 RIR and RAWP, respectively. On December 16, 2011, NJDEP approved both of these documents stating “The Department has determined that the submittals are in compliance with the TRSR, N.J.A.C. 7:26E and other applicable requirements.” A summary of the RI activities, showing where delineation is achieved, are presented in Section 3.3.

1.2 Report Purpose

The purpose of this RIR is to present the results of soil and groundwater investigation activities related to both SGS Units 1 and 2 investigations.

Samples were collected during the RI to determine the extent of constituents in soil and groundwater. The RI consisted of advancing soil borings, installing groundwater monitoring wells, and collecting groundwater samples.

This report presents relevant background information, the Station’s physical setting, a general profile of the investigation execution and results, and the RI findings and conclusions.

1.3 Report Organization

This RIR is organized as follows:

Section 2 – **Site Background**. This section provides an overview of the operating history of the Station, present a description of the Station, including climate and precipitation, regional and station specific geology, hydrogeology, topography and station drainage, surrounding site use, and information captured in the NJDEP-required receptor evaluation and ecological evaluation.

Section 3 – **Summary of Remedial Investigation**. This section presents the applicable regulatory requirements, the details and results of the remedial investigation activities which included groundwater sampling and soil sampling.

Section 4 – **Data Usability**. This section presents the details related to the data usability.

Section 5 – **Classification Exception Area (CEA).** This section provides information regarding the proposed CEA, including the fate and transport, timeframe of the CEA, and the horizontal and vertical extent.

Section 6 – **Regulatory Timeframe.** This section provides a summary of the regulatory timeframe for the station specific investigations.

Section 7 – **Conclusion**. This section summarizes the results of the remedial investigation activities and presents the nature and extent of COCs at the Station.

Section 8 – **References**. This section lists the references cited in this RIR.

2 SITE BACKGROUND

The following sections provide relevant information regarding the Station's operating history, physical setting, receptor evaluation, and ecological evaluation.

2.1 Operating History

PSEG operates two nuclear generating stations on an approximately 740-acre area of Artificial Island located in Hancocks Bridge, Lower Alloways Creek Township, Salem County, New Jersey: SGS and HCGS. Both SGS and HCGS are located on the eastern bank of the Delaware River. The Salem Generating Station encompasses an approximate 26-acre portion of Artificial Island.

SGS is composed of two nuclear generating units (Units 1 and 2). Commercial operations of Units 1 and 2 commenced in 1976 and 1981, respectively. The nuclear generating units operate as base load units with a combined generating capacity of approximately 2,400 mega-watts electric (MWe). Over its operational life, SGS has experienced no significant changes in its operation.

2.2 Physical Setting

The following sections provide information regarding the setting of the Station, including climate and precipitation, regional and station specific geology, hydrogeology, topography and station drainage, and surrounding site use.

2.2.1 Climate and Precipitation

The Station is located in the Southwest Climate Zone of New Jersey. In this zone, winds from the south bring high humidity and moderate temperatures, while proximity to the Delaware Bay moderates temperature extremes. Temperatures vary by season. The maximum expected high temperature for a given year is 100 degrees Fahrenheit (°F), while the minimum expected low temperature is -2°F.

Near the Station, summer temperatures, humidity, and precipitation are influenced by several water bodies (Delaware River, Delaware Bay, and Atlantic Ocean). As described below, summer winds are primarily from the south/southwest, which allows for considerable precipitation, frequently including local thunderstorms. During late summer and autumn seasons, hurricane-induced weather patterns occasionally cause heavy rainfall at the Station. Although the facilities have contingency plans that are implemented in preparation for the sustained high winds and heavy precipitation associated with hurricane-induced weather patterns, winds seldom reach hurricane force in this area.

Regional winter temperatures are influenced and moderated by the Appalachian Mountains to the west as well as by the nearby water bodies. Winter storms can produce heavy snowfalls in this region. Considered together, the information presented above indicates that the regional climate is considered to be humid, temperate, and influenced by its proximity to the Delaware Bay.

Wind direction data collected from several nearby sources were used to define a general wind profile for the Station. In general, the wind direction at this location is from the northwest during the autumn, winter, and spring months and generally from the south during the summer months. The historical maximum

average wind speed (recorded in 1987) for the Station is 41 miles per hour. The average annual precipitation total is generally in the range of 40 inches.

2.2.2 Geology

The Station is located in the Atlantic Coastal Plain Physiographic Province. This area is characterized by relatively flat to gently undulating terrain, underlain by unconsolidated sediments that increase in thickness to the southeast. These sediments range in age from Holocene to Cretaceous (0 to 146 million years old); primarily comprise clay, silt, sand, and gravel; and are generally classified as continental, coastal, or marine in nature. Published geologic mapping indicates that the basement rock beneath these sediments (in the area of the SGS) is metamorphic schist of the Wissahickon Formation, which is Pre-Cambrian in age (570 to 900 million years old) (United States Geological Survey [USGS] 1999).

Beginning in the early twentieth century, the U.S. Army Corps of Engineers (USACE) created the land where the Station is located. Artificial Island was created by depositing hydraulic dredge spoils (hydraulic fill) from the shipping channel in the Delaware River Estuary in to a diked area established around a natural sand bar in the estuary. The Station is located on that portion of Artificial Island that borders the Delaware River Estuary. This fill consists of a layer of soft gray to black organic-rich clays and silts.

The unconsolidated overburden at the Station consists of approximately 25 feet of dredge spoils (hydraulic fill), engineered fill material, tidal marsh deposits, and riverbed deposits. Structural (engineered) fill material was placed on Artificial Island to provide a more stable base than the dredge spoil material to enable construction of the generating units (Arcadis 2006b). Due the length of time and volume required for construction, different sources of fill were used for SGS and HCGS (Dames & Moore June 20, 1972).

The construction of Station facilities required the excavation of dredge spoils in areas requiring structural support. The more recently constructed station (HCGS) used fine sand with a density compacted to 98 percent of an established proctor to replace the dredge spoils. At SGS fine sand was used, with a density compacted to 98 percent of an established proctor to replace the dredge spoils present at land surface in areas requiring structural support for key operational areas; however, in non-essential areas, a 95 percent compacted material was used (Dames & Moore August 28, 1968). Additionally, much of the material (in non-key areas) at SGS has a higher gravel content than the 98 percent compacted material. Structural fill material was encountered in several of the borings located closest to facility buildings. Where encountered, it was typically less than 12 feet thick. The hydraulic conductivity of this material is low, based on the data collected during well installation activities, the composition, and compaction of the engineered fill. As such, the ability of this material to transmit a significant quantity of groundwater is low (Arcadis 2006a).

The engineered fill, tidal marsh deposits, and riverbed deposits combine to form the shallow, water-bearing unit. Beneath the engineered fill and dredge spoil material, in order of increasing depth, are the following geologic formations (USGS 1999):

- *Riverbed Deposits*. Overlying the erosional surface of the confining unit are Quaternary-age riverbed deposits that represent native conditions present in the period before the USACE designated Artificial Island as a Dredge Spoil Area. Direct-push soil borings advanced during pre-facility construction proved that, in the immediate station vicinity, these sediments consist of gray to light brown, medium-

grained, medium-dense sand, with a trace of fine gravel in places. Note that during construction of the Station, the riverbed deposits were removed from the footprint of structures built to be resistant to seismic events.

The riverbed deposits range in thickness from 15 feet thick at well BP (where the sands have filled paleo-channels) to 2 feet thick at well BR. The riverbed deposits are either not present or very thin (several inches) in locations where the underlying confining unit exhibits topographic highs. The riverbed deposits represent the shallowest saturated unit having appreciable hydraulic conductivity in the shallow subsurface at the Station and, where of sufficient thickness, transmit the greatest volume of shallow groundwater beneath and around the containment areas. The thickness and topography of the riverbed deposits are described in prior reports (Arcadis 2004, 2006a, 2006b).

- *Confining Unit*. The confining unit near the SGS consists of dark gray clay with some silt and layers of fine-grained micaceous quartz sand, and is approximately 15 feet thick. The confining unit occurs from approximately 40 to 55 feet bgs (USGS 1999).
- *Basal Sands*. The basal sand is a fine to medium micaceous sand with varying silt content that coarsens with depth. The unit is approximately 15 feet thick. This unit occurs from approximately 55 to 70 bgs (USGS 1999).
- *Vincentown Formation*. The Vincentown Formation occurs from approximately 70 to 135 feet bgs and consists of a competent, greenish-gray, fine to medium sand with some silt, shell fragments, feldspar, and glauconite (USGS 1999).
- *Hornerstown Formation*. The Hornerstown Formation is a highly glauconitic, clayey, with dark green sand that contains small percentages of quartz grains and apatite pellets. The Hornerstown Formation unconformably overlies the Navesink Formation and is unconformably overlain by the Vincentown Formation. The Hornerstown Formation occurs from approximately 135 to 145 feet bgs (USGS 1999).
- *Navesink Formation*. The Navesink Formation is characteristically a glauconitic sand with varying amounts of silt and clay. It is brown or dark green to blue-black and has a shell bed at its base. The upper part of the formation is less glauconitic, more clayey, more micaceous, and lighter in color. The Navesink Formation conformably overlies the Mount Laurel Sand. The contact with the overlying Hornerstown Formation is gradational. The Navesink Formation is encountered from approximately 145 to 170 feet bgs (USGS 1999).
- *Mount Laurel-Wenonah Formation*. The Mount Laurel-Wenonah Formation consists of a clayey, medium-grained sand with some gravel, feldspar, and glauconite. Near the SGS, the Mount Laurel-Wenonah Formation is approximately 100 feet thick and occurs from 170 to 270 feet bgs (USGS 1999).

Beneath the Mount Laurel-Wenonah Formation, more than 1,000 feet of Upper Cretaceous sediments overlie the crystalline bedrock. The Upper Cretaceous sediments include, in descending order: Marshalltown Formation (gray, fine sand); Englishtown Formation (yellow-brown, fine sand); Woodbury Clay (dark gray, stiff, silty clay); Merchantville Formation (dark green clay); Magothy Formation (coarse to fine silt with little fine sand); and Raritan and Potomac formations (interbedded sand, gravelly sand, and clay) (USGS 1999). **Figure 3** provides a regional cross section depicting these geologic units.

2.2.3 Hydrogeology

Four primary water-bearing zones underlay the Station, the shallow water-bearing unit and three aquifers: 1) Vincentown Formation, 2) Mount Laurel-Wenonah Formation, and 3) Potomac-Raritan-Magothy Formations. The physical characteristics and some hydrogeological characteristics of the aquifers are discussed in previous sections of this report. The shallow water-bearing zone is the primary zone of concern regarding this investigation. This unit consists of dredge spoils, engineered fill, tidal marsh deposits, and discontinuous quaternary riverbed deposits and is present between approximately 10 to 40 feet bgs. In general, the dredge spoils, engineered fill, and tidal marsh deposits are characterized by high porosity and low permeability. Occasional lenses of sand within the dredge spoils may contain perched water within a few feet of the ground surface. Groundwater in the shallow water-bearing zone is generally brackish, with flow generally to the southwest and a gradient of approximately 0.007 foot per foot.

2.2.3.1 Groundwater Elevations

Groundwater elevations across the Station generally range between 1 and 7 feet above mean sea level (amsl); however, the Station's many surface and subsurface features influence groundwater elevations on a local level. An example of this influence is observed when comparing groundwater elevations inside and outside the cofferdam structure at SGS. The cofferdam was constructed prior to building SGS and remains in place. The cofferdam, made of concrete and steel, inhibits the horizontal flow of groundwater within and around it. When groundwater levels are elevated, groundwater may flow radially in all directions over the top of the structure (e.g., overflowing bathtub effect). But when water levels are lower, the flow directions may be more limited as a result of the subsurface structures. In general, the subsurface structures (concrete and steel) may result in higher groundwater elevations within the cofferdam than those observed outside the feature.

2.2.3.2 Groundwater Use

As described above, several geologic formations beneath Artificial Island contain transmissive units and are capable of supplying a useable quantity of water. The shallow, water-bearing unit within the shallow and manmade geologic units beneath the Station is not suitable for potable or non-potable purposes because groundwater is marginally transmissive and of poor water quality. As such, the shallow, water-bearing unit is not used as a water source or anticipated to become a usable water source. The Vincentown Formation supplies potable water to domestic wells located upgradient in eastern Salem County, where groundwater in the aquifer is moderately hard with high iron content. Saltwater intrusion into the aquifer occurs along the Delaware River Estuary in western Salem County, thus rendering water quality brackish and non-potable. In general, groundwater in the Vincentown Formation beneath the Station has relatively high concentrations of chloride and therefore is not adequate for use as a potable water supply. Moreover, no public water supply wells or private wells in the general Station vicinity (within 3.5 miles) are completed in the Vincentown Formation.

The Mount Laurel-Wenonah aquifer occurs from approximately 170 to 270 feet bgs. SGS has emergency fire-water supply wells screened in this formation.

The deepest of the water-bearing formations near the Station is the Potomac-Raritan-Magothy (PRM) Formation, which is bounded by the Merchantville Formation above and by the Wissahickon Schist

basement rock below. The crystalline basement rock of the Wissahickon Schist is not considered an aquifer, because it transmits water only locally due to secondary porosity (i.e., fractures and faults). In Salem County, the PRM Formation occurs at depths in excess of 500 feet bgs. This is the primary water-producing aquifer for southern New Jersey. Station water supply wells are screened in the PRM at depths ranging from 800 to 1,100 feet bgs. No off-site public water supply wells or private wells are located within 1 mile of the Station.

2.2.4 Topography

The topography at the Station is relatively flat. Topographic contours for the Station are included on **Figure 2**. Stormwater is managed in accordance with the SGS's New Jersey Pollution Discharge Elimination System (NJPDES) permit (NJPDES Permit NJ0005622) and Stormwater Pollution Prevention Plan. Stormwater is collected in storm drains and routed to the Delaware River for discharge. Stormwater from the major petroleum storage and handling areas is routed to the oil/water separators prior to discharge.

2.2.5 Surrounding Site Use

PSEG owns and/or controls an approximately 740-acre area of Artificial Island that includes SGS and HCGS (**Figure 4**). This area contains SGS, HCGS, and administrative and support facilities used by both SGS and HCGS, including the Salem and Hope Creek Switch Yards, administrative support buildings, and 367 acres of uncommitted, undeveloped land. The zoning classification for generating facilities is industrial. The land adjacent to generating facilities is zoned as wetlands.

The Station is located on a portion of Artificial Island that borders the Delaware Estuary. The Delaware Estuary, in the location of the Station, is a tidal, brackish river, located in an area designated as Zone 5 by the Delaware River Basin Commission (DRBC). The entire area of Artificial Island is within the Delaware River's estuarine zone and is defined by the DRBC as a "tidally influenced interface between fresh water and salt water." The salinity line, as tracked by DRBC and presented in the 2008 State of the Basin Report (DRBC 2008) hovers around the Pennsylvania-Delaware state line.

Beginning in the early twentieth century, the USACE created Artificial Island by depositing hydraulic dredging spoils within a diked area established around a natural sand bar that projected into the Delaware River. Prior to construction of the Station, the property was vacant, undeveloped, low-lying land.

2.3 Receptor Evaluation

PSEG performed a receptor evaluation in accordance with the requirements specified in N.J.A.C. TRSR 7:26E1.15 through 1.19. An initial receptor evaluation was submitted in 2011. An updated receptor evaluation for the Site is included as **Appendix D**. The receptor evaluation concluded that while there are environmentally sensitive areas near the project area, none are located within the project area, and delineation is completed prior to impacting soil or groundwater encroaching on the environmentally sensitive areas. The following sections present the results of the current receptor evaluation:

2.3.1 On-Site and Surrounding Properties Use

The Station is located on a 740-acre parcel adjacent to a brackish reach of the Delaware River. The Station is bounded to the south and west by the Delaware River, to the north by a USAC dredge spoils area, and to the east by undeveloped land. Land surrounding the Station is zoned for industrial, residential, and agricultural uses. However, there are no homes located within several miles of the Station. As shown on **Figure D-1 (Appendix D)**, no natural heritage priority sites are located within one-half mile of the Station.

As part of the evaluation of environmentally sensitive areas, the NJDEP GIS database was searched. The following data layers were downloaded for land within approximately one-half mile of the Station:

- Coastal centers
- Hydrography
- Natural Heritage priority sites
- Lakes
- 1995/97 Land use/land cover
- Linear wetlands
- Streams
- Wetlands

Environmentally sensitive areas located within and adjacent to the Station were characterized during a visual reconnaissance conducted on April 26, 2005. Environmentally sensitive areas identified within the Station property boundary using Geographic Information System (GIS) information downloaded from NJDEP include forests, surface water and wetlands as shown on **Figure D-1** (**Appendix D**). Environmentally sensitive areas located within 200 feet of the Station property boundary include the Delaware River, the associated riparian buffer along the river, forest, and wetlands.

2.3.2 Groundwater Use

Several geologic formations beneath Artificial Island contain transmissive units and are capable of supplying a useable quantity of water. The shallow, water-bearing unit within the shallow and manmade geologic units beneath the Station is not suitable for potable or non-potable purposes because groundwater is marginally transmissive and of poor water quality (high salinity and total dissolved solids). Several hundred feet of overburden exists between the shallow, water bearing zone and the aquifers that the Station's potable wells are screened. As such, potable well sampling is not warranted. The location of the Station's potable wells is shown on **Figure D-2** (**Appendix D**).

2.3.3 Vapor Intrusion

Structural as-built drawings indicate the concrete foundation of the facility extends to a depth of approximately 35-feet bgs compared the SPH being present at 4-feet bgs. Therefore, SPH and groundwater are not present beneath the buildings adjacent to the measurable SPH and vapors have nowhere to accumulate. Additionally, the use of the SGS Auxiliary Building required the construction to

include excessively thick concrete construction. Based on the construction of the generating station structures, the nature of the contaminants (diesel) and absence of shallow groundwater or SPH under the buildings, a vapor intrusion investigation is not warranted for the site.

2.3.4 Ecological Evaluation

In accordance with N.J.A.C. 7:26E-3.11, a baseline ecological evaluation was performed to identify the following: 1) constituents of potential environmental concern in soil and groundwater; 2) environmentally sensitive areas; and, 3) potential contaminant migration pathways. The results of the baseline ecological evaluation, which were presented in Appendix G of the SGS Unit 1 RIR (Arcadis 2006c) and are included in **Appendix A**, concluded that no further ecological evaluation is warranted.

3 SUMMARY OF REMEDIAL INVESTIGATION ACTIVITIES

The following sections provide summary of the RI activities completed at the Station and the analytical results.

3.1 Remedial Goals

This RI was performed using NJDEP's March 4, 2014 Groundwater Quality Criteria for Class IIA aquifers (GWQC) (N.J.A.C. 7:9C) and soil remediation standards (N.J.A.C. 7:26D) as the applicable remediation goals. Consistent with NJDEP guidance, total petroleum hydrocarbon (TPHC) concentrations for #2 fuel oil are equivalent to extractable petroleum hydrocarbon (EPH) values.

3.2 SGS Unit 1

The results of SGS Unit 1 RI field activities are documented in SGS Unit 1 RIR (Arcadis 2005b), February 2007 Remedial Action Progress Report (RAPR; Arcadis 2007), and November 2011 RAPR (Arcadis 2011a). These activities and conclusions were ultimately approved by NJDEP in letters dated, March 14, 2006, March 24, 2008, and December 16, 2011. Since initial site characterization activities began in 2004, PSEG has implemented a groundwater monitoring program. Prior to the implementation of the LSRP program, groundwater monitoring results were documented and submitted the NJDEP in RAPRs. Subsequently, the LSRP reviews the results and RAPRs are kept on file. The following sections provide a summary of the results of the RI investigation activities and the current groundwater quality conditions. Specific details of the investigation activities and NJDEP correspondence are provided in **Appendix A**.

3.2.1 Investigation Activities

As presented in the RIWP (Arcadis 2005a), the remedial investigation conducted in association with the diesel release had the following four primary goals: 1) to characterize the vertical and horizontal extent of diesel-related constituents in soil; 2) to determine if SPH was present on the water table and to what extent; 3) to characterize the extent of dissolved-phase diesel-related constituents in groundwater downgradient of the release area; and, 4) to determine the need for further action. The scope of work developed to achieve these objectives included the advancement of four soil borings at various locations downgradient of the source of the diesel release for collecting soil samples, the installation of eight monitoring wells (well AU, well AV, well AW, well AY, well AZ, well BV, and well CG), and the monitoring of water/SPH levels and the collection of groundwater samples from six monitoring wells (well AV, well AY, well AZ, well BV, and well CG). The cross section view for the investigation area is presented on **Figures 5** and **6**.

3.2.1.1 Soil

On November 8 and 9, 2004, PSEG advanced four soil borings (D-2 through D-5) for the collection of soil samples. The locations of the soil borings relative to the source of the diesel release are identified on **Figure 7**. Due to the presence of diesel-fuel oil, soil samples were not collected from the source area soil

boring (D-1). Prior to initiating soil sampling activities, a water level measurement was obtained from well X, located adjacent to the northwest corner of the Fuel Handling Building (see **Figure 8**) to determine the appropriate depth for sample collection. Soil samples were obtained from the borings at a depth of six inches above the water table as measured in well X. A second sample was obtained from soil boring D-4 to evaluate the vertical distribution of diesel related COCs in soil.

Due to the extensive, facility-critical infrastructure within the area of investigation, both the boring locations and advancement methods were limited. Soil borings D-2 through D-5, advanced at accessible locations beyond the source area of the diesel release to the south and west, were advanced using vacuum excavation equipment to ensure that, if encountered, subsurface infrastructure would not be damaged. Soil samples were obtained from each boring ahead of the vacuum excavation using a hand auger. The soil samples were submitted for laboratory analysis of TPHC. In accordance with the then current TRSR (N.J.A.C. 7:26E-2.1(d)), soil samples were also placed on hold for volatile organic compounds (VOCs) analysis pending the TPHC results. Based on the results of the TPHC analysis (**Figure 7**), analysis for VOCs was not required.

3.2.1.2 Groundwater

The investigation of groundwater consisted of the installation of eight monitoring wells (well AU, well AV, well AW, well AY, well AZ, well BV, and well CG) within and downgradient of the source area to evaluate the extent of dissolved-phase and SPH. The locations of the groundwater monitoring wells are shown on **Figure 9**. Following installation, groundwater monitoring (groundwater elevation measurements, SPH gauging and groundwater sampling) and interim SPH recovery activities were initiated. Groundwater monitoring and SPH recovery activities have continued since the completion of the RI activities. The following sections provide a summary of the groundwater investigation details.

3.2.1.2.1 Monitoring Well Installation

On November 8 and 9, 2004, PSEG installed monitoring wells well AU, well AV, well AW, well AY, and well AZ (Arcadis 2005b). In response to comments received on the SGS Unit 1 RIR (NJDEP 2006), PSEG installed monitoring well BV (Arcadis 2007) to monitor groundwater quality downgradient of the SPH plume and along the migration pathway (Service Water Lines). Additionally, in response to a Notice of Deficiency (NJDEP 2010) PSEG installed monitoring well CG. Monitoring wells were installed by a New Jersey licensed driller in accordance with NJAC 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001. Upon completion, each monitoring well was properly developed to remove fine-grained materials that may have settled in and around the monitoring well during installation, and to ensure that the monitoring well is hydraulically connected to the formation. All monitoring wells were surveyed by a New Jersey licensed surveyor. Additional details regarding the installation are provided in the SGS Unit 1 RIR (Arcadis 2006c). The purposes for the monitoring wells are as follows:

- Well AU was installed closest to the initial source of the diesel fuel oil release. Well AU was installed within the excavation opened to expose and repair the underground piping prior to backfilling. Due to the presence of extensive subsurface infrastructure encountered during the excavation, well AU could not be installed beyond a depth of approximately seven feet bgs. SPH was observed within the open excavation prior to backfilling and in well AU after installation was completed. The primary

purpose of well AU has been to facilitate SPH recovery using the Spill Buster® active product recovery unit. A summary of the SPH recovery efforts are presented in Section 3.2.3;

- Wells AW, AY, and BV were installed to delineate the extent of SPH downgradient of the source area based on knowledge of groundwater flow direction obtained from previously completed and unrelated investigations. Following installation, SPH fuel was detected in well AW. In response, a passive skimmer recovery device was installed within well AW. A summary of the SPH recovery efforts in well AW are presented in Section 3.2.3;

- Wells AV, AZ, and X were installed to horizontally delineate the extent of dissolved-phase constituents in groundwater adjacent to the source area.

- Well CG was installed following the detection of SPH in adjacent well AI. Well AI was installed as part of a separate and independent investigation. Further explanation of this detection is described in Section 3.2.3.

3.2.1.2.2 Groundwater Monitoring

Since monitoring wells were installed, PSEG has implemented a groundwater monitoring program. In 2004 and 2005 groundwater monitoring was performed quarterly, from 2006 through 2016 groundwater monitoring has been performed on a semi-annual basis, and in 2017 groundwater monitoring will be performed annually. Groundwater monitoring events consist of water level and SPH thickness measurements and groundwater sampling. The groundwater monitoring program has largely remained consistent with the exception of expanding the program to include collecting samples from wells AD, AB and AT as described below. The following sections provide summary of monitoring activities completed in 2016 to document that conditions remain protective of human health and the environment and delineation is still complete.

With the exception of a onetime detection in well AZ, measurable SPH is limited to the area of well AU and downgradient towards well AW. On February 16, 2005, PSEG initiated the operation of a groundwater remediation system (GRS) through groundwater extraction associated with an ongoing and unrelated groundwater remediation. The GRS included the use of well AO located approximately five feet to the east of well AZ. The location of well AO and AZ are shown on **Figure 9**. Due to the operation of the GRS and the resulting groundwater influence, SPH migrated in the direction of well AO and 0.09 feet of SPH was observed in well AZ. Immediately (i.e., same day) following the detection of SPH in well AZ, PSEG ceased the operation of the groundwater extraction pump in well AO. An organophilic adsorbent sock was placed in well AZ to recover any accumulated SPH. Since pumping from well AO was suspended, SPH has not been detected in well AZ. Sorbent socks have been deployed in well AZ to recover any residual SPH that may still be present.

Due to the sensitive nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples were collected from monitoring wells utilizing the low-flow sampling methodology. Samples collected from pumping wells, are collected directly from the discharge. Sample collection procedures, as well as quality control/quality assurance (QA/QC) sampling requirements, are outlined in the quality assurance project plan (QAPP) provided in **Appendix E**. Groundwater samples are

only collected from monitoring wells that do not indicate a measurable thickness (i.e., greater than 0.01 feet) of SPH. Well AU and well AW are not sampled due to the presence of SPH in these wells. Groundwater samples are analyzed for priority pollutant list VOCs and semi-volatile organic compounds (SVOCs).

On February 24, 2012, Arcadis personnel observed odors from the discharge water in well AB, a pumping well associated the GRS. Arcadis collected grab samples from each operational GRS pumping well: wells AN, S, AJ and AB. None of the samples contained SPH or a sheen. Arcadis then screened the headspace of the water samples with a photo-ionization detector (PID). Wells AN, S, and AJ were 0.0 parts per million (ppm), while well AB was 0.5 ppm. A visual inspection of the area surrounding well AB could not identify current or recent operations which may be the source of the PID detections in well AB's discharge water. In May 2012 Arcadis was conducting maintenance on the GRS and wells. During this maintenance, Arcadis noted that in addition to well AB, wells AD and AT also had an odor. Due to this, PSEG expanded the groundwater monitoring program to include sampling GRS pumping wells AD, AB, and AT for VOCs and SVOCs.

3.2.2 Results

The following sections present a summary of the soil sampling and groundwater monitoring results.

3.2.2.1 Soil

Analytical results from soil samples are presented on **Table 2** and shown on **Figure 7**. Analytical results of the soil samples submitted for TPHC analysis did not indicate concentrations greater than laboratory detection limits. The method detection limits ranged from 26 to 32 milligrams per kilogram (mg/kg).

Results of the soil investigation indicate that the extent of soil impacts is limited to the "smear-zone" where SPH has migrated, an approximate distance of 49 feet from the source area. The estimated extent to which SPH has migrated is shown on **Figure 7**. Locations for advancing soil borings are limited due to the presence of extensive subsurface infrastructure. Due to these limitations, the extent of diesel-related COCs in soil cannot be further refined.

3.2.2.2 Groundwater

Groundwater elevations measurements collected from 2004 through 2016 are presented on **Table 1**. Groundwater elevation contours generated from measurements collected during the December 2016 sampling event are shown on **Figure 8**.

Groundwater flow within the shallow, water-bearing unit appears to be controlled largely by the presence of large subsurface utilities. As shown on **Figure 8** groundwater flows predominately along the Service Water Lines from north to south. These results are consistent with historical measurements reported since 2004, which indicate that the water table slopes toward the south with a horizontal hydraulic gradient of approximately 0.019.

The extent of measurable SPH observed to date has been limited to well AU, installed within the source area, and well AW, installed immediately downgradient of the source area along the service water piping. SPH was detected during a single gauging event in well AZ and migrated to this area under the influence

of pumping in well AO. In January 2005 and December 2016, SPH thickness was measured in well AU at 1.75 feet and 0.03 feet, respectively. In December 2004 and December 2016, SPH thickness was measured in well AW at 3.07 feet and 0.01 feet, respectively. SPH measurements obtained from well AY, located to the south and downgradient of well AW along the service water pipes, provide delineation of the extent of SPH.

Analytical results from groundwater samples collected since December 2004 are presented on **Table 3.** A summary of the most recent groundwater sampling event (2016) is shown on **Figure 9**. A summary of analytical results, compared to the New Jersey GWQC for Class IIA aquifers is as follows:

- Benzene was detected at concentrations greater than the GWQC in monitoring wells AY and X, with concentrations ranging from 2.3 micrograms per liter (µg/L) through 10.2 µg/L.

- Select SVOCs were detected at concentrations greater than their respective GWQC in wells AV, AY, and X. Constituents included bis(2-Ethylhexyl)phthalate, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene. All of the select SVOCs have been historically detected at a concentration greater than the NJDEP GWQC at least one other time, except indeno(1,2,3-cd)pyrene.

- With the exception of an occasional detection of dissolved-phase constituents in groundwater, concentrations of VOCs and SVOCs are less than the NJDEP GWQC in monitoring wells immediately adjacent to the residual SPH source area.

3.2.3 Interim Remedial Measures

SPH recovery was performed at well AU and well AW. The recovery efforts completed to date include the operation and maintenance of the Spill Buster® active recovery system, the operation of a passive skimmer, and the use of sorbent socks. Recently, sorbent socks and the Spill Buster® were utilized in the wells for product recovery. These sorbent socks were removed and replaced during monthly visits. Use of these methods has resulted in the recovery of approximately 796.3 gallons of SPH through December 2016. The extent to which SPH has migrated to date has been generally controlled by the subsurface infrastructure located within the investigation area. With the repair of the diesel fuel underground conveyance piping, the ongoing SPH recovery efforts being conducted in well AU and well AW, when in operation (see Section 4), are successfully preventing further migration of SPH.

3.2.4 Recommendations

Based on the results of investigation activities and interim remedial actions completed to date, the following actions are proposed:

- Continue operation and maintenance of the Spill Buster® unit and absorbent socks in well AU and well AW, until SPH is less than 0.01 feet thick. Currently, scheduled maintenance of these systems is performed to ensure the timely change out of the accumulation tank and the proper operation of the unit;

- Annual groundwater monitoring will consist of the collection and analysis of groundwater samples from those wells not indicating the presence of SPH. The groundwater samples will be analyzed for

VOCs and SVOCs to evaluate the extent, if any, of dissolved-phase COCs. Annual Remedial Action Progress Reports will be prepared to update the LSRP on the status of SPH recovery efforts and groundwater analytical results;

- Establish a classification exception area (see Section 5); and
- Resubmit the RAWP to the NJDEP that proposes SPH recovery and groundwater remedial strategy.

Results of soil investigation activities completed to date indicate that soil impacts are limited to the source area of the release and the "smear zone" where the SPH has migrated. The further investigation of soil impacts is technically impracticable to complete due to the extensive subsurface infrastructure located within this area which if damaged could cause a significant impact on the operation of SGS. As such, PSEG had previously requested and had been approved (NJDEP 2006) of a variance from the TRSR, specifically N.J.A.C. 7:26E-4.1(b), which was used to base the need for future soil investigation and remediation on groundwater analytical data and constituent-specific soil partition coefficients. Following the decommissioning of the Station, PSEG will evaluate the need to complete further remediation of soil.

Based on the results of investigation activities completed to date in association with incident No. 04-08-02-2350-16, the soil and groundwater delineation is complete and consequently the RI is complete. PSEG will resubmit the RAWP for the remediation of soil and groundwater to correct NJDEP's records.

3.3 SGS Unit 2

The results of SGS Unit 2 RI field activities are documented in SGS Unit 2 RIR (Arcadis 2011b). These activities and conclusions were approved by NJDEP in a letter dated December 16, 2011. Since 2012, PSEG has monitored groundwater at the well adjacent to the single exceedance of NJDEP SRS values. Prior to the implementation of the LSRP program, groundwater monitoring results were documented and submitted the NJDEP in RAPRs. Subsequently, the LSRP reviews the results and RAPRs are kept on file. The following sections provide a summary of the RI investigation activities, results, and the current groundwater quality conditions. Specific details of the investigation activities and NJDEP correspondence are provided in **Appendix B**.

3.3.1 Investigation Activities

As presented in the revised SIR/RIWP (Arcadis 2010), the remedial investigation conducted in association with the SGS Unit 2 diesel release had the following four primary goals: 1) characterize the horizontal extent of diesel-related constituents in soil; 2) Evaluate for the presence of SPH(as defined in *Guidance for LNAPL Free Product Initial Recovery and Interim Remedial Measures* [NJDEP 2010]) and delineate its extent, if necessary; 3) Characterize dissolved-phase diesel-related constituents in shallow groundwater within the release area; and 4) to determine the need for further action.

The scope of work developed to achieve these objectives included the advancement of two soil borings to horizontally delineate TPHC impacts, the installation of four monitoring wells (well CC, well CD, well CE, and well CF), and the monitoring of water/SPH levels and the collection of groundwater samples from the four newly installed monitoring wells. The following sections include a summary of the results of these initial investigation activities.

3.3.1.1 Soil

In November 2010, PSEG advanced two soil borings to horizontally delineate TPHC detected in soil sample OFT-E (0-0.5) to the east and northeast. The locations of the soil borings relative to the initial boring are shown on **Figure 10.** Soil borings OFT-E+5 and OFT-NE are located approximately 5 feet to the east and northeast of boring OFT-E, respectively. Samples were collected from the 0-0.5 interval and analyzed for Extractable Petroleum Hydrocarbons.

3.3.1.2 Groundwater

The investigation of groundwater consisted of the installation of four monitoring wells (well CC, CD, CE and CF) to evaluate for the presence of SPH, and characterize dissolved-phase constituents in groundwater. **Figure 11** shows the locations of the monitoring wells. Following installation, groundwater monitoring activities (groundwater elevation measurements, SPH gauging and groundwater sampling) were initiated.

3.3.1.2.1 Monitoring Well Installation

In November 2010, PSEG installed monitoring wells CC, CD, CE and CF. Monitoring wells were installed by a New Jersey licensed driller in accordance with NJAC 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001. Upon completion, each monitoring well was properly developed to remove fine-grained materials that may have settled in and around the monitoring well during installation, and to ensure that the monitoring well is hydraulically connected to the formation. All monitoring wells were surveyed by a New Jersey licensed surveyor. Additional details regarding the installation are provided in the SGS Unit 2 RIR (Arcadis 2011b). The purposes for the monitoring wells are as follows:

- Monitoring well CC was installed down-gradient of the former excavation number 2.
- Monitoring well CD was installed at a location that TPH concentrations exceeded the NJDEP SRS.
- Monitoring well CE was installed along the diesel fuel line, north of the former excavation number 2.
- Monitoring well CF was installed near a temporary observation point (36).

3.3.1.2.2 Groundwater Monitoring

Following installation, monitoring wells were sampled to characterize water quality. Prior to the collection of groundwater samples from the wells, depth-to-water and SPH thickness measurements were collected using an electronic oil/water interface probe. Water levels and SPH thickness measurements are presented in **Table 1.**

Two-rounds of groundwater samples were collected using low-flow sampling methodology. The first round of groundwater sampling was conducted in December 2010 and January 2011. The second round of groundwater sampling was completed in February 2011, approximately one month following the initial round. Semi-annual groundwater monitoring continued through 2016 to document stable groundwater

conditions in well CD. Sample collection procedures, as well as QA/QC sampling requirements, are outlined in the QAPP included in **Appendix E**.

In accordance with the then current analytical requirements for diesel fuel contained within Table 2-1 of the TRSR groundwater samples were analyzed for volatile organic compounds plus library search (VOC+10) and semi-volatile organic compounds plus library search (SVOC+15).

3.3.2 Results

The following sections present a summary of the soil sampling and groundwater monitoring results.

3.3.2.1 Soil

Analytical results are presented on **Table 4** and shown on **Figure 10**. A summary of analytical results, compared to the NJDEP SRS is as follows:

- EPH was not detected in any of soil samples at a concentration greater than the NJDEP SRS of 5,100 mg/kg.

- EPH exceeded the 1,000 mg/kg contingency analysis trigger value in the parent and duplicate sample collected at location OFT-NE at concentrations of 1,070 mg/kg and 1,350 mg/kg, respectively.

  The contingency constituents (naphthalene and 2-methylnaphthalene) were detected at a concentration less than the NJDEP SRS.

Results of the soil investigation indicate that the release of diesel fuel has not caused a significant impact to soil and is limited to the source area immediately adjacent to the over fill tank.

3.3.2.2 Groundwater

A summary of the SPH gauging and groundwater elevation data is presented in **Table 1**. Groundwater elevation contours generated from measurements collected during the December 2016 sampling event are shown on **Figure 8**.

Groundwater flow within the shallow, water-bearing unit appears to be controlled largely by the presence of large subsurface utilities. As shown on **Figure 8** groundwater flows predominately along the Service Water Lines from east to west. These results are consistent with historical measurements reported since 2010, which indicate that the water table slopes toward the west with a horizontal hydraulic gradient of approximately 0.012. TPH has not been detected in any of the SGS Unit 2 monitoring wells.

Analytical results from groundwater samples collected since January 2011 are presented on **Table 5**. Monitoring well locations and results of the recent sampling events (June and December 2016) are shown on **Figure 11**. The analytical results were compared to the NJDEP GWQC. Accordingly, concentrations of VOCs and SVOCs were not detected above their respective GWQC in all the wells sampled. Analytical results for groundwater monitoring activities completed to date continue to indicate that no impacts to groundwater has occurred.

3.3.3 Recommendations

Based on the results of investigation activities completed to date in association with incident No. 10-0416-1649-11, the soil and groundwater delineation is complete and consequently the RI is complete. On September 9, 2011, PSEG submitted a RAWP to address the residual soil impacts at SGS Unit 2. On December 16, 2011, NJDEP approved the RAWP stating “The Department has determined that the submittals are in compliance with the TRSR, N.J.A.C. 7:26E and other applicable requirements.” PSEG will resubmit the RAWP through the online portal to correct NJDEP’s records.

4 DATA USABILITY

The data quality objectives of this RIR are to determine the potential influence of background conditions on groundwater quality at the Station. The following quality assurance protocols were implemented:

- Sampling and analyses were performed in accordance with the NJDEP Field Sampling Procedures Manual (August 2005) and in accordance with the quality assurance requirements in the TRSR (N.J.A.C. 7:26E-2.1). Additionally, these activities were completed in conformance with the procedures identified in the QAPP (**Appendix E**).
- All samples for groundwater contaminant analysis were submitted to a New Jersey certified laboratory with proper chain-of-custody (Accutest Laboratories, NJDEP Certification No. 12129).
- All sample holding times for the specified analyses were in conformance with laboratory standards and the NJDEP Field Sampling Procedures Manual.
- Groundwater analytical results are presented in a Reduced Laboratory Data Deliverable format that complies with NJAC 7:26E-2.1.

Laboratory non-conformance summaries are included in the laboratory reduced deliverable reports.

- Reporting Limits for target analytes are specified in the laboratory analytical reports.
- Laboratory reporting limits for the contaminants of concern meet the applicable NJDEP SRS and GWQC, and the analytical data are deemed adequate for the intended purpose.

In summary, all of the data generated during the RI are usable. Electronic copies of the relevant reduced laboratory data reports were submitted to NJDEP via email.

5 CLASSIFICATION EXCEPTION AREA

PSEG proposes to establish a groundwater CEA based on the localized presence of diesel fuel oil SPH and dissolved constituents intermittently detected in groundwater at SGS Unit 1. Since initially detecting SPH in 2004 and 18 years of groundwater monitoring, observations and analytical data support that SPH has not migrated beyond the localized area within the Service Water piping backfill and dissolved constituents have only intermittently exceeded the GWQC in wells surrounding the SPH. As described in Section 2.3, the vapor intrusion is not a concern. The perimeter of the CEA will conservatively encompass the monitoring well network and cover an area of approximately 0.27 acres. Remediation of the SPH is planned to occur during the decommissioning process. The current operating license for SGS Unit 1 is through 2036. As such, an indeterminate end date for the CEA is requested pending an extension to the operating license in accordance with the Nuclear Regulatory Commission's process for license renewal. Future land use is expected to continue to be non-residential and no significant facility modifications are anticipated. Groundwater monitoring will continue to ensure the protectiveness of the CEA. A CEA Fact Sheet Form and supporting documentation is provided as **Appendix F**.

6 REGULATORY TIMEFRAME

The regulatory timeframe for remedial action as described in the N.J.A.C. 7:26E will be followed (NJDEP 2012). Accordingly, the RAWP will be resubmitted by May 7, 2021, within one year of the earliest applicable requirement to remediate (pursuant to the 2012 NJDEP regulations at N.J.A.C. 7:26E-5.5 [NJDEP 2012]). The remedial actions will be summarized in an RAR and submitted by May 7, 2022 (pursuant to the 2012 NJDEP regulations at N.J.A.C. 7:26E-5.7 [NJDEP 2012]).

7 CONCLUSIONS

Results of the RI activities performed under the guidance and oversight of NJDEP (Case Manager, Linda Range) are summarized in this report. Details of these investigations were previously submitted to NJDEP. NJDEP either conditionally approved the reports (March 14, 2006 NJDEP letter to PSEG) or approved the reports without comment (December 16, 2011 NJDEP approval letter). PSEG subsequently corrected all deficiencies without further comment from NJDEP (December 16, 2011 NJDEP approval letter), however, NJDEP administrative records do not reflect that the RIR was completed. Furthermore, NJDEP approved the SGS Unit 1 interim remedial measures (March 14, 2006 NJDEP letter to PSEG) and the SGS Unit 2 RAWP (December 16, 2011 NJDEP approval letter). Additional detail on the case history (document submissions and approvals) is provided is Sections 1.1.1 and 1.1.2. On June 9, 2017 as directed by Raymond Strassler of NJDEP, PSEG developed this comprehensive RIR to document past activities so that the RIR is recorded as administratively complete. Based on results of previous investigations, sufficient data has been collected to determine the extent of constituents of concern (COCs) in soil and groundwater. Additionally, with the submission of the RIR, PSEG satisfies the requirement to complete a remedial investigation for these cases.

Results of RI investigation activities conducted at the Station have horizontally and vertically delineated constituents detected at concentrations greater than NJDEP SRS. PSEG will resubmit the RAWP to NJDEP, which presents the previously approved remedial actions.

For SGS Unit 1, historical and current groundwater analytical results obtained since 2004 indicate that petroleum related COC concentrations appear stable, with some modest fluctuation over time. Interim remedial activities at SGS Unit 1 has reduced the amount of recoverable SPH to less than 0.1 foot. The extent to which SPH has migrated to date has been controlled by the subsurface infrastructure located within the investigation area and is not predicted to migrate further.

TPH/EPH concentrations in soil at SGS Unit 2 are localized and current conditions are protective of human health and the environment. Groundwater impacts have not been detected above the GWQC.

8 REFERENCES

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TABLES

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well X	12/7/04	12.00	--	7.16	--	4.84	--
	12/10/04	12.00	--	6.36	--	5.64	--
	12/13/04	12.00	--	6.68	--	5.32	--
	12/22/04	12.00	NM	NM	NM	NM	NM
	1/13/05	12.00	--	7.66	--	4.34	--
	2/10/05	12.00	--	7.70	--	4.30	--
	2/23/05	12.00	Sheen	7.47	<0.01	4.53	--
	3/24/05	12.00	--	7.81	--	4.19	--
	4/8/05	12.00	--	6.78	--	5.22	--
	4/26/05	12.00	--	7.65	--	4.35	--
	6/28/05	12.00	--	8.57	--	3.43	--
	7/20/05	12.00	--	8.01	--	3.99	--
	8/17/05	12.00	--	7.60	--	4.40	--
	9/13/05	12.00	--	8.45	--	3.55	--
	10/3/05	12.00	--	9.46	--	2.54	--
	12/15/05	12.00	--	9.28	--	2.72	--
	3/28/06	12.00	Dry	Dry	--	--	--
	9/26/06	12.00	--	8.74	--	3.26	--
	12/4/06	12.00	--	8.09	--	3.91	--
	3/6/07	12.00	--	8.81	--	3.19	--
	6/12/07	12.00	--	8.16	--	3.84	--
	9/25/07	12.00	--	9.98	--	2.02	--
	12/10/07	12.00	--	9.08	--	2.92	--
	6/26/08	12.00	--	7.88	--	4.12	--
	12/15/08	12.00	--	8.20	--	3.80	--
	6/1/09	12.00	--	8.02	--	3.98	--
	12/7/09	12.00	--	6.77	--	5.23	--
	6/23/10	12.00	--	8.42	--	3.58	--
	12/14/10	12.00	--	8.15	--	3.85	--
	6/20/11	12.00	--	7.95	--	4.05	--
	12/19/11	12.00	--	7.52	--	4.48	--
	6/27/12	12.00	--	7.56	--	4.44	--
	12/3/12	12.00	--	8.54	--	3.46	--
	6/10/13	12.00	--	5.50	--	6.50	--
	12/4/13	12.00	--	8.45	--	3.55	--
	6/4/14	12.00	--	6.20	--	5.80	--
	12/2/14	12.00	--	7.92	--	4.08	--
	6/22/15	12.00	--	5.35	--	6.65	--
	12/21/15	12.00	--	8.77	--	3.23	--
	6/21/16	12.00	--	8.15	--	3.85	--
	12/13/16	12.00	--	8.34	--	3.66	--
Well AU	12/7/04	8.46	NM	NM	NM	NM	NM
	12/10/04	8.46	1.84	2.29	0.45	6.17	6.50
	12/13/04	8.46	2.84	3.35	0.51	5.11	5.49
	12/22/04	8.46	4.22	5.45	1.23	3.01	3.92
	1/13/05	8.46	3.68	5.44	1.76	3.02	4.32
	1/17/05*	9.81	4.15	4.40	0.25	5.41	5.60

Notes: See Last Page for Notes.

SII-SSA-0014-002226

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	1/24/05	9.81	5.40	5.50	0.10	4.31	4.38
	1/26/05	9.81	4.90	5.10	0.20	4.71	4.86
	1/27/05	9.81	5.50	5.69	0.19	4.12	4.26
	1/31/05	9.81	5.45	5.50	0.05	4.31	4.35
	2/4/05	9.81	5.40	5.60	0.20	4.21	4.36
	2/8/05	9.81	5.15	5.40	0.25	4.41	4.60
	2/10/05	9.81	5.34	5.68	0.34	4.13	4.38
	2/16/05	9.81	3.90	4.30	0.40	5.51	5.81
	2/22/05	9.81	4.60	4.80	0.20	5.01	5.16
	2/23/05	9.81	4.96	5.12	0.16	4.69	4.81
	2/28/05	9.81	4.60	4.78	0.18	5.03	5.16
	3/7/05	9.81	4.74	5.00	0.26	4.81	5.00
	3/14/05	9.81	5.16	5.48	0.32	4.33	4.57
	3/21/05	9.81	5.40	5.70	0.30	4.11	4.33
	3/24/05	9.81	3.41	3.42	0.01	6.39	6.40
	3/29/05	9.81	3.10	3.70	0.60	6.11	6.55
	4/5/05	9.81	4.00	4.10	0.10	5.71	5.78
	4/8/05	9.81	2.87	2.91	0.04	6.90	6.93
	4/26/05	9.81	4.35	4.55	0.20	5.26	5.41
	6/28/05	9.81	5.66	5.74	0.08	4.07	4.13
	7/8/05	9.81	1.10	1.20	0.10	8.61	8.68
	7/20/05	9.81	5.25	5.60	0.35	4.21	4.47
	7/25/05	9.81	4.78	5.05	0.27	4.76	4.96
	7/28/05	9.81	3.08	3.55	0.47	6.26	6.61
	8/1/05	9.81	5.08	5.30	0.22	4.51	4.67
	8/5/05	9.81	5.50	5.85	0.35	3.96	4.22
	8/8/05	9.81	5.35	5.60	0.25	4.21	4.40
	8/12/05	9.81	4.75	4.85	0.10	4.96	5.03
	8/16/05	9.81	4.60	4.70	0.10	5.11	5.18
	8/17/05	9.81	3.36	3.38	0.02	6.43	6.44
	8/19/05	9.81	4.05	4.20	0.15	5.61	5.72
	8/22/05	9.81	5.65	5.85	0.20	3.96	4.11
	8/26/05	9.81	5.35	5.55	0.20	4.26	4.41
	8/29/05	9.81	4.75	5.15	0.40	4.66	4.96
	9/2/05	9.81	4.75	5.10	0.35	4.71	4.97
	9/6/05	9.81	5.50	5.75	0.25	4.06	4.25
	9/9/05	9.81	5.55	5.65	0.10	4.16	4.23
	9/12/05	9.81	5.70	6.00	0.30	3.81	4.03
	10/3/05	9.81	6.34	NA	NA	NA	NA
	10/10/05	9.81	3.35	4.70	1.35	5.11	6.11
	10/14/05	9.81	3.05	3.35	0.30	6.46	6.68
	10/28/05	9.81	4.00	4.20	0.20	5.61	5.76
	10/19/05	9.81	4.86	5.65	0.79	4.16	4.74
	10/31/05	9.81	4.60	5.20	0.60	4.61	5.05

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	11/4/05	9.81	5.45	5.55	0.10	4.26	4.33
	11/7/05	9.81	5.90	6.15	0.25	3.66	3.85
	11/11/05	9.81	6.01	6.58	0.57	3.23	3.65
	11/15/05	9.81	6.30	NA	NA	NA	NA
	11/18/05	9.81	5.58	6.40	0.82	3.41	4.02
	11/28/05	9.81	5.86	6.45	0.59	3.36	3.80
	12/2/05	9.81	4.20	5.60	1.40	4.21	5.25
	12/5/05	9.81	5.40	5.50	0.10	4.31	4.38
	12/8/05	9.81	6.05	6.58	0.53	3.23	3.62
	12/12/05	9.81	5.20	6.58	1.38	3.23	4.25
	12/15/05	9.81	5.99	6.06	0.07	3.75	3.80
	12/16/05	9.81	3.20	6.58	3.38	3.23	5.73
	12/23/05	9.81	5.95	6.58	0.63	3.23	3.70
	12/27/05	9.81	5.85	6.58	0.73	3.23	3.77
	12/30/05	9.81	4.10	4.25	0.15	5.56	5.67
	1/3/06	9.81	3.35	3.45	0.10	6.36	6.43
	1/6/06	9.81	4.55	4.75	0.20	5.06	5.21
	1/10/06	9.81	5.90	6.05	0.15	3.76	3.87
	1/12/06	9.81	5.95	6.00	0.05	3.81	3.85
	1/16/06	9.81	5.80	6.25	0.45	3.56	3.89
	1/16/06	9.81	6.15	6.25	0.10	3.56	3.63
	1/19/06	9.81	4.25	4.30	0.05	5.51	5.55
	1/23/06	9.81	2.20	2.40	0.20	7.41	7.56
	1/30/06	9.81	5.15	5.25	0.10	4.56	4.63
	2/3/06	9.81	5.75	5.85	0.10	3.96	4.03
	2/6/06	9.81	5.45	5.55	0.10	4.26	4.33
	2/9/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/13/06	9.81	4.50	5.20	0.70	4.61	5.13
	2/17/06	9.81	4.70	4.90	0.20	4.91	5.06
	2/21/06	9.81	5.60	5.75	0.15	4.06	4.17
	2/24/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/27/06	9.81	6.20	6.35	0.15	3.46	3.57
	3/3/06	9.81	6.30	6.55	0.25	3.26	3.45
	3/6/06	9.81	6.40	NA	NA	NA	NA
	3/10/06	9.81	6.53	NA	NA	NA	NA
	3/13/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/20/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/24/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/28/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/29/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/4/06	9.81	Dry	Dry	Dry	Dry	Dry

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	4/10/06	9.81	6.38	6.40	0.02	3.41	3.42
	4/17/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/24/06	9.81	3.15	3.60	0.45	6.21	6.54
	4/28/06	9.81	4.70	4.80	0.10	5.01	5.08
	5/1/06	9.81	5.85	5.90	0.05	3.91	3.95
	5/5/06	9.81	6.10	6.20	0.10	3.61	3.68
	5/9/06	9.81	6.28	NA	NA	NA	NA
	5/12/06	9.81	5.44	6.15	0.71	3.66	4.19
	5/12/06	9.81	5.92	6.00	0.08	3.81	3.87
	5/15/06	9.81	4.60	4.70	0.10	5.11	5.18
	5/19/06	9.81	5.80	5.90	0.10	3.91	3.98
	5/22/06	9.81	6.25	6.38	0.13	3.43	3.53
	5/30/06	9.81	Dry	Dry	Dry	Dry	Dry
	6/6/06	9.81	4.30	4.90	0.60	4.91	5.35
	6/16/06	9.81	5.10	5.25	0.15	4.56	4.67
	6/22/06	9.81	5.50	5.70	0.20	4.11	4.26
	6/23/06	9.81	5.70	5.80	0.10	4.01	4.08
	6/30/06	9.81	3.08	3.15	0.07	6.66	6.71
	7/5/06	9.81	2.25	2.35	0.10	7.46	7.53
	7/10/06	9.81	3.40	3.50	0.10	6.31	6.38
	7/14/06	9.81	3.65	3.75	0.10	6.06	6.13
	7/17/06	9.81	4.07	4.25	0.18	5.56	5.69
	7/21/06	9.81	4.35	4.50	0.15	5.31	5.42
	7/24/06	9.81	2.55	2.70	0.15	7.11	7.22
	7/28/06	9.81	3.35	3.45	0.10	6.36	6.43
	7/31/06	9.81	3.55	3.60	0.05	6.21	6.25
	8/3/06	9.81	3.70	3.75	0.05	6.06	6.10
	8/7/06	9.81	4.20	4.25	0.05	5.56	5.60
	8/11/06	9.81	4.55	4.60	0.05	5.21	5.25
	8/14/06	9.81	5.00	5.05	0.05	4.76	4.80
	8/18/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/21/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/28/06	9.81	3.15	3.20	0.05	6.61	6.65
	8/31/06	9.81	3.90	3.95	0.05	5.86	5.90
	9/5/06	9.81	3.55	3.60	0.05	6.21	6.25
	9/8/06	9.81	3.75	3.80	0.05	6.01	6.05
	9/11/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/14/06	9.81	4.90	4.95	0.05	4.86	4.90
	9/22/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/25/06	9.81	4.60	4.65	0.05	5.16	5.20
	10/2/06	9.81	4.50	4.65	0.15	5.16	5.27
	10/5/06	9.81	5.05	5.10	0.05	4.71	4.75
	10/9/06	9.81	3.80	3.90	0.10	5.91	5.98
	10/12/06	9.81	2.65	2.70	0.05	7.11	7.15

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	10/17/06	9.81	4.35	4.40	0.05	5.41	5.45
	10/20/06	9.81	1.85	1.90	0.05	7.91	7.95
	10/23/06	9.81	3.85	3.90	0.05	5.91	5.95
	10/31/06	9.81	3.80	3.85	0.05	5.96	6.00
	11/6/06	9.81	5.45	5.50	0.05	4.31	4.35
	11/10/06	9.81	3.25	3.30	0.05	6.51	6.55
	11/13/06	9.81	2.60	2.65	0.05	7.16	7.20
	11/20/06	9.81	3.65	3.70	0.05	6.11	6.15
	11/27/06	9.81	4.10	4.15	0.05	5.66	5.70
	12/4/06	9.81	5.05	5.10	0.05	4.71	4.75
	12/8/06	9.81	5.80	5.85	0.05	3.96	4.00
	12/11/06	9.81	6.00	6.05	0.05	3.76	3.80
	9/25/07	9.81	--	5.15	--	4.66	--
	12/10/07	9.81	3.75	4.02	0.27	5.79	5.99
	6/25/08	9.81	3.46	3.62	0.16	6.19	6.31
	7/21/08	9.81	3.50	3.62	0.12	6.19	6.28
	8/15/08	9.81	3.25	3.42	0.17	6.39	6.52
	9/11/08	9.81	3.05	3.20	0.15	6.61	6.72
	10/8/08	9.81	4.21	4.45	0.24	5.36	5.54
	11/4/08	9.81	4.36	5.30	0.94	4.51	5.21
	12/15/08	9.81	3.31	3.90	0.59	5.91	6.35
	1/14/09	9.81	6.15	6.24	0.09	3.57	3.64
	2/12/09	9.81	5.81	5.83	0.02	3.98	3.99
	3/9/09	9.81	--	7.20	--	2.61	--
	3/30/09	9.81	6.78	6.80	0.02	3.01	3.02
	5/28/09	9.81	5.55	5.90	0.35	3.91	4.17
	6/1/09	9.81	4.76	4.81	0.05	5.00	5.04
	6/30/09	9.81	4.65	4.67	0.02	5.14	5.15
	7/28/09	9.81	5.65	5.71	0.06	4.10	4.14
	8/24/09	9.81	3.23	3.24	0.01	6.57	6.58
	9/17/09	9.81	4.25	4.27	0.02	5.54	5.55
	10/13/09	9.81	6.17	6.20	0.03	3.61	3.63
	11/6/09	9.81	5.07	5.46	0.39	4.35	4.64
	12/7/09	9.81	4.55	4.61	0.06	5.20	5.24
	1/27/10	9.81	4.61	4.64	0.03	5.17	5.19
	2/25/10	9.81	3.36	3.38	0.02	6.43	6.44
	4/23/10	9.81	5.15	5.17	0.02	4.64	4.65
	5/21/10	9.81	4.25	4.26	0.01	5.55	5.56
	6/22/10	9.81	6.01	6.10	0.09	3.71	3.78
	12/14/10	9.81	5.68	5.72	0.04	4.09	4.12
	1/13/11	9.81	--	7.20	--	2.61	--
	2/14/11	9.81	4.35	4.52	0.17	5.29	5.42
	3/18/11	9.81	4.40	4.73	0.33	5.08	5.32
	4/25/11	9.81	4.87	5.60	0.73	4.21	4.75

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	5/16/11	9.81	4.57	5.35	0.78	4.46	5.04
	6/20/11	9.81	5.80	6.72	0.92	3.09	3.77
	7/14/11	9.81	5.30	6.10	0.80	3.71	4.30
	8/15/11	9.81	3.50	3.95	0.45	5.86	6.19
	9/12/11	9.81	4.02	4.35	0.33	5.46	5.70
	10/10/11	9.81	5.15	5.71	0.56	4.10	4.51
	11/8/11	9.81	5.25	5.60	0.35	4.21	4.47
	12/19/11	9.81	5.29	5.64	0.35	4.17	4.43
	1/16/12	9.81	5.85	6.02	0.17	3.79	3.92
	2/28/12	9.81	5.99	6.15	0.16	3.66	3.78
	3/29/12	9.81	6.33	6.56	0.23	3.25	3.42
	5/25/12	9.81	5.10	5.22	0.12	4.59	4.68
	6/27/12	9.81	5.22	5.39	0.17	4.42	4.55
	8/7/12	9.81	4.21	4.30	0.09	5.51	5.58
	8/30/12	9.81	5.11	5.15	0.04	4.66	4.69
	12/3/12	9.81	6.07	6.10	0.03	3.71	3.73
	1/29/13	9.81	6.17	6.18	0.01	3.63	3.64
	2/19/13	9.81	5.30	5.38	0.08	4.43	4.49
	3/22/13	9.81	--	4.90	--	4.91	--
	4/26/13	9.81	sheen	5.20	--	4.61	--
	6/10/13	9.81	3.69	3.70	0.01	6.11	6.12
	7/12/13	9.81	--	4.15	--	5.66	--
	8/20/13	9.81	sheen	4.50	--	5.31	--
	9/23/13	9.81	sheen	4.86	--	4.95	--
	10/9/13	9.81	sheen	5.87	--	3.94	--
	11/5/13	9.81	5.38	5.39	0.01	4.42	4.43
	12/4/13	9.81	5.04	5.05	0.01	4.76	4.77
	1/20/14	9.81	5.54	5.55	0.01	4.26	4.27
	2/18/14	9.81	3.88	3.90	0.02	5.91	5.92
	3/20/14	9.81	--	3.50	--	6.31	--
	4/25/14	9.81	--	4.80	--	5.01	--
	5/14/14	9.81	4.51	4.53	0.02	5.28	5.29
	6/4/14	9.81	4.38	4.40	0.02	5.41	5.42
	7/21/14	9.81	sheen	4.55	--	5.26	--
	8/20/14	9.81	4.50	4.51	0.01	5.30	5.31
	9/22/14	9.81	5.10	5.13	0.03	4.68	4.70
	10/16/14	9.81	sheen	4.39	--	5.42	--
	11/18/14	9.81	sheen	5.15	--	4.66	--
	12/2/14	9.81	5.23	5.25	0.02	4.56	4.57
	6/22/15	9.81	3.30	3.50	0.20	6.31	6.46
	7/27/15	9.81	4.75	4.78	0.03	5.03	5.05
	8/18/15	9.81	5.45	5.49	0.04	4.32	4.35
	9/18/15	9.81	5.97	5.99	0.02	3.82	3.83
	10/16/15	9.81	5.61	5.64	0.03	4.17	4.19
	11/23/15	9.81	--	5.70	--	4.11	--
	12/21/15	9.81	5.72	5.73	0.01	4.08	4.09
	2/10/16	9.81	--	4.10	--	5.71	--
	3/10/16	9.81	--	5.20	--	4.61	--
	4/13/16	9.81	--	5.28	--	4.53	--
	5/13/16	9.81	4.48	4.50	0.02	5.31	5.32
	6/20/16	9.81	4.99	5.00	0.01	4.81	4.82
	7/13/16	9.81	--	4.97	--	4.84	--
	9/9/16	9.81	--	5.00	--	4.81	--
	10/11/16	9.81	4.10	4.12	0.02	5.69	5.70
	12/13/16	9.81	5.05	5.08	0.03	4.73	4.75
Well AV	12/7/04	8.82	--	4.85	--	3.97	--
	12/10/04	8.82	--	4.60	--	4.22	--
	12/13/04	8.82	--	4.55	--	4.27	--
	12/22/04	8.82	--	5.11	--	3.71	--
	1/13/05	8.82	--	5.09	--	3.73	--
	2/10/05	8.82	--	4.86	--	3.96	--
	2/23/05	8.82	--	4.69	--	4.13	--
	3/24/05	8.82	--	4.83	--	3.99	--
	4/8/05	8.82	--	4.20	--	4.62	--
	4/26/05	8.82	--	4.72	--	4.10	--
	6/28/05	8.82	--	5.07	--	3.75	--

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AV (continued)	7/20/05	8.82	--	4.81	--	4.01	--
	8/17/05	8.82	--	5.10	--	3.72	--
	9/13/05	8.82	--	5.21	--	3.61	--
	10/3/05	8.82	--	5.89	--	2.93	--
	12/15/05	8.82	--	6.14	--	2.68	--
	3/28/06	8.82	--	7.04	--	1.78	--
	6/22/06	8.82	--	5.86	--	2.96	--
	9/26/06	8.82	--	5.44	--	3.38	--
	12/4/06	8.82	--	5.28	--	3.54	--
	3/6/07	8.82	--	6.07	--	2.75	--
	6/12/07	8.82	--	4.90	--	3.92	--
	9/25/07	8.82	--	6.21	--	2.61	--
	12/10/07	8.82	--	5.88	--	2.94	--
	6/26/08	8.82	--	4.63	--	4.19	--
	12/15/08	8.82	--	5.17	--	3.65	--
	6/1/09	8.82	--	4.67	--	4.15	--
	12/7/09	8.82	--	3.70	--	5.12	--
	6/22/10	8.82	--	4.80	--	4.02	--
	12/14/10	8.82	--	4.50	--	4.32	--
	6/20/11	8.82	--	3.35	--	5.47	--
	12/19/11	8.82	--	4.30	--	4.52	--
	12/3/12	8.82	--	4.99	--	3.83	--
	6/10/13	8.82	--	2.95	--	5.87	--
	12/4/13	8.82	--	4.81	--	4.01	--
	6/4/14	8.82	--	3.50	--	5.32	--
	12/2/14	8.82	--	4.55	--	4.27	--
	6/22/15	8.82	--	2.40	--	6.42	--
	12/21/15	8.82	--	5.22	--	3.60	--
	6/21/16	8.82	--	4.75	--	4.07	--
	12/13/16	8.82	--	4.99	--	3.83	--
Well AW	12/7/04	9.16	4.14	4.17	0.03	4.99	5.01
	12/10/04	9.16	3.71	5.83	2.12	3.33	4.90
	12/13/04	9.16	3.99	7.06	3.07	2.10	4.37
	12/22/04*	10.10	6.06	6.16	0.10	3.94	4.01
	12/27/04*	10.10	6.70	6.75	0.05	3.35	3.39
	1/3/05*	10.10	6.30	6.50	0.20	3.60	3.75
	1/10/05*	10.10	5.90	6.00	0.10	4.10	4.17
	1/13/05*	10.10	6.95	7.01	0.06	3.09	3.13
	1/27/05	9.16	5.37	6.12	0.75	3.04	3.60
	2/10/05	9.16	5.11	6.11	1.00	3.05	3.79
	2/23/05	9.16	4.78	6.11	1.33	3.05	4.03
	3/24/05	9.16	4.44	6.25	1.81	2.91	4.25
	4/8/05	9.16	3.66	6.05	2.39	3.11	4.88
	4/26/05	9.16	4.72	6.85	2.13	2.31	3.89
	6/28/05	9.16	5.31	7.29	1.98	1.87	3.34
	7/20/05	9.16	4.78	6.84	2.06	2.32	3.84
	8/17/05	9.16	4.69	6.33	1.64	2.83	4.04
	9/9/05	9.16	5.40	7.20	1.80	1.96	3.29
	9/13/05	9.16	5.57	7.41	1.84	1.75	3.11
	10/3/05	9.16	6.12	7.49	1.37	1.67	2.68
	12/12/05	9.16	5.90	6.90	1.00	2.26	3.00
	12/15/005	9.16	5.92	6.97	1.05	2.19	2.97
	2/17/06	9.16	5.70	5.90	0.20	3.26	3.41
	3/3/06	9.16	6.25	7.00	0.75	2.16	2.72
	3/10/06	9.16	6.40	7.05	0.65	2.11	2.59
	3/28/06	9.16	7.01	7.65	0.64	1.51	1.98

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AW (continued)	5/15/06	9.16	7.50	7.85	0.35	1.31	1.57
	6/22/06	9.16	5.90	6.15	0.25	3.01	3.20
	8/21/06	9.16	5.80	6.45	0.65	2.71	3.19
	12/4/06	9.16	5.97	6.41	0.44	2.75	3.08
	3/6/07	9.16	7.00	7.02	0.02	2.14	2.15
	6/12/07	9.16	6.13	6.51	0.38	2.65	2.93
	9/25/07	9.16	6.72	6.87	0.15	2.29	2.40
	12/10/07	9.16	6.30	6.40	0.10	2.76	2.83
	6/25/08	9.16	5.61	6.61	1.00	2.55	3.29
	7/21/08	9.16	6.65	7.71	1.06	1.45	2.23
	8/15/08	9.16	6.35	7.25	0.90	1.91	2.58
	9/11/08	9.16	6.08	6.81	0.73	2.35	2.89
	10/8/08	9.16	6.78	6.90	0.12	2.26	2.35
	11/4/08	9.16	7.16	7.21	0.05	1.95	1.99
	12/15/08	9.16	6.42	6.45	0.03	2.71	2.73
	1/14/09	9.16	5.70	5.80	0.10	3.36	3.43
	2/12/09	9.16	--	6.71	--	2.45	--
	3/9/09	9.16	--	6.85	--	2.31	--
	3/30/09	9.16	--	6.81	--	2.35	--
	5/28/09	9.16	5.54	5.75	0.21	3.41	3.57
	6/1/09	9.16	5.51	5.62	0.11	3.54	3.62
	6/30/09	9.16	4.81	5.25	0.44	3.91	4.24
	9/17/09	9.16	4.22	4.41	0.19	4.75	4.89
	10/13/09	9.16	5.36	6.19	0.83	2.97	3.58
	11/6/09	9.16	5.00	5.65	0.65	3.51	3.99
	12/7/09	9.16	4.15	4.70	0.55	4.46	4.87
	1/27/10	9.16	4.04	4.38	0.34	4.78	5.03
	2/25/10	9.16	2.60	2.76	0.16	6.40	6.52
	4/23/10	9.16	--	5.57	--	3.59	--
	5/21/10	9.16	--	4.10	--	5.06	--
	6/22/10	9.16	5.56	5.57	0.01	3.59	3.60
	12/14/10	9.16	5.79	5.80	0.01	3.36	3.37
	1/13/11	9.16	--	5.72	--	3.44	--
	2/14/11	9.16	5.05	5.07	0.02	4.09	4.10
	3/18/11	9.16	4.05	4.07	0.02	5.09	5.10
	4/25/11	9.16	--	3.45	--	5.71	--
	5/16/11	9.16	--	4.31	--	4.85	--
	6/20/11	9.16	5.31	5.35	0.04	3.81	3.84
	7/14/11	9.16	5.05	5.07	0.02	4.09	4.10
	8/15/11	9.16	3.70	3.74	0.04	5.42	5.45
	9/12/11	9.16	--	3.75	--	5.41	--
	10/10/11	9.16	--	5.19	--	3.97	--
	11/8/11	9.16	--	5.28	--	3.88	--

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AW (continued)	12/19/11	9.16	sheen	5.22	--	3.94	--
	1/16/12	9.16	7.44	7.45	0.01	1.71	1.72
	2/28/12	9.16	--	7.72	--	1.44	--
	3/29/12	9.16	5.60	5.61	0.01	3.55	3.56
	5/25/12	9.16	sheen	4.91	--	4.25	--
	6/27/12	9.16	5.25	5.26	0.01	3.90	3.91
	8/7/12	9.16	--	4.75	0.00	4.41	--
	8/30/12	9.16	4.86	4.87	0.01	4.29	4.30
	12/3/12	9.16	6.05	6.06	0.01	3.10	3.11
	1/29/13	9.16	--	5.67	--	3.49	--
	2/19/13	9.16	--	5.14	--	4.02	--
	3/22/13	9.16	4.70	4.72	--	4.44	--
	4/26/13	9.16	--	4.87	--	4.29	--
	6/10/13	9.16	3.15	3.16	0.01	6.00	6.01
	7/12/13	9.16	4.14	4.15	0.01	5.01	5.02
	8/20/13	9.16	sheen	4.53	--	4.63	--
	9/23/13	9.16	sheen	5.54	--	3.62	--
	10/9/13	9.16	sheen	5.85	--	3.31	--
	11/5/13	9.16	5.62	5.63	0.01	3.53	3.54
	12/4/13	9.16	5.84	5.85	0.01	3.31	3.32
	1/20/14	9.16	4.47	4.49	0.02	4.67	4.68
	2/18/14	9.16	3.34	3.36	0.02	5.80	5.81
	3/20/14	9.16	--	3.46	--	5.70	--
	4/25/14	9.16	--	4.41	--	4.75	--
	5/14/14	9.16	--	4.30	--	4.86	--
	6/4/14	9.16	4.16	4.17	0.01	4.99	5.00
	7/21/14	9.16	--	4.61	--	4.55	--
	8/20/14	9.16	--	4.49	--	4.67	--
	9/22/14	9.16	--	5.11	--	4.05	--
	10/16/14	9.16	--	4.46	--	4.70	--
	11/18/14	9.16	--	5.15	--	4.01	--
	12/2/14	9.16	4.99	5.00	0.01	4.16	4.17
	6/22/15	9.16	sheen	2.92	--	6.24	--
	7/27/15	9.16	sheen	4.38	--	4.78	--
	8/18/15	9.16	--	5.46	--	3.70	--
	9/18/15	9.16	6.21	6.23	0.02	2.93	2.94
	10/16/15	9.16	--	5.85	--	3.31	--
	11/23/15	9.16	sheen	6.20	--	2.96	--
	12/21/15	9.16	sheen	6.25	--	2.91	--
	2/10/16	9.16	--	3.00	--	6.16	--
	3/10/16	9.16	--	5.16	--	4.00	--
	4/13/16	9.16	--	5.22	--	3.94	--
	5/13/16	9.16	--	4.65	--	4.51	--
	6/20/16	9.16	sheen	5.36	--	3.80	--
	8/9/16	9.16	--	4.48	--	4.68	--
	9/9/16	9.16	--	5.04	--	4.12	--
	10/11/16	9.16	--	3.86	--	5.30	--
	12/13/16	9.16	4.24	4.25	0.01	4.91	4.92
Well AY	12/7/04	9.04	--	4.68	--	4.36	--
	12/10/04	9.04	--	4.35	--	4.69	--
	12/13/04	9.04	--	4.43	--	4.61	--
	12/22/04	9.04	--	5.13	--	3.91	--
	1/13/05	9.04	--	5.08	--	3.96	--
	1/27/05	9.04	--	5.29	--	3.75	--
	2/10/05	9.04	NA	NA	NA	NA	NA
	2/23/05	9.04	--	4.82	--	4.22	--
	3/24/05	9.04	--	4.82	--	4.22	--
	4/8/05	9.04	--	4.03	--	5.01	--
	4/26/05	9.04	--	4.77	--	4.27	--
	6/28/05	9.04	--	5.51	--	3.53	--
	7/20/05	9.04	--	5.04	--	4.00	--
	8/17/05	9.04	--	5.10	--	3.94	--
	9/13/05	9.04	--	5.57	--	3.47	--
	10/3/05	9.04	--	6.18	--	2.86	--
	12/15/05	9.04	--	6.12	--	2.92	--
	3/28/06	9.04	--	6.76	--	2.28	--

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AY (continued)	6/23/06	9.04	--	5.97	--	3.07	--
	9/26/06	9.04	--	5.58	--	3.46	--
	12/4/06	9.04	--	5.35	--	3.69	--
	3/6/07	9.04	--	6.84	--	2.20	--
	6/12/07	9.04	--	5.32	--	3.72	--
	9/25/07	9.04	--	6.51	--	2.53	--
	12/10/07	9.04	--	6.34	--	2.70	--
	6/26/08	9.04	--	6.95	--	2.09	--
	12/15/08	9.04	--	6.57	--	2.47	--
	6/1/09	9.04	--	5.95	--	3.09	--
	12/7/09	9.04	--	4.07	--	4.97	--
	6/22/10	9.04	--	5.76	--	3.28	--
	12/14/10	9.04	--	5.35	--	3.69	--
	6/20/11	9.04	--	5.95	--	3.09	--
	12/19/11	9.04	--	5.75	--	3.29	--
	6/27/12	9.04	--	5.67	--	3.37	--
	12/3/12	9.04	--	5.61	--	3.43	--
	6/10/13	9.04	--	3.90	--	5.14	--
	12/4/13	9.04	--	5.58	--	3.46	--
	6/4/14	9.04	--	5.62	--	3.42	--
	12/2/14	9.04	--	5.15	--	3.89	--
	6/22/15	9.04	--	3.52	--	5.52	--
	12/21/15	9.04	--	6.64	--	2.40	--
	6/21/16	9.04	--	5.69	--	3.35	--
	12/13/16	9.04	--	5.92	--	3.12	--
Well AZ	12/7/04	8.66	--	4.45	--	4.21	--
	12/10/04	8.66	--	4.09	--	4.57	--
	12/13/04	8.66	--	4.08	--	4.58	--
	12/22/04	8.66	--	4.69	--	3.97	--
	1/13/05	8.66	--	4.70	--	3.96	--
	1/27/05	8.66	--	4.91	--	3.75	--
	2/10/05	8.66	--	4.69	--	3.97	--
	2/23/05	8.66	--	4.46	--	4.20	--
	3/24/2005**	8.66	4.66	4.75	0.09	3.91	3.98
	4/8/05	8.66	--	3.78	--	4.88	--
	4/26/05	8.66	--	4.74	--	3.92	--
	6/28/05	8.66	--	5.42	--	3.24	--
	7/20/05	8.66	--	5.10	--	3.56	--
	8/17/05	8.66	--	5.41	--	3.25	--
	9/13/05	8.66	--	5.46	--	3.20	--
	10/3/05	8.66	--	6.11	--	2.55	--
	12/15/05	8.66	--	6.05	--	2.61	--
	3/28/06	8.66	--	6.59	--	2.07	--
	6/22/06	8.66	--	5.99	--	2.67	--
	9/26/06	8.66	--	5.66	--	3.00	--
	12/4/06	8.66	--	5.21	--	3.45	--
	1/2/07	8.66	--	5.51	--	3.15	--
	3/6/07	8.66	--	6.09	--	2.57	--
	6/12/07	8.66	--	5.20	--	3.46	--
	9/25/07	8.66	--	6.31	--	2.35	--
	12/10/07	8.66	--	6.50	--	2.16	--
	6/26/08	8.66	--	4.62	--	4.04	--
	12/15/08	8.66	--	5.16	--	3.50	--
	6/1/09	8.66	--	4.85	--	3.81	--
	12/7/09	8.66	--	4.23	--	4.43	--

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AZ (continued)	6/22/10	8.66	--	5.55	--	3.11	--
	12/14/10	8.66	--	5.50	--	3.16	--
	6/20/11	8.66	--	4.85	--	3.81	--
	12/19/11	8.66	--	4.45	--	4.21	--
	6/27/12	8.66	--	4.53	--	4.13	--
	12/3/12	8.66	--	8.19	--	0.47	--
	6/10/13	8.66	--	--	--	--	--
	12/4/13	8.66	--	5.50	--	3.16	--
	6/4/14	8.66	--	4.00	--	4.66	--
	12/2/14	8.66	--	5.17	--	3.49	--
	6/22/15	8.66	--	3.00	--	5.66	--
	12/21/15	8.66	--	5.80	--	2.86	--
	6/21/16	8.66	--	5.05	--	3.61	--
	12/13/16	8.66	--	5.36	--	3.30	--
Well BV	3/6/07	8.85	--	5.95	--	2.90	--
	6/12/07	8.85	--	5.12	--	3.73	--
	9/25/07	8.85	--	6.23	--	2.62	--
	12/10/07	8.85	--	6.00	--	2.85	--
	6/26/08	8.85	--	4.66	--	4.19	--
	12/15/08	8.85	--	5.33	--	3.52	--
	6/1/09	8.85	--	4.74	--	4.11	--
	12/7/09	8.85	--	4.21	--	4.64	--
	6/22/10	8.85	--	5.45	--	3.40	--
	12/14/10	8.85	--	5.25	--	3.60	--
	6/20/11	8.85	--	4.84	--	4.01	--
	12/19/11	8.85	--	4.41	--	4.44	--
	6/27/12	8.85	--	4.55	--	4.30	--
	12/3/12	8.85	--	5.19	--	3.66	--
	6/10/13	8.85	--	3.95	--	4.90	--
	12/4/13	8.85	--	5.39	--	3.46	--
	6/4/14	8.85	--	4.06	--	4.79	--
	12/2/14	8.85	--	NM	--	NM	--
	6/22/15	8.85	--	3.00	--	5.85	--
	12/21/15	8.85	--	5.67	--	3.18	--
	6/21/16	8.85	--	5.05	--	3.80	--
	12/13/16	8.85	--	5.35	--	3.50	--
Well CC	1/20/11	9.16	--	4.51	--	4.65	--
	2/17/11	9.16	--	4.15	--	5.01	--
	12/19/11	9.16	--	4.15	--	5.01	--
	6/27/12	9.16	--	4.07	--	5.09	--
	12/3/12	9.16	--	5.02	--	4.14	--
	6/10/13	9.16	--	2.36	--	6.80	--
	12/4/13	9.16	--	4.72	--	4.44	--
	6/4/14	9.16	--	NM	--	NM	--
	12/2/14	9.16	--	4.15	--	5.01	--
	6/22/15	9.16	--	2.64	--	6.52	--
	12/21/15	9.16	--	4.57	--	4.59	--
	12/13/16	9.16	--	4.85	--	4.31	--
Well CD	1/20/11	9.02	--	3.86	--	5.16	--
	2/17/11	9.02	--	3.65	--	5.37	--
	12/19/11	9.02	--	3.58	--	5.44	--
	6/27/12	9.02	--	3.55	--	5.47	--
	12/3/12	9.02	--	4.67	--	4.35	--
	6/10/13	9.02	--	2.40	--	6.62	--
	12/4/13	9.02	--	4.30	--	4.72	--
	6/4/14	9.02	--	2.95	--	6.07	--
	12/2/14	9.02	--	3.62	--	5.40	--
	6/22/15	9.02	--	1.97	--	7.05	--
	12/21/15	9.02	--	4.07	--	4.95	--
	6/21/16	9.02	--	2.91	--	6.11	--
	12/13/16	9.02	--	4.09	--	4.93	--
Well CE	12/16/10	8.92	--	4.15	--	4.77	--
	2/17/11	8.92	--	4.12	--	4.80	--
	12/19/11	8.92	--	3.70	--	5.22	--
	6/27/12	8.92	--	4.00	--	4.92	--

Notes: See Last Page for Notes.

Table 01. Groundwater Measurements and Product Thickness -- December 2016
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well CE (continued)	12/3/12	8.92	--	4.94	--	3.98	--
	6/10/13	8.92	--	2.22	--	6.70	--
	12/4/13	8.92	--	4.63	--	4.29	--
	6/4/14	8.92	--	NM	--	NM	--
	12/2/14	8.92	--	4.06	--	4.86	--
	6/22/15	8.92	--	2.41	--	6.51	--
	12/21/15	8.92	--	NM	--	NM	--
	12/13/16	8.92	--	4.70	--	4.22	--
Well CF	1/20/11	8.88	--	4.60	--	4.28	--
	2/17/11	8.88	--	4.37	--	4.51	--
	12/19/11	8.88	--	3.71	--	5.17	--
	6/27/12	8.88	--	3.68	--	5.20	--
	12/3/12	8.88	--	4.76	--	4.12	--
	6/10/13	8.88	--	2.07	--	6.81	--
	12/4/13	8.88	--	4.40	--	4.48	--
	6/4/14	8.88	--	NM	--	NM	--
	12/2/14	8.88	--	3.80	--	5.08	--
	6/22/15	8.88	--	2.31	--	6.57	--
	12/21/15	8.88	--	4.30	--	4.58	--
	12/13/16	8.88	--	4.30	--	4.58	--
Well CG	1/21/11	8.95	--	5.17	--	3.78	--
	2/17/11	8.95	--	5.24	--	3.71	--
	6/20/11	8.95	--	5.15	--	3.80	--
	12/19/11	8.95	--	4.74	--	4.21	--
	6/27/12	8.95	--	4.83	--	4.12	--
	12/3/12	8.95	--	5.60	--	3.35	--
	6/10/13	8.95	--	NM	--	NM	--
	12/4/13	8.95	--	5.70	--	3.25	--
	6/4/14	8.95	--	4.25	--	4.70	--
	12/2/14	8.95	--	5.50	--	3.45	--
	6/22/15	8.95	--	2.83	--	6.12	--
	12/21/15	8.95	--	6.32	--	2.63	--
	6/21/16	8.95	--	5.63	--	3.32	--
	12/13/16	8.95	--	5.60	--	3.35	--

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation
**	Due to the operation of a groundwater extraction well (Well AO) in the vicinity of Well AZ, separate-phase product migrated in the direction of this well. Following the detection of separate-phase product in Well AZ, groundwater extraction from Well AO was discontinued.

Table 02. Unit 1 Soil Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Sample ID Monitoring Well Location Sample Date	NRDCSCC	D-2 (3.5-4.0) Well AW 11/8/04	D-3 (3.5-4.0) Well AV 11/8/04	D-4 (3.5-4.0) Well AY 11/8/04	D-4 (9.0-9.5) Well AY 11/8/04	D-5 (3.5-4.0) Well AZ 11/9/04	D-50 (3.5-4.0) Well AZ 11/9/04	FB-1* 11/9/04
Analyte (mg/kg)								
Petroleum Hydrocarbons	10,000	<28 U	<29 U	<32 U	<29 U	<27 U	<26 U	<0.51 U

Notes:

NRDCSCC	New Jersey Department of Environmental Protection Non-Residential Direct Contact Soil Cleanup Criteria.
mg/kg	Milligrams per kilograms (equivalent to parts per million)
U	The compound was not detected at the indicated concentration.
*	Units are in mg/kg - milligrams per kilograms

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-AB 6/27/2012 N	Well-AB 1/23/2013 N	Well-AB 6/10/2013 N	Well-AB 5/30/2014 N	Well-AB 12/2/2014 N	Well-AB 6/15/2015 N	Well-AB 12/14/2015 N	Well-AD 8/1/2012 N	Well-AD 1/23/2013 N	Well-AD 12/4/2013 N	Well-AD 5/30/2014 N	Well-AD 12/2/2014 N	Well-AD 6/15/2015 N	Well-AD 12/14/2015 N	Well-AT 6/27/2012 N	Well-AT 1/23/2013 N	Well-AT 6/10/2013 N	Well-AT 12/4/2013 N	Well-AT 5/30/2014 N	Well-AT 12/2/2014 N	Well-AT 6/15/2015 N	Well-AT 12/14/2015 N	Well-AT 6/14/2016 N
Volatile Organic Compounds																								
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	9	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
1,2-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone (MEK)	300	**126**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	**22.5**	< 10 U	**7.1 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**8.4 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**11.6**	< 10 U	< 10 U
Benzene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	**0.57 J**	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Bromochloromethane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	**0.23 J**	< 2.0 U	**0.29 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
CFC-12	1,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	**0.48 J**	< 5.0 U	**0.30 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	**0.23 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	**0.44 J**	**0.91 J**	**7.7**	< 1.0 U	**3.7**	**3.1**	**3.0**	< 1.0 U	**2.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.69 J**	< 1.0 U
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.51 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500	**150 J**																				**8.2 J**		

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-AB 6/27/2012 N	Well-AB 1/23/2013 N	Well-AB 6/10/2013 N	Well-AB 5/30/2014 N	Well-AB 12/2/2014 N	Well-AB 6/15/2015 N	Well-AB 12/14/2015 N	Well-AD 8/1/2012 N	Well-AD 1/23/2013 N	Well-AD 12/4/2013 N	Well-AD 5/30/2014 N	Well-AD 12/2/2014 N	Well-AD 6/15/2015 N	Well-AD 12/14/2015 N	Well-AT 6/27/2012 N	Well-AT 1/23/2013 N	Well-AT 6/10/2013 N	Well-AT 12/4/2013 N	Well-AT 5/30/2014 N	Well-AT 12/2/2014 N	Well-AT 6/15/2015 N	Well-AT 12/14/2015 N	Well-AT 6/14/2016 N
Semi-volatile Organic Compounds																								
1,1-Biphenyl	400	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4,5-Tetrachlorobenzene	--	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
1,2,4-Trichlorobenzene	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
1-Methylnaphthalene	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
2,4,5-Trichlorophenol	700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2,6-Dinitrotoluene	--	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Chloronaphthalene	600	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
2-Chlorophenol	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	30	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylphenol	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	--	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
2-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3-Dichlorobenzidine	30	< 5.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
3-Methylphenol, 4-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	--	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
4-Bromophenyl phenyl ether	--	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
4-Chloro-3-Methylphenol	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	--	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
4-Nitroaniline	--	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
4-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	400	< 0.10 U	< 0.11 U	< 0.10 U	**4.90**	**7.1**	**6.3**	**3.3**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	**0.408**	< 0.10 U	**1.23**	**0.660**	**0.484**	**0.466**	< 1.0 U	**1.1**	< 1.0 U
Acenaphthylene	100	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Acetophenone	700	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Anthracene	2000	< 0.10 U	< 0.11 U	< 0.10 U	**0.117**	**0.128**	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Atrazine	3	< 5.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Benzaldehyde	--	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
Benzo(a)anthracene	0.1	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.051 U
Benzo(a)pyrene	0.1	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.051 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	100	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
bis(2-Chloroethoxy)methane	--	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	**1.7 J**	< 2.1 U	**1.5 J**	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Caprolactam	5000	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Carbazole	--	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chrysene	5	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzofuran	--	< 5.0 U	< 5.3 U	< 5.0 U	**0.60 J**	**1.1 J**	**0.79 J**	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
Diethyl phthalate	6000	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Dimethyl phthalate	100	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	**1.8 J**	< 2.1 U	< 2.0 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Fluoranthene	300	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Fluorene	300	< 0.10 U	< 0.11 U	< 0.10 U	**0.964**	**1.12**	**0.68 J**	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachloro-1,3-butadiene	1	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U
Hexachlorobenzene	0.02	< 0.020 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.016 U	< 0.015 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.016 U	< 0.015 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.022 U	< 0.020 U	< 0.016 U	< 0.015 U	< 0.015 U
Hexachlorocyclopentadiene	40	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U
Hexachloroethane	7	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Isophorone	40	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
Naphthalene	300	< 0.10 U	< 0.11 U	< 0.10 U	**1.20**	**0.769**	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Nitrobenzene	6	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
p-Chloroaniline	--	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U
Pentachlorophenol	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	100	< 0.10 U	< 0.11 U	< 0.10 U	**0.136**	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Phenol	2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	200	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U
Total SVOC TICs	500	0	0	0	**18 J**	0	0	0	0	**72.1 J**	0	0	0	0	**8.6 J**	0	**68 J**	0	0	**8.8 J**	**45.8 J**	0	**41.5 J**	0

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WELL-AV 12/13/2004 N	WELL-AV 3/15/2005 N	WELL-AV 3/15/2005 FD	WELL-AV 8/17/2005 N	WELL-AV 10/4/2005 N	WELL-AV 1/3/2006 N	WELL-AV 3/28/2006 N	WELL-AV 3/28/2006 FD	WELL-AV 6/22/2006 N	WELL-AV 6/22/2006 FD	WELL-AV 9/27/2006 N	WELL-AV 9/27/2006 FD	WELL-AV 12/4/2006 N	WELL-AV 12/4/2006 FD	WELL-AV 9/26/2007 N	WELL-AV 9/26/2007 FD	WELL-AV 12/11/2007 N	WELL-AV 12/11/2007 FD	WELL-AV 6/26/2008 N	WELL-AV 6/26/2008 FD	WELL-AV 12/16/2008 N	WELL-AV 12/16/2008 FD	WELL-AV 6/2/2009 N
Volatile Organic Compounds																									
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	**7.9 J**	**7.9 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	**8.1 J**	**11.8**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromochloromethane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	--	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.25 J**	**0.26 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CFC-12	1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m&p-Xylenes		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl Acetate	7,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl-tert-butylether	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.43 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500																								

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID / Sample Date / Sample Type Code / GWQC (ug/L)	WELL-AV 12/13/2004 N	WELL-AV 3/15/2005 N	WELL-AV 3/15/2005 FD	WELL-AV 8/17/2005 N	WELL-AV 10/4/2005 N	WELL-AV 1/3/2006 N	WELL-AV 3/28/2006 N	WELL-AV 3/28/2006 FD	WELL-AV 6/22/2006 N	WELL-AV 6/22/2006 FD	WELL-AV 9/27/2006 N	WELL-AV 9/27/2006 FD	WELL-AV 12/4/2006 N	WELL-AV 12/4/2006 FD	WELL-AV 9/26/2007 N	WELL-AV 9/26/2007 FD	WELL-AV 12/11/2007 N	WELL-AV 12/11/2007 FD	WELL-AV 6/26/2008 N	WELL-AV 6/26/2008 FD	WELL-AV 12/16/2008 N	WELL-AV 12/16/2008 FD	WELL-AV 6/2/2009 N
Semi-volatile Organic Compounds																								
1,1-Biphenyl	400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	9	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
1,2-Dichlorobenzene	600	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
1,3-Dichlorobenzene	600	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
1,4-Dichlorobenzene	75	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
1,4-Dioxane	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Oxybis(1-Chloropropane)	300	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
2,4,5-Trichlorophenol	700	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2,4,6-Trichlorophenol	20	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2,4-Dichlorophenol	20	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2,4-Dimethylphenol	100	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2,4-Dinitrophenol	40	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U	< 20 U
2,4-Dinitrotoluene	--	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
2,6-Dinitrotoluene	--	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
2-Chloronaphthalene	600	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2-Chlorophenol	40	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2-Methyl-4,6-dinitrophenol	1	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U	< 20 U
2-Methylnaphthalene	30	**1.8 J**	**2.0**	**2.3**	**8.0**	**4.6**	**2.0**	**0.84 J**	**1.2 J**	< 2.1 U	< 2.0 U	**2.2**	**2.7**	**1.3 J**	**1.2 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.0 J**	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
2-Methylphenol	50	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.1 U	< 2.1 U	< 2.0 U
2-Nitroaniline	--	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
2-Nitrophenol	--	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
3,3-Dichlorobenzidine	30	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
3-Methylphenol, 4-Methylphenol	--	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**9.1**	**6.7**	< 2.1 U	< 2.1 U	< 2.0 U
3-Nitroaniline	--	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
4-Bromophenyl phenyl ether	--	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
4-Chloro-3-Methylphenol	100	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
4-Chlorophenyl phenyl ether	--	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
4-Nitroaniline	--	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
4-Nitrophenol	--	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 11 U	< 10 U
Acenaphthene	400	**0.64 J**	**5.0**	**5.1**	**1.8 J**	**1.5 J**	**1.1 J**	**2.4**	**3.3**	**2.3**	**2.5**	**1.1 J**	**1.3 J**	**1.1 J**	**0.93 J**	**1.1 J**	**1.1 J**	< 2.0 U	< 2.0 U	**0.44 J**	**0.62 J**	< 1.0 U	< 1.1 U	**0.40 J**
Acenaphthylene	100	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Acetophenone	700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	2000	< 2.2 U	**0.95 J**	**0.97 J**	< 2.0 U	**0.54 J**	**0.53 J**	**0.92 J**	**1.1 J**	**0.50 J**	**0.62 J**	**0.44 J**	**0.54 J**	< 2.0 U	< 2.0 U	< 2.0 U	**0.61 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Atrazine	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzaldehyde	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	0.1	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.43 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(a)pyrene	0.1	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(b)fluoranthene	0.2	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(g,h,i)perylene	100	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(k)fluoranthene	0.5	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
bis(2-Chloroethoxy)methane	--	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.0 J**	**1.1 J**	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.1 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.8 J**	< 2.0 U	< 2.1 U	**1.4 J**	< 2.0 U
Butyl benzyl phthalate	100	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Caprolactam	5000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	--	< 2.2 U	**9.9**	**10**	< 2.0 U	< 2.0 U	< 2.0 U	**0.87 J**	**1.2 J**	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Chrysene	5	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.42 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Dibenzo(a,h)anthracene	0.3	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Dibenzofuran	--	**0.71 J**	**2.7 J**	**2.7 J**	**2.2 J**	**1.3 J**	**1.1 J**	**1.7 J**	**2.0 J**	**1.8 J**	**2.0 J**	< 5.0 U	< 5.0 U	**0.93 J**	**0.97 J**	**0.95 J**	**0.97 J**	**0.56 J**	**0.66 J**	**0.76 J**	**0.89 J**	< 5.2 U	< 5.3 U	**0.45 J**
Diethyl phthalate	6000	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Dimethyl phthalate	100	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Fluoranthene	300	**1.0 J**	**1.4 J**	**1.4 J**	**0.86 J**	**1.2 J**	**0.96 J**	**1.1 J**	**1.1 J**	**1.2 J**	**1.2 J**	**1.1 J**	**1.1 J**	**1.1 J**	**0.88 J**	**3.0**	**2.7**	< 2.0 U	< 2.0 U	**0.36 J**	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Fluorene	300	**1.4 J**	**4.4**	**4.7**	**3.5**	**2.4**	**2.0**	**2.4**	**3.0**	**3.1**	**3.5**	**2.4**	**2.6**	**2.0**	**2.3**	**2.0**	**2.3**	**0.81 J**	**0.99 J**	**1.6 J**	**1.6 J**	< 1.0 U	< 1.1 U	**0.88 J**
Hexachloro-1,3-butadiene	1	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Hexachlorobenzene	0.02	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Hexachlorocyclopentadiene	40	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U	< 20 U
Hexachloroethane	7	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Isophorone	40	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Naphthalene	300	**3.9**	**4.3**	**4.6**	**5.6**	**3.1**	**2.3**	**1.2 J**	**1.3 J**	**1.6 J**	**1.8 J**	**2.1**	**2.5**	**2.0**	**1.9 J**	< 2.0 U	**0.44 J**	**0.61 J**	**0.68 J**	**1.3 J**	**0.89 J**	< 1.0 U	< 1.1 U	**0.50 J**
Nitrobenzene	6	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
p-Chloroaniline	--	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U
Pentachlorophenol	0.3	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U
Phenanthrene	100	< 2.2 U	**5.3**	**5.6**	**2.5**	**2.7**	**1.0 J**	**1.7 J**	**1.9 J**	**1.2 J**	**1.3 J**	**0.75 J**	**0.86 J**	**0.69 J**	**0.68 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.62 J**	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Phenol	2000	< 5.6 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U
Pyrene	200	**0.96 J**	**0.94 J**	**0.97 J**	**0.74 J**	**1.0 J**	**1.0 J**	**0.65 J**	**0.64 J**	**1.3 J**	**1.4 J**	**1.0 J**	**0.99 J**	**0.86 J**	**0.63 J**	**2.4**	**2.1**	**0.41 J**	**0.42 J**	**0.46 J**	< 2.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Total SVOC TICs	500	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WELL-AV 6/2/2009 FD	WELL-AV 6/24/2010 N	WELL-AV 6/24/2010 FD	Well-AV 12/15/2010 N	WELL-AV 12/15/2010 FD	WELL-AV 6/21/2011 N	WELL-AV 6/21/2011 FD	Well-AV 12/20/2011 N	Well-AV 12/20/2011 FD	Well-AV 6/28/2012 N	Well-AV 6/28/2012 FD	Well-AV 12/4/2012 N	Well-AV 12/4/2012 FD	Well-AV 6/11/2013 N	Well-AV 6/11/2013 FD	Well-AV 12/5/2013 N	Well-AV 12/5/2013 FD	Well-AV 6/5/2014 N	Well-AV 6/5/2014 FD	Well-AV 12/3/2014 N	Well-AV 12/3/2014 FD	Well-AV 6/23/2015 N	Well-AV 6/23/2015 FD
Volatile Organic Compounds																									
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	9	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	75	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**7.4 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**12.8**	**12.1**
Benzene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
Bromochloromethane		--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
CFC-12	1,000	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	--	--	--	< 2.0 U	< 2.0 U	**0.35 J**	**0.37 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m&p-Xylenes		--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Methyl Acetate	7,000	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl-tert-butylether	70	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene		--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.36 J**	**0.39 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.39 J**	**0.35 J**	< 1.0 U	< 1.0 U	**0.37 J**	**0.37 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.66 J**	**0.71 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500																								

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WELL-AV 6/2/2009 FD	WELL-AV 6/24/2010 N	WELL-AV 6/24/2010 FD	Well-AV 12/15/2010 N	WELL-AV 12/15/2010 FD	WELL-AV 6/21/2011 N	WELL-AV 6/21/2011 FD	Well-AV 12/20/2011 N	Well-AV 12/20/2011 FD	Well-AV 6/28/2012 N	Well-AV 6/28/2012 FD	Well-AV 12/4/2012 N	Well-AV 12/4/2012 FD	Well-AV 6/11/2013 N	Well-AV 6/11/2013 FD	Well-AV 12/5/2013 N	Well-AV 12/5/2013 FD	Well-AV 6/5/2014 N	Well-AV 6/5/2014 FD	Well-AV 12/3/2014 N	Well-AV 12/3/2014 FD	Well-AV 6/23/2015 N	Well-AV 6/23/2015 FD
Semi-volatile Organic Compounds																									
1,1-Biphenyl	400	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4,5-Tetrachlorobenzene	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,2,4-Trichlorobenzene	9	< 2.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	< 2.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	600	< 2.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	< 2.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4,5-Trichlorophenol	700	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	20	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	100	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2,6-Dinitrotoluene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Chloronaphthalene	600	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Chlorophenol	40	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol	1	< 20 U	< 20 U	< 20 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	30	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylphenol	50	< 2.0 U	< 2.0 U	< 2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
2-Nitrophenol	--	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3-Dichlorobenzidine	30	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
3-Methylphenol, 4-Methylphenol	--	< 2.0 U	< 2.0 U	< 2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
4-Bromophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Chloro-3-Methylphenol	100	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
4-Nitrophenol	--	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	400	**0.58 J**	**0.44 J**	**0.54 J**	< 0.10 U	< 0.10 U	**0.495**	**0.787**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.147**	< 0.10 U	< 0.10 U	**0.229**	**0.311**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Acenaphthylene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Acetophenone	700	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Anthracene	2000	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Atrazine	3	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Benzaldehyde	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
Benzo(a)anthracene	0.1	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.050 U	< 0.050 U
Benzo(a)pyrene	0.1	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.050 U	< 0.050 U
Benzo(b)fluoranthene	0.2	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	**0.123**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Benzo(k)fluoranthene	0.5	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
bis(2-Chloroethoxy)methane	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Caprolactam	5000	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbazole	--	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chrysene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Dibenzo(a,h)anthracene	0.3	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzofuran	--	**0.64 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
Diethyl phthalate	6000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**1.8 J**	**1.7 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Fluoranthene	300	**0.39 J**	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Fluorene	300	**1.2**	**0.77 J**	**0.87 J**	< 0.10 U	< 0.10 U	**0.226**	**0.364**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.133**	< 0.10 U	< 0.10 U	**0.149**	**0.216**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Hexachloro-1,3-butadiene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobenzene	0.02	< 2.0 U	< 1.0 U	< 1.0 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.023 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.015 U	< 0.015 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Hexachloroethane	7	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	**0.125**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Naphthalene	300	**0.67 J**	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	**0.211**	**0.263**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.252**	**0.384**	< 0.10 U	< 0.10 U	**0.120**	**0.137**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
p-Chloroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U
Pentachlorophenol	0.3	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Phenol	2000	< 2.0 U	< 2.0 U	< 2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	200	**0.47 J**	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U
Total SVOC TICs	500	--	--	--	0	0	**4 J**	**11.2 J**	0	0	0	0	**4.8 J**	0	**6.7 J**	**5.8 J**	**6.4 J**	**32.4 J**	**4.5 J**	**4.5 J**	0	0	**5.1 J**	0

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-AV 12/21/2015 N	Well-AV 12/21/2015 FD	Well-AV 6/21/2016 N	Well-AV 6/21/2016 FD	Well-AV 12/14/2016 N	Well-AV 12/14/2016 FD	WELL-AY 12/13/2004 N	WELL-AY 3/15/2005 N	WELL-AY 7/21/2005 N	WELL-AY 10/4/2005 N	WELL-AY 3/29/2006 N	Well-AY 6/23/2006 N	Well-AY 9/27/2006 N	Well-AY 12/5/2006 N	WELL-AY 9/27/2007 N	WELL-AY 12/12/2007 N	Well-AY 6/27/2008 N	Well-AY 12/17/2008 N	Well-AY 6/3/2009 N	Well-AY 12/8/2009 N	Well-AY 12/8/2009 FD	WELL-AY 6/24/2010 N	Well-AY 1/21/2011 N
Volatile Organic Compounds																									
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
1,2,4-Trichlorobenzene	9	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
1,2,4-Trimethylbenzene	100	–	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1,2-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U
2-Butanone (MEK)	300	< 10 U	< 10 U	**13.9**	**13.6**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	**2.2 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	**68.3**	**65.4**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.4**	< 1.0 U
Bromochloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
CFC-12	1,000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.0**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.0**	< 1.0 U	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	**2.6 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U
Styrene (Monomer)	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.7**	< 1.0 U	**2.5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500							–	–	–	–	–													

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-AV 12/21/2015 N	Well-AV 12/21/2015 FD	Well-AV 6/21/2016 N	Well-AV 6/21/2016 FD	Well-AV 12/14/2016 N	Well-AV 12/14/2016 FD	WELL-AY 12/13/2004 N	WELL-AY 3/15/2005 N	WELL-AY 7/21/2005 N	WELL-AY 10/4/2005 N	WELL-AY 3/29/2006 N	Well-AY 6/23/2006 N	Well-AY 9/27/2006 N	Well-AY 12/5/2006 N	WELL-AY 9/27/2007 N	WELL-AY 12/12/2007 N	Well-AY 6/27/2008 N	Well-AY 12/17/2008 N	Well-AY 6/3/2009 N	Well-AY 12/8/2009 N	Well-AY 12/8/2009 FD	WELL-AY 6/24/2010 N	Well-AY 1/21/2011 N
Semi-volatile Organic Compounds																								
1,1-Biphenyl	400	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U
1,2,4,5-Tetrachlorobenzene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
1,2,4-Trichlorobenzene	9	--	--	--	--	--	--	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	--
1,2-Dichlorobenzene	600	--	--	--	--	--	--	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	--
1,3-Dichlorobenzene	600	--	--	--	--	--	--	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	--
1,4-Dichlorobenzene	75	--	--	--	--	--	--	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	--
1,4-Dioxane	0.4	--	--	< 0.10 U	< 0.10 U	< 0.11 U	< 0.11 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	5	--	--	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4,5-Trichlorophenol	700	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
2,4,6-Trichlorophenol	20	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
2,4-Dichlorophenol	20	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
2,4-Dimethylphenol	100	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
2,4-Dinitrophenol	40	--	--	--	--	--	--	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	--
2,4-Dinitrotoluene	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
2,6-Dinitrotoluene	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Chloronaphthalene	600	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U
2-Chlorophenol	40	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
2-Methyl-4,6-dinitrophenol	1	--	--	--	--	--	--	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	--
2-Methylnaphthalene	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U
2-Methylphenol	50	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	--
2-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
2-Nitrophenol	--	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
3,3-Dichlorobenzidine	30	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
3-Methylphenol, 4-Methylphenol	--	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	--
3-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
4-Bromophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Chloro-3-Methylphenol	100	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	--
4-Chlorophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
4-Nitrophenol	--	--	--	--	--	--	--	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	--
Acenaphthene	400	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Acenaphthylene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Acetophenone	700	< 2.0 U	< 2.0 U	**0.65 J**	**0.81 J**	< 2.1 U	< 2.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
Anthracene	2000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Atrazine	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
Benzaldehyde	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
Benzo(a)anthracene	0.1	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.053 U	< 0.053 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Benzo(a)pyrene	0.1	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.053 U	< 0.053 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.11 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Benzo(g,h,i)perylene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.11 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
bis(2-Chloroethoxy)methane	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	**2.5**	**3.4**	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	**2.7**	**1.3 J**	< 2.0 U	**2.2 B**	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
Caprolactam	5000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
Carbazole	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U
Chrysene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.11 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Dibenzofuran	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
Diethyl phthalate	6000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**8.7**
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	**2.4**	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**1.5 J**
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
Fluoranthene	300	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Fluorene	300	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Hexachloro-1,3-butadiene	1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.11 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobenzene	0.02	< 0.015 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.016 U	< 0.016 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 0.020 U
Hexachlorocyclopentadiene	40	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 11 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U
Hexachloroethane	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.11 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
Naphthalene	300	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
p-Chloroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U
Pentachlorophenol	0.3	--	--	--	--	--	--	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 22 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	--
Phenanthrene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Phenol	2000	--	--	--	--	--	--	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.5 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	--
Pyrene	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 0.10 U
Total SVOC TICs	500	0	0	**131.7 J**	**117.9 J**	0	**14.4 J**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WELL-AY 6/22/2011 N	Well-AY 6/22/2011 FD	Well-AY 12/21/2011 N	Well-AY 6/28/2012 N	Well-AY 12/5/2012 N	Well-AY 6/12/2013 N	Well-AY 12/5/2013 N	Well-AY 6/6/2014 N	Well-AY 12/4/2014 N	Well-AY 6/24/2015 N	Well-AY 12/22/2015 N	Well-AY 6/24/2016 N	Well-AY 12/14/2016 N	WELL-AZ 12/10/2004 N	WELL-AZ 8/17/2005 N	WELL-AZ 10/4/2005 N	WELL-AZ 3/28/2006 N	Well-AZ 6/22/2006 N	Well-AZ 9/27/2006 N	Well-AZ 12/5/2006 N	WELL-AZ 9/26/2007 N	WELL-AZ 12/11/2007 N	Well-AZ 6/26/2008 N
Volatile Organic Compounds																									
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
1,2,4-Trichlorobenzene	9	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
1,2,4-Trimethylbenzene	100	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–
1,2-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**6.9 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromochloromethane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–
CFC-12	1,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500														–	–	–	–	–	–	–	–	–	–

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WELL-AY 6/22/2011 N	Well-AY 6/22/2011 FD	Well-AY 12/21/2011 N	Well-AY 6/28/2012 N	Well-AY 12/5/2012 N	Well-AY 6/12/2013 N	Well-AY 12/5/2013 N	Well-AY 6/6/2014 N	Well-AY 12/4/2014 N	Well-AY 6/24/2015 N	Well-AY 12/22/2015 N	Well-AY 6/24/2016 N	Well-AY 12/14/2016 N	WELL-AZ 12/10/2004 N	WELL-AZ 8/17/2005 N	WELL-AZ 10/4/2005 N	WELL-AZ 3/28/2006 N	Well-AZ 6/22/2006 N	Well-AZ 9/27/2006 N	Well-AZ 12/5/2006 N	WELL-AZ 9/26/2007 N	WELL-AZ 12/11/2007 N	Well-AZ 6/26/2008 N
Semi-volatile Organic Compounds																									
1,1-Biphenyl	400	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–
1,2,4,5-Tetrachlorobenzene	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	–	–	–	–	–	–	–	–	–	–	–
1,2,4-Trichlorobenzene	9	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,2-Dichlorobenzene	600	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,3-Dichlorobenzene	600	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,4-Dichlorobenzene	75	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,4-Dioxane	0.4	–	–	–	–	–	–	–	–	–	–	–	< 0.10 U	< 0.10 U	–	–	–	–	–	–	–	–	–	–	–
1-Methylnaphthalene	5	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4,5-Trichlorophenol	700	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2,4,6-Trichlorophenol	20	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2,4-Dichlorophenol	20	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2,4-Dimethylphenol	100	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2,4-Dinitrophenol	40	–	–	–	–	–	–	–	–	–	–	–	–	–	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
2,4-Dinitrotoluene	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,6-Dinitrotoluene	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Chloronaphthalene	600	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2-Chlorophenol	40	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2-Methyl-4,6-dinitrophenol	1	–	–	–	–	–	–	–	–	–	–	–	–	–	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
2-Methylnaphthalene	30	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Methylphenol	50	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 2.0 U
2-Nitroaniline	–	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
2-Nitrophenol	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
3,3-Dichlorobenzidine	30	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
3-Methylphenol, 4-Methylphenol	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 2.0 U
3-Nitroaniline	–	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
4-Bromophenyl phenyl ether	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Chloro-3-Methylphenol	100	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
4-Chlorophenyl phenyl ether	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Nitroaniline	–	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
4-Nitrophenol	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
Acenaphthene	400	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Acenaphthylene	100	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Acetophenone	700	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	–	–	–	–	–	–	–	–	–	–	–
Anthracene	2000	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Atrazine	3	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	–	–	–	–	–	–	–	–	–	–	–
Benzaldehyde	–	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	–	–	–	–	–	–	–	–	–	–	–
Benzo(a)anthracene	0.1	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.051 U	**0.441**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Benzo(a)pyrene	0.1	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.128**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.051 U	**0.752**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.219**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**1.54**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Benzo(g,h,i)perylene	100	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.186**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.125**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.391**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Chloroethoxy)methane	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.6 J**	< 2.0 U	< 2.0 U	**5.2**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**1.3 BJ**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Caprolactam	5000	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	–	–	–	–	–	–	–	–	–	–	–
Carbazole	–	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chrysene	5	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.131**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.92 J**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.241**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dibenzofuran	–	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
Diethyl phthalate	6000	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	**2.4**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Fluoranthene	300	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.139**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.0**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Fluorene	300	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Hexachloro-1,3-butadiene	1	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Hexachlorobenzene	0.02	< 0.020 U	< 0.020 U	< 0.021 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.015 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 21 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2.0 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
Hexachloroethane	7	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.142**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.979**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Naphthalene	300	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
p-Chloroaniline	–	< 5.0 U	< 5.0 U	< 5.3 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U
Pentachlorophenol	0.3	–	–	–	–	–	–	–	–	–	–	–	–	–	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U
Phenanthrene	100	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Phenol	2000	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.1 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 2.0 U
Pyrene	200	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	**0.127**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.0**	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Total SVOC TICs	500	0	0	0	0	0	0	**5.4 J**	0	0	0	0	0	0	–	–	–	–	–	–	–	–	–	–	–

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-AZ 12/16/2008 N	Well-AZ 6/2/2009 N	Well-AZ 12/8/2009 N	WELL-AZ 6/23/2010 N	Well-AZ 12/15/2010 N	WELL-AZ 6/20/2011 N	Well-AZ 12/19/2011 N	Well-AZ 6/27/2012 N	Well-AZ 1/23/2013 N	Well-AZ 12/4/2013 N	Well-AZ 6/4/2014 N	Well-AZ 12/4/2014 N	Well-AZ 6/24/2015 N	Well-AZ 12/21/2015 N	Well-AZ 6/22/2016 N	Well-AZ 12/13/2016 N	WELL-BV 9/27/2007 N	WELL-BV 12/12/2007 N	Well-BV 6/26/2008 N	Well-BV 12/17/2008 N	Well-BV 6/2/2009 N	Well-BV 12/8/2009 N	WELL-BV 6/23/2010 N
Volatile Organic Compounds																									
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	9	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
1,2,4-Trimethylbenzene	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**4.3 J**	< 10 U	< 10 U	< 10 U	**8.2 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**6.7 J**
Benzene	1	**0.42 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromochloromethane		--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	--	--	--	--	--	--	--
CFC-12	1,000	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	--	--	--	--	--	--	--
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.41 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
m&p-Xylenes		--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
Methyl Acetate	7,000	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	--	--
Methyl-tert-butylether	70	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
o-Xylene		--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500	--	--	--	--					**12 J**									--	--	--	--	--	--	--

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-AZ 12/16/2008 N	Well-AZ 6/2/2009 N	Well-AZ 12/8/2009 N	WELL-AZ 6/23/2010 N	Well-AZ 12/15/2010 N	WELL-AZ 6/20/2011 N	Well-AZ 12/19/2011 N	Well-AZ 6/27/2012 N	Well-AZ 1/23/2013 N	Well-AZ 12/4/2013 N	Well-AZ 6/4/2014 N	Well-AZ 12/4/2014 N	Well-AZ 6/24/2015 N	Well-AZ 12/21/2015 N	Well-AZ 6/22/2016 N	Well-AZ 12/13/2016 N	WELL-BV 9/27/2007 N	WELL-BV 12/12/2007 N	Well-BV 6/26/2008 N	Well-BV 12/17/2008 N	Well-BV 6/2/2009 N	Well-BV 12/8/2009 N	WELL-BV 6/23/2010 N
Semi-volatile Organic Compounds																									
1,1-Biphenyl	400	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	--	--	--	--	--	--	--
1,2,4,5-Tetrachlorobenzene	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	9	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
1,2-Dichlorobenzene	600	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
1,3-Dichlorobenzene	600	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
1,4-Dichlorobenzene	75	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
1,4-Dioxane	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.11 U	--	--	--	--	--	--	--
1-Methylnaphthalene	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.1 U	--	--	--	--	--	--	--
2,2-Oxybis(1-Chloropropane)	300	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
2,4,5-Trichlorophenol	700	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
2,4,6-Trichlorophenol	20	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
2,4-Dichlorophenol	20	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
2,4-Dimethylphenol	100	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
2,4-Dinitrophenol	40	< 22 U	< 20 U	< 22 U	< 20 U	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U
2,4-Dinitrotoluene	--	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
2,6-Dinitrotoluene	--	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
2-Chloronaphthalene	600	< 5.4 U	< 5.1 U	< 5.6 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 2.0 U
2-Chlorophenol	40	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
2-Methyl-4,6-dinitrophenol	1	< 22 U	< 20 U	< 22 U	< 20 U	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U
2-Methylnaphthalene	30	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
2-Methylphenol	50	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
2-Nitroaniline	--	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
2-Nitrophenol	--	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
3,3-Dichlorobenzidine	30	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
3-Methylphenol, 4-Methylphenol	--	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
3-Nitroaniline	--	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
4-Bromophenyl phenyl ether	--	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
4-Chloro-3-Methylphenol	100	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
4-Chlorophenyl phenyl ether	--	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
4-Nitroaniline	--	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
4-Nitrophenol	--	< 11 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U
Acenaphthene	400	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.932**	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Acenaphthylene	100	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Acetophenone	700	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	--	--	--	--	--	--	--
Anthracene	2000	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Atrazine	3	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	--	--	--	--	--	--	--
Benzaldehyde	--	--	--	--	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	--	--	--	--	--	--	--
Benzo(a)anthracene	0.1	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.050 U	< 0.054 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(a)pyrene	0.1	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.052 U	< 0.050 U	< 0.050 U	< 0.054 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(b)fluoranthene	0.2	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(g,h,i)perylene	100	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Benzo(k)fluoranthene	0.5	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
bis(2-Chloroethoxy)methane	--	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	**1.4 J**	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	**2.0**	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Caprolactam	5000	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	--	--	--	--	--	--	--
Carbazole	--	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
Chrysene	5	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Dibenzo(a,h)anthracene	0.3	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Dibenzofuran	--	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
Diethyl phthalate	6000	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Dimethyl phthalate	100	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Fluoranthene	300	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	**0.24 J**	< 1.1 U	< 1.0 U
Fluorene	300	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Hexachloro-1,3-butadiene	1	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.11 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Hexachlorobenzene	0.02	< 2.2 U	< 2.0 U	< 2.2 U	< 1.0 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.016 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 1.0 U
Hexachlorocyclopentadiene	40	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U
Hexachloroethane	7	< 5.4 U	< 5.1 U	< 5.6 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 2.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Isophorone	40	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Naphthalene	300	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.108**	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Nitrobenzene	6	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
p-Chloroaniline	--	< 5.4 U	< 5.1 U	< 5.6 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.4 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.6 U	< 5.0 U
Pentachlorophenol	0.3	< 11 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U
Phenanthrene	100	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U
Phenol	2000	< 2.2 U	< 2.0 U	< 2.2 U	< 2.0 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.2 U	< 2.0 U
Pyrene	200	< 1.1 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	**0.25 J**	< 1.1 U	< 1.0 U
Total SVOC TICs	500	--	--	--	--	0	0	0	**55 J**	**1930 J**	0	0	0	0	0	0	0	--	--	--	--	--	--	--

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-BV 1/21/2011 N	WELL-BV 6/21/2011 N	Well-BV 12/20/2011 N	Well-BV 6/27/2012 N	Well-BV 12/4/2012 N	Well-BV 6/11/2013 N	Well-BV 12/5/2013 N	Well-BV 6/4/2014 N	Well-BV 12/4/2014 N	Well-BV 6/24/2015 N	Well-BV 12/22/2015 N	Well-BV 6/22/2016 N	Well-BV 12/14/2016 N	Well-CG 1/21/2011 N	WELL-CG 2/17/2011 N	WELL-CG 6/21/2011 N	Well-CG 12/19/2011 N	Well-CG 6/27/2012 N	Well-CG 12/4/2012 N	Well-CG 12/5/2013 N	Well-CG 6/4/2014 N	Well-CG 12/3/2014 N	Well-CG 6/24/2015 N
Volatile Organic Compounds																								
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	9	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	100	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–
1,2-Dichlorobenzene	600	< 1.0 U	**36.2**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**1.1**	**0.34 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.51 J**	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U
Bromochloromethane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U
CFC-12	1,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.79 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.77 J**	< 1.0 U	**0.68 J**	**2.2**	< 1.0 U	**0.74 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.3**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500															–			**27.3 J**					

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-BV 1/21/2011 N	WELL-BV 6/21/2011 N	Well-BV 12/20/2011 N	Well-BV 6/27/2012 N	Well-BV 12/4/2012 N	Well-BV 6/11/2013 N	Well-BV 12/5/2013 N	Well-BV 6/4/2014 N	Well-BV 12/4/2014 N	Well-BV 6/24/2015 N	Well-BV 12/22/2015 N	Well-BV 6/22/2016 N	Well-BV 12/14/2016 N	Well-CG 1/21/2011 N	WELL-CG 2/17/2011 N	WELL-CG 6/21/2011 N	Well-CG 12/19/2011 N	Well-CG 6/27/2012 N	Well-CG 12/4/2012 N	Well-CG 12/5/2013 N	Well-CG 6/4/2014 N	Well-CG 12/3/2014 N	Well-CG 6/24/2015 N
Semi-volatile Organic Compounds																								
1,1-Biphenyl	400	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4,5-Tetrachlorobenzene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,2,4-Trichlorobenzene	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	0.4	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	--	--	--	--	--	--	--	--	--	--
1-Methylnaphthalene	5	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U	--	--	--	--	--	--	--	--	--	--
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4,5-Trichlorophenol	700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2,6-Dinitrotoluene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Chloronaphthalene	600	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Chlorophenol	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.84 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylphenol	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	--	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
2-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3-Dichlorobenzidine	30	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
3-Methylphenol, 4-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	--	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
4-Bromophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Chloro-3-Methylphenol	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Nitroaniline	--	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
4-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	400	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.330**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.714**	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Acenaphthylene	100	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	**0.442**	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Acetophenone	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Anthracene	2000	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Atrazine	3	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Benzaldehyde	--	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
Benzo(a)anthracene	0.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.051 U	< 0.050 U	< 0.050 U	< 0.051 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.050 U
Benzo(a)pyrene	0.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.051 U	< 0.050 U	< 0.050 U	< 0.051 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.050 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	100	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
bis(2-Chloroethoxy)methane	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	**3.5**	< 2.0 U	< 2.0 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Caprolactam	5000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbazole	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chrysene	5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzofuran	--	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
Diethyl phthalate	6000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.7 J**	**27.4**	**3.3**	< 2.0 U	< 2.0 U	**35.3**	< 2.0 U
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Fluoranthene	300	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Fluorene	300	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.203**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.419**	< 0.10 U	**0.295**	< 0.10 U	< 1.0 U
Hexachloro-1,3-butadiene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobenzene	0.02	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.015 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 21 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Hexachloroethane	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Naphthalene	300	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.13**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	**0.536**	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
p-Chloroaniline	--	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U
Pentachlorophenol	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	100	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.110**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	**0.130**	< 0.10 U	< 1.0 U
Phenol	2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	200	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U
Total SVOC TICs	500	0	**45 J**	0	0	0	0	**33 J**	0	0	0	0	0	0	0	--	0	0	**15 J**	**9.8 J**	0	0	0	0

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-CG 12/21/2015 N	Well-CG 6/22/2016 N	Well-CG 12/13/2016 N	WELL-W 8/17/2005 FD	WELL-X 12/13/2004 N	WELL-X 12/13/2004 FD	WELL-X 3/15/2005 N	WELL-X 7/21/2005 N	WELL-X 10/4/2005 N	Well-X 9/27/2006 N	Well-X 12/5/2006 N	WELL-X 12/12/2007 N	Well-X 6/27/2008 N	Well-X 12/16/2008 N	Well-X 6/3/2009 N	Well-X 12/8/2009 N	WELL-X 6/23/2010 N	Well-X 1/21/2011 N	WELL-X 6/22/2011 N	Well-X 12/21/2011 N	Well-X 8/2/2012 N	Well-X 6/12/2013 N	Well-X 12/5/2013 N
Volatile Organic Compounds																									
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2,4-Trichlorobenzene	9	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2,4-Trimethylbenzene	100	–	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1,2-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**44.8**	< 10 U	**15.2**	< 10 U	< 10 U	< 10 U	**12.7**	**8.4 J**	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**2.3**	< 1.0 U	**10.2**	**6.9**	**5.2**	**0.92 J**	< 1.0 U	**0.38 J**	< 1.0 U	**0.39 J**	< 1.0 U	**0.95 J**	< 1.0 U	**0.28 J**	< 1.0 U	< 1.0 U
Bromochloromethane		< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.2 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.34 J**	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
CFC-12	1,000	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	**1.1 J**	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	**0.66 J**	**0.79 J**	**1.1 J**	**0.61 J**	< 5.0 U	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	**0.91 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.83 J**	< 1.0 U	< 1.0 U	< 1.0 U	**0.58 J**	**0.94 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.51 J**	**0.28 J**	**0.52 J**	**0.26 J**	< 1.0 U	< 1.0 U
Isopropylbenzene	700	**1.1**	**0.57 J**	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	**0.34 J**	**0.49 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	**1.3 J**	< 5.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	**0.51 J**	**0.94 J**	**1.9 J**	**1.1 J**	< 5.0 U	< 5.0 U
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	**0.20 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene (Monomer)	100	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.87 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.41 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.0**	**1.4**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.54 J**	< 1.0 U	< 1.0 U	**0.25 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500	**12.9 J**			–	–	–	–	–	–	–	–	–	–	–	–	–	–	**9 J**						

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-CG 12/21/2015 N	Well-CG 6/22/2016 N	Well-CG 12/13/2016 N	WELL-W 8/17/2005 FD	WELL-X 12/13/2004 N	WELL-X 12/13/2004 FD	WELL-X 3/15/2005 N	WELL-X 7/21/2005 N	WELL-X 10/4/2005 N	Well-X 9/27/2006 N	Well-X 12/5/2006 N	WELL-X 12/12/2007 N	Well-X 6/27/2008 N	Well-X 12/16/2008 N	Well-X 6/3/2009 N	Well-X 12/8/2009 N	WELL-X 6/23/2010 N	Well-X 1/21/2011 N	WELL-X 6/22/2011 N	Well-X 12/21/2011 N	Well-X 8/2/2012 N	Well-X 6/12/2013 N	Well-X 12/5/2013 N
Semi-volatile Organic Compounds																									
1,1-Biphenyl	400	< 1.0 U	< 1.0 U	< 1.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U
1,2,4,5-Tetrachlorobenzene	–	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
1,2,4-Trichlorobenzene	9	–	–	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 1.0 U	–	–	–	–	–	–
1,2-Dichlorobenzene	600	–	–	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 1.0 U	–	–	–	–	–	–
1,3-Dichlorobenzene	600	–	–	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 1.0 U	–	–	–	–	–	–
1,4-Dichlorobenzene	75	–	–	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 1.0 U	–	–	–	–	–	–
1,4-Dioxane	0.4	–	< 0.10 U	< 0.10 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1-Methylnaphthalene	5	–	**0.95 J**	**0.87 J**	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
2,4,5-Trichlorophenol	700	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
2,4,6-Trichlorophenol	20	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
2,4-Dichlorophenol	20	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
2,4-Dimethylphenol	100	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
2,4-Dinitrophenol	40	–	–	–	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	–	–	–	–	–	–
2,4-Dinitrotoluene	–	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 1.0 U
2,6-Dinitrotoluene	–	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 1.0 U
2-Chloronaphthalene	600	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
2-Chlorophenol	40	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
2-Methyl-4,6-dinitrophenol	1	–	–	–	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	–	–	–	–	–	–
2-Methylnaphthalene	30	**8.6**	< 1.0 U	< 1.0 U	**7.6**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.7 J**	< 2.0 U	< 2.1 U	< 2.0 U	**1.9 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**1.1**	< 1.1 U	< 1.0 U
2-Methylphenol	50	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	–	–	–	–	–	–
2-Nitroaniline	–	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
2-Nitrophenol	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
3,3-Dichlorobenzidine	30	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 2.1 U
3-Methylphenol, 4-Methylphenol	–	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**4.4 J**	**25.4**	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	–	–	–	–	–	–
3-Nitroaniline	–	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
4-Bromophenyl phenyl ether	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
4-Chloro-3-Methylphenol	100	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	–	–	–	–	–	–
4-Chlorophenyl phenyl ether	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
4-Nitroaniline	–	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
4-Nitrophenol	–	–	–	–	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	–	–	–	–	–	–
Acenaphthene	400	**0.46 J**	**0.51 J**	< 1.0 U	**1.7 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.6 J**	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	**0.64 J**	< 1.0 U	< 0.10 U	**0.232**	< 0.10 U	**0.411**	**0.241**	< 0.10 U
Acenaphthylene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Acetophenone	700	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Anthracene	2000	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	**0.73 J**	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.114**	< 0.10 U	< 0.10 U
Atrazine	3	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 2.1 U
Benzaldehyde	–	< 5.1 U	< 5.0 U	< 5.1 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
Benzo(a)anthracene	0.1	< 0.051 U	< 0.050 U	< 0.051 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	0.1	< 0.051 U	< 0.050 U	< 0.051 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.10 U	< 0.10 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
bis(2-Chloroethoxy)methane	–	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**2.0 J**	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**1.7 J**	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Caprolactam	5000	< 2.0 U	< 2.0 U	< 2.0 U	–	–	–	–	–	–	–	–	–	–	–	–	–	–	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	**56.6**
Carbazole	–	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	**0.51 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U
Chrysene	5	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.10 U	< 0.10 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzofuran	–	< 5.1 U	< 5.0 U	< 5.1 U	**2.1 J**	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
Diethyl phthalate	6000	**1.4 J**	**4.7**	**13.3**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	**2.6**	< 2.1 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Fluoranthene	300	< 1.0 U	< 1.0 U	< 1.0 U	**0.84 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.245**	**0.149**	< 0.10 U
Fluorene	300	**0.50 J**	< 1.0 U	< 1.0 U	**3.3**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.74 J**	< 2.0 U	< 2.0 U	**0.38 J**	< 2.0 U	< 1.0 U	**0.42 J**	**0.81 J**	< 1.0 U	< 0.10 U	**0.350**	**0.140**	**0.515**	**0.260**	< 0.10 U
Hexachloro-1,3-butadiene	1	< 0.10 U	< 0.10 U	< 0.10 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.1 U	< 1.0 U
Hexachlorobenzene	0.02	< 0.015 U	< 0.015 U	< 0.015 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 1.0 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.021 U	< 0.021 U
Hexachlorocyclopentadiene	40	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 21 U	< 11 U	< 11 U	< 10 U
Hexachloroethane	7	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
Naphthalene	300	**8.4**	< 1.0 U	**0.47 J**	**5.5**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**1.5 J**	**0.85 J**	< 2.0 U	< 1.0 U	**0.89 J**	< 1.1 U	< 1.0 U	< 0.10 U	**0.118**	< 0.10 U	**0.202**	< 0.10 U	< 0.10 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U
N-Nitrosodiphenylamine	10	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
p-Chloroaniline	–	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.3 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.3 U	< 5.3 U	< 5.2 U
Pentachlorophenol	0.3	–	–	–	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	–	–	–	–	–	–
Phenanthrene	100	< 1.0 U	< 1.0 U	< 1.0 U	**2.3**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	**1.3**	< 1.0 U	< 0.10 U	**0.113**	< 0.10 U	**0.912**	**0.269**	< 0.10 U
Phenol	2000	–	–	–	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.1 U	< 2.0 U	**3.2**	< 2.0 U	–	–	–	–	–	–
Pyrene	200	< 1.0 U	< 1.0 U	< 1.0 U	**0.74 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.1 U	< 1.0 U	< 0.10 U	**0.145**	< 0.10 U	**0.251**	**0.160**	**0.250**
Total SVOC TICs	500	**22.6 J**	0	0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**138.4 J**	**137.9 J**	0	**21.5 J**	**12 J**	**11.2 J**

Table 03. Unit 1 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-X 6/6/2014 N	Well-X 12/4/2014 N	Well-X 6/24/2015 N	Well-X 12/21/2015 N	Well-X 6/24/2016 N	Well-X 12/14/2016 N
Volatile Organic Compounds							
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trichlorobenzene	9	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4-Trimethylbenzene	100	--	--	--	--	< 2.0 U	< 2.0 U
1,2-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		--	--	--	--	--	--
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**0.17 J**	< 0.50 U
Bromochloromethane		< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
CFC-12	1,000	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	**0.72 J**	< 5.0 U	< 5.0 U	**0.94 J**	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.32 J**	< 1.0 U
Isopropylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.29 J**	< 1.0 U
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanor	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	**0.91 J**	< 5.0 U	< 5.0 U	**1.3 J**	< 5.0 U
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene (Monomer)	100	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500						

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	Well-X 6/6/2014 N	Well-X 12/4/2014 N	Well-X 6/24/2015 N	Well-X 12/21/2015 N	Well-X 6/24/2016 N	Well-X 12/14/2016 N
Semi-volatile Organic Compounds							
1,1-Biphenyl	400	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
1,2,4,5-Tetrachlorobenzene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
1,2,4-Trichlorobenzene	9	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	--	--	--
1,3-Dichlorobenzene	600	--	--	--	--	--	--
1,4-Dichlorobenzene	75	--	--	--	--	--	--
1,4-Dioxane	0.4	--	--	--	--	< 0.10 U	< 0.11 U
1-Methylnaphthalene	5	--	--	--	--	< 1.0 U	< 1.1 U
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
2,4,5-Trichlorophenol	700	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	--	--	--	--	--	--
2,4-Dichlorophenol	20	--	--	--	--	--	--
2,4-Dimethylphenol	100	--	--	--	--	--	--
2,4-Dinitrophenol	40	--	--	--	--	--	--
2,4-Dinitrotoluene	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
2,6-Dinitrotoluene	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
2-Chloronaphthalene	600	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
2-Chlorophenol	40	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol	1	--	--	--	--	--	--
2-Methylnaphthalene	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
2-Methylphenol	50	--	--	--	--	--	--
2-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
2-Nitrophenol	--	--	--	--	--	--	--
3,3-Dichlorobenzidine	30	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
3-Methylphenol, 4-Methylphenol	--	--	--	--	--	--	--
3-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
4-Bromophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
4-Chloro-3-Methylphenol	100	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
4-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
4-Nitrophenol	--	--	--	--	--	--	--
Acenaphthene	400	< 0.10 U	**0.173**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Acenaphthylene	100	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Acetophenone	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Anthracene	2000	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Atrazine	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Benzaldehyde	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
Benzo(a)anthracene	0.1	< 0.10 U	< 0.10 U	< 0.053 U	< 0.050 U	< 0.050 U	< 0.053 U
Benzo(a)pyrene	0.1	< 0.10 U	< 0.10 U	< 0.053 U	< 0.050 U	< 0.050 U	< 0.053 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U
Benzo(g,h,i)perylene	100	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U
bis(2-Chloroethoxy)methane	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	3.3	< 2.1 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Caprolactam	5000	**6.2**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Carbazole	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Chrysene	5	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U
Dibenzofuran	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
Diethyl phthalate	6000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Fluoranthene	300	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Fluorene	300	< 0.10 U	**0.176**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Hexachloro-1,3-butadiene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.11 U
Hexachlorobenzene	0.02	< 0.020 U	< 0.020 U	< 0.016 U	< 0.015 U	< 0.015 U	< 0.016 U
Hexachlorocyclopentadiene	40	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U
Hexachloroethane	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.10 U	< 0.11 U	< 0.10 U	< 0.10 U	< 0.11 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
Naphthalene	300	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
p-Chloroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.3 U
Pentachlorophenol	0.3	--	--	--	--	--	--
Phenanthrene	100	< 0.10 U	**0.107**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Phenol	2000	--	--	--	--	--	--
Pyrene	200	< 0.10 U	**0.107**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.1 U
Total SVOC TICs	500	**6.1 J**	**5.5 J**	0	**196.4 J**	**28 J**	**12.3 J**

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate va
---	No standard published
N	Parent environmental sample
FD	Blind duplicate
NA	Parameter was not analyzed

					Sample ID	OFT-E+5	OFT-NE	OFT-NE
					Sample Type Code	N	N	FD
					Sample Date	11/11/2010	11/11/2010	11/11/2010
					Depth Interval (ft bgs)	0 - 0.5	0 - 0.5	0 - 0.5
					Action Level			
Chemical Name	Unit	RDCSRS	NRDCSRS	IGWSSL				
Solids, Percent	%	--	--	--	**84.9**	**92.6**	**92.7**
Naphthalene	mg/kg	6	17	16	--	--	**0.0785**
2-Methylnaphthalene	mg/kg	230	2400	5	--	--	**0.436**
EPH (>C28-C40)	mg/kg	--	--	--	**31.9**	**85.9**	**126**
EPH (C9-C28)	mg/kg	--	--	--	**506**	**986**	***1230***
Total EPH (C9-C40)	mg/kg	5100	5100	5100	**538**	***1070***	***1350***

Notes:

All concentrations detected above the laboratory detection limit are boldfaced.

Concentrations above the contingent trigger threshhold for total EPH (1,000 mg/kg) for analysis of naphthalene and 2-methylnaphthalene are shown in italics.

-- = sample not analyzed

mg/kg = milligrams per kilogram

EPH = extractable petroleum hydrocarbons

RDCSRS = Residential Direct Contact Soil Remediation Standard

NRDCSRS = Non-Residential Direct Contact Soil Remediation Standard

IGWSSL = Impact to Groundwater Soil Screening Level

ft bgs = feet below ground surface

Table 05. Unit 2 Groundwater Analytical Results Summary
PSEG Salem Generating Station
Hancock's Bridge, New Jersey

ARCADIS Design & Consultancy for natural and built assets

Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WellQC 1/20/2011 N	WELL-QC 2/18/2011 N	WellQD 1/20/2011 N	WELL-QD 2/17/2011 N	WELL-QD 2/17/2011 FD	WellQD 12/19/2011 N	WellQD 6/28/2012 N	WellQD 12/3/2012 N	WellQD 6/11/2013 N	WellQD 12/4/2013 N	WellQD 6/5/2014 N	WellQD 12/3/2014 N	WellQD 6/23/2015 N	WellQD 12/21/2015 N	WellQD 6/21/2016 N	WellQD 12/13/2016 N	WellQE 12/16/2010 N	WELL-QE 2/17/2011 N	WellQF 1/21/2011 N	WELL-QF 2/18/2011 N
Volatile Organic Compounds																					
1,1,1-Trichloroethane	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2,2-Tetrachloroethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	20,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,1,2-Trichloroethane	3	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethane	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-Dichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,3-Trichlorobenzene		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2,4-Trichlorobenzene	9	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
1,2,4-Trimethylbenzene	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	--	--	--
1,2-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethane	2	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-Dichloroethene, Total		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichloropropane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,3-Dichlorobenzene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,4-Dichlorobenzene	75	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-Pentanone		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Acetone	6,000	**3.1 J**	**25.0**	< 10 U	< 10 U	**5.6 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**9.6 J**	< 10 U	< 10 U
Benzene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromochloromethane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Bromodichloromethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Bromoform	4	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 4.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 4.0 U	< 4.0 U	< 4.0 U
Bromomethane	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Disulfide	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.51 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbon Tetrachloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CFC-11	2,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
CFC-12	1,000	< 5.0 U	< 5.0 U	**17.1**	**2.2 J**	**4.1 J**	**9.2**	**5.1**	**4.2 J**	**2.2 J**	**5.3**	< 5.0 U	**2.5**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Chlorobenzene	50	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chlorodibromomethane	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroethane	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloroform	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chloromethane		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,2-Dichloroethene	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
cis-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Cyclohexane		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.35 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Dichloromethane	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Ethylbenzene	700	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Isopropylbenzene	700	< 2.0 U	< 2.0 U	**0.90 J**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	**0.64 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
m&p-Xylenes		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Methyl Acetate	7,000	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl N-Butyl Ketone (2-Hexanon	300	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methylcyclohexane		< 5.0 U	< 5.0 U	**0.86 J**	< 5.0 U	< 5.0 U	**0.60 J**	< 5.0 U	< 5.0 U	< 5.0 U	**0.31 J**	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Methyl-tert-butylether	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
o-Xylene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Styrene (Monomer)	100	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Tetrachloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Toluene	600	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total Xylenes	1,000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,2-Dichloroethene	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
trans-1,3-Dichloropropene		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Trichloroethene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Vinyl chloride	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Total VOC TICs	500		--	**121.6 J**	--	--	**19.8 J**	**24.3 J**		**24.6 J**	**27.2 J**								--		--

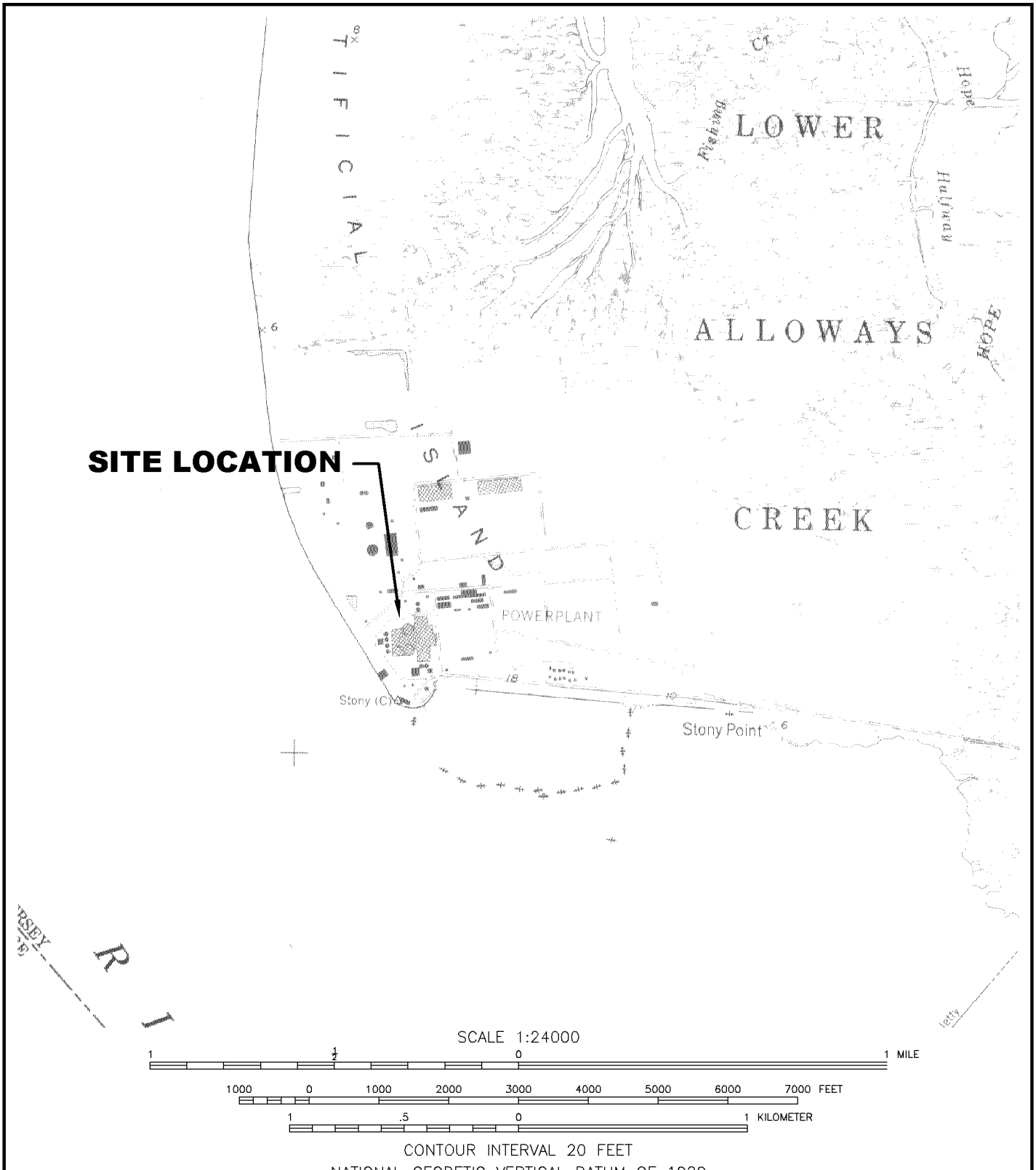
Constituent of Concern	Location ID Sample Date Sample Type Code GWQC (ug/L)	WellQC 1/20/2011 N	WELL-QC 2/18/2011 N	WellQD 1/20/2011 N	WELL-QD 2/17/2011 N	WELL-QD 2/17/2011 FD	WellQD 12/19/2011 N	WellQD 6/28/2012 N	WellQD 12/3/2012 N	WellQD 6/11/2013 N	WellQD 12/4/2013 N	WellQD 6/5/2014 N	WellQD 12/3/2014 N	WellQD 6/23/2015 N	WellQD 12/21/2015 N	WellQD 6/21/2016 N	WellQD 12/13/2016 N	WellQE 12/16/2010 N	WELL-QE 2/17/2011 N	WellQF 1/21/2011 N	WELL-QF 2/18/2011 N
Semi-volatile Organic Compounds																					
1,1-Biphenyl	400	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2,4,5-Tetrachlorobenzene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,2,4-Trichlorobenzene	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dioxane	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	--	--	--	--
1-Methylnaphthalene	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U	--	--	--	--
2,2-Oxybis(1-Chloropropane)	300	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4,5-Trichlorophenol	700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,6-Dinitrotoluene	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Chloronaphthalene	600	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-Chlorophenol	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methyl-4,6-dinitrophenol	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	30	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**0.71 J**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
2-Methylphenol	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
2-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3-Dichlorobenzidine	30	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
3-Methylphenol, 4-Methylphenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
4-Bromophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Chloro-3-Methylphenol	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-Nitroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
4-Nitrophenol	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	400	**0.844**	**0.281**	**0.362**	< 0.10 U	< 0.10 U	**0.294**	**0.684**	< 0.10 U	**0.704**	**0.887**	< 0.10 U	**0.471**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Acenaphthylene	100	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Acetophenone	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Anthracene	2000	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.133**	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Atrazine	3	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Benzaldehyde	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Benzo(a)anthracene	0.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.050 U	< 0.051 U	< 0.050 U	< 0.051 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(a)pyrene	0.1	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.050 U	< 0.051 U	< 0.050 U	< 0.051 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(b)fluoranthene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(g,h,i)perylene	100	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Benzo(k)fluoranthene	0.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
bis(2-Chloroethoxy)methane	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Chloroethyl)ether	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
bis(2-Ethylhexyl)phthalate	3	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	243	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Butyl benzyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**17.1**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Caprolactam	5000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Carbazole	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Chrysene	5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzo(a,h)anthracene	0.3	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Dibenzofuran	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	**0.54 J**	**0.86 J**	< 5.0 U	**0.78 J**	**1.2 J**	< 5.0 U	**0.48 J**	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Diethyl phthalate	6000	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Dimethyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-butyl phthalate	700	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	**2.5**	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Di-n-octyl phthalate	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Fluoranthene	300	**0.131**	< 0.10 U	< 0.10 U	**0.223**	**0.229**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Fluorene	300	< 0.10 U	< 0.10 U	**0.687**	< 0.10 U	< 0.10 U	**0.371**	**0.618**	< 0.10 U	**0.656**	**0.782**	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Hexachloro-1,3-butadiene	1	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
Hexachlorobenzene	0.02	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.021 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.015 U	< 0.020 U	< 0.020 U	< 0.020 U	< 0.020 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 20 U
Hexachloroethane	7	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Isophorone	40	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
Naphthalene	300	< 0.10 U	< 0.10 U	**1.54**	**0.287**	**0.258**	< 0.10 U	**0.173**	< 0.10 U	**1.45**	**2.05**	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Nitrobenzene	6	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodi-n-propylamine	10	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-Nitrosodiphenylamine	10	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
p-Chloroaniline	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.2 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.1 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
Pentachlorophenol	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	100	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	**0.136**	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Phenol	2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	200	**0.111**	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
Total SVOC TICs	500	0	--	**46.5 J**	--	--	**7.1 J**	**33.4 J**	0	**23.7 J**	580 J	0	**9.4 J**	0	**237.2 J**	0	0	0	--	**10.7 J**	--

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate
NA	Parameter was not analyzed

SII-SSA-0014-002261

FIGURES



QUADRANGLE LOCATION

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLES
CAMDEN, NEW JERSEY 1967, PHOTOREVISED 1984.

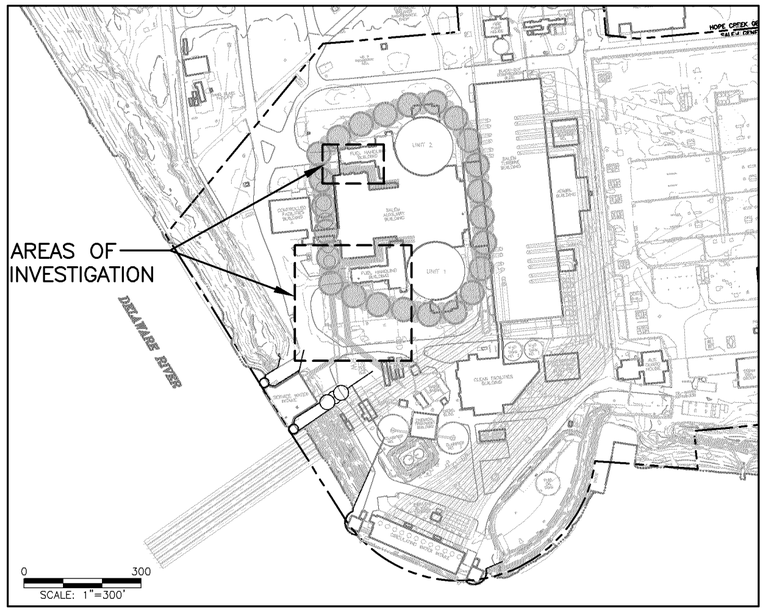
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

CITY:NEWTOWN-PA DIV/GROUP:ENVCAD DB:T.FATTO LD: PIC: PM: P.MILIONIS TM: C.SHARPE LYR: ON=*;OFF=*REF*
C:\ENVCAD\NEWTOWN\ACT\2017\NP000603\0016\000003\RIR\Figure 01 - SITE LOCATION MAP.dwg LAYOUT: 1 SAVED: 7/13/2017 11:30 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 7/13/2017 11:30 AM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
TAYLORS BRIDGE.JPG



SITE LAYOUT
SCALE: 1"=300'

UNIT 2 AREA OF INVESTIGATION

UNIT 1 AREA OF INVESTIGATION

MW-CE
DIESEL FUEL UNDERGROUND PIPING
EXCAVATION No. 2
MW-CC
TW-37
MW-CF
TW-2
TW-50
MW-CD
EMERGENCY FILL VALVE
OVERFLOW TANK
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
WELL-AU
WELL-X
WELL-AW
WELL-AV
WELL-AY
WELL-CG
WELL BV
WELL-AZ
LIMITS OF COFFERDAM
Well AI
Well AO
Well AP
Well AD
Well AB
Well AC
Well AN
Well AE
WELL O
WELL R

CONTROLLED FACILITIES BUILDING A
SALEM AUXILIARY BUILDING
FUEL HANDLING BUILDING
UNIT 2
UNIT 1
TURBINE BUILDING
CONDENSATE POLISHING BUILDING
CIRCULATING WATER PUMP HOUSE
CIRCULATING WATER INTAKE STRUCTURE
SERVICE WATER INTAKE STRUCTURE
DIESEL GENERATOR BUILDING
SERVICE WATER PUMP HOUSE
SERVICE BUILDING
ADMINISTRATION BUILDING
CLEAN FACILITIES BUILDING
SALEM MAINTENANCE BUILDING
PD

LEGEND:

WELL-AZ	MONITORING WELL UTILIZED AS PART OF THE UNIT 1 DIESEL INVESTIGATION. WELL SCREENED ACROSS THE WATER TABLE
WELL AO	MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.
WELL-AT	GRS PUMPING WELL SCREENED BELOW THE WATER TABLE
MW-CF	MONITORING WELL UTILIZED AS PART OF THE UNIT 2 DIESEL INVESTIGATION. WELL SCREENED ACROSS THE WATER TABLE
TW-13	TEMPORARY OBSERVATION POINT
	DIESEL FUEL UNDERGROUND PIPING
	PROPERTY BOUNDARY
	BLOW DOWN PIPING
	LIQUID "RAD" WASTE LINE
	SERVICE WATER PIPING
	CIRCULATING WATER OUTLET PIPING
	CIRCULATING WATER INLET PIPING
	STORM SEWER PIPING
	CATCH BASIN
	MANHOLE (STORM SEWER)
	SHEET PILE

0 40' 80'
GRAPHIC SCALE

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

STATION LAYOUT MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY: Newtown, Pa DIV/GROUP: Env DB: M.Wasilewski LD: M.Wasilewski PIC: J.Balletto PM: B.Pierce TM: B.Pierce LYR:(On)ON=*;OFF=*REF*
C:\ENVCAD\NEWT\OWNACT\2017\NP000603\0001\600303\IRIR\FIGURE-02 STATION LAYOUT MAP.dwg LAYOUT: 2 SAVED: 7/13/2017 12:03 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 7/13/2017 12:04 PM BY: WASILEWSKI, MATT
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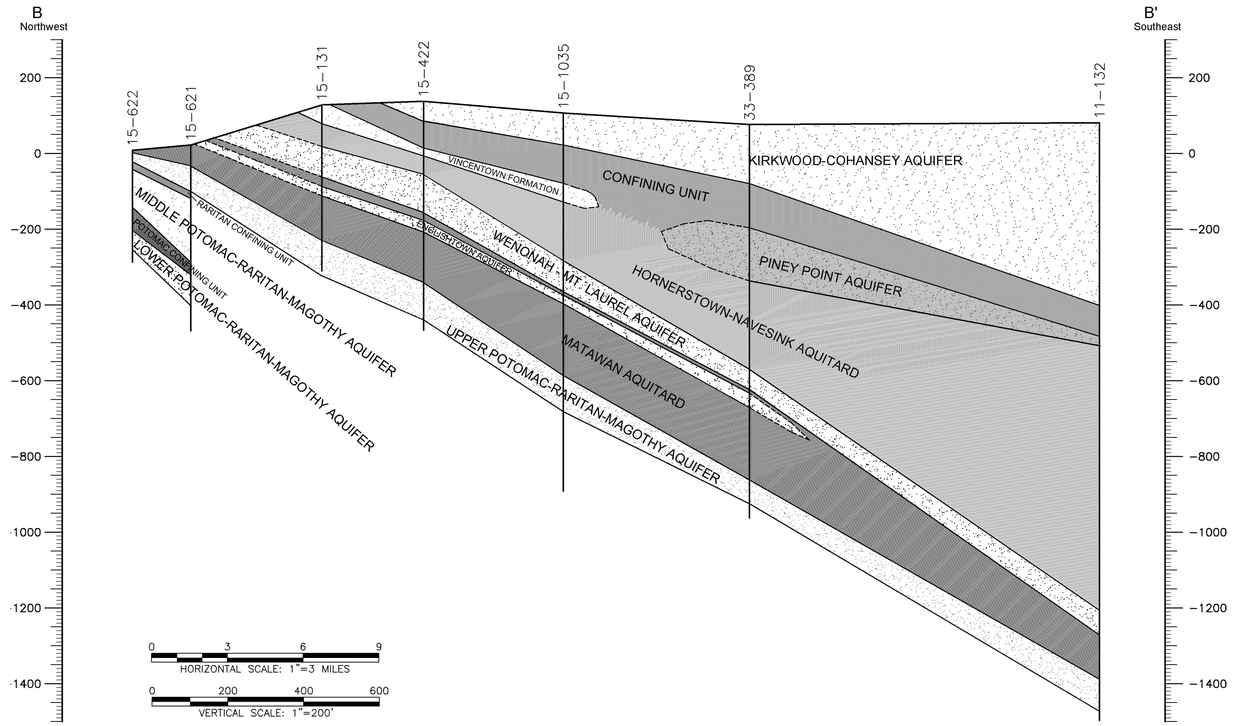
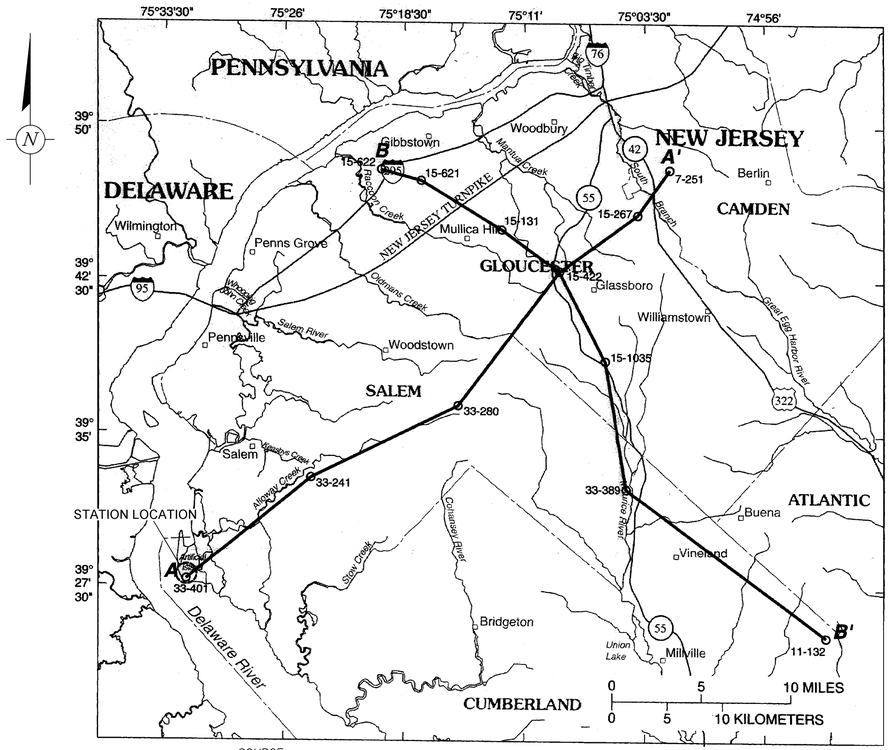
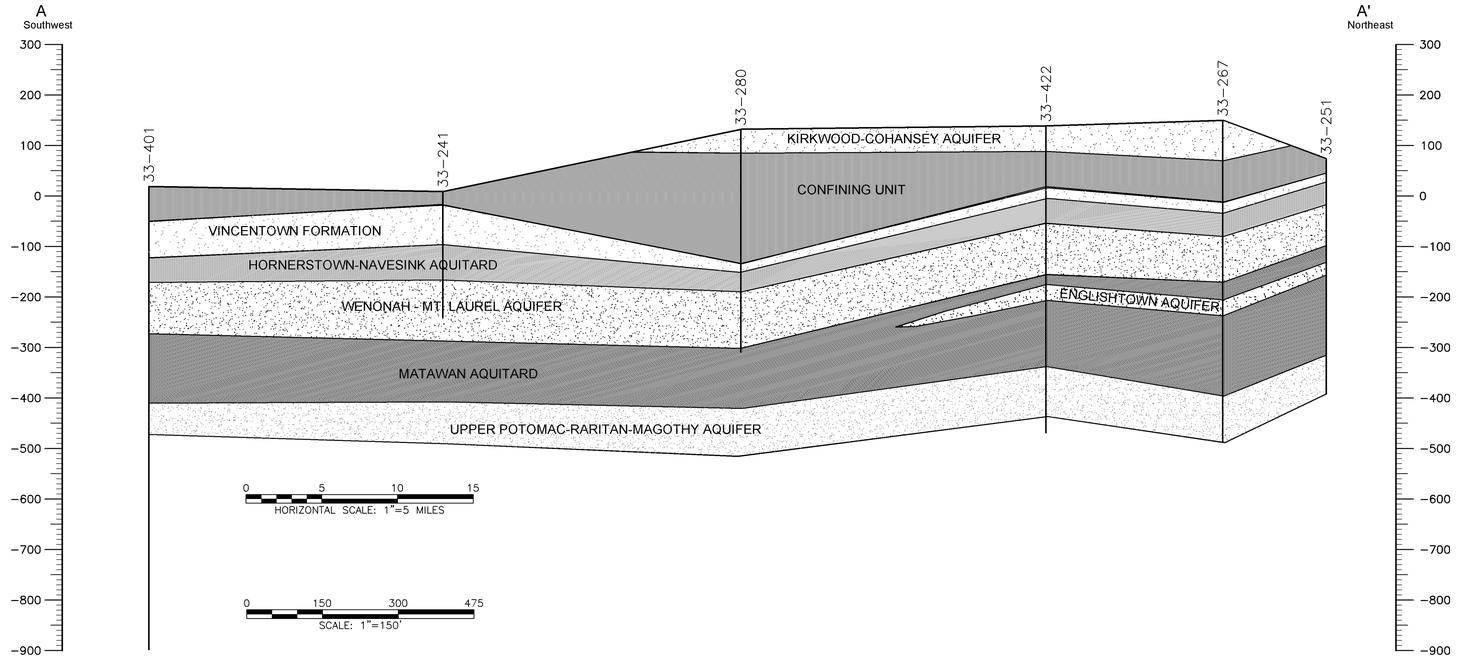




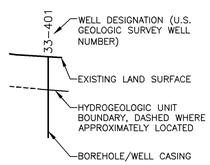
SOURCE:

CAULLER, STEPHEN J., GLEN B. CARLETON, MELISSA J. STORCK; HYDROGEOLOGY OF, WATER WITHDRAWAL FROM, AND WATER LEVELS AND CHLORIDE CONCENTRATIONS IN THE MAJOR COASTAL PLAIN AQUIFERS OF GLOUCESTER AND SALEM COUNTIES, NEW JERSEY; UNITED STATES GEOLOGIC SURVEY WATER-RESOURCES INVESTIGATION REPORT 98-4136, 1999.



LEGEND:

- KIRKWOOD-COHANSEY AQUIFER
- CONFINING UNIT
- PINEY POINT AQUIFER
- VINCENTOWN FORMATION
- HORNERSTOWN-NAVESINK AQUITARD
- WENONAH - MT. LAUREL AQUIFER
- MATAWAN AQUITARD
- ENGLISHTOWN AQUIFER
- UPPER POTOMAC-RARITAN-MAGOTHY AQUIFER
- RARITAN CONFINING UNIT
- MIDDLE POTOMAC-RARITAN-MAGOTHY AQUIFER
- POTOMAC CONFINING UNIT
- LOWER POTOMAC-RARITAN-MAGOTHY AQUIFER



PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

REGIONAL CROSS SECTIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY: MINNEAPOLIS, MN DIV/GROUP: ENV/CAD DB: R. OBERLANDER LD:R. OBERLANDER PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
C:\ENVCAD\NEWTOWN\ACT2017\NP0006003\001600003\RI\RIFIGURE-03 REGIONAL CROSS SECTIONS.dwg LAYOUT: 3 SAVED: 7/13/2017 2:07 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE C-E).CTB PLOTTED: 7/13/2017 2:07 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ----
USGS_100K.TIF

REFERENCE:

1. BOUNDARY SURVEY "ALTA/ACSM LAND TITLE SURVEY" PREPARED BY MASER CONSULTING P.A., HAMILTON, N.J., DATED 6/13/2008.
2. PHOTOGRAMMETRIC SURVEY BY PHOTO SCIENCE, INC. BOWIE, MARYLAND, FLIGHT DATED JUNE 2008.
3. SITE PLAN, SALEM & HOPE CREEK GENERATING STATION (3 SHEETS).
4. DPRP EQUIPMENT INVENTORY, SALEM & HOPE CREEK GENERATING STATION (1 SHEET).
5. FRESHWATER WETLANDS WERE DIGITIZED FROM STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, FRESHWATER WETLANDS MAP NO. 149-2 (TAYLORS BRIDGE NE - TAYLORS BRIDGE)

NOTES:

1. CATEGORIES OF LAND USE AT PSEG NBU
   - I. URBAN LAND:
     - (1) RESIDENTIAL - NONE
     - (2) TRANSPORTATION,UTILITIES - NONE
       COMMUNICATION - NONE
     - (3) INDUSTRIAL AND COMMERCIAL COMPLEXES - NONE
     - (4) RECREATIONAL LAND AND PARKS - NONE
     - (5) SCHOOLS - NONE
     - (6) HOSPITAL AND NURSING CARE FACILITIES - NONE
   - II. WATER:
     - (1) RIVER CHANNELS - DELAWARE RIVER
     - (2) LAKES AND PONDS - NONE
     - (3) RESERVOIRS - NONE
     - (4) BAYS AND ESTUARIES - DELAWARE BAY AND ESTUARIES
     - (5) CRANBERRY BOGS - NONE
   - III. WETLANDS: - SEE FRESHWATER WETLANDS TYPES
   - IV. AGRICULTURAL LAND: - NONE
   - V. BARREN LANDS:
     - (1) BEACHES - NONE
     - (2) EXTRACTIVE MINING - NONE
     - (3) OTHER BARREN OR ALTERED LANDS - SEE LEGEND
   - VI. FOREST:
     - (1) DECIDUOUS - NONE
     - (2) CONIFEROUS - NONE
     - (3) MIXED - NONE
     - (4) BRUSHLAND AND SHRUBLAND - NONE
2. PSEG NBU STORM DRAINAGE SYSTEM CONSISTS OF CATCH BASINS, STORM WATER INLETS, BELOW GRADE PIPING AND DRAINAGE DITCHES THAT INTERCEPT AND CONVEY THE RUNOFF TO THE DELAWARE RIVER.
3. AT PRESENT, THERE ARE A NUMBER OF PRODUCTION WELLS (PW) AND OBSERVATION WELLS (OW) AT PSEG NBU; THEIR LOCATIONS ARE DELINEATED (SEE LEGEND) ON THIS MAP.
4. THERE ARE NO WELLHEAD PROTECTION AREAS DELINEATED BY NJDEP WITHIN 1000 FEET FROM THE PSEG NBU FACILITY BOUNDARY.

LEGEND:

- OTHER BARREN OR ALTERED LANDS
- INDUSTRIAL/COMMERCIAL COMPLEX
- RECREATIONAL LAND AND PARKS
- RIVERS
- SITE BOUNDARY
- LOT LINES
- UTILITY CORRIDOR (Easement Public Service Electric & Gas Co.)
- STORM DRAINAGE SYSTEMS
- PRODUCTION WELLS
- OBSERVATION WELLS
- 100 YEAR FLOOD LINE

FRESHWATER WETLANDS TYPES:

- MODL
- MODD
- POWHh
- POWHx
- PEMIB
- PEMIFh
- PEMIE

KEY
STORM DRAINAGE SYSTEMS

HOPE CREEK:
- NORTH YARD DRAIN
- SOUTH YARD DRAIN
- PERIMETER DITCH DRAIN
- COOLING TOWER DRAIN

SALEM:
- NORTH YARD DRAIN
- WEST YARD DRAIN
- SOUTH YARD DRAIN
- EAST YARD DRAIN
- HELICOPTER PAD DRAIN

SOURCE:
FIGURE FROM ELECTRONIC FILE PROVIDED BY PSEG SERVICES CORPORATION, SURVEYS AND MAPPING, FIGURE TITLE: DPRP DRAINAGE & LAND USE MAP, SALEM & HOPE CREEK GENERATING STATION, SHEET 1 OF 2, LAST REVISED: 3/19/10

0 300' 600'
GRAPHIC SCALE

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCKS BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

LAND USE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: MINNEAPOLIS, MN DIVGROUP: ENVICAD DB: R. OBERLANDER LD:(Opt) PIC:(Opt) PM:(Req'd) TM:(Opt) LYR:(On)*ON*;OFF=*REF* C:\ENVCAD\NEWTOWN-ACT\2017\NP000693\001\R\000003\R\RFIGURE-04 LAND USE MAP.dwg LAYOUT: 4 SAVED: 7/13/2017 2:14 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 7/13/2017 2:14 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ----
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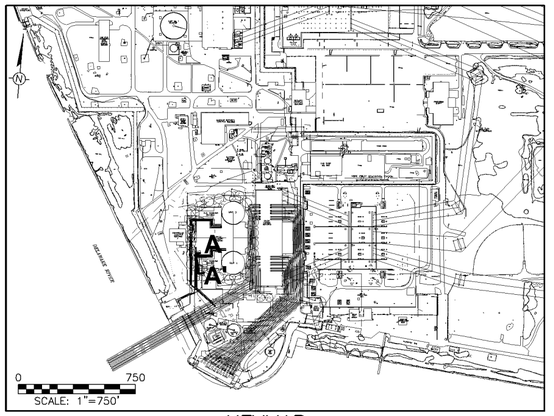
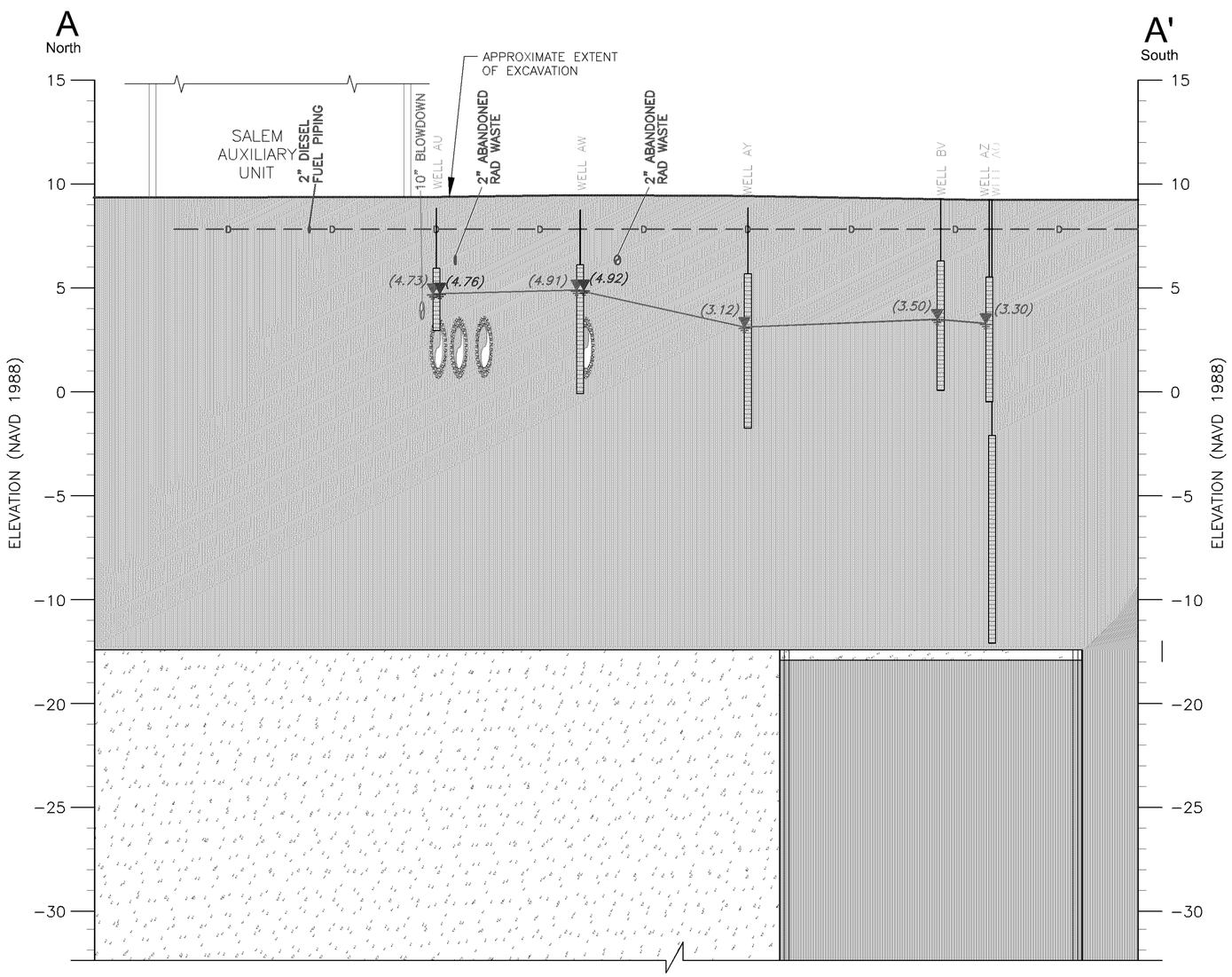
PLAN VIEW
SCALE: 1"=20'



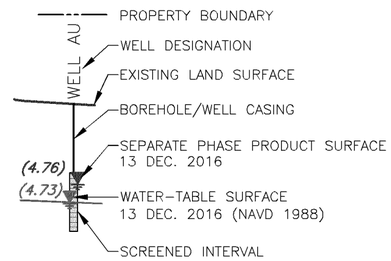
KEYMAP



SECTION

LEGEND:

- HYDRAULIC FILL
- STRUCTURAL FILL
- LEAN CONCRETE
- DIESEL FUEL LINE
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SHEET PILE
- SERVICE WATER PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- RCP REINFORCED CONCRETE PIPE
- MTL MEAN TIDE LEVEL
- BUILDING WALL
- WELL-AO GROUNDWATER EXTRACTION WELL LOCATION
- WELL-AU MONITORING WELL LOCATION
- PROPERTY BOUNDARY



0 20
HORIZONTAL SCALE: 1"=20'

0 5
VERTICAL SCALE: 1"=5'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

FACILITY CROSS SECTION A-A'

ARCADIS Design & Consultancy for natural and built assets

FIGURE **5**

CITY: Newtown Pa DIVGROUP: Env DB: M.Wasilewski LD: M.Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(On)*Off(Ref)*
C:\ENVCAD\NEWTOWN\ACT\2017\NP006093\001\600003\IRIR\FIGURE-05 CROSS SECTION-A-A'.dwg LAYOUT: 5 SAVED: 7/13/2017 1:44 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 7/13/2017 1:45 PM BY: WASILEWSKI, MATT
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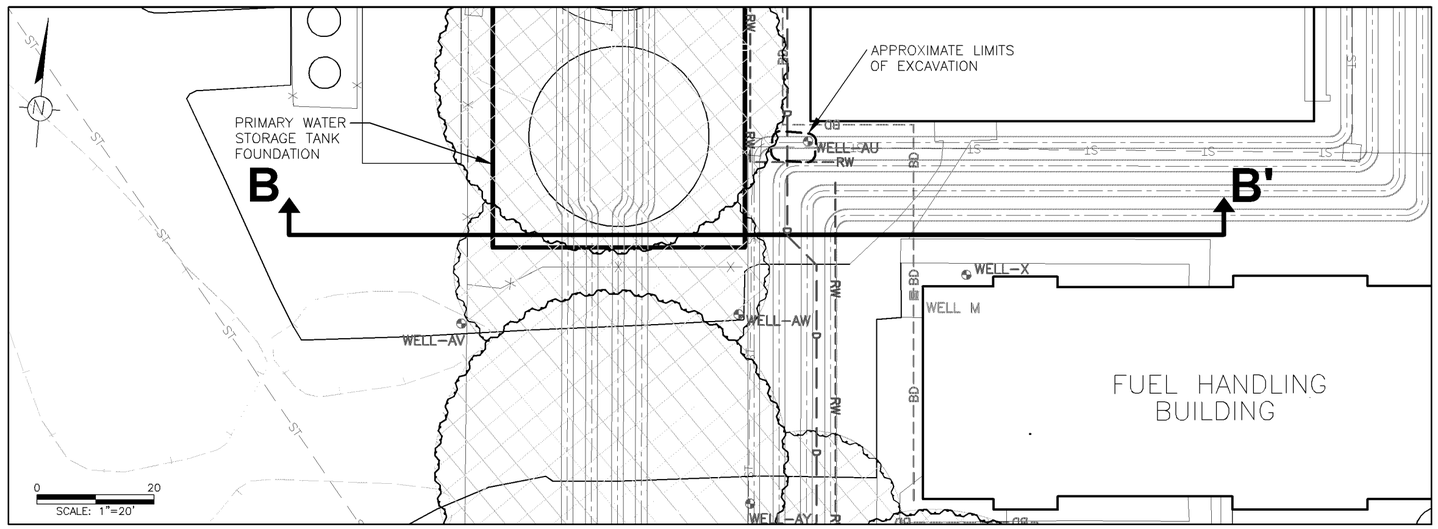
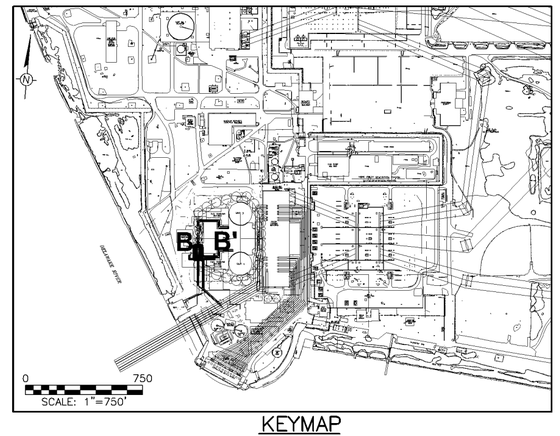
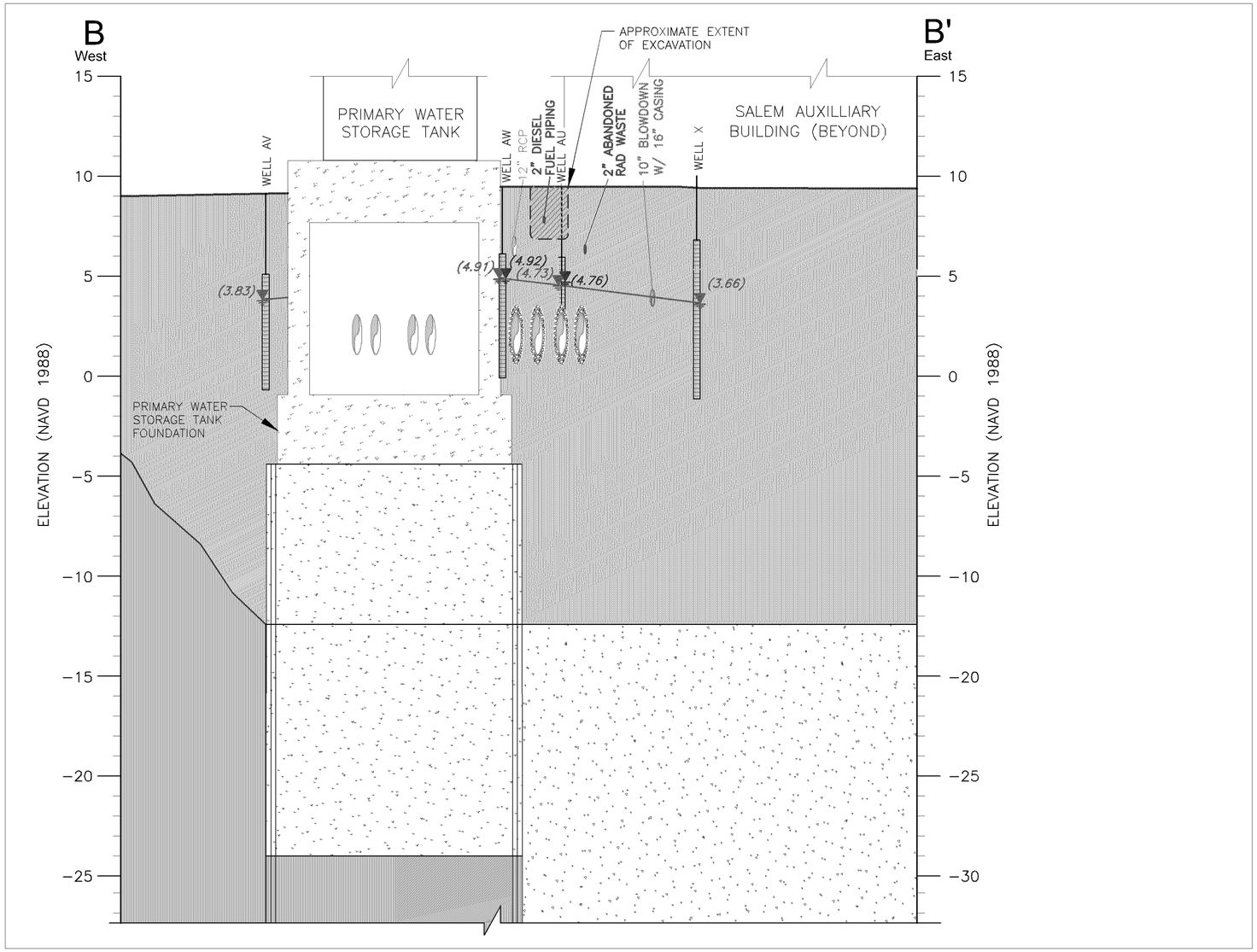
AGM-BASE_02-20-04
PROJECTNAME: ----



PLAN VIEW
SCALE: 1"=20'



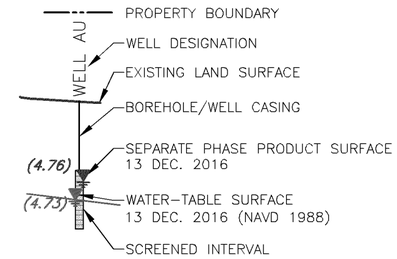
KEYMAP



SECTION

LEGEND:

- HYDRAULIC FILL
- STRUCTURAL FILL
- LEAN CONCRETE
- DIESEL FUEL LINE
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SHEET PILE
- SERVICE WATER PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- RCP REINFORCED CONCRETE PIPE
- MTL MEAN TIDE LEVEL
- BUILDING WALL
- WELL M GROUNDWATER EXTRACTION WELL LOCATION
- WELL-AU MONITORING WELL LOCATION
- PROPERTY BOUNDARY



0 20
HORIZONTAL SCALE: 1"=20'

0 5
VERTICAL SCALE: 1"=5'

PSEG NUCLEAR, LLC
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ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

FACILITY CROSS SECTION B-B'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
6

CITY: Newtown, Pa DIV/GROUP: Env DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(Opt)On=*;Off=*REF*
G:\ENVDATA\NEWTOWN\ACT\2017\NP000083\001\R\000083001R\R\FIGURE-06 FACILITY CROSS SECTION-B-B'.dwg LAYOUT: 6 SAVED: 7/13/2017 2:34 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 7/13/2017 2:34 PM BY: VASILEVSKI
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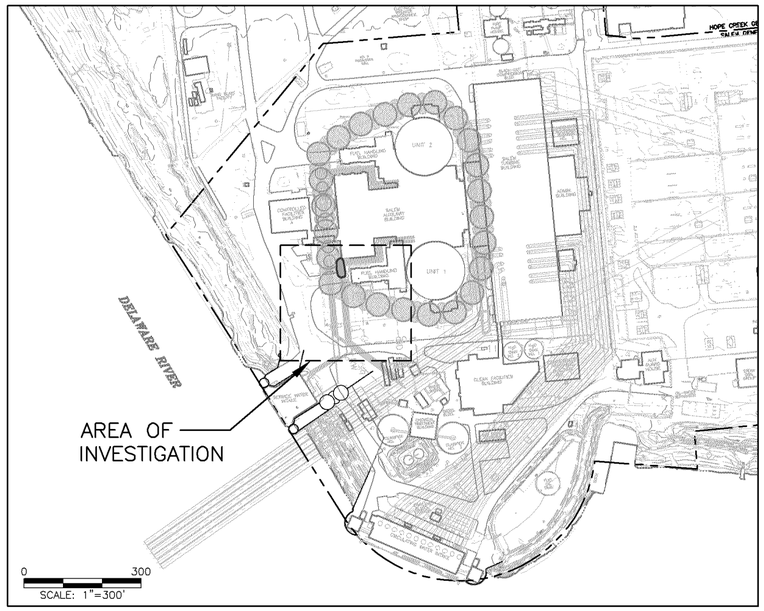
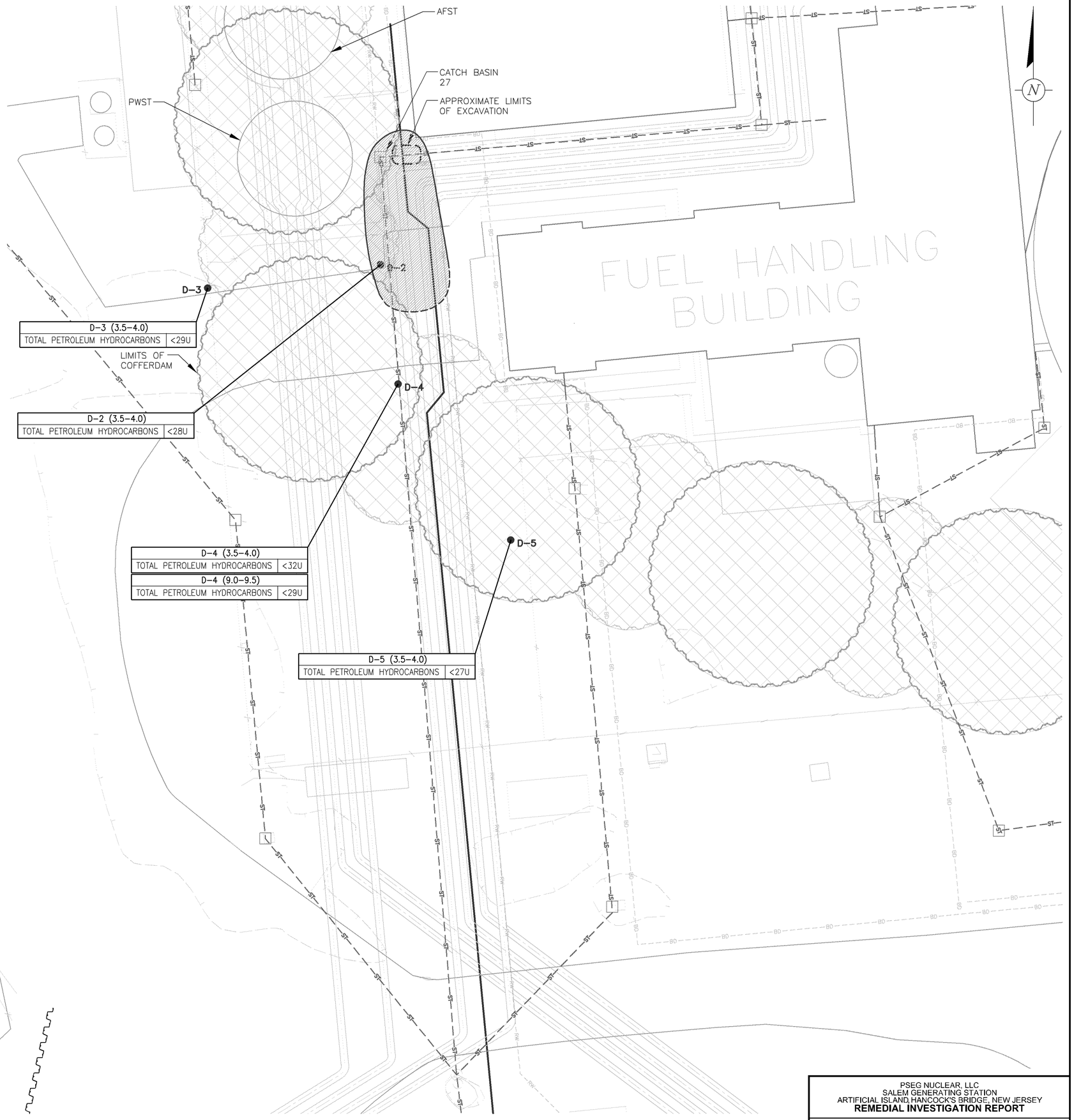


SITE LAYOUT
SCALE: 1"=300'



LEGEND:

- D-3● SOIL BORING LOCATION
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD BLOW DOWN PIPING
- RW LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK
- U THE COMPOUND WAS NOT DETECTED ABOVE THE INDICATED CONCENTRATION
- APPROXIMATE EXTENT OF SEPARATE – PHASE DIESEL FUEL

BORING ID — SAMPLE DEPTH

D-2 (3.5-4.0)	
TOTAL PETROLEUM HYDROCARBONS	<28U

ANALYTICAL RESULT (mg/Kg)

1. DUE TO THE PRESSURE OF SEPARATE–PHASE DIESEL, SOIL SAMPLES WERE NOT OBTAINED FROM THE BORING ADVANCED WITHIN THE SOURCE AREA, SOIL BORING D–1.
2. SOIL SAMPLES WERE ANALYZED FOR TOTAL PETROLEUM HYDROCARBONS (TPHC). ANALYTICAL RESULTS OF THE OF TPHC ABOVE THE LABORATORY DETECTION LIMITS IN ACCORDANCE WITH NJAC 7:26E, THE SAMPLES WERE NOT ANALYZED FOR VOCs.
3. THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR NONRESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA STANDARD FOR TPHC'S IS 10,000 mg/kg.
4. UNITS ARE IN mg/kg (MILLIGRAMS PER KILOGRAM)

0 20 20
SCALE: 1"=20'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

SOIL ANALYTICAL RESULTS SUMMARY UNIT 1

ARCADIS Design & Consultancy for natural and built assets

FIGURE 7

CITY: Newtown, Pa DIV/GROUP: Env. DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(On)ON=*;OFF=*REF*
VIEW: Model XREF: ACAD(R)SIS.dwg, ACAD(R)SIS-BORINGS.dwg, ACAD(R)SIS-BORINGS-UNIT1.dwg, ACAD(R)SIS-BORINGS-UNIT1-TABLE.dwg, ACAD(R)SIS-BORINGS-UNIT1-TABLE-ARCADIS(SIZE A+B).CTB
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arcadiscut.TIF
arcadiscut.JPG
Compass-4.tif
DQC (12).TIF
S1.tif
S1.tif
S5.TIF
e4.tif
sallamcut.JPG
sallamcut.JPG
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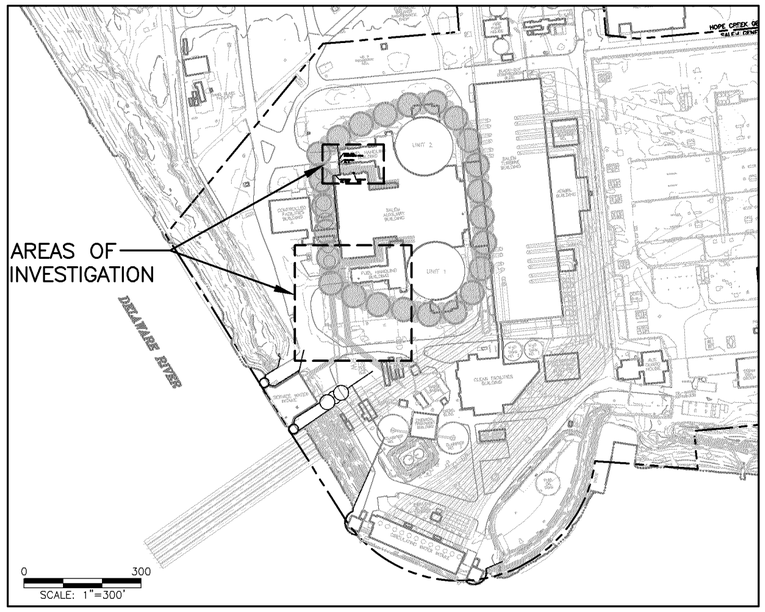

SITE LAYOUT
SCALE: 1"=300'

UNIT 2 AREA OF INVESTIGATION

UNIT 1 AREA OF INVESTIGATION

MW-CE
DIESEL FUEL UNDERGROUND PIPING
EXCAVATION No. 2
MW-CC 4.31
MW-CF 4.58
TW-37
TW-2
TW-50
MW-CD 4.93
EMERGENCY FILL VALVE
OVERFLOW TANK
RWST
PWST
AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
WELL-AU 4.73
WELL-X 3.66
WELL-AW 4.91
WELL-AV 3.83
WELL-AY 3.12
WELL-CG 3.35
WELL BV 3.50
WELL-AZ 3.30
LIMITS OF COFFERDAM
4.00
Well AE
Well AC
Well AN
Well AO
Well AP
Well AD
Well AB
CONTROLLED FACILITIES BUILDING A
SALEM AUXILIARY BUILDING
FUEL HANDLING BUILDING
UNIT 2
UNIT 1
WELL R
WELL Q
N

LEGEND:

WELL-AZ	MONITORING WELL UTILIZED AS PART OF THE UNIT 1 DIESEL INVESTIGATION. WELL SCREENED ACROSS THE WATER TABLE
WELL AO	MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.
WELL-AT	GRS PUMPING WELL SCREENED BELOW THE WATER TABLE
MW-CF	MONITORING WELL UTILIZED AS PART OF THE UNIT 2 DIESEL INVESTIGATION. WELL SCREENED ACROSS THE WATER TABLE
TW-13	TEMPORARY OBSERVATION POINT
4.00	GROUNDWATER ELEVATION CONTOUR (1.0 FOOT INTERVAL, DASHED WHERE INFERRED)
4.58	GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL, NAVD 1988)
NM	MEASUREMENT NOT COLLECTED
	DIESEL FUEL UNDERGROUND PIPING
	PROPERTY BOUNDARY
	BLOW DOWN PIPING
	LIQUID "RAD" WASTE LINE
	SERVICE WATER PIPING
	CIRCULATING WATER OUTLET PIPING
	CIRCULATING WATER INLET PIPING
	STORM SEWER PIPING
	CATCH BASIN
	MANHOLE (STORM SEWER)
	SHEET PILE
AFST	AUXILIARY FEEDWATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK

0 40' 80'
GRAPHIC SCALE

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

GROUNDWATER POTENTIOMETRIC SURFACE - DECEMBER 2016

ARCADIS Design & Consultancy for natural and built assets

FIGURE **8**

CITY: Newtown, Pa DIV/GROUP: Env DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(Opt)ON=*;OFF=*REF*
G:\ENV\SALEM\PROJECTS\WORK\2017\30019580\SR\WORK\30019580SR001RIFIGURE-08 GROUNDWATER POTENTIOMETRIC SURFACE - DECEMBER 2016.dwg LAYOUT: 8 SAVED: 7/13/2017 3:00 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 7/13/2017 3:00 PM BY: WASILEVSKI, MATT
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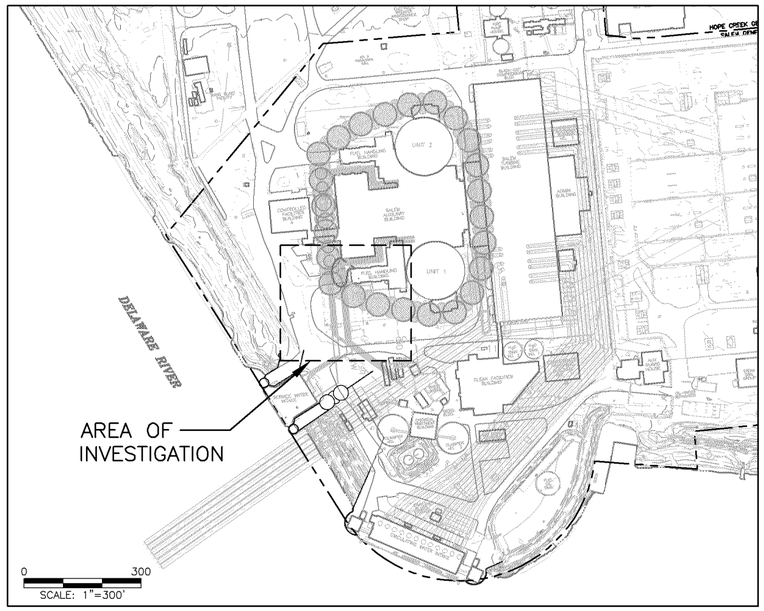


SITE LAYOUT

SCALE: 1"=300'

LEGEND:

- WELL–AZ ⊗ — MONITORING WELL UTILIZED FOR THE UNIT 1 DIESEL INVESTIGATION. WELL SCREENED ACROSS THE WATER TABLE
- WELL AO ⊠ — MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.
- APPROXIMATE EXTENT OF SEPERATE – PHASE DIESEL FUEL
- GROUNDWATER QUALITY CRITERIA DELINEATION BOUNDARY
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- ABANDONED LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST — AUXILIARY FEEDWATER STORAGE TANK
- PWST — PRIMARY WATER STORAGE TANK
- GWQC — NEW JERSEY GROUND WATER QUALITY CRITERIA FOR CLASS IIA AQUIFERS
- J — ESTIMATED VALUE
- 1.1 — BOLD AND GRAY–SHADED VALUES ARE ABOVE THEIR RESPECTIVE GWQC.
- * — AVERAGE OF PARENT AND BLIND DUPLICATE CONCENTRATION
- <1.0 U — NOT DETECTED ABOVE SPECIFIED REPORTING LIMIT

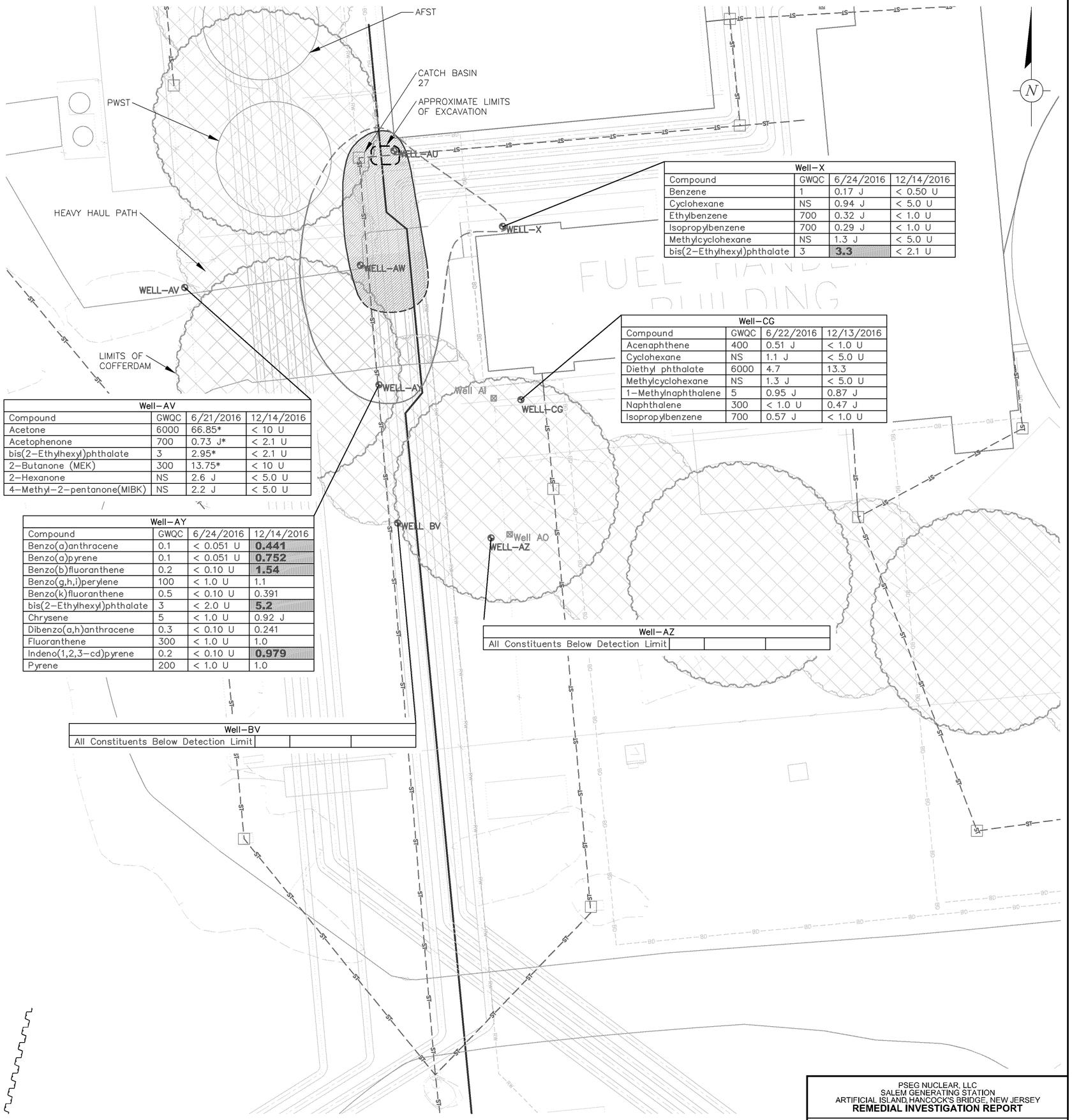
NEW JERSEY GROUNDWATER QUALITY CRITERIA FOR CLASS IIA — WELL ID — SAMPLE DATE

Well–X			
Compound	GWQC	6/24/2016	12/14/2016
Benzene	1	0.17 J	< 0.50 U
Cyclohexane	NS	0.94 J	< 5.0 U
Ethylbenzene	700	0.32 J	< 1.0 U
Isopropylbenzene	700	0.29 J	< 1.0 U
Methylcyclohexane	NS	1.3 J	< 5.0 U
bis(2–Ethylhexyl)phthalate	3	**3.3**	< 2.1 U

CONSTITUENT OF CONCERN — ANALYTICAL RESULT

NOTES:

1. PRIOR TO INITIATING GROUNDWATER SAMPLE COLLECTION, DEPTH–TO–WATER AND SEPARATE PHASE PRODUCT THICKNESS MEASUREMENTS WERE COLLECTED FROM THE INDIVIDUAL WELLS USING AN ELECTRONIC OIL–WATER INTERFACE PROBE.
2. MONITORING WELLS NOT INDICATING A MEASURABLE THICKNESS OF SEPARATE PRODUCT (I.E., GREATER THAN 0.01 FEET) WERE SAMPLED UTILIZING LOW–FLOW SAMPLING METHODS.
3. GROUNDWATER SAMPLES WERE ANALYZED FOR PRIORITY POLLUTANT SEMI–VOLATILE AND VOLATILE ORGANICS INCLUDING A LIBRARY SEARCH.
4. UNITS ARE IN ug/l – MICROGRAMS PER LITER (EQUIVALENT TO PARTS PER BILLION) CONCENTRATIONS ARE ONLY SHOWN FOR THOSE CONSTITUENTS DETECTED ABOVE THE LABORATORY DETECTION LIMITS.



Well–AV			
Compound	GWQC	6/21/2016	12/14/2016
Acetone	6000	66.85*	< 10 U
Acetophenone	700	0.73 J*	< 2.1 U
bis(2–Ethylhexyl)phthalate	3	2.95*	< 2.1 U
2–Butanone (MEK)	300	13.75*	< 10 U
2–Hexanone	NS	2.6 J	< 5.0 U
4–Methyl–2–pentanone(MIBK)	NS	2.2 J	< 5.0 U

Well–AY			
Compound	GWQC	6/24/2016	12/14/2016
Benzo(a)anthracene	0.1	< 0.051 U	**0.441**
Benzo(a)pyrene	0.1	< 0.051 U	**0.752**
Benzo(b)fluoranthene	0.2	< 0.10 U	**1.54**
Benzo(g,h,i)perylene	100	< 1.0 U	1.1
Benzo(k)fluoranthene	0.5	< 0.10 U	0.391
bis(2–Ethylhexyl)phthalate	3	< 2.0 U	**5.2**
Chrysene	5	< 1.0 U	0.92 J
Dibenzo(a,h)anthracene	0.3	< 0.10 U	0.241
Fluoranthene	300	< 1.0 U	1.0
Indeno(1,2,3–cd)pyrene	0.2	< 0.10 U	**0.979**
Pyrene	200	< 1.0 U	1.0

Well–CG			
Compound	GWQC	6/22/2016	12/13/2016
Acenaphthene	400	0.51 J	< 1.0 U
Cyclohexane	NS	1.1 J	< 5.0 U
Diethyl phthalate	6000	4.7	13.3
Methylcyclohexane	NS	1.3 J	< 5.0 U
1–Methylnaphthalene	5	0.95 J	0.87 J
Naphthalene	300	< 1.0 U	0.47 J
Isopropylbenzene	700	0.57 J	< 1.0 U

Well–AZ			
All Constituents Below Detection Limit			

Well–BV			
All Constituents Below Detection Limit			

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

RESULTS OF GROUNDWATER MONITORING ACTIVITIES - UNIT 1

ARCADIS Design & Consultancy for natural and built assets

FIGURE **9**

CITY: Newtown, Pa DIV/GROUP: Env. DB: M. Wasilkowski LD: M. Wasilkowski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(On)=*;OFF=*REF* LIC: ARCADIS U.S., Inc. Phillipsburg, NJ Office Active=NO;Date/Time=Default;Date/Time=Default;Date/Time=Default;Date/Time=Default
G:\Projects\PSEG\Salem\2016\60600589\Figures\9 - RESULTS OF GROUNDWATER MONITORING ACTIVITIES - UNIT 1.dwg LAYOUT: 9 SAVED: 7/27/2017 9:25 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A+).CTB PLOTTED: 7/27/2017 9:26 AM BY: OBERLANDER, ROSEANNE
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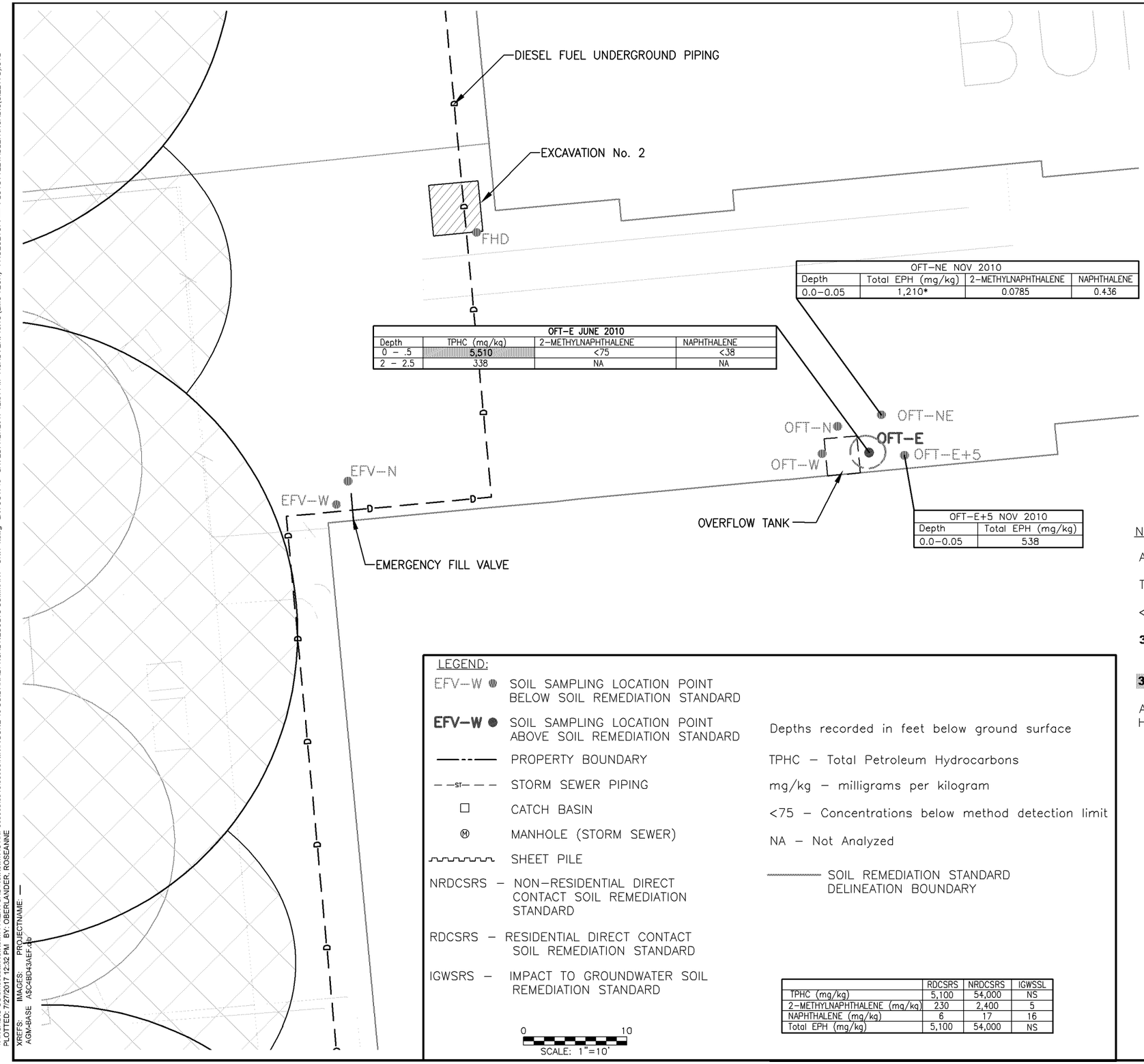
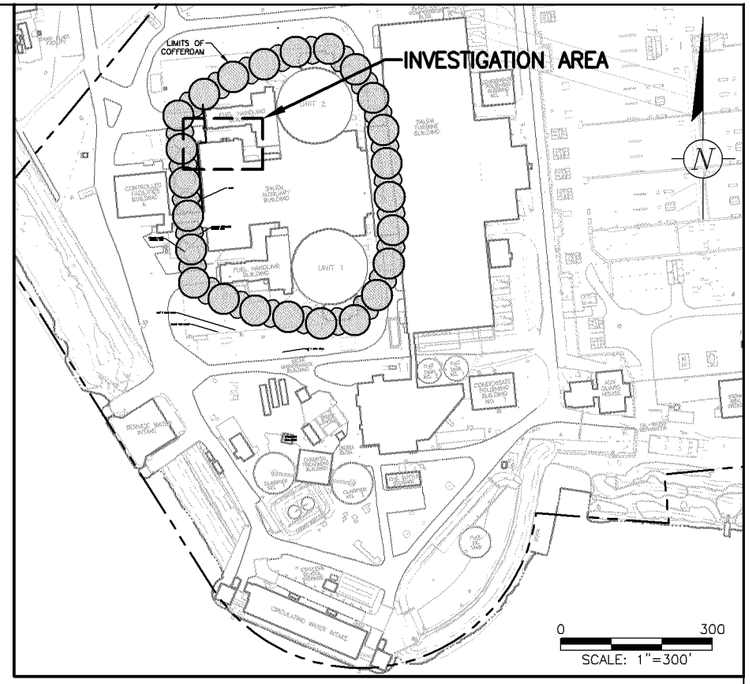


OFT-E JUNE 2010			
Depth	TPHC (mg/kg)	2-METHYLNAPHTHALENE	NAPHTHALENE
0 - .5	5,510	<75	<38
2 - 2.5	338	NA	NA

OFT-NE NOV 2010			
Depth	Total EPH (mg/kg)	2-METHYLNAPHTHALENE	NAPHTHALENE
0.0-0.05	1,210*	0.0785	0.436

OFT-E+5 NOV 2010	
Depth	Total EPH (mg/kg)
0.0-0.05	538



KEYMAP
SCALE: 1"=300'

LEGEND:

EFV-W ◍ SOIL SAMPLING LOCATION POINT BELOW SOIL REMEDIATION STANDARD

EFV-W ● SOIL SAMPLING LOCATION POINT ABOVE SOIL REMEDIATION STANDARD

PROPERTY BOUNDARY

STORM SEWER PIPING

CATCH BASIN

MANHOLE (STORM SEWER)

SHEET PILE

NRDCSRS – NON-RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

RDCSRS – RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

IGWSRS – IMPACT TO GROUNDWATER SOIL REMEDIATION STANDARD

Depths recorded in feet below ground surface

TPHC – Total Petroleum Hydrocarbons

mg/kg – milligrams per kilogram

<75 – Concentrations below method detection limit

NA – Not Analyzed

SOIL REMEDIATION STANDARD DELINEATION BOUNDARY

0 10
SCALE: 1"=10'

	RDCSRS	NRDCSRS	IGWSSL
TPHC (mg/kg)	5,100	54,000	NS
2-METHYLNAPHTHALENE (mg/kg)	230	2,400	5
NAPHTHALENE (mg/kg)	6	17	16
Total EPH (mg/kg)	5,100	54,000	NS

NOTES:

ALL RESULTS ARE SHOWN IN mg/kg, UNLESS OTHERWISE NOTED.

THE HIGH CONCENTRATION OF THE PARENT AND THE DUPLICATE IS SHOWN.

<10 U CONCENTRATION IS BELOW DETECTION LIMITS

37.8 **BOLD AND SHADED** VALUES INDICATE CONCENTRATIONS ABOVE THEIR SOIL REMEDIATION STANDARD

37.8 EXTRACTABLE HYDROCARBONS

ALL SAMPLES COLLECTED IN NOVEMBER 2010 ANALYZED VIA THE EXTRABLE HYDROCARBON METHOD

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

SOIL ANALYTICAL RESULTS SUMMARY UNIT 2

ARCADIS Design & Consultancy for natural and built assets

FIGURE **10**

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
\\ARCADIS-US\offices\aa\Newtown-PA\ENV\CAD\Newtown\ACTIVE\P0008030\0160\0003\RIR\FIGURE-10 SOIL ANALYTICAL RESULTS SUMMARY - UNIT 1.dwg LAYOUT: 10 SAVED: 7/27/2017 12:31 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB
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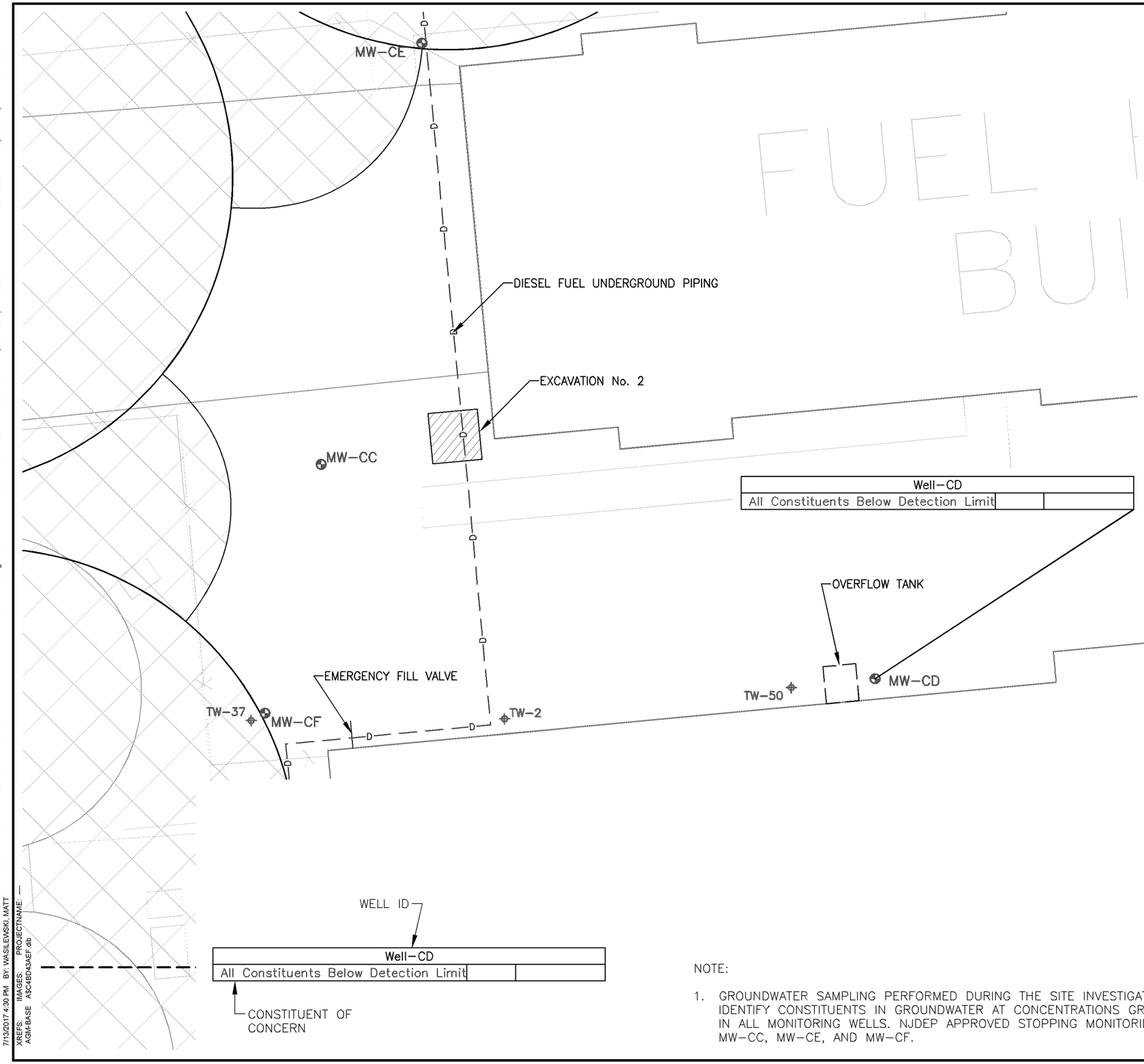

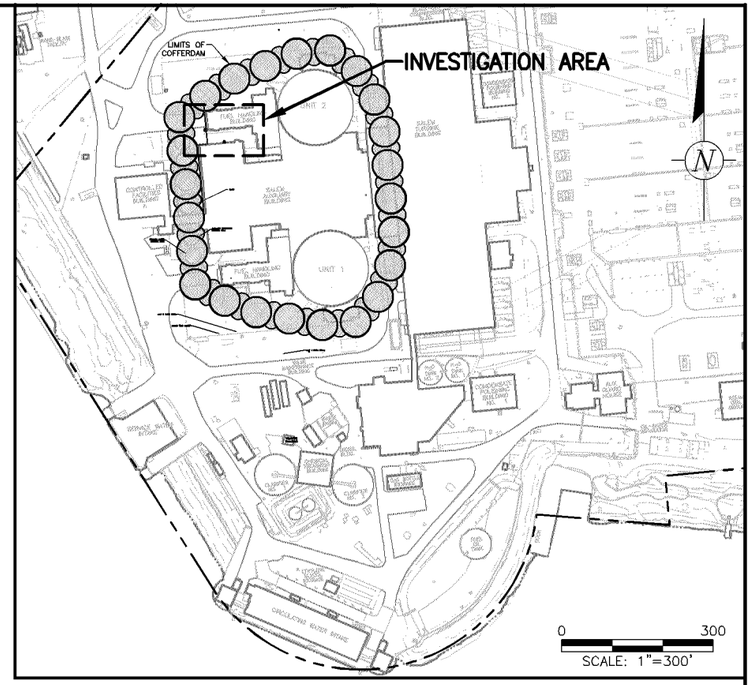

KEYMAP
SCALE: 1"=300'

LEGEND:

- MW-CF — MONITORING WELL
- TW-13 — TEMPORARY OBSERVATION POINT
- PROPERTY BOUNDARY
- DIESEL FUEL UNDERGROUND PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE

GWQC – NEW JERSEY GROUND WATER QUALITY CRITERIA FOR CLASS IIA AQUIFERS

0 10
SCALE: 1"=10'

NOTE:

1. GROUNDWATER SAMPLING PERFORMED DURING THE SITE INVESTIGATION DID NOT IDENTIFY CONSTITUENTS IN GROUNDWATER AT CONCENTRATIONS GREATER THAN GWQC IN ALL MONITORING WELLS. NJDEP APPROVED STOPPING MONITORING FOR WELLS MW-CC, MW-CE, AND MW-CF.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND, HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

RESULTS OF GROUNDWATER MONITORING ACTIVITIES - UNIT 2

ARCADIS Design & Consultancy for natural and built assets

FIGURE
11

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski,JMEYER LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
C:\ENVCADNEWTOWN\ACT2017\NP0060030160000\3RIR\FIGURE-11 - RESULT OF GROUNDWATER MONITORING ACTIVITIES - UNIT 2.dwg LAYOUT: 11 SAVED: 7/13/2017 4:29 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED:
7/13/2017 4:30 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
AGM-BASE ASC-BD43AEF.dib

APPENDIX A

Unit 1 Historical Reports and Correspondence (CD)

Remedial Investigation Work Plan

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

January 2005

PREPARED FOR

PSEG Services Corporation
80 Park Plaza
Newark, NJ 07102

Remedial Investigation
Work Plan

PSEG Nuclear LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

Jon Rutledge
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Bradley D. Pierce
Staff Scientist

Peter N. Milionis, PG
Project Manager

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80 Park Plaza
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New town, Pennsylvania 18940
Tel 267 685 1800
Fax 267 685 1801

Our Ref:
NP000603.0001

Date:
January 2005

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SII-SSA-0014-002278

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2 Remedial Investigation - Proposed Monitoring Well Construction Details, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Figures

1 Station Location, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

2 Station Layout, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

3 Groundwater Elevation Contour Map, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

4 Proposed Soil Investigation Details, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

5 Proposed Groundwater Investigation Details, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

6 Product Recovery System Details, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Appendices

A Quality Assurance Project, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

B Health and Safety Plan, Remedial Investigation Work Plan, December 2004, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

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1 Introduction

ARCADIS, on behalf of PSEG Services Corporation (PSEG), has prepared this Remedial Investigation Workplan (RIWP) for the investigation of a diesel-fuel discharge that occurred at the PSEG Nuclear, LLC Salem Generating Station (the Station) located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. The Station location and layout are depicted on **Figures 1** and **2**, respectively. This Workplan has been prepared in accordance with Chapter 26E - Technical Requirements for Site Remediation (Technical Requirements).

1.1 Project Background

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the stormwater collection system just to the south of the Salem Unit 1 Fuel Handling Building. Investigation of the catch basin, which is identified as "Catch Basin 27" on **Figure 2**, revealed the presence of a red-dyed diesel fuel. At this time, PSEG notified the NJDEP through its spill hotline.

To prevent the migration of diesel fuel within the stormwater collection system, the storm drains upstream and downstream of Catch Basin 27 were temporarily blocked to isolate the affected section of piping. Further, a cover was placed over Catch Basin 27 to prevent rain water from entering. Investigations of the remainder of the stormwater system indicated that the diesel fuel had not migrated beyond Catch Basin 27 and the diesel fuel in the catch basin was removed.

Investigations into the source of the diesel fuel revealed the presence of underground piping adjacent to Catch Basin 27 that supplies diesel fuel from diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. The location of the underground piping is identified on **Figure 2**. PSEG performed a pressure test on the underground piping and the results of the test revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot section of piping, PSEG subcontracted Praxair Services, Inc. to perform a "Tracer Tight" gas analysis. The results of the test revealed the location of the leak was directly adjacent to Catch Basin 27. The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). Soil excavated from adjacent to and around the piping was appropriately stockpiled by PSEG pending characterization and disposal. Separate-phase diesel fuel was observed on standing water within the

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excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation.

Planned interim remedial measures designed to recover any remaining separate-phase diesel fuel include the installation of a Spill Buster® Product Recovery System. To facilitate the installation of a recovery well within the source area of the leak, a ten-inch diameter PVC sleeve was placed in the excavation before backfilling. As presented in Section 5.2.1, a six-inch diameter recovery well will be installed within the PVC sleeve, which will be removed following the installation of the well. The recovery well will then be fitted with the Spill Buster® system for product recovery. Additional information regarding the planned interim remedial actions is presented in Section 7.

1.2 Project Personnel

The primary personnel involved in the project are listed in **Table 1**. These personnel include the PSEG Project Manager, ARCADIS team members, and the project analytical laboratory (Accutest Laboratories). The PSEG Project Manager will be responsible for the overall project coordination and oversight and approval of PSEG and contractor work activities.

ARCADIS team members will be responsible for performing technical activities in accordance with the approved RIWP, supervising field subcontractors, and preparing technical reports. The ARCADIS Project Manager will be responsible for committing the necessary resources to this project, day-to-day operations, adherence to schedule, and work quality. The ARCADIS Field Team Leader will be responsible for the field implementation of the RI scope of work, and ensuring that the data collection procedures outlined in the project Quality Assurance Project Plan (QAPP) provided in **Appendix A**, are followed. The ARCADIS Site Health and Safety Officer will maintain and implement the project Health and Safety Plan provided in **Appendix B**.

Accutest Laboratories will be utilized for the project and is a New Jersey-certified laboratory for performing routine environmental and chemical analyses; its certification number is 12129. The laboratory is responsible for providing analytical services, including laboratory quality assurance and quality control (QA/QC). A detailed description of the analyses to be performed is provided in the QAPP.

1.3 Work Plan Organization

This RIWP contains eight sections, including this introduction:

- Section 2, provides an overview of the operating history of the Station and the regulation of its operations;

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- Section 3 provides a detailed description of the Station including topography, surface water features, climate, soil, geology and hydrogeology, and a detailed description of previous investigation activities;
- Section 4 provides the objectives for the remedial investigation;
- Section 5 provides a detailed scope of work designed to achieve the remedial investigation objectives;
- Section 6 presents the details of interim remedial actions that will be taken to recover separate phase diesel fuel through the proposed source area monitoring well;
- Section 7 outlines the reporting requirements for the remedial investigation and interim remedial actions; and,
- Section 8 provides publications referenced during the preparation of the RIWP.

2 Station History

The following sections provide relevant site information regarding the facility's operating history and a review of applicable regulations relating to operations at the Station.

2.1 Operating History

PSEG Nuclear LLC operates and is part owner of the Salem Generating Station located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. PSEG Nuclear LLC (57.41%) and Excelon (42.59%) jointly own the Salem Generating Station. The Salem Generating Station is situated adjacent to the Hope Creek Generating Station, also located on Artificial Island. Both the Salem and Hope Creek Generating Stations (the Stations) are located on the eastern bank of the Delaware River. The Salem Generating Station encompasses an approximate 26-acre portion of Artificial Island.

The Salem Generating Station is composed of two nuclear generating units (Units 1 and 2) and one distillate oil fueled combustion turbine unit (Unit 3). Commercial operations of Units 1 and 2 commenced in 1976 and 1981, respectively. The combustion turbine unit commenced operations in 1972. The nuclear generating units operate as base load units and the combustion turbine unit operates as a peaking unit. The Salem Generating Station has a combined generating capacity of approximately 2,400 MW. Over its operational life, the Salem Generating Station has experienced no significant changes in its operation.

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2.2 Regulatory Review

Regulatory oversight for the Salem Generating Station, and other nuclear generating stations, is provided by both federal and state agencies. These agencies ensure that the stations are designed, constructed, licensed and operate in a matter that maximizes the safe containment and management of radioactive materials. These agencies also ensure that sufficient funding mechanisms have been established, are adequately funded, and will be available to decommission the nuclear generating stations at the end of their life cycle.

On the federal and state levels, the United States Nuclear Regulatory Commission (USNRC) and the New Jersey Department of Environmental Protection Bureau of Nuclear Engineering (NJDEP-BNE) conduct licensing and oversight of the Station. Oversight by the NJDEP-BNE and USNRC includes periodic inspections and conducting environmental radiological monitoring.

3 Station Description

The following sections provide information regarding the setting of the Salem Generating Station, including land use, the environmental setting, precipitation and drainage, local geology and local hydrogeology.

3.1 Land Use

PSEG Nuclear LLC owns and/or controls an approximately 740-acre area of Artificial Island that is situated adjacent to and surrounds the Salem and Hope Creek Generating Stations. This area contains administrative and support facilities used by the Stations, the Hope Creek Switch Yard, the Salem Switch Yard, and undeveloped vacant land. With the exception of the Salem Generating Stations (Units 1 through 3) and the Salem Switchyard, the remaining acreage is considered to be the Hope Creek Generating Station.

The zoning classification for the Salem Generating Station is industrial. The land adjacent to the Salem Generating Station is zoned for industrial and residential or agricultural use.

3.2 Environmental Setting

The Salem Generating Station is located on a portion of Artificial Island that borders the Delaware Estuary. The Estuary, in the location of the Salem Generating Station, is a tidal, brackish river, located in an area designated as Zone 5 by the Delaware River Basin Commission.

The United States Army Corps of Engineers, beginning in the early twentieth century, created Artificial Island by depositing hydraulic dredging spoils within a diked area established around a natural sand bar that projected into the Delaware River. Prior to

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construction of the Salem Generating Station, the property was vacant, undeveloped, low-lying land.

3.3 Topography and Station Drainage

The topography at the Salem Generating Station is relatively flat with limited local relief. Topographic contours for the Station are included on **Figure 2**. Stormwater is managed in accordance with the Salem Generating Station New Jersey Pollution Discharge Elimination System (NJPDES) permit and Stormwater Pollution Prevention Plan. Stormwater is collected in storm drains and routed to the Delaware River for discharge. Stormwater from the major petroleum storage handling areas is routed to the oil/water separator prior to discharge.

3.4 Climate and Precipitation

Salem County is located in southwestern New Jersey. The county's climate is considered to be humid and temperate, as the climate in this county is readily influenced by its proximity to the Delaware Bay. Coastal storms are not uncommon in this region and can produce high winds and heavy rainfall, which can cause wind damage and flooding in low-lying areas.

Wind direction in this region is dependent upon the season; during the summer, winds are typically from the southwest while during the winter winds are commonly from the northwest. Temperatures vary by season and the maximum expected high temperature for a given year is 96 degrees Fahrenheit, while the minimum expected yearly low temperature is minus 2 degrees Fahrenheit. The average annual precipitation total is 39.9 inches.

3.5 Regional Geology

The Station is located in the Atlantic Coastal Plain Physiographic Province. This area is characterized by relatively flat to gently undulating terrain, underlain by unconsolidated sediments that increase in thickness to the southeast. These sediments range in age from Holocene to Cretaceous (0 to 146 million years old), are primarily comprised of clay, silt, sand, and gravel, and are generally classified as continental, coastal, or marine in nature. Published geologic mapping indicates that the basement rock beneath these sediments (in the area of the Station) is metamorphic schist of the Wissahickon Formation, which is Pre-Cambrian in age (570 to 900 million years old).

The unconsolidated overburden at the Salem and Hope Creek Generating Stations consists of approximately 25 to 40 feet of dredge spoils, engineered fill material (cofferdam), tidal marsh deposits and riverbed deposits. The engineered fill, composed mainly of silt, silty clay, sand, and gravel, replaced the dredge spoils within the cofferdam during the construction of the Station. Due to the composition and nature of the engineered fill, the

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hydraulic conductivity of this material is expected to be very low, thus limiting the extent and rate of groundwater movement. Below the engineered fill there is an approximate five-foot layer of tidal marsh deposits consisting of silty peat and organic silt and meadow mat. The tidal marsh deposits are semi-confining. Beneath the tidal marsh deposits are approximately ten feet of discontinuous Quaternary Age riverbed deposits consisting of sand and gravel. The engineered fill, the tidal marsh deposits and the riverbed deposits, combine to form the water table aquifer (see Section 3.6). Beneath the surface water aquifer, in order of increasing depth, are the following geologic formations:

Clay, Confining Unit – Beneath the shallow, riverbed and other deposits is a clay, confining unit that separates the shallow unit from the deeper Vincentown Formation. Conflicting geologic reports suggest that the clay, confining unit is either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits (USGS 1979 and 1999). Previous investigations conducted at the facility indicate that the clay, confining unit is laterally extensive beneath the Station.

Vincentown Formation – The Vincentown Formation occurs from a depth of approximately 55 feet bgs to a depth of 135 feet bgs and consists of a competent, greenish-gray, fine to medium sand with some silt, shell fragments, feldspar and glauconite.

Hornerstown Formation – The Hornerstown Formation is a highly glauconitic, clayey, dark green sand that contains small percentages of quartz grains and apatite pellets. The Hornerstown Formation unconformably overlies the Navesink Formation and is unconformably overlain by the Vincentown Formation. The Hornerstown Formation occurs from approximately 135 to 145 feet bgs.

Navesink Formation – The Navesink Formation is characteristically a glauconitic sand with varying amounts of silt and clay. It is brown or dark green to blue-black and has a shell bed at its base. The upper part of the formation is less glauconitic, more clayey, more micaceous, and lighter in color. The Navesink Formation conformably overlies the Mount Laurel Sand (USGS 1969). The contact with the overlying Hornerstown Formation is gradational. The Navesink Formation is encountered from approximately 145 to 170 feet bgs.

Mount Laurel-Wenonah Formation – The Mount Laurel-Wenonah Formation consists of a clayey, medium-grained sand with some gravel, feldspar and glauconite. In the vicinity of the Station, the Mount Laurel-Wenonah Formation is approximately 100 hundred feet thick and occurs from 170 to 270 feet bgs.

Beneath the Mount Laurel-Wenonah Formation, more than 1,000 feet of Upper Cretaceous sediments overlie the crystalline bedrock. The Upper Cretaceous sediments include in descending order: the Marshalltown Formation (gray, fine sand); the Englishtown Formation (yellow-brown, fine sand); the Woodbury Clay (dark gray, stiff, silty clay); the

Merchantville Formation (dark green clay); the Magothy Formation (coarse to fine silt with little fine sand); and the Raritan and Potomac Formations (interbedded sand, gravelly sand and clay).

3.6 Regional Hydrogeology

There are four primary water bearing formations (aquifers) underlying the Station: 1) the shallow, water table aquifer; 2) the Vincentown Formation; 3) the Mount Laurel-Wenonah Formations; and, 4) the Potomac-Raritan-Magothy Formations. The shallow, water-bearing unit, which consists of the dredge spoils, engineered fill, tidal marsh deposits and the discontinuous Quaternary riverbed deposits, occurs between approximately 10 to 40 feet bgs. In general, the dredge spoils, engineered fill and tidal marsh deposits are characterized by low permeability. Occasional lenses of sand within the dredge spoils may contain perched water within a few feet of the ground surface. The groundwater in the water table aquifer is generally brackish, with flow to the southeast and a gradient of approximately 0.007 feet/feet.

A clay, confining unit identified as either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits separates the shallow, water-bearing unit from the deeper Vincentown Formation. As stated previously, investigations conducted at the facility indicate that the clay, confining unit is laterally extensive beneath the Station.

The Vincentown Formation, which occurs from approximately 55 to 135 feet bgs, is a semi-confined to confined aquifer under artesian conditions. Groundwater in the Vincentown Formation generally flows from north to south with a gradient of approximately 0.003 feet/feet. Regionally, the Vincentown Formation is a water-producing aquifer, which supplies potable water to domestic wells in Salem County. Groundwater in the aquifer is moderately hard with high iron content. Saltwater-intrusions occur near the Delaware River, where water quality is brackish and non-potable.

The Hornerstown and Navesink confining units separate the Vincentown Formation from the Mount Laurel-Wenonah Formations. The Mount Laurel-Wenonah Formations occur from approximately 135 to 170 feet bgs. The Station has two potable and fire-water supply wells screened in this formation.

The deepest of the water bearing formations is the Potomac-Raritan-Magothy Formation. In Salem County, the Potomac-Raritan-Magothy Formation occurs at depths in excess of 500 feet bgs. This is the primary water producing aquifer for New Jersey. Four potable and fire-water supply wells at the Station are screened in the Potomac-Raritan-Magothy Formation at depths ranging from 800 to 1,100 feet bgs. The Potomac-Raritan-Magothy Formation is bounded by the Merchantville Formation above and below by the Wissahickon Schist basement rock. The crystalline basement rock of the Wissahickon

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Schist is not considered a productive aquifer and only locally transmits water from secondary porosity (i.e., fractures and faults).

4 Facility Construction and Local Geology and Hydrogeology

The construction of the Salem Generating Station has caused significant changes to the local geology and hydrogeology. Within the footprint of the cofferdam surrounding Units 1 and 2 (see Figure 2), the majority of original Artificial Island materials were removed to a depth of 70 feet bgs. The following sections, which contain information presented in a Remedial Investigation Report (RIR) previously prepared for a separate investigation conducted at the Station (ARCADIS 2004), describe the conditions at Artificial Island prior to the construction of the Station, and detail how the construction of the Station has altered the local geology.

4.1 Pre-Facility Construction

The Station is located on the southern tip of what was once a natural sand bar projecting into the Delaware River. The area between the sand bar and the mainland had been used as a dredge spoil deposit area. In 1899, a timber sheetpile wall was installed around the perimeter of the sand bar. Over the next 50 or so years the area was used as a spoil deposit area for material collected during the dredging of the Delaware River. Riprap was added to the perimeter when the timbers began to degrade. The area landward of Artificial Island has remained a tidal marsh.

4.2 Facility Construction

The construction of the Station has resulted in significant changes to the local geology. It was necessary to remove and rework much of the soil in the area of the Station in order to facilitate construction. For the purposes of this report, the description of the facility construction is limited to the area within the cofferdam; however, it should be noted that the local geology beyond the limits of the cofferdam was also significantly modified. The extent of the cofferdam is shown on **Figure 2**.

The cellular cofferdam, which encircled the excavation for all the Class I structures (e.g., containment, fuel handling, and auxiliary buildings), was constructed of interlocking sheet piling driven from an approximate depth of 23 feet below existing grade (approximately 77 feet plant datum [PD] or -12.92 feet above mean sea level [amsl NAVD 1988]). The cofferdam consists of 24 circular cells, approximately 60.5 feet in diameter with connecting arcs, that were advanced from this depth to approximately 10 feet into the Vincentown Formation to an elevation of 17 feet PD (-72.92 feet amsl). The cofferdam sections are of two different heights, 50 feet and 60 feet. The elevation of the top of the cofferdam is 77 feet PD (-12.92 feet amsl) on the north, south and west sides. The

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elevation of the eastern side is 67 feet PD (-22.92 feet amsl) providing access and a foundation for the return circulating water pipes and associated thrust block.

The inside area of the cofferdam sections were excavated to elevation 27 feet PD (-62.92 feet amsl). A vertical steel wall was added inside each individual cofferdam section to divide the sections approximately in half. The inner half of the individual cofferdam sections, or the section facing the building foundations, was then filled to the top with lean concrete. The area contained by the entire cofferdam structure was then excavated to the Vincentown Formation for placement of a lean concrete mat that served as the foundation for the construction of the structures within the cofferdam. During this stage of the excavation, qualified personnel visually inspected the bottom of the excavation to verify that the excavation had reached the top of the Vincentown Formation prior to placing any lean concrete.

Prior to the completion of the excavation, at approximately elevation 45 feet PD (-44.92 feet amsl), 15 exploratory borings were drilled through the remaining Kirkwood Formation and into the underlying Vincentown to verify the depth to the formation. These additional borings showed no measurable differences from the study borings. Based on a review of available documents, the top of the Vincentown Formation in the area of the cofferdam ranges between 27 and 30 feet PD (-62.92 to –65.92 feet amsl).

When the surface of the Vincentown Formation was reached, the area was cleared of loose soil and lean concrete was poured directly onto the exposed Vincentown Formation. Because the latter stages of the excavation were performed in freezing temperatures, a layer of material was left in place to insulate the Vincentown Formation until the concrete was ready to pour. In cases where the top of the Vincentown Formation did freeze prior to pouring of the concrete, the frozen soils were excavated or thawed prior to starting the pour. The station construction drawings indicate that the base of the first lean concrete pour was at 30 feet PD (-59.92).

The cofferdam serves as a basin in which the Class I structures were constructed. Prior to construction of the primary structures, a lean concrete mat ranging in thickness from 5 to 50 feet was placed on top of the Vincentown Formation for support of the structures. Following placement of the lean concrete, the Auxiliary Building, Fuel Handling Buildings and Reactor Containment Buildings were constructed. The remainder of the excavation within the cofferdam was then backfilled with structural fill meeting the design specifications of the Station.

4.3 Local Geology and Hydrogeology

The soils removed from within the cofferdam were not used to backfill the completed structure because the hydraulically placed fill and other riverbed deposits underlying Artificial Island did not meet the building design specifications for the Station. Therefore,

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it was necessary to import construction or structural fill to build the facility. The structural fill was placed between and around the Auxiliary Building, Fuel Handling Buildings, Units 1 and 2, portions of the cofferdam, above the return circulating water pipes, and from the top of the clay, confining-unit to the land surface in the portions of the area between the cofferdam and the circulating water discharge pipes.

The structural fill used at the station was obtained from a number of sources in New Jersey and Delaware. One fill source used in the area of this investigation was the Hinchner Pit. While the location of the borrow source was not identified, the material was described as yellowish-brown fine to medium sand with a trace of silt and clay.

Details of groundwater investigation activities historically completed at the facility indicate that groundwater elevations in the shallow, water-bearing unit within the limits of the cofferdam are generally higher than those outside the limits of the cofferdam. This is expected considering permeability differences that exist between the structural fill within the limits of the cofferdam and the hydraulic fill beyond the limits of the cofferdam, which result in a groundwater mound. Due to the mound, groundwater flows radially outward from the cofferdam. The observed mounding effect dissipates quickly. A groundwater elevation contour map for the shallow, water-bearing unit is presented on **Figure 3** (ARCADIS 2004). Beyond the limits of the cofferdam, groundwater flow is generally from the center of the island (northeast of the Salem Generating Station) towards the Delaware River.

5 Remedial Investigation Scope of Work

The investigation has the following four primary goals: 1) characterize the horizontal extent of diesel-related constituents in soil; 2) determine if separate-phase diesel fuel is present on the water table and delineate its extent; 3) characterize the extent of dissolved-phase diesel-related constituents in groundwater downgradient of the release area; and, 4) determine the need for further action. The following scope of work was developed to achieve the primary objectives of the remedial investigation.

5.1 Soil Investigation

The initial scope of work for investigating the extent of diesel-related constituents in soil consists of the advancement of four soil borings (Borings D-2 through D-5) for the collection of soil samples to characterize the extent of diesel-related constituents in soil beyond the source area. Due to the presence of separate-phase diesel fuel, a soil sample will not be obtained from the source area. Details regarding the proposed soil investigation are also presented on **Figure 4**.

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5.1.1 Collection of Soil Samples

Soil borings D-2 through D-5, identified on **Figure 4**, will be advanced to the depth of the water table for the purpose of sample collection. Prior to initiating soil sampling activities, a water level measurement will be obtained from Well X, located near the northwest corner of the Fuel Handling Building. The water level measurement from Well X will be used to determine the appropriate sample depth. The location of Well X, which was installed during a previous unrelated groundwater investigation, is shown on **Figure 4**. Due to the presence of extensive subsurface infrastructure within the investigation area, the soil borings will be advanced using vacuum excavation techniques. Soil encountered in the borings will be logged by an ARCADIS geologist, and soil boring logs will be prepared.

Soil samples will be obtained from each boring ahead of the vacuum excavation using a hand auger or equivalent handheld soil sampling tools. The samples will be obtained from one-foot above the water table to characterize the horizontal extent of diesel-related constituents in soil.

5.1.2 Soil Sample Analysis

The soil samples collected from the proposed soil boring will be submitted to Accutest Laboratories and will be analyzed for total petroleum hydrocarbons (TPHC). In accordance with New Jersey Administrative Code (N.J.A.C.) 7:26E, 25 percent of the samples indicating a TPHC concentration greater than 1,000 parts per million (ppm) will also be analyzed for volatile organic constituents (VOCs) including a library search.

5.2 Groundwater Investigation

The investigation of groundwater will consist of the installation of monitoring wells to evaluate the extent of dissolved-phase and separate-phase diesel fuel at and downgradient of the source area. The following sections provide the details of the proposed groundwater investigation scope of work.

5.2.1 Monitoring Well Installation

One groundwater/separate-phase product extraction well (Well AU) and four groundwater monitoring wells (Well AV, Well AW, Well AY, and Well AZ) are proposed. The collection of separate-phase product measurements and the collection and analysis of groundwater samples from the monitoring wells will provide data regarding the extent of separate-phase and dissolved-phase diesel fuel constituents in groundwater. Water-level measurements from the monitoring wells will be evaluated to confirm the direction of groundwater flow within the area of investigation. The locations and well construction details of the proposed groundwater monitoring wells are shown on **Figure 5** and are summarized in **Table 2**, respectively. The purposes for the monitoring wells are as follows:

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- Extraction Well AU will be installed within the PVC sleeve that was placed within the excavation around the underground piping prior to backfilling (see Section 1.2). Due to the presence of extensive subsurface infrastructure encountered during the excavation, Well AU can not be installed beyond a depth of approximately seven feet bgs. As stated previously, separate-phase diesel fuel was observed in the excavation and Well AU will be fitted with the Spill Buster® system to recover any remaining separate-phase diesel fuel in the source area. Details regarding the product recovery efforts are presented in Section 7;

- Monitoring Wells AV and AW will be installed at the locations of Soil Borings D-3 and D-2, respectively. Using vacuum excavation equipment, the boreholes of D-2 and D-3 will be advanced to approximately ten feet bgs. The monitoring wells will be installed with these boreholes in accordance with the proposed details outlined in **Table 2**. Based on observed groundwater elevations, the locations of Wells AV and AW were proposed to delineate the extent of separate-phase diesel fuel downgradient of the source area. If separate-phase diesel fuel is detected, groundwater samples will not be collected from these wells; and,

- Monitoring Wells AY and AZ will be installed at the locations of Soil Borings D-4 and D-5, respectively. Using vacuum excavation equipment, the boreholes of these borings will be advanced to approximately ten feet bgs. The monitoring wells will then be installed within the boreholes in accordance with the proposed details outlined in **Table 2**. The proposed locations of these monitoring wells were identified to characterize dissolved-phase diesel constituents in groundwater downgradient of the source area.

5.2.1.1 Proposed Well Details

Extraction Well AU will be constructed of six-inch diameter Schedule 40 PVC well screen and riser and Monitoring Wells AV, Well AW, Well AY, and Well AZ will be constructed of 4-inch diameter Schedule 40 PVC well screen and riser. A sand filter pack will be placed in the annular space around the screen interval followed by an appropriate bentonite seal and grouting material. Extraction Well AU will be completed at ground surface with a two-foot square flush-grade well vault to facilitate the installation of the Spill Buster® unit. Monitoring Well AV, Well AW, Well AY, and Well AZ will be completed with 12-inch round flush-grade manways.

A summary of the proposed well completion details (i.e., total depth, screened interval) is presented in **Table 3**. The total depth and screen interval for the proposed wells may vary depending on field observations and conditions encountered during the installation of the wells. NJDEP Bureau of Water Allocation Monitoring Well Records and well construction logs will be prepared following the completion of the monitoring wells.

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5.2.1.2 Well Permits

The wells will be installed per the requirements of New Jersey Administrative Code (NJAC) 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001, by a New Jersey-licensed well driller. Prior to installation of the wells, monitoring well permits will be obtained from the NJDEP.

5.2.1.3 Well Development

In accordance with N.J.A.C. 7:26E-4.4(g) [8], the proposed monitoring wells will be developed to yield a non-turbid discharge, where possible, following installation. The monitoring wells will be developed using a combination of surging and pumping techniques.

5.2.1.4 Survey

In accordance with N.J.A.C. 7:26E-4.4(g) [7], the Station monitoring wells will be surveyed by a New Jersey-licensed surveyor following installation as follows:

- The inner well casing will be surveyed to the nearest hundredth (0.01) foot in relation to the permanent, on-site datum and horizontally to an accuracy of one-tenth of a second latitude and longitude relative to the New Jersey State Planar Coordinate System.

- A permanent water-level measurement mark will be etched onto the top of the inner well casing to allow for accurate, consistent and comparable water-level measurements over time.

Following completion of the survey, the surveyor will complete a Monitoring Well Certification Form B for submittal to the NJDEP.

5.2.2 Groundwater Sampling

Following the installation of the wells, a groundwater sampling program will be initiated. The groundwater sampling program will involve the collection and analysis of groundwater samples from the proposed monitoring wells (Well AU, Well AV, Well AW, Well AY, and Well AZ) and from Well X. The following sections provide details regarding these activities.

5.2.2.1 Water-Level and Separate-Phase Product Measurements

Prior to the collection of groundwater samples from the wells, depth-to-water and separate-phase product thickness measurements will be collected using an electronic oil/water

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interface probe. The measurement data will be used along with the surveyed top of casing elevation data to calculate groundwater elevations for the wells. The groundwater elevation data will be analyzed to assess groundwater flow conditions at the Station. The separate-phase product measurements will be used to delineate the extent of product on the water table. Water-level and product measurement collection procedures are addressed in the QAPP (**Appendix A**).

5.2.2.2 Collection of Groundwater Samples

Following the installation and development of the wells, two-rounds of groundwater samples will be collected. The first round of groundwater sampling will be completed a minimum of two weeks following the well installation activities. Groundwater samples will only be collected from the wells that do not indicate a measurable thickness (i.e., greater than 0.01 feet) of separate-phase product. The second round of groundwater sampling will be completed three months following the initial round.

Due to the sensitive nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples will be collected utilizing the low-flow sampling methodology. Sample collection procedures, as well as quality control/quality assurance (QA/QC) sampling requirements, are outlined in the QAPP (**Attachment A**).

5.2.2.3 Groundwater Sample Analysis

The groundwater samples collected from the proposed monitoring wells will be submitted to Accutest for laboratory analysis. The groundwater samples will be analyzed for priority pollutant list semi-volatile organics (SVOCs) and VOCs including a library search.

5.3 Data Reduction and Analysis

Following completion of the Remedial Investigation field activities, field and analytical data will be reduced and evaluated to: 1) identify data gaps; 2) present a clear and concise summary of the investigation results; 3) provide recommendations for further investigation and remediation, if necessary. The reduction and evaluation of the field and analytical data will involve the activities described in the following sections.

5.3.1 Geographic Information System

ARCADIS will use the EQuIS data management system to manage environmental data collected during the remedial investigation. EQuIS is a comprehensive geo-environmental data management database, designed to store analytical test data and related data obtained during environmental site investigations, routine site monitoring, and hazardous waste remediation projects. EQuIS can be used for report and chart generation and is integrated with multiple statistical, numerical modeling and data visualization tools.

SII-SSA-0014-002294

Analytical data generated will be in the form of electronic data deliverables (EDD) from the analytical laboratory. Quality assurance/quality control (QA/QC) data will be entered as necessary to comply with regulatory requirements. The electronic database will not be subjected to a formal data validation process; however, the data will be reviewed for completeness and if data gaps are identified, they will be reported for discussion of how to address them.

5.3.2 Construct Water-Level Elevation Contours

Water-level elevation contours for the shallow water-table aquifer will be prepared to analyze horizontal groundwater flow direction and gradient.

5.3.3 Compile and Review Groundwater Analytical Data

As discussed in Section 5.3.1, the EQuIS data management system will be used to compile and manage groundwater analytical data collected at the Station. These data will be summarized and presented in table format and posted on figures as appropriate.

Historical groundwater analytical results for the monitoring wells will be evaluated to determine groundwater analytical trends for the wells.

5.4 Iterative Investigation Objective Process

As stated previously, following completion of the Remedial Investigation, data will be evaluated to: 1) identify data gaps; 2) present a clear and concise summary of the investigation results; 3) provide recommendations for further investigation and remediation, if necessary. Addenda to this RIWP will be prepared, accordingly, to address further investigation.

6 Reporting

Following completion of the Remedial Investigation, the data will be evaluated to determine if additional investigation activities are necessary for characterizing groundwater conditions at the Station. A Remedial Investigation Report (RIR) will be prepared that presents a comprehensive overview of investigation activities performed to date, and recommendations regarding future activities.

7 Interim Remedial Action

Free-phase diesel product will be removed from the subsurface by fitting Well AU with a Spill Buster® product recovery system. The Spill Buster® system is designed to remove only product (i.e., no water) with a down-well conductivity sensor and pump apparatus, an adjustable depth, wellhead auto-seek unit, and integrated control panel. Recovered product

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is conveyed to a nearby storage tank that is equipped with a high-level auto shut-off interfaced with the Spill Buster® control panel. The product storage tank will be staged within a secondary containment structure, which will be sized for storage tank fork-lift access. Product recovered by the Spill Buster® system will be periodically removed from the storage container at a frequency determined by the sustained product recovery flow rate. **Figure 6** shows the proposed product recovery equipment layout. If necessary, the Spill Buster® system setup can be modified to recover product from other wells.

8 References

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SII-SSA-0014-002296

Tables

Table 1. Project Personnel, Remedial Investigation Work Plan, PSEG Nuclear, LLC, Salem Generating Station Hancock's Bridge, New Jersey.

Name and Address	Role	Phone Number
PSEG Project Personnel		
John Ronafalvy PSEG Services Corporation Environment, Health, and Safety Department Estuary Enhancement Program 130 Money Island Road Salem, NJ 08079	Project Manager	856-878-6930
ARCADIS Project Personnel		
Tom Eng, CIH ARCADIS 1200 MacArthur Boulevard Mahwah, NJ 07430	Program Manager	201-236-2233
Peter N. Milionis, PG ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Project Manager/Project Health and Safety Officer	267-685-1800
Bradley D. Pierce ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Field Team Leader/Site Health and Safety Officer	267-685-1800
Scott T. Potter, Ph.D., P.E. ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Groundwater Modeling Expert	267-685-1800
Pat Vollertson ARCADIS 630 Plaza Drive, Suite 200 Highlands Ranch, Colorado 80129	Corporate Health and Safety Officer	720-344-3500
Project Laboratory Personnel		
Diane Komar Accutest Laboratories 2235 Route 130 Dayton, NJ 08810	Analytical Laboratory	732-329-0200

SII-SSA-0014-002298

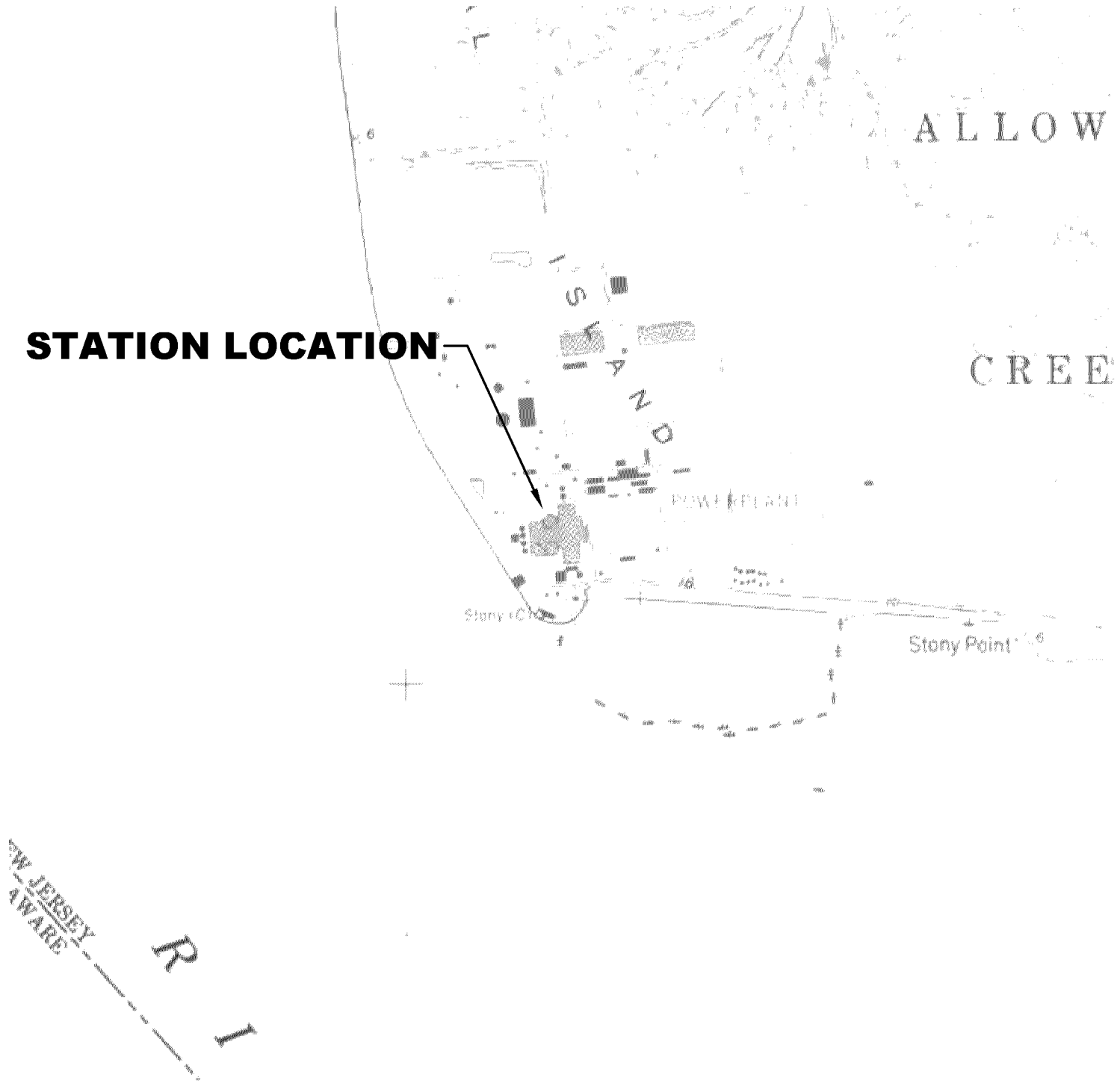
Table 2. Construction Details for Proposed Monitoring Wells, PSEG Nuclear, LLC, Salem Generating Station, Artificial Island, New Jersey.

Proposed Monitoring Well	Location of Monitoring Well[3]	Purpose of Monitoring Well	Construction Material[2]	Diameter (inches)	Total Depth (ft bls)[1]	Screen length (feet)[1]
Well AU	Pipe Repair Excavation	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40 V-wire) 0.020" slot	6	7	5
Well AV	Soil Boring D-3	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40 V-wire) 0.020" slot	4	10 to 14	6 to 10
Well AW	Soil Boring D-2	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40 V-wire) 0.020" slot	4	10 to 14	6 to 10
Well AY	Soil Boring D-4	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40 V-wire) 0.020" slot	4	10 to 14	6 to 10
Well AZ	Soil Boring D-5	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40 V-wire) 0.020" slot	4	10 to 14	6 to 10

Notes:
ft bls Feet below land surface
PVC Polyvinyl choride
TBD To be determined

[1] Proposed total depths and screen lengths for the monitoring wells are approximate. Actual depths and screened intervals will be determined in the field based on field observations.
[2] Wells will be constructed using a Morie #0 sand pack from the bottom of the well to two feet above the top of screened interval.
[3] Corresponds with locations identified on Figure 4

Figures



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

MN GN

10 ½° 187 MILS

0°21' 6 MIL

UTM GRID AND 1981 MAGNETIC NORTH

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

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DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	4/9/03	P. MILIONIS	A. HANNUM
STATION LOCATION PSEG SALEM GENERATING STATION HANCOCK'S BRIDGE, NEW JERSEY		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER NP000571.0001	DRAWING NUMBER 1

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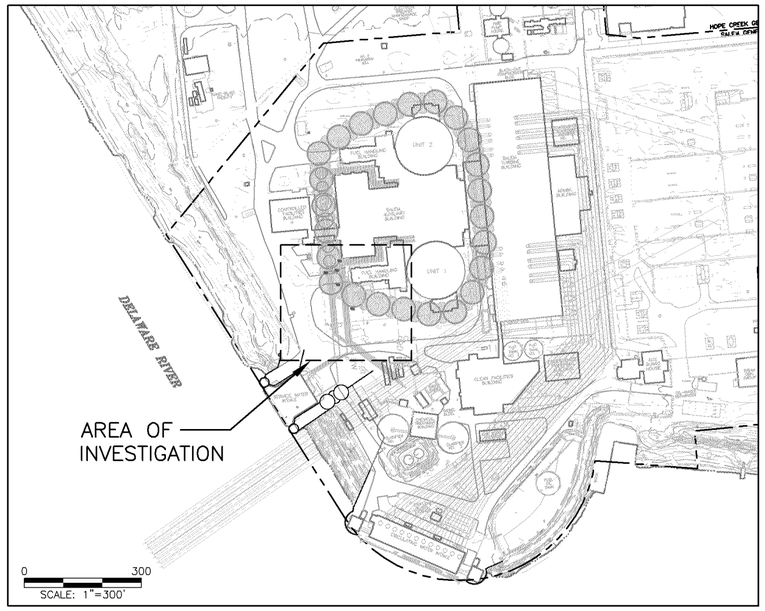

SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
D-1
D-2
D-3
D-4
D-5
LIMITS OF COFFERDAM
FUEL HANDLING BUILDING
N

LEGEND:

- D-1 MONITORING WELL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK

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0 20 20
SCALE: 1"=20'

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		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

STATION LAYOUT

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	2

S:\APROJECT\PSE&G\NP000603 - Salem - Diesel\CADD\FIG-2 STATION LAYOUT.dwg, 3/ 12/2004 2:17pm

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0 150 300
SCALE: 1"=150'

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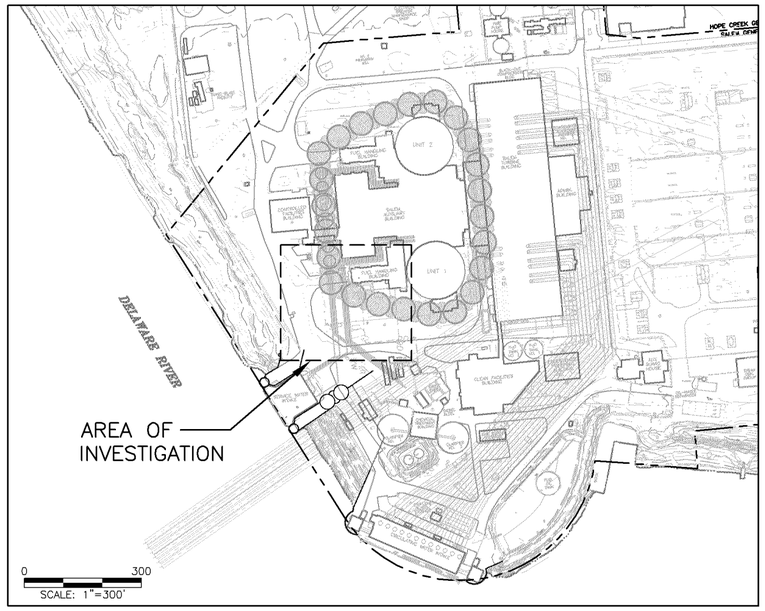
GROUNDWATER ELEVATION CONTOURS		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER NP000603.0001	DRAWING NUMBER 3

S:\APROJECT\PSE&G\NP000603 – Salem – Diesel\CADD\FIG-3 GROUNDWATER ELEVATION CONTOURS.dwg, 3/ 12/2004 2:18pm



SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL-X
D-2
D-3
D-4
D-5
LIMITS OF COFFERDAM
FUEL HANDLING BUILDING
VALVE
N

NOTES:

1. PRIOR TO INITIATING SOIL SAMPLING ACTIVITIES, THE DEPTH TO GROUNDWATER WILL BE MEASURED AT WELL X TO DETERMINE THE APPROPRIATE SAMPLING DEPTH.
2. SOIL SAMPLES WILL BE OBTAINED FROM THE BORINGS AT APPROXIMATELY 1.0 FEET ABOVE THE WATER TABLE AS MEASURED IN WELL X.
3. SOIL SAMPLES WILL BE ANALYZED FOR FOR TOTAL PETROLEUM HYDROCARBONS WITH 25-PERCENT OF THE SAMPLES INDICATING A TOTAL PETROLEUM HYDROCARBONS RESULT GREATER THAN 1,000 MILLIGRAMS PER KILOGRAM ALSO ANALYZED FOR VOLATILE ORGANICS.

LEGEND:

WELL-AZ	EXISTING MONITORING WELL LOCATION
	PROPOSED SOIL BORING LOCATION
	DIESEL FUEL UNDERGROUND PIPING
	PROPERTY BOUNDARY
BD	BLOW DOWN PIPING
RW	LIQUID "RAD" WASTE LINE
	SERVICE WATER PIPING
	CIRCULATING WATER OUTLET PIPING
	CIRCULATING WATER INLET PIPING
ST	STORM SEWER PIPING
	CATCH BASIN
	MANHOLE (STORM SEWER)
	SHEET PILE
AFST	AUXILIARY FEEDWATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK

0 20 20
SCALE: 1"=20'

NO.	DATE	REVISION DESCRIPTION	BY CKD

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PSEG NUCLEAR, LLC
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ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
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		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

PROPOSED SOIL BORING LOCATION

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	4

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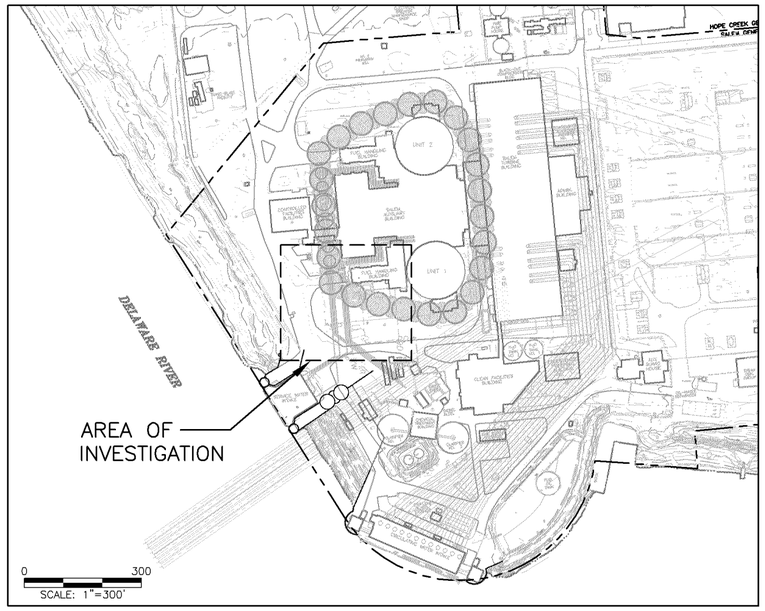
C:\APROJECT\PSE&G\NP000603 - Salem - Diesel\CADD\FIG-4 PROPOSED SOIL BORING LOCATION.dwg, 3/ 12/2004 2:24pm



SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL-AU
WELL-X
WELL-AW
WELL-AV
FUEL HANDLING BUILDING
LIMITS OF COFFERDAM
WELL-AY
WELL-AZ
VALVE
N

NOTES:

1. PRIOR TO INITIATING GROUNDWATER SAMPLE COLLECTION, DEPTH-TO-WATER AND SEPARATE PHASE PRODUCT THICKNESS MEASUREMENTS WILL BE COLLECTED FROM THE INDIVIDUAL WELLS USING USING AN ELECTRONIC OIL-WATER INTERFACE PROBE.
2. MONITORING WELLS NOT INDICATING A MEASURABLE THICKNESS OF SEPARATE PRODUCT (I.E., GREATER THAN 0.01 FEET) WILL BE SAMPLED UTILIZING LOW-FLOW SAMPLING METHODS.
3. GROUNDWATER SAMPLES WILL BE ANALYZED FOR PRIORITY POLLUTANT SEMI-VOLATILE AND VOLATILE ORGANICS INCLUDING A LIBRARY SEARCH.

LEGEND:

WELL-AZ	PROPOSED MONITORING WELL
	DIESEL FUEL UNDERGROUND PIPING
	PROPERTY BOUNDARY
BD	BLOW DOWN PIPING
RW	LIQUID "RAD" WASTE LINE
	SERVICE WATER PIPING
	CIRCULATING WATER OUTLET PIPING
	CIRCULATING WATER INLET PIPING
ST	STORM SEWER PIPING
	CATCH BASIN
	MANHOLE (STORM SEWER)
	SHEET PILE
AFST	AUXILIARY FEEDWATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK

0 20 20
SCALE: 1"=20'

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ARTIFICIAL ISLAND
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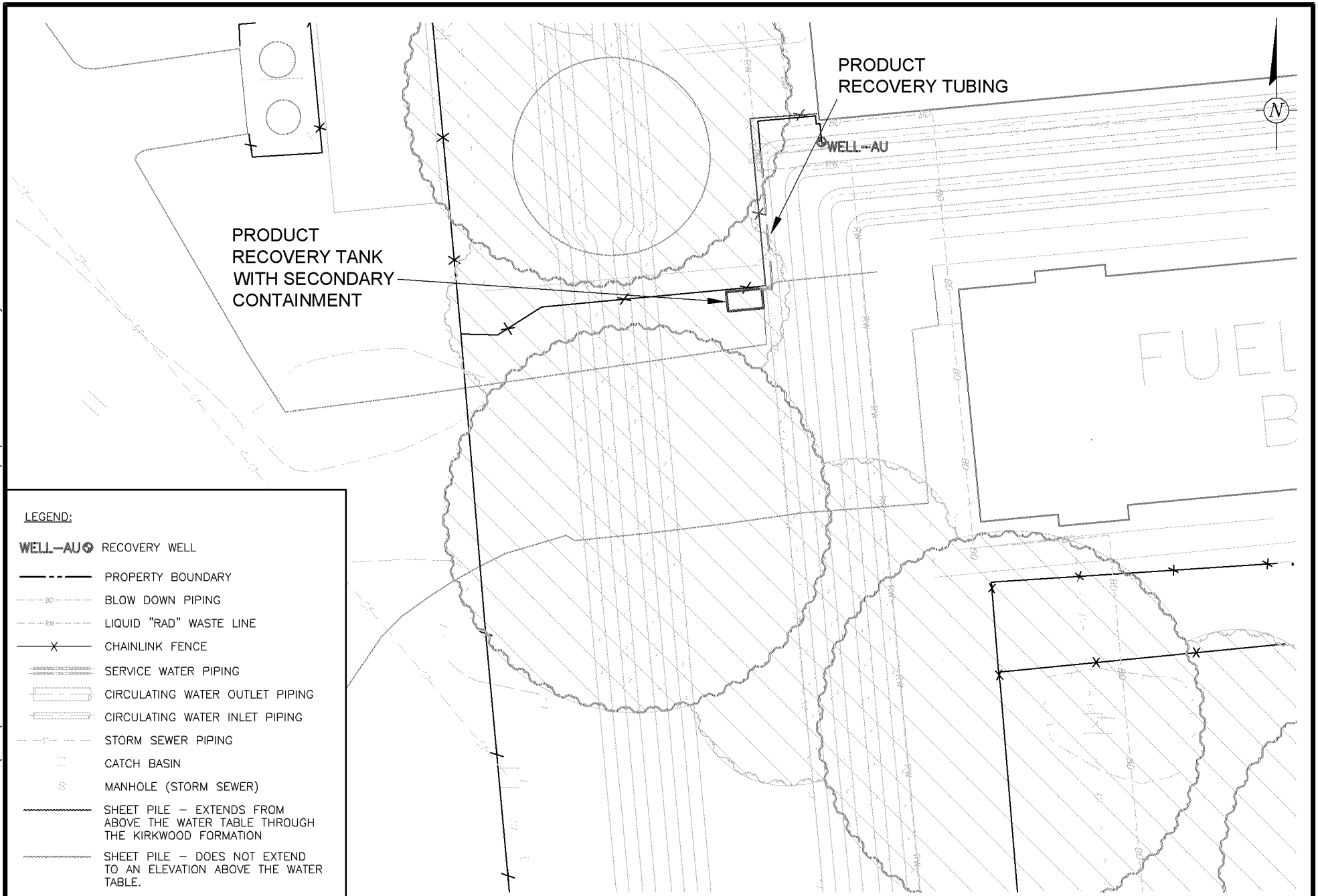
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

PROPOSED GROUNDWATER INVESTIGATION DETAILS

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	5

J:\APROJECT\PSE&G\NP000603 - Salem - Diesel\CADD\FIG-5 PROPOSED GROUNDWATER INVESTIGATION DETAILS.dwg, 3/ 12/2004 2:33pm



J:\APROJECT\PSE&G\NP000603 - Salem - Diesel\CADD\FIG-6 INTERIM REMEDIAL ACTION DETAILS.DWG 12/03/2004 - 2:35:26 PM Layout: 8.5x11

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DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
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		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

INTERIM REMEDIAL ACTION DETAILS

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
HANCOCK'S BRIDGE, NEW JERSEY

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	6

Appendix A

Quality Assurance Project Plan

Quality Assurance Project Plan

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

January 2005

PREPARED FOR

PSEG Services Corporation
130 Money Island Road
Salem, New Jersey 08079

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1 Standard Operating Procedures

1. Introduction

ARCADIS, on behalf of PSEG Services Corporation (PSEG), has prepared this Quality Assurance Project Plan (QAPP) to provide guidelines to conduct, monitor, and document the quality of remedial investigation (RI) activities at the PSEG Nuclear, LLC Salem Generating Station (the Site). The RI activities are being conducted under the direction of the New Jersey Department of Environmental Protection (NJDEP) in accordance with the technical requirements of the NJDEP Site Remediation Program.

The purpose of this QAPP is to ensure that scientific data are acquired according to established methods and procedures designed to obtain results that are objective, true, repeatable, and accurate (of known accuracy). Specifically, this QAPP provides guidance and specifications to ensure that RI activities are planned and executed in a manner consistent with the following quality assurance objectives:

- Field determinations and analytical results are valid through adherence to NJDEP field procedures, NJDEP-approved analytical protocols, and calibration and preventive maintenance of equipment.
- Samples are identified and controlled through chain-of-custody procedures.
- Records are retained as documentary evidence of field activities and observations.
- Generated data are valid in accordance with respective NJDEP data validation guidelines.
- Evaluations of the data are accurate, appropriate, and consistent throughout the project.

The QAPP has been prepared in accordance with the NJDEP *Technical Requirements for Site Remediation* (NJDEP, 1999), the NJDEP *Field Sampling Procedures Manual* (NJDEP, 1992), and generally accepted standard industry quality assurance procedures. Throughout the QAPP, where testing procedures are referenced, the current or most recent method is the standard reference, unless otherwise noted. Specific Quality Assurance/Quality Control (QA/QC) requirements are defined for the components of the project scope identified in Section 2.1 (Project Scope).

This QAPP contains seven sections, including this introduction, as follows:

- Section 2 presents the project scope and quality assurance objectives.

- Section 3 identifies the project organization and the roles and responsibilities of key project personnel.
- Section 4 outlines the procedures for sample collection and acquisition of field data.
- Section 5 describes the sample analyses and the format for laboratory data deliverables.
- Section 6 presents the quality assurance requirements for sample collection.
- Section 7 describes the project quality control procedures

2. Project Scope and Quality Assurance Objectives

The overall objective of the RI is to delineate the extent of diesel-related constituents in soil and groundwater, and to determine the extent of separate-phase diesel fuel on the water table. To meet these objectives, soil borings will be advanced for the collection of representative soil samples and monitoring wells will be installed to collect separate-phase diesel fuel measurements and for the collection of groundwater samples. As presented in Section 5 of the RIWP, the proposed soil borings and monitoring wells will be advanced near the southwest corner of the Salem Unit 1 Fuel Handling Building to investigate the release of diesel fuel from underground piping.

2.1 Project Scope

In order to fulfill the project objective, a comprehensive scope of work for the RI was developed. In general, the scope of work includes the following components:

- Collection and analysis of representative soil samples from Soil Borings D-1 through D-5 to characterize soil quality.
- Installation and development of Monitoring Wells AU through AY.
- Collection and analysis of representative groundwater samples from proposed Monitoring Wells AU through AY and from existing Well X to characterize groundwater quality.
- Survey of the ground surface elevation, casing elevation and relative horizontal location of proposed Monitoring Wells AU through AY and existing Well X

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- Collection of water-level measurements from the Site monitoring wells and from select observation and production wells to assess groundwater gradient, flow direction, and rate of movement.

- Collection of separate-phase diesel fuel measurements from the proposed monitoring wells to assess the extent of separate-phase diesel fuel on the water table.

Details regarding the field implementation of these tasks, including sample collection, decontamination procedures, instrumentation calibration, and the handling of investigation derived-wastes are provided in Section 4 of this QAPP. Details regarding sample handling and analytical procedures, including the collection of QA/QC samples, are provided in Section 5 of this QAPP.

2.2 Quality Assurance Objectives

The overall quality assurance objective is to ensure that all data collected during the implementation of the RI are of known and acceptable quality and that the calculated concentrations for all target compounds accurately represent the sample matrix. Specific laboratory QA/QC procedures will meet or exceed the NJDEP reduced data deliverables and non-Environmental Protection Agency (EPA)/Contract Laboratory Program (CLP) protocols. The QA objective parameters (precision, accuracy, representativeness, completeness, and comparability) used to ensure that data of acceptable quality are obtained, are described in detail below.

2.2.1 Precision

Precision is a measure of mutual agreement among individual measurements of the same property, usually under prescribed similar conditions. Precision is best expressed in terms of standard deviation and/or relative percent difference (RPD). Various measures of precision exist depending upon the "prescribed similar conditions". The precision of an analytical method, field measurement, or sampling technique is measured through duplicate laboratory analyses, analyses of field replicate samples and/or by replicate sample measurements.

Measurements of the precision of laboratory-generated data are necessary to demonstrate the reproducibility of the data and precision of the analytical method. Precision is evaluated by calculating the RPD between duplicate analyses.

Field replicate samples will be analyzed at a rate of 1 in 20 samples for each analytical batch and/or as specified in the analytical protocols to be used for the Site sampling.

The acceptable range of precision for each parameter in the samples will be within that specified by the method used to analyze these parameters. In duplicate sample analyses where constituents are not detected or are present at estimated to low concentrations, professional judgment will be used in assessing precision.

The precision of sampling will be assessed through a comparison of blind field replicate sample results. However, due to the potential difficulty in attributing poor precision to any one handling and/or analytical event, measurements of precision obtained between field replicates will be used qualitatively.

2.2.2 Accuracy

Accuracy describes the degree of agreement of a measurement with an accepted reference or "true" value. Accuracy can also be described as a measure of the bias in an analytical system. Analytical accuracy will be determined from (1) the analyses of standard reference materials of known and traceable purity and quality: and (2) the analyses of blank and matrix samples fortified with representative analytes for the analytical fraction, if appropriate.

Accuracy of field measurements will be assured through calibration techniques and by the measurement of known reference standards. Acceptable limits of accuracy will be as described in the field procedure or as otherwise indicated by the manufacturer of the reference standard.

2.2.3 Representativeness

Representativeness expresses the degree to which data accurately and precisely represent the characteristics of a population, parameter variations at a sampling point, a process condition, or an environmental condition. The representativeness of the data will be assessed in three areas as follows: (1) the number of locations and samples sufficient to accurately depict Site conditions; (2) the sampling procedures that must be designed so that individual samples accurately represent the chemistry of the matrix from which they were collected; and (3) the appropriateness of the analytical method used to the type of sample obtained.

2.2.4 Completeness

Completeness is a measure of the amount of valid data obtained from any measurement system compared to the total amount of data required in the data set to satisfy the DQOs. Valid data are defined as data generated from samples that arrived at the laboratory intact, properly preserved, sampled, and handled, in sufficient quantity to perform the

requested analyses, and accompanied by a chain-of-custody record. Furthermore, samples must be analyzed within the specified recommended holding times and with the appropriate and relevant level of QC effort. The calculation for completeness will be performed after critical QC criteria have been reviewed, including assessments for precision and accuracy, and an evaluation of sample detection limits has been performed. These preliminary assessments and the evaluation of the completeness objective will be performed during data validation.

The goal of most field investigations and analytical programs is to achieve 100 percent completeness of all required data. However, even under closely controlled situations, circumstances occur in the field and laboratory and during review of the data that may reduce the final amount of valid data and preclude 100 percent completion. ARCADIS expects that the selected analytical laboratory will provide data meeting QC acceptance criteria of 95 percent or more for all samples tested using the NJDEP protocols.

The analytical methods selected were chosen to achieve specified detection limits in the samples. In the assessment of the completeness objective, an evaluation of the achieved sample reporting limits or sample sensitivity will be performed. Sensitivity may be defined as the minimum concentration of an analyte that can be measured and reported. In terms of samples, sensitivity is the lowest concentration of analyte(s) that can be reliably achieved within specified limits of method precision and accuracy. The evaluation of sensitivity and the assessment of whether the necessary quantitation limit(s) has been achieved to meet the DQOs will be made by comparing the sample reporting limits to the quantitation limits.

2.2.5 Comparability

Comparability expresses the confidence with which one data set can be compared to another. The comparability of the data is assured by using standard sampling and analysis procedures, and data reporting formats. The data obtained during the RI fieldwork will be analyzed and reported in a manner such that similar data sets can be compared to each other and individual comparisons can be made within each data set.

3. Project Organization and Responsibility

The primary personnel involved in the project are listed in **Table A-1**. These personnel include the NJDEP Contact, PSEG Project members, ARCADIS project members and the analytical laboratory. Other subcontractors that will identified for the completion of the RI scope of work will include a New Jersey-certified driller and a New Jersey-licensed surveyor.

The PSEG Project Manager will be responsible for the overall project coordination and oversight of work activities. Any changes in the PSEG Project Manager will be submitted to the NJDEP within 10 calendar days of the change.

The ARCADIS project personnel will be responsible for performing technical activities in accordance with the approved RIWP (including sampling QA/QC activities), supervising field subcontractors, and preparing technical reports. The ARCADIS project manager will be responsible for committing the necessary resources to this project, day-to-day operations, adherence to schedule, and work quality.

Data collected in the field will be verified by the ARCADIS field team leader and reviewed by the ARCADIS project manager. If QA issues requiring special attention are identified, the ARCADIS project manager will identify the appropriate corrective action(s) and implement them.

Accutest Laboratories will be utilized for the project and is a New Jersey-certified laboratory for routine environmental and chemical analyses; its certification number is 12129. The laboratory is responsible for providing analytical services, including laboratory QA/QC activities. Laboratory sample storage procedures and the laboratories' review and cross-check procedures for the elimination of errors during routine data transfer, in calculations, preparation of data deliverable packages, and off-line storage are provided in the laboratories' Quality Assurance Plans, which are available upon request.

4. Sample Collection and Field Data Acquisition Procedures

Soil and groundwater sampling will be conducted in accordance with the Standard Operating Procedures (SOPs) provided in **Attachment 1**. The SOPs, which include procedures for the installation of monitoring wells and the collection of soil and groundwater samples, were established in accordance with the NJDEP protocols contained in the *Field Sampling Procedures Manual* (NJDEP, 1992).

The following sections discuss monitoring well installation, sample collection and field data acquisition procedures for the components of the scope of work presented in Section 2.1 (Project Scope) of the QAPP, disposal of investigation-derived waste, and decontamination and calibration of field equipment. This section will be expanded, as necessary, to accommodate additional tasks that are identified through the course of the remedial investigation. A detailed description of the scope of work is provided in Section 5 of the RIWP. Prior to a field event, a detailed field or sampling memo will be prepared that describes in detail the scope of work (i.e., provides details regarding sample locations and analyses) to be accomplished during the specific field event.

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4.1 Well Installation

Wells will be installed per the requirements of New Jersey Administrative Code (N.J.A.C.) 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001, by a New Jersey-licensed well driller. Pursuant to N.J.A.C. 7:26E-1.6(d) [8], any variations from the well design specifications outlined in the NJDEP Field Sampling Procedures Manual will be presented to the NJDEP Case Manager for approval prior to the issuance of the well permit and prior to installation.

Due to the presence of abundant subsurface infrastructure within the area of investigation, the proposed monitoring wells will be installed using vacuum excavation techniques. The monitoring well installation standard operating procedure (SOP) is provided in **Attachment 1** of this QAPP.

4.1.1 Well Development

Pursuant to N.J.A.C. 7:26E-4.4(g) [8], monitoring wells will be developed to yield a non-turbid discharge, where possible, following installation.

The well development SOP is provided in **Attachment 1** of this QAPP.

4.1.2 Survey

Pursuant to N.J.A.C. 7:26E-4.4(g) [7], monitoring wells will be surveyed by a New Jersey-licensed surveyor following installation as follows:

- The inner well casing must be surveyed to the nearest hundredth (0.01) foot in relation to the permanent, on-site datum and horizontally to an accuracy of one-tenth of a second latitude and longitude.

- A permanent water-level measurement mark will be etched onto the top of the inner well casing to allow for accurate, consistent and comparable water-level measurements over time.

Following completion of the survey, the surveyor will complete a Monitoring Well Certification Form B for submittal to the NJDEP.

4.2 Soil Sampling

Representative soil samples will be collected at each of the proposed monitoring well locations as a part of the remedial investigation and the locations are shown on Figure

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3 of the RIWP. The sampling plan or memorandum will be provided to field personnel prior to initiating field activities.

The soil sampling SOP is provided in **Attachment 1** of this QAPP.

4.3 Groundwater Sampling

The locations of the site monitoring wells that may be sampled as a part of this remedial investigation are shown on Figure 3 of the RIWP. The list of monitoring wells that will be sampled during each sampling event will be identified in specific sampling plan or memorandum. The sampling plan or memorandum will be provided to field personnel prior to initiating field activities. The following sections provide the procedures that will be utilized during groundwater sample collection activities.

4.3.1 Water-Level, Light Non-Aqueous Phase Liquid Measurements and Well Sounding

The water-level, light non-aques phase liquid (LNAPL) measurement and well-sounding SOPs are provided in **Attachment 1** of this QAPP.

4.3.2 Sample Collection Procedures

Due to the sensitive nature of certain analytes being monitored and to ensure the quality and representative nature of the groundwater data, groundwater sampling procedures will utilize the low-flow sampling methodology.

The low-flow sample collection SOP is provided in **Attachment 1** of this QAPP.

4.4 Decontamination Procedures

Equipment and personnel decontamination areas will be established in a designated on-site area.

4.4.1 Personnel

Decontamination of personnel is discussed in the Project Health and Safety Plan.

4.4.2 Drilling Equipment

Large equipment, such as drill rigs and all ancillary equipment, will be decontaminated prior to the start and at the completion of the field activities. Decontamination will consist of a high-pressure hot water or "steam" wash and brushing to remove encrusted

material. Potable water obtained from fire hydrants or a local source located near the Site will be used.

All of the drill rig equipment and tools used will be pressure cleaned after the completion of each soil boring to minimize the potential for cross contamination. Special attention will be given to decontaminating downhole sampling devices prior to each use. Split-spoon samplers, hand tools, or specialized samplers, will be thoroughly cleaned under the direct supervision of an ARCADIS representative.

4.4.3 Non-Dedicated Sampling Equipment

For this investigation, non-dedicated sampling equipment that will require field decontamination may include the following:

- Split-spoon and hand tool sampling devices
- Submersible pump (well development)
- Electronic water-level indicator
- Electronic oil/water interface indicator
- Steel measuring tape

Non-dedicated sampling equipment will be decontaminated in the field in accordance with the procedures outlined in the equipment decontamination SOP provided in **Attachment 1**.

If gross contamination is suspected or visual contamination exists, the full eight-step decontamination procedure outlined in the *Field Sampling Procedures Manual* (NJDEP, 1992) will be followed.

4.5 Investigation Derived Waste Management

Three types of investigation-derived waste (IDW) will be generated during the RI activities:

- Debris, such as plastic and PPE
- Residual solids, such as drill cuttings

- Residual liquids, such as decontamination water, monitoring well development water, and monitoring well purge water

IDW generated during the RI will be handled and disposed of in accordance with local, state, and federal requirements. Documentation regarding the handling and disposal of IDW will be provided in the RI report.

4.6 Field Data and Notes

Field notebooks contain the documentary evidence for procedures performed by field personnel. Hard cover, bound field notebooks will be used because of their compact size, durability, and secure page binding. The pages of the field notebook will be numbered consecutively and will not be removed.

Entries will be made in waterproof, indelible blue or black ink. No erasures will be allowed. If an incorrect entry is made, the information will be crossed out with a single strike mark and the change initialed and dated by the team member making the change.

Each entry will be dated. Entries will be legible and contain accurate and complete documentation of the individual or sampling team's activities or observations made. The level of detail will be sufficient to explain and reconstruct the activity conducted. Each entry will be signed by the person(s) making the entry.

The following types of information will be provided for each sampling task, as appropriate:

- Project name and number
- Reasons for being on site or taking the sample such as quarterly sampling, resampling to confirm previous analysis, initial site assessment, etc.
- Date and time of activity
- Sample identification number
- Geographical location of the sampling point with reference to site (or other) facilities or a map coordinate system - sketches will be made in the field logbook when appropriate
- Physical location of the sampling point such as depth below ground surface or water surface

- Description of the method of sampling including procedures followed, equipment used, and any departure from the specified procedures; volume of water purged and water levels will be included for groundwater samples
- Description of the sample, such as physical characteristics, odor, etc.
- Results of field measurements, such as temperature, specific conductivity, pH, dissolved oxygen, organic vapors, etc.
- Readings obtained from health and safety equipment
- Weather conditions at the time of sampling and previous meteorological events that may affect the representative nature of a sample
- Photographic information including a brief description of what was photographed, the date and time, the compass direction of the picture, and the number of negatives on the roll (once the film has been developed, each slide or photographic print should be serialized corresponding to its notebook entry and labeled with the signature of the photographer, the time and date of the photograph, and site location.)
- Reference number from all serialized forms on which the sample is listed or labels which are attached to the sample, i.e., chain of custody forms, airbill numbers, etc.
- Other pertinent observations such as the presence of other persons on the site (those associated with the job or members of the press, special interest groups, or passers-by), actions by others that may affect performance of site tasks, etc.
- Names of sampling personnel and signature of persons making entries

4.7 Instrument Calibration and Maintenance

All calibration and maintenance procedures used in support of field activities and/or laboratory analyses will be performed in accordance with the methods and protocols described in the following sections.

4.7.1 Field Equipment

On-site field calibration activities include the use of calibration standards and field equipment checks, as appropriate, for the equipment being used. Field calibration

and/or field checking of each meter will be accomplished by following the procedures outlined in the operating manual for the instrument. At a minimum, field calibration and/or field equipment checking will be performed both prior to and after equipment use. Field calibration will be documented in the field notebook.

Equipment that fails calibration or becomes inoperable during use will be removed from service and segregated to prevent inadvertent utilization. The equipment will be properly tagged to indicate that it is out of calibration. Such equipment will be repaired and recalibrated to approved standards by qualified personnel. Equipment that cannot be repaired will be replaced.

Results of activities performed using field equipment that has failed recalibration will be evaluated by the Project Manager or his/her designee. If the activity results are adversely affected, the results of the evaluation will be documented, appropriate personnel notified, and a decision made of the validity of the results.

Off-site calibration and maintenance of field instruments will be conducted as appropriate throughout the duration of project activities. All field instrumentation, sampling equipment, and accessories will be maintained in accordance with the manufacturer's recommendations and specifications and established field equipment practice. Off-site calibration and maintenance will be performed by qualified personnel. A logbook will be kept to document that established calibration and maintenance procedures have been followed. Documentation will include both scheduled maintenance and unscheduled maintenance. The logbook will be kept with the equipment.

Health and safety instrumentation will be calibrated, maintained, and used by PSEG representatives who will provide radiological screening in accordance with the facility's Radiation Protection Program. Additional detail is provided in the Project HASP.

4.7.2 Laboratory Equipment

Laboratory calibration procedures will follow accepted NJDEP guidelines, as applicable to the specialty analytical equipment used and procedures performed. The methods selected in support of the field investigation were chosen based on the sample matrix, the specified list of target constituents, and the desired level of QA/QC deliverables. All other calibration procedures for laboratory equipment will be performed in accordance with instrument and/or manufacturers' specifications, and laboratory SOPs.

5. Sample Analysis and Laboratory Data Deliverable Format

A summary of the soil and groundwater analyses and methods is presented in **Table A-2**. Soil samples will be analyzed for the following parameters by the analytical laboratory:

- Total petroleum hydrocarbons
- Volatile organic compounds (VOCs) plus library search

Groundwater samples will be analyzed for the following parameters by the analytical laboratory:

- Priority pollutant base neutral scan plus library search
- Priority pollutant VOCs scan, including xylene, plus library search

Laboratory analytical data from the analytical laboratory will be reported in Reduced Laboratory Data Deliverables (NJDEP Regulatory Format IV as per Appendix A of N.J.A.C. 7:26E).

6. Sample Quality Assurance

6.1 Sampling Program

A summary of the analytical methods and a summary of the sampling program with respect to QA/QC for investigating groundwater are presented in **Tables A-2** and **A-3**, respectively. These summaries include the following quality assurance information: matrix type, number of samples to be collected, field blanks, analytical parameters and methods, duplicate samples, container volume and type, sample preservation and holding times.

6.2 Sample Labeling

Each sample collected will be assigned a unique identification number and placed in an appropriate sample container. Each sample container will have a sample label affixed to the outside with the date, time of sample collection and project name. In addition, this label will contain the sample identification number, analysis required, and chemical representatives added, if any. Documentation will be completed in waterproof ink.

6.3 Sample Designation

The following sections outline how specific sample types will be identified:

6.3.1 Soil Samples

The soil sample identification from which the sample was collected will be used to designate the sample identification (i.e., samples collected from Soil Boring D-1 will be identified as Boring D-1).

6.3.2 Monitoring Well Samples

The monitoring well identification from which the sample was collected will be used to designate the sample identification (i.e., samples collected from Monitoring Well AU will be identified as Well AU).

6.3.3 Duplicate Samples

Since the duplicate samples are "blind" to the laboratory, it will have a coded identity on its label and on the chain-of-custody record form. The actual sampling location will be recorded in the field notebook. The field sampling personnel will be responsible for notifying the Project Manager as to which samples are duplicates and how these samples are identified.

6.3.4 Field Rinsate Blanks and Trip Blanks

Field rinsate blanks will be identified as such, and their identification will include the date of sample collection (i.e., a field rinsate blank collected on 1 November 2004 will be identified as Rinsate Blank-11/01/04). Likewise, trip blanks will be identified as such and their identification will include the date the samples in the cooler were collected (i.e., a trip blank contained in a cooler of samples collected on 1 November 2004 will be identified as Trip Blank - 11/01/04).

6.4 Sample Handling

The analytical laboratories will provide pre-cleaned and prepared sample containers for this project. Special sampling containers and handling for the dissolved gas samples are detailed in **Attachment 2**. The laboratories will also prepare and supply the required QA/QC sample containers and reagent preservatives. Sample bottle containers, including the QA/QC sample containers, will be placed into metal or plastic coolers, and the coolers with the samples for major cations and anions analyses will be

filled with frozen "blue ice" packs or ice in Ziploc® bags (or equivalent) to maintain an ambient temperature of approximately four degrees Centigrade. These coolers will be received by the field sampling team within 24 hours of their preparation in the laboratories.

Samples collected in the field for laboratory analysis will be placed directly into the laboratory-supplied sample containers. Individual sample containers will be sealed by hand-tightening container lids.

Possession of samples collected in the field will be traceable from the time of collection until they are analyzed by an analytical laboratory or disposed. To maintain and document sample possession, chain-of-custody procedures as described in Section 6.7 will be followed. Samples will be packaged and shipped as described in Section 6.8.

6.5 Sample Preservation

Coolers containing the sample containers and associated QA/QC sample containers will be received at the laboratories within 24 hours of their shipment from the field. The temperature in the coolers containing major cation and anion samples will be maintained at a temperature of 4 (degrees) Centigrade while on-site and during shipment.

Sample preservation measures will be used to attempt to prevent sample decomposition by contamination, degradation, biological transformation, chemical interactions, and other factors during the time between sample collection and analysis. Steps taken to maintain in situ characteristics may include refrigeration of samples at approximately four degrees Centigrade, freezing, pH adjustment, and/or chemical fixation. Samples are preserved according to the requirements of the specific analytical method selected.

The preservation requirements for the analyses selected for this investigation are presented in presented in **Table A-3**. The analytical laboratories will add the required preservatives to the appropriate sample containers during preparation of the containers, i.e., before shipment to the field.

For preserved groundwater samples, the pH of the sample will be verified in the field prior to sample shipment using the following procedure:

- Place (pour or pipette) a small portion of the groundwater sample across a section of pH paper to verify that the pH of the sample is less than pH 2

- If the pH is greater than pH 2, add high purity HNO_3 to the sample container
- Repeat pH test to ensure pH of the sample is less than pH 2
- Seal container and place sample on ice for shipment

6.6 Level of Quality Control Effort

The sampling team will use several types of QA/QC samples to ensure and document the integrity of the sampling procedures and the laboratory sample-handling procedures, as well as, the validity of the measurement data. These samples include field duplicate samples (replicates), field rinsate blanks and trip blanks. The following sections provide information regarding these samples. **Table A-2** provides information regarding the required number of quality control samples per sampling event.

6.6.1 Duplicate Samples

An aqueous field duplicate sample will be collected to evaluate the reproducibility of the groundwater sampling technique. Duplicate samples will be collected at a rate of one duplicate sample per 20 monitoring wells sampled with at least one duplicate sample being collected per sampling event. The duplicate sample will be analyzed for the list of parameters required for the Site monitoring wells.

6.6.2 Trip Blanks

Analyte-free water will be obtained from the laboratory to be used for trip blanks. If necessary, this water can be verified as being analyte-free by reviewing the analytical results of method blanks run by the laboratory on the days the trip blanks were prepared and shipped. To assess whether cross-contamination of samples has occurred during the shipment of samples, the laboratory will provide one trip blank per cooler of samples. Trip blanks will be returned to the laboratory unopened with the same set of bottles they accompanied in shipment. Trip blanks will be analyzed for the list of parameters required for the Site monitoring wells.

6.6.3 Field Rinsate Blanks

Analyte-free water will be obtained from the laboratory to be used for field rinsate blanks. If necessary, this water can be verified as being analyte-free by reviewing the analytical results of method blanks run by the laboratory on the days the field blank water was bottled and shipped. Field rinsate blanks are run to assess whether cross-contamination of samples has occurred during sampling and to determine whether

decontamination procedures have been performed adequately. Following decontamination, field rinsate blank samples are prepared by pouring the analyte-free water over the field sampling device(s) that are required to be decontaminated between sampling locations (i.e., sample pumps). One field rinsate blank will be collected for each day of sampling. Field rinsate blanks will be preserved in the same manner as the aqueous samples and analyzed for the same parameters.

6.7 Chain-of-Custody Procedures

A program has been established for sample chain-of-custody (COC) that will be followed during sample handling activities in both field and laboratory operations. The primary purpose of COC procedures is to document the possession of the samples from collection through shipping, storage, analysis, data reporting, and disposal.

COC refers to the actual possession of the samples. Samples are considered to be in custody if they are within sight of the individual responsible for their security or locked in a secure location. Each person who takes possession of the samples, except the shipping courier, is responsible for sample integrity and safekeeping.

Standard chain-of-custody procedures are outlined as follows:

- COC will be initiated by the laboratories supplying the precleaned and prepared sample containers. COC forms will accompany the sample containers.

- At the time of sample collection, the COC form will be completed for the sample collected. The sample identification number, date and time of sample collection, analysis requested, and other pertinent information (e.g., preservatives) will be recorded on the form. All entries will be made in waterproof, indelible blue or black ink.

- Field samplers will be responsible for the care and custody of the samples collected until the samples are transferred to another party, dispatched to the laboratories, or disposed. The Field Team Leader will be responsible for enforcing COC procedures during field work.

- When the form is full or when all samples have been collected that will fit in a single cooler, the Field Team Leader will check the form for possible errors and sign the COC form. Any necessary corrections will be made to the record with a single strike mark, dated, and initialed. Each cooler will be accompanied by a separate COC form.

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- A shipping document will be completed for each cooler, and the shipping document number will be recorded on the COC form.

Samples will be packaged for shipment as described in Section 6.8 and dispatched to the laboratories with the appropriate COC form. A copy of the COC form will be retained by the sampling team for the project file, and the original will be sent with the samples. Bills of lading will also be retained as part of the documentation for the COC records.

When transferring custody of the samples, the individuals relinquishing and receiving custody will verify sample numbers and condition and document the sample acquisition and transfer by signing and dating the COC form.

Laboratory COC will be maintained throughout the analytical processes as described in the laboratories' Quality Assurance Plans. The analytical laboratory will return the original COC in the analytical data deliverable package.

6.8 Sample Shipment

6.8.1 Packaging

Sampled containers will be packed in Styrofoam® (or equivalent), bubble wrap, or vermiculite to minimize breakage and placed in metal or plastic coolers. Frozen blue-ice packs or ice in Ziploc® bags (or equivalent) will be placed around sample containers for major cations and anions. Additional cushioning material will be added to the cooler, if necessary. The COC and paperwork will be put in a Ziploc® bag (or equivalent) and placed on the top of the sample containers and ice or taped to the inside lid of the cooler. The cooler will be taped closed and signed custody seals will be affixed to two sides of the cooler. Laboratory address labels will be placed on top of the cooler.

6.8.2 Shipping

Standard procedures to be followed for shipping environmental samples to the laboratories are as follows:

- All environmental samples collected will be transported to the laboratory by field personnel, laboratory personnel, or courier or shipped through Federal Express or equivalent overnight service.

- Daily shipments will be sent whenever necessary to meet holding time requirements.

- The laboratories will be notified to be prepared to receive a shipment of samples. If the number, type, or date of shipment changes due to site constraints or program changes, the laboratories will be informed.

7. Quality Control Procedures

Sample quality control consists of those activities specifically conducted to ensure that the QA program described in Sections 4, 5, and 6 is being implemented according to the specified requirements, to assess the effectiveness of the sample QA program, to identify non-conformances, and to verify that any identified deficiencies are corrected. If any significant deviations from the QA program are documented, corrective action measure(s) will be immediately implemented and documented. For this RI, sample QC will consist of two activities: data validation and technical review. Each of these activities is described in the following sections.

7.1 Data Reduction

Data reduction will consist of summarizing the raw field and laboratory data into a format that will facilitate interpretation, analysis, and evaluation. Thus, the data will be presented in tables, well logs, illustrations, maps, and graphs, as appropriate. Laboratory data will be presented in formats similar to the laboratory deliverable.

Data collected in the field will be provided in the form of daily logs; task-specific logs for field measurements; illustrations; maps; and chain-of-custody records. Field personnel will complete all of the documentation listed above at the time of the collection, measurement, and analysis. The original field data will be relinquished to the Project Manager for the project file.

7.2 Technical Review

The reduction and analysis of data obtained through this RI, along with the conclusions/recommendations reached based on these data, will be reviewed to ensure the quality of the data and the validity of the conclusions/recommendations.

To ensure accurate transfer of laboratory data, the accuracy of electronic copies of analytical data provided by the laboratories will be verified by manually checking a minimum of 10 percent of the sample data to the hard copy laboratory data packages. Similarly, data that are reduced into tables and/or electronically reformatted to facilitate

data evaluation will be verified by manually checking a minimum of 10 percent of the sample data. If inaccuracies are detected, additional data will be checked and the appropriate corrective actions taken.

Data analysis will be reviewed by qualified individuals other than those performing the analysis. Preliminary or informal analysis or calculations may be performed by one or more originators and need not be completely checked but may be reviewed by the ARCADIS project manager. Final calculations and summary data tables will be made on calculation sheets or spreadsheets, respectively, that have signature blocks for peer review documentation.

Conclusions and/or recommendations will be reviewed by one or more peers of the professional who develops the conclusion/recommendation to ensure their accuracy on the basis of the data that have been acquired and the analysis that has been conducted. Technical reviews will be performed by professionals who have the necessary knowledge and skill to perform the review and who are not directly involved in the activity being reviewed. Technical reviews will be documented and this documentation retained in the project file.

8. References

Environmental Protection Agency (EPA). 1944c. *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations. EPA QA/R-5, EPA, Draft Interim Final*, Quality Assurance Management Staff, Washington, D.C.

New Jersey Department of Environmental Protection (NJDEP), 1990 - 1994. *Standard Operating Procedures for Analytical Data Validation.* Bureau of Environmental Measurements and Quality Assurance. 5.a.3, Revision 2. 5.a.4, Revision 1. 5.a.16, Revision 0. 17 April 1990 and 4 October 1994.

New Jersey Department of Environmental Protection (NJDEP), 1992. *Field Sampling Procedures Manual*. May 1992.

New Jersey Department of Environmental Protection (NJDEP), 1999. New Jersey Administrative Code (N.J.A.C.) Chapter 26E, *Technical Requirements for Site Remediation.* 2 July.

Public Service Energy Group (PSEG) Power, LLC, 1998. *Quality Assurance Plan.* Maplewood Testing Services.

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Tables

Table A-1. Project Personnel, Quality Assurance Project Plan, PSEG Salem Generating Station Hancock's Bridge, New Jersey.

Name and Address	Role	Phone Number
PSEG Project Personnel		
John Ronafalvy PSEG Services Corporation Environment, Health, and Safety Department Estuary Enhancement Program 130 Money Island Road Salem, NJ 08079	Project Manager	856-878-6930
ARCADIS Project Personnel		
Tom Eng, CIH ARCADIS 1200 MacArthur Boulevard Mahwah, NJ 07430	Program Manager	201-236-2233
Peter N. Milionis, PG ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Project Manager/Project Health and Safety Officer	267-685-1800
Bradley D. Pierce ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Field Team Leader/Site Health and Safety Officer	267-685-1800
Pat Vollertson ARCADIS 630 Plaza Drive, Suite 200 Highlands Ranch, Colorado 80129	Corporate Health and Safety Officer	720-344-3500
Project Laboratory Personnel		
Diane Komar Accutest Laboratories 2235 Route 130 Dayton, NJ 08810	Analytical Laboratory	732-329-0200

Table A-2. Soil and Groundwater Analyses and Methods, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Parameter	Analytical Method	Technical Protocol	Lower Limit of Detection	Sample Container	Preservation Method	Holding Time	Data Use
Soil Analyses and Methods							
Total Petroleum Hydrocarbons (TPHC)	418.1	USEPA	0.5 mg/kg	8 ounce amber glass	Cool 4°C	28 days for analysis	Characterize Soil Quality
Volatile Organic Compounds (VOCs) +10 Library Search[1]	8260B	USEPA	See Page 3	(1) 10-ml Methanol Kit	Cool 4°C	14 days for analysis	Characterize Soil Quality
Groundwater Analyses and Methods							
Priority Pollutant Base Neutral Scan with Library Search	8270	USEPA	See Page 4	(2) 950-ml amber glass	HCl; Cool 4°C	7 days for extraction; 40 days for analysis	Characterize Groundwater Quality
Priority Pollutant Volatile Organic Compounds Scan Including Xylene with Library Search	8260B	USEPA	See Page 6	(3) 40-ml glass vial	Cool 4°C	14 days for analysis	Characterize Groundwater Quality

Notes:
Mg/kg – Milligrams per Kilogram
ml – Milliliter
°C – Degrees Centigrade
HCl – Hydrochloric acid
[1] VOCs + 10 analysis required on 25 percent of samples in which TPHC level in soil exceeds 1,000 parts per million (mimimum one sample; samples for VOC analyses shall be those with the highest TPHC concentration.

Table A-2. Soil and Groundwater Analyses and Methods, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Parameter	Analytical Method	Technical Protocol	Lower Limit of Detection	Sample Container	Preservation Method	Holding Time	Data Use
Groundwater Field Measurements							
Turbidity	NA	Water quality meter	Range: 0-1000 NTU	NA	NA	NA	Physical parameter used to demonstrated adequate well stabilization prior to sampling
Conductivity	NA	Water quality meter	Range: 0 to 100 mS/cm	NA	NA	NA	General water quality parameter used as a marker to verify that all site samples are obtained from the same groundwater system.
Temperature	NA	Water quality meter	Range: -5 to +45 °C	NA	NA	NA	Physical parameter used to demonstrated adequate well stabilization prior to sampling
Dissolved Oxygen (DO)	NA	Water quality meter	Range: 0 to 20 mg/L	NA	NA	NA	Used in conjunction with ORP to confirm the nature of the groundwater environment.
pH	NA	Water quality meter	Range: 0 to 14 standard units	NA	NA	NA	General water quality parameter used to confirm the nature of the groundwater environment.
Oxidation/Reduction Potential (ORP)	NA	Water quality meter	Range: -999 to +999 mV	NA	NA	NA	Used in conjunction with DO to confirm the nature of the groundwater environment.

Notes:
NA – Not Applicable
NTU –
mS/cm – Microsiemens per Centimeter
mg/L – Milligrams per Liter
°C – Degrees Centigrade
mV - Millivolts

Table A-2. Soil and Groundwater Analyses and Methods, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Soil – Volatile Organic Compounds	Lower Limit of Detection (micrograms per kilogram)
Acetone	<140
Benzene	<24
Bromodichloromethane	<15
Bromoform	<65
Bromomethane	<100
2-Butanone (MEK)	<440
Carbon disulfide	<65
Carbon tetrachloride	<110
Chlorobenzene	<25
Chloroethane	<100
Chloroform	<44
Chloromethane	<75
Dibromochloromethane	<52
1,1-Dichloroethane	<29
1,2-Dichloroethane	<26
1,1-Dichloroethene	<66
cis-1,2-Dichlorlethene	<37
trans-1,2-Dichloroethene	<36
1,2-Dichloropropane	<88
cis-1,3-Dichloropropene	<29
trans-1,3-Dichloropropene	<43
Ethylbenzene	<57
2-Hexanone	<110
4-Methyl-2-pentanone(MIBK)	<120
Methylene chloride	<37
Styrene	<32
1,1,2,2-Tetrachloroethane	<34
Tetrachloroethene	<43
Toulene	<23
1,1,1-Trichloroethane	<44
1,1,2-Trichloroethane	<36
Trichloroethene	<38
Vinyl chloride	<69
Xylene (total)	<42

Table A-2. Soil and Groundwater Analyses and Methods, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Groundwater – Priority Pollutant Base Neutrals Plus Library Search	Lower Limit of Detection (micrograms per liter)
Acenaphthene	<0.30
Acenaphthylene	<0.35
Anthracene	<0.22
Benzo(a)anthracene	<0.27
Benzo(a)pyrene	<0.38
Benzo(b)fluoranthene	<0.37
Benzo(g,h,i)perylene	<0.50
Benzo(k)fluoranthene	<0.37
4-Bromophenyl ether	<0.54
Butyl benzyl phthalate	<0.54
2-Chloronaphthalene	<0.38
4-Chloroaniline	<0.43
Carbazole	<0.34
Chrysene	<0.26
bis(2-Chloroethoxy)methane	<0.34
bis(2-Chloroethyl)ether	<0.49
bis(2-Chloroisopropyl)ether	<0.44
4-Chlorophenyl phenyl ether	<1.0
1,2-Dichlorobenzene	<0.24
1,3-Dichlorobenzene	<0.32
1,4-Dichlorobenzene	<0.25
2,4-Dinitrotoluene	<0.78
2,6-Dimitrotoluene	<0.62
3,3'-Dichlorobenzidine	<0.39
Dibenzo(a,h)anthracene	<0.58
Dibenzofuran	<0.49
Di-n-butyl phthalate	<0.79
Di-n-octyl phthalate	<0.63
Diethyl phthalate	<1.4
Dimethyl phthalate	<0.58
bis(2-Ethylhexyl)phthalate	<0.74
Fluoranthene	<0.63
Fluorene	<0.89
Hexachlorobenzene	<1.2

Table A-2. Soil and Groundwater Analyses and Methods, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Groundwater – Priority Pollutant Base Neutrals Plus Library Search	Lower Limit of Detection (micrograms per liter)
Hexachlorobutadiene	<0.41
Hexachlorocyclopentadiene	<0.45
Hexachloroethane	<0.67
Indeno(1,2,3-cd)pyrene	<1.5
Isophorone	<0.54
2-Methylnaphthalene	<0.72
2-Nitroaniline	<1.4
3-Nitroaniline	<1.2
4-Nitroaniline	<1.1
Naphthalene	<1.0
Nitrobenzene	<0.61
N-Nitroso-di-n-propylamine	<2.0
N-Nitrosodiphenylamine	<0.80
Phenanthrene	<0.23
Pyrene	<0.58
1,2,4-Trichlorobenzene	<0.32

Table A-2. Soil and Groundwater Analyses and Methods, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Groundwater – Priority Pollutant Volatile Organic Compounds Plus Library Search	Lower Limit of Detection (micrograms per liter)
Acetone	<2.3
Benzene	<0.31
Bromodichloromethane	<0.11
Bromoform	<0.17
Bromomethane	<0.15
2-Butanone (MEK)	<2.5
Carbon disulfide	<0.23
Carbon tetrachloride	<0.15
Chlorobenzene	<0.23
Chloroethane	<0.73
Chloroform	<0.081
Chloromethane	<0.13
Dibromochloromethane	<0.18
1,1-Dichloroethane	<0.13
1,2-Dichloroethane	<0.35
1,1-Dichloroethene	<0.81
cis-1,2-Dichlorlethene	<0.24
trans-1,2-Dichloroethene	<0.17
1,2-Dichloropropane	<0.11
cis-1,3-Dichloropropene	<0.071
trans-1,3-Dichloropropene	<0.080
Ethylbenzene	<0.27
2-Hexanone	<0.73
4-Methyl-2-pentanone(MIBK)	<0.59
Methylene chloride	<0.20
Styrene	<0.12
1,1,2,2-Tetrachloroethane	<0.14
Tetrachloroethene	<0.37
Toulene	<0.14
1,1,1-Trichloroethane	<0.25
1,1,2-Trichloroethane	<0.17
Trichloroethene	<0.13
Vinyl chloride	<0.66
Xylene (total)	<0.17

Table A-3. Summary of QA/QC Sample Requirements, Quality Assurance Project Plan, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sample Parameters	Field Duplicates per Event	Rinsate Blanks per Event	Trip Blanks per Event
Soil Analyses			
Total Petroleum Hydrocarbons	One per day of sampling	One per day of sampling	Not Required
Volatile Organic Compounds +10 Library Search	One per day of sampling	Not Required	One per day per cooler of samples
Groundwater Analyses			
Priority Pollutant Base Neutral Scan with Library Search	One per day of sampling	One per day of sampling	Not Required
Priority Pollutant Volatile Organic Compounds Scan Including Xylene with Library Search	One per day of sampling	One per day of sampling	One per day per cooler of samples

Attachment 1

Standard Operating Procedures

Attachment 1

Standard Operating Procedures
Quality Assurance Project Plan
PSEG Nuclear, LLC
Salem Generating Station
Salem, New Jersey

Number	Title
SOP 1.0	Well Sounding Procedures
SOP 2.0	Low-Flow Groundwater Sample Collection from Monitoring Wells
SOP 3.0	Sample Handling Procedures
SOP 4.0	Equipment Decontamination Procedures
SOP 210	Soil Sampling Hand Tools
SOP 510	Overburden Monitoring Well/Piezometer Installation
SOP 530	Monitoring Well/Piezometer Development
SOP 540	Monitoring Groundwater, LNAPL and DNAPL Elevations in Monitoring Wells and Piezometers

STANDARD OPERATING PROCEDURE No. 1.0
WELL SOUNDING PROCEDURES
PSEG SALEM GENERATING STATION, SALEM, NEW JERSEY

The purpose of this standard operating procedure is to provide a uniform basis for sounding the site monitoring wells prior to sample collection. This procedure provides quality control steps necessary for obtaining reliable, representative total depth measurements and for ensuring continuity between field personnel. The practice of sounding wells provides valuable information including the following: (1) determining if the monitoring well is silting-in; and (2) eliminating confusion about well identity when there are several similar, unlabeled wells in close proximity. The following sections provide details regarding the procedures that must be followed when performing this task.

The depth to the bottom of the well will only be verified on an annual basis.

Required Equipment

The following is a list of equipment that will be necessary for implementing the well sounding procedure outlined below:

1. Personal protective equipment (e.g., latex or nitrile gloves, safety glasses, etc) as specified in the Site health and safety plan (HASP);

2. Field notebook –well sounding measurements, along with other sampling notes, will be recorded in the project field notebook (see Project Manager for obtaining the project field notebook). The field notebook is a hard cover, bound notebook;

3. Well keys and a map of well locations; and,

4. A weighted stainless steel measuring tape.

Procedures

1. Clean and decontaminate the stainless steel tape and weight as described in SOP 4.0 provided in **Attachment 4** of this QAPP;

2. Locate and identify the well to be sampled. Record pertinent information in field notebook, including date, well identification number, and weather;

3. Unlock protective casing and remove well cap. Note any observations such as noises, odors, etc.;

4. Identify the measuring point at the top of the well casing.

5. Position the stainless steel tape and weight over the open well and slowly lower the weight until it has reached the bottom of the well. The total depth of the well is then determined

by taking a reading directly from the tape at the measuring point. The depth of the well should then be recorded. Measurements are recorded to the nearest 0.01 of a foot.

6. Remove the stainless steel tape and weight from the well. Replace well cap and lock protective casing.

7. Decontaminate the stainless steel tape and weight as described above prior to moving to the next well.

STANDARD OPERATING PROCEDURE No. 2.0
LOW FLOW GROUNDWATER SAMPLE COLLECTION FROM MONITORING WELLS
PSEG SALEM GENERATING STATION, SALEM, NEW JERSEY

The purpose for describing this procedure is to provide a uniform methodology for the collection of good quality and representative groundwater samples at the PSEG Salem Generating Station – Unit 1 facility (the Site). Groundwater samples collected from the Site monitoring wells for laboratory analysis will be collected using a modified low-flow sample collection procedure. The United States Protection Agency (USEPA) Region 3 (Mid-Atlantic Region) has adopted a Standard Operating Procedure (SOP) for the collection of groundwater samples from monitoring wells using a low-stress minimal drawdown ground-water sample collection method (low-flow sampling). The low-flow sample collection methodology presented in the USEPA Region 3 SOP was incorporated in the development of this SOP, but was modified to accommodate for site-specific conditions (i.e., limited recharge) and the sensitivity of the analyses being performed (e.g., tritium and helium). The procedures outlined below reflect these modifications.

Required Equipment

The following is a list of equipment that will be necessary for implementing the low-flow sample collection procedure outlined below:

1. Personal protective equipment (e.g., latex or nitrile gloves, safety glasses, etc) as specified in the Site health and safety plan (HASP);

2. Field notebook - Groundwater quality parameter measurements, along with other sampling notes, will be recorded in the project field notebook (see Project Manager for obtaining the project field notebook). The field notebook is a hard cover, bound notebook;

3. Well keys and a map of well locations;

4. Electronic water level indicator – The Micropurge Basics Drawdown Meter (model MP30) serves dually as a drawdown meter and water level indicator. See operators manual for operating procedures;

5. Sampling pump and associated equipment - Dedicated sampling pumps and tubing will be utilized for each well. The sampling pumps are Micropurge ¾-inch diameter bladder pumps (model SP-¾-P) with a 1/8-inch ID polyethylene air influent and a ¼-inch ID polyethylene sample effluent. A Micropurge Basics Controller (model MP10), Micropurge Basics Drawdown Meter (model MP30), and a portable 12-volt DC Air Compressor Unit (model 3020) are required for operating the sampling pump;

6. Flow measurement supplies – Graduated cylinder and a stopwatch;

7. A properly calibrated Micropurge Basics Flow Cell Model MP20DT for monitoring pH (standard units), temperature (degrees Celsius), dissolved oxygen (milligrams per liter), conductivity (micromhos per centimeter), oxidation-reduction potential (millivolts), and turbidity (NTU);

8. Properly preserved and labeled laboratory supplied sample containers; and,

9. Decontamination equipment (i.e., deionized water, alcohol-based liquid detergent, spray bottles, buckets, scrub brushes, etc.)

Procedures

Sampling must begin at the monitoring well suspected of containing the lowest concentrations of sample constituents (generally upgradient or furthest from the site or suspected source), then proceed systematically to the monitoring wells suspected of containing the highest concentrations of sample constituents. The order for sampling the monitoring wells will be based on actual laboratory analytical results for those wells that have been sampled previously, or will be based on the proximity of the well to the source area. A sampling event specific Workplan, prepared by the Project Manager, will be provided to field personnel conducting the sampling events and will address sampling order. The following outlines the site-specific purging and sampling procedures for the collection of groundwater samples using the low-flow sample collection procedure:

1. Calibrate all field instruments (e.g., water quality meters, etc.) per manufacturer's guidelines;

2. Decontaminate all non-dedicated sampling equipment following the procedures outlined in the equipment decontamination procedures outlined in SOP 4.0 (Equipment Decontamination Procedures) provided in **Attachment 1** of this QAPP.;

3. Locate and identify the well to be sampled. Record pertinent information in field notebook, including date, well identification number, and weather;

4. Unlock protective casing and remove well cap. Note any observations such as noises, odors, etc.;

5. Using a decontaminated electronic water level indicator, gauge and record the water level in the well relative to the reference measuring point. Water levels should be collected according to the procedures outlined in SOP 540 (Monitoring Groundwater, LNAPL and DNAPL Elevations in Monitoring Wells and Piezometers) provided in **Attachment 1** of this QAPP;

6. Confirm the depth of the pump intake in the monitoring well. The pump intake should be at or slightly above the middle of the screened interval of the monitoring well. Sample construction details will be included with the sampling event specific Workplan provided to the sampling personnel;

7. Lower the Micropurge Basics Drawdown Meter probe to a depth below the water table and approximately one-foot above the top of the well screen. The Micropurge Basics Drawdown Meter will automatically deactivate the pump when the water table has been drawdown to a depth corresponding with the depth of the probe. The pump will automatically reactivate when the water table recharges. (Typically, low-flow sampling procedures suggest that the water table should not be drawn down more than 0.33 feet. However, due to site-specific conditions this is not practical). The Micropurge Basics Drawdown Meter is being used to allow for maximum drawdown without allowing the water table to drop below the top of the well screen. Due to the analyses being performed on the groundwater samples it is essential that **THE WATER TABLE MUST NOT DROP BELOW THE TOP OF THE WELL SCREEN**;

8. Connect the air influent line to the air compressor and the water effluent to the flow-through cell. The discharge line from the flow-through cell must be directed to a container (5-gallon bucket) for temporary storage of the purge water. Following the completion of the sampling event, PSEG personnel will evaluate the need for more permanent storage methods, or disposal requirements;

9. Activate the pump. The initial flow rate should be low (less than 100 milliliters per minute). Decrease the flow rate to minimize drawdown in the well yet maintain a steady flow. Measure the discharge rate of the pump with the graduated cylinder and stop watch. Continue measuring the discharge rate every five minutes during purging;

10. During the purging, monitor and record the water-quality indicator parameters every five minutes. The water-quality indicator parameters are pH, temperature, specific conductance, turbidity, dissolved oxygen and oxidation reduction potential. Purging must be conducted for a minimum of thirty minutes;

11. Sample collection can be initiated after the stabilization criteria have been achieved for three consecutive readings (+/- 0.1 for pH, +/- 3% for conductivity, +/- 10 mV for redox potential, and +/- 10% for turbidity and dissolved oxygen). Note: Dissolved oxygen and turbidity usually require the longest time to achieve stabilization. Achieving stabilization of turbidity reading within +/- 10% within a reasonable time frame may be difficult. If the stabilization criteria have not been achieved following two-hours, samples can be collected;

12. If during purging the water table draws down to the level of the Micropurge Basics Drawdown Meter probe, the pump will automatically deactivate. The Micropurge ¾-inch diameter bladder pumps contain a check valve that will not allow the water in the tubing and the flow-through cell to discharge back into the well. If the pump deactivates, allow the well to recharge and reactivate the pump. If the water table continues to drop and deactivate the pump, a sample can be collected following the purging of a minimum of two tube volumes (including the volume of water in the pump and flow-through cell), even if the stabilization criteria have not been achieved. This information should be noted in the field notebook;

13. The pump must not be removed from the well between purging and sampling. Collect samples at a flow rate of less than 100 milliliters per minute. The sample should be collected directly from the sample effluent prior to passing through the flow-through cell;

14. Disconnect tubing from the inlet of the flow-through cell and proceed to fill sample containers. All sample containers must be filled with minimal turbulence by allowing the groundwater to flow from the tubing gently down the inside of the container;

15. Complete remaining information on field forms and chain-of-custody, including sample collection time and sampler's initials;

16. Store samples in a manner consistent with the sampling handling procedures outlined in SOP 3.0 provided in **Attachment 1** of this QAPP.

17. Decontaminate non-dedicated sampling equipment (i.e., flow-through cell and electronic water-level meter). Discard disposable equipment in a plastic garbage bag; and,

18. Replace well cap and lock protective casing.

STANDARD OPERATING PROCEDURE No. 3.0
SAMPLE HANDLING AND SHIPMENT
PSEG SALEM GENERATING STATION, SALEM, NEW JERSEY

This procedure describes acceptable methodology for the handling and shipment of environmental samples to an analytical laboratory for chemical analyses. The purpose of this procedure is to provide a uniform and documented means of securely transporting environmental samples to the laboratory so as to preserve the integrity and quality of the sample(s).

Required Equipment

The following is a list of equipment that will be necessary for implementing the procedure outlined below:

1. Field notebook – Shipment details (e.g., time/date, shipping method, currier, etc.) must be documented in the field notebook. (see Project Manager for obtaining the project field notebook). The field notebook is a hard cover, bound notebook;

2. Packaging tape;

3. Mailing labels;

4. Chain-of-custody forms;

5. Chain-of-custody seals;

6. Shipping forms;

7. Ice; and,

8. Insulated cooler(s) or other appropriate sample storage container.

Procedures

1. Immediately upon collection, each sample shall be placed in an appropriate sample storage container. If required by the sample methodology, samples should be placed in a cooler with an adequate volume of ice to keep all samples in the cooler at approximately 4°C.

2. Using a new pair of latex or nitrile gloves, assemble all sample containers from the completed sampling event.

3. Locate, identify and record all types of containers for each sample identification number on a chain-of-custody form.

4. Subtotal the number of containers of similar types and then add them all together to get a total bottle count. Check similar bottle counts and total bottle counts with the number of samples present.

5. Check to make sure bottles are labeled properly and have clear protective tape (e.g., 2" width Scotch Tape) over them.

6. Wrap glass containers with bubble wrap packaging material.

7. Place some shock absorbing material (e.g., at least two layers of clean bubble wrap) in the bottom of the cooler to prevent direct contact of glass bottles with the bottom of the cooler.

8. Arrange bottles in cooler to prevent movement. Plastic bottles can fit in between other bottles to make the cooler contents stable.

9. If required, place ice in sealable bags and then double-bag to prevent leakage. Place the bags of ice or dry ice on the top of and around the samples.

10. The courier must be identified on the chain-of-custody. Place the top copy of the chain-of-custody in a sealable bag and secure, to the top of the inside of the cooler with tape.

11. Close lid and place custody seals over the lid/cooler joint and cover with clear tape so as to encircle the entire cooler.

12. If using commercial courier service (e.g., Federal Express, etc.), properly complete and address a shipping form and affix to the lid of the cooler. Samples should be delivered to the laboratory by the next morning.

13. Deliver to the laboratory within 3 days, or the morning after the end of the sampling event (depending on sample holding time requirements).

14. File a copy of the chain-of-custody form and the shipping form in the project file.

Call laboratory the next morning to confirm arrival of samples.

STANDARD OPERATING PROCEDURE 4.0
EQUIPMENT DECONTAMINATION
PSEG SALEM GENERATING STATION, SALEM, NEW JERSEY

The purpose for describing this procedure is to provide a uniform methodology for the decontamination of non-dedicated sampling equipment (e.g., split-spoon samplers, submersible pumps used during observation well development, electronic water-level indicators, etc.) during the implementation of the Phase IV Investigation at the PSEG SC Salem Generating Station facility (the Site). Because of the potential for the decontamination equipment to be a source of contamination, the equipment must be inspected prior to each use for signs of contamination and replaced frequently.

Required Equipment

The following is a list of equipment that will be necessary for implementing the decontamination procedures outlined below:

1. Personal protective equipment (e.g., latex or nitrile gloves, safety glasses, etc) as specified in the Site health and safety plan (HASP);

2. Field notebook – Equipment decontamination details (i.e., time, etc.) and observations will be recorded in the project field notebook (see Project Manager for obtaining the project field notebook). The field notebook is a hard cover, bound notebook;

3. Decontamination equipment:

    - Deionized water;
    - Alcohol-based liquid detergent (non-sudsing detergent such as Alconox);
    - Spray bottles;
    - Four five-gallon buckets;
    - Scrub brushes, etc.); and,
    - Plastic Sheeting.

Procedures

1. Don appropriate personal protective equipment (PPE) per the Site Health and Safety Plan (HASP).

2. Set up four 5-gallon buckets over plastic sheeting as follows: 1) one bucket with clean, potable water; 2) one bucket with a detergent and clean potable water solution; 3) two buckets with distilled water in each.

3. Pre-rinse field equipment in the bucket of clean, potable water. In the case of a submersible pump, circulate the rinse water through the pump.

4. Wash field instruments with a brush in the solution of Detergent and potable water. Also wash any portion of the tapes or cords that were below the top of the well casing.

5. If an oily residue or a substantial amount of sediment begins to accumulate in the pre-rinse or the Detergent solution, prepare new rinsewater or solution.

6. Double rinse the instruments with distilled water.

7. Store the instruments in a clean location until next use.

STANDARD OPERATING PROCEDURE 510

OVERBURDEN MONITORING WELL/PIEZOMETER INSTALLATION

1.0 PURPOSE AND APPLICABILITY

This SOP describes the method for installing single-, double-, and triple cased monitoring wells or piezometers in overburden soils. Monitoring wells and piezometers are installed to determine ground water elevations, monitor ground water elevation fluctuations, and to obtain ground water samples for field and laboratory analyses. Single-cased monitoring wells and piezometers are used in unconfined overburden aquifers. Double- or triple-cased monitoring wells and piezometers are used in confined overburden aquifers to seal off hydraulic units and eliminate the potential movement of contaminants into the confined aquifer through the borehole.

Specific project requirements as described in an approved site-specific Work Plan, Quality Assurance Project Plan (QAPP), or Health and Safety Plan (HASP) will take precedence over the procedures described in this document. Additionally, deviation from this SOP regarding materials and techniques is acceptable providing: 1) the impact of the deviation on data quality has been evaluated by the Project Manager and has been deemed to be acceptable; and 2) the deviation has been clearly documented in an approved site-specific Work Plan or Work Plan Addendum.

2.0 RESPONSIBILITIES

The New Jersey-licensed well driller is responsible for obtaining the required permits, maintaining copies of monitoring well/piezometer specifications and well permits on-site during field work, providing the necessary materials and equipment for drilling and installing the monitoring wells/piezometers, performing the drilling and monitoring well/piezometer installation, and decontaminating the drilling equipment (as appropriate) in accordance with the approved site-specific Work Plan or QAPP. The driller is also required to maintain an accurate daily written log of all materials encountered, record construction details for each well/piezometer, record the depth of each water-bearing zone, and submit this information to the NJDEP Bureau of Water Allocation.

The Project Manager is responsible for ensuring that a utility markout has been conducted prior to initiating drilling activities and for protecting utilities, as appropriate, during field work activities.

Field personnel are responsible for inspecting the construction and installation of the monitoring well/piezometer to ensure that the driller adheres to the well installation specifications described in the approved site-specific Work Plan and/or QAPP. In addition, field personnel are

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responsible for recording all pertinent field data in the field log book or on appropriate forms, (e.g., monitoring well/piezometer construction diagram).

3.0 MATERIALS/EQUIPMENT

Equipment and materials used to install single-, double- and triple-cased monitoring wells/piezometers (in addition to the equipment provided by the driller) include:

- Weighted calibrated tape;
- Water level indicator or oil/water interface probe;
- Camera (optional);
- Personal Protective Equipment (PPE) as required by the site-specific HASP including PID/FID;
- Field forms: monitoring well/piezometer construction diagram, air monitoring log and/or other necessary health and safety documentation; and,
- Field log book.

4.0 METHOD

This section is divided into subsections on general information, marking-out underground utilities, decontamination, drilling methods, casings for double- or triple-cased monitoring wells/piezometers, monitoring well/piezometer installation, and preparation of construction diagrams.

4.1 General Information

- Specific drilling and installation equipment and methodology will be dictated by the geologic and hydrogeologic characteristics of the site, the nature of contaminants to be encountered, water elevations, and local and state regulations. Monitoring well/piezometer design will meet two basic criteria: (1) ground water must move freely into the monitoring well/piezometer, and (2) vertical migration of surface water or undesired ground water to the monitoring well/piezometer intake zone must be minimized.

- The requirements for screen, riser pipe, outer casing, filter pack and grout will be provided in the approved site-specific Work Plan and/or QAPP. (The material used for riser pipes and screens, e.g., PVC or stainless steel, will depend on a number of factors including the contaminants of concern in the ground water. The minimum screen and riser pipe diameter is 2 inches.)

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- Prior to the start of drilling activities, field personnel will review the scope of work and health and safety requirements with the driller. Field personnel will also confirm that driller has obtained the required permits.

- Samples of subsurface soil may be obtained for logging stratigraphy or for chemical analyses during the advancement of borings to be completed as monitoring wells/piezometers using the procedures provided in SOP 221 - Collecting Soil Samples from Soil Borings.

- A mobile phone or some other form of communication (e.g., radio) will be kept in support vehicles when in remote locations.

- All field activities will be conducted using the appropriate level of protection specified in the site-specific HASP.

4.2 Marking-Out Underground Utilities

At least three (3) business days prior to beginning intrusive work, the Project Manager or his/her designee will call New Jersey's utility location service known as "New Jersey One Call" at 1-800-272-1000 to request a field mark-out of underground utilities at the site. The following information must be provided as part of this request:

- Exact location of project site including street address and nearest cross street;
- Type of work;
- Name of company making request (typically environmental consulting firm) and name and phone number for a contact person;
- Date field work starts; and,
- Other pertinent instructions (such as site access).

New Jersey One Call provides a case number for each request and a list of companies that it will notify. This information will be recorded for future reference.

New Jersey One Call will notify affiliate companies that have underground utilities in the project area. The individual companies will send representatives to the site to check utility locations if they deem it necessary. Sampling locations must be marked prior to obtaining clearance unless other arrangements are made with the utility representatives. Utilities usually indicate the location of their facilities using spray paint or stakes. Because maps of underground utilities on most private properties are not available, utilities typically mark the underground utility location to the point where it enters the private property.

Utility mark-outs are valid for ten (10) business days and, therefore, field work must be initiated within ten (10) business days from the effectivity of the mark-out. If field work does not commence within ten (10) business days, is temporarily interrupted, or the marks fade and a re-

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mark-out is necessary, the original case number should be referenced when making a second or subsequent request to New Jersey One Call for the same project location.

It should be noted that: (1) some utilities and/or municipal agencies are not members of New Jersey One Call; and, (2) New Jersey One Call may not be able to provide information regarding all underground facilities (e.g., city water/sewer lines). Due diligence must be performed to identify any utilities that have not been contacted by New Jersey One Call but operate/maintain underground facilities at the site and these utilities contacted directly.

Additional information on the location of underground utilities may be located through:

- Information available from PSEG (including facility plans and personnel familiar with the site or former operations at the site);
- Site visit (obvious outlets, filling lines and pumps for underground tanks);
- Geophysical surveys (see SOP 110 - Geophysical Surveys); and,
- Hand excavation near utilities.

4.3 Decontamination

Equipment and tools used during drilling activities will be cleaned prior to work and between monitoring well/piezometer installations. For double- or triple-cased monitoring wells, equipment and tools will be decontaminated after each outer casing is set and before drilling the borehole for the associated inner casing. If a pre-drilling inspection reveals the presence of contamination such as visible chemical residue, additional decontamination will be conducted to remove the residue. All equipment and tools used during drilling will be cleaned prior to leaving the site. Cleaning of drilling equipment and tools will comply with the procedures detailed in the NJDEP Field Sampling Procedures Manual (May 1992) and the approved, site-specific QAPP.

Riser pipe and well screens will be pre-cleaned and manufacturer-sealed in protective plastic. If the protective plastic has been damaged, both screens and riser pipes will be decontaminated by "steam cleaning" prior to installation.

4.4 Drilling Methods

Boreholes to be used for monitoring well/piezometer installation must be a minimum of 4 inches greater than the casing to be installed. Drilling of the monitoring well/piezometer borehole may be accomplished by a variety of methods. The hollow-stem, continuous flight auger is one of the most widely used methods for installing monitoring wells/piezometers in overburden soils. No drilling fluids are used and the disturbance to geologic materials penetrated is minimal.

The second most popular method of drilling boreholes for installing monitoring wells/piezometers in overburden soils is the rotary-wash method. Rotary-wash methods may use potable water, a drilling mud (such as a potable water/bentonite mixture) or air during the drilling

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process to maintain an open hole and to remove cuttings. Potable water is the preferred circulating substance, followed by use of an acceptable drilling mud. Air rotary should be avoided, if possible, due to the potential for air dispersion of contaminants brought up from the subsurface.

Care must be taken with mud-rotary techniques so that the drilling mud does not affect collection of representative ground water samples. If drilling fluids are used, no chemical additives will be mixed into the fluid to alter viscosity or lubricating properties. Potable water for drilling will be obtained from a source not impacted by site contaminants (e.g., municipal water supply). A sample of the potable water will be collected during the course of well installation and analyzed for the same parameters as the ground water samples.

Drill cuttings and/or spent fluids will be contained and disposed of in accordance with federal and state regulations and the approved, site-specific Work Plan and/or QAPP.

4.5 Casings for Double- or Triple-Cased Monitoring Wells/Piezometers

Double- or triple-cased monitoring wells/piezometers are essentially constructed the same as single-cased monitoring wells/piezometers with the addition of first installing steel casing(s) to seal off hydraulic units.

The outer casing(s) of a cased monitoring well/piezometer will be installed in a pre-drilled borehole. After the borehole has penetrated a minimum of 1 to 2 feet into a confining layer, the outer casing will be lowered to the bottom of the boring. It is preferable to then drive the outer casing a minimum of 1 foot below the drilled borehole and into the confining layer. The annular space is then filled with acceptable grouting materials (see Tables 1, 2 and 3 on p. 202 of the NJDEP Field Sampling Procedures Manual (May 1992)) via pressure grouting through a tremie pipe. Pressure grouting will require the use of a grout shoe or packer installed at the end of the outer casing to prevent the grout from moving up into the casing. The grout will be allowed to cure for a minimum of 12 hours to allow a seal to form between the casing and the surrounding stratum prior to advancing the borehole through the outer casing to the next hydrologic unit.

4.6 Monitoring Well/Piezometer Installation

With hollow-stem augering, the center bit will be removed once the target depth is reached and the auger will be raised approximately 6 inches above the bottom of the borehole, rotated slowly, and returned to the bottom of the borehole to facilitate removal of all material within the auger. With rotary drilling, the borehole will be flushed clear of material prior to monitoring well/piezometer installation.

The borehole will be checked for total open depth and may be extended by further drilling, if necessary, before any well construction materials are placed. If the tip of the monitoring well/piezometer is to be above the terminus of the borehole, backfilling of the borehole with clean sand to the well screen tip elevation will be required. Use of a grout plug to compensate

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for overdrilling is not permitted. A heavy plumb bob or a calibrated tape will be used to determine the depth of the boring and the depth to the top of the backfill.

The monitoring well/piezometer screen and riser pipe will then be assembled. A bottom cap will be placed on the distal end of the well screen. In situations where dense, non-aqueous phase liquid (DNAPL) may be expected to accumulate (i.e., on confining layer or bedrock interfaces), the well screen may be extended a short distance (e.g., 1 to 2 feet) into the top of the confining unit or bedrock to aid in the detection and, possibly, the eventual recovery of DNAPL. Care must be taken to ensure that installation of well screens into confining units will not cause the confining unit to be breached during drilling and allow DNAPL to migrate deeper in the subsurface.

The well screen, riser pipe and bottom cap will be connected by flush-threaded joints. No glues or solvent are to be used on the joints. The length of the screened area and the gauge of the well screen or slots will be specified in the approved site-specific Work Plan and/or QAPP or will be determined in the field by the inspecting field personnel based on the grain-size distribution of the sediments. No more than 25 feet of well screen will be installed.

The well screen, riser pipe and bottom cap will be carefully placed into the borehole. (For multi-cased monitoring well/piezometers, the screen and riser pipe are set through the outer casing.) Care must be taken to ensure that the well screen and riser pipe are centered in the hole, straight, and vertical throughout. Centering will be accomplished with well centralizers.

The annular space surrounding the screened section of the monitoring well or piezometer and 2 feet above the top of the screen will be filled with clean silica sand (filter pack). No more than 5 feet of filter pack will be placed above the top of the monitoring well/piezometer screen. For multi-cased monitoring wells or piezometers, under no circumstance will the filter pack extend into a confining layer. The placement of a finer-grained filter pack on top of a coarser-grained filter pack is recommended. The fine-grained filter pack is used primarily to prevent the grouting material placed above it (see next paragraph) from seeping down into the well screen during installation.

The remainder of the borehole will be grouted to the ground surface using acceptable grouting materials (see Tables 1, 2 and 3 on pp. 198 or 202 of the NJDEP Field Sampling Procedures Manual (May 1992)) via pressure-grouting through a tremie pipe. The protective steel casing will be installed to a minimum of 3 feet below ground surface and securely set in concrete. A "weep hole" will be drilled in the portion of the riser pipe that is above ground to allow ventilation and pressure equilibrium. The monitoring well/piezometer will be fitted with a locking well seal and a protective steel casing cap with lock. Flushmount monitoring wells/piezometers are acceptable provided they have manholes, locking caps, and seals to prevent leakage of surface water into the monitoring well/piezometer. Bumper posts may be necessary for protection depending on the location of the monitoring well/piezometer.

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The completed monitoring well/piezometer must prominently display and have permanently affixed the NJDEP permit number and site-specific designation. A die set will be necessary to tap these identification numbers to flushmount boxes.

The completed overburden monitoring well/piezometer will be developed in accordance with SOP 530 - Monitoring Well/Piezometer Development.

The top of the innermost casing will be surveyed to the nearest 0.01 foot by a New Jersey-licensed surveyor. The survey point will be the highest point of the casing. The survey point will be permanently marked on each monitoring well/piezometer.

4.7 Preparation of Construction Diagrams

Information relating to the construction of the monitoring wells/piezometers will be recorded on draft monitoring well/piezometer constructions diagrams or in the field log book (and transcribed later onto monitoring well/piezometer construction diagrams). Typical construction diagrams for single- and double-cased monitoring wells/piezometers are provided in Figures 1 and 2, respectively.

Information on monitoring well/piezometer installation to be recorded in the field includes:

- Monitoring well/piezometer identification number;
- NJDEP monitoring well permit identification number;
- Drilling company and name of driller;
- Date and time of completion;
- Inspector's name;
- Generalized soil descriptions with corresponding depths;
- Diameter of borehole;
- Depth of borehole;
- Diameter, length and type of riser pipe;
- Diameter, slot size, length, type of screen and depths to top and bottom of screen;
- Type of sand filter pack and depth to top of sand; and,
- Type of annular grout mix and depth interval.

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5.0 QUALITY CONTROL

Elevation measurements will be checked repeatedly during well installation to ensure that the positions of well screen and filter pack, relative to ground water level, conform to project requirements. The depth to the top of each layer of packing (e.g., sand, grout, etc.) will be verified and adjusted if necessary to conform to the requirements of this SOP and the QAPP before the next layer is placed.

Adherence to the procedures described above may be verified through a field quality control audit. During a field quality control audit, the auditor carefully reviews equipment selection and use to ensure that appropriate equipment is utilized based on various factors including equipment capabilities. In addition, the auditor meets with key field staff to review sampling objectives of the site-specific Work Plan and results achieved, and makes recommendations. For example, care will be taken to minimize placement of monitoring wells in low lying areas like swales that will be likely to accumulate or have ponded water. The auditor submits a report summarizing results of the audit to the Project Manager. If corrective action(s) are required, the Project Manager is responsible for ensuring that the appropriate corrective action(s) are implemented and documented.

6.0 DOCUMENTATION

Documentation of observations and measurements obtained in the field will provide information on the proper construction and installation of the monitoring wells/piezometers and also provide a permanent record of the installation activities. These observations and measurements will be recorded with permanent ink in a bound weatherproof field log book with consecutively numbered pages. All documentation will remain in the project files following completion of the project.

The driller will maintain an accurate log of all materials encountered, record construction details for each monitoring well/piezometer, and record the depth to each water bearing zone. This information will be submitted to the NJDEP Bureau of Water Allocation.

Notes will be recorded daily when in the field. The information in the field book will include the following at a minimum:

- Project name and number;
- Name(s) of field personnel and their responsibilities;
- Drilling company and driller's name;
- Measurements (including length of screen, length of riser pipe, total depth of well and depth to stabilized water level);
- Observations (including stratal inconsistencies or gross contamination);
- Air monitoring readings (as required);
- Decontamination procedures; and,
- Weather conditions.

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7.0 REFERENCES

NJDEP Field Sampling Procedures Manual (May 1992)
Monitor Well Requirements for Unconsolidated Aquifers - Rev. 3/92, Appendix 7-1, p. 197
Monitor Well Requirements for Confined Unconsolidated Aquifers - Rev. 3/92, Appendix 7-1, p. 201

ASTM Standards on Ground Water and Vadose Zone Investigations (1996)
Standard Practice for Design and Installation of Ground Water Monitoring Wells in Aquifers, p. 153

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STANDARD OPERATING PROCEDURE 530

MONITORING WELL/PIEZOMETER DEVELOPMENT

1.0 PURPOSE AND APPLICABILITY

This SOP describes the methods to be utilized during overburden and bedrock monitoring well/piezometer development. Development is performed following monitoring well/piezometer installation to improve the hydraulic communication between the formation and monitoring well/piezometer and to help ensure that ground water samples are representative of the surrounding aquifer.

During the drilling process, the side of the borehole may become coated with clays or other fine sediments. This plugging action substantially reduces the hydraulic conductivity of the aquifer in the borehole and retards the movement of ground water into the monitoring well/piezometer. In addition, sediment may enter the filter pack or clog the screen slots during installation of the overburden monitoring well/piezometer materials. Development may also be required for monitoring wells/piezometers that have been left dormant for some time or have accumulated significant quantities of sediment in the monitoring well/piezometer, gravel pack or surrounding formation.

For overburden monitoring wells/piezometers, development is the process of flushing the aquifer and monitoring well/piezometer interface and cleaning the filter pack and the well screen slots to permit ground water to flow into the monitoring well/piezometer. Development is required to: (1) restore the natural hydraulic conductivity of the formation immediately adjacent to the borehole; (2) remove clay, silt and other fines from the filter pack and well screen so that subsequent ground water samples will not be abnormally turbid or contain undue suspended matter; (3) remove remnant drilling fluids and cuttings from the monitoring well/piezometer, filter pack and aquifer; and, (4) remove contaminants that may have been introduced during drilling.

For unscreened bedrock monitoring wells/piezometers, development is the process of flushing the rock wall to permit ground water flow into the monitoring well/piezometer. Development is required to: (1) restore the natural hydraulic conductivity of the formation exposed in the open borehole; (2) remove clay, rock chips, and fines from intersected fractures so that subsequent ground water samples will not be abnormally turbid or contain undue suspended matter; (3) remove remnant drill fluids and cuttings from the monitoring well/piezometer and aquifer; and, (4) remove contaminants that may have been introduced during drilling.

Specific project requirements as described in an approved site-specific Work Plan, Quality Assurance Project Plan (QAPP), or Health and Safety Plan (HASP) will take precedence over the procedures described in this document. Additionally, deviation from this SOP regarding materials and techniques is acceptable providing: 1) the impact of the deviation on data quality

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has been evaluated by the Project Manager and has been deemed to be acceptable; and 2) the deviation has been clearly documented in an approved site-specific Work Plan or Work Plan Addendum.

2.0 RESPONSIBILITIES

The driller is responsible for providing all necessary equipment for monitoring well/piezometer development, performing the development, and decontaminating the development equipment (as appropriate) in accordance with the approved site-specific Work Plan and/or QAPP.

Field personnel are responsible for ensuring that all monitoring well/piezometer development is performed in accordance with the site-specific Work Plan and/or QAPP. In addition, field personnel are responsible for recording all pertinent data in the field log book.

3.0 MATERIALS/EQUIPMENT

Equipment and materials used to develop monitoring wells/piezometers (in addition to the equipment provided by the driller) include:

- Weighted calibrated tape or electric water level indicator;
- Personal Protective Equipment (PPE) as required by the site-specific HASP;
- Field forms: air monitoring log, and/or health and safety documentation; and,
- Field log book.

4.0 METHOD

The appropriate method for development of the monitoring wells/piezometer will be determined following the completion of monitoring well/piezometer installation or as specified in the approved site-specific Work Plan and/or QAPP.

The development process is best accomplished by causing the ground water collected inside the screen of an overburden well/piezometer (or open hole of a bedrock well/piezometer) to be moved vigorously in and out through the screen (or bedrock interface) in order to agitate the clay and silt and move these fines into the monitoring well/piezometer where they can be removed. Use of water other than the natural formation water is not recommended due to the possibility of contaminating the ground water. In the event that insufficient natural formation water is present to adequately develop the monitoring well/piezometer, potable water may be obtained from a nearby water supply such as a fire hydrant. If it is necessary to introduce potable water into any monitoring well/piezometer for development, chemical analyses of a sample of this water will be

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performed to document the quality of water used for development and permission to utilize the source must be obtained.

Monitoring wells/piezometers will be developed until a relatively turbid-free discharge is observed flowing from the monitoring well/piezometer or a maximum of one hour, whichever occurs first. If one hour of development does not produce relatively turbid-free water and turbidity is suspected of impacting the quality of subsequent water samples, additional development may be necessary to clear the screen/rock wall of sediment. Any additional development will be as directed by the Project Manager.

All development water will be properly disposed of in accordance with applicable federal and state regulations and the approved site-specific Work Plan and/or QAPP.

The equipment and procedures for developing monitoring wells/piezometers are described in the subsections that follow. Any equipment used for monitoring well/piezometer development will be thoroughly decontaminated before development of each monitoring well/piezometer to prevent possible cross-contamination. Decontamination procedures will be in accordance with the NJDEP Field Sampling Procedures Manual (May 1992) and the approved site-specific QAPP.

4.1 Surge Block

A surge block is a round plunger with pliable edges (constructed of a material such as rubber belting) that will not catch on the well screen. Moving the surge block forcefully up and down inside the well screen causes the water to surge in and out through the screen, accomplishing the desired cleaning action. Close monitoring of the amount of pressure generated must be made to prevent damaging the well casing or screen.

Surge blocks should be used in cases where the monitoring well is installed in silty conditions to remove silt from around the well's filter pack. Surge blocking is also effective for re-developing wells that have not been sampled in over a year. Surge blocking, however, needs to be combined with removal of the fines -- the surge block agitates the fines around a well gravel pack so that the fines can be removed with either a bailer or a pump, as described below.

4.2 Bailer

A bailer that is heavy enough to sink rapidly through the water can be raised and lowered through the water column to produce an agitating action that is similar to that caused by a surge block. The bailer, however, has the added capability of removing turbid water and fines each time it is brought to the surface. Bailers can be custom-made and can be hand-operated in shallow monitoring wells/piezometers.

The bailer is an alternative method to the surge block for removing fines in the well and the surrounding gravel well pack.

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4.3 Pumping

The use of a submersible pump or a centrifugal pump permits the removal of fine-grained materials or cuttings and allows fresh ground water to enter into the monitoring well/piezometer. In addition, the up and down movement of the submersible pump or tubing placed within the monitoring well/piezometer forces the water to flow through the well screen and sand pack/bedrock interface and facilitates the cleansing of fine-grained material. Pumping is most effective when used in combination with surge blocking, as described above.

Care must be exercised during pumping to prevent the monitoring well/piezometer from being pumped dry. To maintain a near static ground water elevation, periodically check the ground water elevations. Decrease the pumping/development rate as required to maintain a near static ground water elevation.

5.0 QUALITY CONTROL

Adherence to the procedures described above may be verified through a field quality control audit. During a field quality control audit, the auditor carefully reviews equipment selection and use to ensure that appropriate equipment is utilized based on various factors including equipment capabilities. In addition, the auditor meets with key field staff to review sampling objectives of the site-specific Work Plan and results achieved, and makes recommendations. The auditor submits a report summarizing results of the audit to the Project Manager. If corrective action(s) are required, the Project Manager is responsible for ensuring that the appropriate corrective action(s) are implemented and documented.

6.0 DOCUMENTATION

Documentation of observations and measurements obtained in the field will provide information on the proper development of the monitoring wells/piezometers and also provide a permanent record of the activities. These observations and measurements will be recorded with permanent ink in a bound weatherproof field log book with consecutively numbered pages. All documentation will remain in the project files following completion of the project.

Notes will be recorded daily when in the field. The information in the field book will include the following at a minimum:

- Project name and number;
- Name(s) of field personnel and their responsibilities;
- Measurements and observations (e.g., turbidity of water, odors (if present), sheen (if present), PID/FID readings);

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- Volume of water removed and time required for development (including any starts and stops of bailing/pumping during development time);
- Method of development water disposal;
- Drum numbers (if water is contained in drums) and storage location;
- Decontamination procedures; and,
- Weather conditions.

7.0 REFERENCES

Aller, L., T.W. Bent, G. Hackett, R.J. Petty, J.H. Lehr, H. Sedoris, D.M. Nielsen, and J.E. Denne (1989). Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells, EPA 600/4-89/034, National Water Well Association, Dublin, Ohio, pp. 235-244.

Driscoll, F. (1989), Groundwater and Wells, Johnson Filtration Systems, St. Paul, Minnesota, pp. 507-516.

NJDEP Field Sampling Procedures Manual (May 1992)
Appendix 7.1 - NJDEP Monitor Well Specifications for Bedrock, Unconsolidated and Confined Aquifers (Rev 3/92), p. 193

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FIGURE 1
TYPICAL GROUND WATER ELEVATION LOG

PSEG SITE: _____ **ENVIRONMENTAL CONSULTING FIRM:** _____

DATE: _____ **FIELD PERSONNEL:** _____

Monitoring Well Data			Elevation Data								
Well ID	PID Reading Time	PID Reading	Measure Time	Reference Point (Note 1)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Depth to Water (ft)	Depth to DNAPL (ft)	Depth of Well (ft)	DNAPL Thickness (ft)	Remarks

NOTE 1: Point of measurement at each well is referenced to surveyed mark on inner casing (IC) or other (O) and explained in Remarks section.

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STANDARD OPERATING PROCEDURE 540

MEASURING GROUND WATER, LNAPL AND DNAPL ELEVATIONS IN MONITORING WELLS/PIEZOMETERS

1.0 PURPOSE AND APPLICABILITY

This SOP presents the procedures for field personnel to measure ground water and non-aqueous phase liquid (NAPL) elevations in monitoring wells and piezometers. The procedures in this SOP are applicable to all monitoring wells and piezometers where artesian conditions are not encountered.

Numerous methods are available for measuring ground water and NAPL elevations in monitoring wells and piezometers including: weighted steel tape used with chalk, oil-sensing paste or water-sensing paste; popper; electric water level indicator; electronic-interface probe; ultrasonic probe; and pressurized air line. This SOP will focus on the use of the electric water level indicator (e.g., M-scope or Solinst) and the electronic-interface probe because they are: 1) the most widely used devices; 2) capable of measurement accuracy to the nearest 0.01 foot; and, 3) suitable for use under most circumstances.

The electric water level indicator is designed only for immersion in water, whereas the electronic-interface probe may be immersed in water or NAPL. For monitoring wells or piezometers with known or suspected presence of NAPL, the depths to and thicknesses of both light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquids (DNAPL) should be measured using an electronic-interface probe. **An electric water level indicator cannot recognize the top of LNAPL.** For monitoring wells or piezometers with no known or suspected NAPL, an electric water level indicator should be used. If NAPL is observed on the water level indicator probe once it is retrieved, an electronic-interface probe should be used to determine the thickness(es) of NAPL and ground water elevation.

Specific project requirements as described in an approved site-specific Work Plan, Quality Assurance Project Plan (QAPP), or Health and Safety Plan (HASP) will take precedence over the procedures described in this document. Additionally, deviation from this SOP regarding materials and techniques is acceptable providing: 1) the impact of the deviation on data quality has been evaluated by the Project Manager and has been deemed to be acceptable; and, 2) the deviation has been clearly documented in an approved site-specific Work Plan or Work Plan Addendum.

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2.0 RESPONSIBILITIES

Field personnel are responsible for the proper identification of monitoring wells and piezometers, accurate measuring and recording of data, and proper decontamination of the instruments used to obtain the measurements. Field personnel are also responsible for reporting to PSEG if LNAPL or DNAPL is observed in any monitoring well/piezometer that has not previously had evidence of LNAPL or DNAPL.

3.0 MATERIALS/EQUIPMENT

Equipment and materials used to measure ground water and NAPL elevations include:

- Map with monitoring well and piezometer locations and identification numbers;
- Monitoring well keys;
- Flashlight or mirror for sunlight reflection down well;
- Tools (i.e., socket wrenches, bolt cutters, pliers, screwdrivers);
- Spare locks;
- Electric water level indicator;
- Electronic-interface probe;
- Ground water elevation log sheet;
- Personal Protective Equipment (PPE) as required by the site-specific HASP;
- Decontamination supplies (as needed); and,
- Field log book.

4.0 METHOD

4.1 General Information

The depth to the top of LNAPL (if present), ground water, DNAPL (if present) and the bottom of the monitoring well or piezometer are measured to the nearest 0.01 foot from a surveyed reference point (usually the top of the riser pipe or inner casing, if double-cased). The differences in depth are used to calculate the thickness of the various separate phase layers.

The ground water elevation is calculated for each monitoring well or piezometer by measuring the depth to the ground water from the reference point and subtracting this depth from the surveyed elevation of the reference point. The presence of LNAPL can "depress" the ground water level in a monitoring well or piezometer. A formula used to correct the measured ground water elevation for the presence of LNAPL is provided in Section 4.3.

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If the electric water level indicator or electronic-interface probe is used to measure the total depth of the monitoring well or piezometer, a correction factor usually needs to be added to the reading to account for the "zero" point being slightly above the tip of the probe.

If the well riser pipe height is adjusted for any reason, new survey information will be obtained for the top of the well riser pipe prior to performing ground water elevation calculations.

All activities will be conducted using the appropriate level of protection specified in the site-specific HASP.

4.2 Procedures for Measuring Ground Water, LNAPL and DNAPL Elevations

- Confirm the identification number of the monitoring well or piezometer and note the security and integrity of the well.
- Unlock and remove the monitoring well or piezometer cap.
- If required, obtain headspace vapor readings in accordance with the methods outlined in the site-specific HASP or with the general procedures contained in SOP 240 - PID Screening for Organic Vapors. Record the headspace vapor reading on the ground water elevation log or in the field log book. (A typical ground water elevation log is provided in Figure 1.)
- Locate the surveyed reference point. This should be a permanent point marked with an indelible marker or notch cut into the riser pipe. If a reference point is being established for the first time, the reference point is generally established on the north side of the riser pipe or inner casing, or the highest point on the top of the riser pipe or inner casing if it is uneven. The top of the protective outer casing or man hole/curb box should never be used due to its susceptibility to settlement, frost heave, etc. The new reference point should be surveyed prior to performing ground water elevation calculations.
- If using an electric water level indicator, gently lower the probe into the monitoring well or piezometer until the indicator light or buzzer indicates contact with the ground water. Care must be taken to ensure that the probe hangs freely and straight in the ground water monitoring well or piezometer. The probe should be repeatedly lowered and raised to obtain an exact measurement.
- If using an electronic-interface probe, gently lower the probe into the monitoring well or piezometer, stopping to measure the depth at each "interface". Care must be taken to ensure that the probe hangs freely and straight in the ground water monitoring well or piezometer. An electronic-interface probe generally operates by emitting an audible signal when it enters water and a different audible signal when it enters NAPL. In this way, the top of LNAPL, top of water and top of DNAPL can be measured. The probe should be repeatedly lowered and raised at each interface to obtain an exact measurement.
- Record the measurement(s) on the probe line graduated scale that correspond to the depth(s) indicated by the probe on the ground water elevation log or in the field log book. (A typical ground water elevation log is provided in Figure 1.)
- Replace the cap, and lock the monitoring well or piezometer.

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- Decontaminate the electric water level indicator or electronic-interface probe in accordance with the procedures described in the approved site-specific QAPP.

4.3 CORRECTION FACTOR FOR THE PRESENCE OF LNAPL

The following formula will be used to correct the measured ground water elevation for the presence of LNAPL:

$$\mathbf{GWE_{corr} = GWE + (SG)\,(T)}$$

where:

GWE_{corr}	=	corrected ground water elevation
GWE	=	uncorrected ground water elevation
SG	=	specific gravity of the floating product
T	=	measured thickness of floating product

The specific gravity is best determined by laboratory analysis of the LNAPL (free product); however, in many cases, a reasonable value can be obtained from available chemical data for the product, if known. (Information on the specific gravity of LNAPL components is available in the most recent edition of the CRC Handbook of Chemistry and Physics.)

5.0 QUALITY CONTROL

Changes in electric water level indicator or electronic-interface probe line length and graduated scale markings as a result of use, depth, and temperature may reduce the accuracy of readings. Therefore, the accuracy of the measuring device will be checked periodically.

Adherence to the sampling procedures described above may be verified through a field quality control audit. During a field quality control audit, the auditor carefully reviews equipment selection and use to ensure that appropriate equipment is utilized based on various factors including equipment capabilities. In addition, the auditor meets with key field staff to review sampling objectives of the site-specific Work Plan and results achieved, and makes recommendations. The auditor submits a report summarizing results of the audit to the Project Manager. If corrective action(s) are required, the Project Manager is responsible for ensuring that the appropriate corrective action(s) are implemented and documented.

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6.0 DOCUMENTATION

Documentation of observations and data acquired in the field will provide information on the proper acquisition of ground water LNAPL and DNAPL elevations in monitoring wells and piezometers and also provide a permanent record. These observations and data will be recorded with permanent ink in a bound weatherproof field log book with consecutively numbered pages. All documentation will remain in the project files following completion of the project.

Notes will be recorded daily when in the field. The information in the field book will include the following as a minimum:

- Project name and number;
- Name(s) of person(s) conducting the measuring;
- Ground water elevation log;
- Observations;
- Air monitoring readings (as required);
- Decontamination procedures; and,
- Weather conditions.

7.0 REFERENCES

American Petroleum Institute, A Guide to the Assessment and Remediation of Underground Petroleum Releases, API Publication No. 1628, Second Edition (August 1989). Using Free Liquid Hydrocarbon Thickness Data, p. 28.

CRC Handbook of Chemistry and Physics, CRC Press, Inc. Boca Raton, Florida (Current edition).

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STANDARD OPERATING PROCEDURE 210

SOIL SAMPLING
USING HAND TOOLS

1.0 PURPOSE AND APPLICABILITY

This SOP describes methods to be utilized by field personnel for the collection of soil samples using hand tools. Soil sampling using hand tools is appropriate for collecting shallow soil samples as required by a site investigation, remedial investigation, or remedial action. Soil sampling using hand tools is also appropriate, in most cases, for collecting soil samples from waste soil stockpiles.

Specific project requirements as described in an approved site-specific Work Plan, Quality Assurance Project Plan (QAPP), or Health and Safety Plan (HASP) will take precedence over the procedures described in this document. Additionally, deviation from this SOP regarding materials and techniques is acceptable providing: 1) the impact of the deviation on data quality has been evaluated by the Project Manager and has been deemed to be acceptable; and 2) the deviation has been clearly documented in an approved site-specific Work Plan or Work Plan Addendum.

2.0 RESPONSIBILITIES

Field personnel are responsible for the proper decontamination of the hand tools; locating and documenting soil sample locations in accordance with the approved, site-specific Work Plan; ensuring that all standard procedures are followed; recording all pertinent data in a field log book; and, properly handling, storing and shipping the samples.

3.0 MATERIALS/EQUIPMENT

Equipment and materials used to collect soil samples with hand tools include:

- Stakes (and flagging tape as needed) for marking sampling location;
- Steel shovels, post hole diggers or hand augers (as needed);
- Small diameter coring devices (if analyzing for volatile organic compounds);
- Small electronic or manual scale (if analyzing for volatile organic compounds);
- Stainless steel trowels or spoons;
- Stainless steel bowls or trays (as needed);
- Personal Protective Equipment (PPE) as required by the site-specific HASP;
- Decontamination supplies (as needed);
- Ruler/tape measure;

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- Laboratory-supplied sample containers;
- Sample labels;
- Shipment packing material (i.e., bubble wrap, vermiculite or Styrofoam pellets as needed);
- Packing tape;
- Cooler;
- Ice;
- Shipping labels;
- Field forms: chain-of-custody, air monitoring log and/or other necessary health and safety documentation; and,
- Field log book.

4.0 METHOD

Specific sampling equipment and methodologies to be employed will be dictated by the characteristics of the soil to be sampled, the number of soil samples required, and their analytical parameters. Soil samples collected at the ground surface may be obtained using a trowel, shovel or hand auger. Depending on the subsurface conditions, a hand auger may be used to extract soil samples up to approximately 5 feet below the surface.

All sampling activities will be conducted using the appropriate level of protection specified in the site-specific HASP. Before collecting each soil sample for field or laboratory analyses, a dedicated pair of clean rubber or latex gloves will be donned.

4.1 Samples To Be Collected From 0 Feet to 0.5 Feet Below Ground Surface

Soil samples to be collected from 0 feet to 0.5 feet below ground surface (bgs) will be obtained using the following procedures:

- If applicable, clear and remove vegetation and any surface debris such as rocks with a shovel or other tool that has been cleaned by washing with non-phosphate detergent/potable water, rinsing with potable water, and rinsing with deionized water.
- Collect the sample from the top 6 inches of soil using a decontaminated trowel/spoon. Laboratory decontaminated trowels/spoons are preferred. If laboratory-decontaminated trowels/spoons are not available so as to dedicate one trowel/spoon per sample location, the trowels/spoons will be field decontaminated between sampling points in accordance with procedures described in the site-specific QAPP.
- **Samples for volatile organic compound (VOC) analysis are generally <u>not</u> collected from the 0 feet to 0.5 feet interval. See "Surface Sample Collection" (p.138) of the NJDEP Field Sampling Procedures Manual (May 1992) for guidance on the sampling depth for VOC analysis.**

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- If site-specific requirements include sampling for VOC analysis at this depth, obtain the sample for VOC analysis before other parameters using the sample collection procedures provided in Section 4.4 (includes collecting the sample with a small diameter coring device and field extraction/preservation of the soil sample).
- Homogenize the soil to be sampled for non-VOC analyses either *in situ* or in a decontaminated stainless steel bowl or tray.
- Place homogenized soil into laboratory-supplied sample container(s) and cap container(s).
- If applicable, replace the vegetative mat over the disturbed area.
- Label sample container(s).
- Complete chain of custody forms.
- Package and ship samples in accordance with preservation requirements (typically ice to achieve 4 degrees Celsius. See Section 4.4 for preservation of soil samples for VOC analysis, if collected).
- Record all appropriate data (including sample location, time and physical description in accordance with the "Protocol for Describing Soil and Coal Gasification Related Material" provided in Attachment 1) in field log book.

4.2 Samples To Be Collected From Deeper Than 0.5 Feet Below Ground Surface Using Shovel/Post Hole Digger

Soil samples to be collected from deeper than 0.5 feet bgs using a shovel or post hole digger will be obtained using the following procedures:

- If applicable, clear and remove vegetation and any surface debris such as rocks with a shovel or other tool that has been cleaned by washing with non-phosphate detergent/potable water, rinsing with potable water, and rinsing with deionized water.
- Excavate sampling location to the desired depth using a shovel or post hole digger that has been cleaned by washing with non-phosphate detergent/potable water, rinsing with potable water, and rinsing with deionized water. Temporarily stockpile excavated soil on plastic sheeting placed adjacent to the sampling location.
- Collect the sample from the next 6 inches of soil using a decontaminated trowel/spoon. Laboratory decontaminated trowels/spoons are preferred. If laboratory-decontaminated trowels/spoons are not available so as to dedicate one trowel/spoon per sample location, the trowels/spoons will be field decontaminated between sampling points in accordance with procedures described in the site-specific QAPP.
- **Collecting samples for VOC analysis using a shovel or post hole digger is <u>not</u> recommended. However, if site-specific requirements include sampling for VOC analysis, see "Surface Sample Collection" (p.138) of the NJDEP Field Sampling Procedures Manual (May 1992) for specific guidance on the techniques to be used when collecting soil samples for VOC analysis.**

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- If VOC analysis is to be conducted at a particular sampling depth, obtain the sample for VOC analysis before other parameters using the sample collection procedures provided in Section 4.4 (includes collecting the sample with a small diameter coring device and field extraction/preservation of the soil sample).
- Homogenize the soil to be sampled for non-VOC analyses either *in situ* or in a decontaminated stainless steel bowl or tray.
- Place homogenized soil into laboratory-supplied sample container(s) and cap container(s).
- Using the shovel or post-hole digger, replace the soil temporarily stockpiled on the plastic sheeting adjacent to the sampling location. When all stockpiled soil has been replaced, tamp the soil to achieve proper grade.
- If applicable, replace the vegetative mat over the disturbed area.
- Label sample container(s).
- Complete chain of custody forms.
- Package and ship samples in accordance with preservation requirements (typically ice to achieve 4 degrees Celsius. See Section 4.4 for preservation of soil samples for VOC analysis, if collected).
- Record all appropriate data (including sample location, time and physical description in accordance with the "Protocol for Describing Soil and Coal Gasification Related Material" provided in Attachment 1) in field log book.

4.3 Samples To Be Collected From Deeper Than 0.5 Feet Below Ground Surface Using Hand Auger

Soil samples to be collected from depths below 0.5 feet bgs using a hand auger will be obtained using the following procedures:

- If applicable, clear and remove vegetation and any surface debris such as rocks with a shovel or other tool that has been cleaned by washing with non-phosphate detergent/potable water, rinsing with potable water, and rinsing with deionized water.
- Using a hand auger that has been cleaned by washing with non-phosphate detergent/potable water, rinsing with potable water, and rinsing with deionized water, auger to the desired depth. Remove the auger. Temporarily stockpile augered soil on plastic sheeting placed adjacent to the sampling location.
- Attach a decontaminated bucket auger to the auger rods and advance the bucket sampler into the next 6 inches of soil at the base of the boring.
- **Bucket auger sampling is <u>not</u> recommended for collecting undisturbed samples for VOC analysis. See "Bucket Auger" (p. 118) of the NJDEP Field Sampling Procedures Manual (May 1992) for technical guidance on the appropriate use of a bucket auger. However, if site-specific requirements include sampling for VOC analysis, see "Surface Sample Collection" (p. 138) of the NJDEP Field Sampling Procedures Manual (May 1992) for specific guidance on the techniques to be used when collecting soil samples for VOC analysis.**

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- If site-specific requirements include sampling for VOC analysis at this depth, obtain the sample for VOC analysis before other parameters using the sample collection procedures provided in Section 4.4 (includes collecting the sample with a small diameter coring device and field extraction/preservation of the soil sample).
- Transfer the sample into laboratory-supplied sample containers using a decontaminated trowel/spoon. Laboratory decontaminated trowels/spoons are preferred. If laboratory-decontaminated trowels/spoons are not available so as to dedicate one trowel/spoon per sample location, the trowels/spoons will be field decontaminated between sampling points in accordance with procedures described in the site-specific QAPP.
- Replace the soil temporarily stockpiled on the plastic sheeting adjacent to the sampling location. When all stockpiled soil has been replaced, tamp the soil to achieve proper grade.
- If applicable, replace the vegetative mat over the disturbed area.
- Label sample container(s).
- Complete chain of custody forms.
- Package and ship samples in accordance with preservation requirements (typically ice to achieve 4 degrees Celsius. See Section 4.4 for preservation of soil samples for VOC analysis, if collected).
- Record all appropriate data (including sample location, time and physical description in accordance with the "Protocol for Describing Soil and Coal Gasification Related Material" provided in Attachment 1) in field log book.

4.4 Collection of Soil Samples for Analysis of Volatile Organic Compounds

Soil samples collected for analysis of volatile organic compounds must be handled in a manner which will minimize the loss of contaminants due to volatilization and biodegradation. Therefore, these samples should not be homogenized. Also, field extraction/preservation with methanol must be conducted to minimize the volatilization and/or degradation of contaminants during sample handling and transport.

General information on sample collection methodology is provided below:

- Soil sample collection must be performed with the use of a decontaminated small diameter coring device. A modified 10-30 ml disposable syringe or commercially available small diameter tube/plunger sampler is acceptable. The small diameter coring device must be capable of collecting the required amount of sample from larger diameter core samplers (split spoons, etc.) or from freshly exposed soils.

- If a modified disposable syringe is used, it can be prepared in-house by cutting off the injection tip. Depending upon the construction of the syringe, small air vents must be cut into the plunger or the rubber tip and the retaining post must be removed. These

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alterations to the plunger will prevent air from being forced through or around the soil plug during subcoring and sample extrusion.

- The small diameter core sampler must be capable of delivering the sample directly into the sample container. The outer diameter of the core sampler must be smaller than the inner diameter of the sample container to avoid loss of sample and ease the soil transfer process. The sample from the small diameter core cannot be transferred to a secondary container such as another sample bottle, zip lock bag, aluminum foil, etc., prior to placement into the sample container with the methanol preservative.

- Use a small electronic balance or manual scale for measuring the weight of the soil in the syringe. The scale must be calibrated before use. The calibration should be checked intermittently during the sampling day to ensure accuracy of the weight measurements.

Procedures for the collection of soil samples for volatile organic compounds analysis are provided below:

- Tare weigh the small diameter core sampler.

- Using a decontaminated coring device, collect 10g ± 2g (8-12 grams) of sample (wet weight). Wipe the outside of the subcoring device to remove any adherent soil. The plunger of the coring device can be pulled back allowing the open barrel of the subcore to be inserted into the soil. Depending upon the soil texture, depth or moisture content, the subcore can be inserted straight into the soil, on an angle or multiple insertions can be performed to obtain the required sample weight.

- Quickly weigh the sample while contained in the small diameter core sampler. Excess soil sample can be removed from the coring device by extruding a small portion of the core and cleaning away with a decontaminated trowel or spatula. If soil weight is below the weight limit, obtain additional sample. Re-weigh after each addition or removal of sample to the subcore until the target weight is attained (8-12g). [NOTE: when sampling soils consisting of similar textures and water content, sample weight can be estimated based on volume of previously weighed samples from sampling or practice core sampling to determine sample weights. However, analytical results from a sample exceeding the weight maximums and minimums may be rejected and thus require resampling.]

- Immediately open the sample container and slowly extrude the soil core into the pre-weighed and pre-numbered sample container supplied by the laboratory performing the analysis. Avoid splashing methanol out of the sample container. Do not insert the small diameter coring device into the mouth of small diameter sample containers or immerse the small diameter soil coring device into the methanol.

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- Ensure the threads on the sample container and cap are free of soil particles. Use a clean brush or paper towel to remove the particles off the threads. The presence of soil particles compromises the seal of the container resulting in loss of methanol which may invalidate the sample.

- Secure the lid of the sample container. Gently swirl the sample to mix and break up the soil aggregate until soil is covered with methanol. Do not shake.

- In order to report the sample results on a dry weight basis, collect one duplicate sample not preserved with methanol from each sample location for moisture determination. Tightly seal the container to prevent the loss of soil moisture. This sample does not require to be weighed or preserved with methanol. A small volume sample container (15 mls or less) may be used for this sample to avoid possible sample shortages.

- Do not attach any additional adhesive-backed labels or tape to the sample containers. Record sample numbers on container avoiding covering laboratory identification number. Labels with wire or rubber band attachments may be used provided they can be removed easily for sample weighing.

- After sample collection, immediately return the containers to an iced cooler in an upright position. Sample containers can be placed in separate ziplock bags to protect other containers in case of leakage during transport. The laboratory sample number or field sample identification number may be placed on the bag and cross-referenced on the chain of custody.

5.0 QUALITY CONTROL

Adherence to the sampling procedures described above may be verified through a field quality control audit. During a field quality control audit, the auditor carefully reviews equipment selection and use to ensure that appropriate equipment is utilized based on various factors including equipment capabilities. In addition, the auditor meets with key field staff to review sampling objectives of the site-specific Work Plan and results achieved, and makes recommendations. The auditor submits a report summarizing results of the audit to the Project Manager. If corrective action(s) are required, the Project Manager is responsible for ensuring that the appropriate corrective action(s) are implemented and documented.

Sample quality control will be ensured through the use of quality assurance/quality control (QA/QC) samples designed to help identify potential sources of sample contamination. Different types of QA/QC samples include field blanks, methanol trip blanks, and duplicate samples. The types of QA/QC samples required, procedures for collecting, and frequency of collection will be indicated in the site-specific Work Plan or QAPP. All QA/QC samples

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will be labeled with QA/QC identification numbers and sent to the laboratory with the other samples for analyses.

6.0 DOCUMENTATION

Documentation of observations and data acquired in the field will provide information on the proper acquisition of samples and also provide a permanent record. These observations and data will be recorded with permanent ink in a bound weatherproof field log book with consecutively numbered pages. All documentation will remain in the project files following completion of the project.

Notes will be recorded daily when in the field. The information in the field book will include the following as a minimum:

- Project name and number;
- Sampler's name;
- Sampling observations (including a description of the sample in accordance with the "Protocol for Describing Soil and Coal Gasification Related Material" provided in Attachment 1);
- Air monitoring readings (as required);
- Decontamination procedures; and,
- Weather conditions.

7.0 REFERENCES

NJDEP Field Sampling Procedures Manual (May 1992)
Surface Sample Collection, p. 138
Bucket Auger Sampling, p. 118

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Appendix B

Health and Safety Plan

Health and Safety Plan

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

January 2005

PREPARED FOR

PSEG Services Corporation
80Park Plaza
Newark, New Jersey 07102

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2 PSEG Heat Stress Program

3 ARCADIS Health and Safety Training Policy

4 Tailgate Safety Meeting Forms

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6 ARCADIS Respiratory Protection Policy

7 Material Safety Data Sheets

8 OSHA Form 101 – Incident Report Form

1 Project Identification

1.1 PSEG Information

PSEG Services Corporation
80 Park Plaza
Newark, New Jersey 07102

1.2 Site Name and Location

PSEG Nuclear, LLC
Salem Generating Station - Unit 1
Artificial Island
Lower Alloways Creek Township, Salem County, New Jersey

1.3 Project Personnel

The personnel responsible for implementing the project Health and Safety Plan (HASP) are listed in **Table B-1**. These personnel include the PSEG Project Manager and the ARCADIS project members.

2 Introduction

ARCADIS, on behalf of PSEG Services Corporation (PSEG) at the Salem Generating Station (the Station), has prepared this Health and Safety Plan (HASP) to address potential health and safety concerns that may result from the initiation of the scope-of-work outlined in the Remedial Investigation Work Plan. Specifically, this HASP addresses potential health and safety concerns that may result during the following planned activities:

- Installation of monitoring wells;
- Development of monitoring wells;
- Measurement of water levels;
- Measurement of light non-aqueous phase liquid levels;
- Surveying monitoring well locations and elevations;
- Collection of soil samples;
- Collection of groundwater samples; and,
- Interim remedial actions.

This is a list of projected activities that will be performed at the Station during the implementation of the remedial investigation. This list and the corresponding sections of the HASP discussing potential health and safety concerns that may be encountered while performing these tasks will be modified as necessary.

During the implementation of the scope of work outlined in the Remedial Investigation Work Plan, ARCADIS personnel and their subcontractors will require the escort of PSEG personnel or other site access badged personnel when working on site, or ARCADIS trained personnel while performing field activities in areas that do not have restricted access. The escorts and site access badged personnel are trained and are aware of PSEG Salem Generating Station Health and Safety Program protocols and procedures. While implementing activities on site, the Salem Generating Station Health and Safety Program supercede the procedures outlined in this HASP. The purpose of this HASP is to assign responsibilities, specify mandatory operating procedures, establish personal protection standards, and provide for contingencies that may arise while performing work in areas of the Salem Generating Station or at an off site facility that do not require escorted access or when a PSEG Health and Safety Program protocol has not been developed or is less stringent than the protocols outlined herein. In these instances, the HASP addresses safety protocols that will be followed during field operations to minimize the potential for worker's exposure.

This HASP is prepared to inform field personnel, including contractors and subcontractors of ARCADIS, of potential hazards. However, each contractor or subcontractor must assume direct responsibility for the health and safety of its own employees. Subcontractors and visitors may review this HASP and follow its procedures at their own risk. ARCADIS assumes no liability for non-ARCADIS employees and/or personnel that elect to follow this HASP. Subcontractors that elect not to follow the conditions of this HASP must have a completed, site-specific HASP for use by their employees.

Subcontractors will receive a copy of the project HASP for use as a guideline and for reference. However, subcontractors performing onsite work will be responsible for the health and safety of their own employees. Each subcontractor will identify a lead individual responsible for checking that each of the firm's employees is in compliance with health and safety procedures. Prior to commencing with field activities, each subcontractor must review and sign the Compliance Agreement in the on site copy of the HASP (**Attachment 1**).

Personnel participating in field activities must be trained in the general and specific hazards unique to this job. They must meet medical examination requirements and other requirements as set forth in 29 Code of Federal Regulations 1910.120 or other Occupational Safety and Health Administration (OSHA) regulations, as applicable. Site personnel and visitors must follow the guidelines, rules, and procedures in this document. The Project Manager or Site Health and Safety Officer may impose any other procedures or prohibitions as deem necessary for safe operations.

This Health and Safety Plan (HASP) was prepared in accordance with the Occupational Safety and Health Administration Code of Federal Regulations Title 29 Part 1910 "Occupational Safety and Health Standards for General Industry" and Title 29 Part 1926 "Occupational Safety and Health Standards for the Construction Industry." This HASP should be used in conjunction with other safety related information provided by PSEG Services Corporation (PSEG) to ensure that all health and safety issues for the project are addressed.

3 Summary of Site Conditions

The PSEG Salem Generating Station is an approximate 26-acre area of Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. The Salem Generating Station is composed of two nuclear generating units (Units 1 and 2) and one distillate oil fueled combustion turbine unit. Commercial operations of Units 1 and 2 commenced in 1976 and 1981, respectfully. The combustion turbine unit commenced operations in 1972. The nuclear generating units operate as base load units and the combustion turbine unit operates as a peaking unit. The Salem Generating Station has a combined generating capacity of approximately 2,250 MW. Over its operational life, the Salem Generating Station has experienced no significant changes in its operation.

On the evening of August 2, 2004, diesel fuel was found in Catch Basin 27 located between the Unit One Fuel Handling Building and the Unit One Refueling Water, Auxiliary Feedwater, and Primary Water storage tanks. Investigations into the source of the diesel fuel revealed that a section of underground piping adjacent to Catch Basin 27 leaked and allowed diesel fuel to enter the catch basin. The scope of work presented in the Remedial Investigation Work Plan (Section 5), was developed to evaluate the extent of diesel-related constituents in soil and groundwater and to determine the extent of separate-phase diesel fuel on the water table.

4 Project Organization

4.1 ARCADIS Personnel

The project team will include and be supported by ARCADIS safety professionals, whose responsibility will include maintenance and implementation of the HASP. Project Organization with respect to health and safety consists of Mr. Peter Milionis, the ARCADIS Project Manager, and Mr. Bradley Pierce, the ARCADIS Site Health and Safety Officer. Additional health and safety personnel may be assigned as the project moves into the field phase. The health and safety responsibilities of key project personnel are discussed below:

1. Project Manager:

    - Initiates HASP implementation.
    - Reviews the HASP.
    - Ensure the availability of the proper personal protective equipment (PPE), adequate time and budget, and qualified personnel to perform site work in a safe manner.
    - Conducts accident investigations, as necessary.
    - Communicates with the Site Health and Safety Officer on site health and safety issues.
    - Allocates resources for immediate correction of identified unsafe work conditions.
    - Communicates with the client on health and safety issues.

- Conduct periodic field audits to verify compliance with the HASP.

2. Site Health and Safety Officer:

   - Ensures that HASP is implemented and maintained.
   - Maintains record keeping activities.
   - Present at all times during site activities.
   - Initiates applicable utility location activities and permitting.
   - Ensures that work performed on the site is conducted in a safe manner.
   - Ensures immediate correction of identified unsafe work environments.
   - Acquaints field personnel with potential hazards.
   - Checks that all field personnel have read and signed the on site copy of this document (**Attachment 1**).
   - Checks that all site personnel meet OSHA requirements regarding training, medical examinations, and fit testing.
   - Conducts accident investigations in conjunction with the Project Director and Project Manager, as necessary.
   - Checks that the guidelines, rules, and procedures in this document are followed for all site work.
   - Familiar with local emergency services.
   - Conducts a tailgate health and safety meeting before work startup and at least weekly thereafter. Additional tailgate meetings may be required for specific job tasks, site activities, or when visitors come to the site.
   - Checks that visitors have had hazardous waste site training and a medical examination within the past year.
   - Ensures all necessary permits and safety information provided by the client is disseminated to other site personnel and is maintained in an organized manner.
   - Maintains and inspects PPE, monitors work area hazards, and monitors the physical condition of site personnel.
   - Shut down operations that pose a potential threat to field personnel.
   - Effect evacuation of the site, if necessary.

The Site Health and Safety Officer will be responsible for health and safety throughout the field operations. The Site Health and Safety Officer will monitor work locations for proper procedures and will have the authority to stop work if health and safety procedures cannot be followed. In addition, the SHSO will be responsible for producing written reports of health and safety incidents, if any. Emergency contact information for the above listed personnel is provided in Section 14.2.

4.2 Contractors and Subcontractors

Subcontractors will receive a copy of the project HASP for use as a guideline and for reference. However, subcontractors performing onsite work will be responsible for the health and safety of their own employees. Subcontractors will also be responsible for providing their own PPE. Each subcontractor will identify a lead individual responsible for checking that each of the firm's employees is in compliance with health and safety procedures. Prior to commencing with field activities, each subcontractor must review and sign the on site copy of the HASP (**Attachment 1**).

Prior to the start of work, each subcontractor conducting onsite investigations will supply ARCADIS with documentation that onsite personnel under its control are participants in a medical monitoring program and have acceptable health and safety training. This documentation will be maintained with the subcontractor at the Site and will include the following:

- Name
- Training program attended, trainer, hours of training received
- Statement from an occupational physician certifying participation in an annual and post-employment medical surveillance program. The statement must include verification that the person is fit to wear a respirator.
- Documentation demonstrating successful respirator fit testing within the last year prior to Level C or Level B work activities.

4.3 Others

Other persons (visitors) who may enter the work areas or otherwise observe field activities should follow the guidelines, rules, and procedures in this document, and conduct work in a safe manner. Prior to entering the Site, such persons or visitors must supply the Site Health and Safety Officer with documentation consistent with those listed in Section 4.2 above and must attend a tailgate safety briefing given by the Site Health and Safety Officer. The Site Health and Safety Officer may restrict visitors from work areas if they do not have their own HASP or proper personal protective equipment (PPE). All visitors must review and sign the on site copy of the HASP (**Attachment 1**).

5 Planned Field Activities

Several types of field activities are planned. The level of health and safety protection varies according to the type of activity. Field activities are listed in Section 1. Descriptions of health and safety procedures associated with each of these activities, as well as recommended initial levels of PPE are addressed in

Section 10. The Site Health and Safety Officer, depending on conditions at the Site, may modify the recommended initial levels of PPE.

6 Hazard Evaluation and Mitigation

6.1 Chemical Hazards

Some components of diesel fuel, a petroleum product, are known carcinogens. Petroleum products are also flammable and combustible. Hazards posed by these materials include skin exposure, fire, and explosion. All on-site personnel will wear protective clothing and show caution when in areas where potential flammable and combustible liquids may be encountered. No smoking will be allowed in the vicinity of these materials. Petroleum products also may contain volatile organic compounds and semi volatile organic compounds.

6.2 Radiochemical Hazards

Due to the nature of the operations at the site, tritium and various gamma-emitting isotopes could be encountered during the RI activities. These contaminants can have harmful effects on the body if they are inhaled, absorbed through skin contact or ingested.

Worker exposure to external whole body ionization radiation will be controlled by time of exposure, distance from sources, and shielding, if necessary. PSEG radiation protection program personnel will monitor worker exposure to ionizing radiation throughout the implementation of the remedial investigation.

Beta emitters (i.e., tritium), especially low-energy type, generally transfer energy through the production of ion pairs. Simple clothing (long sleeved shirt, long pants, etc.) usually provides adequate protection from external low-energy alpha and beta emitters.

The potential exposure pathways for radiation at the site are inhalation, skin absorption (tritium only) and accidental ingestion. Inhalation could occur during monitoring well installation activities as the radionuclides become airborne with the drill cuttings. Work practices to minimize dust generation will greatly reduce the risk of inhalation exposure. In addition, up to half of tritium exposures occurs through skin absorption. This can occur when water or material contaminated with tritium comes in contact with the skin. PPE (e.g. gloves) will be used to prevent direct skin contact with the waste materials.

Accidental ingestion of the radionuclides is another potential pathway by which radiation can enter the body. Site rules prohibiting eating, smoking, drinking, or chewing gum or tobacco in the exclusion zone and contamination reduction zone should reduce the potential for exposure.

6.3 Biological Hazards

Biological hazards may include plants; infectious waste; rabid, agitated, or disease carrying animals or pets; poisonous snakes; and disease carrying or stinging insects (e.g., ticks, mosquitoes). Mitigation of these hazards may include the following:

- Learn to recognize plants, such as poison ivy, poison oak, and poison sumac;

- Wear long-sleeved shirts, sturdy trousers, and boots when working near plants to minimize the potential for skin contact;
- If exposed to plants, shower as soon as possible with a strong soap (e.g., Fels Naphtha). Launder clothing;
- Do not touch plants that have hairy leaves, milky sap, horny leaves, or fruit or seed pods;
- Do not touch infectious waste or any items suspected of being infectious waste;
- Do not approach or agitate animals, especially ones behaving strangely or foaming at the mouth;
- Use insect repellent to avoid contact with ticks, mosquitoes, and other insects, as necessary. Ticks may be carriers of Lyme Disease. Tuck the open ends of pant legs into socks to aid in preventing ticks from crawling up pant legs. Wear Tyvek suits or coveralls taping the open ends of the legs to safety boots. Conduct frequent "tick checks" in an attempt to locate and remove ticks prior to being bitten. Avoid contamination of field samples when using repellent;
- If possible, avoid contact with poisonous snakes or other reptiles by quietly walking away. If bitten, seek medical assistance immediately;
- Avoid contact with rodents because they are frequently hosts to fleas, which can carry typhus and other diseases. Rodent urine may also contain spirochetes, which are harmful to human health; and,
- Avoid encounters with stinging insects.

6.4 Physical Hazards

6.4.1 Slips, Trips and Falls

Care will be taken by all site personnel to exercise caution during work to prevent slips, trips, and falls. Mitigation of this hazard may be achieved through good housekeeping activities, use of proper foot protection, proper placement of equipment and power cords, and use of engineering controls (barricading, covering, removal, etc.) to prevent the hazard.

Any work performed by site personnel at an elevation 6 feet above ground surface shall require the use of appropriate fall protection equipment.

6.4.2 Fire and Explosive Atmospheres

Fires and explosions are not expected; however, ABC-rated fire extinguishers will be available at the Site. Drill rigs must have a 20-pound ABC-rated fire extinguisher. Fire extinguisher use is limited to fighting very small fires. Do not attempt to fight large fires.

Explosive or flammable material should only be stored in approved facilities as described in 27 CFR Section 181 and applicable state regulations. There will be no smoking allowed except in designated

locations and any sparking equipment will be kept at least 50 feet from explosive or flammable storage or where flammable liquid or vapor is present. The Site Health and Safety Officer may use a combustible gas indicator if he/she deems there is potential for explosive gas and obtain hot work permits if required by the facility.

6.4.3 Heat Stress

Symptoms of heat stress shall be monitored at temperatures above 80 degrees Fahrenheit. Heat stress involves three general categories: heat cramps, heat exhaustion, and heat stroke.

- Heat cramps usually occur first and generally include cramps in the abdomen and legs.
- Heat exhaustion is more serious and signals of this form of heat stress usually involve cool, moist, pale, or flushed skin, headache, nausea, dizziness, weakness, and exhaustion.
- Heat stroke is the most serious form of heat stress, and workers suffering from this condition should get immediate medical attention. The signals of heat stoke include red hot dry skin, changes in consciousness, rapid weak pulse, and rapid shallow breathing.

Early detection and safe work habits are the best measures for preventing heat stress hazards. At a minimum, ARCADIS personnel and others will adhere to the PSEG Heat Stress Program included as Attachment 2 while performing work in areas of the Salem Generating Station or at an off site facility. In addition, it is extremely important to drink plenty of fluids during hot weather, even when not thirsty, and to take rest breaks in order for the body to cool down. Site workers exhibiting any of the signs of heat stress above should take preventive measures including getting out of the heat, loosen any tight clothing, applying cool wet cloths, and for conscious victims, consumption of approximately 4oz of water every 15 minutes. If the victim refuses water, vomits, or starts to lose consciousness, seek immediate medical attention.

The sun is another hazard for which protection against sunburn and long-term risks to skin cancer are necessary. Site workers should use sunscreen or cover the exposed parts of their bodies to protect against harmful sunrays. It should be remembered that covering the body as protection against sunrays may increase the likelihood of heat stress hazards. Keeping alert of warning signs and taking prompt preventive measures is critical to preventing hazards associated with the sun and heat.

6.4.4 Cold Stress

Symptoms of cold stress should be monitored at temperatures below 50 degrees Fahrenheit. Two general categories of cold stress hazards include hypothermia and frostbite. Hypothermia occurs when the body cools down and its ability to stay warm fails. This condition is very serious and can cause death. Symptoms of hypothermia include shivering, numbness, glassy stare, apathy, and loss of consciousness. The temperature does not have to be below freezing for hypothermia to occur. If the conditions are right, hypothermia can occur when the temperature is near 50 degrees Fahrenheit. First aid for hypothermia includes removing any wet clothing, wrapping the victim in blankets and placing them in a warm place, and if the victim is conscious, slowly give them warm liquids. Avoid warming the victim too quickly since this can cause complication with the heart. Workers suffering from hypothermia should seek medical attention.

Frostbite is also a serious cold stress hazard and is caused by freezing of body parts, especially fingers and toes. Symptoms of frostbite include lack of feeling in the affected area, skin that appears waxy, is cold to the touch, or is discolored (flushed, white, yellow, or blue). To care for frostbite, the victim should be placed in warm water (not exceeding 105 degrees Fahrenheit) until the affected area looks red and feels warm. Loosely bandage the area with a dry sterile dressing. If fingers or toes are frostbitten, place cotton or gauze between them. Do not break any blisters and get prompt medical attention.

6.4.5 Acoustical Hazards

Acoustical hazards may be present during drilling and sampling activities. Proper NIOSH-approved hearing protection will be required during these activities.

6.4.6 Electrical and Utilities

Subsurface utilities may be present in work areas. In addition, overhead power lines may be present. Electrical generators, submersible pumps, and other electrical equipment may also be used as part of field activities. Mitigation of utility and electrical hazards may include, but are not limited to the following:

- Buried utilities should be located and marked before drilling or other intrusive activities;
- A minimum 10-foot clearance should be maintained from overhead power lines, although the utility company should be contacted for minimum clearance requirements;
- If unavoidably close to buried or overhead power lines, turn the power off, and lock and tag the circuit breaker;
- Properly ground electrical equipment. Use only three-wire grounded receptacles and extension cords;
- Avoid standing in water when operating electrical equipment;
- If equipment must be connected by splicing wires, make sure all connections are properly taped;
- Consider all wires live until locked and tagged out;
- Be familiar with specific operating instructions for each piece of equipment; and,
- Obtain permits, licenses, or right-of-entry required by local or state authorities;

6.4.7 Illumination

Proper illumination will be required for any activity conducted at the site. If work is to be performed after sunset or inside enclosed structures then auxiliary lighting will be used.

6.4.8 Hand and Power Tools

Hand and power tools present serious hazards especially to fingers and hands in addition to eye injury resulting from flying debris. All hand tools shall be inspected prior to use to ensure the tool is in good condition with good working parts, and is appropriate for the task. All power tools shall also be inspected similarly to hand tools and will also be inspected for proper wiring and grounding. Inspection to ensure all of the safety guards and switches provided by the manufacturer are present and in good working condition will also be conducted. If any hand tool does not meet the criteria specified in this section, it will be repaired by a properly trained individual or replaced.

The refueling of gasoline-powered equipment will not be performed while the equipment is in operation and the engine will be allowed to cool prior to refueling.

6.4.9 Heavy Lifting

Care shall be taken by all workers on site to perform work which does not cause excessive stress on the body. Objects should not be lifted in excess of the individual's ability to lift the object and proper lifting techniques should be used. These include holding the object close to the body, obtaining a secure grip, keeping the back straight, and lifting the object with the legs and not the back. Care will also be taken by all site workers to avoid working in positions that involve excessive or frequent twisting or stooping.

6.4.10 Inclement Weather

Severe weather presents a very real safety concern on this and any other job site. Work will not be performed during periods of lightning, heavy rain, or high winds. When lightning occurs, work at the site will not resume until 15 minutes after the last lightning has occurred or until judged safe by the Site Health and Safety Officer.

6.4.11 Heavy Equipment Operation

Mechanized equipment like drilling equipment, skid steers, trackhoes, bulldozers and backhoes represent serious hazards to site workers. Care shall be taken by all personnel to exercise caution when working with mechanized equipment to prevent clothing from being caught in moving parts, placing body parts in close vicinity to pinch points on equipment, or using the equipment on slopes or unstable surfaces in excess of manufacturer's recommendations. Site personnel, visitors, or other persons who are not performing necessary work shall remain at a distance of at least 15 feet from any moving part of the mechanized equipment and all workers within 15 feet of the equipment are required to wear, at a minimum, hard hats, safety glasses, steel-toed boots, and hearing protection, if applicable.

The Site Health and Safety Officer will inspect all mechanized equipment at the beginning of the field work for proper working condition and to ensure that all manufacturer supplied safety cutoff switches and protective guards are in place. Equipment that has deficiencies in these areas will not be used on this project until a properly trained individual makes the appropriate repairs. All equipment should be inspected daily to ensure proper working condition.

6.4.12 Vehicular Traffic

Work performed in or on the right-of-way of any city, county, state, or federal road shall be conducted in accordance with the Uniform Code of Traffic Control Devices issued by the US Department of Transportation. All site personnel shall wear an orange reflective vest during work in these areas. All traffic cones used in right-of-ways or to shift/detour traffic shall be at least 18 inches tall.

7 ARCADIS Health and Safety Programs

Required ARCADIS health and safety programs, including training and medical monitoring, respiratory protection, and hazard communication, are presented in this section.

7.1 Required Personnel Training

ARCADIS will provide training to its employees consistent with regulations promulgated by the Occupational Safety & Health Administration (OSHA). ARCADIS employees are required to receive the following training:

- Hazwoper 29 CFR 1910.120(e);
- Hazard communication 29 CFR 1910.1200 (h) (3);
- Personal protective equipment 29CFR 1910.138;
- Respiratory protection 29 CFR 1910.134; and
- Hearing conservation 29 CFR 1910.95.

A more detailed description of the ARCADIS health and safety training policy is provided in **Attachment 3**.

7.2 Management and Supervisory Training

In accordance with 29 CFR 1910.120(e)(4) and applicable state regulations, individuals who manage or supervise personnel engaged in hazardous waste operations at the site must receive 40 hours of offsite instruction and three days of field experience supervised by a trained supervisor. In addition, management and supervisory personnel shall receive an additional 8 hours of specialized training that addresses the safety and health program, training requirements, personal protective and respiratory equipment program, health hazard monitoring procedures, accident investigation, and emergency response procedures.

7.3 Refresher Training

Refresher training in accordance with 29 CFR 1910.120(e)(8) and applicable state regulations shall be completed at least annually following the completion of the individual's 40-hour or 24-hour training

course. Personnel will be required to attend the annual refresher training to maintain their qualifications for hazardous waste site operations.

7.4 Documentation

Training must be properly documented and kept readily available or onsite for reference by the Site Health and Safety Officer or designated representative. Personnel required to meet the training requirements must present evidence of this training at the Site. The Site Health and Safety Officer is responsible for checking before each activity to verify complete and current documentation.

7.5 Exempt Personnel

Exempt personnel requesting access to the work areas could include: personnel making deliveries or performing repairs to utilities, public or government officials, untrained visitors, or local residents. Individuals from these groups will not be required to comply with the training requirements as previously stated or the medical monitoring as discussed in Section 7.8. However, access will be limited to designated work, delivery, or observation areas to minimize potential exposure. Observation areas will be upwind from site operations, as determined on the basis of predominant wind direction, so as not to receive dust or chemical contaminants. Access to observation areas may be restricted by weather conditions or site activities. Approvals for exempting personnel, and decisions on access limitations for other personnel, will be handled on a case-by-case basis by the Site Health and Safety Officer in consultation with the ARCADIS Project Manager.

7.6 Tailgate Safety Meetings

A tailgate safety meeting shall be conducted each morning, or when (1) risks or hazards change, (2) new personnel arrive, or (3) site operations warrant indoctrination and training. The Site Health and Safety Officer or another qualified individual shall conduct safety meetings. Where procedural deficiencies are identified, additional safety meetings will be conducted to address the situation. The following should be addressed during the meetings:

- Review of planned activities
- Hazards suspected
- PPE required
- Communications
- Field personnel responsibilities
- Decontamination procedures
- Emergency procedures

Tailgate safety meetings will be documented on the appropriate form in **Attachment 4**.

7.7 Safety Inspections and Audits

The Site Health and Safety Officer will inspect the site daily to identify potential hazardous conditions or work areas. The Project Manager will visit the site periodically to evaluate whether work operations are being conducted in compliance with the protocols and procedures outlined in this HASP.

7.8 Medical Monitoring

A detailed description of the ARCADIS medical surveillance program is provided in **Attachment 5**.

7.9 Respiratory Protection Policy

A detailed description of the ARCADIS respiratory protection policy is provided in **Attachment 6**.

Site visitors, subcontractors, or others who may request entry into the work area must show proof of current (annual) respirator fit testing. Copies of this documentation will be kept readily available onsite, as applicable.

7.10 Hazard Communication

The principal goals of hazard communication are to inform ARCADIS employees about potential hazards associated with routinely used chemicals, and to identify appropriate procedures and protective equipment to be employed during chemical use and handling.

7.10.1 Container Labeling

ARCADIS requires that all containers of hazardous chemicals be labeled in accordance with OSHA regulations. Containers that must be labeled include tanks, pails, cans, drums, or other receptacles used to store chemicals for longer than one 8-hour shift. Periodic inspections will be performed to ensure that containers stored or used at the site are properly labeled.

7.10.2 Material Safety Data Sheets

Material Safety Data Sheets (MSDSs) are obtained when hazardous substances are purchased to conduct field activities. The MSDSs are kept at the support facility for field activities. The Site Health and Safety Officer must maintain and review all MSDSs for new information. Employees may request any or all MSDSs for review at any time. MSDSs for chemicals obtained to perform field activities will be included in **Attachment 7**.

7.11 Incident Reports

The Site Health and Safety Officer must complete an OSHA 101 form (**Attachment 8**) when an accident occurs. The completed form must be sent to the Project Manager within 24 hours of the incident. If a fatality, or 5 or more hospitalized injuries or illnesses occur as the result of a single incident, the Project Manager must contact the Corporate Health and Safety Officer immediately. All Site work activities will

cease, and work will not re-commence until an investigation of the incident is complete. The Corporate Health and Safety Officer must report the incident to OSHA within 48 hours of its occurrence.

7.12 Weekly Safety Report

The Site Health and Safety Officer will prepare a weekly safety report for submittal to PSEG throughout the implementation of the field work associated with the remedial investigation. The weekly safety report will provide PSEG with a summary of the field work completed during the week, a synopsis of each daily tailgate safety meeting, project safety-related concerns, action items to be addressed, status of previous action items, and the signed attendance lists for the daily tailgate safety meetings.

7.13 Personal Hygiene and Sanitation

In accordance with OSHA 29 CFR 1910.120(n), washroom and restroom facilities will be made available to field personnel. Additionally, potable water will be supplied to all field personnel.

7.14 General Work Practice Requirements

A copy of this HASP will be maintained on the Site at all times. The following work practices apply to all field activities on the Site:

- ARCADIS personnel conducting the field activities at the Site will be participants in the Company's Health and Safety Program, which includes mandatory OSHA training, medical surveillance, and respirator fit-testing;
- A supply of PPE will be kept onsite in sufficient quantity to enable field personnel to conduct their duties in a safe manner. The minimum level of PPE required for all field activities are long-sleeve shirts, long pants, steel-toe safety boots and nitrile gloves. Leather work gloves will be required for any activity involving the collection of debris;
- Daily tailgate safety meetings will be conducted to discuss hazards associated with tasks to be performed, personnel protection protocol, and emergency procedures;
- Personnel involved in the remediation work will be required to sign the HASP Compliance Agreement (**Attachment 1**).
- All underground utilities and structures will be marked out and cleared before any ground intrusive work begins. This will be recorded on the form provided in **Attachment 7**.
- No eating, drinking, or smoking will be permitted in contamination reduction or exclusion zones;
- No source ignition will be permitted in contamination reduction or exclusion zones areas unless cleared by the Project Manager or Site Health and Safety Officer;
- Work will cease during hazardous weather conditions such as thunderstorms or tornadoes;
- No unauthorized personnel shall enter or be permitted onsite at any time;

- The use and consumption of alcohol, illegal drugs, or drugs and other substances that could alter or impair coordination, judgment, or response time are strictly forbidden at the site;
- Vehicles must be parked away from piles of dried vegetation or any potentially combustible material, since heat from an exhaust system or catalytic converter might be sufficient to ignit the material; and,
- Site personnel should dress to present a neat appearance, commensurate with the work activity and conditions being undertaken.

7.15 Hand Signal Communication

Since verbal communication is not possible at all time, or can be interfered with due to heavy equipment and personnel protective equipment, the following set of universal hand signals may be used:

Universal Hand Signals

Signal	*Meaning*
Hand gripping throat	Unable to breathe
Grip partner's wrist or around waist	Leave work area immediately
Hand on top of head	Need assistance
Thumbs up	OK, I understand
Thumbs down	No

7.16 Emergency Evacuation Signal

In the event of an emergency requiring the evacuation of the work zone, the following emergency evacuation signal will be repeated every 30 seconds until all personnel are evacuated and accounted for:

- Two long horn blasts.

8 Contingency Planning

8.1 Confined Space Entry

A confined space is defined as a space or work area not designed or intended for normal human occupancy, having limited means of egress and poor natural ventilation; and/or any structure, including buildings or rooms that have limited means of egress. Confined spaces can serve as accumulation points for vapors or gases that could displace oxygen or create a toxic or explosive atmosphere. **Entry into**

confined spaces is forbidden under this scope of work. If work is required in a potential or recognized confined space, additional requirements are needed (permits, training, additional monitoring equipment and personnel) to conduct the work. Permits, plans and equipment needed to enter confined spaces also require approval from Corporate Health and Safety. If confined space entry becomes necessary, this HASP will be modified to include confined space entry procedures pursuant to OSHA 29 CFR 1910.120(b)(4)(ii)(I).

Other areas that do not classify as confined spaces but could serve as accumulation points for hazardous vapors should be thoroughly monitored to ensure a safe working environment. First, the area should be monitored for oxygen deficiency since combustible gas meters are dependent on the oxygen concentration. Second, the atmosphere should be tested for combustible gases. Finally, specific testing for toxic vapors (e.g., carbon monoxide, hydrogen sulfide, etc.) should be performed. The need to conduct such testing shall be determined by the Site Health and Safety Officer.

8.2 Excavations and Trenching

Trenching and excavation activities are not anticipated during the remedial investigation. If trenching and excavation activities become necessary, the HASP will be modified to include trenching and excavation procedures pursuant to OSHA 29 CFR 1910.120(b)(1)(3).

8.3 Handling Drums and Containers

In accordance with OSHA 29 CFR 1910.120(j), all hazardous substances and potentially contaminated materials shall be stored in drums or containers that satisfy Department of Transportation, OSHA and USEPA requirements. All drums and containers will be labeled for identification and transported to a central staging area identified by the Site Health and Safety Officer. Prior to movement of drums or containers, all employees exposed to the transfer operation shall be warned of the potential hazards associated with the contents of the drums or containers.

8.4 Spill Containment Program

The following sections provide guidance regarding emergency response to a chemical spill or accidental discharge of groundwater, including initial response to the incident and cleanup. Precautions you should take to minimize the likelihood of a spill are presented at the end of this section.

8.4.1 Initial Spill Response

When a spill occurs:

- Minimize or contain the flow by shutting off a valve, repairing the leak, righting an overturned barrel, or whatever action is appropriate. Remember that your safety is of primary concern. Only attempt emergency response actions if you can do so without injury or harm to yourself.
- Provide first aid to injured persons as needed.
- If the spill occurs on a porous surface (e.g., soil, gravel) mark the area in preparation for excavation if that is determined to be the appropriate response action. If the spill occurs on

concrete, asphalt, or similar material, use an absorbent material to contain the spill. Cover the area with soil, a tarp, plastic, or other appropriate material if the spilled material is volatile and cannot be cleaned up immediately.

- Call the Site Health and Safety Officer or the local emergency response organization (as applicable), to report the incident. See Sections 14.1 and 14.2 for emergency telephone numbers. If possible, two ARCADIS personnel should remain near the work area in a safe location at least 30 feet upwind of the spill until emergency response representatives arrive.

- Dependent on the location and chemical nature of the spilled liquid, initial response action may require donning Level C or Level B PPE.

8.4.2 Spill Site Decontamination

ARCADIS and subcontractor personnel involved in the response action will undergo limited personal decontamination upwind of the incident site. Further decontamination will be completed in the support zone. The Site Health and Safety Officer will authorize field personnel to leave the job site or continue work, as appropriate, and will provide guidance regarding decontamination and/or disposition of equipment and vehicles.

If personnel come in contact with fuel, they should remove and dispose contaminated PPE, change out of contaminated field clothing, and wash exposed skin with soap and water.

8.4.3 Cleanup Materials and Used Personal Protective Equipment Disposal

Materials used in spill cleanup must be containerized. The Field Operations Manager should assess whether the surficial material on which the spill is located requires treatment or removal and relay this information to the project manager.

Equipment and tools used during spill cleanup will be thoroughly cleaned.

8.4.4 Spill Prevention

To minimize the potential for a spill, you should follow these guidelines:

- Receive instruction concerning recognition of potential spill problems, preventative maintenance actions, and increased safety awareness.

- Inspect stored materials at the beginning of each work shift. The container condition, as well as any notation of leaks or staining that may be related to or an indication of a potential spill, will be recorded in a field logbook. Any abnormalities and steps taken to remedy the situation must be reported immediately to the Field Operations Manager.

- Inspect transfer vehicles and equipment at the beginning of each day. Equipment conditions, as well as any notation of leaks or staining that may be related to or indicative of a potential spill, will be recorded in a field logbook. Loose and or worn connections and worn hoses will also be

noted. Any abnormalities must be reported immediately to the Field Operations Manager and steps should be taken to remedy the situation before continuing transfer activities.

- Make sure materials being stored are compatible with the containers in which they are being stored. Materials that are likely to react when exposed together will not be stored in the same area. Caustics and corrosives will be stored in separate cabinets affixed with caution labels. Spillable items, if stored on shelves, will be no higher than 4 feet off the floor surface. (This height is to limit the potential for getting a toxic substance in the eyes).

- Store containers larger than 1 gallon separately from smaller quantities. Larger liquid storage containers will be stored in a warehouse and must have a secondary containment system. This system can be as simple as a liner with a berm constructed of 4-inch high boarding and should be able to contain an amount 10 percent greater than that of the original container.

- Transfer liquid with catch basins under each joint or valve or with the hose or pipe lined so that no liquid can escape.

8.5 Hot Work

Hot work activities (i.e., welding, cutting, electrical) are not anticipated during the remedial investigation. If hot work activities become necessary, the HASP will be modified to include trenching and excavation procedures pursuant to OSHA 29 CFR 1910.119(k), OSHA 1910.146, and OSHA 1926.64(k), et al as applicable.

9 Worker Monitoring Programs

9.1 Heat Stress Monitoring

Symptoms of heat stress shall be monitored at temperatures above 80 degrees Fahrenheit. The Site Health and Safety Officer will be responsible for monitoring Site workers if conditions warrant. Heat stress involves three general categories: heat cramps, heat exhaustion, and heat stroke. Symptoms of the three general categories of heat stress are identified in Section 6.4.3.

Early detection and safe work habits are the best measures for preventing heat stress hazards. One or more of the following control measures can be used to help control heat stress.

- Site workers will be encouraged to drink plenty of water throughout the day. They will be advised to slightly increase their salt intake by lightly salting their food;

- On-site drinking water will be kept cool to encourage personnel to drink frequently;

- A work regimen that will provide adequate rest periods for cooling down will be established, as required;

- All personnel will be advised of the dangers and symptoms of heat stroke, heat exhaustion, and heat cramps;

- Cooling devices such as vortex tubes or cooling vests should be used when personnel must wear impermeable clothing in conditions of extreme heat;
- Employees should be instructed to monitor themselves and coworkers for signs of heat stress and to take additional breaks as necessary;
- A shaded rest area must be provided. All breaks should take place in the shaded rest area;
- Employees shall not be assigned to other tasks during breaks;
- Employees shall remove impermeable garments during rest periods. This includes white Tyvek™ type garments; and
- All employees shall be informed of the importance of adequate rest, acclimation, and proper diet in the prevention of heat stress disorders.

9.2 Cold Stress Monitoring

Symptoms of cold stress should be monitored at temperatures below 50 degrees Fahrenheit. The Site Health and Safety Officer will be responsible for monitoring Site workers if conditions warrant. Two general categories of cold stress hazards include hypothermia and frostbite. The symptoms of cold stress are identified in Section 6.4.4.

Site workers will be protected from exposure to prevent a drop in the core body temperature. Lower body temperatures often result in reduced mental alertness, reduction in rational decision making, or loss of consciousness with the threat of fatal consequences. Site workers should be provided with warm clothing, such as mittens, heavy socks, etc., when the air temperature is below 45 degrees Fahrenheit. Protective clothing such as Tyvek or other disposable coveralls may be used to shield employees from the wind. When the air temperature is below 35 degrees Fahrenheit, the following work practices must be implemented:

- If the clothing of a Site worker might become wet on the job site, the outer layer of clothing must be water impermeable;
- If a Site worker's underclothing becomes wet in any way, the worker must change into dry clothing immediately. If the clothing becomes wet from sweating (and the employee is not uncomfortable), the employee may finish the task at hand prior to changing into dry clothing;
- Site workers must be provided with a warm (>65 degrees Fahrenheit) break area;
- Hot liquids such as soups or warm drinks shall be provided in the work area. The intake of coffee and tea should be limited due to their circulatory and diuretic effects;
- The buddy system shall be practiced at all times on the Site. Any Site worker observed with severe shivering shall leave the work area immediately;
- Site workers should dress in layers with thinner, lighter clothing worn next to the body;

- Site workers should avoid overdressing when going into warm areas of when performing strenuous activities; and

- Employees handling liquids with a high vapor pressure, such as gasoline, methanol, of hexane, shall take special precautions to avoid soaking of gloves and clothing with those materials.

9.3 Area and Personnel Monitoring

Area and personnel monitoring will be conducted in accordance with the procedures outlined in the Salem Generating Station Radiation Protection Program.

10 Personal Protective Equipment

PPE is required to be worn by workers for all onsite work and whenever there is potential to come into contact with contaminated soil, water, or hazardous substances or conditions. Based upon an evaluation of the hazards, all tasks will initially be performed in Level D protection. PSEG radiation protection program personnel, in accordance with the procedures outlined in the Salem Generating Station Radiation Protection Program, will conduct radiation protection monitoring. In the event that the established action levels are exceeded, the level of protection may be upgraded to Level C or Level B. PPE Levels may be upgraded or downgraded by the Site Health and Safety Officer as field conditions warrant, or by PSEG radiation protection program personnel.

The following is a description of the PPE required for each level:

Level D

- Hard hat
- Disposable coveralls
- Safety glasses, goggles, or face shield
- Steel-toe and shank, chemical-resistant boots
- Chemical-resistant gloves
- Hearing protection with a noise reduction rating (NRR) of 33 decibels, or greater

Level C

- Safety glasses, goggles, or face shield
- Hard hat
- Disposable coveralls

- Full face air purifying respirator equipped with organic vapor cartridges and dust filter
- Steel-toe and shank, chemical-resistant boots
- Chemical-resistant gloves
- Hearing protection with a noise reduction rating (NRR) of 33 decibels, or greater

Level B

- Safety glasses, goggles, or face shield
- Hard hat
- Disposable coveralls
- Supplied air respirator
- Steel-toe and shank, chemical-resistant boots
- Chemical-resistant gloves
- Hearing protection with a noise reduction rating (NRR) of 33 decibels, or greater

ARCADIS' Project Manager will ensure that the proper PPE is supplied to ARCADIS employees. Subcontractors and visitors will be required to supply their own PPE.

11 Work Zone and Site Control Measures

Zones will be established to prevent or minimize exposure of personnel to hazards by establishing boundaries to reduce migration of contaminants into clean areas. For this site, a three-zone approach will be used for most field activities. The zones will be identified during safety briefings and will be clearly marked by traffic cones, barricades, signs, or other means. These three zones shall be designated as the Support Zone, the Contamination Reduction Zone, and the Exclusion Zone. Work area entrance and exit shall be through controlled access points established for each work location.

11.1 Support Zone

The Support Zone is the clean area in which the possibility of encountering hazardous materials or conditions is minimal. Therefore, personal protective and respiratory equipment are not necessary. Inside the Support Zone, the following will be available: an effective means of communication, access to first aid supplies, a fire extinguisher, drinking water, and other appropriate support facilities. The Support Zone shall also serve as the main point of contact for visitor check-in and initiation of emergency services when necessary.

11.2 Contamination Reduction Zone

The Contamination Reduction Zone is the area where equipment and personnel are decontaminated before leaving the Exclusion Zone. Personnel will remove and/or decontaminate PPE, and place it in appropriate containers. Site vehicles and equipment will also be decontaminated in the Contaminant Reduction Zone. The Contaminant Reduction Zone will consist of a decontamination pad (temporary or permanent); a means of washing protective equipment, site vehicles, and equipment; containers for liquids, solids, and PPE; first aid supplies; an eyewash/emergency shower; and a fire extinguisher. Decontamination activities conducted in the Contaminant Reduction Zone will be performed in a manner consistent with the procedures outlined in Section 12 of this HASP.

Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in the Contaminant Reduction Zone.

11.3 Exclusion Zone

The Exclusion Zone includes the work activities at the Site (e.g., drilling, sampling, etc.). Only authorized, trained, and qualified personnel with the appropriate personal protection and respiratory equipment shall be admitted. Personnel entering the Exclusion Zone must use the buddy system. If a situation arises where the buddy system cannot be used, constant visual contact will be maintained with at least one other worker. The maximum distance for visual contact is 200 feet.

Work activities within the Exclusion Zone pose the greatest possibility of exposure to personnel and equipment. The Site Health and Safety Officer shall be responsible for controlling the access points and keeping bystanders and unauthorized personnel to a minimum. The Exclusion Zone will be clearly marked with flagging, barricade tape, traffic cones, or other signals to limit access.

A "hot line" will be established between the CRZ and the Exclusion Zone. Upon exiting the Exclusion Zone, no one will cross the "hot line" without first implementing decontamination procedures. For drilling, well installation, sampling, and other intrusive work, a central decontamination station will be established for decontamination of material and equipment. Unauthorized personnel will not be permitted to pass the "hot line." As the locations of field activities change, differing contaminant reduction and support zones may be established.

Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in the Exclusion Zone.

11.4 Work Zone Control

Work zone layouts and locations will be established by the Site Health and Safety Officer at the time of the work and will be demarcated with barrier tape, barrier ribbon, or other suitable warning devices, where necessary.

12 Decontamination Procedures

All personnel performing work tasks in the work areas must pass through the Contaminant Reduction Zone decontamination procedure, regardless of the work task or protection used. The equipment

decontamination pack is the primary corridor for passing between the exclusion and support zones. All equipment and tools used within the work area will also undergo decontamination. In accordance with the PSEG radiation protection program, final inspection of the equipment prior to leaving the work area is the responsibility of PSEG personnel.

12.1 Personnel Decontamination

The following decontamination procedure will be employed for those field activities requiring Level B and Level C protection. A similar procedure, with two fewer stations (Stations 4 and 6), will be used by personnel requiring Level D protection.

Station 1: Segregated Equipment Drop

Equipment used in the work area (tools, monitoring equipment, radios, clipboards, etc.) will be deposited on plastic drop cloths or in different containers with plastic liners. Tools and devices will be washed/wiped in a detergent solution and rinsed with clean water, then stored or serviced for reuse. Tools and similar field equipment may require a high-temperature water/stream wash. This station may be located adjacent to the CRZ decontamination line.

Station 2: Wash and Rinse Outer Garment, Boots, and Gloves

Outer boots and gloves will be scrubbed with a decontamination solution, consisting of detergent and water. Gloves, boots, and garment will be rinsed with a hand-pump spray bottle or in a plastic bucket or tub.

Station 3: Removal of Outer Gloves

Outer gloves and any accompanying tape will be removed. Tape should be placed in a container with a plastic liner. Reusable gloves will be cleaned and stored for future use.

Station 4: Cartridge/Bottle Change

If a worker leaves the exclusion zone to change respirator cartridges or supplied air bottles, Station 4 must be the last step in the decontamination procedure. After the worker's cartridges/bottles have been exchanged, the outer glove and boot covers are donned and joints taped, if required. The worker may then return to the exclusion zone.

Station 5: Removal of Boots and Outer Garment

Boots and outer garment will be removed. The outer, disposable, chemical-resistant garment should be deposited in a plastic-lined container. Reusable protective garments will be removed and stored for future use.

Station 6: Removal of Respiratory Protection

The respirator facepiece will be removed, and the respirator will be placed in a plastic-lined container for decontamination.

No personnel protective equipment worn on site will be taken off site without prior decontamination or proper disposal.

12.2 Equipment and Vehicles

Equipment will be washed with decontamination solution (i.e., detergent and water), rinsed with clean water, and if required, steam cleaned to the satisfaction of the Site Health and Safety Officer and/or the PSEG radiation protection program personnel prior to reuse. Vehicles will be decontaminated in a designated area. Support vehicles will be decontaminated as deemed necessary by the Site Health and Safety Officer and/or the PSEG radiation protection program personnel.

12.3 Decontamination Personnel

Personnel working the Contaminant Reduction Zone will wear, at a minimum, the same level of protection as the workers. In addition, face shields will be worn rather than safety glasses or goggles to protect personnel against splashing.

12.4 Decontamination Waste Disposal

Solid wastes (discarded protective clothing, tape, etc.) will be containerized and disposed of in an approved manner.

12.5 Equipment Needs

The following equipment may be used during the decontamination procedure:

Station 1:

- Plastic drop cloths
- Plastic 30- or 50-gallon containers

Station 2:

- Hand-operated garden-type sprayers
- Large tubs or wash containers (30- to 50-gallon capacity)
- Plastic buckets
- Brushes
- Decontamination solution

    1. Commercially available detergent

Station 3:

- Plastic liners
- Plastic containers (30- to 50-gallon capacity)

Station 4:

- Duct tape
- Respirator cartridges
- Supplied air bottles

Station 5:

- Plastic liners
- Plastic containers (30- to 50-gallon capacity)
- Detergent and/or boric acid for decontamination of respirators

Station 6:

- Plastic liners
- Plastic containers (30- to 50-gallon capacity)
- Bench
- Rack for boots

Other Equipment:

- Hand-operated garden-type hose sprayers or garden hose for vehicle and equipment washing and rinsing
- Steam cleaner
- Potable water supply
- Wash basins

12.6 Contaminant Containment

A housekeeping program will be implemented during the course of the work tasks to avoid the spread of any contaminants beyond the exclusion zone. The housekeeping program will include the following:

- Periodic policing of the work areas for debris, including paper products, cans, etc.
- Periodic changing of wash and rinse water for hands, face, and equipment.
- Periodic removal (weekly minimum) of all garbage bags and containers used to dispose of disposable clothing. Contaminated materials will be disposed of in an approved manner.
- Drill cuttings and development water generated during all drilling activities will be removed by PSEG.
- The decontamination pad shall be cleaned on an as-needed basis to reduce the potential for tracking contaminated media, dust, and dirt through the Contaminant Reduction Zone.

13 Community Health and Safety Considerations

In accordance with the PSEG radiation protection program for the Salem Generating Station, PSEG personnel will provide authorization prior to any equipment, personnel and samples leaving the Site.

14 Emergency Response

In the event of an emergency, the work site will be evacuated and the appropriate emergency phone numbers shall be called (Section 14.1). Work shall not resume at the site until the ARCADIS Project Manager and Site Health and Safety Officer have been notified of the emergency and they agree that the site is safe for continued work. If a serious injury occurs within a radiologically-controlled area, then the emergency will take precedence over the site action levels provided in the PSEG radiation protection program. The injured individual will be removed from the exclusion zone or radiologically controlled area by coworkers (if possible) for transport to the hospital. The Site Health and Safety Officer will accompany the injured worker and perform necessary contamination survey of the ambulance/vehicle after the individual is at the hospital for treatment.

14.1 Emergency Telephone Numbers

	Off Site	On Site*
Police Department/Security	(856) 935-0057 or 911	(856) 339-2222
Fire Department/Protection	(856) 935-0353 or 911	(856) 339-2800
Emergency Management	(856) 935-3382 or 911	(856) 339-2800
Ambulance	911	(856) 339-2800
Memorial Hospital of Salem	(856) 339-6059	

* Any emergency/incident on site requires immediate reporting to the on duty operating department at extension 3333, outside line (856) 339-3333.

14.2 Project Personnel Emergency Telephone Numbers

Tom C. Eng, Program Manager, ARCADIS, Inc.:

(201) 236-2233 (Office), (201) 417-3079(Mobile)

Peter Milionis, Project Manager, ARCADIS, Inc.:
(267) 685-1800 (Office), (215) 272-4635 (Mobile)

Bradley Pierce, Site Health and Safety Officer, ARCADIS, Inc.
(267) 685-1800 (Office), (215) 718-3580 (Mobile)

John P. Ronafalvy, Project Manager, PSEG
(856) 878-6930 (Office)

14.3 Location of the Memorial Hospital of Salem

The Memorial Hospital of Salem is located at 310 Woodstown Road in Salem, New Jersey. This hospital has confirmed that it is capable of treating chemical trauma victims.

14.4 Emergency Response for Fire and Explosions

If a small fire occurs, extinguish it with the fire extinguisher in the field vehicle (ABC-extinguisher). Remember to follow these directions to put out the fire:

- Aim at the base of the flame.
- Use the appropriate type of fire extinguisher when not using an extinguisher from the field vehicle (e.g., do not use a water type fire extinguisher for an electrical fire).
- Remember that the spray only lasts a few seconds.

If a large fire occurs at the work site, follow these instructions:

- Move flammable and combustible items, if possible, out of the path of the fire
- Call the fire department
- Do not attempt to put out a large fire with the field vehicle fire extinguisher
- Report the incident to the Field Operations Manager and possibly the Fire Department

If an explosion occurs, follow these instructions:

- Evacuate the site immediately
- If feasible, decontaminate yourself and others
- Do not address medical emergencies until you are out of danger

- Call the Site Health and Safety Officer, or local emergency response organization when you are out of danger to report the incident

14.5 Emergency Response for Severe Weather Conditions

This section specifies what you should do in the event of a severe weather emergency, including electrical storms, high winds, heavy rain or hail, and tornados.

Electrical Storms

- Seek shelter at the support facility or in the field vehicles
- Do not stand near or under high objects, such as trees and drilling rigs
- If possible, lower the drilling rig mast

High Winds

- Seek shelter at the support facility (if anchored) or in the field vehicles
- Do not drive high-profile vehicles at high speeds
- Park vehicles heading into the wind
- Don a respirator or wear safety goggles and a kerchief covering your nose and mouth

Heavy Rain or Hail

- Seek shelter at the support facility or in the field vehicles
- Do not attempt to drive a vehicle if you are in an area that is or has the potential for flooding unless you are moving out of a low area.

Tornadoes

- Seek shelter underground or in a closet, bathroom, or interior wall of a substantial building. Get under something sturdy and cover your head.
- Do not stay in a trailer or vehicle. Leave the trailer or vehicle and lie flat in the nearest ditch if substantial shelter is not available.
- Stay away from large areas of glass.
- Stay away from large unsupported roofs.

14.6 Emergency Response for Unforeseen Circumstances

In the event of an emergency as a result of unforeseen circumstances, follow these instructions:

- Evacuate the site immediately
- If feasible, decontaminate yourself and others
- Do not address medical emergencies until you are out of danger
- Call the Site Health and Safety Officer, or local emergency response organization when you are out of danger to report the incident

14.7 On-Site Emergency Equipment and Equipment Locations

A first aid kit equipped with adequate supplies for the anticipated hazards encountered on this project will be at the work site. Components of the first aid kit will be unitized to facilitate access to the needed supplies and keep components in the best possible conditions.

First aid kits for field use have water tight seals to retard moisture entry and metal housings. Care should be taken to keep the first aid kits clean and readily available to all site workers. The location and contents of the first aid kits on the job site shall be discussed in the initial safety meeting and daily "tailgate safety meetings. Additionally, bloodborne pathogens exposure control and decontamination procedures will be addressed during these meetings. The first aid kits are equipped with components to provide decontamination to workers exposed to bloodborne pathogens. First aid kits at the project site(s) for more than one week shall be inspected weekly by the Site Health and Safety Officer.

An eyewash will also be maintained in good condition onsite during field activities.

A minimum 10-pound or two 5-pound multipurpose ABC fire extinguisher(s) will be maintained during field activities in the work area. A fire extinguisher will also be maintained at the decon area if the work zone is not in close proximity to this area. The location of fire extinguishers will be discussed in the initial safety briefing for field activities and during daily "tailgate" safety meetings. Care will be taken to keep fire extinguishers easily accessible, clean, and protected from harsh physical environments which may impact the working condition of the fire extinguisher.

Other emergency equipment that will be maintained at the Site include the following: a vehicle for transport of personnel to a medical facility; and, a cellular telephone for contacting emergency response personnel.

14.8 Accident and Incident Reports

All job-related injuries and illnesses will be reported to the Site Health and Safety Officer. If medical attention is needed, the injured worker will be decontaminated, if possible, prior to leaving the site. The Site Health and Safety Officer will investigate the cause of the accident, and corrective measures will be taken before the work can resume. It will be the responsibility of the Site Health and Safety Officer to complete the accident reporting form, OSHA 101 **(Attachment 8)** for all injuries. The completed OSHA

101 form should be forwarded to the PSEG Project Manager and the ARCADIS Corporate Health and Safety Officer, within 6 days for recording into the OSHA 200 log. In the event of a fatality or three or more workers hospitalized as a result of a single incident, the Project Manager will contact the ARCADIS Corporate Administrator of Health and Safety immediately for OSHA reporting purposes.

15 Site Security

No unauthorized personnel shall be permitted to enter the work zone. Prior to initiating work, PSEG will be provided with a list of ARCADIS personnel that are authorized to enter the Site.

The work zone will be strictly controlled to ensure the protection of all workers and visitors. The Exclusion Zone will be maintained around all work areas. The size of the Exclusion Zone will be dependent upon the hazards associated with the task, professional judgment of the Site Health and Safety Officer, and site conditions. Generally, for the purposes of this scope of work, a 15-foot exclusion zone in all directions from the task activity should be sufficient. During work, all unnecessary personnel will remain outside the exclusion zone and all personnel inside the exclusion zone will be required to wear the appropriate level of PPE as prescribed in this HASP.

Should unauthorized personnel enter the work area, they will be asked to leave immediately.

Health and Safety Plan

PSEG Nulear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Attachment 1

Health and Safety Plan Compliance Agreement

Health and Safety Plan Compliance Agreement

Project personnel (ARCADIS and its subcontractors) must sign the master copy of this document, indicating they have read and understand it. The signature indicates acceptance and compliance with the requirements of the HASP. Copies of this document will be made available for review and readily available at the job site.

LOG OF PROJECT PERSONNEL

Employee Name/Job Title	Date Distributed	Signature

Attachment 2

PSEG Heat Stress Program

Attachment 3

ARCADIS Health and Safety Training Policy

Attachment 4

Tailgate Safety Meeting
Attendance Form

TAILGATE SAFETY MEETING

PREPARED BY _____

CLIENT _____ PROJECT NUMBER _____

WORK LOCATION _____

TYPE OF WORK _____

SAFETY TOPICS PRESENTED

CHEMICAL HAZARDS _____

_____

PHYSICAL HAZARDS/UNDERGROUND UTILITIES _____

_____

PROTECTIVE CLOTHING/EQUIPMENT _____

_____

SPECIAL EQUIPMENT _____

_____

EMERGENCY PROCEDURES _____

_____

HOSPITAL _____ ADDRESS _____

PHONE NUMBER _____

FIRE/AMBULANCE _____

OTHER _____

_____

ATTENDEES

NAME (PRINTED)	SIGNATURE

MEETING CONDUCTED BY

NAME (PRINTED)	SIGNATURE

Attachment 5

ARCADIS Medical Surveillance Program

ARCADIS - Medical Surveillance Program

Summary

Applicability

This standard applies to the following ARCADIS staff:

Any employee who is exposed to hazardous substances or health hazards at or above recognized occupational health standards (Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV)), without regard to the use of respirator, for 30 days a year or more;

Any employee who wears a respirator more than 30 days per year; and

Any employee who becomes ill or exhibits symptoms of possible exposure to health hazards from emergency response or hazardous waste operations.

General Requirements

This standard requires that employees subject to the standard receive medical examinations prior to a new assignment, annually while subject to the standard, when leaving the company, when no longer subject to the standard, and whenever an employee reports/develops symptoms indicating possible exposure or reports a possible exposure.

Exams can be given every two years as recommended or approved by the medical care provider.

The medical examinations are performed to monitor potential adverse health impacts from exposure to health hazards. The examinations also provide clearance for the employee to perform the duties of their job as they relate to the OSHA standards, and to use/wear personnel protective equipment (PPE).

Medical records are maintained confidentially by Corporate Health and Safety as required by this standard and standards related to specific hazardous substances.

Training

Training is required for all employees who fall under this standard as defined above.

Overview of HAZWOPER Medical Surveillance

It is ARCADIS' policy to comply with the requirements of the HAZWOPER standard as they relate to Medical Surveillance. The purpose of medical surveillance is to monitor the health of employees who are or may be exposed to hazardous substances.

Regulatory Guidance

- 29 CFR 1910.120 "Hazardous Waste Operations and Emergency Response"

- 29 CFR 1910.134 "Respiratory Protection"
- 29 CFR 1910.95 "Hearing Conservation"
- 29 CFR 1910.145 "Exposure to Hazardous Chemicals in Laboratories"
- 29 CFR 1910.138 "Personal Protective Equipment"

Other OSHA standards, such as occupational noise exposure or the hazardous substances listed in CFR1910, Subpart Z, may have specific medical surveillance requirements beyond the scope of this policy.

Participating Employees

The following employees will participate in the medical surveillance program:

- Any employee who is exposed to hazardous substances or health hazards at or above recognized occupational health standards (Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV)), without regard to respirator use, for 30 days a year or more;
- Any employee who wears a respirator more than 30 days per year; and
- Any employee who becomes ill or exhibits symptoms of exposure to health hazards from emergency response or hazardous waste operations.

Confidentiality of Medical Records

Medical examinations are confidential and the specific results are discussed between the employee and examining physician only. ARCADIS receives a confirmation report and a clearance determination that pertains only to the capabilities of an individual to perform the duties of their job as they relate to the OSHA standard.

Retained Medical Provider

Continuum Health Management Solutions is the retained medical provider for the ARCADIS medical surveillance program. Continuum contracts with clinics to perform medical examinations that follow their protocols and any ARCADIS-specific program requirements.

For annual examinations, the local Continuum clinic notifies the applicable Office Administrator at least four weeks prior to an employee's examination due date. For exit or transfer examinations, the Office Administrator will coordinate the exam with the local Continuum clinic.

The Office Administrator should fax a completed "Continuum Authorization for Medical Examination" form by 5:00 PM the day before any scheduled examination. The employee must take a completed Continuum provided questionnaire to the examination.

Within four days of a baseline or annual examination, Continuum will either issue a Conditional Clearance or provide notice that has not been given. If conditional clearance is given, it is good for 20 days. If conditional clearance is not given, the physician may recommend additional testing which must be authorized by the Corporate Health and Safety Administrator.

Medical clearance or denial is all that is provided to the Corporate Health and Safety Administrator, but a full detailed medical report is sent to the employee's home. The employee may call Continuum's medical department at 800-229-3674 for any questions on medical issues. Questions about Continuum's service or procedures should be directed to the Corporate Health and Safety Administrator.

Medical Surveillance Examinations

Types and Frequency of Medical Examinations

The following list is what is required by the OSHA standard, but the examining physician may determine that more frequent evaluations/tests are medically necessary, and/or that a consultation is medically necessary.

- **Baseline Exam** – These are done upon hire or at the time an employee is assigned to a job that falls under this program.
- **Annual Exam** – An annual examination schedule is followed unless the attending physician recommends or approves an exam every two years.
- **Exposure Exam** – These exams should be done as soon as possible if an employee may have been exposed above the permissible or published exposure limits or has developed signs and symptoms indicating possible overexposure.
- **Transfer Exam** – If an employee is no longer subject to the medical surveillance program, a transfer exam will be conducted unless the employee had an annual examination within the preceding 6 months.
- **Exit Exam** - Employees leaving the company will be offered an exit medical exam unless they had an exam within the preceding 6 months. If an employee turns down an exit exam, he/she must sign a declination form. If an employee will not sign a declination form, document the date, time, employee's name, what the employee declined to sign and sign the documentation.

Components of the Medical Examination

The purpose of a medical surveillance program is to protect the health of the worker, and focuses on health and fitness related to the workplace. Wellness evaluations, such as mammograms or prostate exams, are not components of a medical surveillance exam or Continuum's standard protocol.

Physical Examination

The physical examination should cover the following topics:

- **Medical History** – This will include a review of any symptoms related to handling of hazardous substances and health hazards, a review of past illnesses and chronic diseases, and will identify individuals who may be vulnerable to particular substances and those with medically relevant lifestyle habits (for example, smoking or alcohol use).

- **Height and Weight** – The examining physician will address any concerns/issues regarding weight with the employee.

- **Vital Signs** – Irregularities in pulse, respiration or blood pressure may require further evaluation, and medical clearance could be denied based on these readings.

- **Vision** – The exam will measure eyesight and the employee's ability to wear PPE and perform related job duties. Any other issues regarding vision will need to be addressed by the employee's personal eye doctor.

During the physical examination, conditions will be noted that could increase susceptibility to heat stroke and that could affect PPE use. The examining physician will:

- Disqualify individuals.

- Note limitations concerning workers ability to use PPE.

- Recommend and provide additional testing regarding the ability to wear PPE.

- Make and provide a written determination regarding the ability to wear PPE.

Laboratory Tests

The examination includes comprehensive blood and urine tests. Any abnormal tests may require additional evaluation by either Continuum or the employee's personal physician.

Other Tests

- **Spirometry** – For this test of pulmonary function Continuum uses the NIOSH and ANSI recommendations for spirometry values. A failed test may be repeated once in the Continuum system, but if the second test is unacceptable, Continuum may recommend consultation with a pulmonologist (lung specialist).

- **Audiometry** – This test for hearing will be preceded by at least 14 hours without exposure to workplace noise or the use of hearing protectors. Additional information on audiometry is found in section 3.4.3.

- **EKG** – This test is done after age 40 and/or when the presence of two or more recognized cardiac risk factors have been identified. It is Continuum's policy that individuals over the age of forty with two or more risk factors also have a stress test.

- **Chest X-Ray** – Continuum will clearly state when further study is required.

Attachment 6

ARCADIS Respiratory Protection Policy

ARCADIS – Respiratory Protection Program

Summary

Applicability

The Respiratory Protection standard applies to any employee who is or may be required to wear a respirator. The voluntary use of respirators is prohibited.

General Requirements

Whenever possible, engineering controls and work practices will be used to reduce or eliminate hazards. If engineering controls are not feasible, or while they are being instituted, appropriate respirators will be used. Only NIOSH-certified respirators will be worn, and only authorized, trained, and medically qualified employees may use a respirator.

Only the respirator prescribed in the hazard analysis will be used for that work environment. Only air supplying respirators will be used in oxygen deficient environments, in environments in which there is an unknown hazardous substance/quantity of substance or in environments that are immediately dangerous to life or health (IDLH).

Written Program

Each office that requires respirator use will develop and implement a written Respiratory Protection Program that will be reviewed and updated/revised as necessary. Each office will also designate a qualified Program Administrator to oversee the program for that office. The written program will include information on the medical evaluation and training process and on procedures for the following:

- Respirator Selection
- Fit testing
- Proper use of respirators in routine and emergency situations
- Cleaning, disinfecting and storing of respirators
- Inspecting, repairing and discarding respirators
- Regularly evaluating the effectiveness of the program

All employees who use a respirator will have a medical evaluation prior to respirator fit testing and respirator use, and if deemed necessary by the program administrator, supervisor, physician or employee. Medical evaluations may cease if the employee is no longer required to use a respirator.

The primary purpose of fit testing is assure that the specific make, model, style, and size of respirator selected by the employee has the proper fit and is the one best suited for the employee. Fit testing also

reinforces respirator training by having employees review the proper way to put on, wear and take off the respirator.

Fit testing will occur prior to respirator use, annually, if the respirator fit is found to be unacceptable or if there any changes in the employee's physical condition that could alter the fit (e.g., facial scarring, facial hair growth, etc.). Fit testing will be done by the medical surveillance provider if this service is available. If not available, it will be done by an outside contractor or by an ARCADIS employee authorized by Corporate Health and Safety

Training

Training will be provided to any employee who is required to wear a respirator as part of his/her job prior to respirator use, annually, whenever there are changes in the workplace or type of respirator required, if there are inadequacies in the employee's knowledge or any other situation in which retraining appears necessary.

Although annual HAZWOPER training may be utilized to help meet compliance with the training portion of this standard, training will be specific to the type of respirator used and the conditions at the job/work site.

Overview of Respiratory Protection

It is ARCADIS' policy to comply with the OSHA's Respiratory Protection Standard as it relates to the work we do. There are also OSHA standards for specific substances that may have additional requirements regarding respiratory protection and should be consulted in conjunction with this policy.

Whenever possible, engineering controls and work practices will be utilized to reduce or eliminate respiratory hazards. If they are not feasible, or while they are being instituted, appropriate respirators will be used. If respirators are necessary, a written respiratory program will be developed and implemented.

The voluntary use of respirators is not permitted.

Regulatory Guidance

- 29CFR 1910.134 "Respiratory Protection"
- OSHA publication 3079, "Respiratory Protection" (revised 1998)
- OSHA's March 1998 "Major Requirements of OSHA's Respiratory Protection Standard"
- OSJA Directive CPL 2-2.54A, "Respiratory Protection Program Guidelines"
- NIOSH Publication 96-101, "Selection and Use of Particulate Respirators Certified Under 42CFR 84"

Definitions

Definitions relative to this standard are found in Attachment 5-1.

Written Respiratory Protection Program

A written Respiratory Protection Program will be developed, implemented and updated as necessary if employees are required to wear a respirator. As part of this program, each office will designate a qualified Program Administrator whom OSHA defines as someone who is qualified by appropriate training or experience to comprehend the complexity of the program. The Program Administrator will oversee compliance of the program and conduct the required program effectiveness evaluations.

Program Provisions

Each of the following will be included in the written Respiratory Protection Program, and will be described in greater detail throughout this section of the manual:

- Procedures for:
  - Respirator selection
  - Fit testing
  - Proper use of respirators in routine and emergency situations
  - Cleaning, disinfecting and storing or respirators
  - Inspecting, repairing and discarding respirators
  - Regularly evaluating the effectiveness of the program
- Medical evaluation process
- Training process
- A statement regarding the voluntary use of respirators

Program Evaluation

Evaluations will be conducted "as necessary" to ensure that the written program is being properly implemented and that employees are using respirators correctly. Be sure and document the date of the evaluation, your findings and any changes or corrections that are made. Attachment 5-2 is a checklist that may be of help in this evaluation.

In addition, employees who wear respirators will be "regularly" asked to identify any problems and to provide their views on the program's effectiveness. Document the date, what was done to correct any identified problems and what was found in regard to the following:

- Respirator fit and the ability to wear it without it interfering with worksite performance.

- Respirator selection and its appropriateness for relevant hazards.
- Respirator use and its appropriateness given worksite conditions.
- Proper respirator maintenance.

Respirator Selection

The written Respiratory Protection Program will include how respirators are selected. All respirators shall be NIOSH certified and used only as allowed by the NIOSH certification. Attachment 5-3 provides several websites regarding NIOSH certified respirators, and Attachment 5-4 provides descriptions and pictures of various respirators.

Hazard Identification

The selection of which NIOSH certified respirator is appropriate will be based on a hazard analysis. It will be performed by an employee who has the training and experience to recognize hazardous and potentially hazardous environments. If the exposure potential can not be identified, or if there is any doubt, the atmosphere will be considered **IDLH** (immediately dangerous to life and health). The analysis will include:

- Evaluation and identity of the respiratory hazards that will or may occur. It should include:
    - Monitoring method utilized
    - A reasonable estimate of employee exposure to respiratory hazards
    - Identity of airborne contaminants (particulate, biological, chemical, etc.)
    - Chemical state, physical properties, toxicity and concentration of the contaminant
    - Concentration of Oxygen
- Identification of relevant workplace and user factors such as heat/cold, duration of use and type of work being done.

General Considerations in Respirator Selections

Other points to consider when selecting the appropriate respirator:

- All oxygen-deficient atmospheres will be considered IDLH, and in no case will an air-purifying respirator be used in IDLH conditions.

- Consideration will be given to limits and characteristics of the respirator, employee comfort and employee mobility. For example, a tightly constrained area may not permit the use of self-contained breathing apparatus (SCBA) and working around obstructions or moving machinery that can snag hoses may limit the use of airline respirators.

- Consideration will be made of the nature and extent of the work, the work rate, and area to be covered. For example, the service life of air-supply respirators even under moderate work conditions

will be less than under a condition of rest, and higher breathing resistance of air-purifying respirators under conditions of heavy work may cause difficulty in breathing.

Breathing Air Quality and Use – Atmosphere-Supplying Respirators

This section applies to compressed air/oxygen and liquid air/oxygen used for supplied-air and SCBA respirators. Breathing air couplings must **not be compatible** with outlets for nonrespirable worksite air or other gas systems. Compressed and liquid oxygen will meet the U.S. Pharmacopoeia requirements. Compressed breathing air will meet at least the requirements for Grade D breathing air described in ANSI G-7.1-1989 to include:

- Oxygen content (v/v) of 19.5-23.5%
- Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less
- Carbon monoxide (CO) content of 10 ppm or less
- Carbon dioxide content of 1,000 ppm or less
- Lack of noticeable odor

Cylinders

Cylinders used to supply breathing air will be tested and maintained per DOT's "Shipping Container Specification Regulations" (49CFR part 173 & 1788). They will also have a certificate of analysis from the supplier that it meets the requirements for Grade D breathing air. The moisture content in the cylinder can not exceed a dew point of -50°F (-45.6° C) at 1 atmosphere of pressure.

Compressors

For compressors that are not oil-lubricated, the carbon monoxide levels will not exceed 10ppm, and if they are oil-lubricated, a high temperature or carbon monoxide alarm, or both, will be used to monitor carbon monoxide levels. Compressors used to supply breathing air will be constructed and situated so as to:

- Prevent entry of contaminated air into the system.
- Minimize moisture content so that the dew point at 1 atmosphere pressure is 10°F (5.56°C) below the ambient temperature.
- Have a tag at the compressor that contains the most recent date and signature of the person who performed the change.
- Have suitable in-line air-purifying sorbent beds and filters that are maintained and replaced/refurbished per manufacturer's instructions.

General Considerations

Some general considerations regarding breathing gases:

- Compressed oxygen cannot be used in respirators that have previously used compressed air.
- Oxygen concentrations greater than 23.5% should only be used in equipment designed for oxygen service or distribution.
- Breathing gas containers will be marked per NIOSH certification standard 42CFR Part 84.
- No asphyxiating substance will be introduced into breathing air lines.

Selection of Respirators for IDLH Atmospheres

The following respirators will be used in atmospheres that are IDLH or in atmospheres in which the exposure hazard is not known:

- A full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes; or
- A combination full-facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

If the respirator is provided for **escape only** from an IDLH atmosphere, it will be NIOSH-certified for escape from the atmosphere in which it will be used.

Selection of Respirators for Atmospheres that are not IDLH

Respirators used in non-IDLH atmospheres will be appropriate for the chemical state and physical form of the contaminant. If the respirator will be used for protection against gas and vapors, one of the following will be supplied:

- An atmosphere-supplying respirator; or
- An air-purifying respirator provided that:
    - It is equipped with a NIOSH certified end-of-service-life indicator (ESLI); or
    - If no ESLI is appropriate for the working conditions, a change schedule will be implemented.

If the respirator will be used against particulates, one of the following will be supplied:

- An atmosphere-supplying respirator; or

- An air-purifying respirator equipped with either a NIOSH certified high energy particulate air (HEPA) filter or NIOSH certified filter for particulates; or
- An air-purifying respirator equipped with any NIOSH certified filter for particulates if the contaminant consists primarily of particles of at least 2 micrometers.

Selection of Particulate Respirators

To select the correct respirator for protection against particulates, the following conditions will be known:

- The identity and concentration of the particulates in the workplace air.
- The OSHA or MSHA permissible exposure limit (PEL), the NIOSH recommended exposure limit (REL), or other occupational exposure limit for the contaminant.
- The hazard ratio (HR) (i.e., airborne particulate concentration divided by the exposure limit).
- The Assigned Protection Factor (PF) for the class of respirator. The APF should be greater than the HR.
    - The APF of a respirator is the minimum anticipated level of protection provided by each type of respirator that is properly fitted and worn correctly by a trained user. OSHA currently sets APFs in some substance-specific standards. A table that lists respirator classes/types and the corresponding NIOSH APF is provided as Attachment 5-5.
- The IDLH concentration, including oxygen deficiency.

Respirator Filters

Filters for air-purifying respirators will be selected in accordance with manufacturer recommendations for the contaminant of concern. All should be legibly labeled and color coded with the NIOSH approval label and the label will not be removed.

Filter Classes and Efficiency Categories

The N, R and P series filters are the three classes of filters for non-powered air-purifying particulate respirators:

- N series: **N**ot resistant to oil - can be used in environments where oil particles are **not** present in the atmosphere.
- R series: **R**esistant to oil – can be used in atmospheres where oil particles are present.
- P series: Oil **P**roof – can be used in atmospheres where oil particles are present for more than 8 hours.

There are three filter efficiency categories—95%, 99%, and 99.7%. The higher the filter efficiency, the lower the filter leakage. For example, a filter marked N95 would mean an N-series filter that is at least 95% efficient.

Change Schedule

Each filter (canister/cartridge) will remain in its original sealed package until it is needed. Each will be equipped with an end-of-service-life indicator (ESLI) that NIOSH certified for the contaminant. If there is no ESLI appropriate for conditions, a change schedule will be established that will ensure that they are changed before the end of their service life. The respirator program will provide the information and data relied upon to make this determination.

Cartridges will be changed after each use. Filters will be changed when discoloring of the filter media is evident and will be changed based on the most limiting factor below:

- Prior to expiration date
- Manufacturer's recommendations for use and environment
- When requested by employee
- When contaminate odor is detected
- When restricted air flow has occurred as evidenced by increased effort by the user to breathe normally

Respirator Fit Testing

The written Respiratory Protection Program shall indicate that an appropriate fit testing program has been implemented. Employees must be medically evaluated and found eligible to wear the respirator selected **prior** to fit testing.

Fit testing will be done by the medical surveillance provider if this service is available. If not available, it will be done by an outside contractor or by an ARCADIS employee authorized by Corporate Health and Safety.

The primary purpose of fit testing is to assure that the specific make, model, style, and size of respirator selected by the employee has the proper fit and is the one best suited for the employee. Fit testing also reinforces respirator training by having wearers review the proper way to put on, wear and take off the respirator.

Fit Testing Requirements

Employees will be fit tested with the same make, model, style and size of respirator that will be used at the worksite. Employees will pass either a qualitative or quantitative fit test (QLFT or QNFT) as defined in CFR 1910. Attachment 5-6 contains a brief description of the QLFT and QNFT, and Attachment 5-7 contains an outline of fit testing preliminary steps.

Fit testing is required for all negative or positive pressure tight-fitting facepiece respirators, and will be performed:

- Before an employee wears a respirator in the work environment.
- Whenever a different respirator facepiece is used.
- At least annually thereafter.

Retesting is required if the employee finds the fit of the respirator to be unacceptable and whenever there are changes in a employee's physical condition that could affect the fit of the respirator (e.g., facial scarring, dental changes, cosmetic surgery or an obvious change in body weight, etc.).

Proper Use of Respirators

The written Respiratory Protection Program will include procedures for the proper use of respirators during routine and emergency situations. Employees will use their respirators only under the conditions specified by the respiratory protection program and the training they receive. They will not be used in a manner that has not been certified by NIOSH or its manufacturer.

Facepiece Seal Protection and Check

Employees will not be allowed to wear tight-fitting respirators if they have facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function, or any condition that interferes with the face-to-facepiece seal or valve function.

If an employee wears corrective glasses or goggles or other personal protective equipment, it will be worn in a manner that does not interfere with the face-to-facepiece seal.

For all tight-fitting respirators, employees will perform a user seal check each time they put on the respirator using the procedures outlined in Attachment 5-8, or the procedures recommended by the respirator manufacturer if they are as effective.

Continuing Respirator Effectiveness

Surveillance will be maintained of the work area conditions and the degree of employee exposure and stress so that respirator effectiveness can be assessed on an ongoing basis.

Employees will leave the respirator use area:

- To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use.
- To replace the respirator or the filter, cartridge, or canister elements.

- If they detect vapor or gas breakthrough, changes in breathing resistance or leakage of the facepiece, and the respirator must be replaced or repaired before returning to the respirator use work area.

Procedures For Respirator Use In IDLH Atmospheres

In IDLH atmosphere situations, at least one person will be located outside the IDLH atmosphere. In addition visual, voice, or signal line communication will be maintained between the person in and the person outside the IDLH atmosphere. The person located outside the IDLH atmosphere will be trained to provide effective emergency rescue, and will be equipped with pressure demand, other positive SCBA or supplied-air respirator with auxiliary SCBA and:

- Appropriate retrieval equipment if it will not increase the overall risk; or
- Equivalent means for rescue where retrieval equipment is not required as noted above.

The appropriate supervisor will be notified before the person located outside the IDLH atmosphere enters the IDLH atmosphere to provide emergency rescue. Once notified, the supervisor will provide assistance appropriate to the situation.

Maintenance and Care of Respirators

The written Respiratory Protection Program will include procedures that address inspection, cleaning and disinfecting, storage and repair of respirators.

Inspection of Respirators

All respirators will be inspected according to the schedule outlined below:

- Respirators used routinely will be inspected before each use and during cleaning;
- SCBAs will be inspected before each use, during cleaning and monthly; inspection will include making sure that the regulator and warning devices function properly;
- Respirators that are maintained for emergency use will be inspected monthly and in accordance with the manufacturer's recommendations; and
- Emergency escape-only respirators will be inspected before being taken to the work site.

Documentation of respirator inspections will include checks on the following (two sample checklists are found in Attachment 5-9):

- Respirator function.
- Tightness of connections and condition of parts (e.g., facepiece, head straps, valves, connecting tube and filters, canisters or cartridges).

- Pliability and any deterioration of any elastic or elastic-type parts.
- Condition of the regulator.
- Proper functioning of warning devices.
- If air and oxygen cylinder are fully charged. Cylinders will be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level.

Respirators maintained for emergency-use will be certified by documenting the date of the inspection, the signature of the inspector, the findings and any remedial action taken and the serial number or other identifier. This information will be on a tag or label that is kept with the respirator or as part of paper or electronic files.

Cleaning and Disinfecting of Respirators

Respirators will be cleaned and disinfected as outlined in **Attachment 5-10**, or as recommended by the manufacturer so long as it is of equivalent effectiveness. Maintain documentation that this was done according to the following schedule:

- As often as necessary to maintain a sanitary condition if used exclusively by one employee.
- Each time before it is worn if used by more than one employee.
- After each use if maintained for emergency use.
- After each use if used for fit testing.

Storage of Respirators

All respirators will be stored or packed to protect them from deformation of a facepiece or exhalation valve, contamination, damage, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

Emergency respirators will be kept accessible to the work area and stored in compartments/covers clearly marked as containing emergency respirators and as instructed by the manufacturer.

Repairs

Documentation of repairs/adjustments will be maintained. Respirators that fail an inspection or are defective, will be removed from service and discarded or repaired/adjusted as noted below.

- Repairs/adjustments will be made only by persons appropriately trained to perform such operations.
- Only the respirator manufacturer's NIOSH-approved parts designed for the respirator will be used.

- Repairs will be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed.

- Reducing and admission valves, regulators, and alarms will be adjusted/repaired only by the manufacturer or technician trained by the manufacturer.

Medical Evaluation Process

Because using a respirator may place a physiological burden on an employee that may vary depending upon the type of respirator and workplace conditions, the written Respiratory Protection Program will include what medical evaluation process we have implemented at ARCADIS. All employees who use a respirator as defined under this standard will participate in the company's medical monitoring program (section 3.3.5). Medical evaluations may cease if the employee is no longer required to use a respirator.

A physician or other licensed health care professional will perform the evaluation using a medical questionnaire as defined in CFR 1910.134, App C or an equivalent medical examination. A follow-up medical examination may be given depending upon the answers to the questionnaire and/or medical examination.

Timeframe Of Medical Evaluations

Medical evaluations will take place according to the following schedule:

- Prior to fit testing and use at the work site

- When an employee reports medical signs/symptoms that may be related to his/her ability to use a respirator

- When a physician, supervisor or the respirator Program Administrator suggests/requests an evaluation

- When information such as observations made during fit testing or program evaluation indicate a need

- When a change occurs in workplace conditions that may result in a substantial increase in the physiological burden placed on an employee (e.g., physical work effort, protective clothing, temperature, etc.)

Written Medical Opinion

The physician or other licensed health care professional will determine and provide a written opinion as to the employee's ability to use a respirator. This opinion will contain:

- Whether or not the employee is medically able to use the respirator.

- Any limitations on respirator use.

- The need for follow-up medical evaluations.
- A statement that the employee was provided with a copy of the written recommendation.

Employee Training

The written Respiratory Protection Program will include a section on the training program that will be provided prior to respirator use, annually, when changes in the workplace or respirator make the training obsolete, when inadequacies are found in the employee's knowledge or use of PPE, or any other situation in which retraining appears necessary.

Training Content Requirements

Training will ensure that employees can demonstrate, at a minimum, knowledge of the following:

- Why the respirator is necessary and its limitations and capabilities
- How improper fit, usage, or maintenance can compromise the protective effect of the respirator, and how to recognize the signs and symptoms that may limit or prevent the effective use of respirators
- How to use the respirator effectively in emergency situations, including when it malfunctions
- How to inspect, put on and remove, use, and check the seals of the respirator
- Proper procedures for maintenance and storage of the respirator
- The general requirements of this standard

Other Training Considerations

Training does not need to be repeated for a new employee if he/she can provide documentation of training within the 12 months prior.

Although annual HAZWOPER training may be utilized to help meet compliance with the training portion of this standard, training will be specific to the type of respirator used and the conditions at the job/work site.

Recordkeeping

Written information regarding medical evaluations, fit testing and the respiratory protection program will be maintained. Each office that falls under this standard will maintain their own written Respiratory Protection Program and corresponding documents (e.g., respirator inspection documentation).

The written medical opinion regarding respirator use and fit testing will be maintained in the employee files by the Corporate Health and Safety Manager/Administrator.

State Plans

The following states have standards that may exceed those of the federal Respiratory Protection standard. If your office or work location is in one of these states, please review the regulation and modify accordingly.

- Alaska – Section 1030
- California – Chapter 4, Subchapter 7
- Michigan – Health Standards and Safety Standards for General Industry
- Minnesota – CFR 1910.1000 - 1989 PEL's
- North Carolina – 13 NCAC 7F.0100
- Oregon – Division 2
- Washington – 296-24 & 296-62

ATTACHMENT 6-1
ARCADIS – RESPIRATORY PROTECTION – DEFINITIONS
(From CFR1910.134(b))

Air-purifying respirator means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

Atmosphere-supplying respirator means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

Canister or cartridge means a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

Demand respirator means an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

Emergency situation means any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

Employee exposure means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

End-of-service-life indicator (ESLI) means a system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

Escape-only respirator means a respirator intended to be used only for emergency exit.

Filter or air purifying element means a component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering facepiece (dust mask) means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium.

Fit factor means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

Helmet means a rigid respiratory inlet covering that also provides head protection against impact and penetration.

High efficiency particulate air (HEPA) filter means a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

Hood means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

Immediately dangerous to life or health (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Loose-fitting facepiece is a respiratory inlet covering designed to form a partial seal with the face.

Negative pressure respirator (tight fitting) means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Oxygen deficient atmosphere means an atmosphere with an oxygen content below 19.5% by volume.

Positive pressure respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Pressure demand respirator means a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

Qualitative fit test (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Respiratory inlet covering means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It

may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

Self-contained breathing apparatus (SCBA) means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

Service life means the period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

Supplied-air respirator (SAR) or airline respirator means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

Tight-fitting facepiece means a respiratory inlet covering that forms a complete seal with the face.

User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

ATTACHMENT 6-2
ARCADIS – RESPIRATORY PROTECTION - RESPIRATORY PROGRAM CHECKLIST

A. Program Administrator

1. _____ A written policy acknowledges employer and employee responsibility, and assigns program
responsibility, accountability, and authority.

2. _____ A Program Administrator has been designated who can coordinate all aspects of the program at the jobsite.

3. _____ Feasible engineering controls or work practices have been implemented.

4. Written procedures/statements covering the various aspects of the respirator program, including:
   - _____ respirator selection;
   - _____ purchase of MSHA/NIOSH certified equipment;
   - _____ medical aspects of respirator usage;
   - _____ issuance of equipment;
   - _____ fitting;
   - _____ training;
   - _____ maintenance, storage, and repair;
   - _____ inspection;
   - _____ use under special condition; and
   - _____ work area surveillance.

B. Program Operation

1. Respiratory protective equipment selection
   - _____ Work area conditions and worker exposures have been properly surveyed.
   - _____ Selections have been made by individuals knowledgeable of proper selection procedures.
   - _____ Only certified respirators are purchased and used which provide adequate protection for the specific hazard and concentration of the contaminant.
   - _____ Medical evaluation has been done to determine the user's ability to wear the selected respiratory protective equipment.
   - _____ Where practical, respirators have been issued to the users for their exclusive use.

2. Respiratory protective equipment fitting:
_____ Users are given the opportunity to try on several respirators to determine the best fit.
_____ Fit testing is done at appropriate intervals.
_____ Users who require corrective lenses are properly fitted.
_____ Users are prohibited from wearing contact lenses when using respirators.
_____ The facepiece-to-face seal tested is tested appropriately.
_____ Workers are prohibited from wearing respirators when they have facial hair or other characteristics may cause face seal leakage.

3. Respirator use in the work area
_____ Respirators are being worn correctly (i.e., head covering over respirator straps).
_____ Employees are keeping respirators on all the time while in the work area.

4. Maintenance of respiratory protective equipment

Cleaning and Disinfecting
_____ Respirators are cleaned and disinfected after each use when different people use the same devices, or as frequently as necessary for devices issued to individual users.
_____ Proper methods of cleaning and disinfecting are utilized.

Storage
_____ Respirators are stored so that they are protected from dust, sunlight, heat, excessive cold or moisture, or damaging chemicals.
_____ Respirators are stored in a proper storage facility to prevent them from deforming.
_____ Storage in lockers/tool boxes permitted only if respirator is in carrying case or carton.

Inspection
_____ Respirators are inspected before and after each use and during cleaning.
_____ Employees are instructed in inspection techniques.
_____ Respiratory protective equipment designated as "emergency use" is inspected at least monthly (in addition to after each use).
_____ A record is kept of the inspection of "emergency use" respiratory protective equipment.
_____ SCBA cylinders are inspected weekly to ensure that they are fully charged.

Repair
_____ Replacement parts are those approved by the manufacturer of the respirator.
_____ Repairs are made by manufacturers or manufacturer-trained individuals.

5. Special Use Conditions

_____ Procedures have been developed for respiratory protective equipment usage in atmospheres immediately dangerous to life or health.

_____ Procedures have been developed for equipment usage for entry into confined spaces.

6. Training

_____ Users are trained in proper respirator use, cleaning, and inspection.

_____ Users are trained in the basis for selection of respirators.

_____ Users demonstrate competency in all required areas of training.

Note any deficiencies and the action taken to correct same (include date the corrective action was taken):

_____

_____

_____

_____

_____

_____ _____

Signature Date

ATTACHMENT 6-3

ARCADIS – RESPIRATORY PROTECTION - RESOURCE GUIDE FOR NIOSH CERTIFIED RESPIRATORS

1. PARTICULATE RESPIRATORS CERTIFIEDUNDER 42 CFR PART 84

(http://www.cdc.gov/niosh/p84intro.html)

NOTICE
Only Non-powered Particulate Respirators are listed here!
Call 1-800-35-NIOSH for listings of other Certified Respirators

On July 10, 1995, a new NIOSH certification program for respirators went into effect. This regulation, 42 CFR Part 84, replaced the long standing regulation 30 CFR Part 11. (Commonly referred to as Part 84 and Part 11, respectively.) The new Part 84 covers all respirator types (self-contained breathing apparatus, air-line respirators, gas and vapor respirators, powered air-purifying respirators, etc.) but only the standards for non-powered, particulate respirators have changed from the provisions of the old Part 11.

The respirators listed here are ONLY non-powered (negative pressure) particulate respirators that have been tested and certified by NIOSH under provisions of the new Part 84. Many other respirator types, such as particulate filters in combination with gas and vapor cartridges, have been certified under provisions of Part 84 but are not included in this listing. Inquiries about other respirators may be made to 1-800-35-NIOSH. This list is updated periodically as additional non-powered, particulate respirators are certified.

2. CERTIFIED EQUIPMENT LIST (http://www.cdc.gov/niosh/celintro.html)

Introduction

The National Institute for Occupational Safety and Health, under the authorization of the Federal Mine Safety and Health Act of 1977 and the Occupational Safety and Health Act of 1970, provides a testing approval and certification program assuring commercial availability of safe personal protective devices and reliable industrial hazard measuring instruments. NIOSH develops improved performance regulations, tests and certifies (or approves) devices, and purchases approved and certified products on the open market to verify quality of manufacture.

The Certified Equipment List (CEL), a database of all certified respirators and coal mine dust personal sampler units, may be accessed on-line, or it may be downloaded. The on-line, searchable database is updated monthly. The downloadable CEL is updated semi-annually, as of March 31 and September 30.

ATTACHMENT 6-4
ARCADIS – RESPIRATORY PROTECTION - TYPES OF RESPIRATORS
(from Safetyinfo.com, "Respiratory Protection Fact Sheet")

Air Purifying Respirators have filters, cartridges, or canisters that remove contaminants from the air by passing the ambient air through the air-purifying element before it reaches the user.

- **Particulate Respirators**
  a. Capture particles in the air such as dust, mists and fumes.
  b. Do not protect against gases or vapors.
  c. Generally become more effective as particles accumulate on the filter and plug spaces between fibers.
  d. Filters should be replaced when user finds it difficult to breath through them.

- **Gas & Vapor Respirator**
  a. Are normally used when there are hazardous gases and vapors in the air.
  b. Use chemical filters (called cartridges or canisters) to remove dangerous gases or vapors.
  c. Do not protect against airborne particles.
  d. Are made to protect against specific gases or vapors.
  e. Provide protection only as long as the filter's absorbing capacity is not depleted.
  f. The service life of the filter depends upon many factors and can be estimated in various ways.

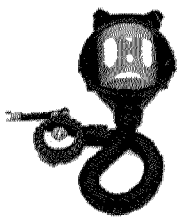
- **Combination Respirators**
  a. Are normally used in atmospheres what contain both gas and particulate hazards.
  b. Have both particulate and gas/vapor filters.
  c. May be heavier.

Air Supplying Respirators - supply clean air directly to the user from a source other than the air surrounding the user.

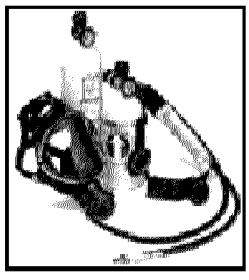
- **Air Supplied Respirators (also called airline respirators)**
  a. Makes use of a hose to deliver clean, safe air from a stationary source of compressed air.

  b. Provides clean air for long periods of time and are light weight for the user.

  c. Limits the range of user-mobility and
  d. Normally used when there are extended work periods required in atmospheres that are not immediately dangerous to life and health (IDLH).



- **Combination Respirators**
  a. Have an auxiliary self-contained air supply that can be used if the primary supply fails
  b. The self-contained portion can be small since it only needs to supply enough air for escape
  c. Can be used for entry into confined spaces
  d. Are normally used when there are extended work periods required in atmospheres that ***are or may be*** (IDLH)



- **Self Contained Breathing Apparatus (SCBA)**
  a. Consists of a wearable, clean-sir supply pack.
  b. Does not restrict movement with a hose connection.
  c. The closed-circuit type can provide air up to 4 hours.
  d. The open-circuit type can provide air for 30-60 minutes.
  e. Normally used when there is a short-time need to enter and escape from atmospheres which **are or may be** (IDLH).

ATTACHMENT 6-5

ARCADIS – RESPIRATORY PROTECITON

ASSIGNED PROTECTION FACTORS (APF)

RESPIRATOR CLASS AND TYPE	15.1.1.1 NIOSH APF
Air Purifying Respirators	
Filtering Facepiece	10
Half-Mask	10
Full-Facepiece	50
Powered Air Purifying Respirators	
Half-Mask	50
Full-Facepiece	50
Loose Fitting Facepiece	25
Hood or Helmet	25
Supplied Air Respirators	
Half-Mask-Demand	10
Half-Mask-Continuous	50
Half-Mask-Pressure Demand	1000
Full-Facepiece Demand	50
Full-Facepiece Continuous Flow	50
Full-Facepiece Pressure Demand	2000
Loose Fitting Facepiece	25
Hood or Helmet	25
Self Contained Breathing Apparatus (SCBA)	
Demand	50
Pressure Demand	10,000

ATTACHMENT 6-6
ARCADIS – RESPIRATORY PROTECTION
RESPIRATOR FIT TESTING PROTOCOL & PROTOCOL DESCRIPTIONS

Qualitative (QLFT) or **Quantitative** (QNFT) fit testing must be administered using OSHA-accepted protocol in CFR1910.134, AppA.

- QLFT testing involves the introduction of a harmless odiferous or irritating substance into the breathing zone around the respirator. If no odor or irritant is detected, a proper fit is indicated.

- QNFT testing offers more accurate, detailed information as it uses instrumentation to quantify the fit of a respirator.

QLFT may only be used to fit test negative-pressure air-purifying respirators that must achieve a fit factor of 100 or less.

If the fit factor, as determined by QNFT fit testing, is equal or greater than 100 for tight-fitting half facepieces, or equal to or greater than 500 for tight-fitting full facepieces, then the QNFT has been passed with that respirator.

Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators will be accomplished by performing QLFT or QNFT in the negative pressure mode, regardless of the mode of operation (negative or positive pressure) that is used for respiratory protection.

ATTACHMENT 6-7
ARCADIS – RESPIRATORY PROTECTION
PRELIMINARY STEPS IN RESPIRATOR FIT TESTING

Prior to the commencement of the fit test, the employee must be given a description of the fit test and a description of the exercises that he or she will be performing during fit testing.

Prior to the actual fit test, the employee must be shown how to put on a respirator, position it on the face, set strap tension, and determine an acceptable fit.

Next, the employee must be allowed to choose a respirator from a sufficient number of models and sizes so that he/she can find an acceptable and correctly fitting respirator.

The employee must be fit tested with the same make, model, style, and size of respirator that will be used.

Employees assigned more than one respirator must be fit tested for each respirator assigned.

Fit testing must take into account the position of the mask on the face, nose, and cheeks and if there is room for eye protection and room to talk.

Once an acceptable respirator is found, a user seal check must be conducted as outlined in Attachment 5-8.

The respirator to be tested must be worn for at least five minutes before the start of the fit test.

ATTACHMENT 6-8
ARCADIS – RESPIRATORY – USER SEAL CHECK PROCEDURES
(from CFR 1910.134 App B-1 Mandatory)

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

I. Facepiece Positive and/or Negative Pressure Checks

A. Positive pressure check
Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

B. Negative pressure check
Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

II. Manufacturer's Recommended User Seal Check Procedures

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

[63 FR 1152, Jan. 8, 1998]

ATTACHMENT 6-9
ARCADIS – RESPIRATORY PROTECITON – RESPIRATOR INSPECTION CHECKLISTS
(from Safetyinfo.com)

Air Purifying Respirator Inspection
Inspect Before Each Use and When Cleaning

Location: _____ Date: _____

Inspected By: _____ Make / Model #: _____

	Signature of person conducting Inspection
Satisfactory Functional Test of Respirator	
Facepiece: Clean, not distorted, no tears, no cracks	
Head Harness: Clean, no tears, no cracks no missing pieces. No loss of elasticity. No wear from buckle.	
Lens: Clean & Clear, no cracks, sealed to mask	
Exhalation Valve: Clean, good seal, no tears, tight fitting	
Inhalation Valve: Clean, good seal, no tears, tight fitting	
Canister/Filter: Clean, no defects, tight fitting	
Respirator Cleaned	

If any defects are found **DO NOT USE RESPIRATOR.**
Turn the respirator in to your supervisor immediately for repair or replacement.

ASR / SCBA Respirator Inspection
Inspect Before Each Use, When Cleaning and Monthly

Location: _____ Date: _____

Inspected By: _____ Unit #: _____

	Signature of person conducting Inspection
Functional check of ASR / SCBA	
Alarm: Works Properly	
Regulator: Functions Properly	
Facepiece: Clean, not distorted, no tears, no cracks	
Elastic Parts: Pliable no deterioration	
Head Harness: Clean, no tears, no cracks no missing pieces. No loss of elasticity. No wear from buckle.	
Lens: Clean & Clear, no cracks, sealed to mask	
Exhalation Valve: Clean, good seal, no tears, tight	
Inhalation Valve: Clean, good seal, no tears, tight	
Cylinder: No dents or gouges, fits tightly in band	
Cylinder: Hydro Test Date _____	
Gage: Cylinder >90% full, check gage face, indicator	
Harness: Clean, no wear, fully extended	
Demand Valve O-ring: clean, no tears, seated properly	
ASR / SCBA: Cleaned and reassembled after inspection & drying	

If any defects are found **DO NOT USE RESPIRATOR.**

Turn the respirator in to your supervisor immediately for repair or replacement.

ATTACHMENT 6-10
ARCADIS – RESPIRATORY PROTECTION - RESPIRATOR CLEANING PROCEDURES

(from CFR 1910.134, App B-2, Mandatory)

These procedures are general in nature, and the employer may use the cleaning recommendations provided by the manufacturer of the respirator(s) provided such procedures are as effective as those listed here. Equivalent effectiveness means that the procedures used must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried.

G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

H. Test the respirator to ensure that all components work properly.

Attachment 7

Material Safety Data Sheets

Attachment 8

OSHA Form 101 – Incident Report

Occupational Safety and Health Administration
Supplementary Record of
Occupational Injuries and Illnesses

U.S. Department of Labor

This form is required by Public Law 91-596 and must be kept in the establishment for 5 years.
Failure to maintain can result in the issuance of citations and assessment of penalties.

Case or File No.

Form Approved
O.M.B. No. 1218-0176

See OMB Disclosure Statement on reverse.

Employer

1. Name

2. Mail address (No. and street, city or town, State, and zip code)

3. Location, if different from mail address

Injured or Ill Employee

4 Name (First, middle, and last) | Social Security No.

5. Home address (No. and street, city or town, State, and zip code)

6. Age | 7. Sex (Check one) Male ☐ Female ☐

8. Occupation (Enter regular job title, not the specific activity he was performing at the time of injury.)

9. Department (Enter name of department or division in which the injured person is regularly employed, even though he may have been temporarily working in another department at the time of injuiry.)

The Accident or Exposure to Occupational Illness

If accident or exposure occurred on employer's premises, give address of plant or establishment in which it occurred. Do not indicated department or division within the plant or establishment. If accident occurred outside employer's premises at an identifiable address, give that address. If it occurred on a public highway or at any other place which cannot be identified by number and street, please provide place references locating the place of injury as accurately as possible.

10. Place of accident or exposure (No. and street, city or town, State, and zip code)

11. Was place of accident or exposure on employer's premises? Yes ☐ No ☐

12. What was the employee doing when injured? (Be specific. If he was using tools or equipment or handling material, name them and tell what he was doing with them.)

13. How did the accident occur? (Describe fully the events which resulted in the injury or occupational illness. Tell what happened and how it happened. Name any objects or substances involved and tell how they were involved. Give full details on all factors which led or contributed to the accident. Use separate sheet for additional space.)

Occupational Injury or Occupational Illness

14. Describe the injury or illness in detail and indicate the part of body affected. (E.g., amputation of right index finger at second joint; fracture of ribs; lead poisoning; dermatitis of left hand, etc.)

15. Name the object or substance which directly injured the employee. (For example, the machine or thing he struck against or which struck him; the vapor or poison he inhaled or swallowed; the chemical or radiation which irriatated his skin; or in cases of strains, hernias, etc., the thing he was lifting, pulling, etc.)

16. Date of injury or initial diagnosis of occupational illness | 17. Did employee die? (Check one) Yes ☐ No ☐

Other

18. Name and address of physician

19. If hospitalized, name and address of hospital

Date of report	Prepared by	Official position

OSHA No. 101 (Feb. 1981)

(See Next Page/Reverse)

SUPPLEMENTARY RECORD OF OCCUPATIONAL INJURIES AND ILLNESSES

To supplement the Log and Summary of Occupational Injuries and Illneses (OSHA No. 200), each establishment must maintain a record of each recordable occupational injury or illness. Worker's compensation, insurance, or other reports are acceptable as records if they contain all facts listed below or are supplemented to do so. If no suitable report is made for other purposes, this form (OSHA No. 101) may be used or the necessary facts can be listed on a separate plain sheet of paper. These records must also be available in the establishment without delay and at reasonable times for examination by representatives of the Department of Labor and the Department of Health and Human Services, and States accorded jurisdiction under the Act. The records must be maintained for a period of not less than five years following the end of the calendar year to which they relate.

Such records must contain at least the following facts:

1) About the employer - name, mail address, and location if different from mail address.

2) About the injured or ill employee - name, social security number, home address, age, sex, occupation, and department.

3) About the accident or exposure to occupational illness - place of accident or exposure, whether it was on employer's premises, what the employee was doing when injured, and how the accident occurred.

4) About the occupational injury or illness - description of the injury or illness, including part of the body affected, name of the object or substance which directly injured the employee; and date of injury or diagnosis of illness.

5) Other - name and address of physician; if hospitalized, name and address of hospital, date of report; and name and position of person preparing the report.

SEE *DEFINITIONS* ON THE BACK OF OSHA FORM 200.

OMB DISCLOSURE STATMENT

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DO NOT SEND THE COMPLETED FORM TO THE OFFICE SHOWN ABOVE

OSHA No. 101 (Feb. 1981)

Remedial Investigation and Interim Remedial Action Report

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

June 2005

PREPARED FOR

PSEG Services Corporation
80 Park Plaza
Newark, NJ 07102

ARCADIS

Remedial Investigation and Interim Remedial Action Report
PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

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Date:
June 2005

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G Baseline Ecological Evaluation Report

1 Introduction

ARCADIS, on behalf of PSEG Services Corporation (PSEG), has prepared this Remedial Investigation (RI) and Interim Remedial Action Report (RAR) to present the details and results of soil and groundwater investigation activities conducted in association with the release of diesel fuel (Incident Number 04-08-02-2350-16) at the PSEG Nuclear, LLC Salem Generating Station (the Station). The Site is located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. The Station location and layout are depicted on **Figures 1** and **2**, respectively. The remedial investigation was conducted in accordance with the Remedial Investigation Work Plan (RIWP) that was submitted to the New Jersey Department of Environmental Protection (NJDEP) in January 2005. The scope of work outlined in the RIWP was designed to investigate the extent of diesel fuel constituents in the shallow, water-bearing unit at the Station.

This report has been prepared in accordance with New Jersey Administrative Code (N.J.A.C.) Chapter 26E - Technical Requirements for Site Remediation (Technical Requirements).

1.1 Project Background

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the stormwater collection system just to the south of the Salem Unit 1 Fuel Handling Building. Investigation of the catch basin, which is identified as "Catch Basin 27" on **Figure 2**, revealed the presence of a red-dyed diesel fuel (the red-dye is more typical of a recent release of diesel fuel). At this time, PSEG notified the NJDEP through its spill hotline.

To prevent the migration of diesel fuel within the stormwater collection system, the storm drains upstream and downstream of Catch Basin 27 were temporarily blocked to isolate the affected section of piping. Further, a cover was placed over Catch Basin 27 to prevent rain water from entering. Investigations of the remainder of the stormwater system indicated that the diesel fuel had not migrated beyond Catch Basin 27, no diesel fuel was released to the Delaware River, and the diesel fuel in the catch basin was removed.

Investigations into the source of the diesel fuel focused on the underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tanks to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. The location of the underground piping is shown on **Figure 2**. PSEG performed a pressure test on this underground piping. The results revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot section of piping, PSEG subcontracted Praxair Services, Inc. to perform a "Tracer Tight" gas analysis. The results of this test showed that the location of the leak was directly adjacent to Catch Basin 27.

The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). Soil excavated from the piping area was stockpiled by PSEG pending waste characterization. Following characterization, the soil was disposed of by Clean Harbors. The soil disposal manifests are included as **Appendix A**. Separate-phase diesel fuel was observed on standing water within the excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation. Disposal manifests for the diesel fuel are also included in **Appendix A**.

In November 2004, PSEG initiated remedial investigation and interim product recovery actions. In accordance with the scope of work presented within the RIWP, soil borings were advanced at locations downgradient of the source area to delineate the horizontal extent of diesel related constituents of concern in soil. The soil borings were converted to monitoring/product recovery wells to facilitate the collection of groundwater samples and for the recovery of separate-phase diesel, if present. Interim remedial actions completed to date include the installation of a Spill Buster® Product Recovery System, a passive product skimmer, and the use of absorbent socks. The sections of this report present relevant facility information, the details and results of the soil and groundwater investigation activities completed to date, and the details and results of product recovery efforts completed to date. These sections are followed by conclusions and proposed investigation and product recovery activities.

1.2 Report Organization

This report contains eleven sections including this introduction:

- Section 2 – Station History;
- Section 3 – Station Setting;
- Section 4 - Facility Construction Details and Local Geology and Hydrogeology;
- Section 5 – Remedial Investigation;
- Section 6 – Interim Remedial Actions;
- Section 7 – Baseline Ecological Evaluation;
- Section 8 – Conclusions
- Section 9 – Proposed Actions;

- Section 10 – Request for Variance; and,
- Section 11 - References

The Station History Section (Section 2) provides an overview of the operating history of the Station and applicable regulations governing these operations;

The Station Setting section (Section 3) provides a detailed description of the environmental setting of the Station including topography, surface water features, climate, soil, and regional geology and hydrogeology;

The Facility Construction Details and Local Geology and Hydrogeology section (Section 4) provides a detailed description of the construction of the facility and the resulting influence on local geology and hydrogeology;

The Remedial Investigation section (Section 5) provides the details and results of soil and groundwater investigation activities completed to date;

The Interim Remedial Action section (Section 6) presents the details of interim remedial actions completed to date:

The Baseline Ecological Evaluation section (Section 7) provides the details and results of a baseline ecological evaluation conducted in accordance with N.J.A.C. 7:26E-3.11;

The Conclusions section (Section 8) presents a summary of the findings of the remedial investigation; and,

The Proposed Actions section (Section 9) presents recommendations for further actions based on the investigation findings;

The Request for Variance section (Section 10) presents a request for variance from the Technical Requirements for Site Remediation (N.J.A.C. 7:26E); and,

The References section (Section 11) provides publications referenced during the preparation of this report.

2 Station History

The following sections provide relevant site information regarding the facility's operating history and a review of applicable regulations relating to operations at the Station.

2.1 Operating History

PSEG Nuclear LLC operates and is part owner of the Salem Generating Station located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. PSEG Nuclear LLC (57.41%) and Exelon (42.59%) jointly own the Salem Generating Station. The Salem Generating Station is situated adjacent to the Hope Creek Generating Station, also located on Artificial Island. Both the Salem and Hope Creek Generating Stations (the Stations) are located on the eastern bank of the Delaware River. The Salem Generating Station encompasses an approximate 26-acre portion of Artificial Island.

The Salem Generating Station is composed of two nuclear generating units (Units 1 and 2) and one distillate oil fueled combustion turbine unit (Unit 3). Commercial operations of Units 1 and 2 commenced in 1976 and 1981, respectively. The combustion turbine unit commenced operations in 1972. The nuclear generating units operate as base load units and the combustion turbine unit operates as a peaking unit. The Salem Generating Station has a combined generating capacity of approximately 2,400 MW. Over its operational life, the Salem Generating Station has experienced no significant changes in its operation.

2.2 Regulatory Review

Regulatory oversight for the Salem Generating Station, and other nuclear generating stations, is provided by both federal and state agencies. These agencies ensure that the stations are designed, constructed, licensed and operate in a matter that maximizes the safe containment and management of radioactive materials. These agencies also ensure that sufficient funding mechanisms have been established, are adequately funded, and will be available to decommission the nuclear generating stations at the end of their life cycle.

On the federal and state levels, the United States Nuclear Regulatory Commission (USNRC) and the New Jersey Department of Environmental Protection Bureau of Nuclear Engineering (NJDEP-BNE) conduct licensing and oversight of the Station. Oversight by the NJDEP-BNE and USNRC includes periodic inspections and conducting environmental radiological monitoring.

3 Station Setting

The following sections provide information regarding the environmental setting of the Salem Generating Station, including land use, the environmental setting, precipitation and drainage, local geology and local hydrogeology.

3.1 Land Use

PSEG Nuclear LLC owns and/or controls an approximately 740-acre area of Artificial Island that is situated adjacent to and surrounds the Salem and Hope Creek Generating Stations. This area contains administrative and support facilities used by the Stations, the Hope Creek Switch Yard, the Salem Switch Yard, and undeveloped vacant land. With the exception of the Salem Generating Stations (Units 1 through 3) and the Salem Switchyard, the remaining acreage is considered to be the Hope Creek Generating Station.

The zoning classification for the Salem Generating Station is industrial. The land adjacent to the Salem Generating Station is zoned for industrial and residential or agricultural use.

3.2 Environmental Setting

The Salem Generating Station is located on a portion of Artificial Island that borders the Delaware Estuary. The Estuary, in the location of the Salem Generating Station, is a tidal, brackish river, located in an area designated as Zone 5 by the Delaware River Basin Commission.

The United States Army Corps of Engineers, beginning in the early twentieth century, created Artificial Island by depositing hydraulic dredging spoils within a diked area established around a natural sand bar that projected into the Delaware River. Prior to construction of the Salem Generating Station, the property was vacant, undeveloped, low-lying land.

3.3 Topography and Station Drainage

The topography at the Salem Generating Station is relatively flat with limited local relief. Topographic contours for the Station are included on **Figure 2**. Stormwater is managed in accordance with the Salem Generating Station New Jersey Pollution Discharge Elimination System (NJPDES) permit and Stormwater Pollution Prevention Plan. Stormwater is collected in storm drains and routed to the Delaware River for discharge. Stormwater from the major petroleum storage and handling areas is routed to the oil/water separator prior to discharge.

3.4 Climate and Precipitation

Salem County is located in southwestern New Jersey. The county's climate is considered to be humid and temperate, as the climate in this county is readily influenced by its proximity to the Delaware Bay. Coastal storms are not uncommon in this region and can produce high winds and heavy rainfall, which can cause wind damage and flooding in low-lying areas.

Wind direction in this region is dependent upon the season; during the summer, winds are typically from the southwest while during the winter winds are commonly from the northwest. Temperatures vary by season and the maximum expected high temperature for a given year is 96 degrees Fahrenheit, while the minimum expected yearly low temperature is minus 2 degrees Fahrenheit. The average annual precipitation total is 39.9 inches.

3.5 Regional Geology

The Station is located in the Atlantic Coastal Plain Physiographic Province. This area is characterized by relatively flat to gently undulating terrain, underlain by unconsolidated sediments that increase in thickness to the southeast. These sediments range in age from Holocene to Cretaceous (0 to 146 million years old), are primarily comprised of clay, silt, sand, and gravel, and are generally classified as continental, coastal, or marine in nature. Published geologic mapping indicates that the basement rock beneath these sediments (in the area of the Station) is metamorphic schist of the Wissahickon Formation, which is Pre-Cambrian in age (570 to 900 million years old).

The unconsolidated overburden at the Salem and Hope Creek Generating Stations consists of approximately 25 to 40 feet of dredge spoils, engineered fill material (cofferdam), tidal marsh deposits and riverbed deposits. The engineered fill, composed mainly of silt, silty clay, sand, and gravel, replaced the dredge spoils within the cofferdam during the construction of the Station. Due to the composition and nature of the engineered fill, the hydraulic conductivity of this material is very low, thus limiting the extent and rate of groundwater movement. Below the engineered fill there is an approximate five-foot layer of tidal marsh deposits consisting of silty peat and organic silt and meadow mat. The tidal marsh deposits are semi-confining. Beneath the tidal marsh deposits are approximately ten feet of discontinuous Quaternary Age riverbed deposits consisting of sand and gravel. The engineered fill, the tidal marsh deposits and the riverbed deposits, combine to form the water table aquifer (see Section 3.6). Beneath the surface water aquifer, in order of increasing depth, are the following geologic formations:

Clay, Confining Unit – Beneath the shallow, riverbed and other deposits is a clay, confining unit that separates the shallow unit from the deeper Vincentown Formation. Conflicting geologic reports suggest that the clay, confining unit is either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits (USGS 1979 and 1999). Previous investigations conducted at the facility indicate that the clay, confining unit is laterally extensive beneath the Station.

Vincentown Formation – The Vincentown Formation occurs from a depth of approximately 55 feet bgs to a depth of 135 feet bgs and consists of a competent, greenish-gray, fine to medium sand with some silt, shell fragments, feldspar and glauconite.

Hornerstown Formation – The Hornerstown Formation is a highly glauconitic, clayey, dark green sand that contains small percentages of quartz grains and apatite pellets. The Hornerstown Formation unconformably overlies the Navesink Formation and is unconformably overlain by the Vincentown Formation. The Hornerstown Formation occurs from approximately 135 to 145 feet bgs.

Navesink Formation – The Navesink Formation is characteristically a glauconitic sand with varying amounts of silt and clay. It is brown or dark green to blue-black and has a shell bed at its base. The upper part of the formation is less glauconitic, more clayey, more micaceous, and lighter in color. The Navesink Formation conformably overlies the Mount Laurel Sand (USGS 1969). The contact with the overlying Hornerstown Formation is gradational. The Navesink Formation is encountered from approximately 145 to 170 feet bgs.

Mount Laurel-Wenonah Formation – The Mount Laurel-Wenonah Formation consists of a clayey, medium-grained sand with some gravel, feldspar and glauconite. In the vicinity of the Station, the Mount Laurel-Wenonah Formation is approximately 100 hundred feet thick and occurs from 170 to 270 feet bgs.

Beneath the Mount Laurel-Wenonah Formation, more than 1,000 feet of Upper Cretaceous sediments overlie the crystalline bedrock. The Upper Cretaceous sediments include in descending order: the Marshalltown Formation (gray, fine sand); the Englishtown Formation (yellow-brown, fine sand); the Woodbury Clay (dark gray, stiff, silty clay); the Merchantville Formation (dark green clay); the Magothy Formation (coarse to fine silt with little fine sand); and the Raritan and Potomac Formations (interbedded sand, gravelly sand and clay).

3.6 Regional Hydrogeology

There are four primary water bearing formations (aquifers) underlying the Station: 1) the shallow, water-bearing unit; 2) the Vincentown Formation; 3) the Mount Laurel-Wenonah Formations; and, 4) the Potomac-Raritan-Magothy Formations. The shallow, water-bearing unit, which consists of the dredge spoils, engineered fill, tidal marsh deposits and the discontinuous Quaternary riverbed deposits, occurs between approximately 10 to 40 feet bgs. In general, the dredge spoils, engineered fill and tidal marsh deposits are characterized by low permeability. Occasional lenses of sand within the dredge spoils may contain perched water within a few feet of the ground surface. The groundwater in the water table aquifer is generally brackish, with flow to the southeast and a gradient of approximately 0.007 feet/feet.

A clay, confining unit identified as either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits separates the shallow, water-bearing unit from

the deeper Vincentown Formation. As stated previously, investigations conducted at the facility indicate that the clay, confining unit is laterally extensive beneath the Station.

The Vincentown Formation, which occurs from approximately 55 to 135 feet bgs, is a semi-confined to confined aquifer under artesian conditions. Groundwater in the Vincentown Formation generally flows from north to south with a gradient of approximately 0.003 feet/feet. Regionally, the Vincentown Formation is a water-producing aquifer, which supplies potable water to domestic wells in Salem County. Groundwater in the aquifer is moderately hard with high iron content. Saltwater-intrusions occur near the Delaware River, where water quality is brackish and non-potable.

The Hornerstown and Navesink confining units separate the Vincentown Formation from the Mount Laurel-Wenonah Formations. The Mount Laurel-Wenonah Formations occur from approximately 135 to 170 feet bgs. The Station has two potable and fire-water supply wells screened in this formation.

The deepest of the water bearing formations is the Potomac-Raritan-Magothy Formation. In Salem County, the Potomac-Raritan-Magothy Formation occurs at depths in excess of 500 feet bgs. This is the primary water producing aquifer for New Jersey. Four potable and fire-water supply wells at the Station are screened in the Potomac-Raritan-Magothy Formation at depths ranging from 800 to 1,100 feet bgs. The Potomac-Raritan-Magothy Formation is bounded by the Merchantville Formation above and below by the Wissahickon Schist basement rock. The crystalline basement rock of the Wissahickon Schist is not considered a productive aquifer and only locally transmits water from secondary porosity (i.e., fractures and faults).

4 Facility Construction Details and Local Geology and Hydrogeology

The construction of the Salem Generating Station has caused significant changes to the local geology and hydrogeology. Within the footprint of the cofferdam surrounding Units 1 and 2 (see Figure 2), the majority of original Artificial Island materials were removed to a depth of 70 feet bgs. The following sections, which contain information presented in a Remedial Investigation Report (RIR) previously prepared for a separate investigation conducted at the Station (ARCADIS 2004), describe the conditions at Artificial Island prior to the construction of the Station, and detail how the construction of the Station has altered the local geology.

4.1 Pre-Facility Construction

The Station is located on the southern tip of what was once a natural sand bar projecting into the Delaware River. The area between the sand bar and the mainland had been used as

a dredge spoil deposit area. In 1899, a timber sheetpile wall was installed around the perimeter of the sand bar. Over the next 50 or so years the area was used as a spoil deposit area for material collected during the dredging of the Delaware River. Riprap was added to the perimeter when the timbers began to degrade. The area landward of Artificial Island has remained a tidal marsh.

4.2 Facility Construction

The construction of the Station has resulted in significant changes to the local geology. It was necessary to remove and rework much of the soil in the area of the Station in order to facilitate construction. For the purposes of this report, the description of the facility construction is limited to the area within the cofferdam; however, it should be noted that the local geology beyond the limits of the cofferdam was also significantly modified. The extent of the cofferdam is shown on **Figure 2**.

The cellular cofferdam, which encircled the excavation for all the Class I structures (e.g., containment, fuel handling, and auxiliary buildings), was constructed of interlocking sheet piling driven from an approximate depth of 23 feet below existing grade (approximately 77 feet plant datum [PD] or -12.92 feet above mean sea level [amsl NAVD 1988]). The cofferdam consists of 24 circular cells, approximately 60.5 feet in diameter with connecting arcs, that were advanced from this depth to approximately 10 feet into the Vincentown Formation to an elevation of 17 feet PD (-72.92 feet amsl). The cofferdam sections are of two different heights, 50 feet and 60 feet. The elevation of the top of the cofferdam is 77 feet PD (-12.92 feet amsl) on the north, south and west sides. The elevation of the eastern side is 67 feet PD (-22.92 feet amsl) providing access and a foundation for the return circulating water pipes and associated thrust block.

The inside area of the cofferdam sections were excavated to elevation 27 feet PD (-62.92 feet amsl). A vertical steel wall was added inside each individual cofferdam section to divide the sections approximately in half. The inner half of the individual cofferdam sections, or the section facing the building foundations, was then filled to the top with lean concrete. The area contained by the entire cofferdam structure was then excavated to the Vincentown Formation for placement of a lean concrete mat that served as the foundation for the construction of the structures within the cofferdam. During this stage of the excavation, qualified personnel visually inspected the bottom of the excavation to verify that the excavation had reached the top of the Vincentown Formation prior to placing any lean concrete.

Prior to the completion of the excavation, at approximately elevation 45 feet PD (-44.92 feet amsl), 15 exploratory borings were drilled through the remaining Kirkwood Formation and into the underlying Vincentown to verify the depth to the formation. These additional borings showed no measurable differences from the study borings.

Based on a review of available documents, the top of the Vincentown Formation in the area of the cofferdam ranges between 27 and 30 feet PD (-62.92 to –65.92 feet amsl).

When the surface of the Vincentown Formation was reached, the area was cleared of loose soil and lean concrete was poured directly onto the exposed Vincentown Formation. The station construction drawings indicate that the base of the first lean concrete pour was at 30 feet PD (-59.92).

The cofferdam serves as a basin in which the Class I structures were constructed. Prior to construction of the primary structures, a lean concrete mat ranging in thickness from 5 to 50 feet was placed on top of the Vincentown Formation for support of the structures. Following placement of the lean concrete, the Auxiliary Building, Fuel Handling Buildings and Reactor Containment Buildings were constructed. The remainder of the excavation within the cofferdam was then backfilled with structural fill meeting the design specifications of the Station.

4.3 Local Geology and Hydrogeology

The soils removed from within the cofferdam were not used to backfill the completed structure because the hydraulically placed fill and other riverbed deposits underlying Artificial Island did not meet the building design specifications for the Station. Therefore, it was necessary to import construction or structural fill to build the facility. The structural fill was placed between and around the Auxiliary Building, Fuel Handling Buildings, Units 1 and 2, portions of the cofferdam, above the return circulating water pipes, and from the top of the clay, confining-unit to the land surface in the portions of the area between the cofferdam and the circulating water discharge pipes.

The structural fill used at the station was obtained from a number of sources in New Jersey and Delaware. One fill source used in the area of this investigation was the Hinchner Pit. While the location of the borrow source was not identified, the material was described as yellowish-brown fine to medium sand with a trace of silt and clay.

Details of groundwater investigation activities historically completed at the facility indicate that groundwater elevations in the shallow, water-bearing unit within the limits of the cofferdam are generally higher than those outside the limits of the cofferdam. This is expected considering permeability differences that exist between the structural fill within the limits of the cofferdam and the hydraulic fill beyond the limits of the cofferdam, resulting in a groundwater mound. Due to the mound, groundwater flows radially outward from the cofferdam. The observed mounding effect dissipates quickly. A groundwater elevation contour map for the shallow, water-bearing unit under ambient (i.e., non-pumping) conditions is presented on **Figure 3** (ARCADIS 2004). The groundwater elevation contour map was prepared using water level measurements obtained during a

previously completed and unrelated investigation at the facility. Beyond the limits of the cofferdam, groundwater flow is generally from the center of the island (northeast of the Salem Generating Station) towards the Delaware River.

Facility construction details and local geology are highlighted on cross section diagrams through various Station features (**Figures 4** and **5**). The cross sections provide details obtained during the remedial investigation, which are discussed in the following sections.

5 Remedial Investigation

As presented in the RIWP, the remedial investigation conducted in association with the diesel release had the following four primary goals: 1) to characterize the vertical and horizontal extent of diesel-related constituents in soil; 2) to determine if separate-phase diesel fuel was present on the water table and to what extent; 3) to characterize the extent of dissolved-phase diesel-related constituents in groundwater downgradient of the release area; and, 4) to determine the need for further action. The scope of work developed to achieve these objectives included the advancement of four soil borings at various locations downgradient of the source of the diesel release for collecting soil samples, the installation of five monitoring wells, and the monitoring of water/product levels and the collection of groundwater samples from six monitoring wells (the five recently installed monitoring wells and one existing monitoring well. The following sections provide the details and results of these investigation activities.

5.1 Soil Investigation

Soil investigation activities were completed between November 8th and 9th 2004 and consisted of the advancement of four soil borings (Borings D-2 through D-5) for the collection of soil samples. The locations of the soil borings relative to the source of the diesel release are identified on **Figure 6**. Due to the presence of diesel-fuel oil, soil samples were not taken from the source area soil boring (D-1). Prior to initiating soil sampling activities, a water level measurement was obtained from Well X, located adjacent to the northwest corner of the Fuel Handling Building (see **Figure 6**) to determine the appropriate depth for sample collection. Soil samples were obtained from the borings at a depth of six inches above the water table as measured in Well X. A second sample was obtained from Soil Boring D-4 to evaluate the vertical distribution of diesel related constituents of concern in soil.

Due to the extensive, facility-critical infrastructure within the area of investigation, both the boring locations and advancement methods were limited. Soil Borings D-2 through D-5, advanced at accessible locations beyond the source area of the diesel release to the south and west, were advanced using vacuum excavation equipment to ensure that, if encountered, subsurface infrastructure would not be damaged. Soil samples were obtained

from each boring ahead of the vacuum excavation using a hand auger. The soil samples were submitted to Accutest Laboratories, of Dayton, New Jersey, and were analyzed for total petroleum hydrocarbons (TPHC). In accordance with N.J.A.C. 7:26E-2.1(d), soil samples were also placed on hold for volatile organic compounds (VOCs) analysis pending the TPHC results. Based on the results of the TPHC analysis, which are summarized in **Table 1**, analysis for VOCs was not required per N.J.A.C 7:26E-2.1(d). Copies of the laboratory reports and the associated HazSite deliverables for the soil samples are included in **Appendix B**. Further details regarding the analytical results are as follows:

- Analytical results of the soil samples submitted for TPHC analysis did not indicate concentrations above laboratory detection limits. The method detection limits ranged from 26 to 32 milligrams per kilogram (mg/kg).

- Results of the soil investigation indicate that the release of diesel fuel has not migrated a significant distance beyond the source area and that diesel related constituents of concern in soil are likely limited to the source area and the "smear-zone" where separate phase diesel has migrated. The estimated extent to which separate-phase diesel has migrated is shown on **Figure 8**. Locations for advancing soil borings are limited due to the presence of extensive subsurface infrastructure. Due to these limitations, the extent of diesel-related constituents of concern in soil can not be further refined.

5.2 Groundwater Investigation

The investigation of groundwater consisted of the installation of five monitoring wells within and downgradient of the source area to evaluate the extent of dissolved-phase and separate-phase diesel. Following installation, product gauging and groundwater sampling were initiated, including the gauging and sampling of six monitoring wells (the five newly installed wells, and one previously existing monitoring well). The following sections provide a summary of the groundwater investigation details and results.

5.2.1 Monitoring Well Installation

Five groundwater monitoring wells (Well AU, Well AV, Well AW, Well AY, and Well AZ) were installed between November 8 and 9, 2004. The five monitoring wells were installed using vacuum excavation techniques due to the extensive subsurface utilities and/or infrastructure described in the previous section. The locations and well construction details of the groundwater monitoring wells are shown on **Figure 3** and are summarized in **Table 2**, respectively. NJDEP Bureau of Water Allocation Monitoring Well Records, well construction logs, and boring logs are included in **Appendix C**. The purposes for the monitoring wells are as follows:

- Well AU was installed within a temporary PVC sleeve that was placed within the excavation opened to expose the underground piping prior to backfilling. Due to the presence of extensive subsurface infrastructure encountered during the excavation, Well AU could not be installed beyond a depth of approximately seven feet below ground surface (bgs). Separate-phase diesel fuel was observed within the open excavation prior to backfilling and in Well AU after installation was completed. The primary purpose of Well AU has been to facilitate product recovery using the Spill Buster® active product recovery unit. Details regarding these product recovery efforts are presented in Section 6;

- Monitoring Wells AV and AW were installed at the locations of Soil Borings D-3 and D-2, respectively. Using vacuum excavation equipment, the boreholes of D-2 and D-3 were advanced to approximately ten feet bgs and the monitoring wells were installed within the borehole. Wells AV and AW were installed to delineate the extent of separate-phase diesel fuel downgradient of the source area based on knowledge of groundwater flow direction obtained from previously completed and unrelated investigations. Following installation, separate-phase diesel fuel was detected in Well AW. In response, a passive skimmer product recovery setup was installed within Well AW. Details regarding the product recovery efforts for this well are presented in Section 6;

- Monitoring Wells AY and AZ were installed at the locations of Soil Borings D-4 and D-5, respectively. Using vacuum excavation equipment, the boreholes of D-4 and D-5 were advanced to approximately ten feet bgs and the monitoring wells were installed within the borehole. These wells were installed to delineate the extent of dissolved-phase diesel constituents in groundwater downgradient of the source area.

Monitoring Well AU was designed for use as a product recovery well and is constructed of six-inch diameter Schedule 40 PVC well screen and riser. Well AV, Well AW, Well AY, and Well AZ were constructed of 4-inch diameter Schedule 40 PVC well screen and riser. A sand filter pack was placed in the annular space around the screen interval followed by an appropriate bentonite seal and grouting material. Well AU was completed at ground surface with a two-foot square flush-grade well vault to facilitate the installation of the Spill Buster® unit. Well AV, Well AW, Well AY, and Well AZ were completed with 12-inch round flush-grade manways.

A summary of the well completion details (i.e., total depth, screened interval) is presented in **Table 2**. The total depth and screen interval for the monitoring wells were field-constructed based on the facility-related subsurface infrastructure observed at each location. Therefore, well construction details varied slightly from the specifications presented in the RIWP. In accordance with N.J.A.C. 7:26E-4.4(g) [8], the proposed monitoring wells were

developed to yield a non-turbid discharge following installation. The monitoring wells were developed using a combination of surging and pumping techniques. In the instances where separate-phase diesel fuel was observed following installation (Wells AU and AW), product was removed from the well using a disposable bailer prior to development. In accordance with N.J.A.C. 7:26E-4.4(g) [7], the Station monitoring wells were surveyed by a New Jersey-licensed surveyor. Monitoring Well Certification Form Bs are provided in **Appendix D**.

5.2.2 Groundwater Monitoring

Following the installation of the wells, quarterly groundwater monitoring was initiated with events completed in December 2004 and March 2005. Quarterly groundwater monitoring events consist of the gauging of water levels and separate-phase product and the collection and analysis of groundwater samples from Well AV, Well AW, Well AY, Well AZ, and Well X. The following sections provide details regarding these activities.

5.2.2.1 Water Level and Separate-Phase Product Measurements

Prior to the initiation of groundwater sampling activities, water-level and separate phase product measurements were obtained from each monitoring well. Water-level and separate phase product measurements were also collected during routine maintenance of the Spill Buster® unit and the other product recovery methods discussed in Section 6. A summary of the product gauging and groundwater elevation data is presented in **Table 3**.

With the exception of a one time detection of product in Well AZ, measurable product is limited to the area of Well AU and downgradient towards Well AW. On February 16, 2005, PSEG initiated the operation of a groundwater extraction system associated with an ongoing and unrelated groundwater remediation. The groundwater extraction system includes the use of Well AO located approximately five feet to the east of Well AZ. The location of Well AO, as well as groundwater elevation contours observed on March 23, 2005 during the operation of the groundwater extraction system, is shown on **Figure 7**. Due to the operation of the groundwater extraction system and the resulting groundwater elevation contours, separate-phase product migrated in the direction of Well AO and 0.09 feet of product was observed in Well AZ. Immediately (i.e., same day) following the detection of separate-phase product in Well AZ, the operation of the groundwater extraction pump in Well AO ceased. An organophilic adsorbent sock was placed in Well AZ to recover any accumulated product. Since pumping from Well AO was ceased, separate-phase product has not been detected in Well AZ. Sorbent socks have been deployed in Well AZ to recover any residual product that may still be present.

The extent to which product has migrated to date has been controlled by the subsurface infrastructure located within the investigation area. As shown on the facility cross sections

(**Figures 4** and **5**), the foundation for the primary water storage tank located to the west of Well AU has limited the migration of separate phase product in this direction. Conversely, the service water piping that runs to the south from Well AU and the source area likely provided a preferential pathway for the migration of separate phase product towards Well AW. With the repair of the diesel fuel underground piping, the ongoing product recovery efforts being conducted in Well AU and Well AW will control further migration of product. Separate phase product measurements obtained from Well AY, located to the south and downgradient of Well AW along the service water pipes, provide delineation of the extent of separate phase product.

5.2.2.2 Monitoring Well Sampling

Depth-to-water and separate-phase product thickness measurements were collected using an electronic oil/water interface probe prior to initiating sampling activities. Groundwater samples were only collected from monitoring wells that did not indicate a measurable thickness (i.e., greater than 0.01 feet) of separate-phase product. Well AU and Well AW were not sampled during either sampling event due to the presence of separate phase product in these wells. In accordance with the Station's operating permit, a grab groundwater sample was also collected from wells being sampled prior to initiating sampling activities for radionuclide screening, which is required prior to releasing the samples from the facility for offsite analysis. Based on the results of the radionuclide screening the groundwater sample from Well AZ was not submitted for laboratory analysis during the March 2005 event. On April 18, 2005, ARCADIS personnel returned to the Site in an effort to obtain a groundwater sample from Well AZ for laboratory analysis and again the sample could not be released from the facility based on the results of the radionuclide screening.

Due to the sensitive nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples were collected utilizing the low-flow sampling methodology. Sample collection procedures, as well as quality control/quality assurance (QA/QC) sampling requirements, were outlined in the RIWP. The groundwater biogeochemical parameters and sampling logs are included in **Table 4** and **Appendix E**, respectively. Groundwater samples were submitted to Accutest Laboratories of Dayton, New Jersey. The groundwater samples were analyzed for priority pollutant list semi-volatile organics (SVOCs) and VOCs including a library search. The laboratory report and HazSite deliverables for the groundwater monitoring events are included as **Appendix F**. The analytical results for the groundwater samples taken in December 2004 and March 2005 are summarized in **Tables 5** and **6**, and indicate the following:

- The analytical results of the groundwater samples collected during the December 2004 and March 2005 sampling events indicated that concentrations of diesel

related constituents of concern (both VOC and SVOC) were below the New Jersey Groundwater Quality Criteria for Class IIA aquifers (GWQC).

- Of the VOCs, only tetrachloroethene was detected above the laboratory detection limit. The groundwater sample collected from Well X in December 2004 indicated a tetrachloroethene concentration of 0.87 µg/l (micrograms per liter, equivalent to parts per billion), which is below the GWQC for tetrachloroethene (1 µg/L). Tetrachloroethene was below the laboratory detection limit in the groundwater sample collected from Well X in March 2005. The detection of tetrachloroethene in Well X appears to be an anomaly and may have been a result of laboratory contamination.

- With the exception of the groundwater samples collected from Well AV, which is located to the east of the service water pipes, the SVOC constituents were below laboratory detection limits. Analytical results of the groundwater samples collected from Well AV indicated concentrations of the following SVOCs above laboratory detection limits but below their respective GWQC: acenaphthalene, carbozole, fluorine, 2-methylnaphthalene, naphthalene, and phenanthrene. The detection of these constituents is consistent with a diesel release.

6 Interim Remedial Actions

The extent of product observed to date has been limited to Well AU, installed within the source area, and Well AW, installed immediately downgradient of the source area along the service water piping. Separate phase product was detected during a single gauging event in Well AZ and migrated to this area under the influence of pumping in Well AO. Product recovery efforts completed to date have included the installation of the Spill Buster® active product recovery system in Well AU and Well AW at different times, the installation and operation of a passive skimmer in Well AW, and the installation of sorbent socks within Well AZ. The following sections provide the details and results of product recovery efforts completed to date.

6.1 Product Recovery Details

Following installation of the monitoring wells, water-level and product gauging activities were initiated to evaluate the extent of separate phase product in the subsurface and to evaluate product recovery methods. As presented in the RIWP, a Spill Buster® unit was installed in the source area well (Well AU) to facilitate product recovery. The Spill Buster® system is designed to remove only product (i.e., no water) with a down-well conductivity sensor and pump apparatus, an adjustable depth, wellhead auto-seek unit, and integrated control panel. Recovered product is conveyed to a nearby storage tank that is equipped with a high-level auto shut-off interfaced with the Spill Buster® control panel.

Based on the initial water-level and separate phase product measurements, the Spill Buster® unit, was instead installed in Well AW due to the greater apparent thickness of separate-phase product. The Spill Buster® unit was installed on December 22, 2004 and product recovery efforts were initiated. Following the initial startup of the Spill Buster® unit, product recovery rates were monitored and it became apparent that, although Well AW indicated a greater product thickness, the recovery rate of product from this well (less than 0.25 gallons per day) was limited. On January 17, 2005, the Spill Buster® unit was transferred to Well AU. Operation of the Spill Buster® Unit in Well AU was much more effective than previous efforts in Well AW. Separate phase product recovery rates from Well AU have been maintained at an approximately two gallons per day. Discussions regarding the results of product recovery rates (e.g., cumulative product recovered to date) are presented in Section 6.2. With the continued presence of separate phase product and the limited product recovery rate in Well AW, a passive skimmer setup was installed on April 8, 2005.

As presented in section 5.2.2.1, separate-phase product was detected in Well AZ following the initiation of pumping in Well AO. Following this detection, pumping at Well AO was immediately discontinued and, since then, product has not been observed in Well AZ. Sorbent socks have been deployed in Well AZ to recover any residual product that may still be present; however, there has been no indication of additional product (i.e., sheen, sock staining, etc.) in Well AZ since the cessation of pumping.

6.2 Product Recovery Results

As presented in Section 6.1, product recovery efforts to date have consisted of the installation and operation of a Spill Buster® in Well AU and Well AW, the use of a passive skimmer in Well AW, and the deployment of sorbent socks within Well AZ. Operation of the Spill Buster® unit in Well AU has resulted in the recovery of approximately 190 gallons of separate phase product through April 8, 2005 at a consistent rate of approximately two gallons per day. **Figure 9** provides details regarding the cumulative product recovered with the Spill Buster® unit through April 8, 2005. Operation of the passive skimmer in Well AW has resulted in the recovery of approximately 0.5 to 0.75 gallons of separate phase product per week. The skimmer is retrieved from the well two to three times per week, and the recovered product is transferred to the storage tank utilized by the Spill Buster® unit.

7 Baseline Ecological Evaluation

In accordance with N.J.A.C. 7:26E-3.11, a baseline ecological evaluation was performed to identify the following: 1) constituents of potential environmental concern in soil and groundwater; 2) environmentally sensitive areas; and, 3) potential contaminant migration pathways. The results of the baseline ecological evaluation, which are presented in **Appendix G**, concluded that no further ecological evaluation is warranted.

8 Conclusions

The following detailed conclusions are based on the results of investigation activities and interim remedial actions completed to date:

- On August 2, 2004, a diesel fuel odor was observed in Catch Basin 27 just to the south of the Salem Unit 1 Fuel Handling Building. Investigation of the catch basin, revealed the presence of a red-dyed diesel fuel. Investigations into the source of the diesel fuel revealed the presence of underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tank to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers;

- PSEG performed a pressure test on the underground piping, which revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. The location of the leak along the 300-foot section of piping was pinpointed using a "Tracer Tight" gas analysis. After the location of the leak was pinpointed, an excavation was opened to expose and repair the leak. Soil excavated from adjacent to and around the piping and approximately 150 gallons of separate-phase product were removed and disposed;

- Soil investigation activities consisted of the advancement of four soil borings. Due to the presence of extensive, facility-critical infrastructure within the area of investigation, the boring locations were limited. Soil samples were submitted for TPHC analysis. Analytical results of the soil samples submitted for TPHC analysis did not indicate concentrations above laboratory detection limits. The method detection limits ranged from 26 to 32 milligrams per kilogram (mg/kg).

- Results of the soil investigation indicate that the release of diesel fuel has not migrated a significant distance beyond the source area and that diesel related constituents of concern in soil are likely limited to the source area and the "smear-zone" where separate phase diesel has migrated. The estimated extent to which separate phase diesel has migrated is shown on **Figure 8**. Due to the extensive subsurface infrastructure, locations for advancing soil borings are limited. Due to these limitations, the extent of diesel-related constituents of concern in soil must be inferred with the existing groundwater monitoring well network;

- The investigation of groundwater consisted of the installation of five monitoring wells within and downgradient of the source area to evaluate the extent of dissolved-phase and separate-phase diesel. Water-level and product gauging and groundwater sampling were completed following installation of the wells. These activities utilized six monitoring wells (the five newly installed wells, and one previously existing monitoring well);

- Water-level and product measurements indicate that the extent of measurable product is limited to the area of Well AU, located at the source area, and Well AW, located downgradient of the source area along the service water pipes. Measurable product was detected during a single gauging event in Well AZ. Product migrated to this well under the influence of unrelated groundwater pumping in Well AO, which has subsequently been discontinued;

- The extent to which product has migrated is controlled by the significant facility-related subsurface infrastructure. The foundation for the primary water storage tank located to the west of Well AU prevents the migration of separate phase product in this direction. The service water piping that runs to the south from Well AU provided a preferential pathway for the migration of separate phase product towards Well AW;

- Product recovery efforts completed to date have included the installation of the Spill Buster® in Well AU and initially in Well AW, the installation and operation of a passive skimmer in Well AW, and the installation of sorbent socks within Well AZ. Operation of the Spill Buster® unit in Well AU has resulted in the recovery of approximately 190 gallons of separate phase product through April 8, 2005 at a consistent rate of approximately two gallons per day. Operation of the passive skimmer in Well AW has resulted in the recovery of approximately 0.5 to 0.75 gallons of separate phase product per week;

- Groundwater samples were collected from those wells not indicating the presence of separate phase product in December 2004 and March 2005. The groundwater samples were analyzed for VOCs and SVOCs. Analytical results of the groundwater samples did not indicate concentrations of constituents of concern above applicable GWQC; and,

- Results of the baseline ecological evaluation concluded that no further ecological evaluation is warranted.

9 Proposed Actions

Based on the results of investigation activities and interim remedial actions completed to date, the following actions are proposed:

- Continue operation and maintenance of the Spill Buster® unit and passive skimmer in Well AU and Well AW, respectively, until measurable separate phase product is no longer detected. Currently, routine maintenance of these systems is performed to ensure the timely change out of the product storage tank and the proper operation of the units;

- Quarterly groundwater monitoring will be conducted concurrently with the product recovery efforts. The quarterly groundwater sampling will consist of the collection and analysis of groundwater samples from those wells not indicating the presence of separate phase product. The groundwater samples will be analyzed for VOCs and SVOCs to evaluate the extent, if any, of dissolved phase constituents of concern. Semi-Annual Remedial Action Progress Reports will be prepared to update the NJDEP with the status of product recovery efforts and groundwater analytical results. A summary of the schedule for the sampling and reporting activities is presented in **Table 7**;

- Following completion of the product recovery efforts (i.e., measurable separate phase product is no longer detected) eight consecutive rounds of quarterly sampling will be completed (assuming concentrations of constituents of concern are above applicable GWQC) as required by the Mann-Whitney U-Test. The analytical results from these sampling events will be evaluated to determine if there are decreasing analytical trends;

- Following completion of the eight consecutive rounds of quarterly sampling, PSEG will either: 1) propose no further action for groundwater if groundwater analytical results continue to be below applicable GWQC; or, 2) establish a classification exception area and prepare a Remedial Action Work Plan that proposes a groundwater remediation strategy.

10 Request for Variance

Results of soil investigation activities completed to date indicate that soil impacts are limited to the source area of the release and the "smear zone" where the separate phase product plume has migrated. The investigation and remediation of soil impacts is technically impracticable to complete due to the extensive subsurface infrastructure located within this area. As such, PSEG is requesting a variance from the Technical Requirements for Site Remediation, specifically N.J.A.C. 7:26E-4.1(b), and is proposing to base the need for future soil investigation and remediation on groundwater analytical data and constituent-specific soil partition coefficients. Following the completion of product recovery efforts and the eight quarterly groundwater sampling events associated with the Mann-Whitney U-Test, PSEG will evaluate if decreasing trends for dissolved-phase constituents are observed. If such a trend is established, PSEG contends that groundwater quality analytical data can be used to demonstrate that residual mass is not present within the subsurface and that no further action for soil is warranted. If decreasing trends are not observed, then PSEG will evaluate remedial alternatives and prepare a Remedial Action Work Plan.

SII-SSA-0014-002487

11 References

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Table 1. Summary of Soil Analytical Results, November 8 and 9, 2004
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sample ID Monitoring Well Location Sample Date	NRDCSCC	D-2 (3.5-4.0) Well AW 11/8/04	D-3 (3.5-4.0) Well AV 11/8/04	D-4 (3.5-4.0) Well AY 11/8/04	D-4 (9.0-9.5) Well AY 11/8/04	D-5 (3.5-4.0) Well AZ 11/9/04	D-50 (3.5-4.0) Well AZ 11/9/04	FB-1* 11/9/04
Analyte (mg/kg)								
Petroleum Hydrocarbons	10,000	<28 U	<29 U	<32 U	<29 U	<27 U	<26 U	<0.51 U

Notes:

NRDCSCC	New Jersey Department of Environmental Protection Non-Residential Direct Contact Soil Cleanup Criteria.
mg/kg	Milligrams per kilograms (equivalent to parts per million)
U	The compound was not detected at the indicated concentration.
*	Units are in mg/kg - milligrams per kilograms

Table 02. Well Construction Details, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well ID	Installation Date	Well Permit Number	Well Purpose	Construction Materials	Diameter (inches)	GS Elevation (feet amsl)	MP Elevation (feet amsl)	Northing (NAD 83)	Easting (NAD 83)	Total Depth (feet bgs)	Monitoring Interval (feet bgs)	Monitoring Interval (feet amsl)
Well X	06/11/03	3400007018	Monitoring	Sch-40 PVC	1.0	9.47	12.00	230,851	199,547	13.03	7.47 to -2.53	6.97 to -1.03
Well AU	11/09/04	3400007375	Product Recovery	Sch-40 PVC	6.0	9.44	8.46	230,868	199,525	6.50	5.44 to 2.44	4.96 to 1.96
Well AV	11/08/04	3400007370	Monitoring	Sch-40 PVC	4.0	9.17	8.82	230,831	199,469	9.66	5.17 to -0.83	5.16 to -0.84
Well AW	11/08/04	3400007372	Monitoring	Sch-40 PVC	4.0	9.48	9.16	230,837	199,516	9.01	5.48 to 0.48	6.15 to 0.15
Well AY	11/08/04	3400007373	Monitoring	Sch-40 PVC	4.0	9.40	9.04	230,805	199,521	7.30	5.40 to 1.40	5.74 to 1.74
Well AZ	11/08/04	3400007374	Monitoring	Sch-40 PVC	4.0	9.33	8.66	230,764	199,551	9.07	5.33 to 0.33	5.59 to -0.41

Notes:

GS	Ground Surface
MP	Measuring Point
bgs	Below ground surface
feet amsl	Feet above mean sea level (NAVD88)

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well X	12/07/04	12.00	--	7.16	--	4.84	--
	12/10/04	12.00	--	6.36	--	5.64	--
	12/13/04	12.00	--	6.68	--	5.32	--
	12/22/04	12.00	NM	NM	NM	NM	NM
	1/13/05	12.00	--	7.66	--	4.34	--
	1/27/05	12.00	--	8.11	--	3.89	--
	2/10/05	12.00	--	7.70	--	4.30	--
	2/23/05	12.00	Sheen	7.47	<0.01	4.53	--
	3/24/05	12.00	--	7.81	--	4.19	--
	4/8/05	12.00	--	6.78	--	5.22	--
Well AU	12/07/04	8.46	NM	NM	NM	NM	NM
	12/10/04	8.46	1.84	2.29	0.45	6.17	6.50
	12/13/04	8.46	2.84	3.35	0.51	5.11	5.49
	12/22/04	8.46	4.22	5.45	1.23	3.01	3.92
	1/13/05	8.46	3.68	5.44	1.76	3.02	4.32
	1/17/05*	9.81	4.15	4.40	0.25	5.41	5.60
	1/24/05*	9.81	5.40	5.50	0.10	4.31	4.38
	1/26/05*	9.81	4.90	5.10	0.20	4.71	4.86
	1/27/05*	9.81	5.50	5.69	0.19	4.12	4.26
	1/31/05*	9.81	5.45	5.50	0.05	4.31	4.35
	2/4/05*	9.81	5.40	5.60	0.20	4.21	4.36
	2/8/05*	9.81	5.15	5.40	0.25	4.41	4.60
	2/10/05*	9.81	5.34	5.68	0.34	4.13	4.38
	2/16/05*	9.81	3.90	4.30	0.40	5.51	5.81
	2/22/05*	9.81	4.60	4.80	0.20	5.01	5.16
	2/23/05*	9.81	4.96	5.12	0.16	4.69	4.81
	2/28/05*	9.81	4.60	4.78	0.18	5.03	5.16
	3/7/05*	9.81	4.74	5.00	0.26	4.81	5.00
	3/14/05*	9.81	5.16	5.48	0.32	4.33	4.57
	3/21/05*	9.81	5.40	5.70	0.30	4.11	4.33
	3/24/05*	9.81	3.41	3.42	0.01	6.39	6.40
	3/29/05*	9.81	3.10	3.70	0.60	6.11	6.55
	4/5/05*	9.81	4.00	4.10	0.10	5.71	5.78
	4/8/05*	9.81	2.87	2.91	0.04	6.90	6.93
Well AV	12/07/04	8.82	--	4.85	--	3.97	--
	12/10/04	8.82	--	4.60	--	4.22	--
	12/13/04	8.82	--	4.55	--	4.27	--
	12/22/04	8.82	--	5.11	--	3.71	--
	1/13/05	8.82	--	5.09	--	3.73	--
	1/27/05	8.82	NA	NA	NA	NA	NA
	2/10/05	8.82	--	4.86	--	3.96	--
	2/23/05	8.82	--	4.69	--	4.13	--
	3/24/05	8.82	--	4.83	--	3.99	--
	4/8/05	8.82	--	4.20	--	4.62	--

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, which accounts for change of wellhead elevation
NA	Well was not accessible

at Artificial Island is 0.11 feet (NAVD 1988).

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AW	12/07/04	9.16	4.14	4.17	0.03	4.99	5.01
	12/10/04	9.16	3.71	5.83	2.12	3.33	4.90
	12/13/04	9.16	3.99	7.06	3.07	2.10	4.37
	12/22/04*	10.10	6.06	6.16	0.10	3.94	4.01
	12/27/04*	10.10	6.70	6.75	0.05	3.35	3.39
	1/3/05*	10.10	6.30	6.50	0.20	3.60	3.75
	1/10/05*	10.10	5.90	6.00	0.10	4.10	4.17
	1/13/05*	10.10	6.95	7.01	0.06	3.09	3.13
	1/27/05	9.16	5.37	6.12	0.75	3.04	3.60
	2/10/05	9.16	5.11	6.11	1.00	3.05	3.79
	2/23/05	9.16	4.78	6.11	1.33	3.05	4.03
	3/24/05	9.16	4.44	6.25	1.81	2.91	4.25
	4/8/05	9.16	3.66	6.05	2.39	3.11	4.88
Well AY	12/07/04	9.04	--	4.68	--	4.36	--
	12/10/04	9.04	--	4.35	--	4.69	--
	12/13/04	9.04	--	4.43	--	4.61	--
	12/22/04	9.04	--	5.13	--	3.91	--
	1/13/05	9.04	--	5.08	--	3.96	--
	1/27/05	9.04	--	5.29	--	3.75	--
	2/10/05	9.04	NA	NA	NA	NA	NA
	2/23/05	9.04	--	4.82	--	4.22	--
	3/24/05	9.04	--	4.82	--	4.22	--
	4/8/05	9.04	--	4.03	--	5.01	--
Well AZ	12/07/04	8.66	--	4.45	--	4.21	--
	12/10/04	8.66	--	4.09	--	4.57	--
	12/13/04	8.66	--	4.08	--	4.58	--
	12/22/04	8.66	--	4.69	--	3.97	--
	1/13/05	8.66	--	4.70	--	3.96	--
	1/27/05	8.66	--	4.91	--	3.75	--
	2/10/05	8.66	--	4.69	--	3.97	--
	2/23/05	8.66	--	4.46	--	4.20	--
	3/24/05	8.66	4.66	4.75	0.09	3.91	3.98
	4/8/05	8.66	--	3.78	--	4.88	--

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, which accounts for change of wellhead elevation
NA	Well was not accessible

Mean tide level at Artificial Island is 0.11 feet (NAVD 1988).

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Table 4. Low-Flow Monitoring Well Field Parameters, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification / Date	Field Parameters					
	DO (mg/L)	ORP (mV)	pH (SU)	Temperature (^{o}C)	Conductivity (umhos/cm)	Turbidity (NTUs)
Well AY						
Dec-04	8.92	23.6	7.05	10.74	0.952	61.5
Mar-05	15.76	166	7.34	6.48	4.80	1.5
Well X						
Dec-04	5.29	22.6	6.42	14.19	0.219	12.8
Mar-05	9.36	6.0	6.52	10.59	0.499	61
Well AV						
Dec-04	3.4	-29	6.6	11.24	0.265	75.7
Mar-05	4.22	-76	6.32	7.79	0.367	3.1
Well AZ						
Dec-04	6.84	142.4	6.59	14.28	0.461	53.5
Mar-05	16.79	237	5.93	8.01	1.12	1.5

Notes:

DO	Dissolved oxygen	SU	Standard units
ORP	Oxidation reduction potential	NTUs	Nephelometric turbidity units
mV	Millivolts		

Table 5. Summary of VOC Analytical Results, December 2004 and March 2005 Sampling Events
PSE&G Salem, Artificial Island, Salem, New Jersey.

Constituent of Concern	GWQC	Well X		Well AX*	Well AV		Well AVD**	Well AY		Well AZ		FB-1	FB-2	FB-031505	Trip Blank	Trip Blank	Trip Blank
		12/13/04	3/15/05	12/13/04	12/13/04	3/15/05	3/15/05	12/13/04	3/15/05	12/10/04	3/15/05	12/10/04	12/13/04	3/15/05	12/10/04	12/10/04	3/15/05
Acetone	700	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	NA	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromodichloromethane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromoform	4	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	NA	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U
Bromomethane	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
2-Butanone (MEK)	--	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	NA	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Carbon Disulfide	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Carbon Tetrachloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chlorobenzene	4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroethane	--	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform	6	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Dibromochloromethane	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,2-Dichloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,2-Dichloroethene	100	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloropropane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,3-Dichloropropene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,3-Dichloropropene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	700	<1 U	0.83 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-Hexanone	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
4-Methly-2-pentanone (MIBK)	400	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Methylene Chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Styrene	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
1,1,2,2-Tetrachloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Tetrachloroethene	1	0.87 J	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Toulene	1000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,1-Trichloroethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,2-Trichloroethane	3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Xylenes (total)	40	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV

Table 6. Summary of SVOC Analytical Results, December 2004 and March 2005 Sampling Events
PSE&G Salem, Artificial Island, Salem, New Jersey.

Sample ID	GWQC	Well X		Well AX*	Well AV		Well AVD**	Well AY		Well AZ		FB-1	FB-2	FB-031505
		12/13/04	3/15/05	12/13/04	12/13/04	3/15/05	3/15/05	12/13/04	3/15/05	12/10/04	3/15/05	12/10/04	12/13/04	3/15/05
Semivolatile Organic Compounds (ug/L)														
2-Chlorophenol	40	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
4-Chloro-3-methyl phenol	20	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
2,4-Dichlorophenol	20	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
2,4-Dimethylphenol	100	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
2,4-Dinitrophenol	10	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<21 U	<20 U	<20 U	NS	<20 U	<20 U	<20 U
4,6-Dinitro-o-cresol	60	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<21 U	<20 U	<20 U	NS	<20 U	<20 U	<20 U
2-Methylphenol	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
3&4-Methylphenol	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
2-Nitrophenol	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
4-Nitrophenol	--	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<21 U	<20 U	<20 U	NS	<20 U	<20 U	<20 U
Pentachlorophenol	0.3	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<21 U	<20 U	<20 U	NS	<20 U	<20 U	<20 U
Phenol	4000	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
2,4,5-Trichlorophenol	700	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
2,4,6-Trichlorophenol	3	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Acenaphthene	400	<2 U	<2 U	<2 U	0.64 J	**5.0**	**5.1**	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Acenaphthylene	10	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Anthracene	2000	<2 U	<2 U	<2 U	<2.2 U	0.95 J	0.97 J	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Benzo(a)anthracene	10	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Benzo(a)pyrene	20	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Benzo(b)fluoranthene	10	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Benzo(g,h,i)perylene	20	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Benzo(k)fluoranthene	2	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
4-Bromophenyl phenyl ether	--	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Butyl benzyl phthalate	100	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
2-Chloronaphthalene	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
4-Chloroaniline	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Carbazole	--	<2 U	<2 U	<2 U	<2.2 U	**9.9**	**10**	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Chrysene	20	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
bis-(2-Chloroethoxy)methane	--	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
bis(2-Chloroethyl)ether	0.03	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
bis(2-Chloroisopropyl)ether	300	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
4-Chlorophenyl phenyl ether	--	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
1,2-Dichlorobenzene	600	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
1,3-Dichlorobenzene	600	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
1,4-Dichlorobenzene	75	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
2,4-Dinitrotoluene	0.05	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
2,6-Dinitrotoluene	0.05	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
3,3'-Dichlorobenzidine	0.08	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Dibenzo(a,h)anthracene	20	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Dibenzofuran	--	<5 U	<5 U	<5 U	0.71 J	2.7 J	2.7 J	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Di-n-butyl phthalate	900	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Di-n-octyl phthalate	100	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Diethyl phthalate	5000	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Dimethyl phthalate	10	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
bis(2-Ethylhexyl)phthalate	3	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Fluoranthene	300	<2 U	<2 U	<2 U	1.0 J	1.4 J	1.4 J	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Fluorene	300	<2 U	<2 U	<2 U	1.4 J	**4.4**	**4.7**	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Hexachlorobenzene	0.02	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Hexaclorobutadiene	1	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Hexachlorocyclopentadiene	50	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<21 U	<20 U	<20 U	NS	<20 U	<20 U	<20 U
Hexachloroethane	0.7	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Indeno(1,2,3-cd)pyrene	--	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Isophorone	100	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
2-Methylnaphthalene	--	<2 U	<2 U	<2 U	1.8 J	**2.0**	**2.3**	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
2-Nitroaniline	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
3-Nitroaniline	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
4-Nitroaniline	--	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Naphthalene	300	<2 U	<2 U	<2 U	**3.9**	**4.3**	**4.6**	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Nitrobenzene	3	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
N-Nitroso-di-n-propylamine	0.005	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
N-Nitrosodiphenylamine	7	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	NS	<5 U	<5 U	<5 U
Phenanthrene	--	<2 U	<2 U	<2 U	<2.2 U	**5.3**	**5.6**	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
Pyrene	200	<2 U	<2 U	<2 U	0.96 J	0.94 J	0.97 J	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U
1,2,4-Trichlorobenzene	9	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	NS	<2 U	<2 U	<2 U

Notes:

GWQC New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L Micrograms per liter (equivalent to parts per billion)
2.3 Bold value indicates compound is above the method detection limit.
U The compound was not detected at the indicated concentration.
J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
-- No standard published
N Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the indication is based on a library search
NA Not analyzed
* Well AX is a blind duplicate of Well X
** Well AVD is a blind duplicate of Well AV

Table 7. Proposed Sampling and Reporting Schedule, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

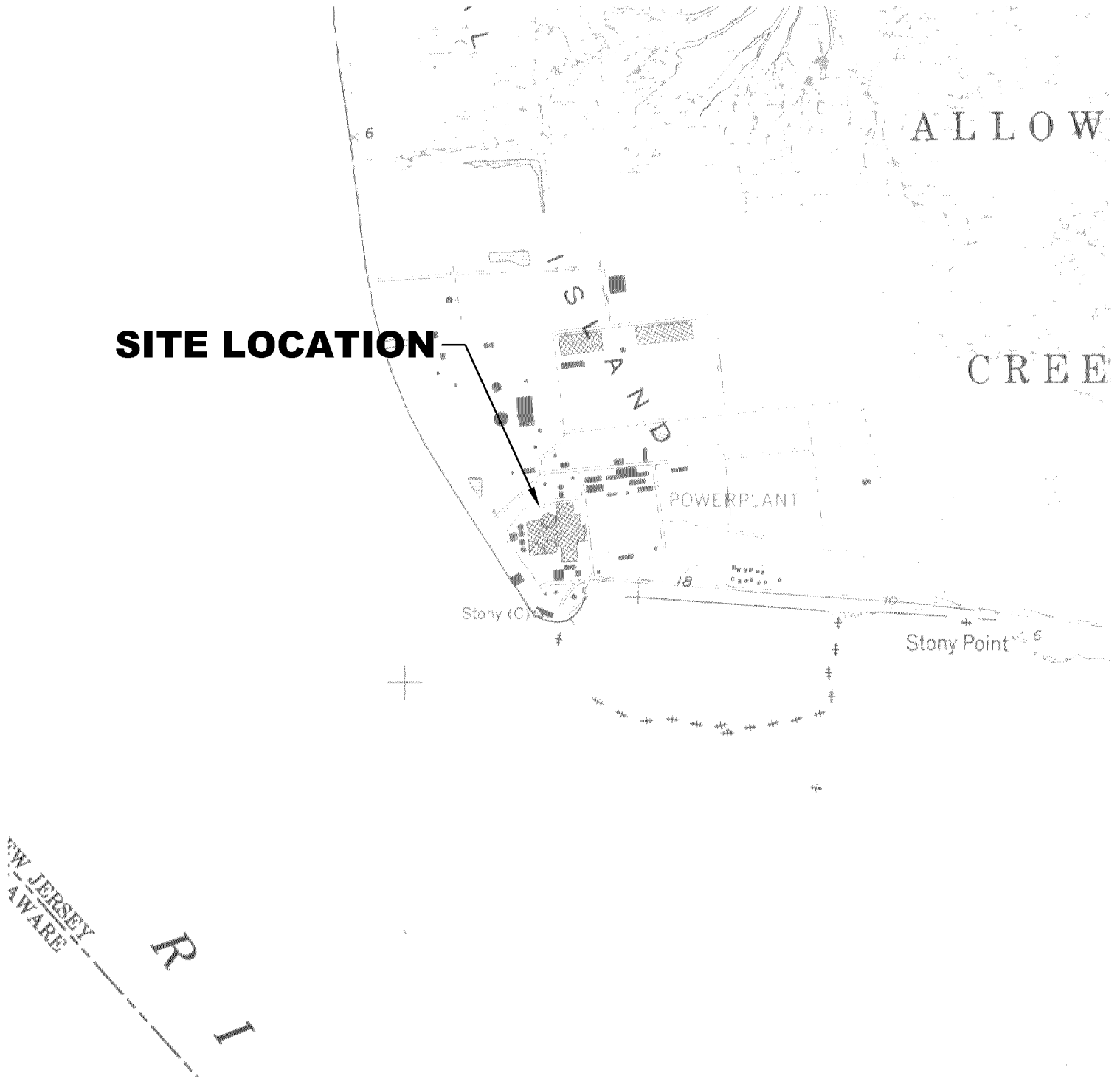
Projected Date Work to be Completed	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06
Semi-Annual Report Submission						X						X
Quarterly Groundwater Sampling Events[1]	X			X			X			X		

Notes:

1 Prior to initiating groundwater sample collection, depth-to-water and separate phase product thickness measurements will be collected from each monitoring well using an electronic oil-water interface probe.

Monitoring wells not indicating a measureable product thickness (i.e., greater than 0.01 feet) will be sampled utilizing low-flow sampling methods

Monitoring wells will be sample via low-flow techniques. Groundwater analysis will include volatile organic compounds by USEPA method 8260A and base neutrals via USEPA method 8270B.



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

MN GN

10 ½° 187 MILS

0°21' 6 MIL

UTM GRID AND 1981 MAGNETIC NORTH

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

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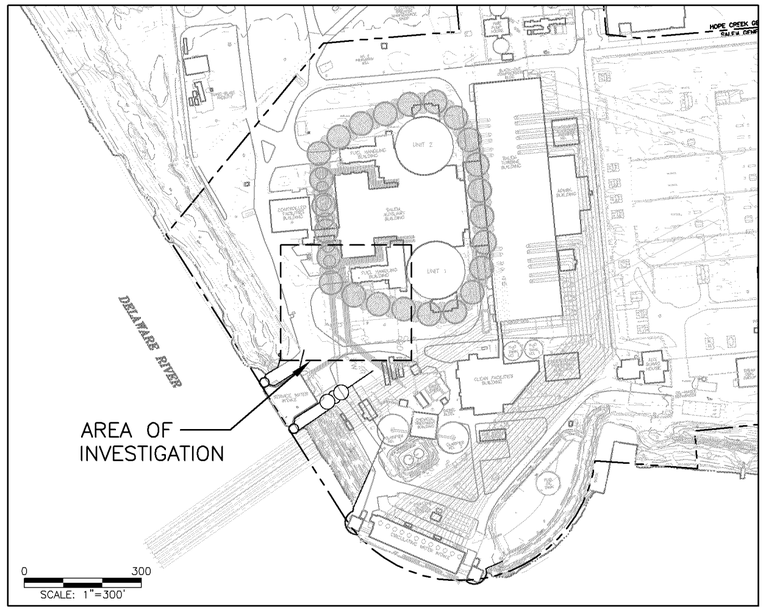
DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF.	CHECKED
		S. POTTER	B. PIERCE

SITE LOCATION
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
SALEM, NEW JERSEY

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	1

G:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0001\Task 04 – Site Investigation Report\Final\Figures\Fig-01 STATION LOCATION.dwg Feb. 15, 2007



SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
LIMITS OF COFFERDAM
FUEL HANDLING BUILDING
VALVE
N

LEGEND:

- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK

0 20 20
SCALE: 1"=20'

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PSEG NUCLEAR, LLC
SALEM GENERATING STATION

ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

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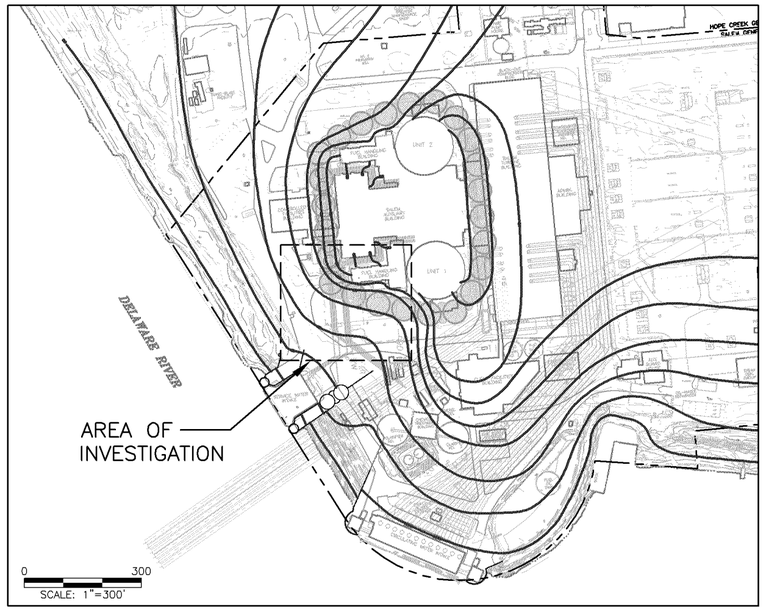
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

STATION LAYOUT

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	2

G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0001\Task 04 - Site Investigation Report\Final\Figures\FIG-02 STATION LAYOUT.dwg, 15/ 2/2007 12:37pm



SITE LAYOUT
SCALE: 1"=300'

LEGEND:

- WELL-AU⊗ MONITORING WELL LOCATION
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD BLOW DOWN PIPING
- RW LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST STORM SEWER PIPING
- □ CATCH BASIN
- ⊗ MANHOLE (STORM SEWER)
- SHEET PILE
- 1.00 GROUNDWATER ELEVATION CONTOUR (0.5 FOOT INTERVAL)

AFST	AUXILIARY FEEDWATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK
RWST	REFUELING WATER STORAGE TANK

NOTES:

1. THE MEAN TIDE LEVEL OF THE DELAWARE RIVER AT ARTIFICIAL ISLAND IS 0.11 FT (NAVD 1988)
2. CONTOUR INTERVAL FOR WATER LEVELS LESS THAN −0.5 FEET MSL IS LOGARITHMIC.
3. GROUNDWATER CONTOURS ARE BASED ON WATER-LEVEL ELEVATIONS OBTAINED FROM MONITORING WELLS ASSOCIATED WITH AN ONGOING, UNRELATED GROUNDWATER INVESTIGATION

G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0001\Task 04 - Site Investigation Report\Final\Figures\FIG-03 GROUNDWATER ELEVATION CONTOUR MAP, AMBIENT CONDITIONS.dwg, 15/ 2/2007 12:40pm
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0 20 20
SCALE: 1"=20'

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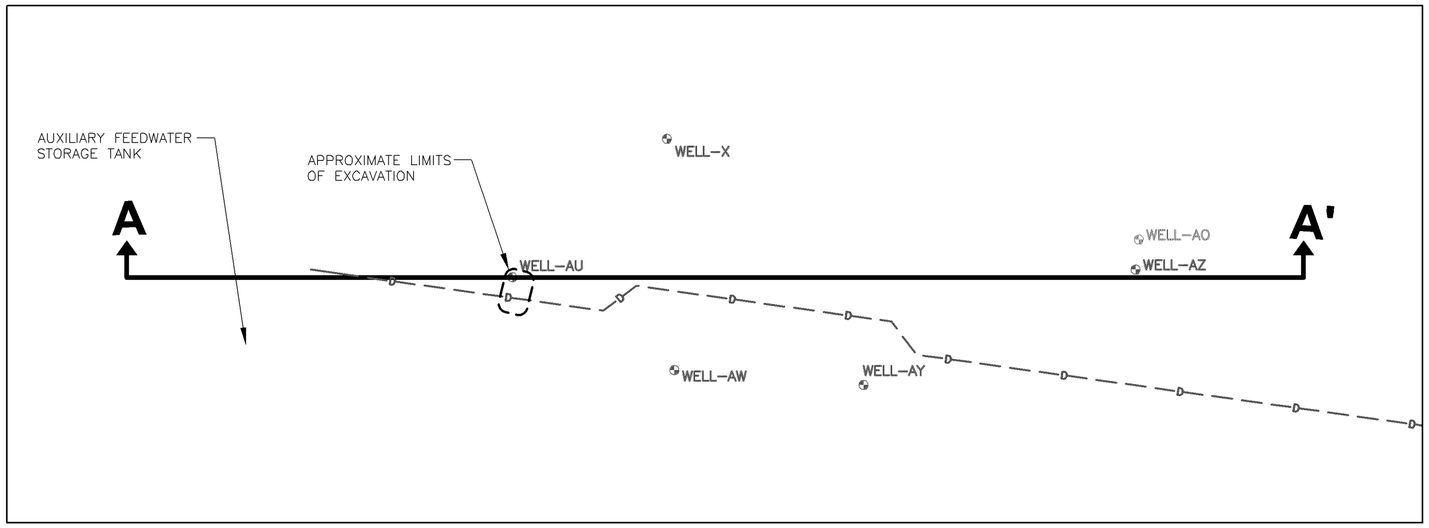
SALEM GENERATING STATION

ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

DRAWN M. WASILEWSKI	DATE 5/12/05	PROJECT MANAGER P. MILIONIS	DEPARTMENT MANAGER A. ROBINSON
GROUNDWATER ELEVATION CONTOUR MAP- AMBIENT CONDITIONS		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER NP000603.0001	DRAWING NUMBER 3



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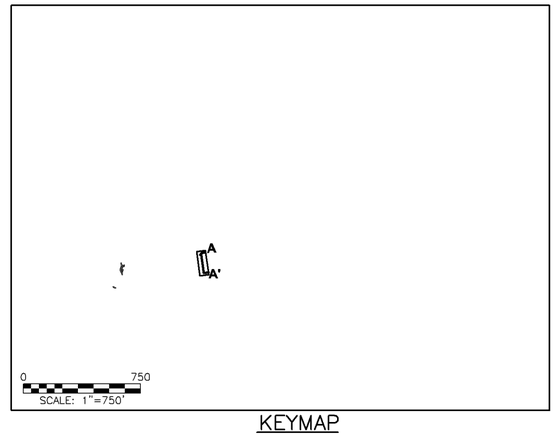

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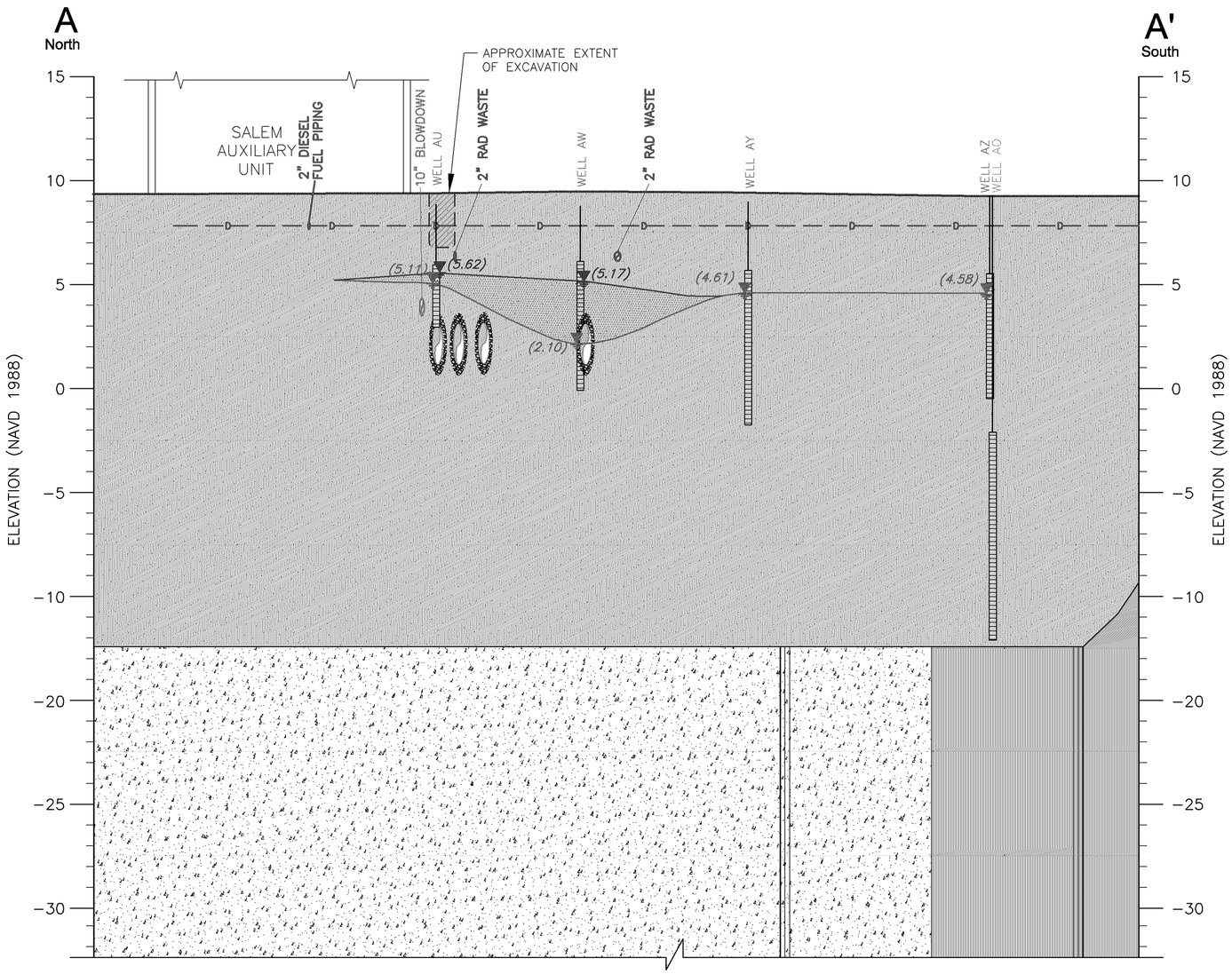
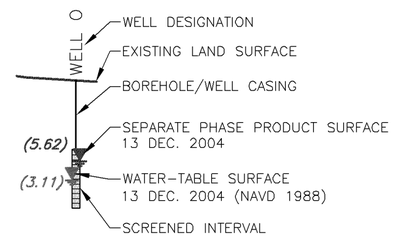


SECTION

LEGEND:

- HYDRAULIC FILL
- STRUCTURAL FILL
- LEAN CONCRETE
- DIESEL FUEL LINE
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SHEET PILE
- SERVICE WATER PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- RCP REINFORCED CONCRETE PIPE
- MTL MEAN TIDE LEVEL
- BUILDING WALL
- WELL-AO GROUNDWATER EXTRACTION WELL LOCATION
- WELL-AU MONITORING WELL LOCATION
- SEISMIC GAP
- PROPERTY BOUNDARY



C:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0001\Task 04 - Site Investigation Report\Final\Figures\FIG-04 CROSS SECTION-A-A'.dwg, 15/ 2/2007 12:44pm

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HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

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1	9/8/03	CLIENT SUBMITTAL	MGW / BP

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ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

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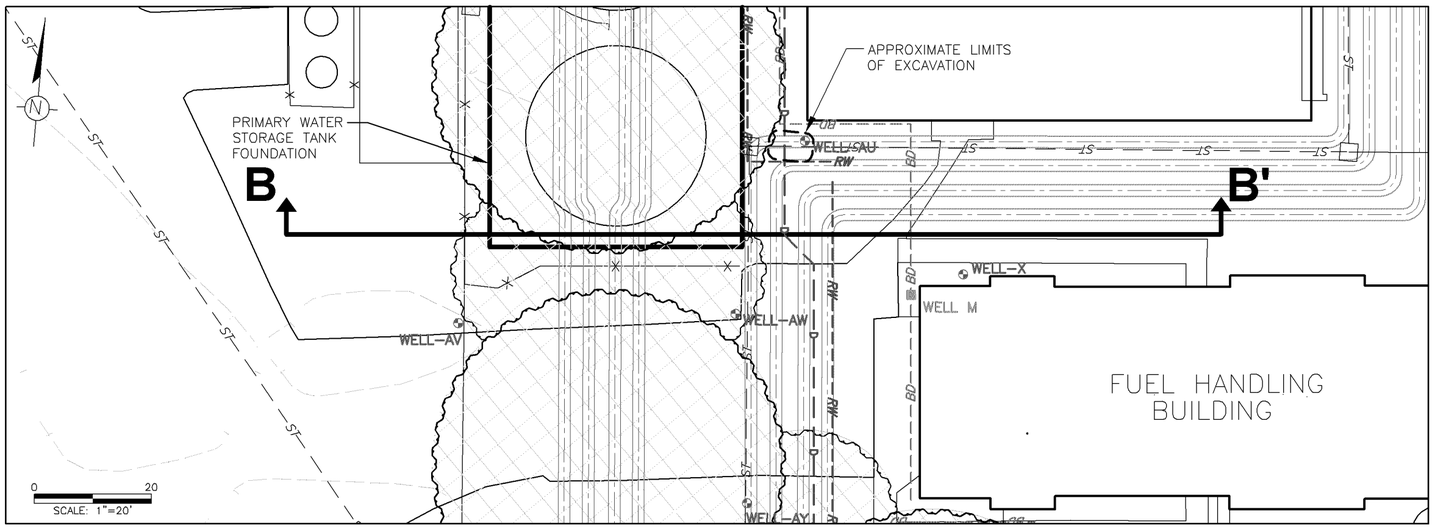
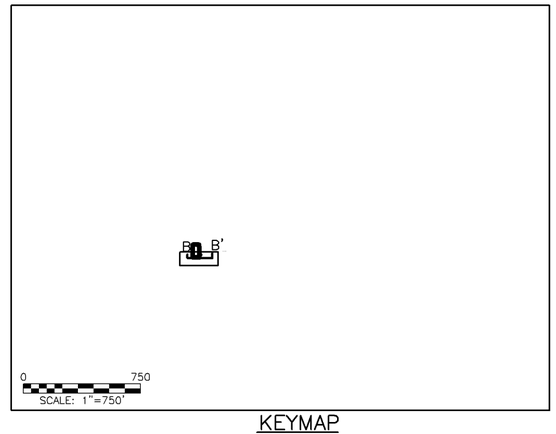
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

FACILITY CROSS SECTION A-A'

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	4



PLAN



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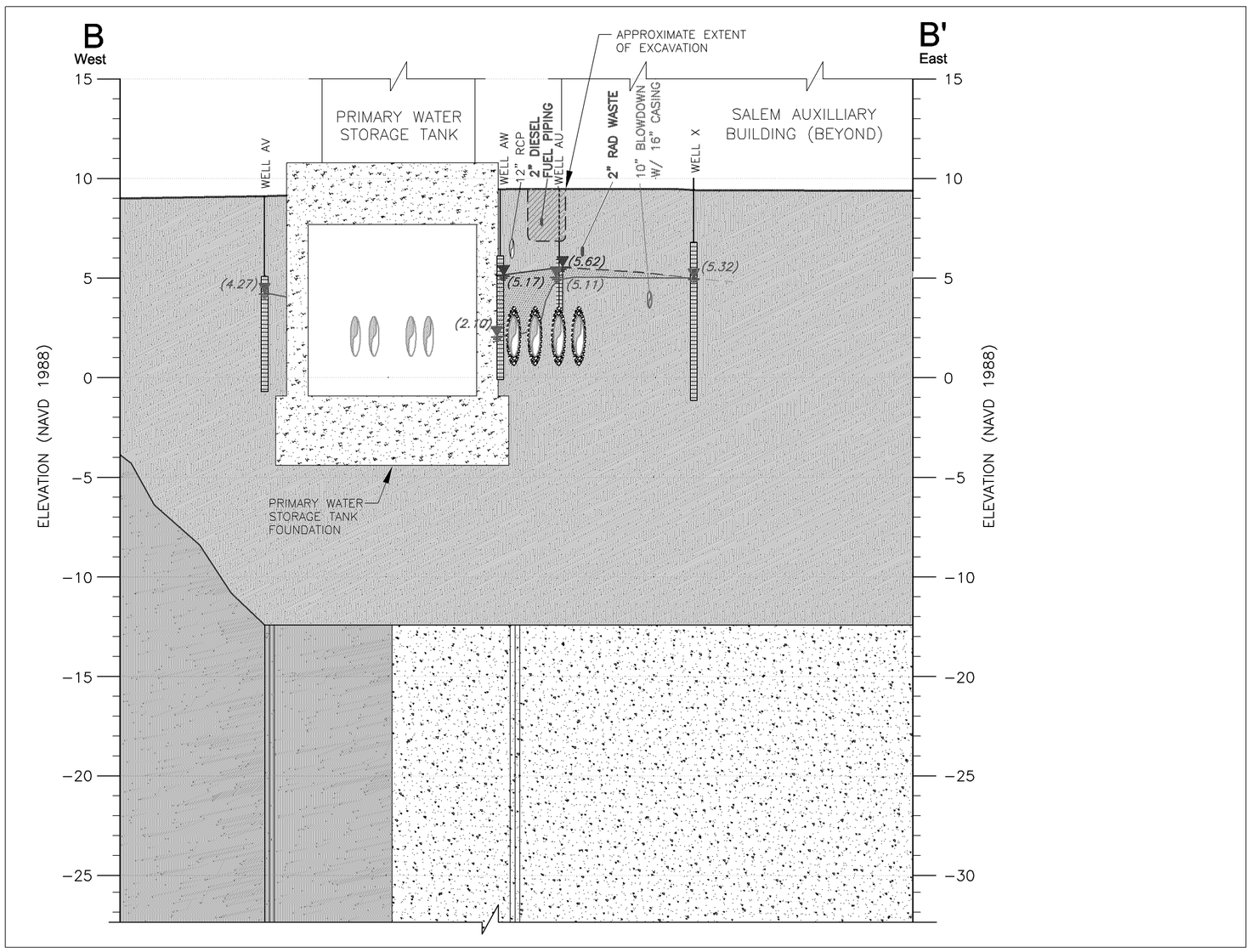
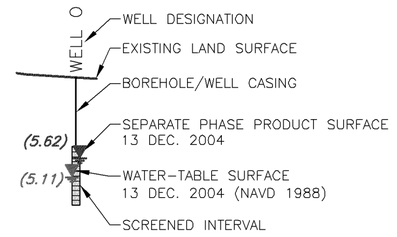


SECTION

LEGEND:

- HYDRAULIC FILL
- STRUCTURAL FILL
- LEAN CONCRETE
- DIESEL FUEL LINE
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SHEET PILE
- SERVICE WATER PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- RCP REINFORCED CONCRETE PIPE
- MTL MEAN TIDE LEVEL
- BUILDING WALL
- WELL M GROUNDWATER EXTRACTION WELL LOCATION
- WELL-AU MONITORING WELL LOCATION
- SEISMIC GAP
- PROPERTY BOUNDARY



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0 20
HORIZONTAL SCALE: 1"=20'

0 5
VERTICAL SCALE: 1"=5'

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		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

FACILITY CROSS SECTION B-B'

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	5

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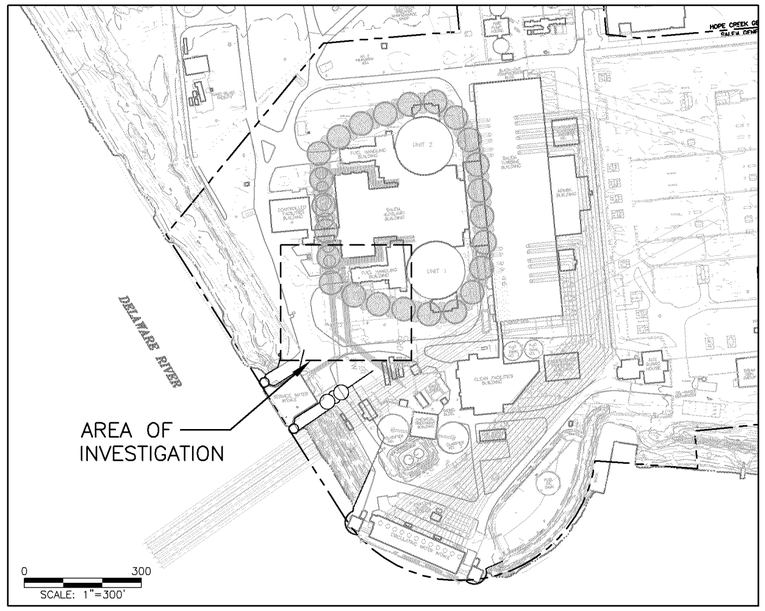

SITE LAYOUT
SCALE: 1"=300'

LEGEND:

- D–3● SOIL BORING LOCATION
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD BLOW DOWN PIPING
- RW LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK
- U THE COMPOUND WAS NOT DETECTED ABOVE THE INDICATED CONCENTRATION

BORING ID — SAMPLE DEPTH

D–2 (3.5–4.0)	
TOTAL PETROLEUM HYDROCARBONS	<28U

ANALYTICAL RESULT (mg/Kg)

1. DUE TO THE PRESSURE OF SEPARATE–PHASE DIESEL, SOIL SAMPLES WERE NOT OBTAINED FROM THE BORING ADVANCED WITHIN THE SOURCE AREA, SOIL BORING D–1.
2. SOIL SAMPLES WERE ANALYZED FOR TOTAL PETROLEUM HYDROCARBONS (TPHC). ANALYTICAL RESULTS OF THE OF TPHC ABOVE THE LABORATORY DETECTION LIMITS IN ACCORDANCE WITH NJAC 7:26E, THE SAMPLES WERE NOT ANALYZED FOR VOCs.
3. THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR NONRESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA STANDARD FOR TPHC'S IS 10,000 mg/kg.
4. UNITS ARE IN mg/kg (MILLIGRAMS PER KILOGRAM)

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
FUEL HANDLING BUILDING
VALVE
D–2
D–3
D–4
D–5
LIMITS OF COFFERDAM

D–3 (3.5–4.0)	
TOTAL PETROLEUM HYDROCARBONS	<29U

D–2 (3.5–4.0)	
TOTAL PETROLEUM HYDROCARBONS	<28U

D–4 (3.5–4.0)	
TOTAL PETROLEUM HYDROCARBONS	<32U

D–4 (9.0–9.5)	
TOTAL PETROLEUM HYDROCARBONS	<29U

D–5 (3.5–4.0)	
TOTAL PETROLEUM HYDROCARBONS	<27U

N

0 20 20
SCALE: 1"=20'

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SALEM GENERATING STATION

ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

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M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

SOIL INVESTIGATION DETAILS AND RESULTS

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	6

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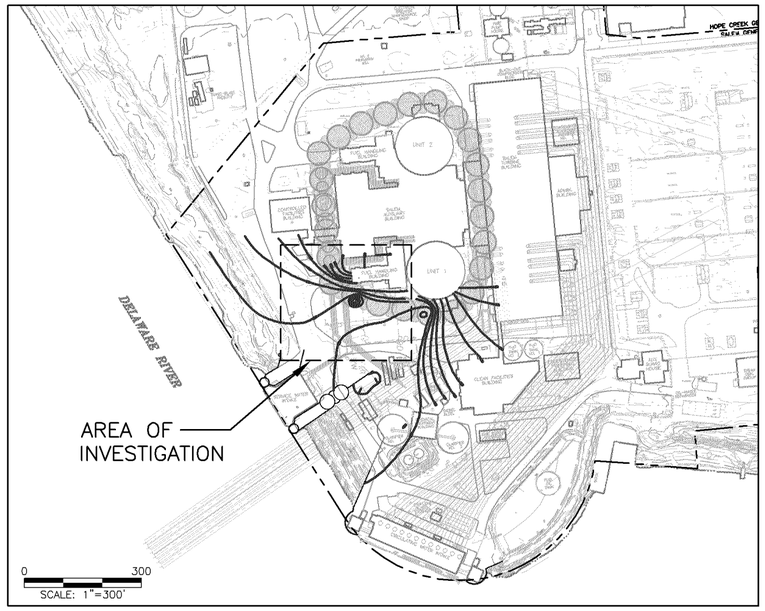

SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL-AU
WELL-X
WELL-AW
WELL-AV
WELL-AY
WELL-AZ
Well AO
LIMITS OF COFFERDAM
FUEL HANDLING BUILDING
VALVE
2.00
1.50
1.00
0.50
0.00
2.50
3.00
3.50
4.00
4.50
5.00
N

LEGEND:

- WELL AO — GROUNDWATER EXTRACTION WELL
- WELL-AU — MONITORING WELL LOCATION
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- 1.00 — GROUNDWATER ELEVATION CONTOUR (0.5 FOOT INTERVAL)

AFST	AUXILIARY FEEDWATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK
RWST	REFUELING WATER STORAGE TANK

NOTES:

1. THE MEAN TIDE LEVEL OF THE DELAWARE RIVER AT ARTIFICIAL ISLAND IS 0.11 FT (NAVD 1988)
2. CONTOUR INTERVAL FOR WATER LEVELS LESS THAN −0.5 FEET MSL IS LOGARITHMIC.
3. GROUNDWATER CONTOURS ARE BASED ON WATER−LEVEL ELEVATIONS OBTAINED FROM MONITORING WELLS ASSOCIATED WITH AN ONGOING, UNRELATED GROUNDWATER INVESTIGATION

G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0001\Task 04 - Site Investigation Report\Final\Figures\FIG-07 GROUNDWATER ELEVATION CONTOURS UNDER PUMPING CONDITIONS - MARCH 23 2005.dwg, 15/ 2/2007 1:58pm

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0 20 20
SCALE: 1"=20'

NO.	DATE	REVISION DESCRIPTION	BY CKD

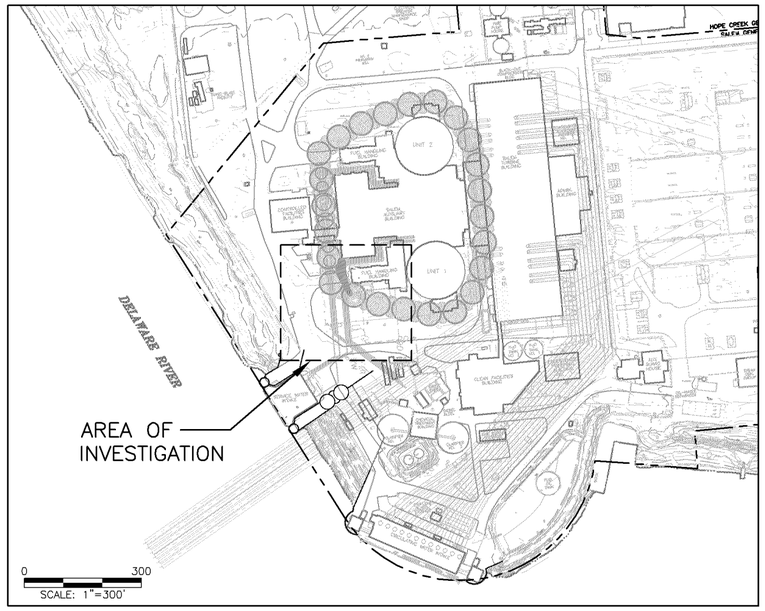
ARCADIS
6 Terry Drive
Suite 300 , Newtown, PA 18940
Tel: 267/685-1800 Fax: 267/685-1801

PSEG NUCLEAR, LLC
SALEM GENERATING STATION

ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

GROUNDWATER ELEVATION CONTOURS UNDER PUMPING CONDITIONS MARCH 23, 2005

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER NP000603.0001	DRAWING NUMBER 7



SITE LAYOUT
SCALE: 1"=300'

LEGEND:

- WELL–AZ ⊗ MONITORING WELL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD BLOW DOWN PIPING
- RW LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST STORM SEWER PIPING
- □ CATCH BASIN
- ⊗ MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK
- GWQC NEW JERSEY GROUND WATER QUALITY CRITERIA FOR CLASS IIA AQUIFERS
- NS NO PUBLISHED STANDARDS

WELL ID → | NEW JERSEY GROUNDWATER CRITERIA FOR CLASS IIA AQUIFER

WELL AV	GWQC	DEC–04	MAR–05
ACENAPHTHALENE	400	<1	5.1
CARBAZOLE	NS	<2.2	10.0

CONSTITUENT OF CONCERN; ANALYTICAL RESULT; SAMPLE DATE

1. PRIOR TO INITIATING GROUNDWATER SAMPLE COLLECTION, DEPTH–TO–WATER AND SEPARATE PHASE PRODUCT THICKNESS MEASUREMENTS ARE COLLECTED FROM THE INDIVIDUAL WELLS USING AN ELECTRONIC OIL–WATER INTERFACE PROBE.
2. MONITORING WELLS NOT INDICATING A MEASURABLE THICKNESS OF SEPARATE PRODUCT (I.E., GREATER THAN 0.01 FEET) WERE SAMPLED UTILIZING LOW–FLOW SAMPLING METHODS.
3. GROUNDWATER SAMPLES ARE ANALYZED FOR PRIORITY POLLUTANT SEMI–VOLATILE AND VOLATILE ORGANICS INCLUDING A LIBRARY SEARCH.
4. UNITS ARE IN ug/l – MICROGRAMS PER LITER (EQUIVALENT TO PARTS PER BILLION) CONCENTRATIONS ARE ONLY SHOWN FOR THOSE CONSTITUENTS DETECTED ABOVE THE LABORTORY DETECTION LIMITS.

WELL AV	GWQC	DEC–04	MAR–05
ACENAPHTHALENE	400	<1	5.1
CARBAZOLE	NS	<2.2	10.0
FLOURENE	300	<2	4.7
2–METHYLNAPHTHALENE	NS	<2	2.3
NAPHTHALENE	300	3.9	4.6
PHENANTHRENE	100	<2.2	5.6

0 20 20
SCALE: 1"=20'

NO.	DATE	REVISION DESCRIPTION	BY CKD

ARCADIS
6 Terry Drive
Suite 300 , Newtown, PA 18940
Tel: 267/685–1800 Fax: 267/685–1801

PSEG NUCLEAR, LLC
SALEM GENERATING STATION

ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	4/28/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

GROUNDWATER INVESTIGATION DETAILS AND RESULTS

PROJECT NUMBER NP000603.0001

DRAWING NUMBER 8

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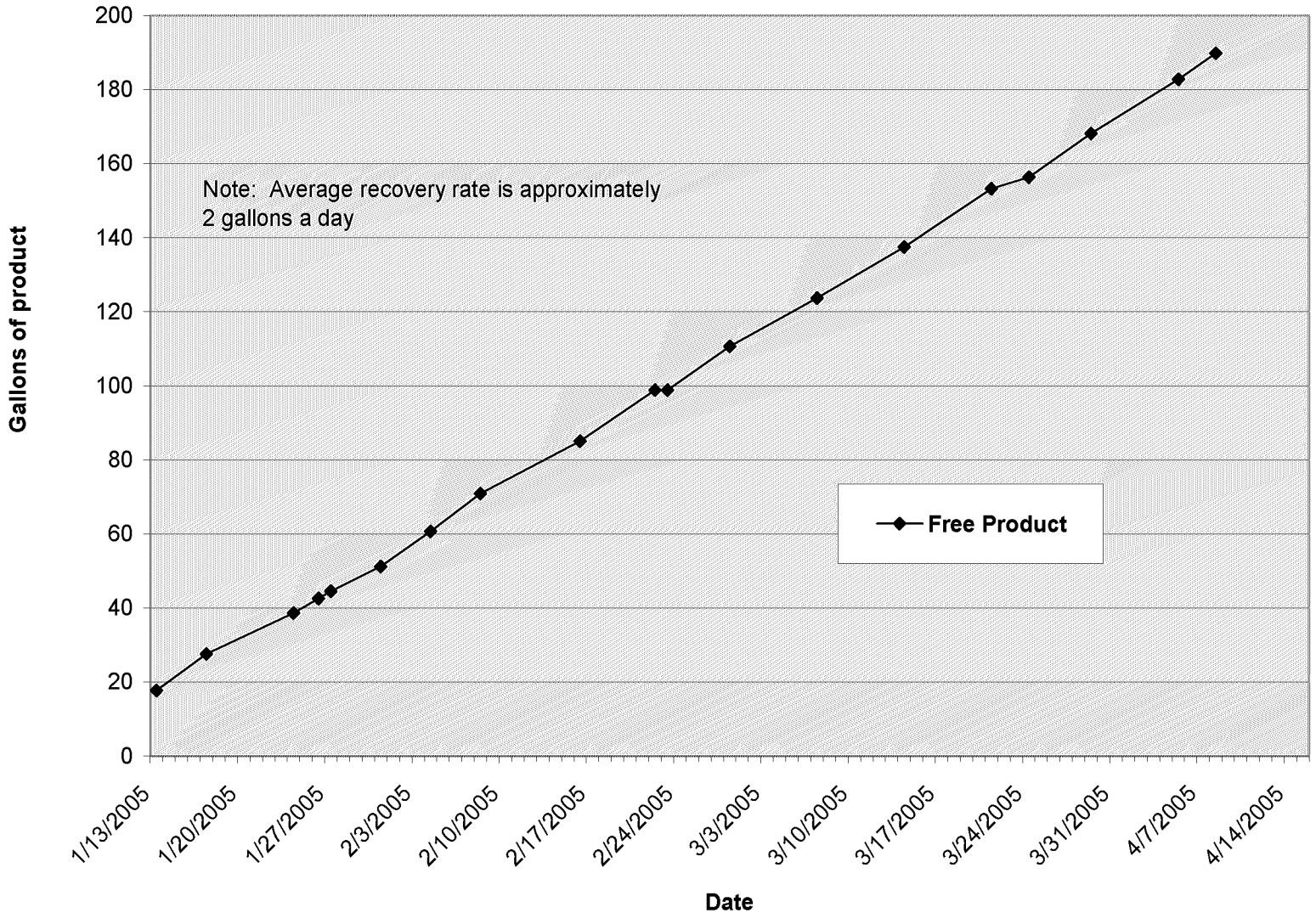
J:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0001\Task 04 – Site Investigation Report\Final\Figures\FIG–08 GROUNDWATER INVESTIGATION DETAILS AND RESULTS.dwg, 15/ 2/2007 2:05pm



C:\APROJECT\PSE&G\NP000603 - Salem - Diesel\Task 04 - Site Investigation Report\Figures\Figures-REV-1\FIG-09 CUMULATIVE PRODUCT RECOVERED FROM WELL AU.DWG 5/13/2005 - 2:18:3

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ARCADIS

DRAWN: M. WASILEWSKI	DATE: 5/12/05	PROJECT MANAGER: P. MILIONIS	DEPARTMENT MANAGER: A. ROBINSON
CUMULATIVE PRODUCT RECOVERED FROM WELL AU		LEAD DESIGN PROF.: S. POTTER	CHECKED: B. PIERCE
PSEG NUCLEAR, LLC SALEM GENERATING STATION HANCOCK'S BRIDGE, NEW JERSEY		PROJECT NUMBER: NP000603.0001	DRAWING NUMBER: 9

Appendix A

Disposal Manifests

Fax Transmittal Form

To:

Attention: Brad Pierce

Fax Number: 267-685-1801

From: Albert W. Fisher

Company: PSE&G

Phone Number: 856-224-9109

Fax Number: 856-224-1574

Comment:

Brad the following shipping paper and scale ticket is for the soil removed from the Salem fuel oil line leak. The soil (approximately 2 cu/yds) was placed into the 20-cu/yd container utilized for minor on site spill cleanup. A total of 9.96 cu/yds was shipped to Casie Pro Tank for disposal. Of the 9.96 cubic yard shipped only 2 cu/yds was attributed to the fuel line leak.

CASIE / PROTANK
ENVIRONMENTAL SERVICES

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS MANIFEST

1. Generator's US EPA ID No. N J D 0 7 7 0 7 0 8 1 1 | Document No. | 2. Page 1 of

3. Generator's Name and Mailing Address: PSE&G-Salem/Hope Creek Gen.
Alloway Creek Neck Rd, PO Box
Hancocks Bridge NJ 08038

4. Generator's Phone (609) 339-5338

A. Non-hazardous Manifest Document Number: NHZ020 160890

B. State Generator's ID: SAME

5. Transporter 1 Company Name: C&H Disposal Service

6. US EPA ID Number: NONEREQUIRED

C. State Trans. ID

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone ( )

E. State Trans. ID

9. Designated Facility Name and Site Address
Casie Ecology Oil Salvage, Inc. T/A
3209 N. Mill Rd / Casie Protank
Vineland NJ 08360

10. US EPA ID Number: N J D 0 4 5 9 9 5 6 9 3

F. Transporter's Phone ( )

G. State Facility's ID: 0614D1HP05

H. Facility's Phone: (856) 696-4401

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	L Waste No.
a.	Non Hazardous Oily Debris Non DOT Regulated	001	CM	0020	Y	ID27
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
(S)(add'l codes)
a.
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information
24 hr emergency response #609-685-2156 G. Call

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
I hereby certify that the above-named material is not hazardous waste as defined by 40 CFR Part 261, 264 and 270 or any applicable state law.

GENERATOR

Printed/Typed Name: James A Coleman | Signature | Month Day Year: 05/10/04

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature: James Coleman | Month Day Year: 05/10/04

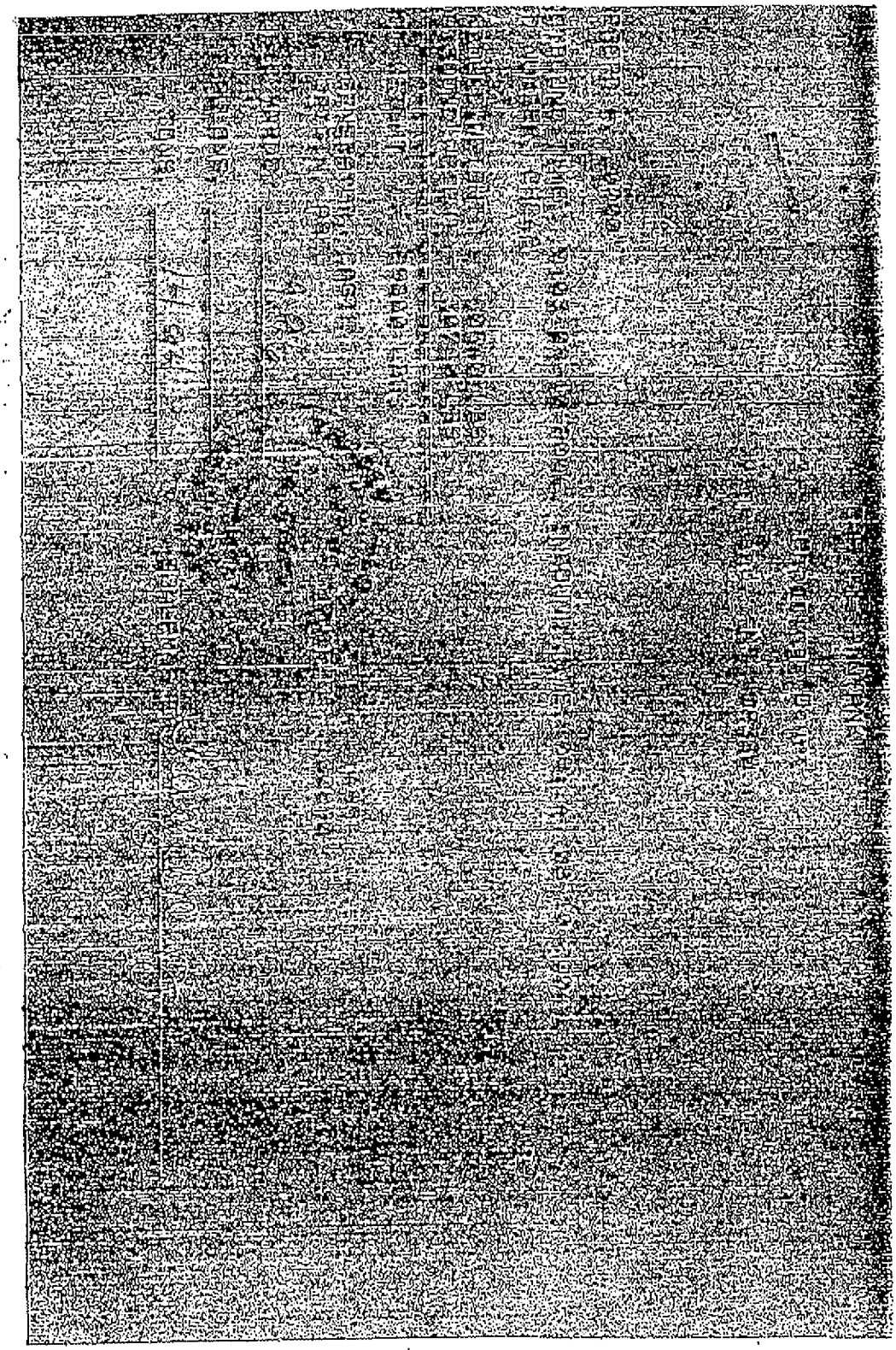
TRANSPORTER

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

FACILITY



Remit To:

CleanHarbors®
ENVIRONMENTAL SERVICES COMPANIES
P.O. Box 3442
Boston, MA 02241-3442

INVOICE

Date: 3/9/05

Clean Harbors, Inc.
Oil Recycling Division
Tel: 800-522-4645

Bill To: Name: PSE&G Salem/Hope Creek
Address: Alloway Creek Neck Rd
City, State, Zip: Hancocks Bridge, NJ 08038
Phone #: (856) 224-9109

Job Site: Name:
Address: Same
City, State, Zip:
Phone #:

Invoice Number: MW 233955

Sold By:	C.O.D.	Charge	P.O. #

Quantity	Service Description	Price	Amount
2600	Waste Oil Removal		
	Antifreeze Removal		
	Oil Filter Removal		
	Waste Water Removal		
	Oil Delivery		
	Transporters Fee		
	Transportation Charges		
	Demurrage Charges		
	DRIVER CAN NOT ACCEPT CASH		
		Tax	
		Total Due	

Received By: Charles W. Fiel 3/9/05

DETACH AND MAIL

Date	Amount Due	Amount Paid

Customer Code:
Account Name:
Address:

Invoice Number
MW 233955

TERMS: Due Upon Receipt

Remit to: Clean Harbors, Inc.
P.O. Box 3442
Boston, MA 02241-3442

CREDIT CARD INFORMATION

(✓) CHECK ONE

☐ VISA ☐ MasterCard

Account Number:

Expiration Date: /

Amount Paid $

X Signature

Appendix B

Soil Analytical Results

New Jersey
ACCUTEST.
Laboratories

12/07/04

Technical Report for

Arcadis Geraghty & Miller

PSEG-Salem, Artificial Island, Salem, NJ

NP000571

Accutest Job Number: N83004

Sampling Dates: 11/08/04 - 11/09/04

Report to:

Arcadis Geraghty & Miller
6 Terry Drive
Newtown, PA 18940

ATTN: Brad Pierce

Total number of pages in report: 39

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sample Summary

Arcadis Geraghty & Miller

Job No: N83004

PSEG-Salem, Artificial Island, Salem, NJ
Project No: NP000571

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N83004-1	11/08/04	10:15 DK	11/10/04	SO	Soil	D-2 (3.5-4.0)
N83004-2	11/08/04	11:30 DK	11/10/04	SO	Soil	D-4 (3.5-4.0)
N83004-3	11/08/04	12:00 DK	11/10/04	SO	Soil	D-4 (9.0-9.5)
N83004-4	11/08/04	13:00 DK	11/10/04	SO	Soil	D-3 (3.5-4.0)
N83004-5	11/09/04	14:00 DK	11/10/04	SO	Soil	D-5 (3.5-4.0)
N83004-5D	11/09/04	14:00 DK	11/10/04	SO	Soil Dup/MSD	D-5 (3.5-4.0)
N83004-5S	11/09/04	14:00 DK	11/10/04	SO	Soil Matrix Spike	D-5 (3.5-4.0)
N83004-6	11/09/04	11:00 DK	11/10/04	SO	Soil	D-50 (3.5-4.0)
N83004-7	11/09/04	15:00 DK	11/10/04	AQ	Field Blank Soil	FB-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

2

ACCUTEST.

Table Of Contents
Reduced Laboratory Data Deliverables
For
Non-USEPA/CLP Methods

Title/Cover Page

Table Of Contents

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A. Results Summary
B. Chain of Custody
C. Sample Tracking Chronicle/Method References

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B. Method Blank Summary
C. Blank Spike Summary
D. Matrix Spike/Matrix Spike Duplicate Summary
E. Tune Results Summary
F. Internal Standard Summary
G. Surrogate Recovery Results Summary
H. Calibration Summary (sorted by Instrument)
I. Initial Calibration Check Summary
Continuing Calibration Check Summary
J. Sample and Blank Chromatograms, Quant Reports, Mass Spectra, and Library Search Data

Section 3 GC Support Data

A. Conformance/Non-conformance Summary
B. Method Blank Summary
C. Blank Spike Summary
D. Matrix Spike/Matrix Spike Duplicate Summary
E. Surrogate Recovery Results Summary
F. Calibration Summary (sorted by Instrument)
Initial Calibration Check Summary
Continuing Calibration Check Summary
G. Retention Time Shift Summary
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Section 4 Metals Support Data (sorted by Instrument Type-ICP, Furnace, Flame, and Mercury)

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Initial and Continuing Calibration Blank Summary
Method Blank Summary
C. Batch Quality Control Summary
Matrix Spike and Duplicate Results Summary
Spike Blank and Lab Control Sample Summary
Serial Dilution Results Summary
D. Calibration Summary
Calibration Check Standards Summary
Interfering Elements Check Standard Summary

Section 5 General Chemistry/Petroleum Hydrocarbon Support Data

A. Conformance/Non-Conformance Summary
B. Batch Quality Control Summary
Method Blank and Spike Blank Results Summary
Matrix Spike Results Summary
Duplicate Results Summary
C. Raw Data and IR Spectra (Petroleum Hydrocarbons)
D. Raw Data and Run Record (Hexavalent Chromium)

New Jersey * Fresh Ponds Corporate Village * Building B * 2235 Route 130 * Dayton, NJ 08810 Tel: 732.329.0200 * Fax: 732.329.3499 * http://www.accutest.com

SII-SSA-0014-002514

RESULTS

SII-SSA-0014-002515

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-2 (3.5-4.0)	**Date Sampled:**	11/08/04
Lab Sample ID:	N83004-1	**Date Received:**	11/10/04
Matrix:	SO - Soil	**Percent Solids:**	92.7
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<28	28	mg/kg	1	11/11/04	NR	EPA 418.1 M
Solids, Percent	92.7		%	1	11/11/04	AK	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-4 (3.5-4.0)	**Date Sampled:**	11/08/04
Lab Sample ID:	N83004-2	**Date Received:**	11/10/04
Matrix:	SO - Soil	**Percent Solids:**	80.0
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<32	32	mg/kg	1	11/11/04	NR	EPA 418.1 M
Solids, Percent	80		%	1	11/11/04	AK	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-4 (9.0-9.5)	**Date Sampled:**	11/08/04
Lab Sample ID:	N83004-3	**Date Received:**	11/10/04
Matrix:	SO - Soil	**Percent Solids:**	88.2
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<29	29	mg/kg	1	11/11/04	NR	EPA 418.1 M
Solids, Percent	88.2		%	1	11/11/04	AK	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-3 (3.5-4.0)	**Date Sampled:**	11/08/04
Lab Sample ID:	N83004-4	**Date Received:**	11/10/04
Matrix:	SO - Soil	**Percent Solids:**	89.1
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<29	29	mg/kg	1	11/11/04	NR	EPA 418.1 M
Solids, Percent	89.1		%	1	11/11/04	AK	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-5 (3.5-4.0)	**Date Sampled:**	11/09/04
Lab Sample ID:	N83004-5	**Date Received:**	11/10/04
Matrix:	SO - Soil	**Percent Solids:**	94.4
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<27	27	mg/kg	1	11/12/04	NR	EPA 418.1 M
Solids, Percent	94.4		%	1	11/15/04	ADP	ASTM 4643-00

RL = Reporting Limit

SII-SSA-0014-002520

Accutest Laboratories

Report of Analysis

Client Sample ID:	D-50 (3.5-4.0)	**Date Sampled:**	11/09/04
Lab Sample ID:	N83004-6	**Date Received:**	11/10/04
Matrix:	SO - Soil	**Percent Solids:**	94.6
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<26	26	mg/kg	1	11/12/04	NR	EPA 418.1 M
Solids, Percent	94.6		%	1	11/15/04	ADP	ASTM 4643-00

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-1		
Lab Sample ID:	N83004-7	**Date Sampled:**	11/09/04
Matrix:	AQ - Field Blank Soil	**Date Received:**	11/10/04
		Percent Solids:	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Petroleum Hydrocarbons	<0.51	0.51	mg/l	1	11/12/04	HBA	EPA 418.1

RL = Reporting Limit

11

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Rou[illegible]n, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # N83004

Client / Reporting Information

Company Name: ARCADIS
Address: 6 Terry Drive
City: Newtown State: PA Zip: 18940
Project Contact: Brad Pierce E-mail:
Phone #: 267-685-1800
Sampler's Name: Deric Keerns

Project Information

Project Name: PSEG - Salem
Street: Artificial Island
City: Salem State: NJ
Project #: NP000571
Fax #:
Client Purchase Order #:

Requested Analysis

8021 ☐ 602 ☐ PAUG ☐
624 ☐ MTBE ☐ NAP ☐
8260 ☐ BTEX ☐ TBA ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐
TBA ☐ NAP ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐
ABN ☐ BN ☐ PAH ☐ PAP ☐ +TICs ☐

TPH 418.1 no Acid
VOC 8260 - VOA + 10 *

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles	LAB USE ONLY
-1	D-2 (3.5-4.0)	2369	11/8/04	10:15	DK	S	2	VOA X	X X
-2	D-4 (3.5-4.0)	2365		11:30					X 14E7M
-3	D-4 (9.0-9.5)	2368		12:00					X 11C27
-4	D-3 (3.5-4.0)	2371		13:00					X ~~HC5~~ 40
☆	D-5 (3.5-4.0)	2370, 2367		14:00					22472
-5	D-5 (3.5-4.0) MS	29	11/9/04	11:00					~~11C5~~
	D-5 (3.5-4.0) MSD	27		11:00					
-6	D-50 (3.5-4.0)	2363		11:00					
-7	FB-1			15:00			3		X
-8	Trip Blank	28	11/8/04				1	HCl Filled 11/8/04 @ 0830	X

Turnaround Time (Business Days)

☐ Std. 15 Business Days — Approved By: / Date:
☐ 10 Day *RUSH*
☐ 5 Day *RUSH*
☐ 3 Day *EMERGENCY*
☐ 2 Day *EMERGENCY*
☐ 1 Day *EMERGENCY*
☒ Other See notes
Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

☐ Commercial "A" ☐ FULL CLP
☐ Commercial "B" ☐ NYASP Category A
☒ NJ Reduced ☐ NYASP Category B
☐ NJ Full ☐ State Forms
☐ Other _____ ☐ EDD Format _____
Commercial "A" = Results Only

PHC FAST TRACK

Comments / Remarks

* = VOC analysis pending results of TPH ☆ MeOH vial for sample ☆
① For D-2(3.5-4.0) / D-4(3.5-4.0) / D-4(9.0-9.5) + D-3(3.5-4.0) need 24 hr TAT on TPH analysis, rest standard

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date/Time	Received by	Relinquished by	Date Time	Received by
1 Paul Fox	11/9/04 19:00	1 [signature] 11.10.04 10:20	2 [signature] 11/10	11/10.04	2
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal # 284 Preserved where applicable ☐	On Ice ☒	Cooler Temp. 3

SII-SSA-0014-002523

Internal Sample Tracking Chronicle

Arcadis Geraghty & Miller

Job No: N83004

PSEG-Salem, Artificial Island, Salem, NJ
Project No: NP000571

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N83004-1 Collected: 08-NOV-04 10:15 By: DK Received: 10-NOV-04 By: MP D-2 (3.5-4.0)						
N83004-1	EPA 418.1 M	11-NOV-04	NR	11-NOV-04	NR	PHCFT
N83004-1	ASTM 4643-00	11-NOV-04	AK			%SOLFT
N83004-2 Collected: 08-NOV-04 11:30 By: DK Received: 10-NOV-04 By: MP D-4 (3.5-4.0)						
N83004-2	EPA 418.1 M	11-NOV-04	NR	11-NOV-04	NR	PHCFT
N83004-2	ASTM 4643-00	11-NOV-04	AK			%SOLFT
N83004-3 Collected: 08-NOV-04 12:00 By: DK Received: 10-NOV-04 By: MP D-4 (9.0-9.5)						
N83004-3	EPA 418.1 M	11-NOV-04	NR	11-NOV-04	NR	PHCFT
N83004-3	ASTM 4643-00	11-NOV-04	AK			%SOLFT
N83004-4 Collected: 08-NOV-04 13:00 By: DK Received: 10-NOV-04 By: MP D-3 (3.5-4.0)						
N83004-4	EPA 418.1 M	11-NOV-04	NR	11-NOV-04	NR	PHCFT
N83004-4	ASTM 4643-00	11-NOV-04	AK			%SOLFT
N83004-5 Collected: 09-NOV-04 14:00 By: DK Received: 10-NOV-04 By: MP D-5 (3.5-4.0)						
N83004-5	EPA 418.1 M	12-NOV-04	NR	11-NOV-04	AS	PHCFT
N83004-5	ASTM 4643-00	15-NOV-04	ADP			%SOLFT
N83004-6 Collected: 09-NOV-04 11:00 By: DK Received: 10-NOV-04 By: MP D-50 (3.5-4.0)						
N83004-6	EPA 418.1 M	12-NOV-04	NR	11-NOV-04	AS	PHCFT
N83004-6	ASTM 4643-00	15-NOV-04	ADP			%SOLFT
N83004-7 Collected: 09-NOV-04 15:00 By: DK Received: 10-NOV-04 By: MP FB-1						
N83004-7	EPA 418.1	12-NOV-04	HBA	12-NOV-04	HBA	PHCFT

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GEN CHEM

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ACCUTEST.

General Chemistry Case Narrative/Conformance/Non-Conformance Summary

	NO	YES
1. Blank levels below reporting limits?		✓
If no, list analytes above reporting limits:		
2. Spike blank or lab control data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
3. Matrix Spike data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
4. Matrix duplicate data within acceptable limits?		✓
If no, list analytes outside of acceptable limits. Refer to QC summary for additional comments:		
5. Samples prepared and analyzed within holding time?		✓
If holding times were not met, list analytes where holding times were exceeded and explain:		
6. All analytical criteria met (calibrations, CCV checks, etc.)?		✓
If no, list affected samples and elements:		

Additional Comments:

QC Review Signature: Mary Linn **Date:** 12/04/04

Form: RG07
Rev. Date: 2/10/00

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N83004
Account: AGMPAL - Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Petroleum Hydrocarbons	GP25960/GN73662	25	<25	mg/kg	130	105	80.8	80-120%
Petroleum Hydrocarbons	GP25986/GN73706	25	<25	mg/kg	130	112	86.2	80-120%
Petroleum Hydrocarbons	GP26003/GN73732	0.50	<0.50	mg/l	1.30	1.1	84.6	80-120%

Associated Samples:
Batch GP25960: N83004-1, N83004-2, N83004-3, N83004-4
Batch GP25986: N83004-5, N83004-6
Batch GP26003: N83004-7

SII-SSA-0014-002527

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N83004
Account: AGMPAL - Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Petroleum Hydrocarbons	GP25960/GN73991	N82700-1	mg/kg	<27	135	107	79.4	52-132%
Petroleum Hydrocarbons	GP25986/GN73706	N83004-5	mg/kg	<27	133	120	89.9	52-132%
Petroleum Hydrocarbons	GP26003/GN73732	N82903-1	mg/l	<0.53	1.40	1.7	121.4	59-137%

Associated Samples:
Batch GP25960: N83004-1, N83004-2, N83004-3, N83004-4
Batch GP25986: N83004-5, N83004-6
Batch GP26003: N83004-7

SII-SSA-0014-002528

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: N83004
Account: AGMPAL - Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Petroleum Hydrocarbons	GP25960/GN73662	N82700-1	mg/kg	<27	<27	0.0	0-34%
Petroleum Hydrocarbons	GP25986/GN73706	N83004-5	mg/kg	<27	<27	0.0	0-34%
Petroleum Hydrocarbons	GP26003/GN73732	N82913-4A	mg/l	<0.63	<0.54	0.0	0-33%

Associated Samples:
Batch GP25960: N83004-1, N83004-2, N83004-3, N83004-4
Batch GP25986: N83004-5, N83004-6
Batch GP26003: N83004-7

SII-SSA-0014-002529

ACCUTEST

Prep Log - IPH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Soil / Solid**
Analytical wavenumber: **2924 cm-1**
Balance #: **b11**
Freon Used: **midatlantic 400280a**
Spike Lot #: **gne11-7141-phc**

Analyst: **HA**
GN Batch ID: **GN73662**
GP Batch ID: **GP25960**
Analysis Date: **11/11/04**
Prep Date: **11/10/2004 17:07**

	Cell #	BOT #	Sample ID	Sample Wt (g)	Dilution	Dilution Prep	Comments
1	A1		GP25960-MB1	10.0000			
2	A2		GP25960-B1	10.0000			1.0 mL of 1.30 mg/mL
3	A3	1	GP25960-S1(n82700-1)	9.8000			1.0 mL of 1.30 mg/mL
4	A4	1	GP25960-D1(n82700-1)	9.9000			
5	A5	1	N83004-1	9.8000			
6	A6	1	N83004-2	9.8000			
7	A7	1	N83004-3	9.8000			
8	A8	1	N83004-4	9.8000			
9	A9	1	N82700-1 XX	9.9000			ornage brwn, sand like, no odor
10	A10	1	N82700-2	9.7			
11	A11	1	N82700-3	9.8000			
12	A12	1	N82700-4	9.7000			
13	A13	1	N82700-5	9.9000			
14	A14	1	N82700-6	9.9000			
15	A15	1	N82700-7	9.8000	1:5	5ml → 25ml Freon	
16	A16	1	N82700-8 cont	9.7			confusion what sample is ml 16 Back to No 8
17	A17	1	N82830-3	9.9			
18	A18	1	N82830-4	9.8	1:50	0.5ml → 25ml Freon	
19	A19	1	N82830-5	9.9000	1:250	0.1ml → 25ml Freon	
20	A20	1	N82830-6	9.8000	1:25	1ml → 25ml Freon	
21	A21	1	N82830-7	9.8000	1:25	1ml → 25ml Freon	
22	A22	1	N82593-1	5.0000			high moisture content
23	A23	1	N82593-2	5.6000	1:5	5ml → 25ml Freon	high moisture content
24	A24	1	N82593-3	5.2000	1:5	5ml → 25ml Freon	high moisture content

XX = QC Sample

Analyst: N. R. Date: 11/11/04 QC Reviewer: Date: 11/11/04

SII-SSA-0014-002530

Test Title: PHC
Analyst: NR
Prep Date: 11/10/2004
GP Batch #: GP25960

EPA 418.1 Mod

Analysis Date: 11/11/2004
GN Batch: GN73662

Corr. Coef: 0.999114
Slope: 129.44438
Intercept: -0.75919

	Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol. (ml)	Sam. Wt. (g)	Dilution	Final Conc.	Units	DL	Factor
		Cal Blk	0	0.0							
		STD 1	0.047	5.00							
		STD 2	0.082	10.00							
		STD 3	0.155	20.00							
		STD 4	0.336	40.00							
		STD 5	0.465	60.00							
		STD 6	0.617	80.00							
	14:40	ICV	0.33	41.96	NA	NA	NA	NA	mg/l	0.5	NA
	14:41	CCV	0.337	42.86	NA	NA	NA	NA	mg/l	0.5	NA
MB		GP25960-MB1	0.016	1.31	25.0	10.00	1	3.3	mg/kg	25.0	1
BS		GP25960-B1	0.33	41.96	25.0	10.00	1	104.9	mg/kg	25.0	1
MS		GP25960-S1	0.134	16.59	25.0	9.80	1	42.3	mg/kg	25.0	1.020408
DUP		GP25960-D1	0.009	0.41	25.0	9.90	1	1.0	mg/kg	25.0	1.010101
5		N82593-1	0.025	2.48	25.0	5.00	1	12.4	mg/kg	25.0	2
6		N82593-2	OVR	#VALUE!	25.0	5.60	1			25.0	1.785714
7		N82593-2	0.316	40.15	25.0	5.60	5	896.1	mg/kg	25.0	1.785714
8		N82593-3	OVR	#VALUE!	25.0	5.20	1			25.0	1.923077
9		N82593-3	0.164	20.47	25.0	5.20	5	492.1	mg/kg	25.0	1.923077
10		N82700-1	0.012	0.79	25.0	9.90	1	2.0	mg/kg	25.0	1.010101
	15:13	CCV	0.335	42.60	NA	NA	NA	NA	mg/l	0.5	NA
11		N82700-2	0.028	2.87	25.0	9.70	1	7.4	mg/kg	25.0	1.030928
12		N82700-3	0.085	10.24	25.0	9.80	1	26.1	mg/kg	25.0	1.020408
13		N82700-4	0.136	16.85	25.0	9.70	1	43.4	mg/kg	25.0	1.030928
14		N82700-5	0.076	9.08	25.0	9.90	1	22.9	mg/kg	25.0	1.010101
		N82700-6	0.017	1.44	25.0	9.90	1	3.6	mg/kg	25.0	1.010101
		N82700-7	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
		N82700-7	0.164	20.47	25.0	9.80	5	261.1	mg/kg	25.0	1.020408
18		N82700-8conf		#VALUE!	25.0		1			25.0	#DIV/0!
19		N82830-3	0.417	53.22	25.0	9.90	1	134.4	mg/kg	25.0	1.010101
20		N82830-4	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
	15:30	CCV	0.338	42.99	NA	NA	NA	NA	mg/l	0.5	NA
21		N82830-4	0.212	26.68	25.0	9.80	50	3403.4	mg/kg	25.0	1.020408
22		N82830-5	OVR	#VALUE!	25.0	9.90	1			25.0	1.010101
23		N82830-5	0.236	29.79	25.0	9.90	250	18806.6	mg/kg	25.0	1.010101
24		N82830-6	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
25		N82830-6	0.216	27.20	25.0	9.80	25	1734.7	mg/kg	25.0	1.020408
26		N82830-7	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
27		N82830-7	0.134	16.59	25.0	9.80	25	1057.8	mg/kg	25.0	1.020408
28		N83004-1	0.018	1.57	25.0	9.80	1	4.0	mg/kg	25.0	1.020408
29		N83004-2	0.028	2.87	25.0	9.80	1	7.3	mg/kg	25.0	1.020408
30		N83004-3	0.016	1.31	25.0	9.80	1	3.3	mg/kg	25.0	1.020408
	15:42	CCV	0.339	43.12	NA	NA	NA	NA	mg/l	0.5	NA
31		N83004-4	0.045	5.07	25.0	9.80	1	12.9	mg/kg	25.0	1.020408
32				#VALUE!	25.0		1			25.0	#DIV/0!
33				#VALUE!	25.0		1			25.0	#DIV/0!
34				#VALUE!	25.0		1			25.0	#DIV/0!
35				#VALUE!	25.0		1			25.0	#DIV/0!
36				#VALUE!	25.0		1			25.0	#DIV/0!
37				#VALUE!	25.0		1			25.0	#DIV/0!
38				#VALUE!	25.0		1			25.0	#DIV/0!
39				#VALUE!	25.0		1			25.0	#DIV/0!
40				#VALUE!	25.0		1			25.0	#DIV/0!
	15:44	CCV	0.338	42.99	NA	NA	NA	NA	mg/l	0.5	NA
41				#VALUE!	25.0		1			25.0	#DIV/0!
42				#VALUE!	25.0	27.00	1			25.0	0.37037
43				#VALUE!	25.0	28.00	1			25.0	0.357143
44				#VALUE!	25.0	29.00	1			25.0	0.344828

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ACCUTEST.

Test: Petroleum Hydrocarbons
Product: PHC
Method: EPA 418.1 Mod

Units: mg/kg

Analyst: NR
GNBatch ID: GN73662
GPBatch ID: GP25960
Date: 11/11/04

Preparation Batch QC Summary Units = mg/kg

Method Blank ID: GP25960-MB1 Date: 11/11/04 Result: <25.0 DL: 25.0 <DL: Yes
Spike Blank ID: -B1 Date: ↓ Result: 105 Spike: 130 %Rec.: 80.8% ✓
Duplicate ID: -D1 Samp. Result: <25.0 Dup. Result: <25.0 %RPD: 0%
MS ID: ↓ -S1 Samp. Result: <25.0 MS Result: 42.3 Spike: 133 %Rec: 31.8%

Method Blank ID: _____ Date: _____ Result: _____ DL: _____ <DL: _____
Spike Blank ID: _____ Date: _____ Result: _____ Spike: _____ %Rec.: _____
Duplicate ID: _____ Samp. Result: _____ Dup. Result: _____ %RPD: _____
MS ID: _____ Samp. Result: _____ MS Result: _____ Spike: _____ %Rec: _____

Analysis Batch QC Summary Units = mg/mL
ICV (Ext): 11/11/04 Result: 4.20 TV: 4.00 %Rec: 105%

CCV: Result: 4.29 TV: %Rec.: 107%
CCV: Result: 4.26 TV: %Rec.: 106% ✓
CCV: Result: 4.30 TV: %Rec.: 108%
~~CCV: Result: 4.30 TV: %Rec.:~~ NG W/ MS
CCV: Result: 4.31 TV: %Rec.: 108%
CCV: ↓ Result: 4.30 TV: ↓ %Rec.: 108%

CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:

Reagent Reference Numbers: see Attached

Freon Manufacturer: _____ Lot Number: _____
Sodium Sulfate Manufacturer: _____ Lot Number: _____
Silica Gel Manufacturer: _____ Lot Number: _____

Analyst: N. [signature] Date: 11/11/04

Comments: _____

Form: GN-109-01
Rev. Date:2/15/99

ACCUTEST.

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHC

(GN) or GP Number: GN73662

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
DIL. STD STOCK	GNE10-7045-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04	NR	11/11/04
DIL. EXT STOCK	GNE10-7046-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04	NR	11/11/04

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
STD 1	GNE10-7047-PHC	1000 PPM	0.5	FREON	100ML	5.0	11/24/04	NR	11/11/04
STD 2			1.0			10.0			
STD 3			2.0			20.0			
STD 4			4.0			40.0			
STD 5			6.0			60.0			
STD 6			8.0			80.0			
EXT (ICV)	GNE10-7048-PHC		4.0			40.0			

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Form: GN121
Rev. Date:9/14/01

SII-SSA-0014-002533

ACCUTEST®

Reagent Information Log - PHC

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Fluorocarbon - 113	Virgin 400280A	NA
Spike Solution	4NE11-7141-PHC	12/5/04
Sodium Sulfate	Baker 39585	NA
Hydromatrix	Varian 28204	NA
Silica Gel	Fisher 037259	NA
ICV	4NE10-7048-PHC	11/24/04
CCV	4NE10-7047-PHC	11/24/04

All standards and stocks were made as described in the SOP for this method (circle one): (Y) or N
If no (N), see attached page for standards prep.

Form: GN-087 1-45B
Rev. Date:10/20/2004

ACCUTEST.

Prep Log - PH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Soil / Solid**
Analytical wavenumber: **2924 cm-1**
Balance #: **b-11**
Freon Used: **VIRGIN 400280A**
Spike Lot #: **gne11-7141-phc**

Analyst: **AMINAS**
GN Batch ID: GN73706
GP Batch ID: **GP25986**
Analysis Date: 11/12/04
Prep Date: **11/11/2004 15:49**

	Cell #	BOT #	Sample ID	Sample Wt (g)	Dilution	Dilution Prep	Comments
1	A23		GP25986-MB1				
2	A22		GP25986-B1				1 ml of 1.30mg/ml
3	A3	5	GP25986-S1	10.3000			1 ml of 1.30 mg/ml
4	A6	5	GP25986-D1	9.7000			
5	A19	1	N82152-10	9.8000			
6	A13	1	N82152-11	9.5000			
7	A24	1	N82152-12	10.2000			
8	A21	1	N82152-13	9.9000			
9	A4	5	N83004-5 XX	9.8000			
10	A18	1	N83004-6	10.2			
11	A2	1	N83011-1	10.1000			
12	A15	1	N83011-2	9.7000			
13	A17	1	N83011-3	9.7000			
14	A9	1	N83011-4	9.7000			
15	A14	1	N83011-5	9.9000			
16	A16	1	N83011-6	9.8			
17	A1	1	N83123-1	10.2	1:25	1ml → 25ml Freon	
18	A7	1	N83123-2	9.8	1:25	1ml → 25ml Freon	
19	A5	1	N83123-3	10.3000	1:50	0.5ml → 25ml Freon	
20	A12	1	N83123-4	10.0000			
21	A10	1	N83123-5	9.9000	1:125	0.2ml → 25ml Freon	
22	A8	1	N83123-6	9.9000			
23	A11	1	N83123-7	9.8000			
24							

XX = QC Sample

Analyst: R. R [signature] Date: 11/12/04 QC Reviewer: [signature] Date: 11/12/04

SII-SSA-0014-002535

Test Title: PHC
Analyst: NR
Prep Date: 11/11/2004
GP Batch #: GP25986

EPA 418.1 Mod

Analysis Date: 11/12/2004
GN Batch: GN73706

Corr. Coef: 0.9988857
Slope: 129.92357
Intercept: -0.782899

	Check QC ple	Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol. (ml)	Sam Wt (g)	Dilution	Final Conc.	Units	DL	Factor
			Cal Blk	0	0.0							
			STD 1	0.043	5.00							
			STD 2	0.083	10.00							
			STD 3	0.157	20.00							
			STD 4	0.338	40.00							
			STD 5	0.463	60.00							
			STD 6	0.613	80.00							
		15:27	ICV	0.329	41.96	NA	NA	NA	NA	mg/l	0.5	NA
		15:28	CCV	0.338	43.13	NA	NA	NA	NA	mg/l	0.5	NA
1. MB			GP25986-MB1	0.015	1.17	25.0	10.00	1	2.9	mg/kg	25.0	1
2. BS			GP25986-B1	0.351	44.62	25.0	10.00	1	112.1	mg/kg	25.0	1
3. MS			GP25986-S1	0.365	46.64	25.0	10.30	1	113.2	mg/kg	25.0	0.970874
4. DUP			GP25986-D1	0.04	4.41	25.0	9.70	1	11.4	mg/kg	25.0	1.030928
5			N82152-10	0.025	2.47	25.0	9.80	1	6.3	mg/kg	25.0	1.020408
6			N82152-11	0.018	1.56	25.0	9.50	1	4.1	mg/kg	25.0	1.052632
7			N82152-12	0.017	1.43	25.0	10.20	1	3.5	mg/kg	25.0	0.980392
8			N82152-13	0.073	8.70	25.0	9.90	1	22.0	mg/kg	25.0	1.010101
9			N83004-5	0.04	4.41	25.0	9.80	1	11.3	mg/kg	25.0	1.020408
10			N83004-6	0.026	2.60	25.0	10.20	1	6.4	mg/kg	25.0	0.980392
		15:45	CCV	0.34	43.39	NA	NA	NA	NA	mg/l	0.5	NA
11			N83011-1	0.014	1.04	25.0	10.10	1	2.6	mg/kg	25.0	0.990099
12			N83011-2	0.017	1.43	25.0	9.70	1	3.7	mg/kg	25.0	1.030928
13			N83011-3	0.025	2.47	25.0	9.70	1	6.4	mg/kg	25.0	1.030928
14			N83011-4	0.009	0.39	25.0	9.70	1	1.0	mg/kg	25.0	1.030928
15			N83011-5	0.267	33.91	25.0	9.90	1	85.6	mg/kg	25.0	1.010101
			N83011-6	0.015	1.17	25.0	9.80	1	3.0	mg/kg	25.0	1.020408
			N83123-1	OVR	#VALUE!	25.0	10.20	1			25.0	0.980392
16			N83123-1	0.181	22.73	25.0	10.20	25	1393.0	mg/kg	25.0	0.980392
19			N83123-2	OVR	#VALUE!	25.0	9.80	1			25.0	1.020408
20			N83123-2	0.26	33.00	25.0	9.80	25	2104.4	mg/kg	25.0	1.020408
		16:02	CCV	0.338	43.13	NA	NA	NA	NA	mg/l	0.5	NA
21			N83123-3	OVR	#VALUE!	25.0	10.30	1			25.0	0.970874
22			N83123-3	0.271	34.43	25.0	10.30	50	4178.0	mg/kg	25.0	0.970874
23			N83123-4	0.057	6.62	25.0	10.00	1	16.6	mg/kg	25.0	1
24			N83123-5	OVR	#VALUE!	25.0	9.90	1			25.0	1.010101
25			N83123-5	0.243	30.79	25.0	9.90	125	9718.6	mg/kg	25.0	1.010101
26			N83123-6	0.297	37.80	25.0	9.90	1	95.5	mg/kg	25.0	1.010101
27			N83123-7	0.038	4.15	25.0	9.80	1	10.6	mg/kg	25.0	1.020408
28					#VALUE!	25.0		1			25.0	#DIV/0!
29					#VALUE!	25.0		1			25.0	#DIV/0!
30					#VALUE!	25.0		1			25.0	#DIV/0!
		16:19	CCV	0.338	43.13	NA	NA	NA	NA	mg/l	0.5	NA
31					#VALUE!	25.0		1			25.0	#DIV/0!
32					#VALUE!	25.0		1			25.0	#DIV/0!
33					#VALUE!	25.0		1			25.0	#DIV/0!
34					#VALUE!	25.0		1			25.0	#DIV/0!
35					#VALUE!	25.0		1			25.0	#DIV/0!
36					#VALUE!	25.0		1			25.0	#DIV/0!
37					#VALUE!	25.0		1			25.0	#DIV/0!
38					#VALUE!	25.0		1			25.0	#DIV/0!
39					#VALUE!	25.0	27.00	1			25.0	0.37037
40					#VALUE!	25.0	28.00	1			25.0	0.357143
			CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
41					#VALUE!	25.0	29.00	1			25.0	0.344828
42					#VALUE!	25.0	30.00	1			25.0	0.333333
43					#VALUE!	25.0	31.00	1			25.0	0.322581
44					#VALUE!	25.0		1			25.0	#DIV/0!

ACCUTEST.

Test: Petroleum Hydrocarbons
Product: PHC
Method: EPA 418.1 Mod

Units: mg/kg

Analyst: NR
GNBatch ID: GN73706
GPBatch ID: GP25986
Date: 11/12/04

Preparation Batch QC Summary Units = mg/kg

Method Blank ID: GP25986-MB1 Date: 11/12/04 Result: < 25.0 DL: 25.0 <DL: Yes
Spike Blank ID: -B1 Date: ↓ Result: 112 Spike: 130 %Rec.: 86.2%
Duplicate ID: -D1 Samp. Result: < 25.0 Dup. Result: < 25.0 %RPD: 0%
MS ID: ↓-S1 Samp. Result: < 25.0 MS Result: 113 Spike: 126 %Rec: 89.6%

Method Blank ID: _____ Date: _____ Result: _____ DL: _____ <DL: _____
Spike Blank ID: _____ Date: _____ Result: _____ Spike: _____ %Rec.: _____
Duplicate ID: _____ Samp. Result: _____ Dup. Result: _____ %RPD: _____
MS ID: _____ Samp. Result: _____ MS Result: _____ Spike: _____ %Rec: _____

Analysis Batch QC Summary Units = mg/mL
ICV (Ext): 11/12/04 Result: 4.20 TV: 4.00 %Rec: 105%

CCV: _____ Result: 4.31 TV: _____ %Rec.: 108%
CCV: _____ Result: 4.34 TV: _____ %Rec.: 109%
CCV: _____ Result: 4.31 TV: _____ %Rec.: 108%
CCV: ↓ Result: 4.31 TV: ↓ %Rec.: 108%
CCV: _____ Result: _____ TV: _____ %Rec.: _____
CCV: _____ Result: _____ TV: _____ %Rec.: _____

CCB: _____ Result: _____ DL: _____ <DL: _____
CCB: _____ Result: _____ DL: _____ <DL: _____
CCB: _____ Result: _____ DL: _____ <DL: _____
CCB: _____ Result: _____ DL: _____ <DL: _____
CCB: _____ Result: _____ DL: _____ <DL: _____
CCB: _____ Result: _____ DL: _____ <DL: _____

Reagent Reference Numbers: See Attached

Freon Manufacturer: _____ Lot Number: _____
Sodium Sulfate Manufacturer: _____ Lot Number: _____
Silica Gel Manufacturer: _____ Lot Number: _____

Analyst: N Date: 11/12/04

Comments: _____

Form: GN-109-01
Rev. Date:2/15/99

ACCUTEST.

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHC

GN or GP Number: GN23705

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
DIL. STD STOCK	GNE10-7045-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04	NR	11/12/04
DIL. EXT STOCK	GNE10-7046-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04	NR	11/12/04

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
STD 1	GNE10-7047-PHC	1000 PPM	0.5	FREON	100ML	5.0	11/24/04	NR	11/12/04
STD 2			1.0			10.0			
STD 3			2.0			20.0			
STD 4			4.0			40.0			
STD 5			6.0			60.0			
STD 6			8.0			80.0			
EXT (ICV)	GNE10-7048-PHC		4.0			40.0			

SII-SSA-0014-002538

ACCUTEST.

Reagent Information Log - PHC

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Fluorocarbon - 113	Virgin 400280A	NA
Spike Solution	GNE11-7141-PHC	12/5/04
Sodium Sulfate	EMD 44121428	NA
Hydromatrix	Varian 28204	NA
Silica Gel	Fisher 03725-9	NA
ICV	GNE10-7048-PHC	11/24/04
CCV	GNE10-7047-PHC	11/24/04

All standards and stocks were made as described in the SOP for this method (circle one) (Y) or N
If no (N), see attached page for standards prep

SII-SSA-0014-002539

ACCUTEST

Prep Log - TPH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Soil / Solid**
Analytical wavenumber: **2924 cm-1**
Balance #: **b11**
Freon Used: **virgin 400280a**
Spike Lot #: **gne11-7141-phc**

Analyst: **NR**
GN Batch ID: **73991**
GP Batch ID: **GP26097**
Analysis Date: **11/20/04**
Prep Date: **11/19/2004 8:51**

	Cell #	BOT #	Sample ID	Sample Wt (g)	Dilution	Dilution Prep	Comments
1	A1		GP26097-MB1				1 ml of 1.30 mg/ml
2	A2		GP26097-B1				1 ml of 1.30 mg/ml
3	A3	1	GP26097-S1(n82237-2)	10.3000			
4	A4	1	GP26097-D1(n82237-2)	10.3000			
5	A5	1	N82237-1	9.8000			brown moist sand, few small pebbles, slt odor
6	A6	1	N82237-2 XX	10.3000			
7	A7	1	N82237-3	9.6000			
8	A8	1	N82237-4	10.3000			
9	A9	1	N82237-5	9.8000			
10	A10	1	N82237-6	10.2000			
11	A11	1	N83561-10	9.9000			
12	A12	1	N83561-3	9.7000	1:250	0.1ml → 25ml	
13	A13	1	N83561-4	9.5			
14	A14	1	N83561-5	10.1			
15	A15	1	N83561-6	9.7	1:5	5.0ml → 25ml	
16	A16	1	N83561-7	9.7	1:5	5.0ml → 25ml	
17	A17	1	N83561-8	9.9			
18	A18	1	N83561-9	10.1			
19	A19	1	N83706-1	10.0			
20	A20	1	N83706-2	9.8	1:25	1.0ml → 25ml	
21	A21	1	N83706-6	9.9			
22	A22	1	N83706-7	10.2			
23	A23	1	N83827-1	10.1			
24	A24	1	GP25960-S2(n82700-1)	10.0			

XX = QC Sample

Analyst: _____ Date: 11/20/04 QC Reviewer: _____ Date: 11/21/04

11/23/04

SII-SSA-0014-002540

Total Petroleum Hydrocarbon Soils

Test Title: PHC
Analyst: JAREDO
Prep Date: 11/19/2004
GP Batch #: GP26097

EPA 418.1 Mod

Analysis Date: 11/20/2004
GN Batch: GN73991

Corr. Coef: 0.9987039
Slope: 127.48608
Intercept: -0.574441

Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol.	Sam. Wt.	Dilution	Final Conc.	Units	DL	Factor
	Cal Blk	0	0.0							
	STD 1	0.041	5.00							
	STD 2	0.08	10.00							
	STD 3	0.16	20.00							
	STD 4	0.345	40.00							
	STD 5	0.47	60.00	Final Vol. (ml)	Sam Wt (g)	Dilution	Final Conc.	Units	DL	Factor
	STD 6	0.622	80.00	NA	NA	NA	NA	mg/l	0.5	NA
	ICV	0.329	41.37	NA	NA	NA	NA	mg/l	0.5	NA
	CCV	0.34	42.77	25.0	10.00	1	2.1	mg/kg	25.0	1
	GP26097-MB1	0.011	0.83	25.0	10.00	1	112.0	mg/kg	25.0	1
	GP26097-B1	0.356	44.81	25.0	10.30	1	100.4	mg/kg	25.0	0.970874
	GP26097-S1	0.329	41.37	25.0	10.30	1	1.4	mg/kg	25.0	0.970874
	GP26097-D1	0.009	0.57	25.0	9.80	1	2.1	mg/kg	25.0	1.020408
	N82237-1	0.011	0.83	25.0	10.30	1	0.8	mg/kg	25.0	0.970874
	N82237-2	0.007	0.32	25.0	9.60	1	-0.2	mg/kg	25.0	1.041667
	N82237-3	0.004	-0.06	25.0	10.30	1	6.7	mg/kg	25.0	0.970874
	N82237-4	0.026	2.74	25.0	9.80	1	3.7	mg/kg	25.0	1.020408
	N82237-5	0.016	1.47	25.0	10.20	1	2.0	mg/kg	25.0	0.980392
	N82237-6	0.011	0.83	NA	NA	NA	NA	mg/l	0.5	NA
	CCV	0.34	42.77	25.0	9.90	1	3.7	mg/kg	25.0	1.010101
	N83561-10	0.016	1.47	25.0	9.70	1			25.0	1.030928
	N83561-3	OVR	#VALUE!	25.0	9.70	250	27805.0	mg/kg	25.0	1.030928
	N83561-3	0.343	43.15	25.0	9.50	1	37.7	mg/kg	25.0	1.052632
	N83561-4	0.117	14.34	25.0	10.10	1	4.9	mg/kg	25.0	0.990099
	N83561-5	0.02	1.98	25.0	9.70	1			25.0	1.030928
	N83561-6	OVR	#VALUE!	25.0	9.70	5	653.0	mg/kg	25.0	1.030928
	N83561-6	0.402	50.67	25.0	9.70	1			25.0	1.030928
	N83561-7	OVR	#VALUE!	25.0	9.70	5	424.7	mg/kg	25.0	1.030928
	N83561-7	0.263	32.95	25.0	9.90	1	-0.5	mg/kg	25.0	1.010101
	N83561-8	0.003	-0.19	NA	NA	NA	NA	mg/l	0.5	NA
	CCV	0.34	42.77	25.0	10.10	1	21.6	mg/kg	25.0	0.990099
	N83561-9	0.073	8.73	25.0	10.00	1	2.4	mg/kg	25.0	1
	N83706-1	0.012	0.96	25.0	9.80	1			25.0	1.020408
	N83706-2	OVR	#VALUE!	25.0	9.80	25	3996.1	mg/kg	25.0	1.020408
	N83706-2	0.496	62.66	25.0	9.90	1	11.1	mg/kg	25.0	1.010101
	N83706-6	0.039	4.40	25.0	10.20	1	1.4	mg/kg	25.0	0.980392
	N83706-7	0.009	0.57	25.0	10.10	1	78.7	mg/kg	25.0	0.990099
	N83827-1	0.254	31.81	25.0	10.00	1	99.9	mg/kg	25.0	1
	GP25960-S2	0.318	39.97	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
	CCV	0.341	42.90	NA	NA	NA	NA	mg/l	0.5	NA
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0		1			25.0	#DIV/0!
			#VALUE!	25.0	27.00	1			25.0	0.37037
			#VALUE!	25.0	28.00	1			25.0	0.357143
	CCV		#VALUE!	NA	NA	NA	NA		0.5	NA
			#VALUE!	25.0	29.00	1			25.0	0.344828
			#VALUE!	25.0	30.00	1			25.0	0.333333
			#VALUE!	25.0	31.00	1			25.0	0.322581
			#VALUE!	25.0		1			25.0	#DIV/0!

ACCUTEST.

Test: Petroleum Hydrocarbons
Product: PHC
Method: EPA 418.1 Mod

Units: mg/kg

Analyst: JO
GNBatch ID: 73991
GPBatch ID: 26097.
Date: 11/19/04

Preparation Batch QC Summary Units = mg/kg.

Method Blank ID: MB1 Date: 11/20/04 Result: <25 DL: 25 <DL: YES.
Spike Blank ID: BS1 Date: " Result: 112 Spike: 130 %Rec.: 86.2
Duplicate ID: D1 Samp. Result: <25 Dup. Result: <25 %RPD: 0
MS ID: S1 Samp. Result: <25 MS Result: 100.4 Spike: 126.2 %Rec: 79.6

Method Blank ID: Date: Result: DL: <DL:
Spike Blank ID: Date: Result: Spike: %Rec.:
Duplicate ID: Samp. Result: Dup. Result: %RPD:
MS ID: S2 Samp. Result: MS Result: 99.9 Spike: 130 %Rec:

Analysis Batch QC Summary Units = mg/kg.

ICV (Ext): ~~11/18/04~~ 11/20/04 Result: 4.14 TV: 4.0 %Rec: 103.5

CCV: Result: 4.28 TV: 4.0 %Rec.: 107.0
CCV: Result: 4.28 TV: 4.0 %Rec.: 107.0
CCV: Result: 4.28 TV: 4.0 %Rec.: 107.0
CCV: J Result: 4.29 TV: 4.0 %Rec.: 107.3
CCV: Result: TV: %Rec.:
CCV: Result: TV: %Rec.:

CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:

Reagent Reference Numbers:

See attached

Freon Manufacturer: Lot Number:
Sodium Sulfate Manufacturer: Lot Number:
Silica Gel Manufacturer: Lot Number:

Analyst: [signature] Date: 11/20/04

Comments:

Form: GN-109-01
Rev. Date:2/15/99

ACCUTEST. GN 73991

Reagent Information Log - PHC

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Fluorocarbon - 113	Virgin 4002809	NA
Spike Solution	GNE11-7141-PHC	12/5/04
Sodium Sulfate	EMD 44121428	NA
Hydromatrix	Varian 28204	NA
Silica Gel	Fisher 037259	NA
ICV	GNE10-7048-PHC	11/24/04
CCV	GNE10-7047-PHC	11/24/04

All standards and stocks were made as described in the SOP for this method (circle one) (Y) or N
If no (N), see attached page for standards prep.

ACCUTEST.

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHC

GN or GP Number: 73991

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
DIL. STD STOCK	GNE10-7045-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04		
DIL. EXT STOCK	GNE10-7046-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04		

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
STD 1	GNE10-7047-PHC	1000 PPM	0.5	FREON	100ML	5.0	11/24/04		
STD 2			1.0			10.0			
STD 3			2.0			20.0			
STD 4			4.0			40.0			
STD 5			6.0			60.0			
STD 6			8.0			80.0			
EXT (ICV)	GNE10-7048-PHC		4.0			40.0			

33

Form: GN121

SII-SSA-0014-002544

ACCUTEST

Prep Log - TPH

Test: **Petroleum Hydrocarbons**
Product: **PHC**
Method: **EPA 418.1 Mod**
Matrix: **Water**
Analytical wavenumber: **2924 cm-1**
Freon Used: midatlantic 400280a
Spike Lot #: gne11-7141-phc

Analyst: **HA**
GN Batch ID: GN73732
GP Batch ID: **GP26003**
Analysis Date: 11/12/04
Prep Date: **11/12/2004 15:36**

	BOT #	Sample ID	pH Check	Sample Vol (ml)	Dilution	Dilution Prep	Appearance	Odor
1		GP26003-MB1	LV	1000				
2		GP26003-B1	LV	1000			clear, yellow	chemical
3	2	GP26003-S1(n82903-1)	LV	930			clear, light yellow	chemical
4	1	GP26003-D1(n82913-4a)	LV	970			cloudy, orange brown w/ lots of particles	slight chemical
5	1	N82692-1	*LV	990	1:50	0.50 mL → 25 mL freon	slightly cloudy, orange brown, oily	strong chemical
6		N82692-2 ★	LV	1.00	1:5	5.0 mL → 25 mL freon	clear, yellow	chemical
7	3	N82903-1 XX	LV	950			clear, light yellow	chemical
8	2	N82913-4A XX	LV	990			clear, dark yellow	chemical
9	1	N82923-1	LV	870			clear, colorless	none
10	1	N83004-7	LV	990				
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

XX - QC.

* pH adjusted to LV, see attached
★ sample mixes w/ freon, took 1mL of sample → 90 mL freon

Spike Info: 1.0 mL of 1.50 mg/mL

Analyst: Helen B Ateingeu Date: 11/12/04 QC Reviewer: _____ Date: 11/15/04

SII-SSA-0014-002545

Total Petroleum Hydrocarbon - Waters

Test Title: EPA 418.1
Analyst: HA
Prep Date: 11/12/2004
GP Batch #: GP26003

Analysis Date: 11/12/2004
GN Batch: GN73732

Corr. Coef: 0.9988857
Slope: 129.92357
Intercept: -0.782899

	Time	Sample #	X Values(abs)	Y Values Conc (mg/l)	Final Vol. (ml)	Sam Vol (ml)	Dilution	Final Conc.	Units	DL	Factor
		Cal Blk	0	0.0							
		STD 1	0.043	5.00							
		STD 2	0.083	10.00							
		STD 3	0.157	20.00							
		STD 4	0.338	40.00							
		STD 5	0.463	60.00							
		STD 6	0.613	80.00							
	22:39	ICV	0.339	43.26	NA	NA	NA	NA	mg/l	5.0	NA
	22:40	CCV	0.332	42.35	NA	NA	NA	NA	mg/l	5.0	NA
1. MB		GP26003-MB1	0.013	0.91	100.0	1000	1	0.09	mg/l	0.5	1
2. BS		GP26003-B1	0.094	11.43	100.0	1000	1	1.14	mg/l	0.5	1
3. MS		GP26003-S1	0.129	15.98	100.0	930	1	1.72	mg/l	0.5	1.075269
4. DUP		GP26003-D1	0.012	0.78	100.0	920	1	0.08	mg/l	0.5	1.086957
5		N82692-1	OVR	#VALUE!	100.0	990	1			0.5	1.010101
6		N82692-1	0.221	27.93	100.0	990	50	141.06	mg/l	0.5	1.010101
7		N82692-2	OVR	#VALUE!	100.0	1	1			0.5	1000
8		N82692-2	0.316	40.27	100.0	1	5	20136.47	mg/l	0.5	1000
9		N82903-1	0.043	4.80	100.0	950	1	0.51	mg/l	0.5	1.052632
10		N82913-4A	0.014	1.04	100.0	790	1	0.13	mg/l	0.5	1.265823
	20:55	CCV	0.336	42.87	NA	NA	NA	NA	mg/l	5.0	NA
11		N82923-1	0.036	3.89	100.0	820	1	0.47	mg/l	0.5	1.219512
12		N83004-7	0.008	0.26	100.0	990	1	0.03	mg/l	0.5	1.010101
13				#VALUE!	100.0	100	1			0.5	10
14				#VALUE!	100.0	1000	1			0.5	1
				#VALUE!	100.0	1000	1			0.5	1
				#VALUE!	100.0	1000	1			0.5	1
				#VALUE!	100.0	1000	1			0.5	1
18				#VALUE!	100.0	1000	1			0.5	1
19				#VALUE!	100.0	1000	1			0.5	1
20				#VALUE!	100.0	1000	1			0.5	1
	20:59	CCV	0.333	42.48	NA	NA	NA	NA	mg/l	5.0	NA
21				#VALUE!	100.0	1000	1			0.5	1
22				#VALUE!	100.0	1000	1			0.5	1
23				#VALUE!	100.0	1000	1			0.5	1
24				#VALUE!	100.0	1000	1			0.5	1
25				#VALUE!	100.0	1000	1			0.5	1
26				#VALUE!	100.0	1000	1			0.5	1
27				#VALUE!	100.0	1000	1			0.5	1
28				#VALUE!	100.0	1000	1			0.5	1
29				#VALUE!	100.0	1000	1			0.5	1
30				#VALUE!	100.0	1000	1			0.5	1
		CCV		#VALUE!	NA	NA	NA	NA		5.0	NA
31				#VALUE!	100.0	1000	1			0.5	1
32				#VALUE!	100.0	1000	1			0.5	1
33				#VALUE!	100.0	1000	1			0.5	1
34				#VALUE!	100.0	1000	1			0.5	1
35				#VALUE!	100.0	1000	1			0.5	1
36				#VALUE!	100.0	1000	1			0.5	1
37				#VALUE!	100.0	1000	1			0.5	1
38				#VALUE!	100.0	1000	1			0.5	1
39				#VALUE!	100.0	1000	1			0.5	1
40				#VALUE!	100.0	1000	1			0.5	1
		CCV		#VALUE!	NA	NA	NA	NA		5.0	NA
41				#VALUE!	100.0	1000	1			0.5	1
42				#VALUE!	100.0	1000	1			0.5	1
43				#VALUE!	100.0	1000	1			0.5	1
44				#VALUE!	100.0	1000	1			0.5	1

ACCUTEST.

Test: Petroleum Hydrocarbons
Product: PHC
Method: EPA 418.1

Units: mg/l

Analyst: HA
GNBatch ID: 73732
GPBatch ID: 26003
Date: 11/12/04

Preparation Batch QC Summary Units = mg/L

Method Blank ID: GP26003-MB1 Date: 11/12/04 Result: <0.50 DL: 0.50 <DL: yes
Spike Blank ID: -B1 Date: ↓ Result: 1.14 Spike: 1.30 %Rec.: 89.7%
Duplicate ID: -D1 Samp. Result: <0.50 Dup. Result: <0.50 %RPD: 0%
MS ID: -S1 Samp. Result: 0.51 MS Result: 1.92 Spike: 1.40 %Rec: 86.4%

Method Blank ID: Date: Result: DL: <DL:
Spike Blank ID: Date: Result: Spike: %Rec.:
Duplicate ID: Samp. Result: Dup. Result: %RPD:
MS ID: Samp. Result: MS Result: Spike: %Rec:

Analysis Batch QC Summary Units = mg/mL

ICV (Ext): 11/12/04 Result: 4.33 TV: 4.00 %Rec: 108%

HA 11/17/04
CCV: Result: 4.234 TV: %Rec.: 106%
CCV: Result: 4.29 TV: %Rec.: 109%
CCV: Result: 4.25 TV: %Rec.: 106%
CCV: Result: TV: %Rec.:
CCV: Result: TV: %Rec.:
CCV: Result: TV: %Rec.:

CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:
CCB: Result: DL: <DL:

Reagent Reference Numbers:
see attached

Freon Manufacturer: Lot Number:
Sodium Sulfate Manufacturer: Lot Number:
Silica Gel Manufacturer: Lot Number:

Analyst: Helen B Odurya Date: 11/12/04

Comments:

Form: GN-109
Rev. Date:2/15/99

SII-SSA-0014-002547

ACCUTEST.

DOCUMENTATION OF IMPROPER SAMPLE PRESERVATION

Sample Number	Test	measured pH/preservative	Added preservative	Final pH	Analyst (Initials)	Date
N82692-1	pHC	7.0	2.0 ml of conc. HCl	<2.0	HA	11/12/04

Form: GN-175
Rev. date:2/10/04

QC Review: 37

ACCUTEST.

GENERAL CHEMISTRY STANDARD PREPARATION LOG

Product: TPHC

GN or GP Number: 73732

Intermediate Standard Description	Stock used to prepare standard	Stock concentration	Stock volume used in ml	Diluent	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
DIL. STD STOCK	GNE10-7045-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04	HA	11/17/04
DIL. EXT STOCK	GNE10-7046-PHC	10 000 PPM	10	FREON	100ml	1000 PPM	11/24/04	HA	11/17/04

Standard Description	Intermediate or Stock used to prepare standard	Intermediate or Stock concentration	Intermediate or Stock volume used in ml	Diluent	Final Volume	Final Conc. of Standard (mg/l)	Expiration Date	Analyst	Date
STD 1	GNE10-7047-PHC	1000 PPM	0.5	FREON	100ML	5.0	11/24/04	HA	11/17/04
STD 2			1.0			10.0			
STD 3			2.0			20.0			
STD 4			4.0			40.0			
STD 5			6.0			60.0			
STD 6			8.0			80.0			
EXT (ICV)	GNE10-7048-PHC		4.0			40.0			

SII-SSA-0014-002549

ACCUTEST.

GN73932

Reagent Information Log - PHC

Reagent	Reagent#_or_Manufacturer/Lot	Exp_Date
Fluorocarbon - 113	MIDATLANTIC 400280A	NA
Spike Solution	GNE11-7141-PHC	12/5/04
Sodium Sulfate	EMD 44121428	NA
Hydromatrix	Varian 28204	NA
Silica Gel	Fisher 037259	NA
ICV	GNE10-7048-PHC	11/24/04
CCV	GNE10-7047-PHC	11/24/04

All standards and stocks were made as described in the SOP for this method (circle one) (Y) or N
If no (N), see attached page for standards prep

SII-SSA-0014-002550

Appendix C

Well Records, Well Completion Details and Boring Logs

ARCADIS

Sample/Core Log

Boring/Well: Well AU | Project/No.: PSEG Nuclear, LLC Salem Generrating Station/NP000603.0001 | Page: 1 of 1

Site Location: Artificial Island, Hancock's Bridge, New Jersey | Drilling Started: 11/9/2004 | Drilling Completed: 11/9/2004

Total Depth Drilled: 7.0 Feet | Hole Diameter: 12 inches | Type of Sample/ Coring Device: NA

Length and Diameter of Coring Device: 12 inch diameter vacuum extraction flex-pipe | Sampling Interval: NA feet

Land-Surface Elev.: _____ feet | [X] Surveyed [ ] Estimated | Datum: Plant Datum

Drilling Fluid Used: Water | Drilling Method: Vacuum Extraction

Drilling Contractor: Unitech Drilling and Jetline Services | Driller: Rich | Helper: Jim

Prepared By: Deric Kearns | Hammer Weight: NA | Hammer Drop: NA inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	PID Reading (ppm)	Sample/Core Description
0.0	4.0	--	--	--	SAND, medium, tan, some silt, moist, loose.
4.0	7.0	--	--	--	SAND, medium, tan, some silt, wet, strong hydrocarbon odor.
					Description of cuttings based on visual observations during vacuum extraction.
					Borehole completed as Monitoring Well AU.

ARCADIS

Sample/Core Log

Boring/Well: Well AV | Project/No.: PSEG Nuclear, LLC Salem Generrating Station/NP000603.0001 | Page: 1 of 1

Site Location: Artificial Island, Hancock's Bridge, New Jersey | Drilling Started: 11/8/2004 | Drilling Completed: 11/8/2004

Total Depth Drilled: 10.0 Feet | Hole Diameter: 12 inches | Type of Sample/ Coring Device: NA

Length and Diameter of Coring Device: 12 inch diameter vacuum extraction flex-pipe | Sampling Interval: 3.5 - 4.0 feet

Land-Surface Elev.: _____ feet | [X] Surveyed | [ ] Estimated | Datum: Plant Datum

Drilling Fluid Used: Water | Drilling Method: Vacuum Extraction

Drilling Contractor: Unitech Drilling and Jetline Services | Driller: Rich | Helper: Jim

Prepared By: Deric Kearns | Hammer Weight: NA | Hammer Drop: NA inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	PID Reading (ppm)	Sample/Core Description
0.0	4.0	--	--	--	SAND, medium, tan, some silt, moist, loose.
4.0	10.0	--	--	--	SAND, medium, tan, some silt, wet, moderate hydrocarbon odor.
					Description of cuttings based on visual observations during vacuum extraction.
					Borehole completed as Monitoring Well AV.

ARCADIS

Sample/Core Log

Boring/Well: Well AW | Project/No.: PSEG Nuclear, LLC Salem Generrating Station/NP000603.0001 | Page: 1 of 1

Site Location: Artificial Island, Hancock's Bridge, New Jersey | Drilling Started: 11/8/2004 | Drilling Completed: 11/8/2004

Total Depth Drilled: 10.0 Feet | Hole Diameter: 12 inches | Type of Sample/ Coring Device: NA

Length and Diameter of Coring Device: 12 inch diameter vacuum extraction flex-pipe | Sampling Interval: 3.5 - 4.0 feet

Land-Surface Elev.: _____ feet | [X] Surveyed [ ] Estimated | Datum: Plant Datum

Drilling Fluid Used: Water | Drilling Method: Vacuum Extraction

Drilling Contractor: Unitech Drilling and Jetline Services | Driller: Rich | Helper: Jim

Prepared By: Deric Kearns | Hammer Weight: NA | Hammer Drop: NA inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	PID Reading (ppm)	Sample/Core Description
0.0	4.0	--	--	--	SAND, medium, tan, some silt, moist, loose.
4.0	10.0	--	--	--	SAND, medium, tan, some silt, wet, moderate hydrocarbon odor.
					Description of cuttings based on visual observations during vacuum extraction.
					Borehole completed as Monitoring Well AW.

ARCADIS

Sample/Core Log

Boring/Well: Well AY | Project/No.: PSEG Nuclear, LLC Salem Generrating Station/NP000603.0001 | Page: 1 of 1

Site Location: Artificial Island, Hancock's Bridge, New Jersey | Drilling Started: 11/8/2004 | Drilling Completed: 11/8/2004

Total Depth Drilled: 9.0 Feet | Hole Diameter: 12 inches | Type of Sample/ Coring Device: NA

Length and Diameter of Coring Device: 12 inch diameter vacuum extraction flex-pipe | Sampling Interval: 3.5-4.0 / 9.0-9.5 feet

Land-Surface Elev.: _____ feet | [X] Surveyed | [ ] Estimated | Datum: Plant Datum

Drilling Fluid Used: Water | Drilling Method: Vacuum Extraction

Drilling Contractor: Unitech Drilling and Jetline Services | Driller: Rich | Helper: Jim

Prepared By: Deric Kearns | Hammer Weight: NA | Hammer Drop: NA inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	PID Reading (ppm)	Sample/Core Description
0.0	4.0	--	--	--	SAND, medium, tan, some silt, moist, loose.
4.0	9.0	--	--	--	SAND, medium, tan, some silt, wet, no hydrocarbon odor.
					Description of cuttings based on visual observations during vacuum extraction.
					Borehole completed as Monitoring Well AY.

ARCADIS

Sample/Core Log

Boring/Well: Well AZ | Project/No.: PSEG Nuclear, LLC Salem Generrating Station/NP000603.0001 | Page: 1 of 1

Site Location: Artificial Island, Hancock's Bridge, New Jersey | Drilling Started: 11/8/2004 | Drilling Completed: 11/8/2004

Total Depth Drilled: 10.0 Feet | Hole Diameter: 12 inches | Type of Sample/ Coring Device: NA

Length and Diameter of Coring Device: 12 inch diameter vacuum extraction flex-pipe | Sampling Interval: 3.5 - 4.0 feet

Land-Surface Elev.: _____ feet | [X] Surveyed | [ ] Estimated | Datum: Plant Datum

Drilling Fluid Used: Water | Drilling Method: Vacuum Extraction

Drilling Contractor: Unitech Drilling and Jetline Services | Driller: Rich | Helper: Jim

Prepared By: Deric Kearns | Hammer Weight: NA | Hammer Drop: NA inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	PID Reading (ppm)	Sample/Core Description
0.0	4.0	--	--	--	SAND, medium, tan, some silt, moist, loose.
4.0	10.0	--	--	--	SAND, medium, tan, some silt, wet, no hydrocarbon odor.
					Description of cuttings based on visual observations during vacuum extraction.
					Borehole completed as Monitoring Well AZ.

ARCADIS

Sample/Core Log

Boring/Well: Well X | Project/No.: PSEG Nuclear, LLC Salem Generrating Station/NP000571.0002 | Page 1 of 1

Site Location: Artificial Island, Hancock's Bridge, New Jersey | Drilling Started: 6/11/2003 | Drilling Completed: 6/11/2003

Total Depth Drilled: 10.0 Feet | Hole Diameter: 8 inches | Type of Sample/ Coring Device: NA

Length and Diameter of Coring Device: NA | Sampling Interval: NA feet

Land-Surface Elev.: 99.39 feet | [X] Surveyed | [ ] Estimated | Datum: Plant Datum

Drilling Fluid Used: None | Drilling Method: Vacuum Excavation

Drilling Contractor: CT&E Environmental Services, Inc. | Driller: Jeff | Helper: NA

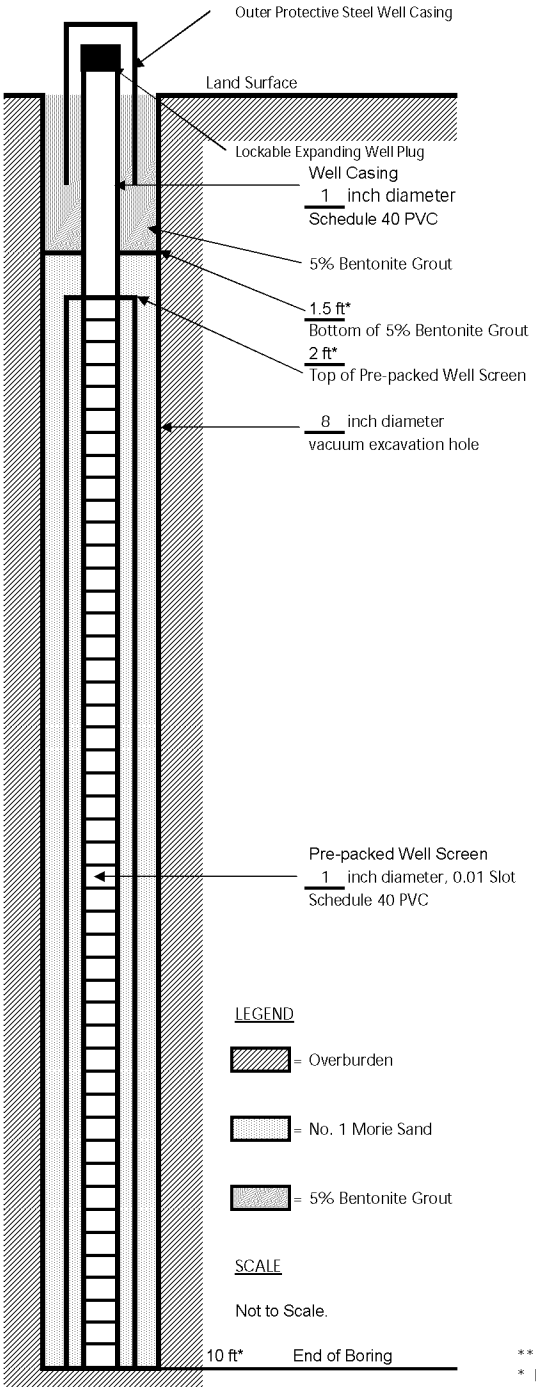
Prepared By: Jon Rutledge | Hammer Weight: NA | Hammer Drop: NA inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blow Counts	PID Reading (ppm)	Sample/Core Description
0.0	10.0	--	--	--	Borehole advanced to 10.0 feet below ground surface using vacuum excavation.
					A sample/core desription was unable to be observed due to
					the nature of the vacuum excavation process.
10.0					End of boring. Boring completed as Monitoring Well X.

ARCADIS

Well Construction Log

(Unconsolidated)



Well Identification: Well X

Project/No.: PSEG Nuclear, LLC - Salem Generating Station/NP000603.0001

Site Location: Salem Generating Station - Artificial Island

Town/City: Hancock's Bridge

County: Salem State: New Jersey

Permit No.: 3400007018

Land-Surface Elevation: 9.17 feet [X] Surveyed

Top-of-Casing Elevation: 8.82 feet [ ] Estimated

Datum: NAVD 1988

Installation Date(s): June 11, 2003

Drilling Method: Vacuum Excavation

Drilling Contractor: CT&E Environmental Services, Inc

Drilling Fluid: Not Applicable (NA)

Development Technique(s) and Date(s): Peristaltic pump on June 11, 2003. Development was considered complete when turbidity in discharge was reduced/eliminated.

Fluid Loss During Drilling: 0 gallons

Water Removed During Development: 5 gallons

Static Depth to Water: 8.7 feet below M.P.**

Pumping Depth to Water: NA feet below M.P.**

Pumping Duration: 0.2 hours

Yield: NA gpm Date: NA

Specific Capacity: NA gpm/ft

Well Purpose: Well installed to monitor groundwater quality.

Remarks: Due to extensive underground utilities within the location of the monitoring well, vacuum excavation equipment was used to advance the well boring.

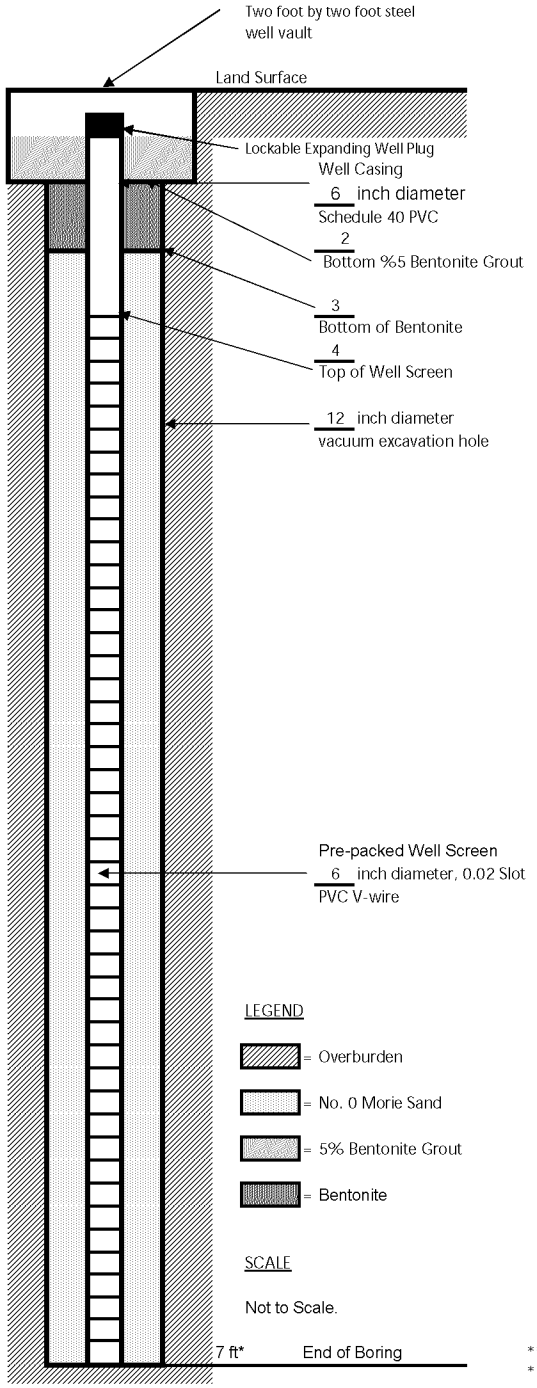
Prepared by: Jon Rutledge

** M.P. Measuring Point. Top of 2-inch PVC well casing unless otherwise noted.
* Depth Below Land Surface

ARCADIS

Well Construction Log

(Unconsolidated)



Well Identification: Well AU

Project/No.: PSEG Nuclear, LLC - Salem Generating Station/NP000603.0001

Site Location: Salem Generating Station - Artificial Island

Town/City: Hancock's Bridge

County: Salem State: New Jersey

Permit No.: 3400007375

Land-Surface Elevation: 9.44 feet [X] Surveyed

Top-of-Casing Elevation: 8.46 feet [ ] Estimated

Datum: NAVD 1988

Installation Date(s): November 9, 2004

Drilling Method: Vacuum Excavation

Drilling Contractor: Uni - Tech Drilling Co., Inc.

Drilling Fluid: Not Applicable (NA)

Development Technique(s) and Date(s): Surge block and submerisble pump on November 10, 2004. Development was considered complete when turbidity in discharge was reduced/eliminated.

Fluid Loss During Drilling: 0 gallons

Water Removed During Development: ~10 gallons

Static Depth to Water: 5.21 feet below M.P.**

Pumping Depth to Water: NA feet below M.P.**

Pumping Duration: 0.2 hours

Yield: NA gpm Date: 11/10//04

Specific Capacity: NA gpm/ft

Well Purpose: Well installed to facilitate separate phase product recovery.

Remarks: Due to extensive underground utilities within the location of the monitoring well, vacuum excavation equipment was used to advance the well boring.

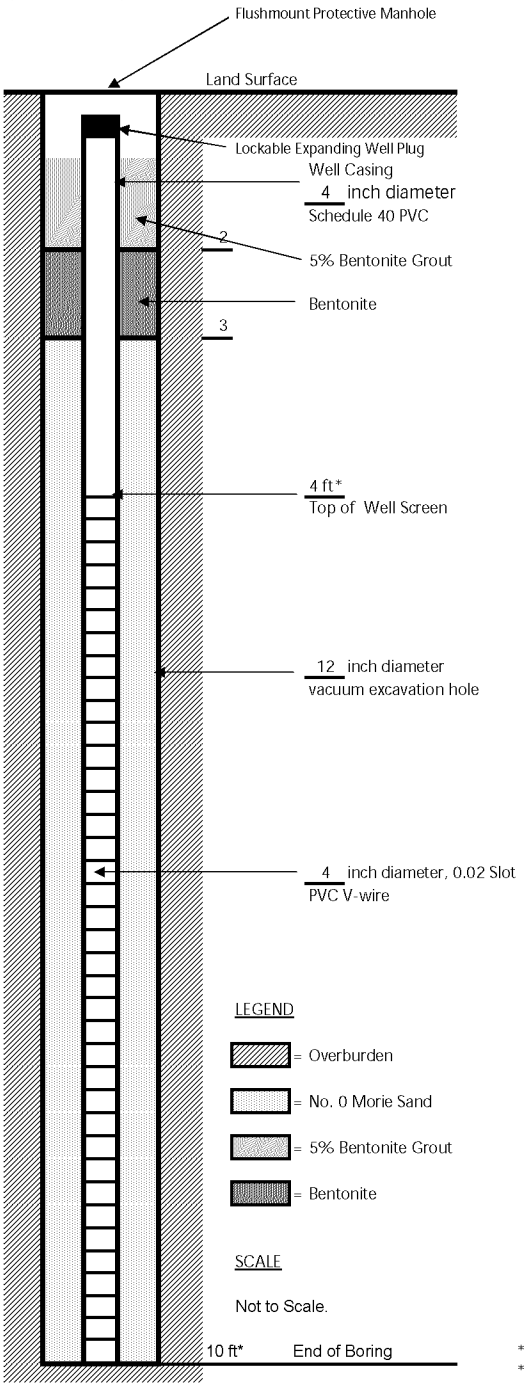
Prepared by: Deric Kearns

** M.P. Measuring Point. Top of 2-inch PVC well casing unless otherwise noted.
* Depth Below Land Surface

ARCADIS

Well Construction Log

(Unconsolidated)



Well Identification: Well AV

Project/No.: PSEG Nuclear, LLC - Salem Generating Station/NP000603.0001

Site Location: Salem Generating Station - Artificial Island

Town/City: Hancock's Bridge

County: Salem State: New Jersey

Permit No.:

Land-Surface Elevation: ____ feet [X] Surveyed

Top-of-Casing Elevation: ____ feet [ ] Estimated

Datum: NAVD 1988

Installation Date(s): November 8, 2004

Drilling Method: Vacuum Excavation

Drilling Contractor: Uni-Tech Drilling Co., Inc.

Drilling Fluid: Not Applicable (NA)

Development Technique(s) and Date(s): Surge block and submerisble pump on November 10, 2004. Development was considered complete when turbidity in discharge was reduced/eliminated.

Fluid Loss During Drilling: 0 gallons

Water Removed During Development: 15 gallons

Static Depth to Water: 5.36 feet below M.P.**

Pumping Depth to Water: 9.0 feet below M.P.**

Pumping Duration: 0.25 hours

Yield: NA gpm Date: November 10, 2004

Specific Capacity: NA gpm/ft

Well Purpose: Well installed to monitor groundwater quality.

Remarks: Due to extensive underground utilities within the location of the monitoring well, vacuum excavation equipment was used to advance the well boring.

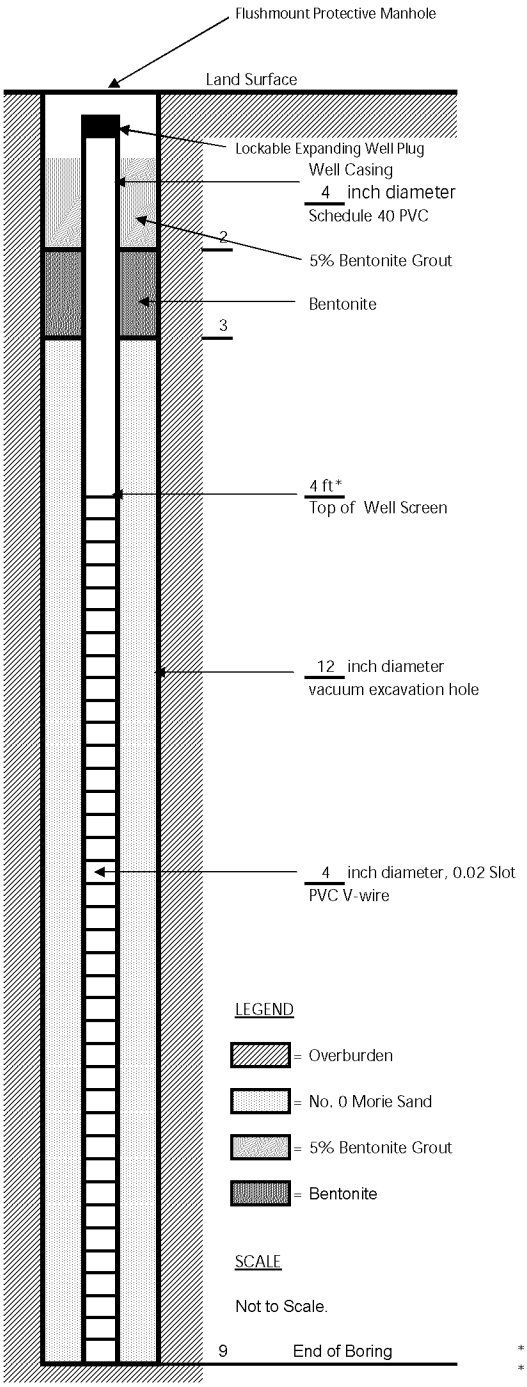
Prepared by: Deric Kearns

** M.P. Measuring Point. Top of 2-inch PVC well casing unless otherwise noted.
* Depth Below Land Surface

ARCADIS

Well Construction Log

(Unconsolidated)



Well Identification: Well AW

Project/No.: PSEG Nuclear, LLC - Salem Generating Station/NP000603.0001

Site Location: Salem Generating Station - Artificial Island

Town/City: Hancock's Bridge

County: Salem State: New Jersey

Permit No.:

Land-Surface Elevation: _____ feet [X] Surveyed

Top-of-Casing Elevation: _____ feet [ ] Estimated

Datum: NAVD 1988

Installation Date(s): November 8, 2004

Drilling Method: Vacuum Excavation

Drilling Contractor: Uni-Tech Drilling Co., Inc.

Drilling Fluid: Not Applicable (NA)

Development Technique(s) and Date(s): Surge block and submerisble pump on November 10, 2004. Development was considered complete when turbidity in discharge was reduced/eliminated.

Fluid Loss During Drilling: 0 gallons

Water Removed During Development: ~22 gallons

Static Depth to Water: 5.42 - Product / 6.60 - Water feet below M.P.**

Pumping Depth to Water: 9.0 feet below M.P.**

Pumping Duration: 0.25 hours

Yield: NA gpm Date: November 10, 2004

Specific Capacity: NA gpm/ft

Well Purpose: Well installed to monitor groundwater quality.

Remarks: Due to extensive underground utilities within the location of the monitoring well, vacuum excavation equipment was used to advance the well boring.

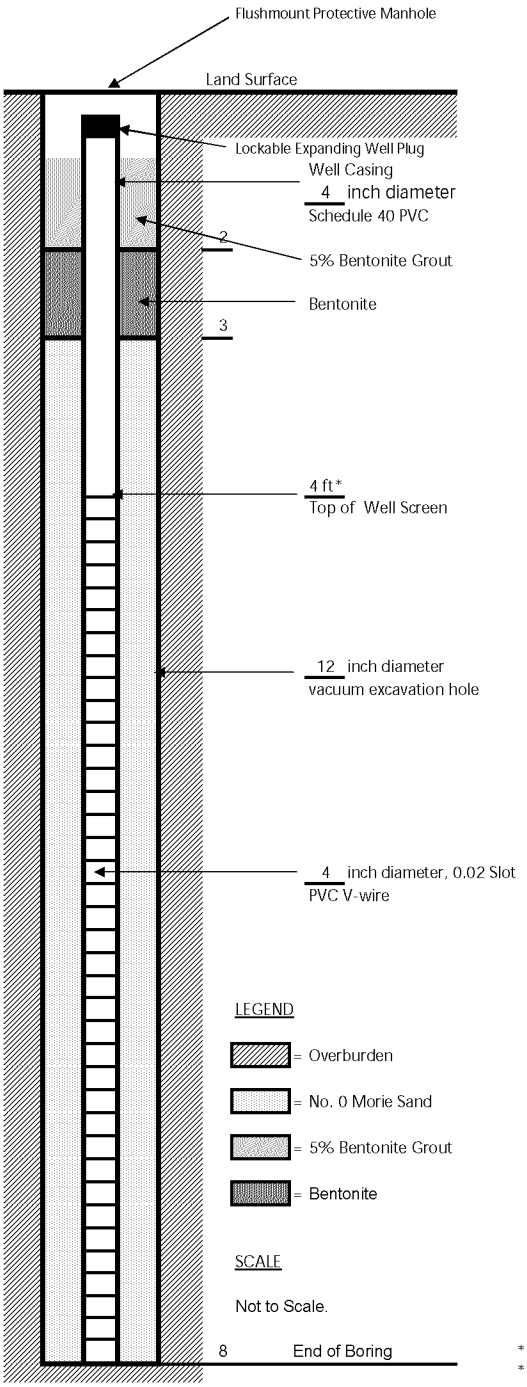
Prepared by: Deric Kearns

** M.P. Measuring Point. Top of 2-inch PVC well casing unless otherwise noted.
* Depth Below Land Surface

ARCADIS

Well Construction Log

(Unconsolidated)



Well Identification: Well AY

Project/No.: PSEG Nuclear, LLC - Salem Generating Station/NP000603.0001

Site Location: Salem Generating Station - Artificial Island

Town/City: Hancock's Bridge

County: Salem State: New Jersey

Permit No.:

Land-Surface Elevation: _____ feet [X] Surveyed

Top-of-Casing Elevation: _____ feet [ ] Estimated

Datum: NAVD 1988

Installation Date(s): November 8, 2004

Drilling Method: Vacuum Excavation

Drilling Contractor: Uni-Tech Drilling Co., Inc.

Drilling Fluid: Not Applicable (NA)

Development Technique(s) and Date(s): Surge block and submerisble pump on November 10, 2004. Development was considered complete when turbidity in discharge was reduced/eliminated.

Fluid Loss During Drilling: 0 gallons

Water Removed During Development: ~15 gallons

Static Depth to Water: 5.51 feet below M.P.**

Pumping Depth to Water: 9.0 feet below M.P.**

Pumping Duration: 0.25 hours

Yield: NA gpm Date: November 10, 2004

Specific Capacity: NA gpm/ft

Well Purpose: Well installed to monitor groundwater quality.

Remarks: Due to extensive underground utilities within the location of the monitoring well, vacuum excavation equipment was used to advance the well boring.

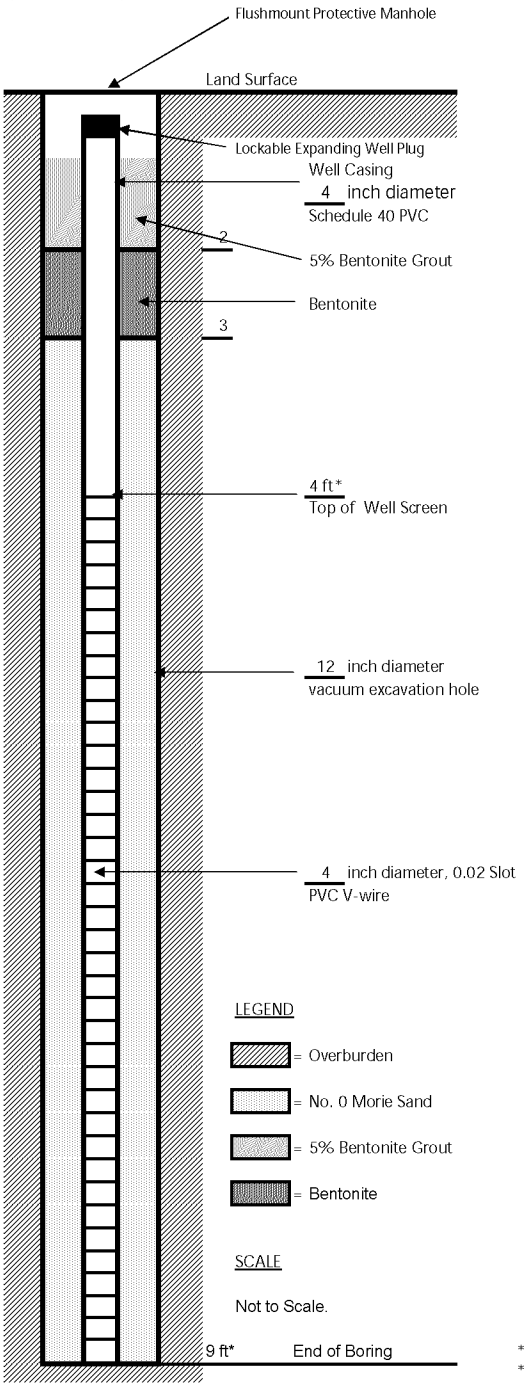
Prepared by: Deric Kearns

** M.P. Measuring Point. Top of 2-inch PVC well casing unless otherwise noted.
* Depth Below Land Surface

ARCADIS

Well Construction Log

(Unconsolidated)



Well Identification: Well AZ

Project/No.: PSEG Nuclear, LLC - Salem Generating Station/NP000603.0001

Site Location: Salem Generating Station - Artificial Island

Town/City: Hancock's Bridge

County: Salem State: New Jersey

Permit No.:

Land-Surface Elevation: ____ feet [X] Surveyed

Top-of-Casing Elevation: ____ feet [ ] Estimated

Datum: NAVD 1988

Installation Date(s): November 8, 2004

Drilling Method: Vacuum Excavation

Drilling Contractor: Uni-Tech Drilling Co., Inc.

Drilling Fluid: Not Applicable (NA)

Development Technique(s) and Date(s): Surge block and submerisble pump on November 10, 2004. Development was considered complete when turbidity in discharge was reduced/eliminated.

Fluid Loss During Drilling: 0 gallons

Water Removed During Development: ~20 gallons

Static Depth to Water: 5.21 feet below M.P.**

Pumping Depth to Water: 9.0 feet below M.P.**

Pumping Duration: 0.5 hours

Yield: NA gpm Date: November 10, 2004

Specific Capacity: NA gpm/ft

Well Purpose: Well installed to monitor groundwater quality.

Remarks: Due to extensive underground utilities within the location of the monitoring well, vacuum excavation equipment was used to advance the well boring.

Prepared by: Deric Kearns

** M.P. Measuring Point. Top of 2-inch PVC well casing unless otherwise noted.
* Depth Below Land Surface

Appendix D

Monitoring Well Form Bs

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location Lower Alloways Creek, Salem County

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:

This number must be permanently affixed to the well casing.

Owners Well Number (As shown on application or plans) MW-AU

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.06" Latitude: North 39° 27' 45.45"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,867.61 East 199,525.52

Elevation of Top of Inner Casing (Cap off) at Reference mark (to nearest 0.01' in relation to permanent on-site datum) Rim 99.36 PVC 98.38

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0, E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE 12/10/04 DATE

RICHARD C. MATHEWS GS29353

PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location Lower Alloways Creek, Salem County

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-AW
Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.17" Latitude: North 39° 27' 45.15"
New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,837.74 East 199,516.37
Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.40 PVC 99.08

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0, E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE 12/10/04 DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location Lower Alloways Creek, Salem County

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-AV
Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.76" Latitude: North 39° 27' 45.08"
New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,831.11 East 199,469.71
Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.09 PVC 98.74

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0, E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

Richard C Martin
PROFESSIONAL LAND SURVEYOR'S SIGNATURE

12/10/04
DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location Lower Alloways Creek, Salem County

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:

This number must be permanently affixed to the well casing.

Owners Well Number (As shown on application or plans) MW-AY

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.10" Latitude: North 39° 27' 44.84"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,805.92 East 199,521.42

Elevation of Top of Inner Casing (Cap off) at Reference mark (to nearest 0.01' in relation to permanent on-site datum) Rim 99.32 PVC 98.96

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0, E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

Richard C Mathews

PROFESSIONAL LAND SURVEYOR'S SIGNATURE 12/10/04 DATE

RICHARD C. MATHEWS GS29353

PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230

PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location Lower Alloways Creek, Salem County

UST Number: SRP Case No.:

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-AZ
Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 10.72" Latitude: North 39° 27' 44.43"
New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,764.41 East 199,551.16
Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.25 PVC 98.58

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0, E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes:

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

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12/10/04
DATE

RICHARD C. MATHEWS GS29353
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43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location Lower Alloways Creek, Salem County

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-X
Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 10.68" Latitude: North 39° 27' 45.24"
New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,845.66 East 199,554.29

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.09 PVC 98.74

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0, E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

Richard C Mathews
PROFESSIONAL LAND SURVEYOR'S SIGNATURE

12/10/04
DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

Appendix E

Groundwater Sampling Logs

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well X | Date 12/13/2004

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Sunny

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 7.47 to -2.53 | Casing Diameter (in.): 1 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 6.71 | Total Depth (ft-bmp): 13.03 | Water Column/ Gallons in Well: --

MP Elevation: 12.00 | Pump Intake (ft-bmp): 10 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: --

Sample Time: Label 17:15, Start, End | Replicate/ Code No.: Well AX | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
16:45	5	150	6.91	--	6.57	0.217	37.6	7.53	13.7	31.3	--	--
16:50	10	125	7.01	--	6.49	0.217	15.6	6.63	14.32	34.4	--	--
16:55	15	125	7.08	--	6.47	0.217	12.7	6.16	14.44	32.6	--	--
17:00	20	125	7.14	--	6.45	0.218	11.0	5.74	14.34	28.7	--	--
17:05	25	100	7.16	--	6.43	0.219	10.5	5.46	14.29	24.9	--	--
17:10	30	100	7.18	--	6.42	0.219	12.8	5.29	14.19	22.6	--	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	6	Hcl
SVOCs by 8270	1 liter amber	4	--

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well AV | Date 12/13/2004

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Overcast

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 5.17 to -0.83 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.49 | Total Depth (ft-bmp): 9.66 | Water Column/ Gallons in Well: --

MP Elevation: 9.17 | Pump Intake (ft-bmp): 7 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: -- | Sample Time: Label 15:35, Start, End | Replicate/ Code No.: -- | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
15:08	8	75	4.51	--	6.71	0.278	89.8	8.09	10.61	-26.5	--	--
15:13	13	75	4.51	--	6.62	0.270	88.6	5.73	11.09	-26.8	--	--
15:18	18	75	4.51	--	6.60	0.267	85.3	4.38	11.4	-27.2	--	--
15:23	23	75	4.51	--	6.59	0.265	81.2	3.69	11.47	-27.8	--	--
15:28	28	75	4.51	--	6.59	0.266	78.3	3.51	11.35	-28.7	--	--
15:33	33	75	4.51	--	6.60	0.265	75.7	3.40	11.24	-29.0	--	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	3	Hcl
SVOCs by 8270	1 liter amber	2	--

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well AY | Date 12/13/2004

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Sunny

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 5.40 to 1.40 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.39 | Total Depth (ft-bmp): 7.30 | Water Column/ Gallons in Well: --

MP Elevation: 9.04 | Pump Intake (ft-bmp): 6.50 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: --

Sample Time: Label 13:55, Start, End | Replicate/ Code No.: -- | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:48	5	--	4.39	--	7.06	0.572	88.0	9.46	11.42	154.3	--	--
12:53	10	75	4.40	--	7.07	1.067	87.5	8.37	11.49	154.8	--	--
12:58	15	50	4.40	--	7.06	1.063	88.3	8.22	11.2	141.2	--	--
13:03	20	75	4.41	--	7.06	1.052	89.0	8.15	10.82	119.4	--	--
13:08	25	75	4.41	--	7.06	1.034	88.1	8.17	10.54	81.7	--	--
13:13	30	75	4.41	--	7.06	1.019	87.8	8.28	10.54	63.2	--	--
13:18	35	75	4.41	--	7.04	0.995	84.8	8.50	10.61	48.7	--	--
13:23	40	75	4.42	--	7.04	0.974	80.0	8.71	10.63	41.5	--	--
13:28	45	75	4.42	--	7.04	0.953	72.5	8.94	10.72	58.0	--	--
13:33	50	75	4.42	--	7.04	0.951	71.6	8.95	10.74	50.1	--	--
13:38	55	75	4.43	--	7.04	0.950	70.8	8.96	10.65	42.2	--	--
13:43	60	75	4.43	--	7.04	0.949	66.9	8.97	10.63	32.6	--	--
13:48	65	75	4.43	--	7.04	0.951	63.7	8.93	10.56	26.9	--	--
13:53	70	75	4.43	--	7.05	0.952	61.5	8.92	10.74	23.6	--	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	6	Hcl
SVOCs by 8270	1 liter amber	4	--

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well AZ | Date 12/10/2004

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Light Rain

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 5.33 to 0.33 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.09 | Total Depth (ft-bmp): 9.07 | Water Column/ Gallons in Well: --

MP Elevation: 8.66 | Pump Intake (ft-bmp): 6.50 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: -- | Sample Time: Label, Start, End | Replicate/ Code No.: -- | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:55	5	250	4.20	--	6.58	0.566	104.7	7.71	14.35	148.8	--	--
14:00	10	250	4.26	--	6.61	0.453	93.0	7.31	14.42	129.0	--	--
14:05	15	150	4.26	--	6.52	0.453	77.3	7.15	14.3	138.8	--	--
14:10	20	150	4.26	--	6.55	0.454	75.0	7.13	14.24	136.0	--	--
14:15	25	150	4.26	--	6.56	0.457	62.8	7.04	14.26	137.0	--	--
14:20	30	150	4.26	--	6.56	0.458	59.5	6.96	14.25	142.1	--	--
14:25	35	150	4.26	--	6.60	0.460	56.4	6.89	14.33	137.5	--	--
14:30	40	150	4.26	--	6.59	0.461	53.5	6.84	14.28	142.4	--	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	3	Hcl
SVOCs by 8270	1 liter amber	2	--

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well X | Date 3/15/2005

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Sunny 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 7.47 to -2.53 | Casing Diameter (in.): 1 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 8.02 | Total Depth (ft-bmp): 13.03 | Water Column/ Gallons in Well: --

MP Elevation: 12.00 | Pump Intake (ft-bmp): 10.5 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: -- | Sampled by: R. McKinney

Sample Time: Label 13:12, Start, End | Replicate/ Code No.: --

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
12:09	5	200	8.25	--	6.91	0.379	+999	15.38	10.23	163	lt brown	--
12:14	10	200	8.46	--	6.68	0.379	690	14.07	10.02	120	lt brown	--
12:19	15	200	8.56	--	6.59	0.373	130	12.97	10.12	121	lt brown	--
12:24	20	200	8.64	--	6.56	0.374	71	12.2	10.18	108	clear	--
12:29	25	200	8.70	--	6.54	0.391	51	11.47	10.24	96	clear	--
12:34	30	200	8.75	--	6.53	0.428	50	11.00	10.28	83	clear	--
12:39	35	200	8.79	--	6.52	0.477	36	10.45	10.3	56	clear	--
12:44	40	200	8.85	--	6.51	0.496	32	10.29	10.32	37	clear	--
12:49	45	200	8.89	--	6.51	0.494	34	9.80	10.28	26	clear	--
12:54	50	200	8.96	--	6.52	0.496	41	9.55	10.27	16	clear	--
12:59	55	200	9.03	--	6.52	0.497	56	9.48	10.38	10	clear	--
13:04	60	200	9.25	--	6.52	0.496	60	9.77	10.44	5.0	clear	--
13:09	65	200	9.34	--	6.52	0.499	61	9.36	10.59	6.0	clear	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	3	Hcl
SVOCs by 8270	1 liter amber	2	--

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well AV | Date 3/15/2005

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Sunny 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 5.17 to -0.83 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.88 | Total Depth (ft-bmp): 9.66 | Water Column/ Gallons in Well: --

MP Elevation: 9.17 | Pump Intake (ft-bmp): 7.5 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: -- | Sample Time: Label 14:25, Start, End | Replicate/ Code No.: Well AVD | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
13:53	5	250	4.93	--	6.33	0.365	41	4.27	7.74	-50	--	--
13:58	10	250	4.93	--	6.3	0.364	19	9.18	7.72	-57	--	--
14:03	15	250	4.95	--	6.31	0.357	120	4.13	7.76	-62	--	--
14:08	20	250	4.95	--	6.31	0.364	400	3.88	7.74	-66	--	--
14:13	25	250	4.95	--	6.31	0.369	4.8	3.84	7.78	-70	--	--
14:18	30	250	4.96	--	6.32	0.369	3.7	4.20	7.74	-72	--	--
14:23	35	250	4.96	--	6.32	0.367	3.1	4.22	7.79	-76	--	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	3	Hcl
SVOCs by 8270	1 liter amber	2	--

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well AY | Date 3/15/2005

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Sunny 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 5.40 to 1.40 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.39 | Total Depth (ft-bmp): 7.30 | Water Column/ Gallons in Well: --

MP Elevation: 9.04 | Pump Intake (ft-bmp): 6.50 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: --

Sample Time: Label 11:00, Start, End | Replicate/ Code No.: -- | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance	
											Color	Odor
9:50	5	250	4.9	--	6.60	5.41	640.0	18.21	6.33	172	lt brown	--
9:55	10	250	4.94	--	6.87	5.35	650	17.43	6.27	171	lt brown	--
10:00	15	250	4.96	--	7.00	5.24	520	17.31	6.25	172	lt brown	--
10:05	20	250	4.98	--	7.07	5.16	420.0	17.17	6.26	173	lt brown	--
10:10	25	250	4.99	--	7.13	5.1	330	16.97	6.24	173	lt brown	--
10:15	30	250	5.01	--	7.19	5.02	250	16.42	6.32	173	lt brown	--
10:20	35	250	5.02	--	7.22	4.98	200	16.32	6.32	173	lt brown	--
10:25	40	250	5.03	--	7.25	4.95	130.0	15.09	6.33	172	lt brown	--
10:30	45	250	5.04	--	7.28	4.91	90	15.95	6.33	171.0	lt brown	--
10:35	50	250	5.06	--	7.3	4.88	51	15.8	6.36	170	clear	--
10:40	55	250	5.07	--	7.31	4.860	26	15.69	6.37	169	clear	--
10:45	60	250	5.08	--	7.32	4.84	10	15.64	6.42	167	clear	--
10:50	65	250	5.09	--	7.34	4.82	3	15.29	6.47	167	clear	--
10:55	70	250	5.10	--	7.34	4.80	1.5	15.76	6.48	166	clear	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	3	Hcl
SVOCs by 8270	1 liter amber	2	--

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0001.00004 | Well ID Well AZ | Date 3/15/2005

Project Name/Location PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey. | Weather Sunny 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bgs): 5.33 to 0.33 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.18 | Total Depth (ft-bmp): 9.07 | Water Column/ Gallons in Well: --

MP Elevation: 8.66 | Pump Intake (ft-bmp): 6.50 | Purge Method: Centrifugal, Submersible, Other: Bladder | Sample Method: Low-flow

Pump On/Off: -- | Volumes Purged: -- | Sample Time: Label 9:05, Start, End | Replicate/ Code No.: -- | Sampled by: R. McKinney

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Redox (mV)	Appearance Color	Appearance Odor
8:25	5	225	4.28	--	5.66	1.12	5.0	15.84	7.84	247	--	--
8:30	10	225	Recalibrated water quality meter due to high DO readings								--	--
8:35	15	225	4.38	--	5.34	1.15	1.5	17.16	7.76	256	--	--
8:40	20	225	4.42	--	5.8	1.13	1.5	16.46	8	244	--	--
8:45	25	225	4.41	--	5.86	1.11	2.0	17.54	7.65	238	--	--
8:50	30	225	4.46	--	5.89	1.11	1.5	17.08	7.93	236	--	--
8:55	35	225	4.49	--	5.91	1.12	1.5	16.72	7.96	237	--	--
9:00	40	225	4.5	--	5.93	1.12	1.5	16.79	8.01	237	--	--

Constituents Sampled	Container	Number	Preservative
VOCs by 8260	40 ml VOA	3	Hcl
SVOCs by 8270	1 liter amber	2	--

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	American Lock

Well AZ
2/15/2007

Appendix F

Groundwater Analytical Results

December 2004 & March 2005

New Jersey
ACCUTEST.
Laboratories

01/07/05

Technical Report for

Arcadis Geraghty & Miller

PSEG-Salem, Artificial Island, Salem, NJ

NP000571

Accutest Job Number: N85893

Sampling Date: 12/10/04

Report to:

Arcadis Geraghty & Miller
6 Terry Drive
Newtown, PA 18940

ATTN: Brad Pierce

Total number of pages in report: 98

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Sample Summary

Arcadis Geraghty & Miller

Job No: N85893

PSEG-Salem, Artificial Island, Salem, NJ
Project No: NP000571

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
N85893-1	12/10/04	00:00 RPM	12/13/04	AQ	Ground Water	WELL AZ
N85893-2	12/10/04	00:00 RPM	12/13/04	AQ	Field Blank Water	FB-1
N85893-3	12/10/04	00:00 RPM	12/13/04	AQ	Trip Blank Water	TRIP BLANK

ACCUTEST.

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Reduced Laboratory Data Deliverables
For
Non-USEPA/CLP Methods

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SII-SSA-0014-002583

RESULTS

SII-SSA-0014-002584

Report of Analysis

Client Sample ID:	WELL AZ		
Lab Sample ID:	N85893-1	**Date Sampled:**	12/10/04
Matrix:	AQ - Ground Water	**Date Received:**	12/13/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C1396.D	1	12/19/04	KNV	n/a	n/a	V2C63
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AZ		
Lab Sample ID:	N85893-1	**Date Sampled:**	12/10/04
Matrix:	AQ - Ground Water	**Date Received:**	12/13/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		79-119%
17060-07-0	1,2-Dichloroethane-D4	96%		68-129%
2037-26-5	Toluene-D8	88%		83-118%
460-00-4	4-Bromofluorobenzene	106%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AZ		
Lab Sample ID:	N85893-1	**Date Sampled:**	12/10/04
Matrix:	AQ - Ground Water	**Date Received:**	12/13/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47282.D	1	12/31/04	NAP	12/14/04	OP19011	EF2503
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AZ		
Lab Sample ID:	N85893-1	**Date Sampled:**	12/10/04
Matrix:	AQ - Ground Water	**Date Received:**	12/13/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		10-88%
4165-62-2	Phenol-d5	28%		10-71%
118-79-6	2,4,6-Tribromophenol	86%		45-134%
4165-60-0	Nitrobenzene-d5	70%		32-128%
321-60-8	2-Fluorobiphenyl	66%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AZ		
Lab Sample ID:	N85893-1	**Date Sampled:**	12/10/04
Matrix:	AQ - Ground Water	**Date Received:**	12/13/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	84%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-1	**Date Sampled:**	12/10/04
Lab Sample ID:	N85893-2	**Date Received:**	12/13/04
Matrix:	AQ - Field Blank Water	**Percent Solids:**	n/a
Method:	SW846 8260B		
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C1397.D	1	12/19/04	KNV	n/a	n/a	V2C63
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FB-1		
Lab Sample ID:	N85893-2	**Date Sampled:**	12/10/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/13/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		79-119%
17060-07-0	1,2-Dichloroethane-D4	97%		68-129%
2037-26-5	Toluene-D8	89%		83-118%
460-00-4	4-Bromofluorobenzene	105%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-1	**Date Sampled:**	12/10/04
Lab Sample ID:	N85893-2	**Date Received:**	12/13/04
Matrix:	AQ - Field Blank Water	**Percent Solids:**	n/a
Method:	SW846 8270C SW846 3510C		
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47283.D	1	12/31/04	NAP	12/14/04	OP19011	EF2503
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated val
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FB-1		
Lab Sample ID:	N85893-2	**Date Sampled:**	12/10/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/13/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	37%		10-88%
4165-62-2	Phenol-d5	34%		10-71%
118-79-6	2,4,6-Tribromophenol	89%		45-134%
4165-60-0	Nitrobenzene-d5	85%		32-128%
321-60-8	2-Fluorobiphenyl	79%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-1	**Date Sampled:**	12/10/04
Lab Sample ID:	N85893-2	**Date Received:**	12/13/04
Matrix:	AQ - Field Blank Water	**Percent Solids:**	n/a
Method:	SW846 8270C SW846 3510C		
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	90%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK	**Date Sampled:**	12/10/04
Lab Sample ID:	N85893-3	**Date Received:**	12/13/04
Matrix:	AQ - Trip Blank Water	**Percent Solids:**	n/a
Method:	SW846 8260B		
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C1398.D	1	12/19/04	KNV	n/a	n/a	V2C63
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	N85893-3	**Date Sampled:**	12/10/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/13/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		79-119%
17060-07-0	1,2-Dichloroethane-D4	96%		68-129%
2037-26-5	Toluene-D8	90%		83-118%
460-00-4	4-Bromofluorobenzene	105%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # M85893

Client / Reporting Information

Company Name: Arcadis
Address: 6 Terry Drive Suite 300
City: Newtown State: PA Zip: 18940
Project Contact: Brad Pierce E-mail: bpierce@arcadis-us.com
Phone #: 267-685-1800 Fax #: 267-685-1801
Sampler's Name: Ryan McKinney

Project Information

Project Name: PSEG
Street:
City: State:
Project #:
Client Purchase Order #:

Requested Analysis

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	HNO3	H2SO4	NONE	NaHSO4	MEOH	EnCore	8260 BTEX MTBE 624 MTBE 8021 TBA 624 MAP 8021 MAP 624 PALG 8021 PALG	8260 TBA 624 TCL PPL STARS MTBE 624 NAP PPL +15 STARS +10	8270 ABN 625 BN 625 TCL PAH 625 PPL PADF STARS +TICs	VOC 8260 b	SVOC 8270C						Lab Use Only
-1	Well A2		12/10/24		RDM	GW	5	3			2							X	X						23991
-2	FB-1		↓		RDM	—	5	3			2							X	X						6+4
-3	Trip Blank		↓		—	—	2	1			2							X							

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*
- ☐ Other 10

Approved By: / Date:

Emergency & Rush TIA data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other _____
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format _____

Commercial "A" = Results Only

Comments / Remarks

TB Fwd 12/10/24 @ 0630

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date Time:	Received by:
1	[signature]	12-10-24/1830	FedX
2	FedX	12/11/24 @ 1000	[signature]
3			
4			
5			

Custody Seal # | Preserved where applicable ☐ | On Ice ☐ | Cooler Temp. 3.8

1A

SII-SSA-0014-0025597

Internal Sample Tracking Chronicle

Arcadis Geraghty & Miller

Job No: N85893

PSEG-Salem, Artificial Island, Salem, NJ
Project No: NP000571

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N85893-1	Collected: 10-DEC-04 00:00 By: RPM	Received: 13-DEC-04 By: MP				
WELL AZ						
N85893-1	SW846 8260B	19-DEC-04 20:42	KNV			V8260TCL
N85893-1	SW846 8270C	31-DEC-04 06:05	NAP	14-DEC-04	VDT	AB8270TCL
N85893-2	Collected: 10-DEC-04 00:00 By: RPM	Received: 13-DEC-04 By: MP				
FB-1						
N85893-2	SW846 8260B	19-DEC-04 21:13	KNV			V8260TCL
N85893-2	SW846 8270C	31-DEC-04 06:41	NAP	14-DEC-04	VDT	AB8270TCL
N85893-3	Collected: 10-DEC-04 00:00 By: RPM	Received: 13-DEC-04 By: MP				
TRIP BLANK						
N85893-3	SW846 8260B	19-DEC-04 21:44	KNV			V8260TCL

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SII-SSA-0014-002598

GC/MS

SII-SSA-0014-002599

VOLATILE

SII-SSA-0014-002600

ACCUTEST

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Volatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		N/A
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: Jianmin Fang Date: 1/6/05

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C63-MB1	2C1383.D	1	12/19/04	KNV	n/a	n/a	V2C63

The QC reported here applies to the following samples: **Method:** SW846 8260B

N85893-1, N85893-2, N85893-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

Method Blank Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C63-MB1	2C1383.D	1	12/19/04	KNV	n/a	n/a	V2C63

The QC reported here applies to the following samples: **Method:** SW846 8260B

N85893-1, N85893-2, N85893-3

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	79-119%
17060-07-0	1,2-Dichloroethane-D4	98%	68-129%
2037-26-5	Toluene-D8	88%	83-118%
460-00-4	4-Bromofluorobenzene	105%	82-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C63-BS	2C1384.D	1	12/19/04	KNV	n/a	n/a	V2C63

The QC reported here applies to the following samples: **Method:** SW846 8260B

N85893-1, N85893-2, N85893-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	41.6	83	53-153
71-43-2	Benzene	50	49.6	99	77-119
75-27-4	Bromodichloromethane	50	54.3	109	82-126
75-25-2	Bromoform	50	56.3	113	73-135
74-83-9	Bromomethane	50	55.4	111	61-138
78-93-3	2-Butanone (MEK)	50	50.9	102	58-142
75-15-0	Carbon disulfide	50	55.5	111	60-130
56-23-5	Carbon tetrachloride	50	60.2	120	72-140
108-90-7	Chlorobenzene	50	51.0	102	81-117
75-00-3	Chloroethane	50	56.8	114	69-135
67-66-3	Chloroform	50	53.5	107	80-122
74-87-3	Chloromethane	50	65.8	132	59-132
124-48-1	Dibromochloromethane	50	59.0	118	80-125
75-34-3	1,1-Dichloroethane	50	53.6	107	78-121
107-06-2	1,2-Dichloroethane	50	60.1	120	66-137
75-35-4	1,1-Dichloroethene	50	55.1	110	73-124
156-59-2	cis-1,2-Dichloroethene	50	47.8	96	76-120
156-60-5	trans-1,2-Dichloroethene	50	51.0	102	73-119
78-87-5	1,2-Dichloropropane	50	50.9	102	82-117
10061-01-5	cis-1,3-Dichloropropene	50	47.6	95	81-120
10061-02-6	trans-1,3-Dichloropropene	50	49.9	100	81-125
100-41-4	Ethylbenzene	50	51.7	103	79-120
591-78-6	2-Hexanone	50	44.6	89	66-140
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.6	103	70-134
75-09-2	Methylene chloride	50	55.6	111	75-122
100-42-5	Styrene	50	50.9	102	80-125
79-34-5	1,1,2,2-Tetrachloroethane	50	53.4	107	76-117
127-18-4	Tetrachloroethene	50	50.2	100	69-130
108-88-3	Toluene	50	47.4	95	81-120
71-55-6	1,1,1-Trichloroethane	50	53.5	107	77-132
79-00-5	1,1,2-Trichloroethane	50	49.5	99	85-117
79-01-6	Trichloroethene	50	51.9	104	83-119
75-01-4	Vinyl chloride	50	62.0	124	65-135
1330-20-7	Xylene (total)	150	150	100	81-119

Blank Spike Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C63-BS	2C1384.D	1	12/19/04	KNV	n/a	n/a	V2C63

The QC reported here applies to the following samples: **Method:** SW846 8260B

N85893-1, N85893-2, N85893-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	79-119%
17060-07-0	1,2-Dichloroethane-D4	98%	68-129%
2037-26-5	Toluene-D8	91%	83-118%
460-00-4	4-Bromofluorobenzene	104%	82-120%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N85524-33MS	2C1401.D	1	12/19/04	KNV	n/a	n/a	V2C63
N85524-33MSD	2C1402.D	1	12/19/04	KNV	n/a	n/a	V2C63
N85524-33	2C1385.D	1	12/19/04	KNV	n/a	n/a	V2C63

The QC reported here applies to the following samples: **Method:** SW846 8260B

N85893-1, N85893-2, N85893-3

CAS No.	Compound	N85524-33 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	45.2	90	46.2	92	2	47-163/22
71-43-2	Benzene	ND		50	48.6	97	49.5	99	2	51-138/10
75-27-4	Bromodichloromethane	ND		50	53.1	106	54.3	109	2	80-128/10
75-25-2	Bromoform	ND		50	54.5	109	54.8	110	1	68-137/10
74-83-9	Bromomethane	ND		50	51.8	104	51.0	102	2	61-141/17
78-93-3	2-Butanone (MEK)	ND		50	43.0	86	41.2	82	4	55-149/22
75-15-0	Carbon disulfide	ND		50	56.6	113	57.6	115	2	59-128/14
56-23-5	Carbon tetrachloride	ND		50	59.6	119	62.3	125	4	71-143/13
108-90-7	Chlorobenzene	ND		50	50.0	100	50.8	102	2	78-120/10
75-00-3	Chloroethane	ND		50	54.5	109	54.9	110	1	67-139/16
67-66-3	Chloroform	ND		50	53.2	106	53.9	108	1	78-126/11
74-87-3	Chloromethane	ND		50	57.0	114	55.7	111	2	57-134/17
124-48-1	Dibromochloromethane	ND		50	58.5	117	59.1	118	1	79-127/10
75-34-3	1,1-Dichloroethane	ND		50	53.5	107	54.3	109	1	75-125/11
107-06-2	1,2-Dichloroethane	ND		50	56.2	112	57.3	115	2	63-142/12
75-35-4	1,1-Dichloroethene	ND		50	55.5	111	57.0	114	3	69-129/12
156-59-2	cis-1,2-Dichloroethene	0.82	J	50	50.0	98	50.4	99	1	73-127/10
156-60-5	trans-1,2-Dichloroethene	ND		50	50.5	101	50.9	102	1	71-123/11
78-87-5	1,2-Dichloropropane	ND		50	50.0	100	51.3	103	3	81-120/10
10061-01-5	cis-1,3-Dichloropropene	ND		50	44.2	88	45.6	91	3	78-121/10
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.9	92	47.4	95	3	77-128/11
100-41-4	Ethylbenzene	ND		50	49.9	100	51.0	102	2	51-142/11
591-78-6	2-Hexanone	ND		50	43.5	87	44.2	88	2	64-145/13
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	48.7	97	49.3	99	1	66-140/12
75-09-2	Methylene chloride	ND		50	54.5	109	55.4	111	2	73-126/10
100-42-5	Styrene	ND		50	47.2	94	48.7	97	3	79-130/10
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.0	102	51.9	104	2	74-121/10
127-18-4	Tetrachloroethene	ND		50	49.7	99	51.2	102	3	70-128/12
108-88-3	Toluene	ND		50	45.3	91	47.7	95	5	49-147/10
71-55-6	1,1,1-Trichloroethane	ND		50	53.5	107	54.8	110	2	74-136/13
79-00-5	1,1,2-Trichloroethane	ND		50	49.0	98	50.0	100	2	83-121/10
79-01-6	Trichloroethene	ND		50	51.5	103	53.1	106	3	75-128/10
75-01-4	Vinyl chloride	ND		50	59.4	119	59.3	119	0	60-141/16
1330-20-7	Xylene (total)	ND		150	146	97	151	101	3	44-146/11

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N85524-33MS	2C1401.D	1	12/19/04	KNV	n/a	n/a	V2C63
N85524-33MSD	2C1402.D	1	12/19/04	KNV	n/a	n/a	V2C63
N85524-33	2C1385.D	1	12/19/04	KNV	n/a	n/a	V2C63

The QC reported here applies to the following samples: **Method:** SW846 8260B

N85893-1, N85893-2, N85893-3

CAS No.	Surrogate Recoveries	MS	MSD	N85524-33	Limits
1868-53-7	Dibromofluoromethane	103%	102%	100%	79-119%
17060-07-0	1,2-Dichloroethane-D4	95%	95%	97%	68-129%
2037-26-5	Toluene-D8	90%	92%	88%	83-118%
460-00-4	4-Bromofluorobenzene	103%	104%	106%	82-120%

Instrument Performance Check (BFB)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	V2C1-BFB	Injection Date:	11/15/04
Lab File ID:	2C0021.D	Injection Time:	13:30
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	2341	17.2		Pass
75	30.0 - 60.0% of mass 95	6185	45.3		Pass
95	Base peak, 100% relative abundance	13642	100.0		Pass
96	5.0 - 9.0% of mass 95	1065	7.8		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	14402	105.6		Pass
175	5.0 - 9.0% of mass 174	1049	7.7	(7.3) [a]	Pass
176	95.0 - 101.0% of mass 174	14331	105.1	(99.5) [a]	Pass
177	5.0 - 9.0% of mass 176	957	7.0	(6.7) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C1-IC001	2C0022.D	11/15/04	14:04	00:34	Initial cal 1
V2C1-IC001	2C0023.D	11/15/04	14:35	01:05	Initial cal 2
V2C1-IC001	2C0024.D	11/15/04	15:06	01:36	Initial cal 5
V2C1-IC001	2C0025.D	11/15/04	15:38	02:08	Initial cal 20
V2C1-ICC001	2C0026.D	11/15/04	16:09	02:39	Initial cal 50
V2C1-IC001	2C0027.D	11/15/04	16:40	03:10	Initial cal 100
V2C1-IC001	2C0028.D	11/15/04	17:11	03:41	Initial cal 200

Instrument Performance Check (BFB)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	V2C63-BFB	**Injection Date:**	12/19/04
Lab File ID:	2C1381.D	**Injection Time:**	12:06
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	1396	20.8		Pass
75	30.0 - 60.0% of mass 95	3512	52.2		Pass
95	Base peak, 100% relative abundance	6725	100.0		Pass
96	5.0 - 9.0% of mass 95	499	7.4		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	6353	94.5		Pass
175	5.0 - 9.0% of mass 174	454	6.8	(7.1) [a]	Pass
176	95.0 - 101.0% of mass 174	6123	91.0	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	418	6.2	(6.8) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C63-CC001	2C1382.D	12/19/04	13:22	01:16	Continuing cal 20
V2C63-MB1	2C1383.D	12/19/04	13:53	01:47	Method Blank
V2C63-BS	2C1384.D	12/19/04	14:25	02:19	Blank Spike
N85524-33	2C1385.D	12/19/04	14:56	02:50	(used for QC only; not part of job N85893)
ZZZZZZ	2C1386.D	12/19/04	15:28	03:22	(unrelated sample)
ZZZZZZ	2C1387.D	12/19/04	15:59	03:53	(unrelated sample)
ZZZZZZ	2C1388.D	12/19/04	16:31	04:25	(unrelated sample)
ZZZZZZ	2C1389.D	12/19/04	17:02	04:56	(unrelated sample)
ZZZZZZ	2C1390.D	12/19/04	17:33	05:27	(unrelated sample)
ZZZZZZ	2C1391.D	12/19/04	18:05	05:59	(unrelated sample)
ZZZZZZ	2C1392.D	12/19/04	18:36	06:30	(unrelated sample)
ZZZZZZ	2C1393.D	12/19/04	19:08	07:02	(unrelated sample)
ZZZZZZ	2C1394.D	12/19/04	19:39	07:33	(unrelated sample)
ZZZZZZ	2C1395.D	12/19/04	20:10	08:04	(unrelated sample)
N85893-1	2C1396.D	12/19/04	20:42	08:36	WELL AZ
N85893-2	2C1397.D	12/19/04	21:13	09:07	FB-1
N85893-3	2C1398.D	12/19/04	21:44	09:38	TRIP BLANK
ZZZZZZ	2C1399.D	12/19/04	22:16	10:10	(unrelated sample)
ZZZZZZ	2C1400.D	12/19/04	22:47	10:41	(unrelated sample)
N85524-33MS	2C1401.D	12/19/04	23:19	11:13	Matrix Spike
N85524-33MSD	2C1402.D	12/19/04	23:50	11:44	Matrix Spike Duplicate

Volatile Internal Standard Area Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std: V2C63-CC001
Lab File ID: 2C1382.D
Instrument ID: GCMS2C
Injection Date: 12/19/04
Injection Time: 13:22
Method: SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	27362	8.24	109121	10.68	139460	11.61	104982	14.62	61983	16.78
Upper Limit [a]	54724	8.74	218242	11.18	278920	12.11	209964	15.12	123966	17.28
Lower Limit [b]	13681	7.74	54561	10.18	69730	11.11	52491	14.12	30992	16.28

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C63-MB1	27688	8.24	107086	10.68	134740	11.61	100625	14.62	56677	16.78
V2C63-BS	28768	8.23	115515	10.67	147219	11.61	111299	14.61	64843	16.78
N85524-33	29678	8.23	116263	10.68	144551	11.61	108119	14.61	61031	16.78
ZZZZZZ	29734	8.24	116268	10.68	145428	11.61	107593	14.61	61102	16.78
ZZZZZZ	28541	8.24	113113	10.68	142202	11.61	104845	14.61	59025	16.78
ZZZZZZ	27870	8.23	111428	10.68	138503	11.61	102843	14.61	58374	16.78
ZZZZZZ	28809	8.23	115438	10.67	146863	11.61	107960	14.61	61339	16.78
ZZZZZZ	27862	8.23	111479	10.67	142041	11.61	104850	14.61	58229	16.78
ZZZZZZ	28733	8.23	114082	10.67	144557	11.61	106169	14.61	60498	16.78
ZZZZZZ	27754	8.24	108957	10.68	137253	11.61	101925	14.61	58083	16.78
ZZZZZZ	28790	8.23	113853	10.68	143662	11.61	107559	14.61	60023	16.78
ZZZZZZ	29356	8.23	113463	10.68	145460	11.61	107978	14.61	60588	16.78
ZZZZZZ	26779	8.24	110001	10.67	140121	11.61	103947	14.61	59717	16.78
N85893-1	28847	8.24	112901	10.68	143489	11.61	106439	14.61	59636	16.78
N85893-2	29612	8.23	112704	10.68	143678	11.61	107329	14.61	59647	16.78
N85893-3	29328	8.23	112490	10.68	143200	11.61	106559	14.61	60579	16.78
ZZZZZZ	28487	8.23	110962	10.67	143008	11.61	105533	14.61	59236	16.78
ZZZZZZ	28776	8.23	112189	10.68	142549	11.61	106684	14.61	59984	16.78
N85524-33MS	31121	8.23	117683	10.68	150643	11.61	113333	14.61	66557	16.78
N85524-33MSD	31928	8.24	123303	10.67	155678	11.61	119553	14.61	69473	16.78

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Method: SW846 8260B Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
N85893-1	2C1396.D	103.0	96.0	88.0	106.0
N85893-2	2C1397.D	102.0	97.0	89.0	105.0
N85893-3	2C1398.D	102.0	96.0	90.0	105.0
N85524-33MS	2C1401.D	103.0	95.0	90.0	103.0
N85524-33MSD	2C1402.D	102.0	95.0	92.0	104.0
V2C63-BS	2C1384.D	102.0	98.0	91.0	104.0
V2C63-MB1	2C1383.D	102.0	98.0	88.0	105.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-119%
S2 = 1,2-Dichloroethane-D4	68-129%
S3 = Toluene-D8	83-118%
S4 = 4-Bromofluorobenzene	82-120%

Initial Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: V2C1-ICC001
Lab FileID: 2C0026.D

Response Factor Report MS2C

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Nov 18 10:21:14 2004
Response via : Initial Calibration

Calibration Files
1 =2C0022.D 2 =2C0023.D 100 =2C0027.D 50 =2C0026.D
20 =2C0025.D 200 =2C0028.D 5 =2C0024.D

Compound	1	2	100	50	20	200	5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD								
2)M tertiary butyl al			0.991	1.006	0.951	1.038	0.960	0.989	3.57

****

For special project Tertiary butyl alcohol RL = 10 ppb.

2)M tertiary butyl al	0.335	0.991	1.006	0.951	1.038	0.960	0.880		30.57

----- Linear regression ----- Coefficient = 0.9996
Response Ratio = -0.01692 + 1.03889 *A

****

3)M 1,4-dioxane			0.088	0.091	0.081	0.097	0.071	0.086	11.72
4) I pentafluorobenzene	ISTD								
5)M chlorodifluoromet	0.936	0.783	0.875	0.826	0.832	0.858	0.865	0.854	5.55
6)M dichlorodifluorom	0.391	0.402	0.561	0.530	0.520	0.567	0.503	0.496	14.48
7)M chloromethane	0.636	0.641	0.629	0.599	0.601	0.621	0.631	0.623	2.67
8)M vinyl chloride	0.508	0.567	0.631	0.601	0.601	0.631	0.600	0.591	7.19
9)M bromomethane	0.394	0.403	0.385	0.378	0.381	0.363	0.392	0.385	3.38
10)M chloroethane	0.237	0.301	0.299	0.299	0.298	0.288	0.299	0.289	8.03
11)M trichlorofluorome	0.647	0.679	0.778	0.759	0.741	0.793	0.761	0.737	7.30
12)M ethyl ether		0.187	0.224	0.213	0.204	0.228	0.203	0.210	7.26
13)M acrolein			0.006	0.006	0.004	0.006	0.002	0.005#	35.29

----- Linear regression ----- Coefficient = 0.9995
Response Ratio = -0.00752 + 0.00653 *A

14)M 1,1-dichloroethen	0.381	0.451	0.425	0.428	0.401	0.440	0.433	0.423	5.65
15)M acetone		0.126	0.118	0.122	0.119	0.110	0.134	0.121	6.78
16)M allyl chloride	1.558	1.503	1.373	1.353	1.305	1.360	1.432	1.412	6.41
17)M acetonitrile		0.041	0.035	0.034	0.034	0.033	0.040	0.036	9.60
18)M iodomethane	0.665	0.810	0.890	0.864	0.807	0.902	0.838	0.825	9.67
19)M iso-butyl alcohol			0.005	0.005	0.004	0.005		0.005#	12.01
20)M carbon disulfide	1.362	1.480	1.540	1.522	1.425	1.548	1.480	1.480	4.54
21)M methylene chlorid	0.368	0.489	0.481	0.473	0.450	0.487	0.479	0.461	9.37
22)M methyl acetate	0.221	0.259	0.297	0.289	0.276	0.294	0.310	0.278	10.76
23)M methyl tert butyl	1.100	1.180	1.212	1.154	1.095	1.188	1.162	1.156	3.81
24)M trans-1,2-dichlor	0.574	0.533	0.478	0.468	0.457	0.489	0.554	0.508	9.01
25)M di-isopropyl ethe	1.693	1.595	1.755	1.722	1.631	1.736	1.716	1.692	3.46
26)M 2-butanone	0.352	0.396	0.489	0.470	0.446	0.478	0.471	0.443	11.41
27)M 1,1-dichloroethan	0.756	0.848	0.885	0.871	0.827	0.902	0.880	0.852	5.78
28)M chloroprene	0.537	0.517	0.628	0.610	0.574	0.641	0.591	0.585	7.86
29)M acrylonitrile	0.090	0.110	0.127	0.120	0.114	0.127	0.117	0.115	10.99
30)M vinyl acetate			0.054	0.051	0.045	0.055	0.036	0.048	16.24

----- Linear regression ----- Coefficient = 0.9998
Response Ratio = -0.00377 + 0.05624 *A

0 32

Initial Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: V2C1-ICC001
Lab FileID: 2C0026.D

31)M ethyl tert-butyl	1.471	1.312	1.549	1.485	1.416	1.527	1.467	1.461	5.38
32)M ethyl acetate			0.047	0.046	0.041	0.046	0.036	0.043	10.25
33)M 2,2-dichloropropa	0.727	0.787	0.798	0.779	0.747	0.799	0.794	0.776	3.62
34)M cis-1,2-dichloroe	0.517	0.563	0.540	0.598	0.538	0.556	0.587	0.557	5.10
35)M propionitrile		0.036	0.045	0.043	0.040	0.045	0.041	0.042	8.43
36)M bromochloromethan		0.232	0.255	0.245	0.233	0.260	0.236	0.243	4.91
37)M tetrahydrofuran			0.101	0.096	0.087	0.101	0.069	0.091	14.68
38)M chloroform	0.738	0.847	0.856	0.846	0.801	0.881	0.829	0.828	5.64
39)S dibromofluorometh	0.359	0.420	0.467	0.446	0.443	0.485	0.447	0.438	9.21
40)S 1,2-dichloroethan	0.416	0.422	0.462	0.444	0.444	0.464	0.453	0.443	4.21
41)M freon 113	0.350	0.325	0.447	0.430	0.420	0.452	0.421	0.406	12.10
42)M methacrylonitrile	0.261	0.253	0.230	0.223	0.212	0.232	0.224	0.233	7.48
43)M 1,1,1-trichloroet	0.670	0.789	0.814	0.792	0.756	0.826	0.796	0.778	6.75
44)M Cyclohexane	0.637	0.708	0.771	0.734	0.704	0.786	0.721	0.723	6.76

ISTD

45) I 1,4-difluorobenzene									
46)M Di-isobutylene	0.824	0.827	0.994	0.953	0.863	1.036	0.876	0.910	9.24
47)M epichlorohydrin			0.021	0.020	0.018	0.021	0.018	0.019	7.46
48)M n-butyl alcohol	0.005	0.005	0.004	0.004	0.007	0.004	0.007	0.005#	23.59

----- Linear regression ----- Coefficient = 0.9951
Response Ratio = 0.01353 + 0.00427 *A

49)M carbon tetrachlor	0.424	0.498	0.550	0.535	0.500	0.560	0.507	0.511	8.88
50)M 1,1-dichloroprope	0.410	0.453	0.471	0.461	0.439	0.484	0.469	0.455	5.39
51)M hexane		0.507	0.401	0.438	0.437	0.419	0.454	0.444	7.49
52)M tert amyl alcohol								0.443	0.000# -1.00
53)M iso-octane									0.000# -1.00
54)M benzene	1.488	1.475	1.371	1.358	1.292	1.388	1.393	1.395	4.88
55)M tert-amyl methyl	1.052	0.936	0.984	0.959	0.918	0.941	0.976	0.967	4.59
56)M heptane	0.236	0.184	0.210	0.209	0.200	0.219	0.214	0.210	7.58
57)M isopropyl acetate	0.447	0.413	0.475	0.459	0.442	0.466	0.479	0.454	5.07
58)M 1,2-dichloroethan	0.340	0.396	0.416	0.411	0.393	0.405	0.410	0.396	6.50
59)M trichloroethene	0.318	0.338	0.357	0.349	0.333	0.367	0.340	0.343	4.70
60)M 2-nitropropane		0.146	0.151	0.161	0.152	0.142	0.152	0.151	4.29
61)M 2-chloroethyl vin	0.142	0.133	0.165	0.160	0.149	0.161	0.157	0.152	7.59
62)M methyl methacryla		0.120	0.160	0.148	0.135	0.167	0.139	0.145	11.91
63)M 1,2-dichloropropa	0.291	0.336	0.356	0.352	0.328	0.361	0.341	0.338	7.04
64)M dibromomethane	0.128	0.170	0.189	0.183	0.175	0.193	0.173	0.173	12.39
65)M methylcyclohexane	0.561	0.504	0.570	0.551	0.529	0.578	0.540	0.547	4.66
66)M bromodichlorometh	0.362	0.395	0.450	0.434	0.396	0.462	0.404	0.415	8.48
67)M cis-1,3-dichlorop	0.442	0.491	0.543	0.528	0.489	0.558	0.501	0.507	7.70
68)S toluene-d8 (s)	1.095	1.086	1.144	1.103	1.095	1.182	1.114	1.117	3.09
69)M 4-methyl-2-pentan	0.228	0.278	0.306	0.304	0.281	0.302	0.294	0.285	9.57
70)M toluene	0.726	0.752	0.800	0.784	0.722	0.828	0.747	0.765	5.18
71)M 3-methyl-1-butano			0.007	0.008	0.007	0.007	0.006	0.007#	10.26
72)M trans-1,3-dichlor	0.382	0.403	0.455	0.436	0.406	0.464	0.419	0.424	6.93
73)M ethyl methacrylat		0.227	0.303	0.284	0.254	0.309	0.252	0.271	11.97
74)M 1,1,2-trichloroet	0.150	0.189	0.207	0.199	0.187	0.213	0.194	0.191	10.71
75)M 2-hexanone		0.116	0.132	0.136	0.127	0.126	0.129	0.128	5.23

ISTD

76) I chlorobenzene-d5									
77)M tetrachloroethene	0.337	0.373	0.395	0.387	0.365	0.401	0.378	0.376	5.70
78)M 1,3-dichloropropa	0.368	0.438	0.467	0.450	0.426	0.458	0.457	0.438	7.68
79)M butyl acetate		0.097	0.148	0.144	0.137	0.146	0.141	0.135	14.05
80)M dibromochlorometh	0.271	0.312	0.386	0.359	0.332	0.397	0.320	0.340	13.05
81)M 1,2-dibromoethane	0.209	0.250	0.290	0.275	0.263	0.292	0.269	0.264	10.73
82)M chlorobenzene	0.955	1.000	1.069	1.047	0.989	1.086	1.033	1.025	4.56
83)M 1,1,1,2-tetrachlo	0.322	0.391	0.448	0.427	0.405	0.444	0.399	0.405	10.51
84)M ethylbenzene	1.597	1.624	1.676	1.658	1.575	1.688	1.629	1.635	3.53
85)M m,p-xylene	0.641	0.657	0.682	0.670	0.631	0.687	0.650	0.660	3.17

Initial Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: V2C1-ICC001
Lab FileID: 2C0026.D

86)M o-xylene	0.615	0.666	0.709	0.687	0.659	0.712	0.673	0.674	4.92
87)M styrene	0.844	0.936	1.076	1.035	0.961	1.099	0.971	0.989	8.91
88)M bromoform		0.187	0.258	0.234	0.210	0.271	0.198	0.227	14.85
89) I 1,4-dichlorobenzene-d	----------ISTD----------								
90)M isopropylbenzene	2.479	2.483	2.820	2.747	2.540	2.809	2.573	2.636	5.74
91)S 4-bromofluorobenz	0.830	0.792	0.834	0.809	0.804	0.837	0.826	0.819	2.11
92)M cyclohexanone			0.030	0.032	0.028	0.028	0.024	0.029	10.44
93)M bromobenzene	0.772	0.806	0.870	0.844	0.801	0.861	0.836	0.827	4.31
94)M 1,1,2,2-tetrachlo	0.464	0.483	0.553	0.528	0.500	0.539	0.508	0.511	6.21
95)M trans-1,4-dichlor			0.145	0.141	0.132	0.144	0.125	0.138	6.23
96)M 1,2,3-trichloropr			0.149	0.144	0.138	0.143	0.138	0.142	3.47
97)M n-propylbenzene	3.132	3.240	3.359	3.325	3.158	3.315	3.286	3.259	2.65
98)M 2-chlorotoluene	2.302	2.316	2.356	2.352	2.205	2.326	2.302	2.308	2.19
99)M 4-chlorotoluene	2.065	2.096	2.083	2.070	1.955	2.082	2.080	2.062	2.33
100)M 1,3,5-trimethylbe	2.357	2.305	2.561	2.488	2.313	2.570	2.348	2.420	4.79
101)M tert-butylbenzene	1.368	1.437	1.521	1.484	1.383	1.517	1.393	1.443	4.47
102)M pentachloroethane	0.373	0.403	0.544	0.502	0.457	0.552	0.439	0.467	14.71
103)M 1,2,4-trimethylbe	2.411	2.443	2.616	2.553	2.393	2.680	2.444	2.506	4.44
104)M sec-butylbenzene	3.021	3.070	3.354	3.232	2.995	3.402	3.032	3.158	5.36
105)M 1,3-dichlorobenze	1.618	1.648	1.685	1.652	1.547	1.701	1.635	1.641	3.06
106)M p-isopropyltoluen	2.711	2.658	2.917	2.810	2.610	3.001	2.631	2.762	5.48
107)M 1,4-dichlorobenze	1.607	1.691	1.704	1.654	1.559	1.722	1.621	1.651	3.56
108)M 1,2-dichlorobenze	1.492	1.527	1.624	1.565	1.475	1.646	1.542	1.553	4.10
109)M n-butylbenzene	2.642	2.476	2.550	2.492	2.351	2.630	2.433	2.511	4.18
110)M 1,2-dibromo-3-chl			0.110	0.102	0.098	0.110	0.108	0.106	5.04
111)M 1,2,4-trichlorobe	1.555	1.415	1.580	1.444	1.391	1.542	1.408	1.476	5.38
112)M hexachlorobutadie	0.851	0.750	0.810	0.750	0.710	0.790	0.739	0.771	6.24
113)M naphthalene	2.435	2.333	2.593	2.368	2.292	2.413	2.327	2.394	4.22
114)M 1,2,3-trichlorobe	1.498	1.285	1.395	1.288	1.245	1.295	1.274	1.326	6.72
115)M hexachloroethane			0.644	0.585	0.505	0.681	0.444	0.572	17.04

----- Linear regression ----- Coefficient = 0.9990

Response Ratio = -0.07087 + 0.69292 *A

(#) = Out of Range

M2C001.M Thu Dec 02 21:37:01 2004 MS2C

SII-SSA-0014-002614

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: V2C63-CC001
Lab FileID: 2C1382.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2C1382.D
Acq On : 19 Dec 2004 1:22 pm
Sample : CC001-20
Misc : MS8372,V2C063,W,,,,1
MS Integration Params: rteint.p

Vial: 2
Operator: KANYAV
Inst : ms2C
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Nov 18 10:21:14 2004
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	75	-0.03	8.24
2 M	tertiary butyl alcohol	0.989	0.998	-0.9	79	-0.02	8.38
3 M	1,4-dioxane	0.086	0.075	12.8	69	-0.02	12.32
4 I	pentafluorobenzene	1.000	1.000	0.0	79	-0.02	10.68
5 M	chlorodifluoromethane	0.854	0.982	-15.0	93	-0.01	4.22
6 M	dichlorodifluoromethane	0.496	0.626	-26.2#	95	-0.02	4.18
7 M	chloromethane	0.623	0.685	-10.0	90	-0.03	4.60
8 M	vinyl chloride	0.591	0.670	-13.4	88	-0.02	4.90
9 M	bromomethane	0.385	0.406	-5.5	84	-0.02	5.68
10 M	chloroethane	0.289	0.313	-8.3	83	-0.01	5.89
11 M	trichlorofluoromethane	0.737	0.897	-21.7#	95	-0.01	6.42
12 M	ethyl ether	0.210	0.217	-3.3	84	-0.02	6.93
		True	Calc.	% Drift			
13 M	acrolein	200.000	1294.533	-547.3#	709	-0.02	7.24
		AvgRF	CCRF	% Dev			
14 M	1,1-dichloroethene	0.423	0.444	-5.0	87	-0.01	7.41
15 M	acetone	0.121	0.098	19.0	65	-0.03	7.51
16 M	allyl chloride	1.412	1.443	-2.2	87	-0.02	8.03
17 M	acetonitrile	0.036	0.040	-11.1	94	-0.02	8.02
18 M	iodomethane	0.825	0.941	-14.1	92	-0.02	7.73
19 M	iso-butyl alcohol	0.005	0.004#	20.0	77	-0.02	10.97
20 M	carbon disulfide	1.480	1.450	2.0	80	-0.02	7.87
21 M	methylene chloride	0.461	0.505	-9.5	88	-0.02	8.26
22 M	methyl acetate	0.278	0.269	3.2	77	-0.02	8.03
23 M	methyl tert butyl ether	1.156	1.160	-0.3	83	-0.02	8.63
24 M	trans-1,2-dichloroethene	0.508	0.487	4.1	84	-0.02	8.68
25 M	di-isopropyl ether	1.692	1.649	2.5	80	-0.02	9.29
26 M	2-butanone	0.443	0.443	0.0	78	-0.02	10.12
27 M	1,1-dichloroethane	0.852	0.905	-6.2	86	-0.02	9.32
28 M	chloroprene	0.585	0.556	5.0	76	-0.02	9.43
29 M	acrylonitrile	0.115	0.134	-16.5	93	-0.02	8.65
		True	Calc.	% Drift			
30 M	vinyl acetate	20.000	21.109	-5.5	87	-0.02	9.31
		AvgRF	CCRF	% Dev			
31 M	ethyl tert-butyl ether	1.461	1.400	4.2	78	-0.02	9.80
32 M	ethyl acetate	0.043	0.039	9.3	74	-0.01	10.12
33 M	2,2-dichloropropane	0.776	0.821	-5.8	87	-0.02	9.12

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: V2C63-CC001
Lab FileID: 2C1382.D

34 M	cis-1,2-dichloroethene	0.557	0.527	5.4	77	-0.02	10.13
35 M	propionitrile	0.042	0.046	-9.5	92	-0.02	10.21
36 M	bromochloromethane	0.243	0.263	-8.2	89	-0.02	10.47
37 M	tetrahydrofuran	0.091	0.083	8.8	75	-0.02	10.52
38 M	chloroform	0.828	0.882	-6.5	87	-0.02	10.53
39 S	dibromofluoromethane (s)	0.438	0.457	-4.3	81	-0.02	10.74
40 S	1,2-dichloroethane-d4 (s)	0.443	0.443	0.0	79	-0.02	11.17
41 M	freon 113	0.406	0.511	-25.9#	96	0.00	7.38
42 M	methacrylonitrile	0.233	0.212	9.0	79	-0.02	10.41
43 M	1,1,1-trichloroethane	0.778	0.824	-5.9	86	-0.02	10.79
44 M	Cyclohexane	0.723	0.678	6.2	76	-0.02	10.85
45 I	1,4-difluorobenzene	1.000	1.000	0.0	75	-0.02	11.61
46 M	Di-isobutylene	0.910	0.793	12.9	69	-0.02	11.82
47 M	epichlorohydrin	0.019	0.018	5.3	75	-0.01	12.84
		True	Calc.	% Drift			
48 M	n-butyl alcohol	1000.000	604.289	39.6#	34	-0.02	11.76
		AvgRF	CCRF	% Dev			
49 M	carbon tetrachloride	0.511	0.598	-17.0	89	-0.02	10.99
50 M	1,1-dichloropropene	0.455	0.462	-1.5	79	-0.02	10.97
51 M	hexane	0.443	0.434	2.0	77	-0.02	9.01
52 M	tert amyl alcohol	0.000	0.000#	0.0	77	-0.02	11.94
53 M	iso-octane	0.000	0.017	0.0	0#	-0.19	12.15
54 M	benzene	1.395	1.304	6.5	75	-0.02	11.24
55 M	tert-amyl methyl ether	0.967	0.942	2.6	77	-0.02	11.27
56 M	heptane	0.210	0.199	5.2	74	-0.02	11.40
57 M	isopropyl acetate	0.454	0.439	3.3	74	-0.02	11.16
58 M	1,2-dichloroethane	0.396	0.468	-18.2	89	-0.02	11.26
59 M	trichloroethene	0.343	0.345	-0.6	78	-0.02	11.94
60 M	2-nitropropane	0.151	0.145	4.0	72	-0.01	13.03
61 M	2-chloroethyl vinyl ether	0.152	0.152	0.0	76	-0.02	12.70
62 M	methyl methacrylate	0.145	0.130	10.3	72	-0.02	12.21
63 M	1,2-dichloropropane	0.338	0.334	1.2	76	-0.02	12.21
64 M	dibromomethane	0.173	0.198	-14.5	85	-0.02	12.36
65 M	methylcyclohexane	0.547	0.519	5.1	73	-0.02	12.15
66 M	bromodichloromethane	0.415	0.444	-7.0	84	-0.02	12.49
67 M	cis-1,3-dichloropropene	0.507	0.477	5.9	73	-0.02	12.92
68 S	toluene-d8 (s)	1.117	1.016	9.0	69	-0.02	13.19
69 M	4-methyl-2-pentanone	0.285	0.270	5.3	72	-0.02	13.01
70 M	toluene	0.765	0.673	12.0	70	-0.01	13.26
71 M	3-methyl-1-butanol	0.007	0.006#	14.3	64	-0.02	13.03
72 M	trans-1,3-dichloropropene	0.424	0.423	0.2	78	-0.02	13.45
73 M	ethyl methacrylate	0.271	0.220	18.8	65	-0.01	13.43
74 M	1,1,2-trichloroethane	0.191	0.192	-0.5	77	-0.02	13.65
75 M	2-hexanone	0.128	0.100	21.9#	59	0.00	13.82
76 I	chlorobenzene-d5	1.000	1.000	0.0	68	-0.01	14.62
77 M	tetrachloroethene	0.376	0.384	-2.1	71	-0.02	13.81
78 M	1,3-dichloropropane	0.438	0.495	-13.0	79	-0.02	13.83
79 M	butyl acetate	0.135	0.136	-0.7	67	-0.01	13.87
80 M	dibromochloromethane	0.340	0.388	-14.1	79	-0.02	14.08
81 M	1,2-dibromoethane	0.264	0.291	-10.2	75	-0.02	14.22
82 M	chlorobenzene	1.025	1.023	0.2	70	-0.02	14.64
83 M	1,1,1,2-tetrachloroethane	0.405	0.451	-11.4	75	-0.02	14.70
84 M	ethylbenzene	1.635	1.597	2.3	69	-0.02	14.69
85 M	m,p-xylene	0.660	0.635	3.8	68	-0.01	14.79
86 M	o-xylene	0.674	0.636	5.6	65	-0.02	15.18
87 M	styrene	0.989	0.868	12.2	61	-0.01	15.19

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: V2C63-CC001
Lab FileID: 2C1382.D

88 M	bromoform	0.227	0.233	-2.6	75	-0.02	15.45
89 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	69	-0.02	16.78
90 M	isopropylbenzene	2.636	2.426	8.0	66	-0.01	15.49
91 S	4-bromofluorobenzene (s)	0.819	0.852	-4.0	73	-0.02	15.69
92 M	cyclohexanone	0.029	0.026	10.3	64	-0.02	13.03
93 M	bromobenzene	0.827	0.826	0.1	71	-0.01	15.88
94 M	1,1,2,2-tetrachloroethane	0.511	0.542	-6.1	74	-0.02	15.79
95 M	trans-1,4-dichloro-2-bute	0.138	0.099	28.3#	51	-0.02	15.82
96 M	1,2,3-trichloropropane	0.142	0.164	-15.5	82	-0.02	15.86
97 M	n-propylbenzene	3.259	3.115	4.4	68	-0.02	15.87
98 M	2-chlorotoluene	2.308	2.298	0.4	72	-0.02	16.02
99 M	4-chlorotoluene	2.062	2.012	2.4	71	-0.01	16.11
100 M	1,3,5-trimethylbenzene	2.420	2.252	6.9	67	-0.02	16.01
101 M	tert-butylbenzene	1.443	1.431	0.8	71	-0.01	16.34
102 M	pentachloroethane	0.467	0.547	-17.1	82	-0.02	16.43
103 M	1,2,4-trimethylbenzene	2.506	2.372	5.3	68	-0.01	16.38
104 M	sec-butylbenzene	3.158	2.884	8.7	66	-0.01	16.54
105 M	1,3-dichlorobenzene	1.641	1.551	5.5	69	-0.01	16.73
106 M	p-isopropyltoluene	2.762	2.520	8.8	66	-0.01	16.65
107 M	1,4-dichlorobenzene	1.651	1.584	4.1	70	-0.02	16.80
108 M	1,2-dichlorobenzene	1.553	1.467	5.5	68	-0.02	17.19
109 M	n-butylbenzene	2.511	2.339	6.8	68	-0.02	17.04
110 M	1,2-dibromo-3-chloropropa	0.106	0.111	-4.7	78	-0.02	17.96
111 M	1,2,4-trichlorobenzene	1.476	1.401	5.1	69	-0.02	18.79
112 M	hexachlorobutadiene	0.771	0.757	1.8	73	-0.02	18.90
113 M	naphthalene	2.394	2.323	3.0	70	-0.02	19.08
114 M	1,2,3-trichlorobenzene	1.326	1.308	1.4	72	-0.02	19.33
		True	Calc.	% Drift			
115 M	hexachloroethane	20.000	20.701	-3.5	73	-0.01	17.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C0025.D M2C001.M Mon Dec 20 08:54:03 2004 MS2C

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1396.D Vial: 16
Acq On : 19 Dec 2004 8:42 pm Operator: KANYAV
Sample : N85893-1 Inst : ms2C
Misc : MS8569,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 19 21:07:38 2004 Quant Results File: M2C001.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Nov 18 10:21:14 2004
Response via : Initial Calibration
DataAcq Meth : M2C001

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	28847	500.00	ug/L	-0.03
4) pentafluorobenzene	10.68	168	112901	50.00	ug/L	-0.02
45) 1,4-difluorobenzene	11.61	114	143489	50.00	ug/L	-0.02
76) chlorobenzene-d5	14.61	117	106439	50.00	ug/L	-0.02
89) 1,4-dichlorobenzene-d4	16.78	152	59636	50.00	ug/L	-0.02
System Monitoring Compounds						
39) dibromofluoromethane (s)	10.73	113	50795	51.33	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 102.66%			
40) 1,2-dichloroethane-d4 (s)	11.17	65	48063	48.00	ug/L	-0.02
Spiked Amount 50.000	Range 68 - 129		Recovery = 96.00%			
68) toluene-d8 (s)	13.19	98	141202	44.04	ug/L	-0.02
Spiked Amount 50.000	Range 83 - 118		Recovery = 88.08%			
91) 4-bromofluorobenzene (s)	15.69	95	51820	53.07	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 120		Recovery = 106.14%			

Target Compounds Qvalue

DP 12/21/04

9 38

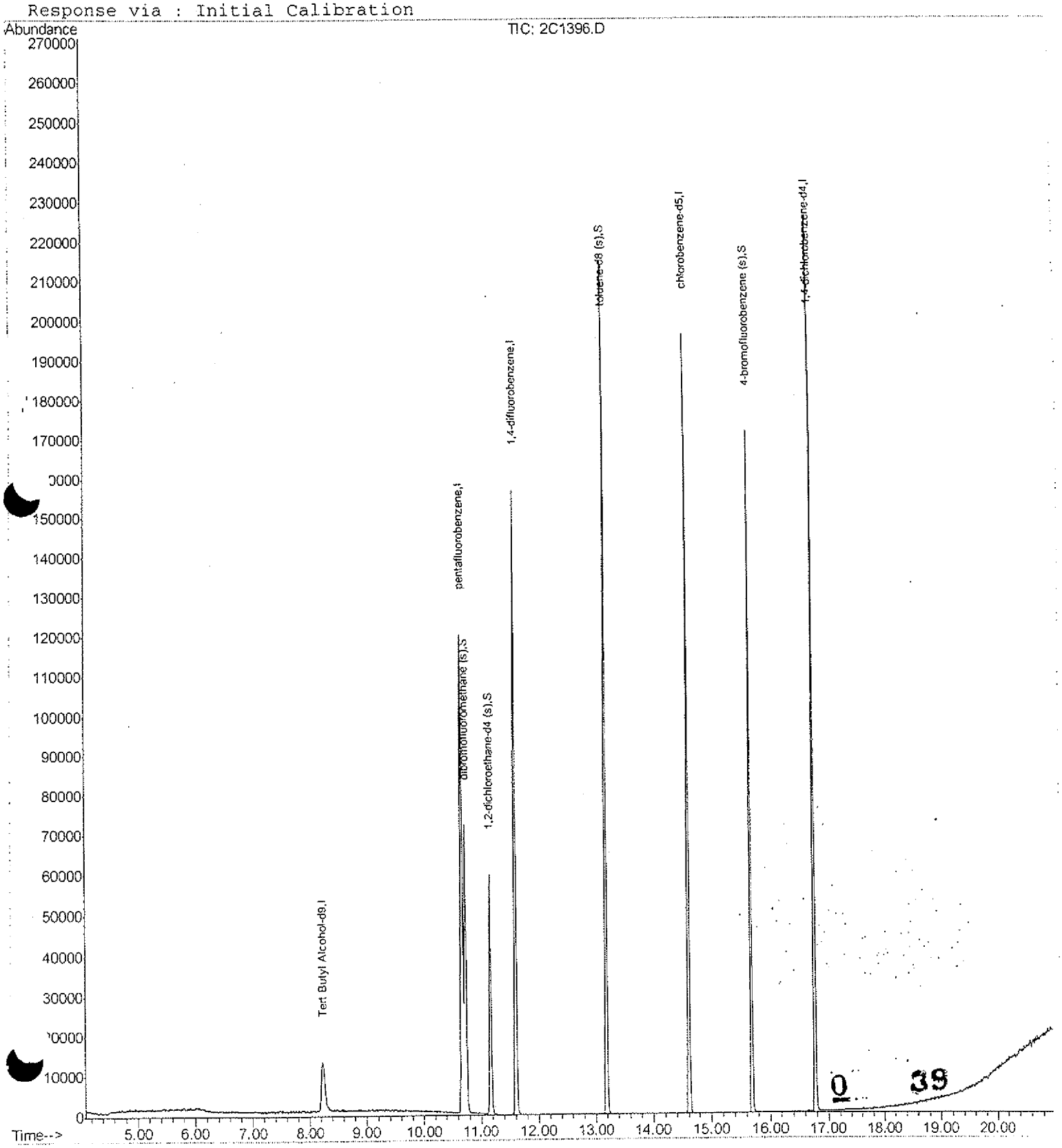
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1396.D
Acq On : 19 Dec 2004 8:42 pm
Sample : N85893-1
Misc : MS8569,V2C063,W,,,,1
MS Integration Params: rteint.p
ant Time: Dec 21 10:57 2004

Vial: 16
Operator: KANYAV
Inst : ms2C
Multiplr: 1.00

Quant Results File: M2C001.RES

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Nov 15 19:32:24 2004
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\MS2C\2C1397.D Vial: 17
Acq On : 19 Dec 2004 9:13 pm Operator: KANYAV
Sample : N85893-2 Inst : ms2C
Misc : MS8569,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 19 21:39:06 2004 Quant Results File: M2C001.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Nov 18 10:21:14 2004
Response via : Initial Calibration
DataAcq Meth : M2C001

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	29612	500.00	ug/L	-0.04
4) pentafluorobenzene	10.68	168	112704	50.00	ug/L	-0.02
45) 1,4-difluorobenzene	11.61	114	143678	50.00	ug/L	-0.02
76) chlorobenzene-d5	14.61	117	107329	50.00	ug/L	-0.02
89) 1,4-dichlorobenzene-d4	16.78	152	59647	50.00	ug/L	-0.02
System Monitoring Compounds						
39) dibromofluoromethane (s)	10.73	113	50348	50.96	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 101.92%			
40) 1,2-dichloroethane-d4 (s)	11.17	65	48297	48.31	ug/L	-0.02
Spiked Amount 50.000	Range 68 - 129		Recovery = 96.62%			
68) toluene-d8 (s)	13.19	98	142818	44.49	ug/L	-0.02
Spiked Amount 50.000	Range 83 - 118		Recovery = 88.98%			
91) 4-bromofluorobenzene (s)	15.69	95	51090	52.32	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 120		Recovery = 104.64%			

Target Compounds Qvalue

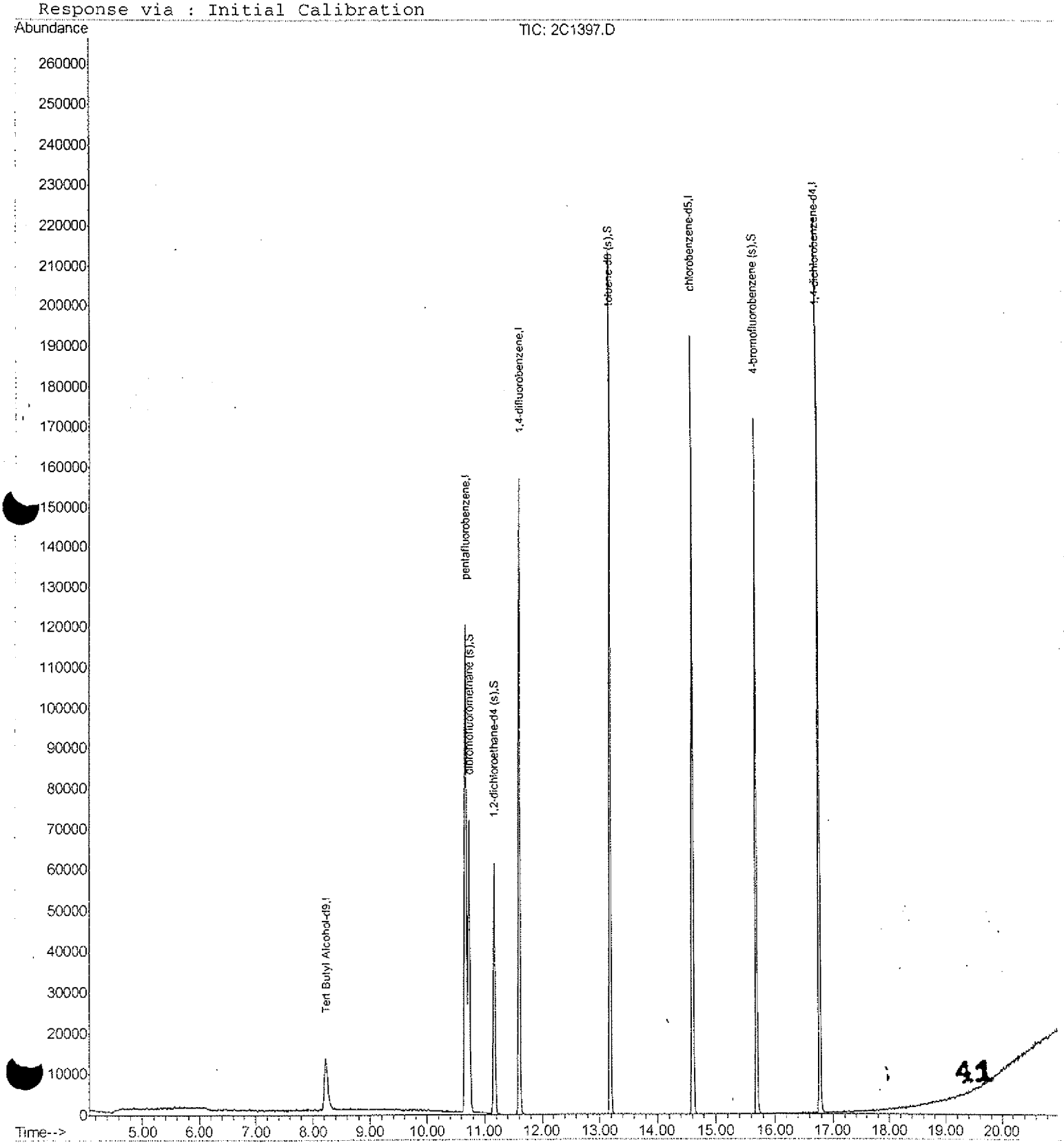
DP 12/21/04

Q 40

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1397.D Vial: 17
Acq On : 19 Dec 2004 9:13 pm Operator: KANYAV
Sample : N85893-2 Inst : ms2C
Misc : MS8569,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 21 10:57 2004 Quant Results File: M2C001.RES

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Nov 15 19:32:24 2004
Response via : Initial Calibration



41

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1398.D Vial: 18
Acq On : 19 Dec 2004 9:44 pm Operator: KANYAV
Sample : N85893-3 Inst : ms2C
Misc : MS8569,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 19 22:10:27 2004 Quant Results File: M2C001.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Nov 18 10:21:14 2004
Response via : Initial Calibration
DataAcq Meth : M2C001

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	29328	500.00	ug/L	-0.04
4) pentafluorobenzene	10.68	168	112490	50.00	ug/L	-0.02
45) 1,4-difluorobenzene	11.61	114	143200	50.00	ug/L	-0.02
76) chlorobenzene-d5	14.61	117	106559	50.00	ug/L	-0.02
89) 1,4-dichlorobenzene-d4	16.78	152	60579	50.00	ug/L	-0.02
System Monitoring Compounds						
39) dibromofluoromethane (s)	10.73	113	50496	51.21	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 102.42%			
40) 1,2-dichloroethane-d4 (s)	11.17	65	48000	48.11	ug/L	-0.02
Spiked Amount 50.000	Range 68 - 129		Recovery = 96.22%			
68) toluene-d8 (s)	13.19	98	143862	44.96	ug/L	-0.02
Spiked Amount 50.000	Range 83 - 118		Recovery = 89.92%			
91) 4-bromofluorobenzene (s)	15.69	95	51910	52.34	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 120		Recovery = 104.68%			

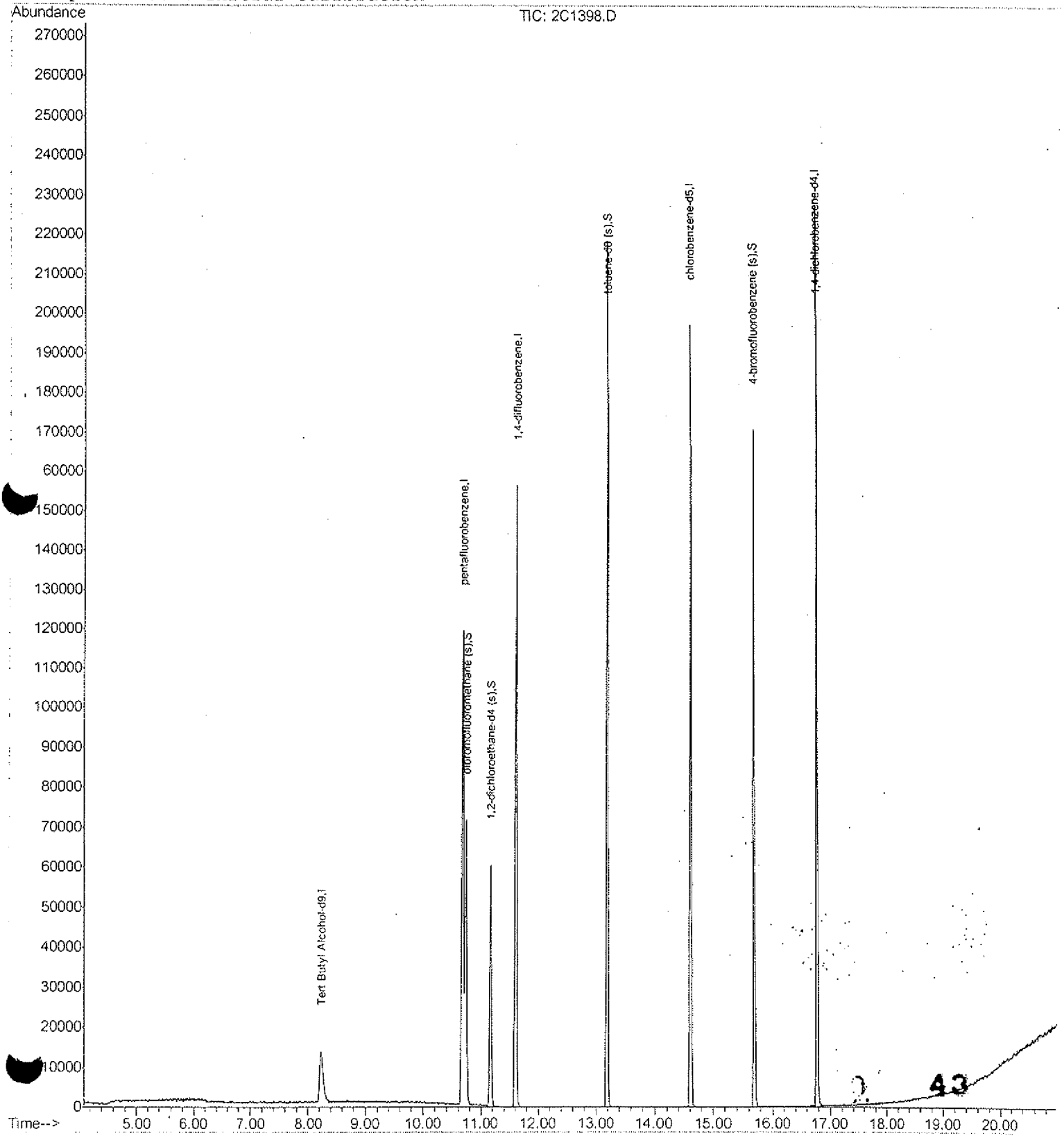
Target Compounds Qvalue

12/21/04

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1398.D Vial: 18
Acq On : 19 Dec 2004 9:44 pm Operator: KANYAV
Sample : N85893-3 Inst : ms2C
Misc : MS8569,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 21 10:57 2004 Quant Results File: M2C001.RES

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Nov 15 19:32:24 2004
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\MS2C\2C1383.D Vial: 3
Acq On : 19 Dec 2004 1:53 pm Operator: KANYAV
Sample : MB1 Inst : ms2C
Misc : MS8206,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 19 14:19:29 2004 Quant Results File: M2C001.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Nov 18 10:21:14 2004
Response via : Initial Calibration
DataAcq Meth : M2C001

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	27688	500.00	ug/L	-0.03
4) pentafluorobenzene	10.68	168	107086	50.00	ug/L	-0.02
45) 1,4-difluorobenzene	11.61	114	134740	50.00	ug/L	-0.02
76) chlorobenzene-d5	14.62	117	100625	50.00	ug/L	-0.01
89) 1,4-dichlorobenzene-d4	16.78	152	56677	50.00	ug/L	-0.02
System Monitoring Compounds						
39) dibromofluoromethane (s)	10.73	113	47749	50.87	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 101.74%			
40) 1,2-dichloroethane-d4 (s)	11.17	65	46643	49.11	ug/L	-0.02
Spiked Amount 50.000	Range 68 - 129		Recovery = 98.22%			
68) toluene-d8 (s)	13.19	98	133001	44.18	ug/L	-0.02
Spiked Amount 50.000	Range 83 - 118		Recovery = 88.36%			
91) 4-bromofluorobenzene (s)	15.69	95	48839	52.63	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 120		Recovery = 105.26%			

Target Compounds Qvalue

AP 12/21/04

Q 44

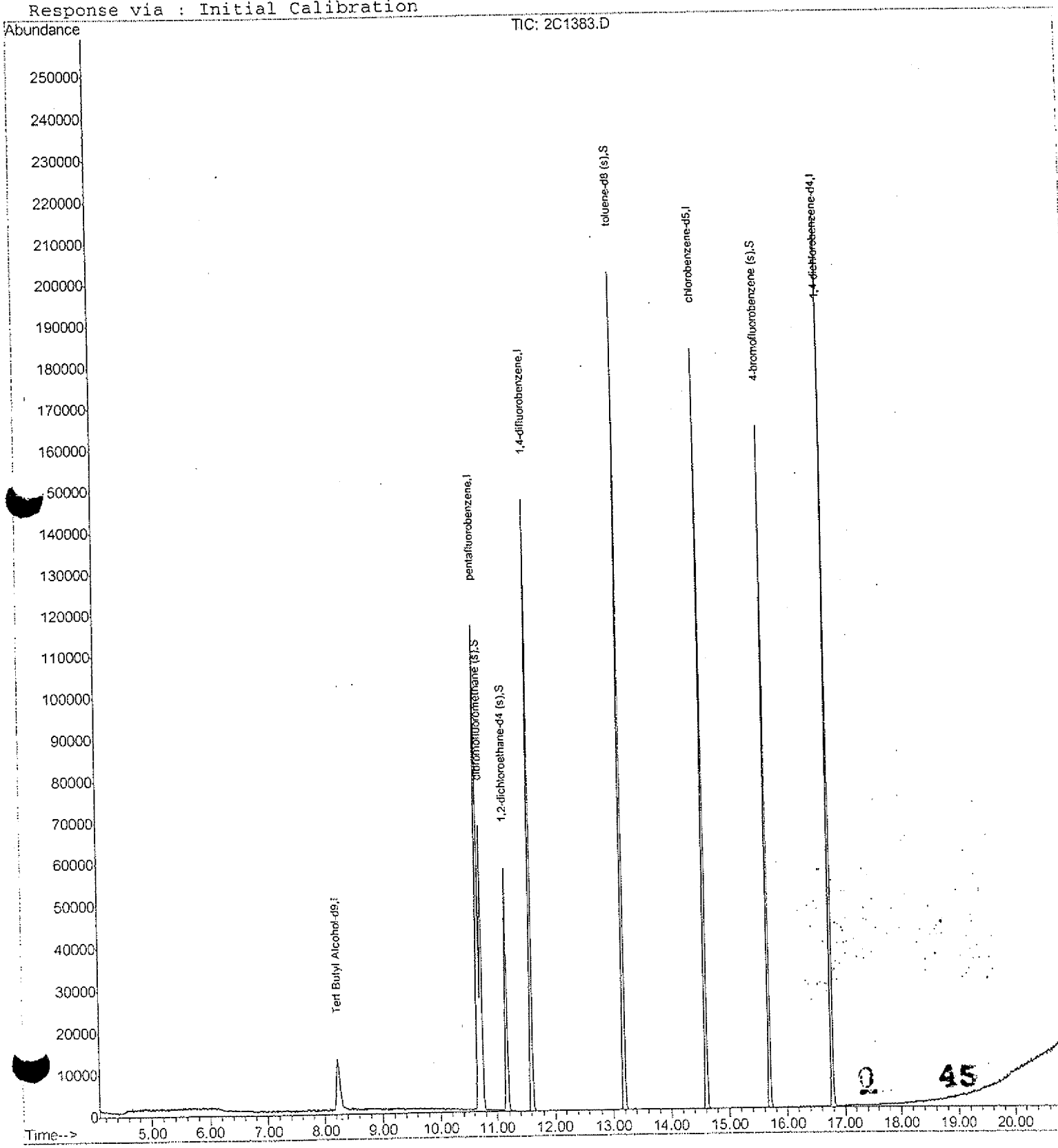
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1383.D
Acq On : 19 Dec 2004 1:53 pm
Sample : MB1
Misc : MS8206,V2C063,W,,,,1
MS Integration Params: rteint.p
Quant Time: Dec 21 10:50 2004

Vial: 3
Operator: KANYAV
Inst : ms2C
Multiplr: 1.00

Quant Results File: M2C001.RES

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Mon Nov 15 19:32:24 2004
Response via : Initial Calibration



2C1383.D M2C001.M Tue Dec 21 10:50:35 2004 RPT1 Page

SII-SSA-0014-002625

Data File : C:\MSDCHEM\1\DATA\MS2C\2C1383.D
Acq On : 19 Dec 2004 1:53 pm
Sample : MB1
Misc : MS8206,V2C063,W,,,,1
MS Integration Params: LSCINT.P

Vial: 3
Operator: KANYAV
Inst : ms2C
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Smoothing : ON
Sampling : 1
Start Thrs: 0.1
Stop Thrs : 0.1

Filtering: 5
Min Area: 100 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

Peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.216	16	26	43	rVB3	485	2319	0.67%	0.094%
2	4.441	64	69	78	rBV2	379	1118	0.32%	0.045%
3	4.535	78	87	88	rBV2	469	817	0.24%	0.033%
4	4.567	88	93	95	rVV3	550	764	0.22%	0.031%
5	4.583	95	96	100	rVV3	531	667	0.19%	0.027%
6	4.609	100	101	107	rVV3	467	785	0.23%	0.032%
7	4.719	114	122	124	rBV2	392	735	0.21%	0.030%
8	4.845	143	146	149	rVB3	732	549	0.16%	0.022%
9	4.881	149	153	172	rBV2	724	2545	0.74%	0.103%
.0	5.023	178	180	188	rVB2	473	770	0.22%	0.031%
.1	5.081	188	191	199	rBV4	568	1150	0.33%	0.046%
.2	5.138	199	202	206	rVB2	401	500	0.15%	0.020%
.3	5.186	210	211	223	rBV3	509	1023	0.30%	0.041%
.4	5.275	223	228	233	rVB2	434	513	0.15%	0.021%
.5	5.317	235	236	242	rVB	492	606	0.18%	0.024%
.6	5.401	247	252	257	rVB3	446	862	0.25%	0.035%
.7	5.432	257	258	266	rBV3	468	881	0.26%	0.036%
.8	5.484	266	268	274	rVV2	442	601	0.17%	0.024%
.9	5.521	274	275	280	rVV3	573	536	0.16%	0.022%
20	5.563	280	283	293	rVV4	550	1168	0.34%	0.047%
21	5.642	293	298	304	rVV3	499	908	0.26%	0.037%
22	5.715	310	312	323	rVV3	446	970	0.28%	0.039%
23	5.794	323	327	333	rVB3	464	875	0.25%	0.035%
24	5.883	343	344	351	rVB2	612	603	0.17%	0.024%
25	5.925	351	352	359	rVB2	682	714	0.21%	0.029%
26	5.988	361	364	366	rBV2	550	577	0.17%	0.023%
27	6.087	381	383	387	rVB	603	645	0.19%	0.026%
28	6.140	387	393	398	rBV3	646	1027	0.30%	0.042%
29	6.239	410	412	425	rVB2	479	945	0.27%	0.038%
30	6.323	425	428	434	rVV2	410	639	0.19%	0.026%
31	6.376	434	438	445	rVV2	381	668	0.19%	0.027%
.2	6.439	445	450	468	rVV3	391	1359	0.39%	0.055%
33	7.078	567	572	578	rBV3	434	650	0.19%	0.026%
34	7.183	590	592	613	rVV3	347	1282	0.37%	0.052%
35	7.330	613	620	623	rVV2	440	745	0.22%	0.030%
36	7.351	623	624	633	rVB2	469	852	0.25%	0.034%
37	7.424	636	638	645	rVB	336	539	0.16%	0.022%
38	7.482	645	649	651	rVB	605	571	0.17%	0.023%

0	7.555	662	663	668	rBV2	323	497	0.14%	0.020%
1	7.597	668	671	678	rVV2	486	816	0.24%	0.033%
2	7.639	678	679	687	rVV	454	725	0.21%	0.029%
3	7.707	691	692	696	rVB	593	572	0.17%	0.023%
4	8.012	745	750	762	rVB	390	660	0.19%	0.027%
5	8.090	762	765	770	rBV2	577	618	0.18%	0.025%
6	8.153	774	777	782	rBV2	392	604	0.18%	0.024%
7	8.237	782	793	826	rBV	12213	51774	15.02%	2.093%
8	8.515	845	846	853	rVB	602	849	0.25%	0.034%
9	8.588	853	860	863	rBV2	457	898	0.26%	0.036%
0	8.614	863	865	876	rVB2	391	790	0.23%	0.032%
1	8.683	876	878	884	rBV2	255	466	0.14%	0.019%
2	8.756	890	892	900	rVV	325	626	0.18%	0.025%
3	8.814	900	903	917	rVV2	469	1158	0.34%	0.047%
4	8.898	917	919	926	rVV2	412	771	0.22%	0.031%
5	8.940	926	927	933	rVB	439	567	0.16%	0.023%
6	9.034	944	945	954	rVV2	628	880	0.26%	0.036%
7	9.128	960	963	966	rVB2	451	519	0.15%	0.021%
8	9.186	973	974	978	rVB2	459	475	0.14%	0.019%
9	9.254	978	987	989	rBV2	557	1050	0.30%	0.042%
0	9.333	1000	1002	1013	rVB2	391	705	0.20%	0.028%
1	9.453	1023	1025	1030	rBV2	348	502	0.15%	0.020%
2	9.511	1035	1036	1043	rBV2	476	742	0.22%	0.030%
3	9.637	1056	1060	1065	rVV	423	590	0.17%	0.024%
4	9.763	1079	1084	1092	rVV	273	558	0.16%	0.023%
5	9.862	1098	1103	1107	rVB	327	491	0.14%	0.020%
6	10.282	1179	1183	1196	rVV	239	584	0.17%	0.024%
7	10.675	1247	1258	1264	rVV	116082	258981	75.14%	10.467%
8	0.733	1264	1269	1286	rVV	67730	153632	44.57%	6.209%
9	0.832	1286	1288	1296	rVV	234	553	0.16%	0.022%
0	10.879	1296	1297	1306	rVV	285	623	0.18%	0.025%
1	10.953	1306	1311	1313	rVV	268	472	0.14%	0.019%
2	10.969	1313	1314	1327	rVV	283	815	0.24%	0.033%
3	11.053	1327	1330	1337	rVV	262	544	0.16%	0.022%
4	11.168	1341	1352	1368	rVB	57843	122653	35.58%	4.957%
5	11.608	1427	1436	1452	rBB	146841	289149	83.89%	11.686%
6	13.186	1728	1737	1751	rBB	201681	344681	100.00%	13.931%
7	13.375	1769	1773	1778	rBB	365	567	0.16%	0.023%
8	14.613	2001	2009	2023	rBB	182928	294281	85.38%	11.894%
9	15.693	2207	2215	2227	rBB	163900	243378	70.61%	9.836%
0	16.448	2353	2359	2363	rBB	261	506	0.15%	0.020%
1	16.537	2373	2376	2382	rVB	277	596	0.17%	0.024%
2	16.783	2415	2423	2437	rVV	215679	326878	94.83%	13.211%
3	17.208	2502	2504	2510	rVV2	390	627	0.18%	0.025%
4	18.010	2639	2657	2661	rBV	242	656	0.19%	0.027%
5	18.246	2699	2702	2706	rBV2	389	545	0.16%	0.022%
6	18.304	2706	2713	2719	rVV2	290	784	0.23%	0.032%
7	18.419	2732	2735	2744	rVV	379	669	0.19%	0.027%
8	18.477	2744	2746	2753	rBV	224	466	0.14%	0.019%
9	18.587	2759	2767	2769	rBV2	468	842	0.24%	0.034%
0	18.655	2774	2780	2787	rBV3	426	1044	0.30%	0.042%
1	8.807	2806	2809	2812	rBV2	564	470	0.14%	0.019%
2	8.849	2815	2817	2825	rBV2	370	796	0.23%	0.032%
3	19.064	2832	2858	2859	rBV2	832	4182	1.21%	0.169%
4	19.080	2859	2861	2871	rBV3	682	1250	0.36%	0.051%
5	19.184	2871	2881	2885	rBV4	564	1462	0.42%	0.059%

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6	19.258	2885	2895	2897	rBV3	899	1529	0.44%	0.062%
7	19.368	2905	2916	2919	rBV5	765	1917	0.56%	0.077%
8	19.415	2919	2925	2929	rBV5	491	998	0.29%	0.040%
9	19.787	2929	2996	3006	rBV4	2729	32174	9.33%	1.300%
10	20.894	3021	3207	3216	rBV5	9266	281937	81.80%	11.395%

Sum of corrected areas: 2474250

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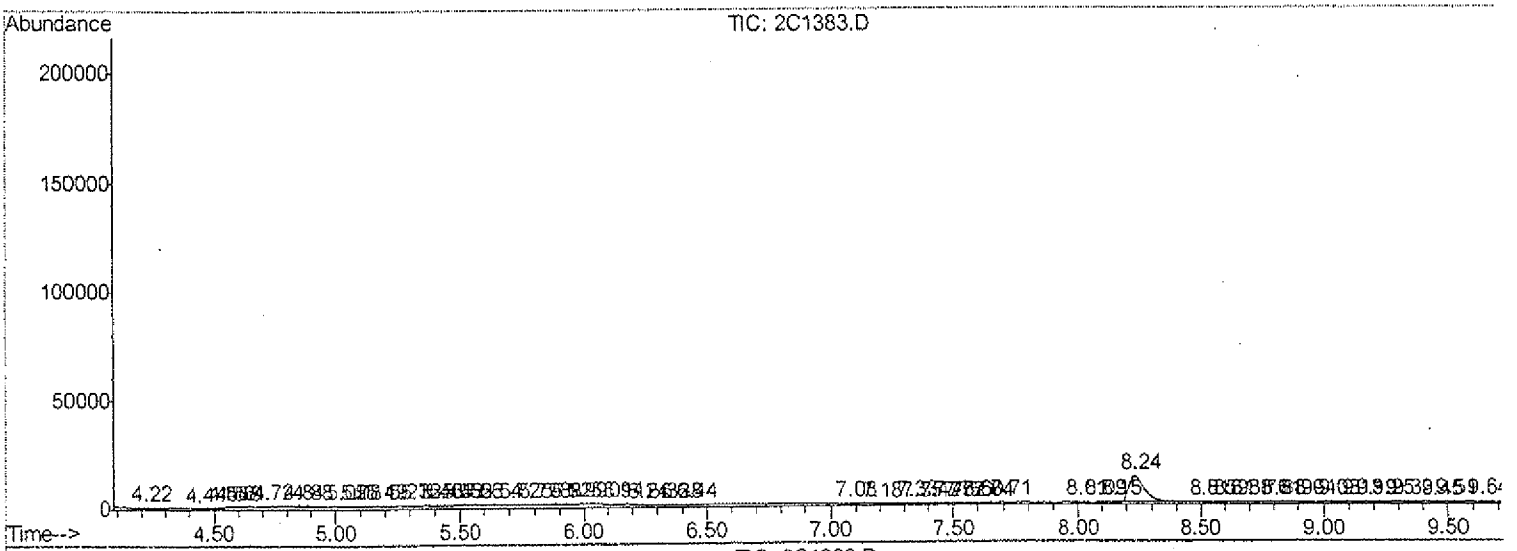
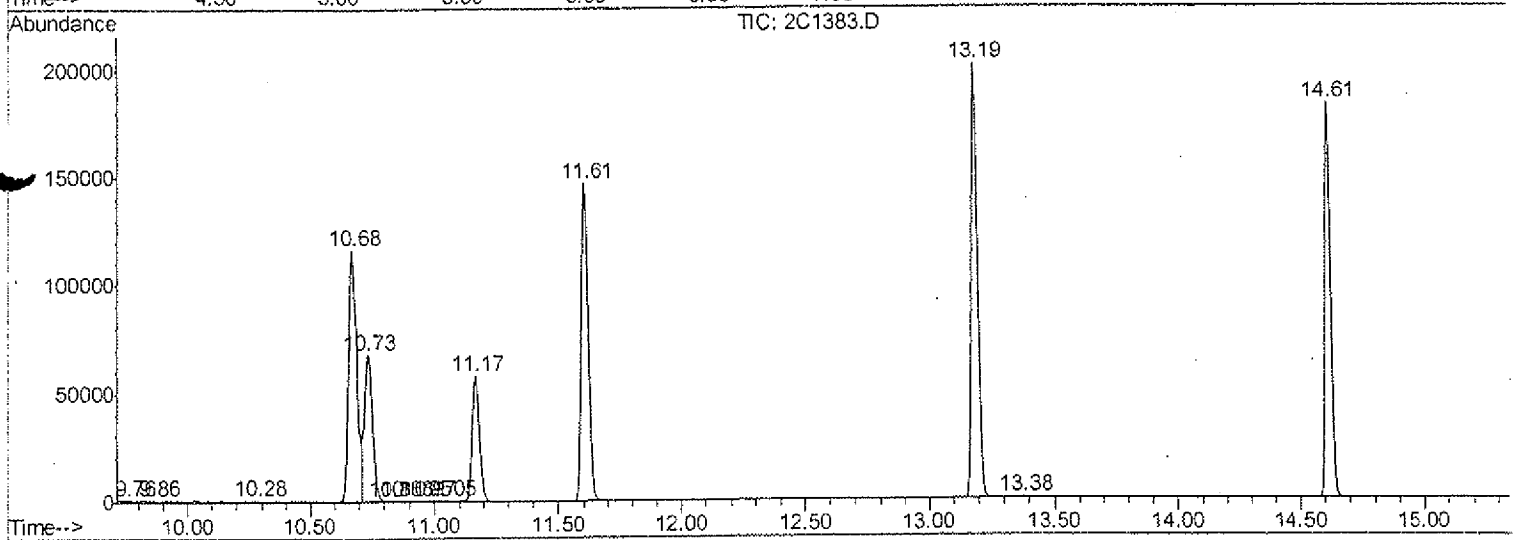
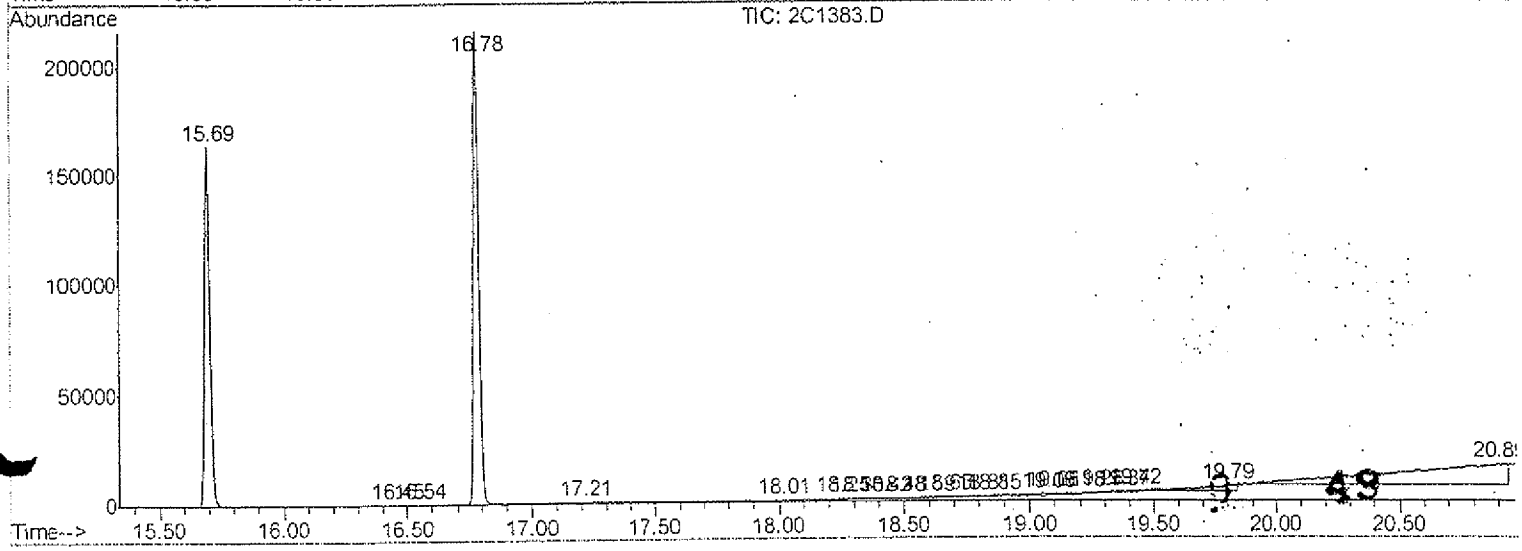
SII-SSA-0014-002628

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\MS2C\2C1383.D
Operator : KANYAV
Acquired : 19 Dec 2004 1:53 pm using AcqMethod M2C001
Instrument : ms2C
Sample Name: MB1
Misc Info : MS8206,V2C063,W,,,,1
Vial Number: 3
Quant File :M2C001.RES (RTE Integrator)







Data File : C:\MSDCHEM\1\DATA\MS2C\2C1383.D Vial: 3
Acq On : 19 Dec 2004 1:53 pm Operator: KANYAV
Sample : MB1 Inst : ms2C
Misc : MS8206,V2C063,W,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

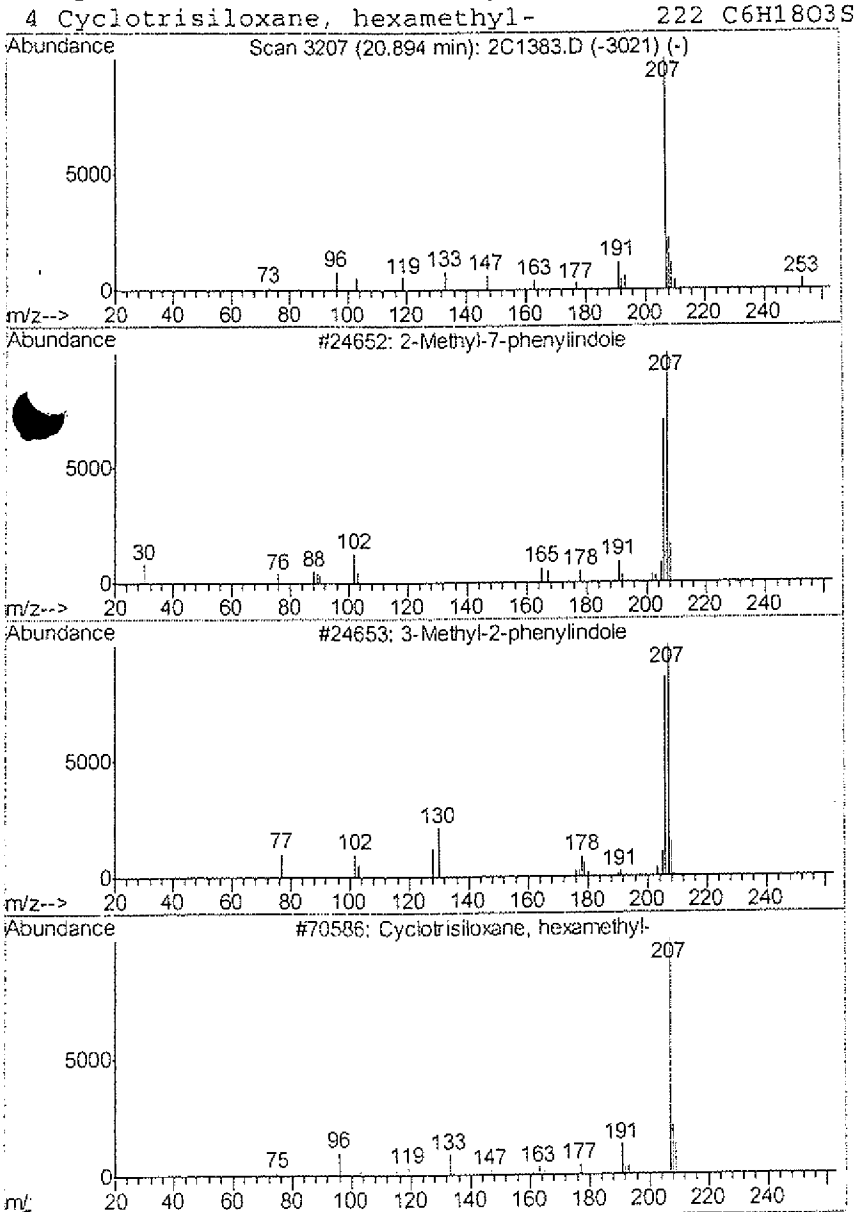
Qu Method : C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
Title : SW-846 Method 8260
Library : C:\DATABASE\NBS75K.L

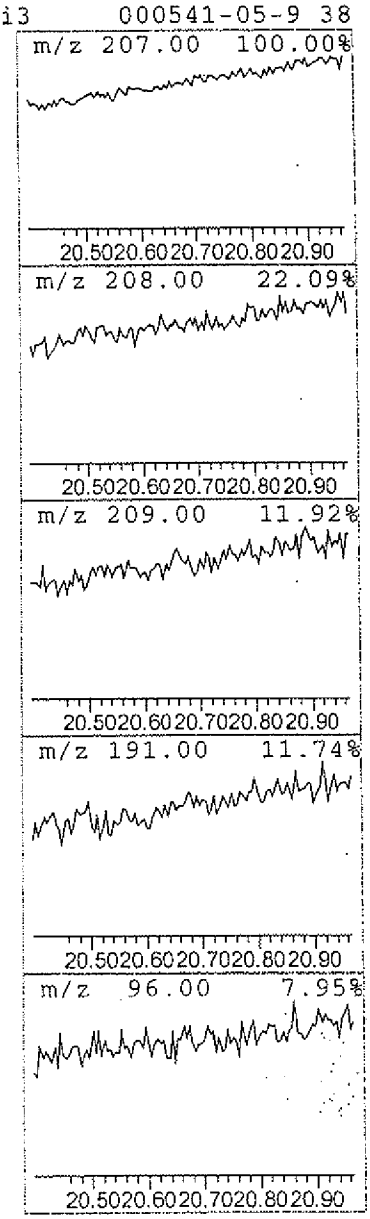
****

Peak Number 1 2-Methyl-7-phenylindole Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	43.13 ug/L	281937	1,4-dichlorobenzene-d4	16.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Methyl-7-phenylindole	207	C15H13N	000000-00-0	59
2	3-Methyl-2-phenylindole	207	C15H13N	010257-92-8	42
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	40
4	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	38





SII-SSA-0014-002630

perator ID: KANYAV Date Acquired: 19 Dec 2004 1:53 pm
ata File: C:\MSDCHEM\1\DATA\MS2C\2C1383.D
ame: MB1
isc: MS8206,V2C063,W,,,,1
ethod: C:\MSDCHEM\1\METHODS\M2C001.M (RTE Integrator)
itle: SW-846 Method 8260
i y Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
-Methyl-7-phenyl...	20.89	43.1	ug/L	281937	5	16.78	326878	50.0

SII-SSA-0014-002631

SEMI-VOLATILE

SII-SSA-0014-002632

ACCUTEST.

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Semi - Volatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments:

QC Review Signature: Jianhua Fang Date: 1/6/05

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-MB1	F46968.D	1	12/15/04	NAP	12/14/04	OP19011	EF2492

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	

Method Blank Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-MB1	F46968.D	1	12/15/04	NAP	12/14/04	OP19011	EF2492

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Compound	Result	RL	MDL	Units	Q
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	37%	10-88%
4165-62-2	Phenol-d5	31%	10-71%
118-79-6	2,4,6-Tribromophenol	72%	45-134%
4165-60-0	Nitrobenzene-d5	70%	32-128%

Method Blank Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-MB1	F46968.D	1	12/15/04	NAP	12/14/04	OP19011	EF2492

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	69%	34-121%
1718-51-0	Terphenyl-d14	83%	41-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	4.05	4.4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-BS1	F47332.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	36.4	73	49-101
59-50-7	4-Chloro-3-methyl phenol	50	42.7	85	52-111
120-83-2	2,4-Dichlorophenol	50	41.4	83	54-110
105-67-9	2,4-Dimethylphenol	50	39.0	78	40-108
51-28-5	2,4-Dinitrophenol	100	83.6	84	32-129
534-52-1	4,6-Dinitro-o-cresol	50	46.8	94	49-125
95-48-7	2-Methylphenol	50	29.0	58	40-98
	3&4-Methylphenol	50	26.3	53	32-97
88-75-5	2-Nitrophenol	50	44.7	89	50-112
100-02-7	4-Nitrophenol	50	12.5	25	1-88
87-86-5	Pentachlorophenol	50	39.6	79	37-121
108-95-2	Phenol	50	14.8	30	1-84
95-95-4	2,4,5-Trichlorophenol	50	42.1	84	57-118
88-06-2	2,4,6-Trichlorophenol	50	40.6	81	55-114
83-32-9	Acenaphthene	50	38.4	77	53-109
208-96-8	Acenaphthylene	50	35.7	71	48-101
120-12-7	Anthracene	50	40.9	82	61-113
56-55-3	Benzo(a)anthracene	50	41.5	83	62-115
50-32-8	Benzo(a)pyrene	50	42.3	85	60-118
205-99-2	Benzo(b)fluoranthene	50	48.2	96	58-122
191-24-2	Benzo(g,h,i)perylene	50	34.0	68	52-131
207-08-9	Benzo(k)fluoranthene	50	39.9	80	51-131
101-55-3	4-Bromophenyl phenyl ether	50	43.8	88	57-115
85-68-7	Butyl benzyl phthalate	50	44.4	89	61-124
91-58-7	2-Chloronaphthalene	50	38.2	76	50-109
106-47-8	4-Chloroaniline	50	32.3	65	27-115
86-74-8	Carbazole	50	44.1	88	60-133
218-01-9	Chrysene	50	41.0	82	61-118
111-91-1	bis(2-Chloroethoxy)methane	50	42.0	84	50-115
111-44-4	bis(2-Chloroethyl)ether	50	41.8	84	45-113
108-60-1	bis(2-Chloroisopropyl)ether	50	41.1	82	46-109
7005-72-3	4-Chlorophenyl phenyl ether	50	42.3	85	54-115
95-50-1	1,2-Dichlorobenzene	50	39.1	78	41-106
541-73-1	1,3-Dichlorobenzene	50	36.9	74	38-102
106-46-7	1,4-Dichlorobenzene	50	38.2	76	39-103
121-14-2	2,4-Dinitrotoluene	50	45.4	91	62-118

Blank Spike Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-BS1	F47332.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
606-20-2	2,6-Dinitrotoluene	50	45.0	90	57-118
91-94-1	3,3'-Dichlorobenzidine	50	41.5	83	39-131
53-70-3	Dibenzo(a,h)anthracene	50	36.5	73	53-130
132-64-9	Dibenzofuran	50	40.4	81	55-115
84-74-2	Di-n-butyl phthalate	50	48.1	96	61-125
117-84-0	Di-n-octyl phthalate	50	55.6	111	55-140
84-66-2	Diethyl phthalate	50	44.7	89	57-118
131-11-3	Dimethyl phthalate	50	43.8	88	45-123
117-81-7	bis(2-Ethylhexyl)phthalate	50	47.2	94	57-128
206-44-0	Fluoranthene	50	43.5	87	60-122
86-73-7	Fluorene	50	42.0	84	54-112
118-74-1	Hexachlorobenzene	50	44.1	88	58-114
87-68-3	Hexachlorobutadiene	50	41.8	84	41-116
77-47-4	Hexachlorocyclopentadiene	100	62.4	62	19-107
67-72-1	Hexachloroethane	50	40.2	80	36-104
193-39-5	Indeno(1,2,3-cd)pyrene	50	36.7	73	52-131
78-59-1	Isophorone	50	42.3	85	46-113
91-57-6	2-Methylnaphthalene	50	40.3	81	47-109
88-74-4	2-Nitroaniline	50	47.1	94	53-122
99-09-2	3-Nitroaniline	50	38.6	77	43-127
100-01-6	4-Nitroaniline	50	44.3	89	47-140
91-20-3	Naphthalene	50	38.3	77	44-105
98-95-3	Nitrobenzene	50	39.9	80	46-108
621-64-7	N-Nitroso-di-n-propylamine	50	42.5	85	50-117
86-30-6	N-Nitrosodiphenylamine	50	39.9	80	60-121
85-01-8	Phenanthrene	50	39.6	79	59-110
129-00-0	Pyrene	50	39.4	79	60-115
120-82-1	1,2,4-Trichlorobenzene	50	39.6	79	44-103

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	35%	10-88%
4165-62-2	Phenol-d5	22%	10-71%
118-79-6	2,4,6-Tribromophenol	88%	45-134%
4165-60-0	Nitrobenzene-d5	76%	32-128%

Blank Spike Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-BS1	F47332.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	71%	34-121%
1718-51-0	Terphenyl-d14	76%	41-129%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-MS	F47334.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504
OP19011-MSD	F47335.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504
N85706-1	F47333.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Compound	N85706-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		100	88.7	89	84.7	85	5	30-117/28
59-50-7	4-Chloro-3-methyl phenol	ND		100	103	103	97.4	97	6	36-129/25
120-83-2	2,4-Dichlorophenol	ND		100	96.2	96	92.0	92	4	37-124/27
105-67-9	2,4-Dimethylphenol	ND		100	94.1	94	89.9	90	5	28-121/28
51-28-5	2,4-Dinitrophenol	ND		200	207	104	198	99	4	8-144/32
534-52-1	4,6-Dinitro-o-cresol	ND		100	113	113	105	105	7	24-142/29
95-48-7	2-Methylphenol	ND		100	78.5	79	74.3	74	5	30-114/28
	3&4-Methylphenol	ND		100	73.8	74	71.3	71	3	21-122/28
88-75-5	2-Nitrophenol	ND		100	103	103	98.4	98	5	34-123/27
100-02-7	4-Nitrophenol	ND		100	51.4	51	49.7	50	3	1-129/33
87-86-5	Pentachlorophenol	ND		100	97.4	97	89.1	89	9	36-143/24
108-95-2	Phenol	ND		100	51.0	51	48.4	48	5	1-102/32
95-95-4	2,4,5-Trichlorophenol	ND		100	99.8	100	95.0	95	5	41-131/24
88-06-2	2,4,6-Trichlorophenol	ND		100	96.6	97	92.6	93	4	43-121/25
83-32-9	Acenaphthene	ND		100	90.1	90	86.0	86	5	40-114/30
208-96-8	Acenaphthylene	ND		100	83.5	84	80.0	80	4	36-106/31
120-12-7	Anthracene	ND		100	96.0	96	89.6	90	7	54-119/23
56-55-3	Benzo(a)anthracene	ND		100	98.9	99	94.7	95	4	57-122/22
50-32-8	Benzo(a)pyrene	ND		100	102	102	96.7	97	5	53-126/23
205-99-2	Benzo(b)fluoranthene	ND		100	118	118	113	113	4	50-135/26
191-24-2	Benzo(g,h,i)perylene	ND		100	80.3	80	76.7	77	5	35-141/29
207-08-9	Benzo(k)fluoranthene	ND		100	97.0	97	90.7	91	7	37-144/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	103	103	94.7	95	8	49-121/25
85-68-7	Butyl benzyl phthalate	ND		100	107	107	102	102	5	56-132/23
91-58-7	2-Chloronaphthalene	ND		100	89.9	90	86.1	86	4	34-115/30
106-47-8	4-Chloroaniline	ND		100	68.8	69	66.5	67	3	10-108/37
86-74-8	Carbazole	ND		100	104	104	96.4	96	8	49-146/22
218-01-9	Chrysene	ND		100	98.4	98	94.1	94	4	55-125/23
111-91-1	bis(2-Chloroethoxy)methane	ND		100	95.2	95	90.9	91	5	37-119/32
111-44-4	bis(2-Chloroethyl)ether	ND		100	95.5	96	91.1	91	5	32-122/37
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	94.1	94	88.9	89	6	34-112/32
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	98.7	99	94.2	94	5	43-118/27
95-50-1	1,2-Dichlorobenzene	ND		100	89.6	90	86.2	86	4	31-110/31
541-73-1	1,3-Dichlorobenzene	ND		100	84.7	85	81.6	82	4	27-107/32
106-46-7	1,4-Dichlorobenzene	ND		100	87.8	88	84.9	85	3	29-108/31
121-14-2	2,4-Dinitrotoluene	ND		100	108	108	102	102	6	50-125/31

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-MS	F47334.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504
OP19011-MSD	F47335.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504
N85706-1	F47333.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Compound	N85706-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
606-20-2	2,6-Dinitrotoluene	ND		100	106	106	101	101	5	45-124/28
91-94-1	3,3'-Dichlorobenzidine	ND		100	95.0	95	91.9	92	3	1-145/37
53-70-3	Dibenzo(a,h)anthracene	ND		100	86.8	87	82.2	82	5	40-138/27
132-64-9	Dibenzofuran	ND		100	94.3	94	90.3	90	4	42-119/28
84-74-2	Di-n-butyl phthalate	ND		100	113	113	104	104	8	54-131/22
117-84-0	Di-n-octyl phthalate	ND		100	136	136	126	126	8	49-151/25
84-66-2	Diethyl phthalate	ND		100	106	106	99.9	100	6	49-123/24
131-11-3	Dimethyl phthalate	ND		100	102	102	97.7	98	4	39-124/27
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	113	113	108	108	5	51-140/29
206-44-0	Fluoranthene	ND		100	103	103	95.1	95	8	52-129/22
86-73-7	Fluorene	ND		100	98.7	99	94.1	94	5	43-116/26
118-74-1	Hexachlorobenzene	ND		100	104	104	95.5	96	9	49-121/24
87-68-3	Hexachlorobutadiene	ND		100	97.5	98	94.4	94	3	30-126/33
77-47-4	Hexachlorocyclopentadiene	ND		200	148	74	140	70	6	1-109/41
67-72-1	Hexachloroethane	ND		100	92.7	93	89.8	90	3	22-113/34
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	87.2	87	82.7	83	5	40-139/28
78-59-1	Isophorone	ND		100	97.3	97	92.8	93	5	34-116/37
91-57-6	2-Methylnaphthalene	ND		100	92.6	93	88.7	89	4	28-123/32
88-74-4	2-Nitroaniline	ND		100	110	110	105	105	5	30-135/33
99-09-2	3-Nitroaniline	ND		100	86.5	87	83.3	83	4	15-134/35
100-01-6	4-Nitroaniline	ND		100	103	103	99.4	99	4	18-153/32
91-20-3	Naphthalene	ND		100	87.7	88	84.2	84	4	22-120/30
98-95-3	Nitrobenzene	ND		100	90.8	91	88.2	88	3	31-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		100	95.2	95	92.4	92	3	32-125/33
86-30-6	N-Nitrosodiphenylamine	ND		100	92.9	93	86.7	87	7	49-131/24
85-01-8	Phenanthrene	ND		100	93.3	93	86.7	87	7	51-117/23
129-00-0	Pyrene	ND		100	94.5	95	90.3	90	5	54-122/22
120-82-1	1,2,4-Trichlorobenzene	ND		100	90.4	90	87.3	87	3	27-115/31

CAS No.	Surrogate Recoveries	MS	MSD	N85706-1	Limits
367-12-4	2-Fluorophenol	54%	52%	37%	10-88%
4165-62-2	Phenol-d5	41%	38%	22%	10-71%
118-79-6	2,4,6-Tribromophenol	104%	97%	98%	45-134%
4165-60-0	Nitrobenzene-d5	86%	83%	88%	32-128%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19011-MS	F47334.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504
OP19011-MSD	F47335.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504
N85706-1	F47333.D	1	01/04/05	NAP	12/14/04	OP19011	EF2504

The QC reported here applies to the following samples: **Method:** SW846 8270C

N85893-1, N85893-2

CAS No.	Surrogate Recoveries	MS	MSD	N85706-1	Limits
321-60-8	2-Fluorobiphenyl	83%	80%	83%	34-121%
1718-51-0	Terphenyl-d14	92%	89%	98%	41-129%

Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2491-DFTPP	**Injection Date:**	12/14/04
Lab File ID:	F46939.D	**Injection Time:**	16:21
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4643	45.7		Pass
68	Less than 2.0% of mass 69	52	0.51	(1.1) [a]	Pass
69	Mass 69 relative abundance	4650	45.8		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	5573	54.9		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	10149	100.0		Pass
199	5.0 - 9.0% of mass 198	607	6.0		Pass
275	10.0 - 30.0% of mass 198	2337	23.0		Pass
365	1.0 - 100.0% of mass 198	192	1.9		Pass
441	Present, but less than mass 443	1092	10.8	(77.2) [b]	Pass
442	40.0 - 100.0% of mass 198	7223	71.2		Pass
443	17.0 - 23.0% of mass 442	1414	13.9	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2491-ICC2491	F46940.D	12/14/04	16:45	00:24	Initial cal 50
EF2491-IC2491	F46941.D	12/14/04	17:22	01:01	Initial cal 100
EF2491-IC2491	F46942.D	12/14/04	17:59	01:38	Initial cal 80
EF2491-IC2491	F46943.D	12/14/04	18:36	02:15	Initial cal 25
EF2491-IC2491	F46944.D	12/14/04	19:12	02:51	Initial cal 10
EF2491-IC2491	F46945.D	12/14/04	19:49	03:28	Initial cal 5
EF2491-IC2491	F46946.D	12/14/04	20:26	04:05	Initial cal 2
OP18875-MB1	F46948.D	12/14/04	21:39	05:18	Method Blank
ZZZZZZ	F46949.D	12/14/04	22:15	05:54	(unrelated sample)
ZZZZZZ	F46950.D	12/14/04	22:52	06:31	(unrelated sample)
ZZZZZZ	F46951.D	12/14/04	23:29	07:08	(unrelated sample)
ZZZZZZ	F46952.D	12/15/04	00:05	07:44	(unrelated sample)
ZZZZZZ	F46953.D	12/15/04	00:42	08:21	(unrelated sample)
ZZZZZZ	F46954.D	12/15/04	01:19	08:58	(unrelated sample)
ZZZZZZ	F46955.D	12/15/04	01:56	09:35	(unrelated sample)
ZZZZZZ	F46956.D	12/15/04	02:32	10:11	(unrelated sample)
ZZZZZZ	F46957.D	12/15/04	03:09	10:48	(unrelated sample)
ZZZZZZ	F46958.D	12/15/04	03:47	11:26	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2492-DFTPP	**Injection Date:**	12/15/04
Lab File ID:	F46960.D	**Injection Time:**	08:40
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3544	40.4		Pass
68	Less than 2.0% of mass 69	17	0.19	(0.48) [a]	Pass
69	Mass 69 relative abundance	3552	40.5		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	4398	50.1		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	8780	100.0		Pass
199	5.0 - 9.0% of mass 198	657	7.5		Pass
275	10.0 - 30.0% of mass 198	2002	22.8		Pass
365	1.0 - 100.0% of mass 198	193	2.2		Pass
441	Present, but less than mass 443	1018	11.6	(80.8) [b]	Pass
442	40.0 - 100.0% of mass 198	6686	76.2		Pass
443	17.0 - 23.0% of mass 442	1260	14.4	(18.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2492-CC2491	F46961.D	12/15/04	08:54	00:14	Continuing cal 50
OP18822-MB1	F46962.D	12/15/04	09:31	00:51	Method Blank
OP18822-BS1	F46966.D	12/15/04	10:08	01:28	Blank Spike
ZZZZZZ	F46963.D	12/15/04	10:44	02:04	(unrelated sample)
ZZZZZZ	F46964.D	12/15/04	11:21	02:41	(unrelated sample)
ZZZZZZ	F46965.D	12/15/04	11:57	03:17	(unrelated sample)
OP18958-MB1	F46967.D	12/15/04	12:34	03:54	Method Blank
OP19011-MB1	F46968.D	12/15/04	13:11	04:31	Method Blank
ZZZZZZ	F46969.D	12/15/04	13:47	05:07	(unrelated sample)
OP18902-MB1	F46970.D	12/15/04	14:25	05:45	Method Blank
OP18902-BS1	F46971.D	12/15/04	15:01	06:21	Blank Spike
ZZZZZZ	F46972.D	12/15/04	15:37	06:57	(unrelated sample)
ZZZZZZ	F46973.D	12/15/04	16:14	07:34	(unrelated sample)
N85098-8	F46974.D	12/15/04	16:51	08:11	(used for QC only; not part of job N85893)
OP18902-MS	F46975.D	12/15/04	17:27	08:47	Matrix Spike
OP18902-MSD	F46976.D	12/15/04	18:04	09:24	Matrix Spike Duplicate
ZZZZZZ	F46977.D	12/15/04	18:41	10:01	(unrelated sample)
ZZZZZZ	F46978.D	12/15/04	19:17	10:37	(unrelated sample)
ZZZZZZ	F46979.D	12/15/04	19:54	11:14	(unrelated sample)

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Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2492-DFTPP	**Injection Date:**	12/15/04
Lab File ID:	F46960.D	**Injection Time:**	08:40
Instrument ID:	GCMSF		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F46980.D	12/15/04	20:31	11:51	(unrelated sample)
N85602-1	F46983.D	12/15/04	23:35	14:55	(used for QC only; not part of job N85893)
OP18980-MS	F46984.D	12/16/04	00:12	15:32	Matrix Spike
OP18980-MSD	F46985.D	12/16/04	00:49	16:09	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2503-DFTPP	**Injection Date:**	12/31/04
Lab File ID:	F47278.D	**Injection Time:**	03:27
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	6762	40.3		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	6499	38.7		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	8341	49.7		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	16785	100.0		Pass
199	5.0 - 9.0% of mass 198	1155	6.9		Pass
275	10.0 - 30.0% of mass 198	4170	24.8		Pass
365	1.0 - 100.0% of mass 198	425	2.5		Pass
441	Present, but less than mass 443	2120	12.6	(78.4) [b]	Pass
442	40.0 - 100.0% of mass 198	14427	86.0		Pass
443	17.0 - 23.0% of mass 442	2704	16.1	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2503-CC2491	F47279.D	12/31/04	03:41	00:14	Continuing cal 50
OP19078-MB1	F47280.D	12/31/04	04:53	01:26	Method Blank
ZZZZZZ	F47281.D	12/31/04	05:29	02:02	(unrelated sample)
N85893-1	F47282.D	12/31/04	06:05	02:38	WELL AZ
N85893-2	F47283.D	12/31/04	06:41	03:14	FB-1
ZZZZZZ	F47284.D	12/31/04	07:17	03:50	(unrelated sample)
ZZZZZZ	F47285.D	12/31/04	07:53	04:26	(unrelated sample)
ZZZZZZ	F47286.D	12/31/04	08:29	05:02	(unrelated sample)
ZZZZZZ	F47287.D	12/31/04	09:05	05:38	(unrelated sample)
ZZZZZZ	F47288.D	12/31/04	09:41	06:14	(unrelated sample)
ZZZZZZ	F47289.D	12/31/04	10:16	06:49	(unrelated sample)
ZZZZZZ	F47290.D	12/31/04	10:52	07:25	(unrelated sample)
ZZZZZZ	F47291.D	12/31/04	11:27	08:00	(unrelated sample)
ZZZZZZ	F47292.D	12/31/04	12:03	08:36	(unrelated sample)
ZZZZZZ	F47293.D	12/31/04	12:39	09:12	(unrelated sample)
ZZZZZZ	F47294.D	12/31/04	13:15	09:48	(unrelated sample)
ZZZZZZ	F47295.D	12/31/04	13:50	10:23	(unrelated sample)
ZZZZZZ	F47296.D	12/31/04	14:27	11:00	(unrelated sample)
ZZZZZZ	F47297.D	12/31/04	15:03	11:36	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2503-DFTPP	**Injection Date:**	12/31/04
Lab File ID:	F47278.D	**Injection Time:**	03:27
Instrument ID:	GCMSF		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	F47302.D	12/31/04	20:24	16:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2504-DFTPP	**Injection Date:**	01/04/05
Lab File ID:	F47324.D	**Injection Time:**	08:28
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4630	41.0		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	4689	41.5		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	5600	49.6		Pass
197	Less than 1.0% of mass 198	53	0.47		Pass
198	Base peak, 100% relative abundance	11292	100.0		Pass
199	5.0 - 9.0% of mass 198	820	7.3		Pass
275	10.0 - 30.0% of mass 198	2715	24.0		Pass
365	1.0 - 100.0% of mass 198	303	2.7		Pass
441	Present, but less than mass 443	1446	12.8	(73.7) [b]	Pass
442	40.0 - 100.0% of mass 198	9828	87.0		Pass
443	17.0 - 23.0% of mass 442	1961	17.4	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2504-CC2491	F47325.D	01/04/05	09:23	00:55	Continuing cal 25
OP19176-MB1	F47326.D	01/04/05	09:59	01:31	Method Blank
OP19176-BS1	F47327.D	01/04/05	10:35	02:07	Blank Spike
OP19078-BS1	F47328.D	01/04/05	11:11	02:43	Blank Spike
N86593-2	F47329.D	01/04/05	11:46	03:18	(used for QC only; not part of job N85893)
OP19078-MS	F47330.D	01/04/05	12:22	03:54	Matrix Spike
OP19078-MSD	F47331.D	01/04/05	12:58	04:30	Matrix Spike Duplicate
OP19011-BS1	F47332.D	01/04/05	13:35	05:07	Blank Spike
N85706-1	F47333.D	01/04/05	14:10	05:42	(used for QC only; not part of job N85893)
OP19011-MS	F47334.D	01/04/05	14:46	06:18	Matrix Spike
OP19011-MSD	F47335.D	01/04/05	15:21	06:53	Matrix Spike Duplicate
ZZZZZZ	F47336.D	01/04/05	15:57	07:29	(unrelated sample)
OP19014-MS	F47337.D	01/04/05	16:33	08:05	Matrix Spike
OP19014-MSD	F47341.D	01/04/05	17:09	08:41	Matrix Spike Duplicate
N87336-10	F47338.D	01/04/05	17:45	09:17	(used for QC only; not part of job N85893)
OP19176-MS	F47339.D	01/04/05	18:20	09:52	Matrix Spike
OP19176-MSD	F47340.D	01/04/05	18:56	10:28	Matrix Spike Duplicate
OP19128-MS	F47342.D	01/04/05	19:32	11:04	Matrix Spike
OP19128-MSD	F47343.D	01/04/05	20:08	11:40	Matrix Spike Duplicate

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Instrument Performance Check (DFTPP)

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2504-DFTPP
Lab File ID: F47324.D
Instrument ID: GCMSF
Injection Date: 01/04/05
Injection Time: 08:28

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP19072-MB1	F47344.D	01/04/05	22:31	14:03	Method Blank
OP19072-BS1	F47345.D	01/04/05	23:06	14:38	Blank Spike
ZZZZZZ	F47346.D	01/04/05	23:42	15:14	(unrelated sample)
ZZZZZZ	F47347.D	01/05/05	00:18	15:50	(unrelated sample)
ZZZZZZ	F47348.D	01/05/05	00:53	16:25	(unrelated sample)
ZZZZZZ	F47349.D	01/05/05	01:28	17:00	(unrelated sample)
ZZZZZZ	F47350.D	01/05/05	02:04	17:36	(unrelated sample)
ZZZZZZ	F47351.D	01/05/05	02:39	18:11	(unrelated sample)
ZZZZZZ	F47352.D	01/05/05	03:15	18:47	(unrelated sample)
ZZZZZZ	F47353.D	01/05/05	03:51	19:23	(unrelated sample)
ZZZZZZ	F47354.D	01/05/05	04:27	19:59	(unrelated sample)
ZZZZZZ	F47355.D	01/05/05	05:02	20:34	(unrelated sample)
ZZZZZZ	F47356.D	01/05/05	05:38	21:10	(unrelated sample)
N86590-1	F47357.D	01/05/05	06:14	21:46	(used for QC only; not part of job N85893)
OP19072-MS	F47358.D	01/05/05	06:49	22:21	Matrix Spike
OP19072-MSD	F47359.D	01/05/05	07:25	22:57	Matrix Spike Duplicate
ZZZZZZ	F47360.D	01/05/05	08:01	23:33	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	EF2492-CC2491	**Injection Date:**	12/15/04
Lab File ID:	F46961.D	**Injection Time:**	08:54
Instrument ID:	GCMSF	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	329763	6.51	1237145	9.14	609484	13.24	1023602	16.72	955259	22.22	580571	24.56
Upper Limit [a]	659526	7.01	2474290	9.64	1218968	13.74	2047204	17.22	1910518	22.72	1161142	25.06
Lower Limit [b]	164882	6.01	618573	8.64	304742	12.74	511801	16.22	477630	21.72	290286	24.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP18822-MB1	316069	6.50	1229840	9.13	621513	13.23	1072770	16.71	1007542	22.21	607739	24.56
OP18822-BS1	303460	6.50	1175722	9.14	592964	13.24	1008445	16.72	941666	22.22	566076	24.56
ZZZZZZ	328115	6.50	1246253	9.14	652058	13.25	1051957	16.74	901100	22.22	555843	24.56
ZZZZZZ	321755	6.50	1205661	9.13	597670	13.24	971270	16.71	790814	22.21	443182	24.56
ZZZZZZ	299205	6.50	1164225	9.13	591228	13.23	1019980	16.71	890696	22.21	507244	24.56
OP18958-MB1	348519	6.49	1326745	9.13	671201	13.23	1118445	16.71	985750	22.21	582961	24.56
OP19011-MB1	319360	6.50	1213909	9.13	605159	13.23	1036319	16.71	896441	22.21	517876	24.56
ZZZZZZ	290625	6.50	1116317	9.13	564049	13.23	967309	16.71	875617	22.21	497666	24.56
OP18902-MB1	393804	6.50	1499896	9.13	766870	13.23	1306290	16.71	1195627	22.21	702470	24.56
OP18902-BS1	341453	6.50	1298729	9.14	634915	13.24	1031634	16.71	967424	22.22	602061	24.56
ZZZZZZ	308996	6.49	1154654	9.13	568426	13.23	916569	16.71	815766	22.21	452673	24.56
ZZZZZZ	307620	6.50	1150469	9.13	561329	13.23	896326	16.71	806729	22.20	481754	24.56
N85098-8	301251	6.49	1142244	9.13	565372	13.23	912014	16.71	846194	22.21	485275	24.56
OP18902-MS	342684	6.50	1268736	9.14	606210	13.23	971820	16.71	963618	22.22	530459	24.56
OP18902-MSD	377956	6.50	1405494	9.14	665371	13.24	1060813	16.72	1076893	22.22	553943	24.56
ZZZZZZ	298463	6.50	1051864	9.13	480622	13.22	793939	16.71	496718	22.21	166300*	24.56
ZZZZZZ	281476	6.50	999864	9.14	453816	13.23	729066	16.71	507273	22.20	170102*	24.54
ZZZZZZ	257973	6.51	925524	9.14	420138	13.23	688846	16.71	480621	22.20	166042*	24.54
ZZZZZZ	272051	6.51	930516	9.14	403053	13.23	630672	16.71	426435*	22.20	141205*	24.54
N85602-1	283337	6.50	1024955	9.14	483651	13.23	761971	16.71	549932	22.20	193786*	24.55
OP18980-MS	327824	6.51	1202188	9.14	561897	13.24	896469	16.72	675759	22.22	244223*	24.55
OP18980-MSD	270248	6.50	987409	9.14	462580	13.24	748481	16.71	557504	22.21	186344*	24.55

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	EF2503-CC2491	**Injection Date:**	12/31/04
Lab File ID:	F47279.D	**Injection Time:**	03:41
Instrument ID:	GCMSF	**Method:**	SW846 8270C

	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT
Check Std	393671	6.34	1502855	8.96	797227	13.05	1376917	16.53	1379319	22.07	853382	24.39
Upper Limit [a]	787342	6.84	3005710	9.46	1594454	13.55	2753834	17.03	2758638	22.57	1706764	24.89
Lower Limit [b]	196836	5.84	751428	8.46	398614	12.55	688459	16.03	689660	21.57	426691	23.89
Lab Sample ID	**IS 1 AREA**	**IS 1 RT**	**IS 2 AREA**	**IS 2 RT**	**IS 3 AREA**	**IS 3 RT**	**IS 4 AREA**	**IS 4 RT**	**IS 5 AREA**	**IS 5 RT**	**IS 6 AREA**	**IS 6 RT**
OP19078-MB1	397709	6.33	1549240	8.95	830963	13.04	1453389	16.52	1434540	22.06	904610	24.38
ZZZZZZ	361641	6.33	1445813	8.95	771303	13.04	1355179	16.52	1352152	22.06	870535	24.38
N85893-1	393345	6.34	1544503	8.96	829676	13.04	1437523	16.52	1405309	22.06	908747	24.38
N85893-2	401821	6.33	1595622	8.96	839326	13.04	1453838	16.52	1429040	22.06	905723	24.38
ZZZZZZ	433467	6.33	1722372	8.95	915096	13.04	1609304	16.52	1630647	22.06	1023757	24.38
ZZZZZZ	403960	6.33	1605282	8.95	859287	13.04	1489886	16.52	1456736	22.06	750045	24.38
ZZZZZZ	1254*	6.50	1759419	8.95	941165	13.04	1629379	16.52	1626388	22.06	1038280	24.38
ZZZZZZ	422722	6.33	1690634	8.95	900866	13.04	1637772	16.52	1608884	22.06	1009821	24.38
ZZZZZZ	404460	6.33	1606256	8.95	864324	13.04	1520495	16.52	1528720	22.06	943447	24.38
ZZZZZZ	445379	6.33	1782272	8.96	972898	13.04	1671985	16.53	1647242	22.06	995740	24.38
ZZZZZZ	398332	6.33	1583617	8.95	846897	13.04	1474179	16.52	1487988	22.06	923638	24.38
ZZZZZZ	390337	6.33	1568343	8.96	842001	13.04	1446713	16.52	1433089	22.06	837623	24.38
ZZZZZZ	418423	6.34	1645497	8.97	895625	13.05	1543768	16.52	1518431	22.06	923737	24.38
ZZZZZZ	421910	6.33	1687721	8.96	917468	13.04	1580669	16.52	1542562	22.06	934714	24.38
ZZZZZZ	519888	6.33	2064770	8.96	1098840	13.04	1916927	16.53	1924936	22.06	1158784	24.39
ZZZZZZ	414841	6.33	1660814	8.95	885401	13.04	1563339	16.52	1506972	22.06	892700	24.38
ZZZZZZ	415847	6.33	1648819	8.95	880949	13.04	1508687	16.52	1434345	22.06	700747	24.38
ZZZZZZ	445802	6.33	1777495	8.95	960569	13.04	1684146	16.53	1644513	22.07	765618	24.40
ZZZZZZ	366774	6.34	1457169	8.96	768980	13.04	1330587	16.52	1309446	22.06	724484	24.38

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std: EF2504-CC2491
Lab File ID: F47325.D
Instrument ID: GCMSF
Injection Date: 01/04/05
Injection Time: 09:23
Method: SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	329243	6.32	1272297	8.94	691200	13.03	1219532	16.50	1221144	22.04	738072	24.37
Upper Limit [a]	658486	6.82	2544594	9.44	1382400	13.53	2439064	17.00	2442288	22.54	1476144	24.87
Lower Limit [b]	164622	5.82	636149	8.44	345600	12.53	609766	16.00	610572	21.54	369036	23.87

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP19176-MB1	359622	6.32	1387420	8.94	708917	13.03	1300682	16.50	1250516	22.04	764887	24.36
OP19176-BS1	389501	6.32	1495466	8.94	815794	13.03	1423482	16.51	1438661	22.05	865084	24.37
OP19078-BS1	354750	6.32	1374663	8.95	749260	13.03	1303989	16.51	1336642	22.05	809665	24.37
N86593-2	370335	6.32	1409286	8.94	708579	13.03	1287530	16.50	1213707	22.04	725213	24.37
OP19078-MS	392255	6.32	1522798	8.95	829530	13.03	1461301	16.51	1468024	22.05	887098	24.37
OP19078-MSD	380849	6.32	1474268	8.95	804731	13.03	1410721	16.51	1410773	22.05	843445	24.37
OP19011-BS1	379975	6.33	1476576	8.95	813425	13.03	1413349	16.51	1432416	22.05	842340	24.37
N85706-1	330873	6.33	1272627	8.94	647045	13.02	1158089	16.50	1095379	22.04	646358	24.37
OP19011-MS	334118	6.32	1298638	8.95	702401	13.03	1219056	16.51	1215773	22.05	702539	24.37
OP19011-MSD	338685	6.33	1307671	8.95	698902	13.03	1241377	16.51	1200889	22.05	703793	24.37
ZZZZZZ	164254*	6.33	632525*	8.94	318916*	13.02	569326*	16.50	519200*	22.04	284758*	24.36
OP19014-MS	390460	6.32	1527329	8.95	833681	13.03	1467078	16.52	1523094	22.06	911319	24.38
OP19014-MSD	376168	6.32	1464109	8.94	801191	13.03	1398709	16.51	1410952	22.05	834798	24.37
N87336-10	233544	6.33	911983	8.94	475566	13.02	887642	16.50	842035	22.04	455797	24.37
OP19176-MS	257997	6.32	1030538	8.94	528364	13.02	919381	16.50	886113	22.04	467917	24.37
OP19176-MSD	236445	6.32	957568	8.93	496089	13.02	872775	16.50	825244	22.04	383295	24.37
OP19128-MS	371462	6.32	1431909	8.94	799652	13.03	1408724	16.51	1283553	22.05	556898	24.37
OP19128-MSD	360124	6.33	1385749	8.94	775099	13.03	1350156	16.51	1206086	22.05	501323	24.37
OP19072-MB1	330851	6.33	1268437	8.94	657638	13.02	1174147	16.50	1002627	22.04	456682	24.37
OP19072-BS1	332067	6.33	1282695	8.95	689787	13.03	1190827	16.51	1081014	22.05	460474	24.37
ZZZZZZ	314588	6.33	1213576	8.94	620183	13.03	1126371	16.50	977393	22.04	430841	24.37
ZZZZZZ	297021	6.33	1115194	8.94	606628	13.03	1058340	16.50	948714	22.04	415370	24.37
ZZZZZZ	314442	6.34	1252437	8.97	692223	13.13	642101	16.67	1132765	22.08	433172	24.38
ZZZZZZ	293461	6.33	1144853	8.94	618780	13.03	1111461	16.50	969451	22.04	423141	24.37
ZZZZZZ	310876	6.33	1186689	8.94	627374	13.03	1101899	16.50	995478	22.04	434072	24.37
ZZZZZZ	322233	6.33	1261392	8.95	674584	13.03	1122865	16.50	960703	22.04	412882	24.37
ZZZZZZ	325028	6.33	1242533	8.94	638095	13.03	1087624	16.50	998189	22.04	439427	24.37
ZZZZZZ	350247	6.33	1341949	8.94	689474	13.03	1200118	16.51	1009550	22.04	444059	24.37
ZZZZZZ	303037	6.33	1154610	8.94	607138	13.02	1024654	16.50	936393	22.04	401839	24.37
ZZZZZZ	312767	6.33	1202934	8.96	654887	13.03	1167664	16.54	721120	22.08	182607*	24.41
ZZZZZZ	316753	6.33	1227106	8.94	644283	13.03	1168567	16.52	957995	22.06	371693	24.38
N86590-1	310292	6.33	1205772	8.94	650871	13.04	1154411	16.53	899579	22.06	300415*	24.38
OP19072-MS	310721	6.33	1196968	8.95	645344	13.03	1139543	16.53	912094	22.06	331731*	24.38
OP19072-MSD	310316	6.33	1191607	8.95	638445	13.03	1128439	16.52	918682	22.06	348399*	24.38
ZZZZZZ	309893	6.34	1174889	8.96	615804	13.03	1014162	16.51	814251	22.05	319009*	24.37

Semivolatile Internal Standard Area Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	EF2504-CC2491	**Injection Date:**	01/04/05
Lab File ID:	F47325.D	**Injection Time:**	09:23
Instrument ID:	GCMSF	**Method:**	SW846 8270C

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
N85893-1	F47282.D	40.0	28.0	86.0	70.0	66.0	84.0
N85893-2	F47283.D	37.0	34.0	89.0	85.0	79.0	90.0
OP19011-BS1	F47332.D	35.0	22.0	88.0	76.0	71.0	76.0
OP19011-MB1	F46968.D	37.0	31.0	72.0	70.0	69.0	83.0
OP19011-MB1	P11097.D	49.0	31.0	103.0	77.0	71.0	85.0
OP19011-MS	F47334.D	54.0	41.0	104.0	86.0	83.0	92.0
OP19011-MSD	F47335.D	52.0	38.0	97.0	83.0	80.0	89.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-88%
S2 = Phenol-d5	10-71%
S3 = 2,4,6-Tribromophenol	45-134%
S4 = Nitrobenzene-d5	32-128%
S5 = 2-Fluorobiphenyl	34-121%
S6 = Terphenyl-d14	41-129%

Initial Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2491-ICC2491
Lab FileID: F46940.D

Response Factor Report MSF

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Initial Calibration

Calibration Files
2 =F46946.D 5 =F46945.D 25 =F46943.D 80 =F46942.D
100 =F46941.D 50 =F46940.D 10 =F46944.D =

Compound	2	5	25	80	100	50	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD								
2) 1,4-Dioxane	0.829	0.741	0.653	0.583	0.594	0.628	0.708	0.676	13.05
3) Pyridine	1.702	1.719	1.682	1.489	1.514	1.594	1.780	1.640	6.69
4) N-Nitrosodim	0.621	0.550	0.532	0.481	0.488	0.514	0.581	0.538	9.37
5) 2-Fluorophen	1.486	1.528	1.409	1.250	1.257	1.344	1.491	1.395	8.19
6) Indene	2.452	2.509	2.532	2.320	2.349	2.429	2.670	2.466	4.81
7) Cumene	3.078	3.209	3.184	3.030	3.075	3.134	3.361	3.153	3.54
8) Phenol-d5	1.825	1.872	1.724	1.450	1.450	1.605	1.829	1.679	10.69
9) Phenol	1.969	1.989	1.927	1.569	1.567	1.765	2.048	1.833	10.98
10) Aniline	2.140	2.285	2.232	1.837	1.852	2.040	2.380	2.110	9.96
11) bis(2-Chloro	1.345	1.370	1.348	1.213	1.213	1.276	1.418	1.312	6.05
12) Benzaldehyde	0.275	0.361	0.593	0.238	0.181	0.401	0.405	0.351	38.87
13) 2-Chlorophen	1.433	1.462	1.447	1.271	1.281	1.366	1.537	1.399	7.02
14) Decane	1.292	1.363	1.313	1.174	1.166	1.231	1.423	1.280	7.47
15) 1,3-Dichloro	1.535	1.598	1.584	1.468	1.492	1.529	1.669	1.554	4.43
16) 1,4-Dichloro	1.637	1.653	1.595	1.490	1.499	1.552	1.690	1.588	4.87
17) Benzyl alcoh	0.909	0.925	0.949	0.823	0.826	0.901	0.985	0.903	6.67
18) 1,2-Dichloro	1.495	1.533	1.489	1.365	1.382	1.441	1.584	1.470	5.39
19) Acetophenone	1.926	1.959	1.948	1.703	1.731	1.837	2.056	1.880	6.85
20) 2-Methylphen	1.309	1.336	1.303	1.103	1.116	1.210	1.370	1.250	8.60
21) 2,2'-oxybis(	0.460	0.466	0.459	0.419	0.420	0.437	0.490	0.450	5.74
22) 3&4-Methylph	1.348	1.374	1.388	1.150	1.163	1.276	1.455	1.308	8.87
23) n-Nitroso-di	0.758	0.811	0.823	0.717	0.728	0.772	0.850	0.780	6.36
24) Hexachloroet	0.479	0.507	0.525	0.500	0.511	0.515	0.547	0.512	4.14
25) I Naphthalene-d8	ISTD								
26) Nitrobenzene	0.349	0.372	0.390	0.371	0.378	0.383	0.408	0.379	4.84
27) Nitrobenzene	0.161	0.172	0.181	0.172	0.176	0.177	0.188	0.175	4.81
28) Quinoline	0.664	0.679	0.691	0.618	0.640	0.662	0.727	0.669	5.29
29) Isophorone	0.607	0.637	0.645	0.580	0.593	0.614	0.681	0.622	5.56
30) 2-Nitropheno	0.131	0.154	0.183	0.180	0.184	0.181	0.184	0.171	12.07
31) 2,4-Dimethyl	0.317	0.338	0.349	0.313	0.322	0.334	0.355	0.332	4.81
32) Benzoic acid			0.238	0.253	0.263	0.244	0.181	0.236	13.56
33) bis(2-Chloro	0.382	0.398	0.396	0.364	0.370	0.376	0.418	0.386	4.90
34) 2,4-Dichloro	0.251	0.264	0.278	0.256	0.262	0.269	0.289	0.267	4.90
35) 1,3,5-Trichl	0.335	0.343	0.335	0.326	0.331	0.331	0.354	0.337	2.75
36) 1,2,4-Trichl	0.324	0.326	0.322	0.313	0.320	0.318	0.343	0.324	2.94
37) 1,2,3-Trichl	0.310	0.314	0.309	0.297	0.306	0.305	0.329	0.310	3.22
38) alpha-Terpin	0.268	0.278	0.277	0.241	0.240	0.255	0.297	0.265	7.90
39) Naphthalene	1.111	1.110	1.063	0.983	0.998	1.027	1.137	1.061	5.68
40) 4-Chloroanil	0.404	0.441	0.444	0.389	0.396	0.421	0.470	0.423	6.98
41) 2,3-Dichloro	0.311	0.332	0.335	0.299	0.307	0.322	0.352	0.323	5.68
42) Caprolactam	0.100	0.121	0.137	0.117	0.122	0.128	0.139	0.124	10.68
43) Hexachlorobu	0.182	0.183	0.184	0.182	0.186	0.183	0.195	0.185	2.54
44) 4-Chloro-3-m	0.248	0.276	0.296	0.265	0.274	0.284	0.300	0.278	6.47
45) 2-Methylnaph	0.673	0.693	0.702	0.641	0.657	0.675	0.740	0.675	4.77

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Initial Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2491-ICC2491
Lab FileID: F46940.D

46)	1-Methylnaph	0.655	0.676	0.678	0.620	0.636	0.659	0.713	0.662	4.56
47)	Dimethylnaph	0.565	0.591	0.601	0.541	0.552	0.578	0.633	0.580	5.38
48)	I Acenaphthene-d10	----------ISTD----------								
49)	Hexachlorocy	0.180	0.209	0.304	0.358	0.369	0.335	0.283	0.291	24.99
	----- Linear regression ----- Coefficient = 0.9984									
	Response Ratio = -0.05128 + 0.37242 *A									
50)	2,4,6-Trichl	0.324	0.369	0.397	0.395	0.405	0.392	0.406	0.384	7.56
51)	2,4,5-Trichl	0.369	0.401	0.438	0.433	0.444	0.435	0.445	0.424	6.68
52)	2-Fluorobiph	1.530	1.522	1.507	1.523	1.537	1.491	1.591	1.529	2.06
53)	2-Chloronaph	1.222	1.229	1.212	1.177	1.183	1.182	1.281	1.212	3.03
54)	Biphenyl	1.692	1.699	1.663	1.598	1.598	1.617	1.763	1.662	3.70
55)	2-Nitroanili	0.239	0.305	0.341	0.297	0.299	0.317	0.349	0.307	11.70
56)	Dimethylphth	1.184	1.256	1.289	1.220	1.250	1.255	1.331	1.255	3.72
57)	Acenaphthyle	1.782	1.899	1.991	1.912	1.961	1.944	2.056	1.935	4.41
58)	2,6-Dinitrot	0.162	0.221	0.278	0.279	0.285	0.275	0.267	0.252	17.95
	----- Linear regression ----- Coefficient = 0.9997									
	Response Ratio = -0.00705 + 0.28508 *A									
59)	3-Nitroanili	0.228	0.287	0.337	0.309	0.316	0.322	0.341	0.306	12.65
60)	Acenaphthene	1.241	1.243	1.226	1.177	1.209	1.203	1.305	1.229	3.31
61)	2,4-Dinitrop		0.064	0.137	0.168	0.175	0.151	0.108	0.134	31.28
	----- Linear regression ----- Coefficient = 0.9975									
	Response Ratio = -0.04432 + 0.17979 *A									
62)	4-Nitropheno		0.141	0.170	0.165	0.170	0.173	0.167	0.164	7.28
63)	Dibenzofuran	1.716	1.734	1.674	1.597	1.629	1.642	1.786	1.683	3.94
64)	2,4-Dinitrot	0.217	0.315	0.381	0.364	0.378	0.371	0.371	0.342	17.45
	----- Linear regression ----- Coefficient = 0.9993									
	Response Ratio = -0.00471 + 0.37513 *A									
65)	2,3,4,6-Tetr	0.220	0.284	0.331	0.325	0.339	0.329	0.328	0.308	13.81
66)	Diethylphtha	1.160	1.241	1.267	1.167	1.195	1.227	1.320	1.225	4.67
67)	Fluorene	1.288	1.341	1.341	1.259	1.288	1.303	1.411	1.319	3.81
68)	4-Chlorophen	0.671	0.674	0.682	0.655	0.675	0.662	0.710	0.676	2.56
69)	4-Nitroanili	0.211	0.286	0.327	0.271	0.267	0.303	0.328	0.285	14.31
70)	I Phenanthrene-d10	----------ISTD----------								
71)	4,6-Dinitro-		0.058	0.106	0.132	0.135	0.117	0.089	0.106	27.52
	----- Linear regression ----- Coefficient = 0.9973									
	Response Ratio = -0.01635 + 0.13942 *A									
72)	Atrazine	0.096	0.121	0.132	0.110	0.106	0.118	0.134	0.117	11.75
73)	n-Nitrosodip	0.533	0.563	0.569	0.556	0.562	0.559	0.595	0.563	3.24
74)	1,2-Diphenyl	0.749	0.772	0.742	0.687	0.716	0.705	0.805	0.739	5.51
75)	2,4,6-Tribro	0.068	0.082	0.089	0.094	0.097	0.090	0.087	0.087	11.21
76)	4-Bromopheny	0.188	0.205	0.209	0.217	0.224	0.210	0.216	0.210	5.52
77)	Hexachlorobe	0.205	0.210	0.205	0.214	0.222	0.209	0.217	0.212	2.88
78)	Pentachlorop	0.146	0.112	0.144	0.155	0.161	0.154	0.136	0.144	11.48
79)	Phenanthrene	1.214	1.210	1.167	1.133	1.169	1.153	1.250	1.185	3.43
80)	Anthracene	1.149	1.228	1.207	1.174	1.202	1.192	1.273	1.204	3.31
81)	Carbazole	0.922	0.993	0.977	0.830	0.810	0.904	1.039	0.925	9.16
82)	Di-n-butylph	0.793	1.063	1.144	1.089	1.114	1.128	1.142	1.068	11.66
83)	Fluoranthene	0.989	1.189	1.170	1.113	1.161	1.181	1.211	1.145	6.56
84)	Octadecane	0.384	0.431	0.420	0.399	0.391	0.397	0.447	0.410	5.63
85)	I Chrysene-d12	----------ISTD----------								
86)	Benzidine	0.127	0.189	0.231	0.165	0.153	0.205	0.221	0.184	20.65
87)	Pyrene	1.205	1.323	1.315	1.313	1.314	1.291	1.357	1.303	3.63

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Initial Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2491-ICC2491
Lab FileID: F46940.D

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 88) Terphenyl-d1 0.815 0.908 0.914 0.919 0.929 0.895 0.934        0.902   4.48
 89) Butylbenzylp 0.262 0.425 0.485 0.479 0.479 0.474 0.464        0.438  18.29
            ----- Linear regression -----  Coefficient =  0.9999
              Response Ratio = -0.00607 + 0.48182 *A

 90) Butyl steara 0.156 0.249 0.280 0.251 0.236 0.255 0.280        0.244  17.27
            ----- Linear regression -----  Coefficient =  0.9966
              Response Ratio = 0.00901 + 0.23987 *A

 91) Benzo[a]anth 0.979 1.142 1.155 1.163 1.184 1.156 1.192        1.139   6.39
 92) 3,3'-Dichlor 0.256 0.313 0.363 0.337 0.320 0.363 0.347        0.329  11.37
 93) Chrysene     1.181 1.187 1.162 1.139 1.156 1.128 1.241        1.171   3.20
 94) bis(2-Ethylh 0.337 0.552 0.629 0.624 0.611 0.608 0.610        0.567  18.49
            ----- Linear regression -----  Coefficient =  0.9997
              Response Ratio = -0.00518 + 0.61819 *A


 95) I   Perylene-d12          ----------------ISTD--------------------
 96) Di-n-octylph 0.477 1.060 1.414 1.439 1.419 1.399 1.238        1.206  28.98
            ----- Linear regression -----  Coefficient =  0.9998
              Response Ratio = -0.04348 + 1.44516 *A

 97) Benzo[b]fluo 1.370 1.553 1.746 1.846 1.780 1.723 1.725        1.677   9.67
 98) Benzo[k]fluo 1.675 1.822 1.811 1.684 1.851 1.848 1.856        1.792   4.40
 99) Benzo[a]pyre 1.196 1.482 1.592 1.630 1.689 1.639 1.604        1.547  10.81
100) Indeno[1,2,3 1.014 1.239 1.441 1.630 1.647 1.570 1.428        1.424  16.11
            ----- Linear regression -----  Coefficient =  0.9994
              Response Ratio = -0.07280 + 1.66364 *A

101) Dibenz(a,h)a 0.683 0.923 1.099 1.275 1.286 1.210 1.065        1.077  20.06
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.06856 + 1.30299 *A

102) Dibenz[a,h]a 0.878 1.058 1.255 1.421 1.441 1.366 1.245        1.238  16.60
            ----- Linear regression -----  Coefficient =  0.9993
              Response Ratio = -0.06637 + 1.45402 *A

103) 7,12-Dimethy 0.544 0.664 0.774 0.770 0.796 0.777 0.756        0.726  12.53
104) 3-Methylchol                                                 0.000# -1.00
105) Benzo[g,h,i] 0.826 1.008 1.164 1.358 1.368 1.309 1.162        1.171  17.04
            ----- Linear regression -----  Coefficient =  0.9992
              Response Ratio = -0.06719 + 1.38666 *A

-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MF2491.M          Mon Dec 20 16:50:35 2004    RPT1
```

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2492-CC2491
Lab FileID: F46961.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF2492D\F46961.D Vial: 2
Acq On : 15 Dec 2004 8:54 am Operator: NINAP
Sample : CC2491-50 Inst : MSF
Misc : OP18812,EF2492, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	6.51
2	t	1,4-Dioxane	0.676	0.607	10.2	119	-0.02	2.70
3	t	Pyridine	1.640	1.550	5.5	119	-0.01	3.02
4	t	N-Nitrosodimethylamine	0.538	0.502	6.7	120	-0.10	2.90
5	S	2-Fluorophenol	1.395	1.344	3.7	123	0.00	4.48
6	t	Indene	2.466	2.429	1.5	123	0.00	7.04
7	t	Cumene	3.153	3.080	2.3	121	0.00	5.22
8	S	Phenol-d5	1.679	1.578	6.0	121	0.00	5.94
9	t	Phenol	1.833	1.732	5.5	120	0.00	5.96
10	t	Aniline	2.110	1.950	7.6	117	0.00	5.99
11	t	bis(2-Chloroethyl)ether	1.312	1.268	3.4	122	0.00	6.09
12	t	Benzaldehyde	0.351	0.430	-22.5#	132	0.00	5.74
13	t	2-Chlorophenol	1.399	1.358	2.9	122	0.00	6.18
14	t	Decane	1.280	1.185	7.4	118	0.00	6.27
15	t	1,3-Dichlorobenzene	1.554	1.530	1.5	123	0.00	6.44
16	t	1,4-Dichlorobenzene	1.588	1.540	3.0	122	0.00	6.54
17	t	Benzyl alcohol	0.903	0.890	1.4	121	0.00	6.82
18	t	1,2-Dichlorobenzene	1.470	1.435	2.4	122	0.00	6.89
19	t	Acetophenone	1.880	1.825	2.9	122	0.00	7.35
20	t	2-Methylphenol	1.250	1.196	4.3	121	0.00	7.09
21	t	2,2'-oxybis(1-Chloropropa	0.450	0.443	1.6	124	0.00	7.13
22	t	3&4-Methylphenol	1.308	1.255	4.1	121	0.00	7.40
23	t	n-Nitroso-di-n-propylamin	0.780	0.765	1.9	122	0.00	7.42
24	t	Hexachloroethane	0.512	0.512	0.0	122	0.00	7.50
25	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	9.14
26	S	Nitrobenzene-d5	0.379	0.369	2.6	118	0.00	7.65
27	t	Nitrobenzene	0.175	0.174	0.6	120	0.00	7.69
28	t	Quinoline	0.669	0.657	1.8	122	0.01	9.97
29	t	Isophorone	0.622	0.615	1.1	123	0.00	8.19
30	t	2-Nitrophenol	0.171	0.174	-1.8	118	0.00	8.37
31	t	2,4-Dimethylphenol	0.332	0.331	0.3	122	0.00	8.51
32	t	Benzoic acid	0.236	0.222	5.9	112	0.02	8.87
33	t	bis(2-Chloroethoxy)methan	0.386	0.374	3.1	122	0.00	8.72
34	t	2,4-Dichlorophenol	0.267	0.272	-1.9	124	0.00	8.88
35		1,3,5-Trichlorobenzene	0.337	0.335	0.6	124	0.00	8.38
36	t	1,2,4-Trichlorobenzene	0.324	0.324	0.0	125	0.00	9.06
37		1,2,3-Trichlorobenzene	0.310	0.311	-0.3	125	0.00	9.60
38	t	alpha-Terpineol	0.265	0.254	4.2	122	0.00	9.23
39	t	Naphthalene	1.061	1.020	3.9	122	0.00	9.18
40	t	4-Chloroaniline	0.423	0.410	3.1	120	0.00	9.39
41	t	2,3-Dichloroaniline	0.323	0.319	1.2	122	0.00	9.51

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2492-CC2491
Lab FileID: F46961.D

42 t	Caprolactam	0.124	0.124	0.0	119	0.02	10.14
43 t	Hexachlorobutadiene	0.185	0.188	-1.6	126	0.00	9.63
44 t	4-Chloro-3-methylphenol	0.278	0.282	-1.4	122	0.00	10.57
45 t	2-Methylnaphthalene	0.683	0.673	1.5	122	0.00	10.76
46 t	1-Methylnaphthalene	0.662	0.653	1.4	122	0.00	11.01
47 t	Dimethylnaphthalene	0.580	0.577	0.5	123	0.00	12.25
48 I	Acenaphthene-d10	1.000	1.000	0.0	122	0.00	13.24
		True	Calc.	% Drift			
49 t	Hexachlorocyclopentadiene	100.000	93.661	6.3	120	0.00	11.32
		AvgRF	CCRF	% Dev			
50 t	2,4,6-Trichlorophenol	0.384	0.399	-3.9	124	0.00	11.52
51 t	2,4,5-Trichlorophenol	0.424	0.432	-1.9	122	0.00	11.60
52 S	2-Fluorobiphenyl	1.529	1.501	1.8	123	0.00	11.71
53 t	2-Chloronaphthalene	1.212	1.180	2.6	122	0.00	11.88
54 t	Biphenyl	1.662	1.602	3.6	121	0.00	11.90
55 t	2-Nitroaniline	0.307	0.290	5.5	112	0.00	12.24
56 t	Dimethylphthalate	1.255	1.271	-1.3	124	0.00	12.81
57 t	Acenaphthylene	1.935	1.943	-0.4	122	0.00	12.86
		True	Calc.	% Drift			
58 t	2,6-Dinitrotoluene	50.000	45.963	8.1	114	0.00	12.93
		AvgRF	CCRF	% Dev			
59 t	3-Nitroaniline	0.306	0.304	0.7	115	0.00	13.24
60 t	Acenaphthene	1.229	1.196	2.7	121	0.00	13.32
		True	Calc.	% Drift			
61 t	2,4-Dinitrophenol	100.000	83.610	16.4	107	0.00	13.48
		AvgRF	CCRF	% Dev			
62 t	4-Nitrophenol	0.164	0.166	-1.2	117	0.00	13.72
63 t	Dibenzofuran	1.683	1.638	2.7	122	0.00	13.70
		True	Calc.	% Drift			
64 t	2,4-Dinitrotoluene	50.000	47.893	4.2	117	0.00	13.84
		AvgRF	CCRF	% Dev			
65	2,3,4,6-Tetrachlorophenol	0.308	0.335	-8.8	124	0.00	14.12
66 t	Diethylphthalate	1.225	1.239	-1.1	123	0.00	14.52
67 t	Fluorene	1.319	1.312	0.5	123	0.00	14.51
68 t	4-Chlorophenyl-phenylethe	0.676	0.678	-0.3	125	0.00	14.57
69 t	4-Nitroaniline	0.285	0.274	3.9	111	0.01	14.71
70 I	Phenanthrene-d10	1.000	1.000	0.0	123	0.00	16.72
		True	Calc.	% Drift			
71 t	4,6-Dinitro-2-methylpheno	50.000	41.807	16.4	109	0.01	14.81
		AvgRF	CCRF	% Dev			
72 t	Atrazine	0.117	0.110	6.0	115	0.00	16.30
73 t	n-Nitrosodiphenylamine	0.563	0.556	1.2	122	0.00	14.89
74 t	1,2-Diphenylhydrazine	0.739	0.689	6.8	120	0.00	14.95
75 S	2,4,6-Tribromophenol	0.087	0.091	-4.6	124	0.00	15.14
76 t	4-Bromophenyl-phenylether	0.210	0.215	-2.4	126	0.00	15.72
77 t	Hexachlorobenzene	0.212	0.214	-0.9	126	0.00	16.02
78 t	Pentachlorophenol	0.144	0.154	-6.9	123	0.00	16.47
79 t	Phenanthrene	1.185	1.158	2.3	123	0.00	16.78

Continuing Calibration Summary

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Sample: EF2492-CC2491
Lab FileID: F46961.D

80 t	Anthracene	1.204	1.190	1.2	123	0.00	16.88
81 t	Carbazole	0.925	0.810	12.4	110	0.00	17.32
82 t	Di-n-butylphthalate	1.068	1.140	-6.7	124	0.00	18.41
83 t	Fluoranthene	1.145	1.173	-2.4	122	0.00	19.48
84 t	Octadecane	0.410	0.388	5.4	120	0.00	16.71
85 I	Chrysene-d12	1.000	1.000	0.0	118	0.00	22.22
86 t	Benzidine	0.184	0.155	15.8	89	0.00	19.82
87 t	Pyrene	1.303	1.315	-0.9	120	0.00	19.92
88 S	Terphenyl-d14	0.902	0.932	-3.3	123	0.00	20.33
		True	Calc.	% Drift			
89 t	Butylbenzylphthalate	50.000	50.279	-0.6	119	0.00	21.37
90	Butyl stearate	50.000	51.902	-3.8	118	0.00	21.48
		AvgRF	CCRF	% Dev			
91 t	Benzo[a]anthracene	1.139	1.173	-3.0	119	0.00	22.19
92 t	3,3'-Dichlorobenzidine	0.329	0.337	-2.4	109	0.00	22.20
93 t	Chrysene	1.171	1.129	3.6	118	0.00	22.26
		True	Calc.	% Drift			
94 t	bis(2-Ethylhexyl)phthalat	50.000	50.320	-0.6	119	0.00	22.47
		AvgRF	CCRF	% Dev			
95 I	Perylene-d12	1.000	1.000	0.0	115	0.00	24.56
		True	Calc.	% Drift			
96 t	Di-n-octylphthalate	50.000	50.942	-1.9	118	0.00	23.45
		AvgRF	CCRF	% Dev			
97 t	Benzo[b]fluoranthene	1.677	1.698	-1.3	113	0.00	23.95
98 t	Benzo[k]fluoranthene	1.792	1.884	-5.1	117	0.00	23.99
99 t	Benzo[a]pyrene	1.547	1.600	-3.4	112	0.00	24.46
		True	Calc.	% Drift			
100 t	Indeno[1,2,3-cd]pyrene	50.000	48.121	3.8	113	0.00	26.63
101 t	Dibenz(a,h)acridine	50.000	46.928	6.1	111	0.00	26.15
102 t	Dibenz[a,h]anthracene	50.000	47.397	5.2	111	0.00	26.67
		AvgRF	CCRF	% Dev			
103 t	7,12-Dimethylbenz(a)anthr	0.726	0.779	-7.3	115	0.00	23.99
104 t	3-Methylcholanthrene		----------NA----------				
		True	Calc.	% Drift			
105 t	Benzo[g,h,i]perylene	50.000	48.237	3.5	112	0.00	27.23

(#) = Out of Range
F46940.D MF2491.M

SPCC's out = 0 CCC's out = 0
Mon Dec 20 11:13:59 2004 RPT1

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2503-CC2491
Lab FileID: F47279.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF2503\F47279.D
Acq On : 31 Dec 2004 3:41 am
Sample : CC2491-50
Misc : OP19139,EF2503,1000
MS Integration Params: LSCINT.P

Vial: 2
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	146	-0.17	6.34
2 t	1,4-Dioxane	0.676	0.574	15.1	134	-0.25	2.47
3 t	Pyridine	1.640	1.430	12.8	131	-0.22	2.80
4 t	N-Nitrosodimethylamine	0.538	0.522	3.0	149	-0.21	2.79
5 S	2-Fluorophenol	1.395	1.279	8.3	139	-0.12	4.35
6 t	Indene	2.466	2.387	3.2	144	-0.17	6.87
7 t	Cumene	3.153	3.065	2.8	143	-0.17	5.06
8 S	Phenol-d5	1.679	1.514	9.8	138	-0.13	5.80
9 t	Phenol	1.833	1.742	5.0	145	-0.13	5.83
10 t	Aniline	2.110	1.770	16.1	127	-0.15	5.84
11 t	bis(2-Chloroethyl)ether	1.312	1.319	-0.5	151	-0.16	5.93
12 t	Benzaldehyde	0.351	0.401	-14.2	146	-0.15	5.59
13 t	2-Chlorophenol	1.399	1.339	4.3	144	-0.15	6.03
14 t	Decane	1.280	1.268	0.9	151	-0.17	6.11
15 t	1,3-Dichlorobenzene	1.554	1.472	5.3	141	-0.17	6.27
16 t	1,4-Dichlorobenzene	1.588	1.524	4.0	144	-0.17	6.37
17 t	Benzyl alcohol	0.903	0.847	6.2	138	-0.16	6.66
18 t	1,2-Dichlorobenzene	1.470	1.428	2.9	145	-0.17	6.72
19 t	Acetophenone	1.880	1.822	3.1	145	-0.17	7.18
20 t	2-Methylphenol	1.250	1.161	7.1	141	-0.15	6.94
21 t	2,2'-oxybis(1-Chloropropa	0.450	0.436	3.1	146	-0.17	6.97
22 t	3&4-Methylphenol	1.308	1.229	6.0	141	-0.15	7.24
23 t	n-Nitroso-di-n-propylamin	0.780	0.791	-1.4	150	-0.18	7.25
24 t	Hexachloroethane	0.512	0.534	-4.3	152	-0.18	7.32
25 I	Naphthalene-d8	1.000	1.000	0.0	149	-0.18	8.96
26 S	Nitrobenzene-d5	0.379	0.385	-1.6	150	-0.17	7.48
27 t	Nitrobenzene	0.175	0.171	2.3	144	-0.17	7.52
28 t	Quinoline	0.669	0.668	0.1	150	-0.16	9.79
29 t	Isophorone	0.622	0.632	-1.6	154	-0.17	8.02
30 t	2-Nitrophenol	0.171	0.187	-9.4	154	-0.17	8.20
31 t	2,4-Dimethylphenol	0.332	0.340	-2.4	152	-0.16	8.35
32 t	Benzoic acid	0.236	0.231	2.1	141	-0.11	8.74
33 t	bis(2-Chloroethoxy)methan	0.386	0.374	3.1	148	-0.17	8.54
34 t	2,4-Dichlorophenol	0.267	0.275	-3.0	152	-0.16	8.72
35	1,3,5-Trichlorobenzene	0.337	0.337	0.0	152	-0.18	8.21
36 t	1,2,4-Trichlorobenzene	0.324	0.326	-0.6	153	-0.17	8.89
37	1,2,3-Trichlorobenzene	0.310	0.315	-1.6	154	-0.18	9.42
38 t	alpha-Terpineol	0.265	0.269	-1.5	158	-0.17	9.06
39 t	Naphthalene	1.061	1.008	5.0	146	-0.18	9.00
40 t	4-Chloroaniline	0.423	0.397	6.1	141	-0.17	9.22
41 t	2,3-Dichloroaniline	0.323	0.342	-5.9	150	-0.18	11.33

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2503-CC2491
Lab FileID: F47279.D

42 t	Caprolactam	0.124	0.133	-7.3	154	-0.13	9.98
43 t	Hexachlorobutadiene	0.185	0.197	-6.5	161	-0.18	9.45
44 t	4-Chloro-3-methylphenol	0.278	0.294	-5.8	155	-0.14	10.42
45 t	2-Methylnaphthalene	0.683	0.687	-0.6	152	-0.18	10.58
46 t	1-Methylnaphthalene	0.662	0.674	-1.8	153	-0.18	10.83
47 t	Dimethylnaphthalene	0.580	0.606	-4.5	156	-0.18	12.06
48 I	Acenaphthene-d10	1.000	1.000	0.0	160	-0.18	13.05
		True	Calc.	% Drift			
49 t	Hexachlorocyclopentadiene	100.000	89.908	10.1	150	-0.19	11.13
		AvgRF	CCRF	% Dev			
50 t	2,4,6-Trichlorophenol	0.384	0.393	-2.3	160	-0.17	11.35
51 t	2,4,5-Trichlorophenol	0.424	0.435	-2.6	160	-0.15	11.45
52 S	2-Fluorobiphenyl	1.529	1.464	4.3	157	-0.18	11.53
53 t	2-Chloronaphthalene	1.212	1.155	4.7	156	-0.18	11.70
54 t	Biphenyl	1.662	1.567	5.7	155	-0.18	11.71
55 t	2-Nitroaniline	0.307	0.332	-8.1	168	-0.17	12.07
56 t	Dimethylphthalate	1.255	1.277	-1.8	163	-0.18	12.63
57 t	Acenaphthylene	1.935	1.892	2.2	155	-0.19	12.67
		True	Calc.	% Drift			
58 t	2,6-Dinitrotoluene	50.000	52.751	-5.5	171	-0.17	12.75
		AvgRF	CCRF	% Dev			
59 t	3-Nitroaniline	0.306	0.299	2.3	148	-0.16	13.07
60 t	Acenaphthene	1.229	1.172	4.6	156	-0.19	13.12
		True	Calc.	% Drift			
61 t	2,4-Dinitrophenol	100.000	109.621	-9.6	190	-0.15	13.32
		AvgRF	CCRF	% Dev			
62 t	4-Nitrophenol	0.164	0.164	0.0	151	-0.13	13.59
63 t	Dibenzofuran	1.683	1.621	3.7	158	-0.18	13.51
		True	Calc.	% Drift			
64 t	2,4-Dinitrotoluene	50.000	53.311	-6.6	171	-0.16	13.68
		AvgRF	CCRF	% Dev			
65	2,3,4,6-Tetrachlorophenol	0.308	0.344	-11.7	168	-0.17	13.95
66 t	Diethylphthalate	1.225	1.270	-3.7	165	-0.19	14.34
67 t	Fluorene	1.319	1.306	1.0	160	-0.19	14.32
68 t	4-Chlorophenyl-phenylethe	0.676	0.679	-0.4	164	-0.18	14.39
69 t	4-Nitroaniline	0.285	0.257	9.8	136	-0.17	14.54
70 I	Phenanthrene-d10	1.000	1.000	0.0	165	-0.18	16.53
		True	Calc.	% Drift			
71 t	4,6-Dinitro-2-methylpheno	50.000	54.938	-9.9	199	-0.15	14.65
		AvgRF	CCRF	% Dev			
72 t	Atrazine	0.117	0.113	3.4	159	-0.17	16.12
73 t	n-Nitrosodiphenylamine	0.563	0.526	6.6	156	-0.18	14.71
74 t	1,2-Diphenylhydrazine	0.739	0.667	9.7	157	-0.18	14.76
75 S	2,4,6-Tribromophenol	0.087	0.095	-9.2	174	-0.18	14.95
76 t	4-Bromophenyl-phenylether	0.210	0.217	-3.3	171	-0.19	15.53
77 t	Hexachlorobenzene	0.212	0.220	-3.8	174	-0.18	15.83
78 t	Pentachlorophenol	0.144	0.156	-8.3	166	-0.17	16.30
79 t	Phenanthrene	1.185	1.109	6.4	159	-0.18	16.58

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2503-CC2491
Lab FileID: F47279.D

80 t	Anthracene	1.204	1.149	4.6	159	-0.19	16.69
81 t	Carbazole	0.925	0.778	15.9	142	-0.18	17.13
82 t	Di-n-butylphthalate	1.068	1.180	-10.5	173	-0.18	18.23
83 t	Fluoranthene	1.145	1.169	-2.1	164	-0.17	19.31
84 t	Octadecane	0.410	0.394	3.9	164	-0.18	16.53
85 I	Chrysene-d12	1.000	1.000	0.0	170	-0.15	22.07
86 t	Benzidine	0.184	0.123	33.2#	102	-0.16	19.66
87 t	Pyrene	1.303	1.243	4.6	164	-0.16	19.75
88 S	Terphenyl-d14	0.902	0.908	-0.7	172	-0.16	20.17
		True	Calc.	% Drift			
89 t	Butylbenzylphthalate	50.000	51.385	-2.8	176	-0.16	21.21
90	Butyl stearate	50.000	50.806	-1.6	167	-0.15	21.33
		AvgRF	CCRF	% Dev			
91 t	Benzo[a]anthracene	1.139	1.134	0.4	167	-0.15	22.03
92 t	3,3'-Dichlorobenzidine	0.329	0.322	2.1	151	-0.15	22.06
93 t	Chrysene	1.171	1.129	3.6	170	-0.15	22.11
		True	Calc.	% Drift			
94 t	bis(2-Ethylhexyl)phthalat	50.000	54.940	-9.9	188	-0.15	22.32
		AvgRF	CCRF	% Dev			
95 I	Perylene-d12	1.000	1.000	0.0	168	-0.17	24.39
		True	Calc.	% Drift			
96 t	Di-n-octylphthalate	50.000	57.812	-15.6	197	-0.16	23.30
		AvgRF	CCRF	% Dev			
97 t	Benzo[b]fluoranthene	1.677	1.897	-13.1	185	-0.15	23.80
98 t	Benzo[k]fluoranthene	1.792	1.655	7.6	151	-0.15	23.84
99 t	Benzo[a]pyrene	1.547	1.602	-3.6	165	-0.17	24.30
		True	Calc.	% Drift			
100 t	Indeno[1,2,3-cd]pyrene	50.000	47.158	5.7	162	-0.24	26.39
101 t	Dibenz(a,h)acridine	50.000	48.275	3.5	167	-0.22	25.93
102 t	Dibenz[a,h]anthracene	50.000	46.678	6.6	161	-0.25	26.43
		AvgRF	CCRF	% Dev			
103 t	7,12-Dimethylbenz(a)anthr	0.726	0.785	-8.1	170	-0.16	23.83
104 t	3-Methylcholanthrene		----------NA----------				
		True	Calc.	% Drift			
105 t	Benzo[g,h,i]perylene	50.000	46.405	7.2	159	-0.27	26.96

(#) = Out of Range
F46940.D MF2491.M

SPCC's out = 0 CCC's out = 0
Mon Jan 03 09:31:52 2005 RPT1

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2504-CC2491
Lab FileID: F47325.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF2504\F47325.D
Acq On : 4 Jan 2005 9:23 am
Sample : CC2491-25
Misc : OP19067,EF2504,,1
MS Integration Params: LSCINT.P

Vial: 3
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	-0.18	6.32
2	t	1,4-Dioxane	0.676	0.618	8.6	106	-0.12	2.59
3	t	Pyridine	1.640	1.539	6.2	103	-0.13	2.89
4	t	N-Nitrosodimethylamine	0.538	0.599	-11.3	126	-0.14	2.86
5	S	2-Fluorophenol	1.395	1.366	2.1	109	-0.13	4.35
6	t	Indene	2.466	2.540	-3.0	112	-0.19	6.86
7	t	Cumene	3.153	3.216	-2.0	113	-0.18	5.04
8	S	Phenol-d5	1.679	1.801	-7.3	117	-0.13	5.81
9	t	Phenol	1.833	1.855	-1.2	108	-0.13	5.83
10	t	Aniline	2.110	1.864	11.7	94	-0.17	5.81
11	t	bis(2-Chloroethyl)ether	1.312	1.436	-9.5	119	-0.18	5.92
12	t	Benzaldehyde	0.351	0.704	-100.6#	133	-0.17	5.57
13	t	2-Chlorophenol	1.399	1.424	-1.8	110	-0.17	6.02
14	t	Decane	1.280	1.357	-6.0	116	-0.18	6.10
15	t	1,3-Dichlorobenzene	1.554	1.553	0.1	110	-0.18	6.26
16	t	1,4-Dichlorobenzene	1.588	1.620	-2.0	114	-0.18	6.35
17	t	Benzyl alcohol	0.903	0.828	8.3	98	-0.17	6.65
18	t	1,2-Dichlorobenzene	1.470	1.532	-4.2	115	-0.19	6.71
19	t	Acetophenone	1.880	1.967	-4.6	113	-0.19	7.16
20	t	2-Methylphenol	1.250	1.201	3.9	103	-0.15	6.94
21	t	2,2'-oxybis(1-Chloropropa	0.450	0.460	-2.2	112	-0.19	6.95
22	t	3&4-Methylphenol	1.308	1.294	1.1	104	-0.14	7.25
23	t	n-Nitroso-di-n-propylamin	0.780	0.836	-7.2	114	-0.20	7.23
24	t	Hexachloroethane	0.512	0.552	-7.8	118	-0.20	7.31
25	I	Naphthalene-d8	1.000	1.000	0.0	112	-0.20	8.94
26	S	Nitrobenzene-d5	0.379	0.401	-5.8	115	-0.18	7.47
27	t	Nitrobenzene	0.175	0.180	-2.9	111	-0.19	7.50
28	t	Quinoline	0.669	0.687	-2.7	112	-0.20	9.76
29	t	Isophorone	0.622	0.687	-10.5	120	-0.19	7.99
30	t	2-Nitrophenol	0.171	0.190	-11.1	117	-0.18	8.18
31	t	2,4-Dimethylphenol	0.332	0.345	-3.9	111	-0.16	8.35
32	t	Benzoic acid	0.236	0.196	16.9	92	-0.20	8.65
33	t	bis(2-Chloroethoxy)methan	0.386	0.393	-1.8	112	-0.19	8.52
34	t	2,4-Dichlorophenol	0.267	0.277	-3.7	112	-0.15	8.73
35		1,3,5-Trichlorobenzene	0.337	0.351	-4.2	118	-0.20	8.19
36	t	1,2,4-Trichlorobenzene	0.324	0.340	-4.9	119	-0.19	8.87
37		1,2,3-Trichlorobenzene	0.310	0.329	-6.1	120	-0.19	9.40
38	t	alpha-Terpineol	0.265	0.291	-9.8	118	-0.19	9.04
39	t	Naphthalene	1.061	1.081	-1.9	114	-0.20	8.98
40	t	4-Chloroaniline	0.423	0.390	7.8	98	-0.18	9.21
41	t	2,3-Dichloroaniline	0.323	0.347	-7.4	110	-0.19	11.32

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2504-CC2491
Lab FileID: F47325.D

42 t	Caprolactam	0.124	0.144	-16.1	118	-0.19	9.92
43 t	Hexachlorobutadiene	0.185	0.203	-9.7	124	-0.20	9.43
44 t	4-Chloro-3-methylphenol	0.278	0.299	-7.6	114	-0.13	10.43
45 t	2-Methylnaphthalene	0.683	0.721	-5.6	115	-0.20	10.56
46 t	1-Methylnaphthalene	0.662	0.721	-8.9	120	-0.20	10.80
47 t	Dimethylnaphthalene	0.580	0.637	-9.8	119	-0.20	12.04
48 I	Acenaphthene-d10	1.000	1.000	0.0	121	-0.20	13.03
		True	Calc.	% Drift			
49 t	Hexachlorocyclopentadiene	50.000	44.165	11.7	114	-0.20	11.11
		AvgRF	CCRF	% Dev			
50 t	2,4,6-Trichlorophenol	0.384	0.377	1.8	115	-0.18	11.34
51 t	2,4,5-Trichlorophenol	0.424	0.431	-1.7	119	-0.14	11.46
52 S	2-Fluorobiphenyl	1.529	1.514	1.0	121	-0.20	11.50
53 t	2-Chloronaphthalene	1.212	1.183	2.4	118	-0.20	11.68
54 t	Biphenyl	1.662	1.597	3.9	116	-0.20	11.69
55 t	2-Nitroaniline	0.307	0.352	-14.7	125	-0.18	12.05
56 t	Dimethylphthalate	1.255	1.336	-6.5	125	-0.20	12.60
57 t	Acenaphthylene	1.935	1.951	-0.8	118	-0.21	12.65
		True	Calc.	% Drift			
58 t	2,6-Dinitrotoluene	25.000	27.095	-8.4	129	-0.20	12.73
		AvgRF	CCRF	% Dev			
59 t	3-Nitroaniline	0.306	0.311	-1.6	112	-0.18	13.05
60 t	Acenaphthene	1.229	1.213	1.3	119	-0.21	13.10
		True	Calc.	% Drift			
61 t	2,4-Dinitrophenol	50.000	47.487	5.0	119	-0.18	13.29
		AvgRF	CCRF	% Dev			
62 t	4-Nitrophenol	0.164	0.145	11.6	103	-0.04	13.68
63 t	Dibenzofuran	1.683	1.689	-0.4	122	-0.21	13.49
		True	Calc.	% Drift			
64 t	2,4-Dinitrotoluene	25.000	27.331	-9.3	127	-0.19	13.65
		AvgRF	CCRF	% Dev			
65	2,3,4,6-Tetrachlorophenol	0.308	0.346	-12.3	126	-0.18	13.94
66 t	Diethylphthalate	1.225	1.338	-9.2	127	-0.22	14.30
67 t	Fluorene	1.319	1.372	-4.0	124	-0.21	14.30
68 t	4-Chlorophenyl-phenylethe	0.676	0.699	-3.4	124	-0.20	14.37
69 t	4-Nitroaniline	0.285	0.300	-5.3	111	-0.18	14.52
70 I	Phenanthrene-d10	1.000	1.000	0.0	125	-0.21	16.50
		True	Calc.	% Drift			
71 t	4,6-Dinitro-2-methylpheno	25.000	26.097	-4.4	141	-0.19	14.61
		AvgRF	CCRF	% Dev			
72 t	Atrazine	0.117	0.128	-9.4	120	-0.20	16.09
73 t	n-Nitrosodiphenylamine	0.563	0.548	2.7	120	-0.21	14.68
74 t	1,2-Diphenylhydrazine	0.739	0.725	1.9	122	-0.21	14.74
75 S	2,4,6-Tribromophenol	0.087	0.095	-9.2	132	-0.20	14.93
76 t	4-Bromophenyl-phenylether	0.210	0.216	-2.9	129	-0.21	15.51
77 t	Hexachlorobenzene	0.212	0.220	-3.8	134	-0.21	15.80
78 t	Pentachlorophenol	0.144	0.146	-1.4	126	-0.19	16.27
79 t	Phenanthrene	1.185	1.129	4.7	121	-0.21	16.56

85

Continuing Calibration Summary

Job Number: N85893
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2504-CC2491
Lab FileID: F47325.D

80 t	Anthracene	1.204	1.193	0.9	123	-0.21	16.66
81 t	Carbazole	0.925	0.898	2.9	115	-0.19	17.12
82 t	Di-n-butylphthalate	1.068	1.182	-10.7	129	-0.20	18.21
83 t	Fluoranthene	1.145	1.177	-2.8	126	-0.19	19.29
84 t	Octadecane	0.410	0.427	-4.1	127	-0.21	16.50
85 I	Chrysene-d12	1.000	1.000	0.0	131	-0.17	22.04
86 t	Benzidine	0.184	0.136	26.1#	77	-0.15	19.67
87 t	Pyrene	1.303	1.246	4.4	124	-0.19	19.73
88 S	Terphenyl-d14	0.902	0.904	-0.2	129	-0.18	20.15
		True	Calc.	% Drift			
89 t	Butylbenzylphthalate	25.000	26.191	-4.8	134	-0.18	21.20
90	Butyl stearate	25.000	26.378	-5.5	125	-0.17	21.31
		AvgRF	CCRF	% Dev			
91 t	Benzo[a]anthracene	1.139	1.129	0.9	128	-0.17	22.01
92 t	3,3'-Dichlorobenzidine	0.329	0.350	-6.4	126	-0.16	22.04
93 t	Chrysene	1.171	1.164	0.6	131	-0.17	22.09
		True	Calc.	% Drift			
94 t	bis(2-Ethylhexyl)phthalat	25.000	27.877	-11.5	142	-0.17	22.30
		AvgRF	CCRF	% Dev			
95 I	Perylene-d12	1.000	1.000	0.0	128	-0.19	24.37
		True	Calc.	% Drift			
96 t	Di-n-octylphthalate	25.000	29.830	-19.3	149	-0.17	23.28
		AvgRF	CCRF	% Dev			
97 t	Benzo[b]fluoranthene	1.677	1.820	-8.5	133	-0.18	23.78
98 t	Benzo[k]fluoranthene	1.792	1.770	1.2	125	-0.18	23.82
99 t	Benzo[a]pyrene	1.547	1.603	-3.6	129	-0.19	24.27
		True	Calc.	% Drift			
100 t	Indeno[1,2,3-cd]pyrene	25.000	23.051	7.8	126	-0.28	26.35
101 t	Dibenz(a,h)acridine	25.000	24.190	3.2	134	-0.26	25.89
102 t	Dibenz[a,h]anthracene	25.000	23.074	7.7	126	-0.30	26.38
		AvgRF	CCRF	% Dev			
103 t	7,12-Dimethylbenz(a)anthr	0.726	0.759	-4.5	125	-0.18	23.80
104 t	3-Methylcholanthrene		----------NA----------				
		True	Calc.	% Drift			
105 t	Benzo[g,h,i]perylene	25.000	22.277	10.9	124	-0.32	26.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0

F46943.D MF2491.M Tue Jan 04 09:56:23 2005 RPT1

Data File : C:\MSDCHEM\1\DATA\EF2503\F47282.D
Acq On : 31 Dec 2004 6:05 am
Sample : N85893-1
Misc : OP19011,EF2503,1000
MS Integration Params: LSCINT.P
Q Time: Dec 31 06:33:44 2004

Vial: 27
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.34	152	393345	40.00	ppb	-0.17
25) Naphthalene-d8	8.96	136	1544503	40.00	ppb	-0.18
48) Acenaphthene-d10	13.04	164	829676	40.00	ppb	-0.19
70) Phenanthrene-d10	16.52	188	1437523	40.00	ppb	-0.19
85) Chrysene-d12	22.06	240	1405309	40.00	ppb	-0.16
95) Perylene-d12	24.38	264	908747	40.00	ppb	-0.18
System Monitoring Compounds						
5) 2-Fluorophenol	4.33	112	276735m	20.17	ppb	-0.14
Spiked Amount 50.000			Recovery = 40.34%			
8) Phenol-d5	5.79	99	232729	14.09	ppb	-0.15
Spiked Amount 50.000			Recovery = 28.18%			
26) Nitrobenzene-d5	7.47	82	513061	35.06	ppb	-0.18
Spiked Amount 50.000			Recovery = 70.12%			
52) 2-Fluorobiphenyl	11.52	172	1038490	32.75	ppb	-0.19
Spiked Amount 50.000			Recovery = 65.50%			
75) 2,4,6-Tribromophenol	14.94	330	134730	43.17	ppb	-0.19
Spiked Amount 50.000			Recovery = 86.34%			
) Terphenyl-d14	20.17	244	1327919	41.90	ppb	-0.16
Spiked Amount 50.000			Recovery = 83.80%			

Target Compounds Qvalue

6/13/05

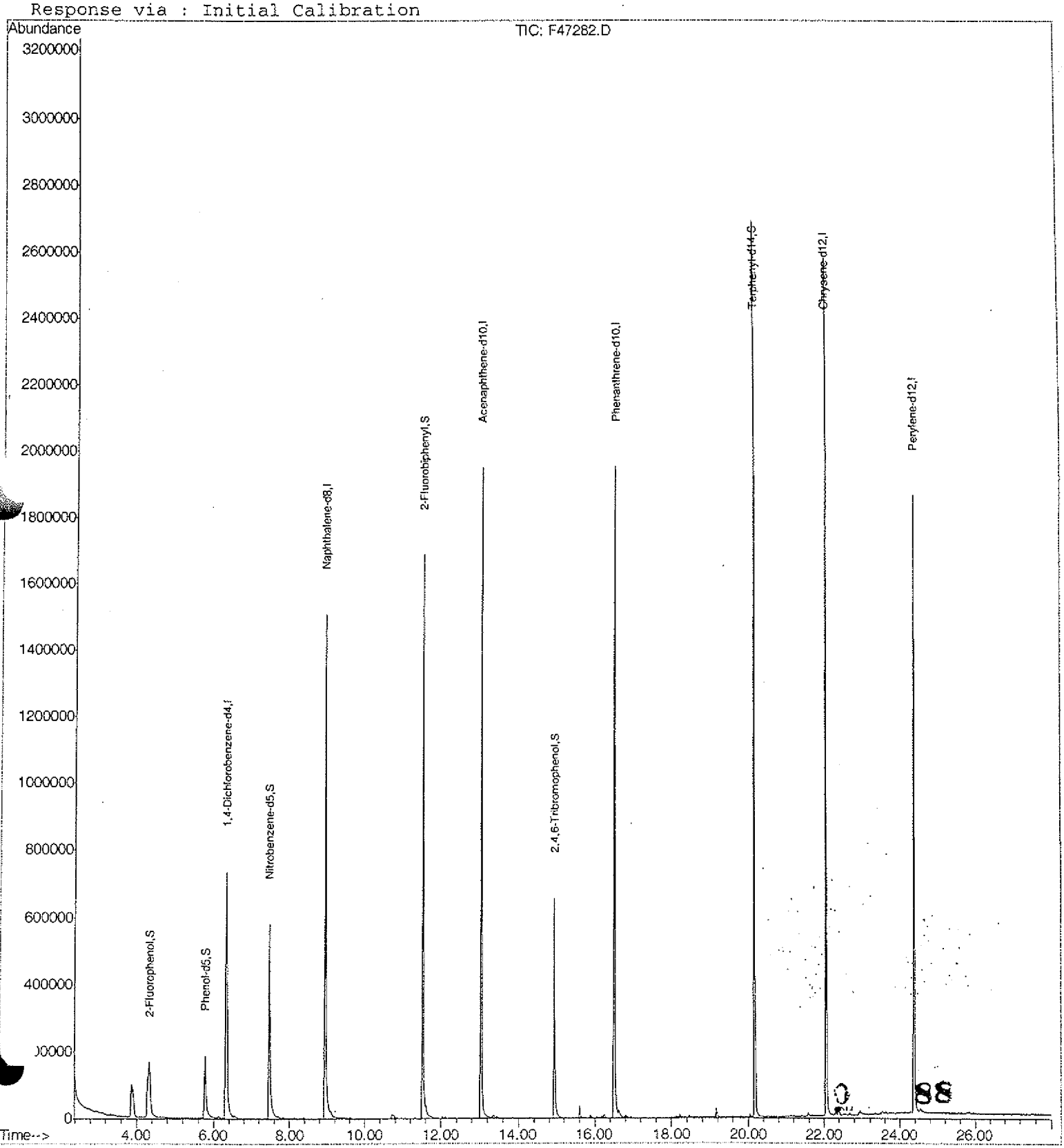
87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

SII-SSA-0014-002667

Data File : C:\MSDCHEM\1\DATA\EF2503\F47282.D Vial: 27
Acq On : 31 Dec 2004 6:05 am Operator: NINAP
Sample : N85893-1 Inst : MSF
Misc : OP19011,EF2503,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 3 10:21 2005 Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Initial Calibration



F47282.D MF2491.M Mon Jan 03 10:21:27 2005 RPT1 Page

Data File : C:\MSDCHEM\1\DATA\EF2503\F47283.D
Acq On : 31 Dec 2004 6:41 am
Sample : N85893-2
Misc : OP19011,EF2503,1000
MS Integration Params: LSCINT.P
Quant Time: Dec 31 07:09:45 2004

Vial: 28
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.33	152	401821	40.00	ppb	-0.17
25) Naphthalene-d8	8.96	136	1595622	40.00	ppb	-0.18
48) Acenaphthene-d10	13.04	164	839326	40.00	ppb	-0.19
70) Phenanthrene-d10	16.52	188	1453838	40.00	ppb	-0.19
85) Chrysene-d12	22.06	240	1429040	40.00	ppb	-0.16
95) Perylene-d12	24.38	264	905723	40.00	ppb	-0.18
System Monitoring Compounds						
5) 2-Fluorophenol	4.33	112	256317	18.29	ppb	-0.14
Spiked Amount 50.000			Recovery = 36.58%			
8) Phenol-d5	5.79	99	285398	16.92	ppb	-0.15
Spiked Amount 50.000			Recovery = 33.84%			
26) Nitrobenzene-d5	7.47	82	641688	42.45	ppb	-0.18
Spiked Amount 50.000			Recovery = 84.90%			
52) 2-Fluorobiphenyl	11.52	172	1267637	39.52	ppb	-0.19
Spiked Amount 50.000			Recovery = 79.04%			
75) 2,4,6-Tribromophenol	14.94	330	140646	44.56	ppb	-0.19
Spiked Amount 50.000			Recovery = 89.12%			
3) Terphenyl-d14	20.17	244	1449300	44.98	ppb	-0.16
Spiked Amount 50.000			Recovery = 89.96%			

Target Compounds Qvalue

1/10/05

89

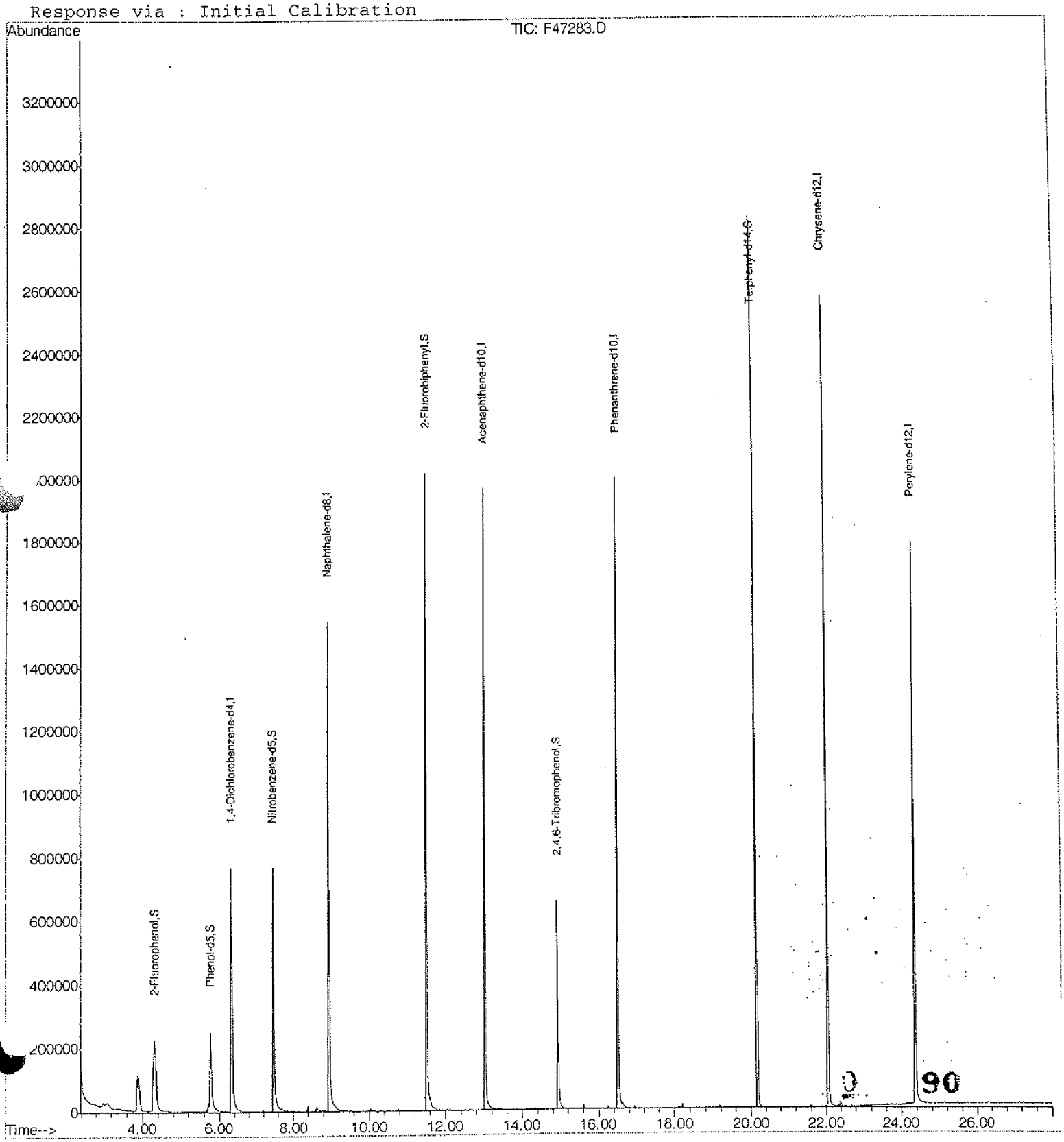
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\EF2503\F47283.D
Acq On : 31 Dec 2004 6:41 am
Sample : N85893-2
Misc : OP19011,EF2503,1000
MS Integration Params: LSCINT.P
Quant Time: Jan 3 10:22 2005

Vial: 28
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\EF2492\F46968.D
Acq On : 15 Dec 2004 1:11 pm
Sample : OP19011-MB1
Misc : OP19011,EF2492,1000
MS Integration Params: LSCINT.P
Quant Time: Dec 15 14:42:36 2004

Vial: 9
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Dec 15 14:17:29 2004
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.50	152	319360	40.00	ppb	0.00
25) Naphthalene-d8	9.13	136	1213909	40.00	ppb	0.00
48) Acenaphthene-d10	13.23	164	605159	40.00	ppb	0.00
70) Phenanthrene-d10	16.71	188	1036319	40.00	ppb	0.00
85) Chrysene-d12	22.21	240	896441	40.00	ppb	0.00
95) Perylene-d12	24.56	264	517876	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.47	112	205627	18.46	ppb	0.00
Spiked Amount 50.000			Recovery = 36.92%			
8) Phenol-d5	5.93	99	210276	15.68	ppb	0.00
Spiked Amount 50.000			Recovery = 31.36%			
26) Nitrobenzene-d5	7.64	82	401912	34.95	ppb	0.00
Spiked Amount 50.000			Recovery = 69.90%			
52) 2-Fluorobiphenyl	11.70	172	802254	34.69	ppb	0.00
Spiked Amount 50.000			Recovery = 69.38%			
75) 2,4,6-Tribromophenol	15.12	330	80916	35.96	ppb	0.00
Spiked Amount 50.000			Recovery = 71.92%			
) Terphenyl-d14	20.33	244	837013	41.41	ppb	0.00
Spiked Amount 50.000			Recovery = 82.82%			

Target Compounds Qvalue

12/15/04

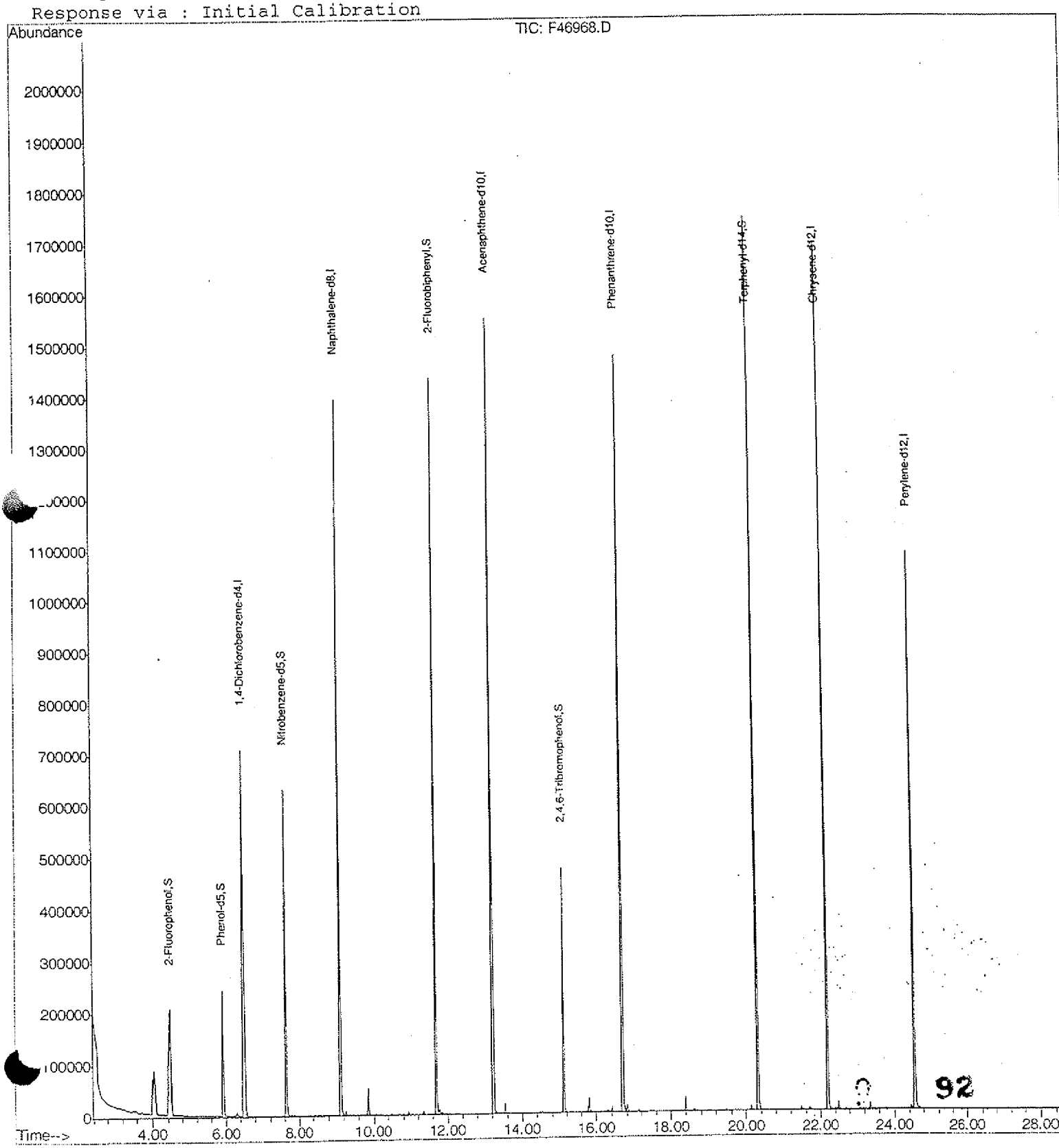
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\EF2492\F46968.D
Acq On : 15 Dec 2004 1:11 pm
Sample : OP19011-MB1
Misc : OP19011,EF2492,1000
MS Integration Params: LSCINT.P
Quant Time: Dec 15 14:43 2004

Vial: 9
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Dec 15 14:17:29 2004
Response via : Initial Calibration



F46968.D MF2491.M Wed Dec 15 14:43:10 2004 RPT1 Page

Data File : C:\MSDCHEM\1\DATA\F46968.D
Acq On : 15 Dec 2004 1:11 pm
Sample : OP19011-MB1
Misc : OP19011,EF2492,1000
MS Integration Params: LSCINT.P

Vial: 9
Operator: NINAP
Inst : MSF
Multiplr: 1.00

.od : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Smoothing : ON
Sampling : 1
Start Thrs: 0.05
Stop Thrs : 0

Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 125
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.240	159	161	180	rVB8	4702	14860	0.56%	0.065%
2	3.486	201	207	211	rBV7	1738	3750	0.14%	0.017%
3	3.544	212	218	219	rBV4	2084	3028	0.11%	0.013%
4	3.705	242	248	257	rVB5	2688	6828	0.26%	0.030%
5	4.004	298	304	307	rBV	66121	103959	3.90%	0.458%
6	4.047	307	312	328	rVB2	82632	255107	9.58%	1.124%
7	4.180	335	337	342	rVB2	1090	1440	0.05%	0.006%
8	4.426	375	383	385	rBV	121764	198687	7.46%	0.875%
9	4.474	385	392	411	rVB	203756	653393	24.53%	2.879%
10	4.789	443	451	458	rVB4	1465	3882	0.15%	0.017%
[illegible]	4.923	472	476	479	rVB4	803	1197	0.04%	0.005%
[illegible]	5.729	618	627	629	rBV5	932	2132	0.08%	0.009%
13	5.756	629	632	639	rVB6	926	1787	0.07%	0.008%
14	5.927	650	664	682	rVB	242435	539556	20.25%	2.377%
15	6.194	709	714	717	rVB3	1084	1594	0.06%	0.007%
16	6.290	717	732	745	rBV10	7800	20263	0.76%	0.089%
17	6.504	756	772	786	rBV	708561	1881777	70.64%	8.292%
18	6.696	802	808	812	rBV3	738	1036	0.04%	0.005%
19	7.337	922	928	934	rBV3	988	1589	0.06%	0.007%
20	7.642	974	985	1006	rBV	631246	1130078	42.42%	4.979%
21	7.786	1006	1012	1019	rVV7	1347	3532	0.13%	0.016%
22	7.856	1021	1025	1029	rVB4	1322	1405	0.05%	0.006%
23	8.561	1152	1157	1161	rVB2	2775	3959	0.15%	0.017%
24	8.988	1231	1237	1241	rVB3	1298	1727	0.06%	0.008%
25	9.132	1253	1264	1280	rBV	1395563	2332843	87.57%	10.279%
26	9.266	1283	1289	1297	rVB	7331	11771	0.44%	0.052%
27	9.752	1375	1380	1387	rBV2	1527	2428	0.09%	0.011%
28	9.854	1390	1399	1408	rBV	50427	75081	2.82%	0.331%
29	10.922	1591	1599	1606	rVB2	5705	9697	0.36%	0.043%
30	11.024	1613	1618	1623	rBV3	1248	1926	0.07%	0.008%
31	11.333	1669	1676	1686	rVB	6623	9326	0.35%	0.041%
32	11.499	1699	1707	1713	rBV3	849	1787	0.07%	0.008%
33	11.702	1734	1745	1752	rBV	1434801	2273686	85.35%	10.019%
34	11.755	1752	1755	1758	rVV2	6325	10209	0.38%	0.045%
[illegible]	11.787	1758	1761	1768	rVV3	9861	17762	0.67%	0.078%
36	11.841	1768	1771	1776	rVV3	2108	3749	0.14%	0.017%
37	11.878	1776	1778	1785	rVB	1966	2819	0.11%	0.012%
38	12.023	1800	1805	1806	rBV2	728	1077	0.04%	0.005%

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40	12.226	1835	1843	1848	rVB4	1455	2065	0.08%	0.009%
41	12.300	1851	1857	1862	rBV3	1429	2126	0.08%	0.009%
42	13.230	2020	2031	2044	rBV	1551464	2537648	95.26%	11.182%
43	13.363	2053	2056	2066	rVB2	1112	1782	0.07%	0.008%
44	13.454	2071	2073	2081	rVB3	965	1546	0.06%	0.007%
4[illegible]	13.529	2081	2087	2097	rBV	19208	26410	0.99%	0.116%
[illegible]	13.609	2097	2102	2111	rBV3	1469	2290	0.09%	0.010%
47	13.807	2135	2139	2146	rBV3	1142	1477	0.06%	0.007%
48	14.480	2260	2265	2270	rBV2	833	1219	0.05%	0.005%
49	14.523	2270	2273	2285	rVB4	1038	2149	0.08%	0.009%
50	15.068	2369	2375	2376	rBV3	658	1066	0.04%	0.005%
51	15.116	2376	2384	2402	rVB	472282	750110	28.16%	3.305%
52	15.324	2416	2423	2433	rBV3	1609	4087	0.15%	0.018%
53	15.623	2470	2479	2481	rBV2	591	1117	0.04%	0.005%
54	15.725	2492	2498	2502	rVB2	1443	2125	0.08%	0.009%
55	15.810	2502	2514	2519	rBV2	28172	45125	1.69%	0.199%
56	15.858	2519	2523	2531	rVB2	2019	3580	0.13%	0.016%
57	15.933	2531	2537	2544	rBV5	1738	3620	0.14%	0.016%
58	15.992	2544	2548	2553	rVB3	1220	1894	0.07%	0.008%
59	16.104	2562	2569	2572	rBV	1087	1591	0.06%	0.007%
60	16.195	2582	2586	2591	rBV2	1161	1675	0.06%	0.007%
61	16.286	2598	2603	2609	rBV	3103	5029	0.19%	0.022%
62	16.414	2619	2627	2635	rVB2	11190	19591	0.74%	0.086%
63	16.708	2671	2682	2695	rBV2	1475986	2664029	100.00%	11.739%
64	16.815	2695	2702	2713	rVB	13464	24512	0.92%	0.108%
65	17.124	2750	2760	2766	rVB3	5375	7899	0.30%	0.035%
66	18.262	2965	2973	2980	rBB3	1459	2264	0.08%	0.010%
67	18.396	2989	2998	3008	rVB	26834	38210	1.43%	0.168%
[illegible]	18.626	3034	3041	3047	rBV4	3597	6436	0.24%	0.028%
[illegible]	18.690	3047	3053	3057	rVB3	2283	3400	0.13%	0.015%
70	19.032	3112	3117	3124	rBB2	2466	3126	0.12%	0.014%
71	19.256	3155	3159	3161	rBV	832	1095	0.04%	0.005%
72	19.454	3187	3196	3200	rBB2	1136	1658	0.06%	0.007%
73	19.758	3247	3253	3257	rVB	814	1309	0.05%	0.006%
74	20.148	3321	3326	3332	rBV	8832	11583	0.43%	0.051%
75	20.202	3332	3336	3339	rVB3	1438	1412	0.05%	0.006%
76	20.239	3339	3343	3349	rBV	853	1634	0.06%	0.007%
77	20.330	3349	3360	3372	rBV	1745067	2472166	92.80%	10.893%
78	20.640	3412	3418	3425	rVB	1041	1694	0.06%	0.007%
79	20.773	3435	3443	3447	rBV2	519	1178	0.04%	0.005%
80	21.275	3530	3537	3541	rBV	864	1354	0.05%	0.006%
81	21.478	3565	3575	3580	rBV2	6069	8875	0.33%	0.039%
82	21.542	3584	3587	3595	rVB2	872	1840	0.07%	0.008%
83	21.713	3612	3619	3623	rBV2	5258	7324	0.27%	0.032%
84	22.130	3694	3697	3702	rBV3	830	1366	0.05%	0.006%
85	22.210	3702	3712	3727	rBV	1693411	2467321	92.62%	10.872%
86	22.467	3754	3760	3762	rBV3	3827	5037	0.19%	0.022%
87	22.504	3762	3767	3776	rVB2	15704	22801	0.86%	0.100%
88	22.825	3822	3827	3835	rBV4	1484	2635	0.10%	0.012%
89	23.076	3867	3874	3881	rBV4	1029	1874	0.07%	0.008%
90	23.156	3886	3889	3894	rBV2	945	1026	0.04%	0.005%
[illegible]	23.364	3922	3928	3940	rBV2	12408	23045	0.87%	0.102%
[illegible]	23.492	3948	3952	3956	rVB3	1353	1315	0.05%	0.006%
93	23.792	4001	4008	4012	rBV4	1811	2824	0.11%	0.012%
94	24.059	4055	4058	4065	rVB3	640	1107	0.04%	0.005%
95	24.246	4092	4093	4099	rBV3	719	1048	0.04%	0.005%

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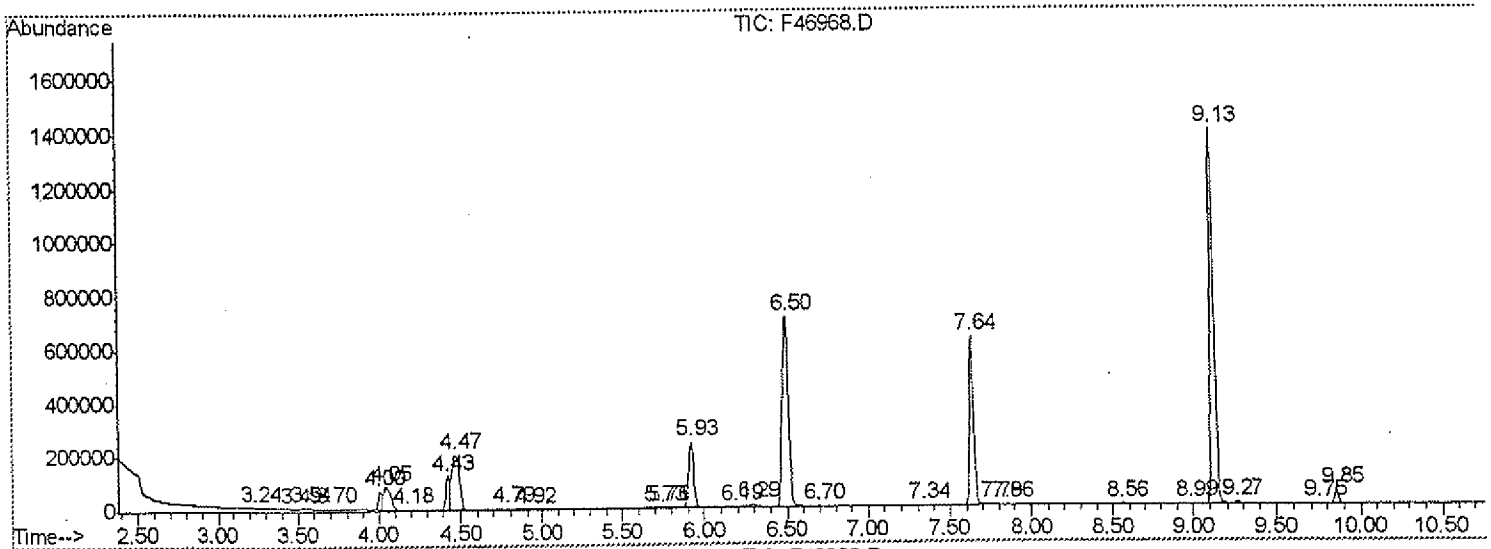
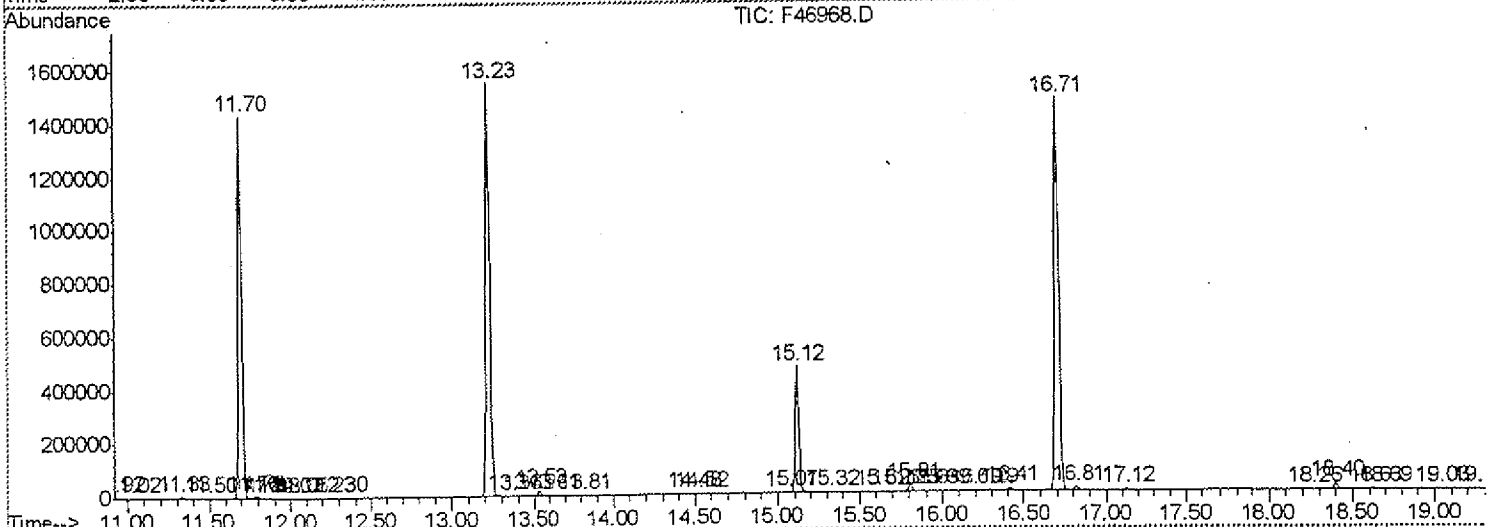
96	24.310	4099	4105	4106	rBV4	1165	1419	0.05%	0.006%
97	24.443	4123	4130	4139	rBV2	5778	11597	0.44%	0.051%
98	24.555	4139	4151	4171	rVV2	1082603	1869842	70.19%	8.239%
99	24.726	4180	4183	4190	rBV4	760	1217	0.05%	0.005%
100	24.897	4213	4215	4221	rBV4	722	1206	0.05%	0.005%
10[illegible]	25.512	4325	4330	4332	rBV3	821	1142	0.04%	0.005%
1[illegible]	26.131	4441	4446	4450	rBV3	710	1087	0.04%	0.005%
10[illegible]	26.383	4489	4493	4496	rBV4	752	1039	0.04%	0.005%

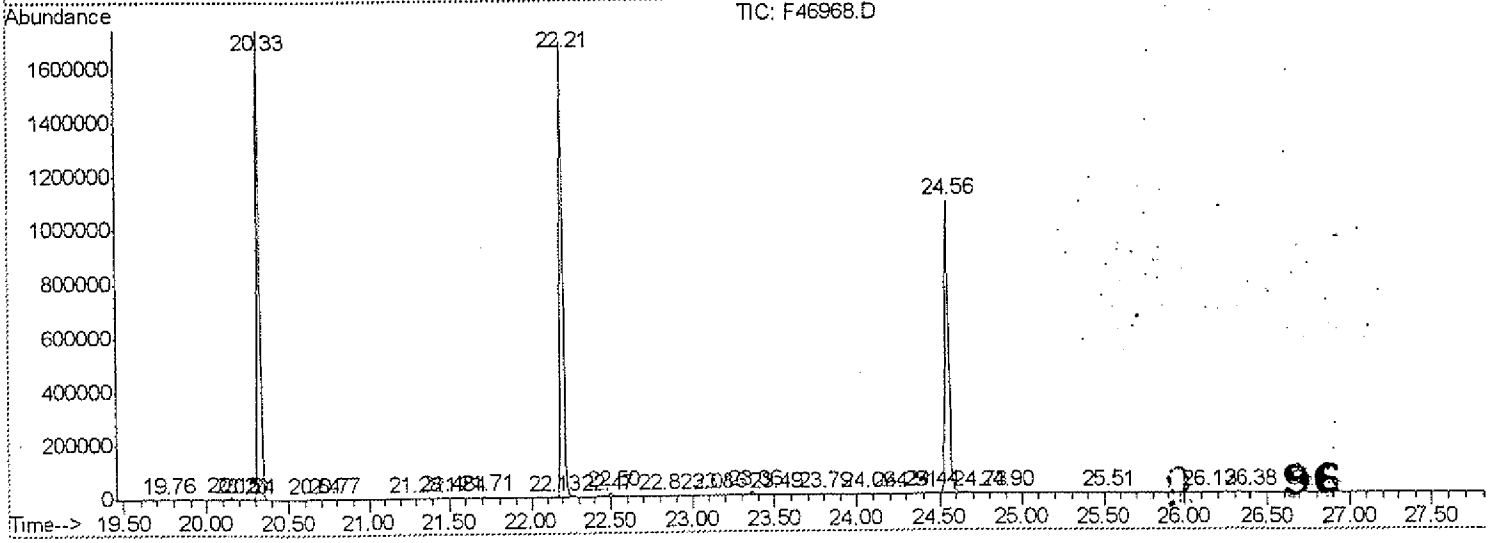
Sum of corrected areas: 22694764

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\F46968.D
Operator : NINAP
Acquired : 15 Dec 2004 1:11 pm using AcqMethod MF2491
Instrument : MSF
Sample Name: OP19011-MB1
Misc Info : OP19011,EF2492,1000
Vial Number: 9
Quant File :MF2491.RES (RTE Integrator)







SII-SSA-0014-002676

Data File : C:\MSDCHEM\1\DATA\F46968.D
Acq On : 15 Dec 2004 1:11 pm
Sample : OP19011-MB1
Misc : OP19011,EF2492,1000
MS Integration Params: LSCINT.P

Vial: 9
Operator: NINAP
Inst : MSF
Multiplr: 1.00

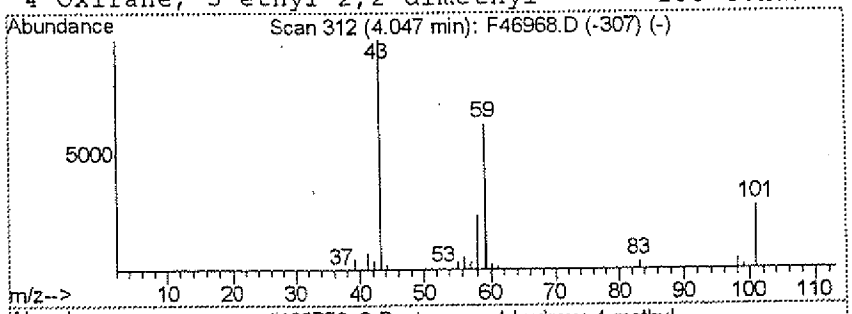
Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NIST98.L

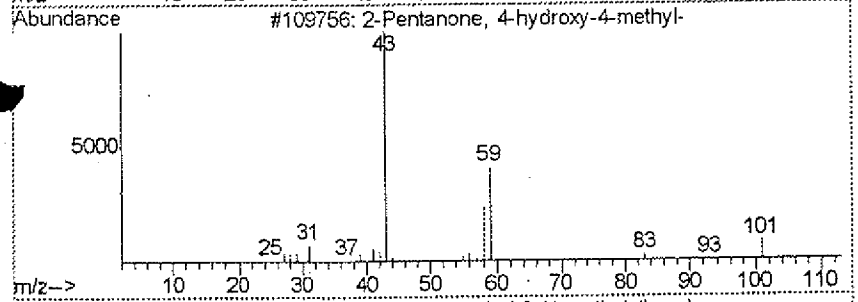
****

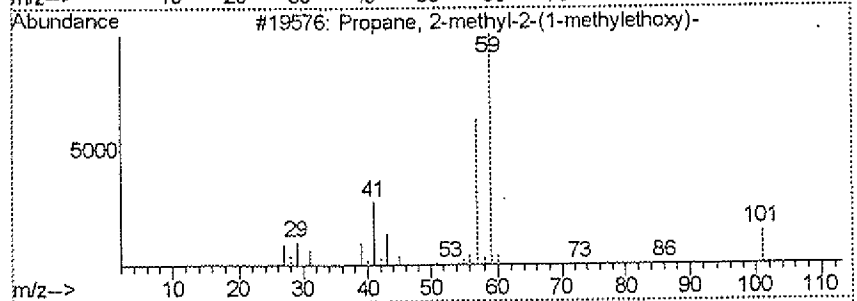
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

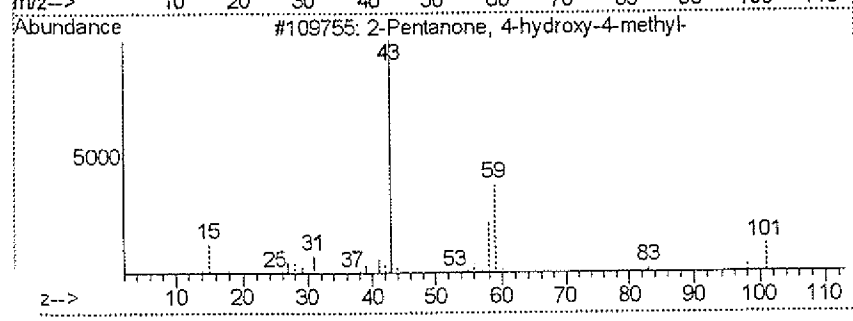
R.T.	EstConc	Area	Relative to ISTD	R.T.
4.05	4.37 ppb	255107	Naphthalene-d8	9.13

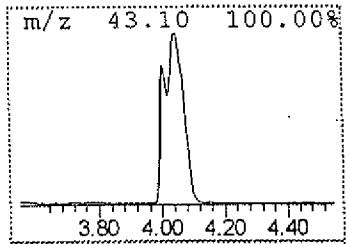
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	72
2	Propane, 2-methyl-2-(1-methyleth...	116	C7H16O	017348-59-3	38
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
4	Oxirane, 3-ethyl-2,2-dimethyl-	100	C6H12O	001192-22-9	25

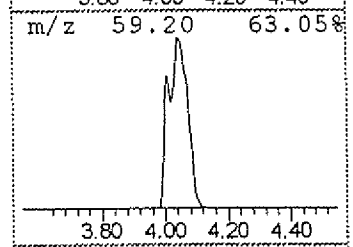


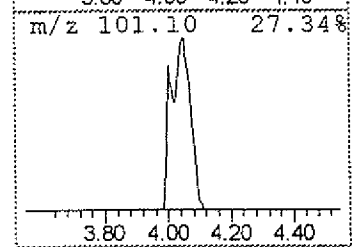


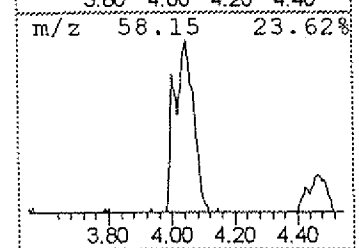


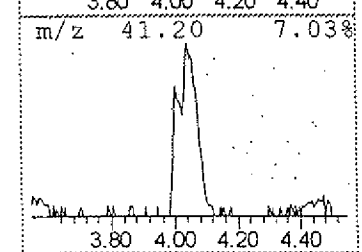












SII-SSA-0014-002677

Operator ID: NINAP Date Acquired: 15 Dec 2004 1:11 pm
Data File: C:\MSDCHEM\1\DATA\F46968.D
Name: OP19011-MB1
Misc: OP19011,EF2492,1000
Method: C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Fit Semi Volatile Extractables by GC/MS
Library Searched: C:\DATABASE\NIST98.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
2-Pentanone, 4-hy...	4.05	4.4	ppb	255107	2	9.13	2332840	40.0

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SII-SSA-0014-002678

New Jersey
ACCUTEST.
Laboratories

01/12/05

Technical Report for

Arcadis Geraghty & Miller

PSEG-Salem, Artificial Island, Salem, NJ

NP000571

Accutest Job Number: N86261

Sampling Date: 12/13/04

Report to:

Arcadis Geraghty & Miller
6 Terry Drive
Newtown, PA 18940

ATTN: Brad Pierce

Total number of pages in report: 137

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Sample Summary

Arcadis Geraghty & Miller

Job No: N86261

PSEG-Salem, Artificial Island, Salem, NJ
Project No: NP000571

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
N86261-1	12/13/04	13:55	RM	12/15/04	AQ	Ground Water	WELL AY
N86261-2	12/13/04	15:35	RM	12/15/04	AQ	Ground Water	WELL AV
N86261-3	12/13/04	17:15	RM	12/15/04	AQ	Ground Water	WELL X
N86261-4	12/13/04	18:05	RM	12/15/04	AQ	Field Blank Water	FB-2
N86261-5	12/13/04	18:05	RM	12/15/04	AQ	Trip Blank Water	TRIP BLANK
N86261-6	12/13/04	17:15	RM	12/15/04	AQ	Ground Water	WELL AX

ACCUTEST.

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Reduced Laboratory Data Deliverables
For
Non-USEPA/CLP Methods

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SII-SSA-0014-002682

RESULTS

SII-SSA-0014-002683

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N86261-1	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S70819.D	1	12/23/04	MMC	n/a	n/a	VS2585
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N86261-1	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		79-119%
17060-07-0	1,2-Dichloroethane-D4	95%		68-129%
2037-26-5	Toluene-D8	98%		83-118%
460-00-4	4-Bromofluorobenzene	101%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N86261-1	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47512.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	4.5	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	5.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.3	0.78	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	1.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	21	0.69	ug/l	
95-48-7	2-Methylphenol	ND	5.3	0.77	ug/l	
	3&4-Methylphenol	ND	5.3	0.75	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	0.78	ug/l	
100-02-7	4-Nitrophenol	ND	21	2.4	ug/l	
87-86-5	Pentachlorophenol	ND	21	0.80	ug/l	
108-95-2	Phenol	ND	5.3	1.9	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	0.79	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	0.85	ug/l	
83-32-9	Acenaphthene	ND	2.1	0.31	ug/l	
208-96-8	Acenaphthylene	ND	2.1	0.37	ug/l	
120-12-7	Anthracene	ND	2.1	0.23	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.1	0.29	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.1	0.41	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.1	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.1	0.53	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.1	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.57	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.57	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	0.40	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.45	ug/l	
86-74-8	Carbazole	ND	2.1	0.36	ug/l	
218-01-9	Chrysene	ND	2.1	0.28	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.36	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.52	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.47	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N86261-1	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.25	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.34	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.27	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.82	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.66	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.41	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.1	0.62	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.52	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.84	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.67	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	1.5	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.61	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.78	ug/l	
206-44-0	Fluoranthene	ND	2.1	0.67	ug/l	
86-73-7	Fluorene	ND	2.1	0.95	ug/l	
118-74-1	Hexachlorobenzene	ND	2.1	1.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.1	0.44	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.48	ug/l	
67-72-1	Hexachloroethane	ND	5.3	0.71	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.1	1.6	ug/l	
78-59-1	Isophorone	ND	2.1	0.57	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	0.77	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	1.5	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	1.1	ug/l	
91-20-3	Naphthalene	ND	2.1	1.1	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.65	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.85	ug/l	
85-01-8	Phenanthrene	ND	2.1	0.25	ug/l	
129-00-0	Pyrene	ND	2.1	0.62	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	0.34	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		10-88%
4165-62-2	Phenol-d5	29%		10-71%
118-79-6	2,4,6-Tribromophenol	87%		45-134%
4165-60-0	Nitrobenzene-d5	76%		32-128%
321-60-8	2-Fluorobiphenyl	70%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N86261-1	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	83%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N86261-2	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S70820.D	1	12/23/04	MMC	n/a	n/a	VS2585
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N86261-2	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		79-119%
17060-07-0	1,2-Dichloroethane-D4	97%		68-129%
2037-26-5	Toluene-D8	98%		83-118%
460-00-4	4-Bromofluorobenzene	101%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N86261-2	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47513.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	4.7	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.6	5.3	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.6	0.81	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.6	1.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	1.2	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	22	0.72	ug/l	
95-48-7	2-Methylphenol	ND	5.6	0.80	ug/l	
	3&4-Methylphenol	ND	5.6	0.78	ug/l	
88-75-5	2-Nitrophenol	ND	5.6	0.81	ug/l	
100-02-7	4-Nitrophenol	ND	22	2.5	ug/l	
87-86-5	Pentachlorophenol	ND	22	0.84	ug/l	
108-95-2	Phenol	ND	5.6	1.9	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.6	0.83	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.6	0.89	ug/l	
83-32-9	Acenaphthene	0.64	2.2	0.33	ug/l	J
208-96-8	Acenaphthylene	ND	2.2	0.39	ug/l	
120-12-7	Anthracene	ND	2.2	0.24	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.2	0.30	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.2	0.43	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.2	0.41	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.2	0.55	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.2	0.42	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.60	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.60	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.6	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.6	0.47	ug/l	
86-74-8	Carbazole	ND	2.2	0.38	ug/l	
218-01-9	Chrysene	ND	2.2	0.29	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.37	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.54	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.49	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	1.1	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N86261-2	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.2	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.2	0.36	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.2	0.28	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.2	0.86	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.2	0.69	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.6	0.43	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.2	0.64	ug/l	
132-64-9	Dibenzofuran	0.71	5.6	0.54	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.2	0.87	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.70	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	1.6	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.64	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	0.82	ug/l	
206-44-0	Fluoranthene	1.0	2.2	0.70	ug/l	J
86-73-7	Fluorene	1.4	2.2	0.99	ug/l	J
118-74-1	Hexachlorobenzene	ND	2.2	1.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.2	0.46	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	22	0.50	ug/l	
67-72-1	Hexachloroethane	ND	5.6	0.74	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.2	1.7	ug/l	
78-59-1	Isophorone	ND	2.2	0.60	ug/l	
91-57-6	2-Methylnaphthalene	1.8	2.2	0.80	ug/l	J
88-74-4	2-Nitroaniline	ND	5.6	1.5	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	1.4	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	1.2	ug/l	
91-20-3	Naphthalene	3.9	2.2	1.1	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.68	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.88	ug/l	
85-01-8	Phenanthrene	ND	2.2	0.26	ug/l	
129-00-0	Pyrene	0.96	2.2	0.65	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		10-88%
4165-62-2	Phenol-d5	32%		10-71%
118-79-6	2,4,6-Tribromophenol	99%		45-134%
4165-60-0	Nitrobenzene-d5	78%		32-128%
321-60-8	2-Fluorobiphenyl	73%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N86261-2	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	93%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: WELL X
Lab Sample ID: N86261-3
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: PSEG-Salem, Artificial Island, Salem, NJ

Date Sampled: 12/13/04
Date Received: 12/15/04
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S70853.D	1	12/24/04	MMC	n/a	n/a	VS2588
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	0.87	1.0	0.37	ug/l	J
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N86261-3	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		79-119%
17060-07-0	1,2-Dichloroethane-D4	99%		68-129%
2037-26-5	Toluene-D8	100%		83-118%
460-00-4	4-Bromofluorobenzene	100%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N86261-3	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47474.D	1	01/08/05	NAP	12/16/04	OP19045	EF2508
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N86261-3	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%		10-88%
4165-62-2	Phenol-d5	27%		10-71%
118-79-6	2,4,6-Tribromophenol	88%		45-134%
4165-60-0	Nitrobenzene-d5	72%		32-128%
321-60-8	2-Fluorobiphenyl	69%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N86261-3	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	95%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-2		
Lab Sample ID:	N86261-4	**Date Sampled:**	12/13/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S70854.D	1	12/24/04	MMC	n/a	n/a	VS2588
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-2		
Lab Sample ID:	N86261-4	**Date Sampled:**	12/13/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		79-119%
17060-07-0	1,2-Dichloroethane-D4	101%		68-129%
2037-26-5	Toluene-D8	100%		83-118%
460-00-4	4-Bromofluorobenzene	102%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-2		
Lab Sample ID:	N86261-4	**Date Sampled:**	12/13/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47475.D	1	01/08/05	NAP	12/16/04	OP19045	EF2508
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-2		
Lab Sample ID:	N86261-4	**Date Sampled:**	12/13/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		10-88%
4165-62-2	Phenol-d5	29%		10-71%
118-79-6	2,4,6-Tribromophenol	81%		45-134%
4165-60-0	Nitrobenzene-d5	85%		32-128%
321-60-8	2-Fluorobiphenyl	75%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FB-2		
Lab Sample ID:	N86261-4	**Date Sampled:**	12/13/04
Matrix:	AQ - Field Blank Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	92%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	N86261-5	**Date Sampled:**	12/13/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S70855.D	1	12/24/04	MMC	n/a	n/a	VS2588
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	N86261-5	**Date Sampled:**	12/13/04
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		79-119%
17060-07-0	1,2-Dichloroethane-D4	103%		68-129%
2037-26-5	Toluene-D8	101%		83-118%
460-00-4	4-Bromofluorobenzene	103%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: WELL AX
Lab Sample ID: N86261-6
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: PSEG-Salem, Artificial Island, Salem, NJ

Date Sampled: 12/13/04
Date Received: 12/15/04
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S70856.D	1	12/24/04	MMC	n/a	n/a	VS2588
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	WELL AX		
Lab Sample ID:	N86261-6	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		79-119%
17060-07-0	1,2-Dichloroethane-D4	105%		68-129%
2037-26-5	Toluene-D8	101%		83-118%
460-00-4	4-Bromofluorobenzene	101%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AX		
Lab Sample ID:	N86261-6	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F47484.D	1	01/08/05	NAP	12/16/04	OP19045	EF2508
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AX		
Lab Sample ID:	N86261-6	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		10-88%
4165-62-2	Phenol-d5	32%		10-71%
118-79-6	2,4,6-Tribromophenol	96%		45-134%
4165-60-0	Nitrobenzene-d5	89%		32-128%
321-60-8	2-Fluorobiphenyl	85%		34-121%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AX		
Lab Sample ID:	N86261-6	**Date Sampled:**	12/13/04
Matrix:	AQ - Ground Water	**Date Received:**	12/15/04
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Salem, Artificial Island, Salem, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	112%		41-129%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SW, PB, TB

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FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # N86261

Client / Reporting Information

Company Name: Arcadis
Address: 6 Terry Drive Suite 300
City: Newtown State: PA Zip: 18940
Project Contact: Brad Pierce E-mail: bpierce@arcadis-us.com
Phone #: 267-685-1900
Sampler's Name: Ryan McKinney

Project Information

Project Name: PSEG
Street:
City: Salem State: NJ
Project #:
Fax #: 267-685-1801
Client Purchase Order #:

Requested Analysis

8260 ☐ 624 ☐ 8021 ☐ 602 ☐ PALG ☐ PALG ☐
BTEX ☐ MTBE ☐ TBA ☐ NAP ☐
8260 ☐ 624 ☐ TCL ☐ PPL ☐ STARS ☐ MTBE ☐
TBA ☐ NAP ☐ +10 ☐ +15 ☐
8270 ☐ 625 ☐ TCL ☐ PPL ☐ STARS ☐
ABN ☐ BN ☐ PAH ☐ PAOF ☐ +TICS ☐

VOC 8260b
SVOC 8270c

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	H2SO4	NONE	MEOH	ENCORE
-1	Well AJ		12-13-04	1355	RDM	GW	5	3		2		
-2	Well AV			1535			5	3		2		
-3	Well X			1715			5	3		2		
-4	FB-2			1805		-	4	2		2		
-5	Trip Blank			—	—	—	2	2				
-6	Well AX		12-13-04	1715	RDM	GW	5	3		2		

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

LAB USE ONLY: EX36, 800

Turnaround Time (Business Days)

☐ Std. 15 Business Days
☐ 10 Day RUSH
☐ 5 Day RUSH
☐ 3 Day EMERGENCY
☐ 2 Day EMERGENCY
☐ 1 Day EMERGENCY
☐ Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

☐ Commercial "A"
☐ Commercial "B"
☐ NJ Reduced
☐ NJ Full
☐ Other

☐ FULL CLP
☐ NYASP Category A
☐ NYASP Category B
☐ State Forms
☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

TB filled 12/13/04 0650

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by	Date Time	Received by	Relinquished by	Date Time	Received by
1	Sampler	12.14.04 945	Brad Pierce	2 Brad Pierce	12.15.04 0825	2
3		12.15.04 0830	3	4	Date Time	4
5		Date Time	5	Custody Seal #	Preserved where applicable ☐	On Ice ☐

Cooler Temp. 2.8

TB

TD

Internal Sample Tracking Chronicle

Arcadis Geraghty & Miller

Job No: N86261

PSEG-Salem, Artificial Island, Salem, NJ
Project No: NP000571

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N86261-1 Collected: 13-DEC-04 13:55 By: RM Received: 15-DEC-04 By: JD WELL AY						
N86261-1	SW846 8260B	23-DEC-04 06:36	MMC			V8260TCL
N86261-1	SW846 8270C	10-JAN-05 10:31	NAP	16-DEC-04	CAS	AB8270TCL
N86261-2 Collected: 13-DEC-04 15:35 By: RM Received: 15-DEC-04 By: JD WELL AV						
N86261-2	SW846 8260B	23-DEC-04 07:07	MMC			V8260TCL
N86261-2	SW846 8270C	10-JAN-05 11:07	NAP	16-DEC-04	CAS	AB8270TCL
N86261-3 Collected: 13-DEC-04 17:15 By: RM Received: 15-DEC-04 By: JD WELL X						
N86261-3	SW846 8260B	24-DEC-04 02:20	MMC			V8260TCL
N86261-3	SW846 8270C	08-JAN-05 12:13	NAP	16-DEC-04	CAS	AB8270TCL
N86261-4 Collected: 13-DEC-04 18:05 By: RM Received: 15-DEC-04 By: JD FB-2						
N86261-4	SW846 8260B	24-DEC-04 02:50	MMC			V8260TCL
N86261-4	SW846 8270C	08-JAN-05 12:49	NAP	16-DEC-04	CAS	AB8270TCL
N86261-5 Collected: 13-DEC-04 18:05 By: RM Received: 15-DEC-04 By: JD TRIP BLANK						
N86261-5	SW846 8260B	24-DEC-04 03:20	MMC			V8260TCL
N86261-6 Collected: 13-DEC-04 17:15 By: RM Received: 15-DEC-04 By: JD WELL AX						
N86261-6	SW846 8260B	24-DEC-04 03:50	MMC			V8260TCL
N86261-6	SW846 8270C	08-JAN-05 18:12	NAP	16-DEC-04	CAS	AB8270TCL

GC/MS

SII-SSA-0014-002713

GC/MS VOLATILE

SII-SSA-0014-002714

ACCUTEST.

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Volatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		*1/ ✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		N/A
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		

12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*

Additional Comments: *1. See footnote for detail.

QC Review Signature: Ilona Chang Date: 11/10/05

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2585-MB1	S70809.D	1	12/23/04	MMC	n/a	n/a	VS2585

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-1, N86261-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2585-MB1	S70809.D	1	12/23/04	MMC	n/a	n/a	VS2585

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-1, N86261-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	79-119%
17060-07-0	1,2-Dichloroethane-D4	89%	68-129%
2037-26-5	Toluene-D8	97%	83-118%
460-00-4	4-Bromofluorobenzene	98%	82-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

SII-SSA-0014-002717

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2588-MB1	S70847.D	1	12/23/04	MMC	n/a	n/a	VS2588

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-3, N86261-4, N86261-5, N86261-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2588-MB1	S70847.D	1	12/23/04	MMC	n/a	n/a	VS2588

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-3, N86261-4, N86261-5, N86261-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	79-119%
17060-07-0	1,2-Dichloroethane-D4	98%	68-129%
2037-26-5	Toluene-D8	101%	83-118%
460-00-4	4-Bromofluorobenzene	100%	82-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2585-BS	S70810.D	1	12/23/04	MMC	n/a	n/a	VS2585

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-1, N86261-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	45.5	91	53-153
71-43-2	Benzene	50	48.0	96	77-119
75-27-4	Bromodichloromethane	50	48.5	97	82-126
75-25-2	Bromoform	50	53.4	107	73-135
74-83-9	Bromomethane	50	53.3	107	61-138
78-93-3	2-Butanone (MEK)	50	46.0	92	58-142
75-15-0	Carbon disulfide	50	33.4	67	60-130
56-23-5	Carbon tetrachloride	50	47.4	95	72-140
108-90-7	Chlorobenzene	50	50.0	100	81-117
75-00-3	Chloroethane	50	53.7	107	69-135
67-66-3	Chloroform	50	45.4	91	80-122
74-87-3	Chloromethane	50	59.7	119	59-132
124-48-1	Dibromochloromethane	50	50.8	102	80-125
75-34-3	1,1-Dichloroethane	50	44.6	89	78-121
107-06-2	1,2-Dichloroethane	50	46.2	92	66-137
75-35-4	1,1-Dichloroethene	50	42.9	86	73-124
156-59-2	cis-1,2-Dichloroethene	50	44.2	88	76-120
156-60-5	trans-1,2-Dichloroethene	50	43.2	86	73-119
78-87-5	1,2-Dichloropropane	50	47.4	95	82-117
10061-01-5	cis-1,3-Dichloropropene	50	47.3	95	81-120
10061-02-6	trans-1,3-Dichloropropene	50	47.6	95	81-125
100-41-4	Ethylbenzene	50	50.7	101	79-120
591-78-6	2-Hexanone	50	45.3	91	66-140
108-10-1	4-Methyl-2-pentanone(MIBK)	50	47.4	95	70-134
75-09-2	Methylene chloride	50	45.5	91	75-122
100-42-5	Styrene	50	53.8	108	80-125
79-34-5	1,1,2,2-Tetrachloroethane	50	49.3	99	76-117
127-18-4	Tetrachloroethene	50	49.5	99	69-130
108-88-3	Toluene	50	48.2	96	81-120
71-55-6	1,1,1-Trichloroethane	50	45.3	91	77-132
79-00-5	1,1,2-Trichloroethane	50	48.6	97	85-117
79-01-6	Trichloroethene	50	47.5	95	83-119
75-01-4	Vinyl chloride	50	60.1	120	65-135
1330-20-7	Xylene (total)	150	151	101	81-119

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2585-BS	S70810.D	1	12/23/04	MMC	n/a	n/a	VS2585

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-1, N86261-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	79-119%
17060-07-0	1,2-Dichloroethane-D4	89%	68-129%
2037-26-5	Toluene-D8	99%	83-118%
460-00-4	4-Bromofluorobenzene	97%	82-120%

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2588-BS	S70848.D	1	12/23/04	MMC	n/a	n/a	VS2588

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-3, N86261-4, N86261-5, N86261-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	48.3	97	53-153
71-43-2	Benzene	50	48.6	97	77-119
75-27-4	Bromodichloromethane	50	49.3	99	82-126
75-25-2	Bromoform	50	49.5	99	73-135
74-83-9	Bromomethane	50	52.0	104	61-138
78-93-3	2-Butanone (MEK)	50	47.1	94	58-142
75-15-0	Carbon disulfide	50	47.6	95	60-130
56-23-5	Carbon tetrachloride	50	50.6	101	72-140
108-90-7	Chlorobenzene	50	51.3	103	81-117
75-00-3	Chloroethane	50	52.9	106	69-135
67-66-3	Chloroform	50	48.5	97	80-122
74-87-3	Chloromethane	50	51.4	103	59-132
124-48-1	Dibromochloromethane	50	50.2	100	80-125
75-34-3	1,1-Dichloroethane	50	50.6	101	78-121
107-06-2	1,2-Dichloroethane	50	51.4	103	66-137
75-35-4	1,1-Dichloroethene	50	47.2	94	73-124
156-59-2	cis-1,2-Dichloroethene	50	47.6	95	76-120
156-60-5	trans-1,2-Dichloroethene	50	47.3	95	73-119
78-87-5	1,2-Dichloropropane	50	49.4	99	82-117
10061-01-5	cis-1,3-Dichloropropene	50	50.3	101	81-120
10061-02-6	trans-1,3-Dichloropropene	50	50.3	101	81-125
100-41-4	Ethylbenzene	50	50.4	101	79-120
591-78-6	2-Hexanone	50	48.6	97	66-140
108-10-1	4-Methyl-2-pentanone(MIBK)	50	49.5	99	70-134
75-09-2	Methylene chloride	50	48.2	96	75-122
100-42-5	Styrene	50	50.9	102	80-125
79-34-5	1,1,2,2-Tetrachloroethane	50	48.5	97	76-117
127-18-4	Tetrachloroethene	50	51.9	104	69-130
108-88-3	Toluene	50	48.3	97	81-120
71-55-6	1,1,1-Trichloroethane	50	48.6	97	77-132
79-00-5	1,1,2-Trichloroethane	50	48.7	97	85-117
79-01-6	Trichloroethene	50	49.5	99	83-119
75-01-4	Vinyl chloride	50	53.6	107	65-135
1330-20-7	Xylene (total)	150	151	101	81-119

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VS2588-BS	S70848.D	1	12/23/04	MMC	n/a	n/a	VS2588

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-3, N86261-4, N86261-5, N86261-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	79-119%
17060-07-0	1,2-Dichloroethane-D4	99%	68-129%
2037-26-5	Toluene-D8	101%	83-118%
460-00-4	4-Bromofluorobenzene	99%	82-120%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N86169-2MS	S70811.D	5	12/23/04	MMC	n/a	n/a	VS2585
N86169-2MSD	S70812.D	5	12/23/04	MMC	n/a	n/a	VS2585
N86169-2	S70813.D	5	12/23/04	MMC	n/a	n/a	VS2585
N86169-2	S70814.D	25	12/23/04	MMC	n/a	n/a	VS2585

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-1, N86261-2

CAS No.	Compound	N86169-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	240	96	224	90	7	47-163/22
71-43-2	Benzene	ND		250	248	99	246	98	1	51-138/10
75-27-4	Bromodichloromethane	ND		250	250	100	248	99	1	80-128/10
75-25-2	Bromoform	ND		250	276	110	267	107	3	68-137/10
74-83-9	Bromomethane	ND		250	234	94	232	93	1	61-141/17
78-93-3	2-Butanone (MEK)	ND		250	253	101	242	97	4	55-149/22
75-15-0	Carbon disulfide	ND		250	232	93	236	94	2	59-128/14
56-23-5	Carbon tetrachloride	2.7	J	250	255	101	253	100	1	71-143/13
108-90-7	Chlorobenzene	ND		250	255	102	254	102	0	78-120/10
75-00-3	Chloroethane	ND		250	231	92	226	90	2	67-139/16
67-66-3	Chloroform	ND		250	237	95	231	92	3	78-126/11
74-87-3	Chloromethane	ND		250	215	86	207	83	4	57-134/17
124-48-1	Dibromochloromethane	ND		250	265	106	260	104	2	79-127/10
75-34-3	1,1-Dichloroethane	ND		250	236	94	231	92	2	75-125/11
107-06-2	1,2-Dichloroethane	ND		250	238	95	234	94	2	63-142/12
75-35-4	1,1-Dichloroethene	4.3	J	250	242	95	240	94	1	69-129/12
156-59-2	cis-1,2-Dichloroethene	10		250	248	95	245	94	1	73-127/10
156-60-5	trans-1,2-Dichloroethene	ND		250	240	96	236	94	2	71-123/11
78-87-5	1,2-Dichloropropane	ND		250	246	98	244	98	1	81-120/10
10061-01-5	cis-1,3-Dichloropropene	ND		250	245	98	241	96	2	78-121/10
10061-02-6	trans-1,3-Dichloropropene	ND		250	244	98	240	96	2	77-128/11
100-41-4	Ethylbenzene	ND		250	254	102	252	101	1	51-142/11
591-78-6	2-Hexanone	ND		250	245	98	226	90	8	64-145/13
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	236	94	223	89	6	66-140/12
75-09-2	Methylene chloride	ND		250	241	96	238	95	1	73-126/10
100-42-5	Styrene	ND		250	260	104	257	103	1	79-130/10
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	254	102	245	98	4	74-121/10
127-18-4	Tetrachloroethene	10.9		250	270	104	270	104	0	70-128/12
108-88-3	Toluene	ND		250	251	100	249	100	1	49-147/10
71-55-6	1,1,1-Trichloroethane	3.4	J	250	242	95	238	94	2	74-136/13
79-00-5	1,1,2-Trichloroethane	ND		250	253	101	247	99	2	83-121/10
79-01-6	Trichloroethene	3700 [b]		250	3210	-196* [a]	3180	-208* [a]	1	75-128/10
75-01-4	Vinyl chloride	ND		250	229	92	228	91	0	60-141/16
1330-20-7	Xylene (total)	ND		750	769	103	759	101	1	44-146/11

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N86169-2MS	S70811.D	5	12/23/04	MMC	n/a	n/a	VS2585
N86169-2MSD	S70812.D	5	12/23/04	MMC	n/a	n/a	VS2585
N86169-2	S70813.D	5	12/23/04	MMC	n/a	n/a	VS2585
N86169-2	S70814.D	25	12/23/04	MMC	n/a	n/a	VS2585

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-1, N86261-2

CAS No.	Surrogate Recoveries	MS	MSD	N86169-2	N86169-2	Limits
1868-53-7	Dibromofluoromethane	96%	95%	93%	96%	79-119%
17060-07-0	1,2-Dichloroethane-D4	89%	87%	88%	89%	68-129%
2037-26-5	Toluene-D8	99%	99%	97%	98%	83-118%
460-00-4	4-Bromofluorobenzene	98%	97%	98%	99%	82-120%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N86426-16MS	S70849.D	10	12/24/04	MMC	n/a	n/a	VS2588
N86426-16MSD	S70850.D	10	12/24/04	MMC	n/a	n/a	VS2588
N86426-16	S70852.D	10	12/24/04	MMC	n/a	n/a	VS2588

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-3, N86261-4, N86261-5, N86261-6

CAS No.	Compound	N86426-16 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		500	512	102	509	102	1	47-163/22
71-43-2	Benzene	ND		500	501	100	494	99	1	51-138/10
75-27-4	Bromodichloromethane	ND		500	502	100	495	99	1	80-128/10
75-25-2	Bromoform	ND		500	508	102	498	100	2	68-137/10
74-83-9	Bromomethane	ND		500	506	101	487	97	4	61-141/17
78-93-3	2-Butanone (MEK)	ND		500	482	96	497	99	3	55-149/22
75-15-0	Carbon disulfide	ND		500	463	93	450	90	3	59-128/14
56-23-5	Carbon tetrachloride	ND		500	518	104	501	100	3	71-143/13
108-90-7	Chlorobenzene	ND		500	513	103	513	103	0	78-120/10
75-00-3	Chloroethane	ND		500	518	104	501	100	3	67-139/16
67-66-3	Chloroform	ND		500	479	96	470	94	2	78-126/11
74-87-3	Chloromethane	ND		500	502	100	481	96	4	57-134/17
124-48-1	Dibromochloromethane	ND		500	508	102	507	101	0	79-127/10
75-34-3	1,1-Dichloroethane	ND		500	502	100	490	98	2	75-125/11
107-06-2	1,2-Dichloroethane	ND		500	517	103	506	101	2	63-142/12
75-35-4	1,1-Dichloroethene	ND		500	471	94	461	92	2	69-129/12
156-59-2	cis-1,2-Dichloroethene	ND		500	472	94	471	94	0	73-127/10
156-60-5	trans-1,2-Dichloroethene	ND		500	473	95	455	91	4	71-123/11
78-87-5	1,2-Dichloropropane	ND		500	507	101	507	101	0	81-120/10
10061-01-5	cis-1,3-Dichloropropene	ND		500	505	101	493	99	2	78-121/10
10061-02-6	trans-1,3-Dichloropropene	ND		500	508	102	497	99	2	77-128/11
100-41-4	Ethylbenzene	ND		500	508	102	503	101	1	51-142/11
591-78-6	2-Hexanone	ND		500	500	100	485	97	3	64-145/13
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		500	499	100	487	97	2	66-140/12
75-09-2	Methylene chloride	ND		500	474	95	465	93	2	73-126/10
100-42-5	Styrene	ND		500	509	102	504	101	1	79-130/10
79-34-5	1,1,2,2-Tetrachloroethane	ND		500	495	99	488	98	1	74-121/10
127-18-4	Tetrachloroethene	1460		500	1870	82	1850	78	1	70-128/12
108-88-3	Toluene	ND		500	495	99	485	97	2	49-147/10
71-55-6	1,1,1-Trichloroethane	ND		500	481	96	469	94	3	74-136/13
79-00-5	1,1,2-Trichloroethane	ND		500	499	100	489	98	2	83-121/10
79-01-6	Trichloroethene	ND		500	506	101	495	99	2	75-128/10
75-01-4	Vinyl chloride	ND		500	519	104	504	101	3	60-141/16
1330-20-7	Xylene (total)	4.2	J	1500	1530	102	1500	100	2	44-146/11

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N86426-16MS	S70849.D	10	12/24/04	MMC	n/a	n/a	VS2588
N86426-16MSD	S70850.D	10	12/24/04	MMC	n/a	n/a	VS2588
N86426-16	S70852.D	10	12/24/04	MMC	n/a	n/a	VS2588

The QC reported here applies to the following samples: **Method:** SW846 8260B

N86261-3, N86261-4, N86261-5, N86261-6

CAS No.	Surrogate Recoveries	MS	MSD	N86426-16	Limits
1868-53-7	Dibromofluoromethane	97%	96%	97%	79-119%
17060-07-0	1,2-Dichloroethane-D4	97%	96%	99%	68-129%
2037-26-5	Toluene-D8	101%	100%	100%	83-118%
460-00-4	4-Bromofluorobenzene	99%	99%	100%	82-120%

Instrument Performance Check (BFB)

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	VS2585-BFB	**Injection Date:**	12/22/04
Lab File ID:	S70797.D	**Injection Time:**	19:37
Instrument ID:	GCMSS		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	2513	15.2		Pass
75	30.0 - 60.0% of mass 95	7106	43.0		Pass
95	Base peak, 100% relative abundance	16507	100.0		Pass
96	5.0 - 9.0% of mass 95	1129	6.8		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	15383	93.2		Pass
175	5.0 - 9.0% of mass 174	1106	6.7	(7.2) [a]	Pass
176	95.0 - 101.0% of mass 174	14932	90.5	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	1003	6.1	(6.7) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VS2585-IC2585	S70799.D	12/22/04	20:37	01:00	Initial cal 5
VS2585-IC2585	S70800.D	12/22/04	21:06	01:29	Initial cal 2
VS2585-IC2585	S70801.D	12/22/04	21:37	02:00	Initial cal 1
VS2585-IC2585	S70803.D	12/22/04	22:36	02:59	Initial cal 20
VS2585-ICC2585	S70804.D	12/22/04	23:06	03:29	Initial cal 50
VS2585-IC2585	S70805.D	12/22/04	23:36	03:59	Initial cal 100
VS2585-IC2585	S70806.D	12/23/04	00:06	04:29	Initial cal 200
VS2585-MB1	S70809.D	12/23/04	01:36	05:59	Method Blank
VS2585-BS	S70810.D	12/23/04	02:06	06:29	Blank Spike
N86169-2MS	S70811.D	12/23/04	02:36	06:59	Matrix Spike
N86169-2MSD	S70812.D	12/23/04	03:06	07:29	Matrix Spike Duplicate
N86169-2	S70813.D	12/23/04	03:36	07:59	(used for QC only; not part of job N86261)
N86169-2	S70814.D	12/23/04	04:06	08:29	(used for QC only; not part of job N86261)
ZZZZZZ	S70815.D	12/23/04	04:36	08:59	(unrelated sample)
ZZZZZZ	S70816.D	12/23/04	05:06	09:29	(unrelated sample)
ZZZZZZ	S70817.D	12/23/04	05:36	09:59	(unrelated sample)
ZZZZZZ	S70818.D	12/23/04	06:06	10:29	(unrelated sample)
N86261-1	S70819.D	12/23/04	06:36	10:59	WELL AY
N86261-2	S70820.D	12/23/04	07:07	11:30	WELL AV

SII-SSA-0014-002728

Instrument Performance Check (BFB)

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	VS2588-BFB	**Injection Date:**	12/23/04
Lab File ID:	S70844.D	**Injection Time:**	21:49
Instrument ID:	GCMSS		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	2823	16.8		Pass
75	30.0 - 60.0% of mass 95	7610	45.2		Pass
95	Base peak, 100% relative abundance	16852	100.0		Pass
96	5.0 - 9.0% of mass 95	1141	6.8		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	16207	96.2		Pass
175	5.0 - 9.0% of mass 174	1147	6.8	(7.1) [a]	Pass
176	95.0 - 101.0% of mass 174	15861	94.1	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	1018	6.0	(6.4) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VS2588-CC2585	S70845.D	12/23/04	22:19	00:30	Continuing cal 50
VS2588-MB1	S70847.D	12/23/04	23:19	01:30	Method Blank
VS2588-BS	S70848.D	12/23/04	23:49	02:00	Blank Spike
N86426-16MS	S70849.D	12/24/04	00:20	02:31	Matrix Spike
N86426-16MSD	S70850.D	12/24/04	00:50	03:01	Matrix Spike Duplicate
N86426-16	S70852.D	12/24/04	01:50	04:01	(used for QC only; not part of job N86261)
N86261-3	S70853.D	12/24/04	02:20	04:31	WELL X
N86261-4	S70854.D	12/24/04	02:50	05:01	FB-2
N86261-5	S70855.D	12/24/04	03:20	05:31	TRIP BLANK
N86261-6	S70856.D	12/24/04	03:50	06:01	WELL AX
ZZZZZZ	S70857.D	12/24/04	04:20	06:31	(unrelated sample)
ZZZZZZ	S70858.D	12/24/04	04:50	07:01	(unrelated sample)
ZZZZZZ	S70859.D	12/24/04	05:20	07:31	(unrelated sample)
ZZZZZZ	S70860.D	12/24/04	05:49	08:00	(unrelated sample)
ZZZZZZ	S70861.D	12/24/04	06:19	08:30	(unrelated sample)
ZZZZZZ	S70862.D	12/24/04	06:49	09:00	(unrelated sample)
ZZZZZZ	S70863.D	12/24/04	07:19	09:30	(unrelated sample)
ZZZZZZ	S70864.D	12/24/04	07:49	10:00	(unrelated sample)
ZZZZZZ	S70865.D	12/24/04	08:19	10:30	(unrelated sample)
ZZZZZZ	S70866.D	12/24/04	08:49	11:00	(unrelated sample)
ZZZZZZ	S70867.D	12/24/04	09:19	11:30	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	VS2585-ICC2585	**Injection Date:**	12/22/04
Lab File ID:	S70804.D	**Injection Time:**	23:06
Instrument ID:	GCMSS	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	142231	7.59	257444	9.60	389270	10.47	380451	13.70	240635	16.26
Upper Limit [a]	284462	8.09	514888	10.10	778540	10.97	760902	14.20	481270	16.76
Lower Limit [b]	71116	7.09	128722	9.10	194635	9.97	190226	13.20	120318	15.76
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**
VS2585-MB1	146231	7.59	289404	9.60	417767	10.48	400467	13.70	255030	16.25
VS2585-BS	147868	7.59	288868	9.60	421316	10.47	401379	13.70	257236	16.26
N86169-2MS	151407	7.59	290286	9.60	426442	10.47	407447	13.70	258599	16.25
N86169-2MSD	140254	7.59	293852	9.60	428565	10.47	411518	13.70	260543	16.25
N86169-2	147506	7.59	295324	9.59	424180	10.48	409233	13.70	257996	16.26
N86169-2	146803	7.59	289224	9.60	415806	10.48	401922	13.70	253438	16.25
ZZZZZZ	125035	7.59	283538	9.60	409689	10.48	394160	13.70	251281	16.26
ZZZZZZ	131835	7.59	280986	9.60	406180	10.48	392546	13.70	246523	16.26
ZZZZZZ	130848	7.59	270971	9.60	395518	10.48	384068	13.70	242839	16.26
ZZZZZZ	125106	7.59	263077	9.60	387494	10.48	373512	13.70	236236	16.26
N86261-1	110965	7.59	254342	9.59	376908	10.48	363663	13.70	227335	16.25
N86261-2	107650	7.59	250030	9.60	371416	10.48	359174	13.70	225266	16.26

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	VS2588-CC2585	**Injection Date:**	12/23/04
Lab File ID:	S70845.D	**Injection Time:**	22:19
Instrument ID:	GCMSS	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	137731	7.59	257340	9.60	382506	10.48	359753	13.70	228607	16.26
Upper Limit [a]	275462	8.09	514680	10.10	765012	10.98	719506	14.20	457214	16.76
Lower Limit [b]	68866	7.09	128670	9.10	191253	9.98	179877	13.20	114304	15.76

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VS2588-MB1	131125	7.59	247644	9.60	358779	10.48	342020	13.70	218134	16.25
VS2588-BS	131699	7.59	248149	9.60	372637	10.48	352707	13.70	225729	16.25
N86426-16MS	136033	7.59	255696	9.60	375540	10.48	358609	13.70	227910	16.25
N86426-16MSD	136296	7.59	261044	9.60	383760	10.48	363212	13.70	229267	16.26
N86426-16	133500	7.59	252007	9.60	368707	10.47	351813	13.70	222458	16.25
N86261-3	120415	7.59	244167	9.60	355427	10.48	337546	13.70	215032	16.26
N86261-4	128228	7.59	235560	9.60	347723	10.48	329152	13.70	208765	16.25
N86261-5	123466	7.59	230812	9.60	338799	10.47	324546	13.70	202292	16.25
N86261-6	116999	7.59	223659	9.60	330045	10.48	316585	13.70	199045	16.26
ZZZZZZ	122387	7.59	217805	9.60	323296	10.48	309483	13.70	197850	16.25
ZZZZZZ	109691	7.59	217564	9.60	319471	10.48	308098	13.70	194245	16.26
ZZZZZZ	120296	7.59	214180	9.60	318943	10.48	305573	13.70	192701	16.25
ZZZZZZ	118918	7.59	211713	9.60	316009	10.47	298431	13.70	190263	16.25
ZZZZZZ	106796	7.59	208786	9.60	311868	10.48	300189	13.70	189700	16.25
ZZZZZZ	115458	7.59	207976	9.60	313487	10.48	297167	13.70	187999	16.25
ZZZZZZ	112796	7.59	206573	9.60	310471	10.47	296110	13.70	187184	16.25
ZZZZZZ	104337	7.59	205003	9.60	307457	10.48	293669	13.70	186044	16.25
ZZZZZZ	112795	7.59	206563	9.60	309066	10.48	294663	13.70	188296	16.25
ZZZZZZ	112528	7.59	206622	9.60	310173	10.48	295909	13.70	189108	16.25
ZZZZZZ	113603	7.59	204502	9.60	306543	10.48	294262	13.70	186671	16.26

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
N86261-1	S70819.D	99.0	95.0	98.0	101.0
N86261-2	S70820.D	99.0	97.0	98.0	101.0
N86261-3	S70853.D	97.0	99.0	100.0	100.0
N86261-4	S70854.D	98.0	101.0	100.0	102.0
N86261-5	S70855.D	99.0	103.0	101.0	103.0
N86261-6	S70856.D	100.0	105.0	101.0	101.0
N86169-2MS	S70811.D	96.0	89.0	99.0	98.0
N86169-2MSD	S70812.D	95.0	87.0	99.0	97.0
N86426-16MS	S70849.D	97.0	97.0	101.0	99.0
N86426-16MSD	S70850.D	96.0	96.0	100.0	99.0
VS2585-BS	S70810.D	95.0	89.0	99.0	97.0
VS2585-MB1	S70809.D	95.0	89.0	97.0	98.0
VS2588-BS	S70848.D	98.0	99.0	101.0	99.0
VS2588-MB1	S70847.D	97.0	98.0	101.0	100.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-119%
S2 = 1,2-Dichloroethane-D4	68-129%
S3 = Toluene-D8	83-118%
S4 = 4-Bromofluorobenzene	82-120%

Initial Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: VS2585-ICC2585
Lab FileID: S70804.D

Response Factor Report MSS

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration

Calibration Files
1 =S70801.D 100 =S70805.D 50 =S70804.D 20 =S70803.D
200 =S70806.D 5 =S70799.D 2 =S70800.D =

Compound	1	100	50	20	200	5	2	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD								
2) tertiary but		1.133	1.150	1.175	1.105	1.084	1.047	1.116	4.16
3) 1,4-dioxane		0.110	0.106	0.092	0.106	0.082		0.099	12.05
4) I pentafluorobenzene	ISTD								
5) chlorodifluo	0.494	0.484	0.521	0.561	0.454	0.539	0.487	0.506	7.26
6) dichlorodifl		0.427	0.445	0.470	0.390	0.436		0.434	6.71
7) chloromethan	0.497	0.438	0.466	0.499	0.400	0.474	0.447	0.460	7.65
8) vinyl chlori	0.470	0.502	0.534	0.546	0.474	0.515	0.479	0.503	5.99
9) bromomethane	0.395	0.355	0.386	0.411	0.312	0.417	0.390	0.381	9.57
10) chloroethane	0.286	0.261	0.292	0.311	0.221	0.312	0.280	0.280	11.29
11) trichloroflu		0.614	0.640	0.659	0.579	0.582		0.615	5.74
12) ethyl ether		0.278	0.288	0.293	0.270	0.274	0.235	0.273	7.55
13) acrolein	0.078	0.060	0.069	0.081		0.082	0.079	0.075	11.43
14) 1,1-dichloro	0.548	0.483	0.484	0.509	0.470	0.503	0.486	0.497	5.21
15) acetone		0.106	0.122	0.124	0.101	0.120		0.115	9.22
16) allyl chlori	1.370	1.188	1.330	1.377	1.098	1.411	1.359	1.305	8.90
17) acetonitrile		0.034	0.042	0.044	0.032	0.051		0.040	18.62
----- Linear regression ----- Coefficient = 0.9959									
Response Ratio = 0.05590 + 0.03105 *A									
18) iodomethane	0.923	0.957	0.967	0.984	0.947	0.955	0.872	0.943	3.90
19) iso-butyl al		0.006	0.007	0.007	0.006	0.006		0.006#	6.78
20) carbon disul	1.886	1.640	1.711	1.772	1.575	1.793	1.645	1.717	6.22
21) methylene ch	0.555	0.529	0.548	0.570	0.514	0.567	0.489	0.539	5.53
22) methyl aceta		0.294	0.332	0.333	0.274	0.320		0.311	8.23
23) methyl tert	1.504	1.401	1.491	1.535	1.333	1.557	1.462	1.469	5.34
24) trans-1,2-di	0.608	0.516	0.533	0.540	0.500	0.546	0.525	0.538	6.37
25) di-isopropyl	1.471	1.389	1.510	1.577	1.282	1.584	1.462	1.468	7.26
26) 2-butanone		0.057	0.060	0.058	0.054	0.040		0.054	15.43
----- Linear regression ----- Coefficient = 0.9983									
Response Ratio = 0.00244 + 0.05419 *A									
27) 1,1-dichloro	0.856	0.812	0.866	0.900	0.773	0.871	0.826	0.843	5.05
28) chloroprene	0.438	0.510	0.543	0.563	0.489	0.521	0.465	0.504	8.66
29) acrylonitril		0.162	0.180	0.179	0.148	0.181	0.146	0.166	9.73
30) vinyl acetat		0.086	0.090	0.081	0.085	0.047		0.078	22.54
----- Linear regression ----- Coefficient = 0.9993									
Response Ratio = -0.00019 + 0.08516 *A									
31) ethyl tert-b	1.517	1.517	1.614	1.656	1.453	1.653	1.547	1.565	4.95
32) ethyl acetat		0.056	0.062	0.060	0.052	0.045		0.055	12.54
33) 2,2-dichloro	0.703	0.638	0.677	0.722	0.599	0.728	0.662	0.676	6.93
34) cis-1,2-dich	0.609	0.563	0.582	0.599	0.542	0.601	0.574	0.582	4.08
35) propionitril	0.048	0.064	0.071	0.072	0.059	0.068	0.058	0.063	13.68
36) bromochlorom	0.243	0.279	0.284	0.289	0.275	0.276	0.254	0.271	6.17

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Initial Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: VS2585-ICC2585
Lab FileID: S70804.D

37)	tetrahydrofu		0.123	0.148	0.148	0.114	0.147	0.140	0.137	10.80
38)	chloroform	0.871	0.824	0.874	0.903	0.795	0.873	0.854	0.856	4.19
39)	dibromofluor	0.461	0.440	0.451	0.455	0.436	0.466	0.460	0.453	2.48
40)	1,2-dichloro	0.447	0.398	0.423	0.434	0.380	0.455	0.452	0.427	6.67
41)	freon 113	0.335	0.419	0.412	0.415	0.407	0.397	0.343	0.390	9.08
42)	methacryloni		0.230	0.251	0.257	0.218	0.234		0.238	6.60
43)	1,1,1-trichl	0.772	0.726	0.766	0.797	0.703	0.782	0.735	0.755	4.48
44)	Cyclohexane	0.755	0.732	0.756	0.780	0.701	0.782	0.678	0.741	5.32
45)	I 1,4-difluorobenzene	----------	ISTD	----------						
46)	Di-isobutyle	0.617	0.649	0.660	0.654	0.638	0.642	0.595	0.636	3.62
47)	epichlorohyd		0.033	0.036	0.035	0.031	0.034	0.026	0.033	11.42
48)	n-butyl alco		0.010	0.011	0.010	0.009	0.009		0.010#	10.55
49)	carbon tetra	0.428	0.443	0.450	0.457	0.437	0.449	0.398	0.437	4.55
50)	1,1-dichloro	0.417	0.409	0.424	0.425	0.392	0.431	0.401	0.414	3.41
51)	hexane	0.302	0.297	0.304	0.309	0.281	0.302	0.287	0.297	3.31
52)	tert amyl al								0.000#	-1.00
53)	benzene	1.378	1.235	1.309	1.348	1.114	1.361	1.302	1.292	7.11
54)	tert-amyl me	1.042	1.005	1.070	1.080	0.920	1.077	1.043	1.034	5.48
55)	heptane	0.108	0.128	0.130	0.135	0.124	0.130	0.117	0.125	7.58
56)	isopropyl ac		0.489	0.533	0.541	0.466	0.543	0.497	0.512	6.26
57)	1,2-dichloro	0.352	0.341	0.364	0.376	0.324	0.376	0.353	0.355	5.30
58)	trichloroeth	0.321	0.342	0.351	0.350	0.338	0.351	0.319	0.339	4.07
59)	2-nitropropa		0.255	0.288	0.306	0.223	0.318	0.276	0.278	12.51
60)	2-chloroethy	0.149	0.184	0.198	0.193	0.170	0.181	0.162	0.177	9.74
61)	methyl metha		0.311	0.323	0.316	0.300	0.299		0.310	3.27
62)	1,2-dichloro	0.310	0.326	0.339	0.344	0.315	0.336	0.322	0.328	3.90
63)	dibromometha	0.169	0.205	0.211	0.215	0.201	0.201	0.191	0.199	7.65
64)	methylcycloh	0.415	0.460	0.462	0.462	0.449	0.440	0.422	0.444	4.34
65)	bromodichlor	0.385	0.435	0.452	0.451	0.426	0.438	0.404	0.427	5.82
66)	cis-1,3-dich	0.504	0.544	0.558	0.565	0.531	0.544	0.515	0.537	4.10
67)	toluene-d8 (	1.139	1.159	1.167	1.156	1.163	1.156	1.149	1.155	0.82
68)	4-methyl-2-p		0.455	0.509	0.527	0.410	0.535	0.489	0.488	9.74
69)	toluene	0.838	0.853	0.870	0.875	0.833	0.835	0.799	0.844	3.06
70)	3-methyl-1-b	0.018	0.018	0.020	0.021	0.016	0.021	0.016	0.018	11.64
71)	trans-1,3-di	0.448	0.474	0.497	0.499	0.464	0.479	0.439	0.471	4.83
72)	ethyl methac	0.319	0.426	0.448	0.439	0.417	0.418	0.363	0.404	11.50
73)	1,1,2-trichl	0.227	0.253	0.263	0.262	0.251	0.256	0.227	0.248	6.11
74)	2-hexanone		0.178	0.182	0.169	0.171	0.105		0.161	19.70

----- Linear regression ----- Coefficient = 0.9990

Response Ratio = 0.00202 + 0.17205 *A

75)	I chlorobenzene-d5	----------	ISTD	----------						
76)	tetrachloroe	0.308	0.327	0.328	0.327	0.332	0.312	0.288	0.317	4.99
77)	1,3-dichloro	0.472	0.485	0.513	0.527	0.468	0.510	0.488	0.495	4.51
78)	butyl acetat		0.209	0.230	0.234	0.195	0.229	0.184	0.213	9.68
79)	dibromochlor	0.342	0.390	0.393	0.388	0.391	0.368	0.329	0.372	7.05
80)	1,2-dibromoe	0.277	0.331	0.342	0.335	0.328	0.324	0.293	0.319	7.49
81)	chlorobenzen	1.004	1.002	1.016	1.033	0.986	1.006	0.968	1.002	2.06
82)	1,1,1,2-tetr	0.370	0.389	0.394	0.393	0.390	0.380	0.342	0.380	4.96
83)	ethylbenzene	1.524	1.556	1.600	1.626	1.506	1.583	1.483	1.554	3.36
84)	m,p-xylene	0.640	0.652	0.669	0.685	0.638	0.664	0.618	0.652	3.43
85)	o-xylene	0.686	0.684	0.698	0.714	0.672	0.678	0.639	0.682	3.43
86)	styrene	1.028	1.109	1.128	1.132	1.088	1.068	0.976	1.075	5.27
87)	bromoform	0.231	0.300	0.299	0.286	0.307	0.267	0.235	0.275	11.39
88)	I 1,4-dichlorobenzene-d	----------	ISTD	----------						
89)	isopropylben	2.301	2.320	2.373	2.388	2.262	2.276	2.179	2.300	3.08
90)	4-bromofluor	0.779	0.742	0.757	0.759	0.736	0.769	0.773	0.759	2.09

Initial Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: VS2585-ICC2585
Lab FileID: S70804.D

91)	cyclohexanon								0.000#	-1.00
92)	bromobenzene	0.766	0.774	0.788	0.780	0.770	0.761	0.712	0.765	3.26
93)	1,1,2,2-tetr	0.710	0.700	0.741	0.732	0.678	0.724	0.707	0.713	3.00
94)	trans-1,4-di	0.141	0.164	0.175	0.190	0.166	0.184	0.154	0.168	10.25
95)	1,2,3-trichl		0.194	0.203	0.203	0.186	0.205	0.189	0.197	4.20
96)	n-propylbenz	2.820	2.799	2.923	2.981	2.663	2.908	2.764	2.837	3.82
97)	2-chlorotolu	2.124	2.041	2.099	2.125	1.988	2.094	2.065	2.077	2.38
98)	4-chlorotolu	1.968	1.895	1.947	1.989	1.852	1.955	1.895	1.928	2.54
99)	1,3,5-trimet	2.131	2.141	2.170	2.193	2.081	2.098	1.984	2.114	3.26
100)	tert-butylbe	1.137	1.127	1.148	1.180	1.100	1.121	1.039	1.122	3.93
101)	pentachloroe	0.440	0.530	0.530	0.519	0.528	0.478	0.456	0.497	7.77
102)	1,2,4-trimet	2.248	2.279	2.311	2.343	2.222	2.218	2.123	2.249	3.21
103)	sec-butylben	2.518	2.586	2.629	2.615	2.504	2.471	2.361	2.526	3.72
104)	1,3-dichloro	1.529	1.504	1.517	1.525	1.486	1.503	1.399	1.495	2.98
105)	p-isopropylt	2.137	2.268	2.261	2.272	2.195	2.158	2.023	2.188	4.15
106)	1,4-dichloro	1.620	1.578	1.586	1.610	1.537	1.557	1.528	1.574	2.21
107)	vinyltoluene								0.000#	-1.00
108)	1,2-dichloro	1.488	1.520	1.535	1.537	1.457	1.505	1.422	1.495	2.85
109)	n-butylbenze	1.836	1.868	1.889	1.919	1.786	1.834	1.710	1.835	3.80
110)	1,2-dibromo-		0.128	0.137	0.138	0.117	0.136	0.125	0.130	6.36
111)	1,2,4-trichl	0.897	0.926	0.953	0.958	0.886	0.900	0.841	0.909	4.48
112)	hexachlorobu		0.361	0.375	0.388	0.349	0.383	0.379	0.373	3.91
113)	naphthalene	2.123	2.197	2.288	2.307	2.026	2.233	2.060	2.176	5.03
114)	1,2,3-trichl	0.740	0.770	0.801	0.824	0.738	0.798	0.730	0.771	4.79
115)	hexachloroet		0.450	0.438	0.420	0.453	0.378	0.337	0.413	11.19

(#) = Out of Range ### Number of calibration levels exceeded format ###

MS2585.M Thu Dec 23 16:50:49 2004 RPT1

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: VS2588-CC2585
Lab FileID: S70845.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\S70845.D
Acq On : 23 Dec 2004 10:19 pm
Sample : cc2585-50
Misc : MS8620,VS2588,5,,,,1
MS Integration Params: LSCINT.P

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	97	0.00	7.59
2	M	tertiary butyl alcohol	1.116	1.150	-3.0	97	0.00	7.70
3	M	1,4-dioxane	0.099	0.096	3.0	88	0.00	11.18
4	I	pentafluorobenzene	1.000	1.000	0.0	100	0.00	9.60
5	M	chlorodifluoromethane	0.506	0.558	-10.3	107	0.00	4.41
6	M	dichlorodifluoromethane	0.434	0.432	0.5	97	0.00	4.40
7	M	chloromethane	0.460	0.475	-3.3	102	0.00	4.76
8	M	vinyl chloride	0.503	0.536	-6.6	100	0.00	5.01
9	M	bromomethane	0.381	0.397	-4.2	103	0.00	5.67
10	M	chloroethane	0.280	0.295	-5.4	101	0.00	5.83
11	M	trichlorofluoromethane	0.615	0.632	-2.8	99	0.00	6.26
12	M	ethyl ether	0.273	0.270	1.1	94	0.00	6.61
13	M	acrolein	0.075	0.054	28.0#	78	0.00	6.88
14	M	1,1-dichloroethene	0.497	0.466	6.2	96	0.00	7.02
15	M	acetone	0.115	0.113	1.7	93	0.00	7.08
16	M	allyl chloride	1.305	1.268	2.8	95	0.00	7.49
			True	Calc.	% Drift			
17	M	acetonitrile	500.000	511.327	-2.3	90	0.00	7.48
			AvgRF	CCRF	% Dev			
18	M	iodomethane	0.943	0.955	-1.3	99	0.00	7.30
19	M	iso-butyl alcohol	0.006	0.007#	-16.7	99	0.00	9.90
20	M	carbon disulfide	1.717	1.602	6.7	94	0.00	7.43
21	M	methylene chloride	0.539	0.523	3.0	95	0.00	7.67
22	M	methyl acetate	0.311	0.318	-2.3	96	0.00	7.46
23	M	methyl tert butyl ether	1.469	1.417	3.5	95	0.00	7.93
24	M	trans-1,2-dichloroethene	0.538	0.513	4.6	96	0.00	7.99
25	M	di-isopropyl ether	1.468	1.468	0.0	97	0.00	8.43
			True	Calc.	% Drift			
26	M	2-butanone	50.000	48.108	3.8	91	0.00	9.14
			AvgRF	CCRF	% Dev			
27	M	1,1-dichloroethane	0.843	0.845	-0.2	97	0.00	8.51
28	M	chloroprene	0.504	0.536	-6.3	99	0.00	8.60
29	M	acrylonitrile	0.166	0.166	0.0	92	0.00	7.97
			True	Calc.	% Drift			
30	M	vinyl acetate	50.000	46.715	6.6	88	0.00	8.46

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: VS2588-CC2585
Lab FileID: S70845.D

			AvgRF	CCRF	% Dev			
31	M	ethyl tert-butyl ether	1.565	1.570	-0.3	97	0.00	8.85
32	M	ethyl acetate	0.055	0.058	-5.5	93	0.00	9.12
33	M	2,2-dichloropropane	0.676	0.675	0.1	100	0.00	9.18
34	M	cis-1,2-dichloroethene	0.582	0.555	4.6	95	0.00	9.18
35	M	propionitrile	0.063	0.065	-3.2	91	0.00	9.25
36	M	bromochloromethane	0.271	0.274	-1.1	96	0.00	9.47
37	M	tetrahydrofuran	0.137	0.128	6.6	86	0.00	9.50
38	M	chloroform	0.856	0.816	4.7	93	0.00	9.50
39	S	dibromofluoromethane (s)	0.453	0.444	2.0	98	0.00	9.69
40	S	1,2-dichloroethane-d4 (s)	0.427	0.413	3.3	98	0.00	10.09
41	M	freon 113	0.390	0.438	-12.3	106	0.00	6.97
42	M	methacrylonitrile	0.238	0.232	2.5	93	0.00	9.41
43	M	1,1,1-trichloroethane	0.755	0.731	3.2	95	0.00	9.74
44	M	Cyclohexane	0.741	0.758	-2.3	100	0.00	9.81
45	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	10.48
46	M	Di-isobutylene	0.636	0.663	-4.2	99	0.00	10.66
47	M	epichlorohydrin	0.033	0.033	0.0	91	0.00	11.72
48	M	n-butyl alcohol	0.010	0.010	0.0	89	0.00	10.57
49	M	carbon tetrachloride	0.437	0.442	-1.1	97	0.00	9.93
50	M	1,1-dichloropropene	0.414	0.424	-2.4	98	0.00	9.91
51	M	hexane	0.297	0.317	-6.7	103	0.00	8.23
52	M	tert amyl alcohol	0.000	0.000#	0.0	93	0.00	10.02
53	M	benzene	1.292	1.270	1.7	95	0.00	10.16
54	M	tert-amyl methyl ether	1.034	1.037	-0.3	95	0.00	10.14
55	M	heptane	0.125	0.134	-7.2	101	0.00	10.25
56	M	isopropyl acetate	0.512	0.515	-0.6	95	0.00	10.02
57	M	1,2-dichloroethane	0.355	0.359	-1.1	97	0.00	10.18
58	M	trichloroethene	0.339	0.336	0.9	94	0.00	10.82
59	M	2-nitropropane	0.278	0.278	0.0	95	0.00	11.88
60	M	2-chloroethyl vinyl ether	0.177	0.188	-6.2	94	0.00	11.56
61	M	methyl methacrylate	0.310	0.305	1.6	93	0.00	11.04
62	M	1,2-dichloropropane	0.328	0.330	-0.6	96	0.00	11.08
63	M	dibromomethane	0.199	0.199	0.0	92	0.00	11.25
64	M	methylcyclohexane	0.444	0.473	-6.5	101	0.00	11.02
65	M	bromodichloromethane	0.427	0.423	0.9	92	0.00	11.36
66	M	cis-1,3-dichloropropene	0.537	0.540	-0.6	95	0.00	11.80
67	S	toluene-d8 (s)	1.155	1.152	0.3	97	0.00	12.09
68	M	4-methyl-2-pentanone	0.488	0.477	2.3	92	0.00	11.88
69	M	toluene	0.844	0.822	2.6	93	0.00	12.17
70	M	3-methyl-1-butanol	0.018	0.018	0.0	90	0.00	11.88
71	M	trans-1,3-dichloropropene	0.471	0.472	-0.2	93	0.00	12.37
72	M	ethyl methacrylate	0.404	0.410	-1.5	90	0.00	12.32
73	M	1,1,2-trichloroethane	0.248	0.244	1.6	91	0.00	12.60
			True	Calc.	% Drift			
74	M	2-hexanone	50.000	49.419	1.2	93	0.00	12.76
			AvgRF	CCRF	% Dev			
75	I	chlorobenzene-d5	1.000	1.000	0.0	95	0.00	13.70
76	M	tetrachloroethene	0.317	0.323	-1.9	93	0.00	12.78
77	M	1,3-dichloropropane	0.495	0.503	-1.6	93	0.00	12.80
78	M	butyl acetate	0.213	0.223	-4.7	92	0.00	12.81
79	M	dibromochloromethane	0.372	0.372	0.0	89	0.00	13.09
80	M	1,2-dibromoethane	0.319	0.322	-0.9	89	0.00	13.26
81	M	chlorobenzene	1.002	1.031	-2.9	96	0.00	13.74
82	M	1,1,1,2-tetrachloroethane	0.380	0.395	-3.9	95	0.00	13.80
83	M	ethylbenzene	1.554	1.578	-1.5	93	0.00	13.77

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: VS2588-CC2585
Lab FileID: S70845.D

84	M	m,p-xylene	0.652	0.654	-0.3	92	0.00	13.89
85	M	o-xylene	0.682	0.684	-0.3	93	0.00	14.35
86	M	styrene	1.075	1.089	-1.3	91	0.00	14.36
87	M	bromoform	0.275	0.274	0.4	86	0.00	14.69
88	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	16.26
89	M	isopropylbenzene	2.300	2.334	-1.5	93	0.00	14.71
90	S	4-bromofluorobenzene (s)	0.759	0.751	1.1	94	0.00	14.96
91	M	cyclohexanone	0.000	0.037	0.0	0#	0.00	14.95
92	M	bromobenzene	0.765	0.757	1.0	91	0.00	15.19
93	M	1,1,2,2-tetrachloroethane	0.713	0.695	2.5	89	0.00	15.07
94	M	trans-1,4-dichloro-2-bute	0.168	0.172	-2.4	94	0.00	15.12
95	M	1,2,3-trichloropropane	0.197	0.189	4.1	89	0.00	15.16
96	M	n-propylbenzene	2.837	2.846	-0.3	93	0.00	15.17
97	M	2-chlorotoluene	2.077	2.051	1.3	93	0.00	15.35
98	M	4-chlorotoluene	1.928	1.884	2.3	92	0.00	15.46
99	M	1,3,5-trimethylbenzene	2.114	2.132	-0.9	93	0.00	15.32
100	M	tert-butylbenzene	1.122	1.145	-2.0	95	0.00	15.72
101	M	pentachloroethane	0.497	0.512	-3.0	92	0.00	15.84
102	M	1,2,4-trimethylbenzene	2.249	2.244	0.2	92	0.00	15.77
103	M	sec-butylbenzene	2.526	2.536	-0.4	92	0.00	15.95
104	M	1,3-dichlorobenzene	1.495	1.455	2.7	91	0.00	16.19
105	M	p-isopropyltoluene	2.188	2.225	-1.7	93	0.00	16.08
106	M	1,4-dichlorobenzene	1.574	1.515	3.7	91	0.00	16.28
107	M	vinyltoluene	0.000	0.168	0.0	0#	0.00	16.26
108	M	1,2-dichlorobenzene	1.495	1.470	1.7	91	0.00	16.73
109	M	n-butylbenzene	1.835	1.839	-0.2	92	0.00	16.54
110	M	1,2-dibromo-3-chloropropa	0.130	0.132	-1.5	92	0.00	17.59
111	M	1,2,4-trichlorobenzene	0.909	0.937	-3.1	93	0.00	18.56
112	M	hexachlorobutadiene	0.373	0.362	2.9	92	0.00	18.67
113	M	naphthalene	2.176	2.147	1.3	89	0.00	18.92
114	M	1,2,3-trichlorobenzene	0.771	0.788	-2.2	93	0.00	19.22
115	M	hexachloroethane	0.413	0.433	-4.8	94	0.00	17.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

S70804.D MS2585.M Mon Dec 27 10:56:08 2004 RPT1

Data File : C:\HPCHEM\1\DATA\S70819.D
Acq On : 23 Dec 2004 6:36 am
Sample : n86261-1
Misc : MS8583,VS2585,5,,,,1
MS Integration Params: LSCINT.P
uant Time: Dec 23 16:57 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	110965	500.00	ug/L	0.00
4) pentafluorobenzene	9.59	168	254342	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	376908	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	363663	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.25	152	227335	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	113715	49.39	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 98.78%			
40) 1,2-dichloroethane-d4 (s)	10.10	65	103606	47.71	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 95.42%			
67) toluene-d8 (s)	12.09	98	427205	49.05	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.10%			
90) 4-bromofluorobenzene (s)	14.96	95	174136	50.45	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 100.90%			
Target Compounds						Qvalue
76) tetrachloroethene	12.78	164	852	0.37	ug/L	88

(#) = qualifier out of range (m) = manual integration

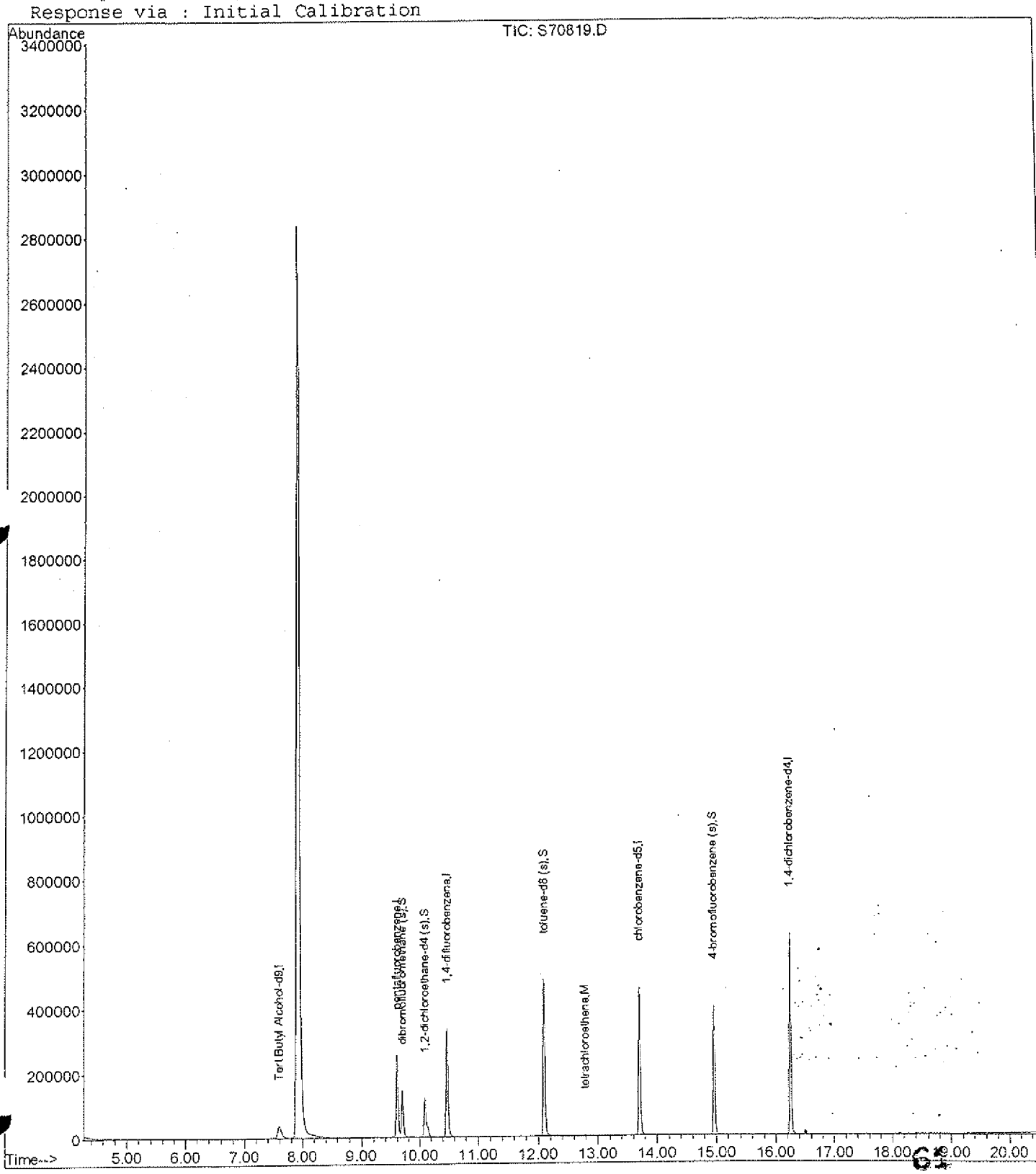
SII-SSA-0014-002739

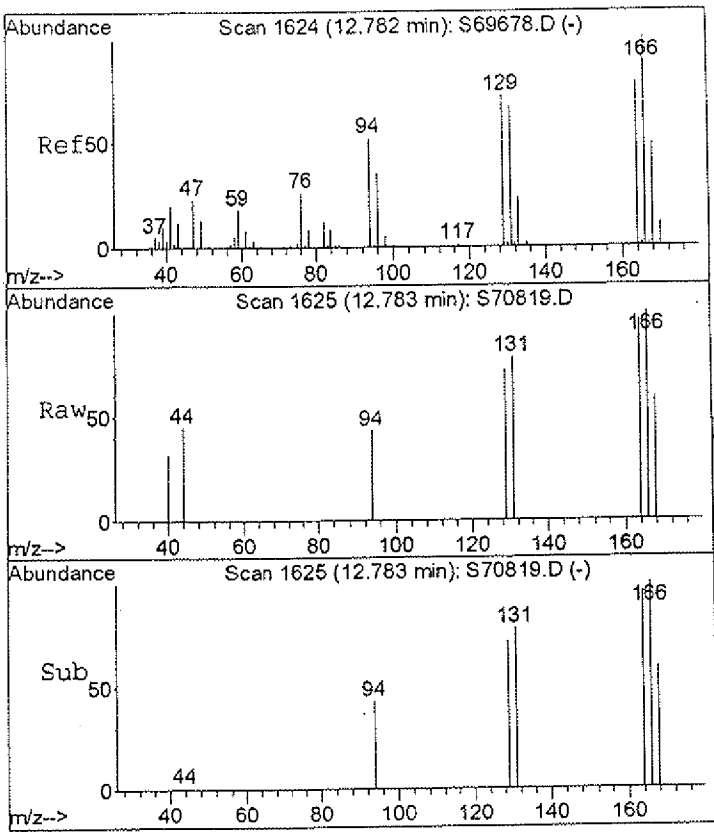
Data File : C:\HPCHEM\1\DATA\S70819.D
Acq On : 23 Dec 2004 6:36 am
Sample : n86261-1
Misc : MS8583,VS2585,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 23 16:57 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration

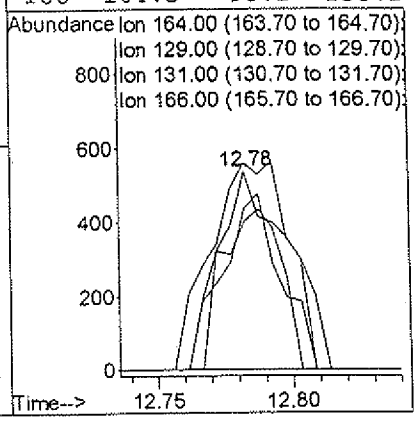




#76
tetrachloroethene
Concen: 0.37 ug/L
RT: 12.78 min Scan# 1625
Delta R.T. 0.00 min
Lab File: S70819.D
Acq: 23 Dec 2004 6:36 am

Tgt Ion:164 Resp: 852

Ion	Ratio	Lower	Upper
164	100		
129	74.8	55.6	115.6
131	81.2	51.4	111.4
166	104.5	98.2	158.2



SII-SSA-0014-002741

Data File : C:\HPCHEM\1\DATA\S70820.D
Acq On : 23 Dec 2004 7:07 am
Sample : n86261-2
Misc : MS8583,VS2585,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 23 17:00 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

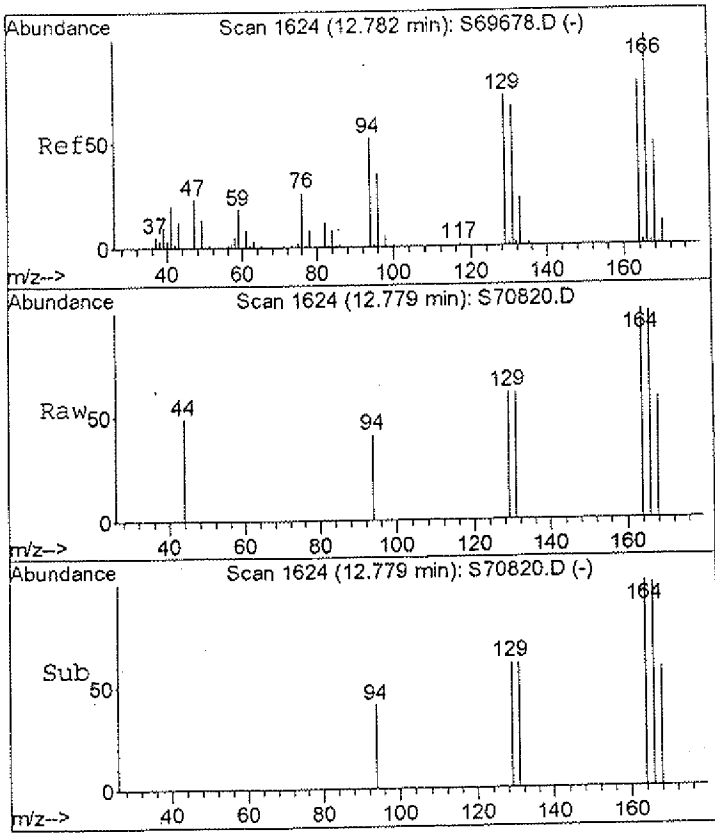
Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	107650	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	250030	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	371416	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	359174	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.26	152	225266	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	111853	49.42	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 98.84%			
40) 1,2-dichloroethane-d4 (s)	10.10	65	103847	48.65	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 97.30%			
67) toluene-d8 (s)	12.09	98	422127	49.18	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.36%			
90) 4-bromofluorobenzene (s)	14.96	95	172681	50.48	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 100.96%			
Target Compounds						Qvalue
76) tetrachloroethene	12.78	164	789	0.35	ug/L	75

63

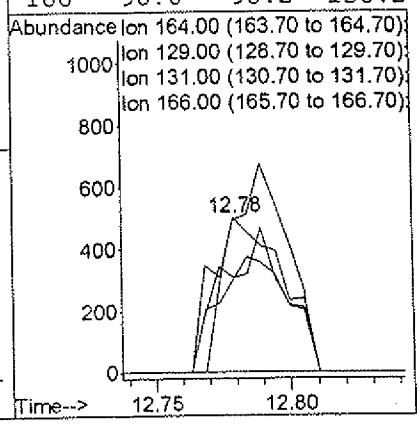
(#) = qualifier out of range (m) = manual integration



#76
tetrachloroethene
Concen: 0.35 ug/L
RT: 12.78 min Scan# 1624
Delta R.T. -0.00 min
Lab File: S70820.D
Acq: 23 Dec 2004 7:07 am

Tgt Ion:164 Resp: 789

Ion	Ratio	Lower	Upper
164	100		
129	61.4	55.6	115.6
131	60.8	51.4	111.4
166	98.6	98.2	158.2



SII-SSA-0014-002743

Data File : C:\HPCHEM\1\DATA\S70853.D
Acq On : 24 Dec 2004 2:20 am
Sample : n86261-3
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 10:59 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	120415	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	244167	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	355427	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	337546	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.26	152	215032	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.70	113	107488	48.63	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 97.26%			
40) 1,2-dichloroethane-d4 (s)	10.09	65	103150	49.48	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 98.96%			
67) toluene-d8 (s)	12.09	98	409506	49.86	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.72%			
90) 4-bromofluorobenzene (s)	14.96	95	163813	50.17	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 100.34%			
Target Compounds						Qvalue
76) tetrachloroethene	12.79	164	1871	0.87	ug/L	91

FINAL

66

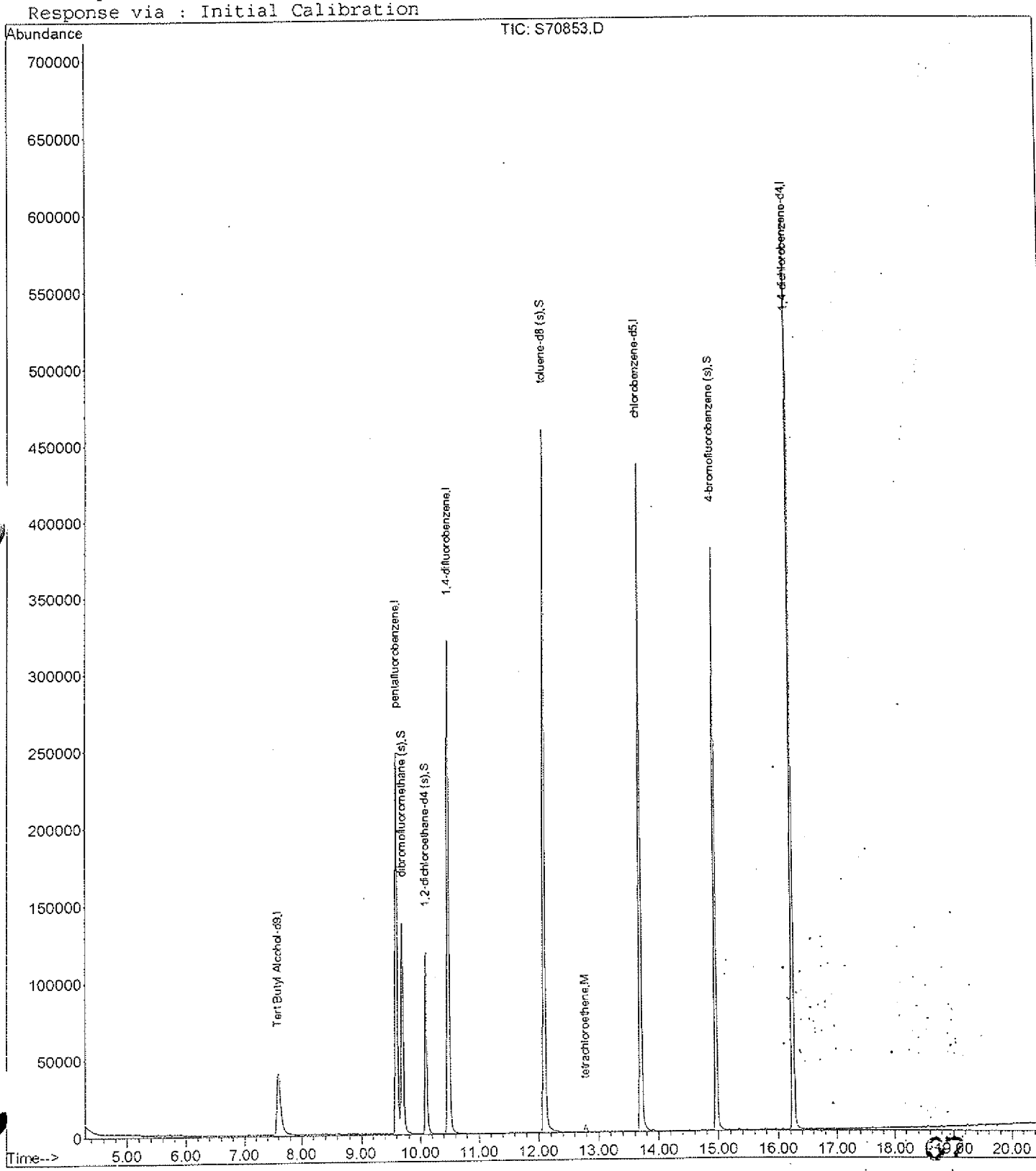
(#) = qualifier out of range (m) = manual integration
S70853.D MS2585.M Mon Dec 27 15:04:27 2004 RPT1

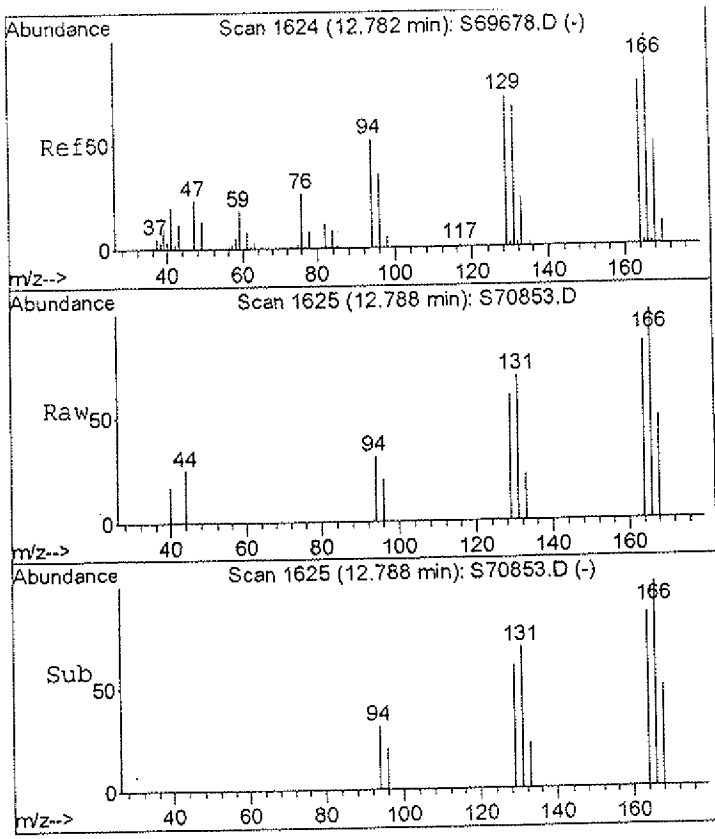
Data File : C:\HPCHEM\1\DATA\S70853.D
Acq On : 24 Dec 2004 2:20 am
Sample : n86261-3
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 10:59 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration

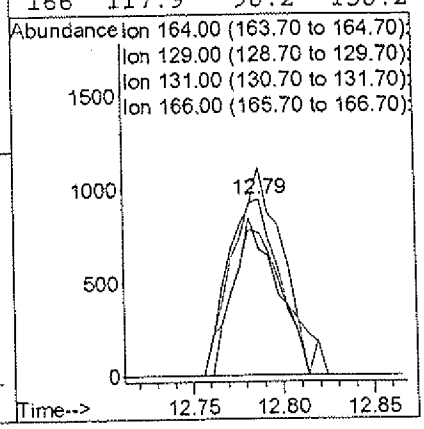




#76
tetrachloroethene
Concen: 0.87 ug/L
RT: 12.79 min Scan# 1625
Delta R.T. 0.01 min
Lab File: S70853.D
Acq: 24 Dec 2004 2:20 am

Tgt Ion:164 Resp: 1871

Ion	Ratio	Lower	Upper
164	100		
129	71.2	55.6	115.6
131	81.0	51.4	111.4
166	117.9	98.2	158.2



Data File : C:\HPCHEM\1\DATA\S70854.D
Acq On : 24 Dec 2004 2:50 am
Sample : n86261-4
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 11:00 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	128228	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	235560	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	347723	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	329152	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.25	152	208765	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	104434	48.97	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 97.94%			
40) 1,2-dichloroethane-d4 (s)	10.09	65	101980	50.71	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 101.42%			
67) toluene-d8 (s)	12.10	98	402289	50.06	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.12%			
90) 4-bromofluorobenzene (s)	14.96	95	161314	50.89	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 101.78%			

Target Compounds Qvalue

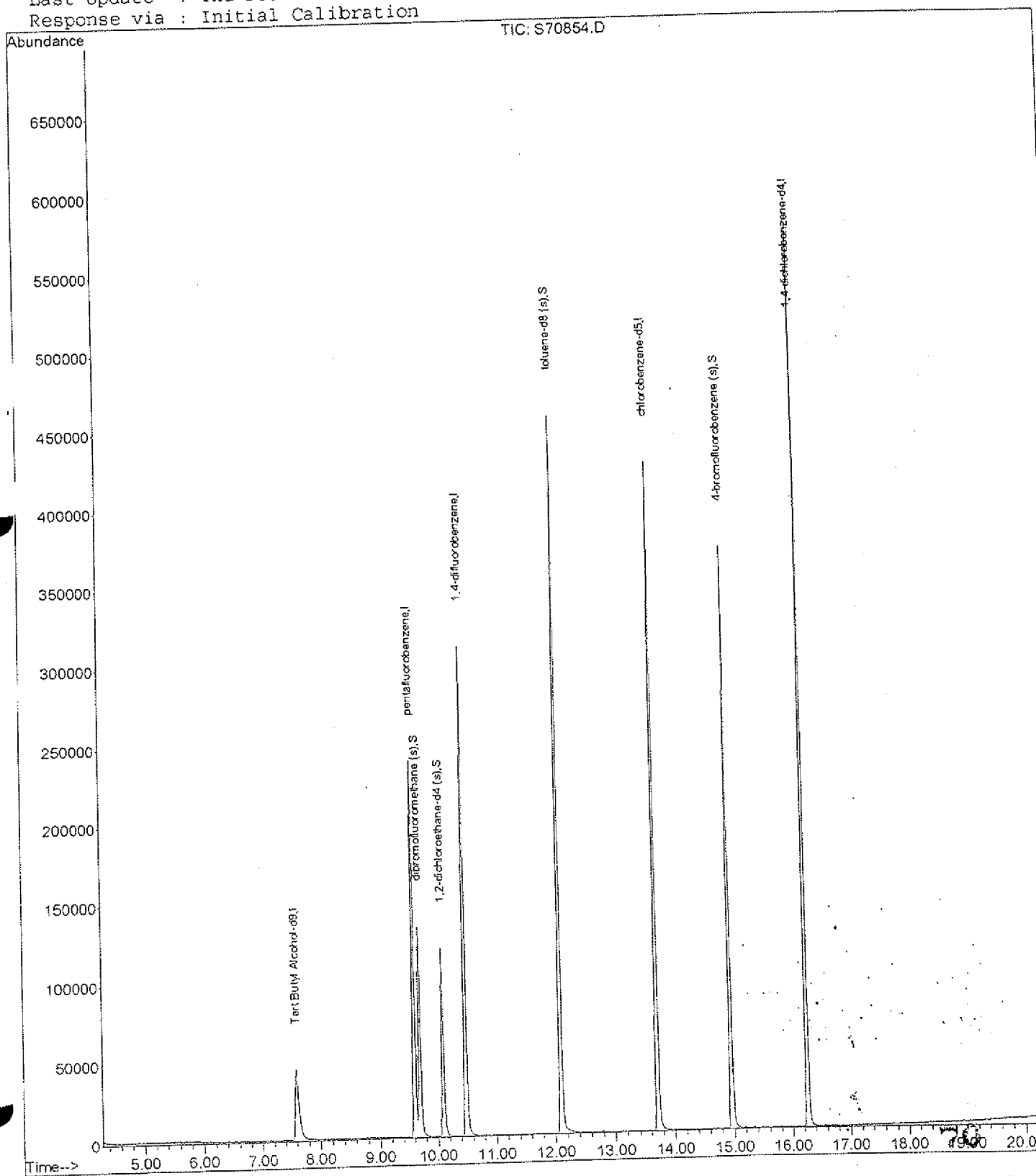
(#) = qualifier out of range (m) = manual integration

Data File : C:\HPCHEM\1\DATA\S70854.D
Acq On : 24 Dec 2004 2:50 am
Sample : n86261-4
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 11:00 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\S70855.D
Acq On : 24 Dec 2004 3:20 am
Sample : n86261-5
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 11:00 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	123466	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	230812	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.47	114	338799	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	324546	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.25	152	202292	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	103641	49.60	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 99.20%			
40) 1,2-dichloroethane-d4 (s)	10.09	65	101432	51.47	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 102.94%			
67) toluene-d8 (s)	12.09	98	395368	50.50	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.00%			
90) 4-bromofluorobenzene (s)	14.96	95	157541	51.29	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 102.58%			

Target Compounds Qvalue

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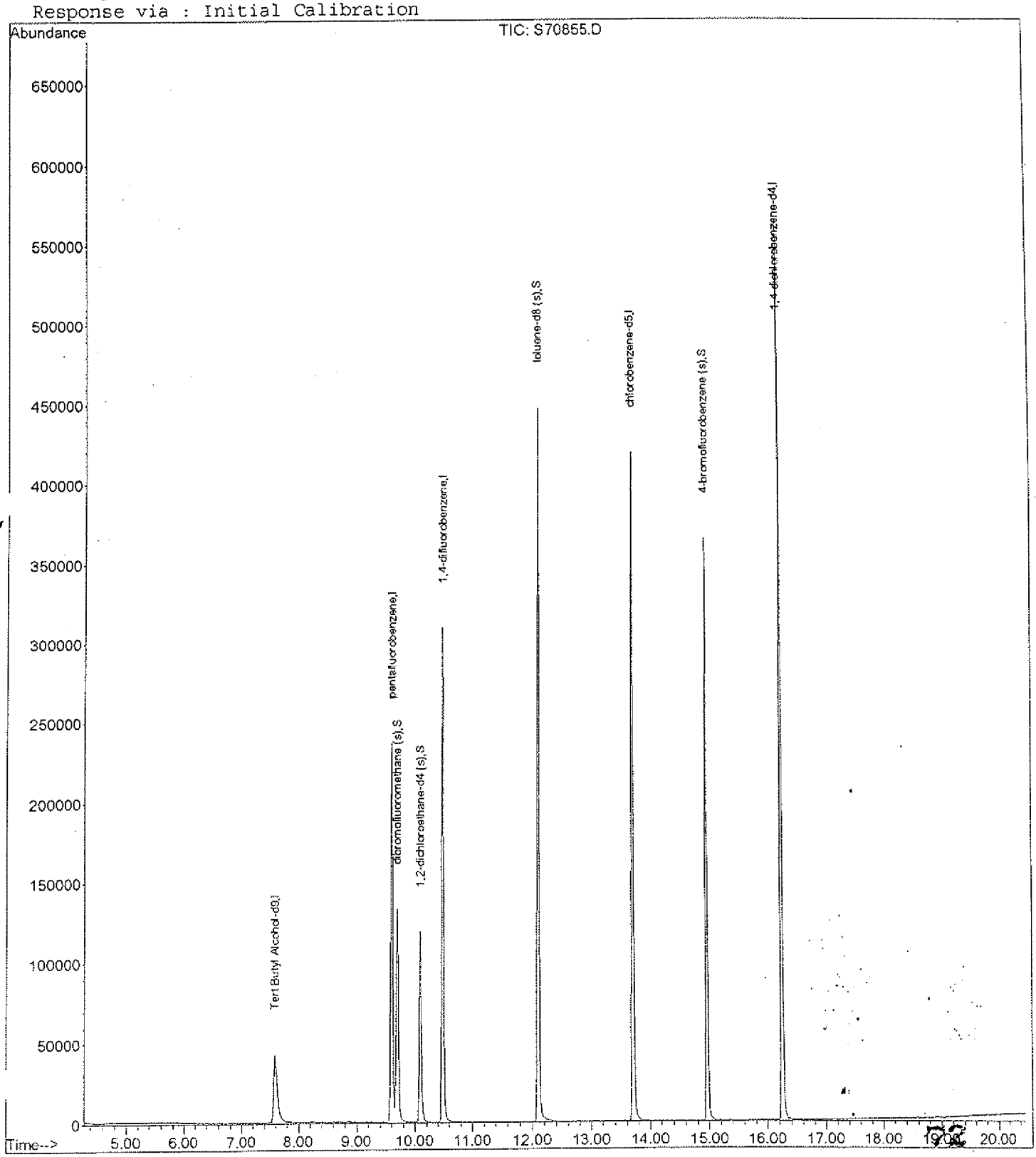
(#) = qualifier out of range (m) = manual integration
S70855.D MS2585.M Mon Dec 27 15:04:57 2004 RPT1

Data File : C:\HPCHEM\1\DATA\S70855.D
Acq On : 24 Dec 2004 3:20 am
Sample : n86261-5
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 11:00 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\S70856.D
Acq On : 24 Dec 2004 3:50 am
Sample : n86261-6
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 15:54 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	116999	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	223659	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	330045	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	316585	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.26	152	199045	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	101228	50.00	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 100.00%			
40) 1,2-dichloroethane-d4 (s)	10.09	65	100430	52.59	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 105.18%			
67) toluene-d8 (s)	12.09	98	385304	50.52	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.04%			
90) 4-bromofluorobenzene (s)	14.96	95	153186	50.68	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 101.36%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
S70856.D MS2585.M Mon Dec 27 15:54:09 2004 RPT1

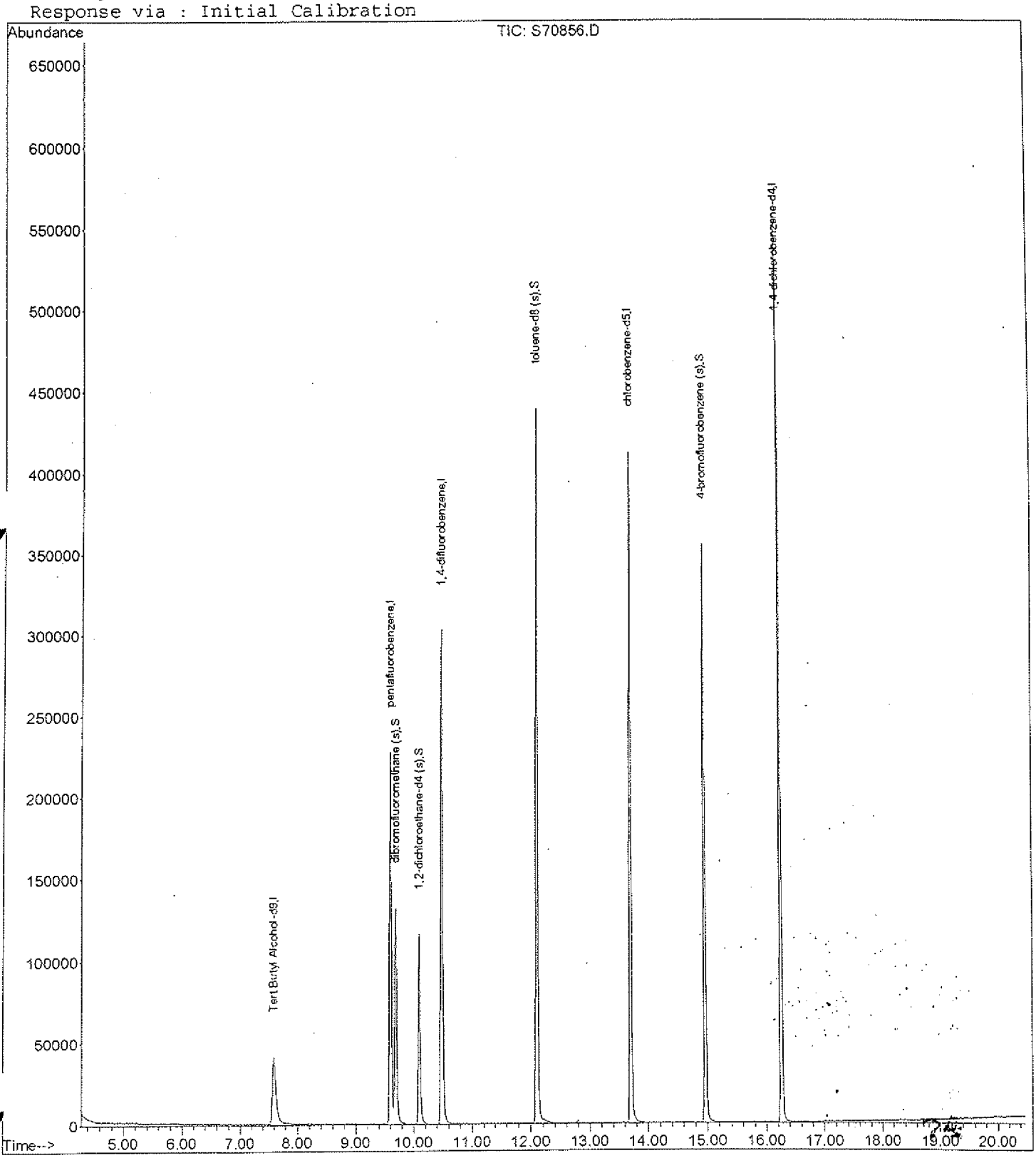
SII-SSA-0014-002751

Data File : C:\HPCHEM\1\DATA\S70856.D
Acq On : 24 Dec 2004 3:50 am
Sample : n86261-6
Misc : MS8583,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 15:54 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\S70809.D
Acq On : 23 Dec 2004 1:36 am
Sample : mb1
Misc : MS8583,VS2585,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 23 16:51 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	146231	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	289404	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	417767	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	400467	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.25	152	255030	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	124133	47.38	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 94.76%			
40) 1,2-dichloroethane-d4 (s)	10.10	65	110259	44.62	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 89.24%			
67) toluene-d8 (s)	12.09	98	466180	48.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.58%			
90) 4-bromofluorobenzene (s)	14.96	95	190267	49.13	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 98.26%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

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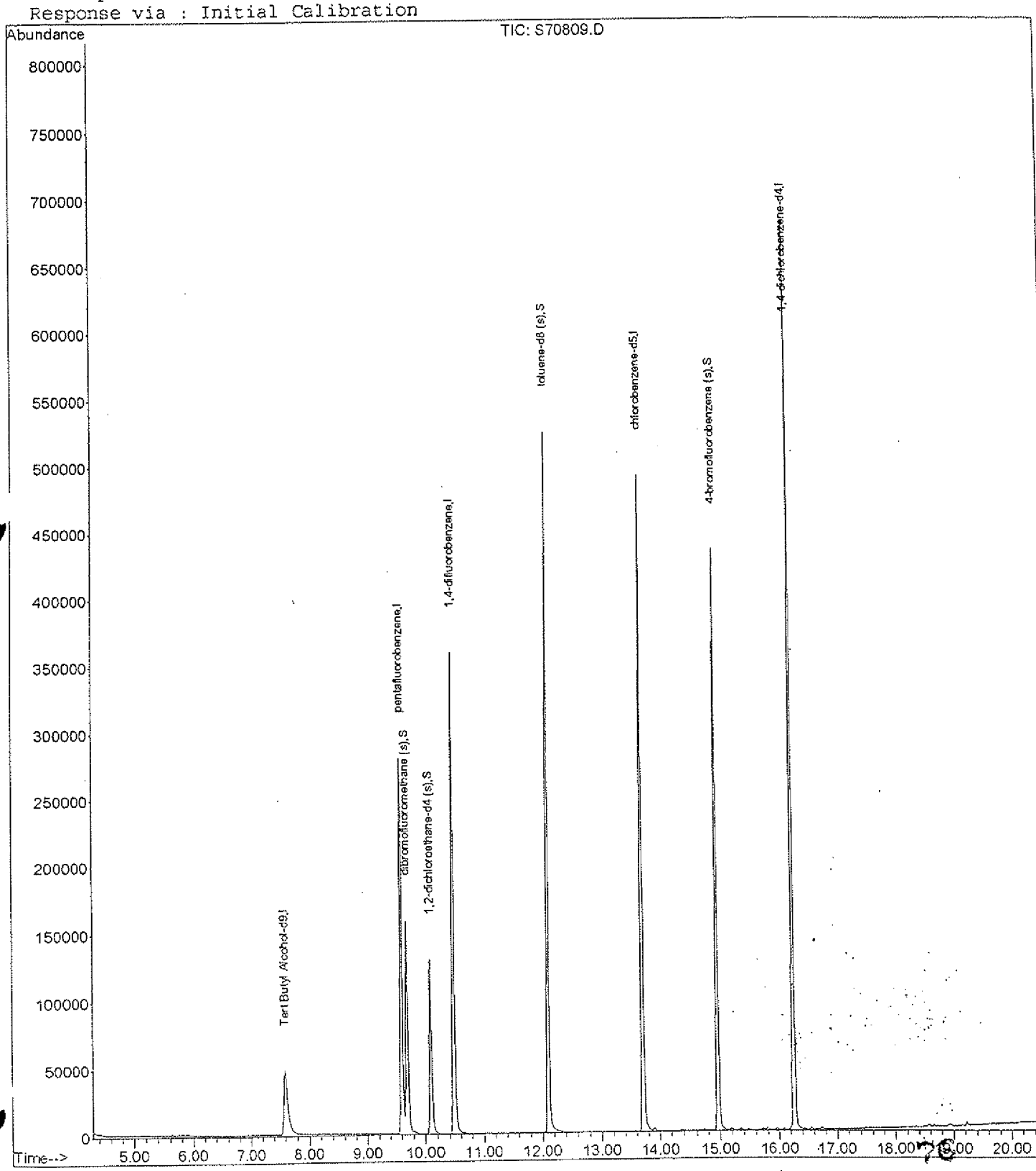
SII-SSA-0014-002753

Data File : C:\HPCHEM\1\DATA\S70809.D
Acq On : 23 Dec 2004 1:36 am
Sample : mb1
Misc : MS8583,VS2585,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 23 16:51 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration



SII-SSA-0014-002754

Data File : C:\HPCHEM\1\DATA\S70809.D
Acq On : 23 Dec 2004 1:36 am
Sample : mb1
Misc : MS8583,VS2585,5,,,,1
MS Integration Params: LSCINT.P

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Smoothing : ON
Sampling : 1
Start Thrs: 0.06
Stop Thrs : 0.04

Filtering: 5
Min Area: 100 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.669	71	73	79	rBV2	683	711	0.05%	0.010%
2	4.732	84	85	91	rVB2	730	571	0.04%	0.008%
3	4.962	125	129	131	rBV3	476	530	0.04%	0.008%
4	4.988	131	134	136	rBV2	515	538	0.04%	0.008%
5	5.009	136	138	144	rBV2	700	583	0.04%	0.008%
6	5.072	149	150	156	rBV2	413	722	0.05%	0.010%
7	5.124	157	160	163	rVB2	731	719	0.05%	0.010%
8	5.417	212	216	218	rVB2	741	1064	0.08%	0.015%
9	5.438	218	220	222	rBV2	793	737	0.06%	0.011%
10	5.459	222	224	227	rVV2	497	547	0.04%	0.008%
11	5.532	232	238	245	rBV3	532	1143	0.09%	0.016%
	5.631	252	257	259	rBV	1004	1065	0.08%	0.015%
	5.694	264	269	271	rBV2	479	723	0.05%	0.010%
14	5.987	324	325	332	rVB3	459	661	0.05%	0.009%
15	6.102	343	347	348	rBV	550	605	0.05%	0.009%
16	6.311	384	387	394	rVV2	574	855	0.06%	0.012%
17	6.619	439	446	449	rBV2	352	696	0.05%	0.010%
18	7.032	523	525	532	rVB2	413	776	0.06%	0.011%
19	7.241	562	565	574	rBV3	666	1269	0.09%	0.018%
20	7.430	599	601	608	rVB3	667	805	0.06%	0.011%
21	7.471	608	609	619	rVB3	627	1299	0.10%	0.019%
22	7.592	619	632	675	rBV	47746	230351	17.22%	3.290%
23	7.858	680	683	691	rVV3	690	1642	0.12%	0.023%
24	7.911	691	693	696	rVV2	625	628	0.05%	0.009%
25	7.932	696	697	701	rVB3	661	575	0.04%	0.008%
26	7.973	701	705	708	rBV3	770	1024	0.08%	0.015%
27	8.015	708	713	717	rVB3	653	716	0.05%	0.010%
28	8.041	717	718	725	rBV2	484	627	0.05%	0.009%
29	8.177	739	744	748	rVB2	511	693	0.05%	0.010%
30	8.219	748	752	754	rBV2	1106	970	0.07%	0.014%
31	8.235	754	755	763	rVV3	1034	998	0.07%	0.014%
32	8.313	766	770	781	rBV2	353	1002	0.07%	0.014%
33	8.580	820	821	827	rBV2	450	637	0.05%	0.009%
34	8.690	840	842	850	rVB3	565	669	0.05%	0.010%
35	8.747	850	853	861	rBV2	312	530	0.04%	0.008%
	9.108	920	922	930	rBV2	513	807	0.06%	0.012%
37	9.427	981	983	988	rBV	829	761	0.06%	0.011%
38	9.594	1005	1015	1026	rBV	279861	675015	50.46%	9.642%

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40	9.871	1067	1068	1074	rVB2	388	581	0.04%	0.008%
41	10.096	1098	1111	1137	rVB	129261	311907	23.32%	4.455%
42	10.478	1173	1184	1218	rBV	359088	832827	62.26%	11.896%
43	10.666	1218	1220	1233	rVB2	800	1482	0.11%	0.021%
44	11.011	1284	1286	1295	rVB	462	773	0.06%	0.011%
45	12.093	1474	1493	1532	rBV	523708	1152180	86.14%	16.458%
[illegible]	12.339	1539	1540	1550	rVB3	798	1106	0.08%	0.016%
47	12.783	1620	1625	1631	rBV3	959	1209	0.09%	0.017%
48	13.348	1730	1733	1743	rVB	439	766	0.06%	0.011%
49	13.567	1768	1775	1782	rBV2	866	1353	0.10%	0.019%
50	13.703	1787	1801	1833	rVV	490743	1043734	78.03%	14.909%
51	13.891	1833	1837	1849	rVV3	2567	5932	0.44%	0.085%
52	14.357	1917	1926	1933	rBV3	1092	2385	0.18%	0.034%
53	14.718	1989	1995	2002	rVV	1069	2166	0.16%	0.031%
54	14.963	2029	2042	2075	rBV	434332	881093	65.87%	12.586%
55	15.178	2075	2083	2092	rVB3	1762	4324	0.32%	0.062%
56	15.340	2107	2114	2116	rBV2	1566	2821	0.21%	0.040%
57	15.355	2116	2117	2130	rVB2	1383	2065	0.15%	0.029%
58	15.481	2134	2141	2148	rBV3	1355	2769	0.21%	0.040%
59	15.523	2148	2149	2157	rVB	498	566	0.04%	0.008%
60	15.638	2167	2171	2176	rBV2	492	671	0.05%	0.010%
61	15.716	2181	2186	2192	rVV	1198	2222	0.17%	0.032%
62	15.779	2192	2198	2205	rVB3	1668	3123	0.23%	0.045%
63	15.957	2226	2232	2243	rVV	1349	2620	0.20%	0.037%
64	16.082	2249	2256	2262	rBV	1352	2276	0.17%	0.033%
65	16.255	2272	2289	2317	rBV	680018	1337601	100.00%	19.107%
66	16.417	2318	2320	2327	rVB	826	1128	0.08%	0.016%
67	16.553	2337	2346	2352	rBV2	1351	2955	0.22%	0.042%
68	16.694	2367	2373	2376	rVV3	652	1125	0.08%	0.016%
[illegible]	16.736	2376	2381	2392	rVV3	2068	3435	0.26%	0.049%
[illegible]	16.803	2392	2394	2399	rVB2	468	543	0.04%	0.008%
71	16.887	2402	2410	2413	rBV2	628	1060	0.08%	0.015%
72	16.908	2413	2414	2422	rBV2	432	536	0.04%	0.008%
73	17.175	2462	2465	2477	rBV2	552	1284	0.10%	0.018%
74	17.326	2492	2494	2499	rVV3	522	632	0.05%	0.009%
75	17.515	2529	2530	2535	rBV2	716	738	0.06%	0.011%
76	17.546	2535	2536	2541	rVV2	433	577	0.04%	0.008%
77	17.640	2553	2554	2558	rBV	718	673	0.05%	0.010%
78	17.734	2568	2572	2574	rBV3	647	829	0.06%	0.012%
79	17.760	2574	2577	2579	rVV3	524	540	0.04%	0.008%
80	17.786	2580	2582	2590	rVB3	759	1147	0.09%	0.016%
81	17.839	2590	2592	2597	rBV2	497	752	0.06%	0.011%
82	17.880	2597	2600	2611	rVB3	795	1777	0.13%	0.025%
83	17.954	2611	2614	2624	rBV3	795	2210	0.17%	0.032%
84	18.053	2630	2633	2640	rVB3	553	839	0.06%	0.012%
85	18.095	2640	2641	2644	rBV2	768	581	0.04%	0.008%
86	18.168	2651	2655	2660	rBV3	865	1325	0.10%	0.019%
87	18.267	2670	2674	2676	rVB3	739	757	0.06%	0.011%
88	18.304	2676	2681	2682	rBV3	681	904	0.07%	0.013%
89	18.335	2685	2687	2695	rVB3	1090	1337	0.10%	0.019%
90	18.492	2714	2717	2722	rVB3	822	1258	0.09%	0.018%
91	18.523	2722	2723	2725	rBV2	869	544	0.04%	0.008%
9[illegible]	18.565	2725	2731	2738	rVV4	1918	4432	0.33%	0.063%
[illegible]	18.623	2738	2742	2746	rVB4	1082	1121	0.08%	0.016%
[illegible]	18.659	2746	2749	2756	rBV5	2130	3437	0.26%	0.049%
95	18.853	2783	2786	2794	rBV5	1142	2079	0.16%	0.030%

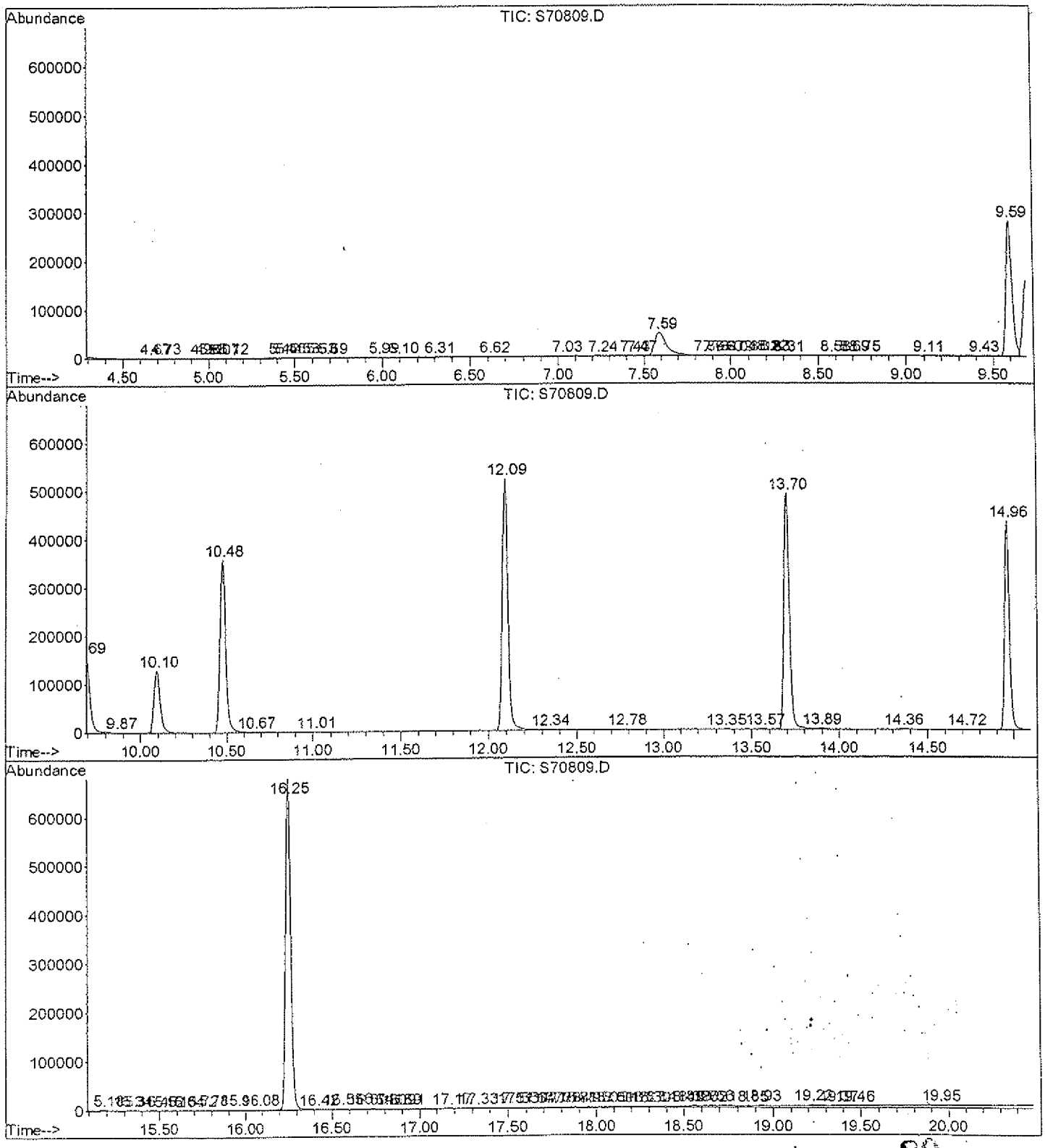
96	19.928	2794	2800	2807	rV	2270	5306	0.42%	0.080%
97	19.219	2853	2856	2865	rVB5	2910	5819	0.44%	0.083%
98	19.365	2876	2884	2888	rBV5	935	2430	0.18%	0.035%
99	19.459	2901	2902	2905	rBV2	818	774	0.06%	0.011%
100	19.946	2960	2995	3003	rBV9	1275	10237	0.77%	0.146%

Sum of corrected areas: 7000668

S70809.D MS2585.M Thu Dec 23 16:59:33 2004 RPT1

SII-SSA-0014-002757

File : C:\HPCHEM\1\DATA\S70809.D
Operator : mei
Acquired : 23 Dec 2004 1:36 am using AcqMethod MS2585
Instrument : MSS
Sample Name: mb1
Misc Info : MS8583,VS2585,5,,,,1
Vial Number: 100
Quant File :MS2585.RES (RTE Integrator)



80

Operator ID: mei Date Acquired: 23 Dec 2004 1:36 am
Data File: C:\HPCHEM\1\DATA\S70809.D
Name: mb1
Misc: MS8583,VS2585,5,,,,1
Method: C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
:le: SW-846 Method 8260
brary Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

S70809.D MS2585.M Thu Dec 23 16:59:35 2004 RPT1

Data File : C:\HPCHEM\1\DATA\S70847.D Vial: 100
Acq On : 23 Dec 2004 11:19 pm Operator: mei
Sample : mb1 Inst : MSS
Misc : MS8694,VS2588,5,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 27 10:56 2004 Quant Results File: MS2585.RES

Quant Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration
DataAcq Meth : MS2585

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	7.59	65	131125	500.00	ug/L	0.00
4) pentafluorobenzene	9.60	168	247644	50.00	ug/L	0.00
45) 1,4-difluorobenzene	10.48	114	358779	50.00	ug/L	0.00
75) chlorobenzene-d5	13.70	117	342020	50.00	ug/L	0.00
88) 1,4-dichlorobenzene-d4	16.25	152	218134	50.00	ug/L	0.00
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.69	113	108583	48.43	ug/L	0.00
Spiked Amount 50.000	Range 79 - 119		Recovery = 96.86%			
40) 1,2-dichloroethane-d4 (s)	10.09	65	103695	49.04	ug/L	0.00
Spiked Amount 50.000	Range 68 - 129		Recovery = 98.08%			
67) toluene-d8 (s)	12.09	98	417666	50.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.76%			
90) 4-bromofluorobenzene (s)	14.96	95	166171	50.17	ug/L	0.00
Spiked Amount 50.000	Range 82 - 120		Recovery = 100.34%			

Target Compounds Qvalue

missing MB.

Thanks.

(#) = qualifier out of range (m) = manual integration
S70847.D MS2585.M Tue Dec 28 12:53:22 2004 RPT1

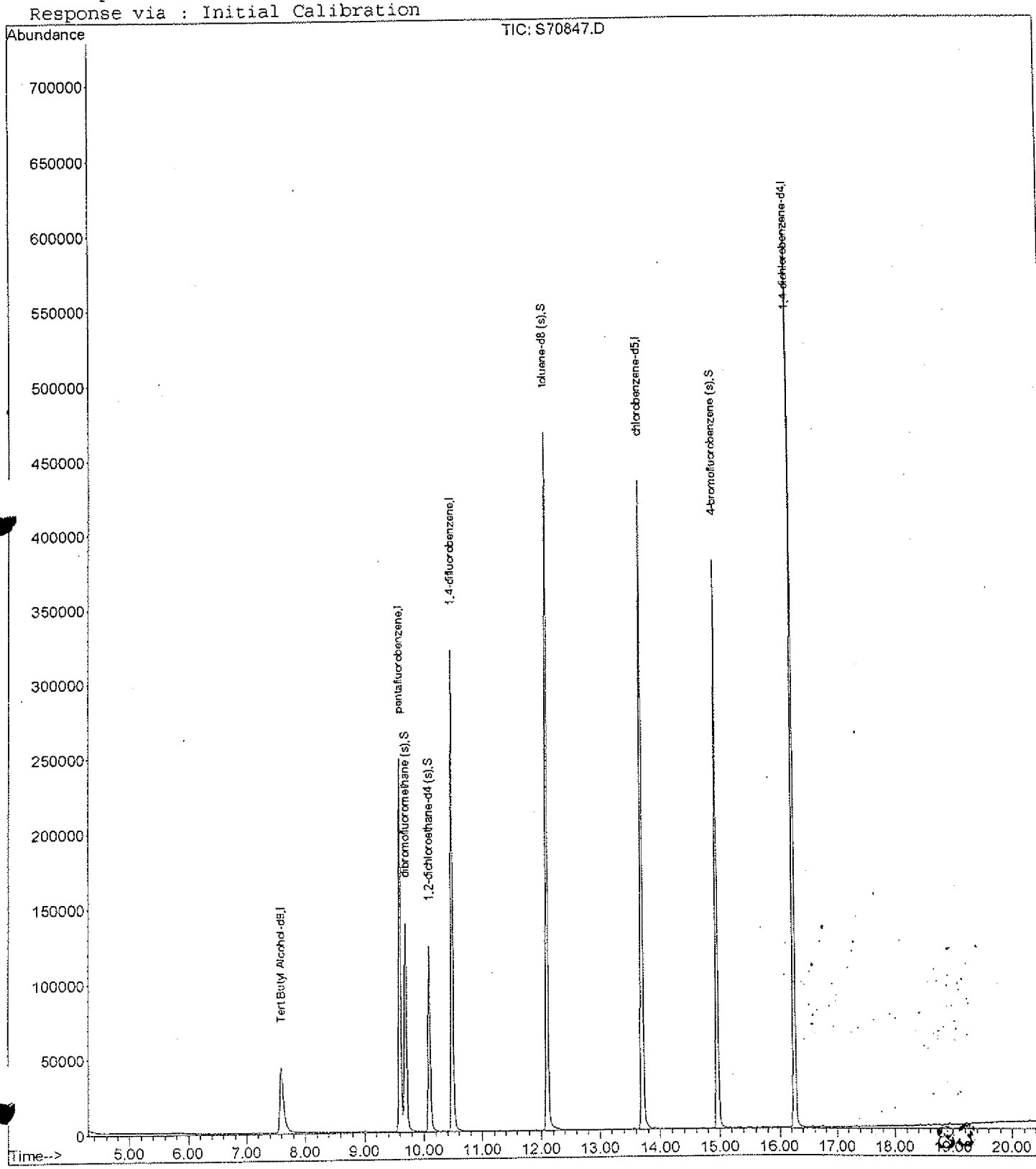
SII-SSA-0014-002760

Data File : C:\HPCHEM\1\DATA\S70847.D
Acq On : 23 Dec 2004 11:19 pm
Sample : mb1
Misc : MS8694,VS2588,5,,,,1
MS Integration Params: LSCINT.P
Quant Time: Dec 27 10:56 2004

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Quant Results File: MS2585.RES

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Thu Dec 23 08:35:44 2004
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\S70847.D
Acq On : 23 Dec 2004 11:19 pm
Sample : mb1
Misc : MS8694,VS2588,5,,,,1
MS Integration Params: LSCINT.P

Vial: 100
Operator: mei
Inst : MSS
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title : SW-846 Method 8260
Smoothing : ON
Sampling : 1
Start Thrs: 0.06
Stop Thrs : 0.04

Filtering: 5
Min Area: 100 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.670	66	73	75	rBV2	508	1022	0.09%	0.017%
2	4.832	100	104	110	rVV2	657	888	0.08%	0.014%
3	4.916	110	120	125	rVB3	498	1024	0.09%	0.017%
4	5.005	135	137	144	rBV3	679	963	0.08%	0.016%
5	5.554	241	242	247	rVB3	690	710	0.06%	0.011%
6	5.590	247	249	256	rBV3	620	1013	0.09%	0.016%
7	5.726	270	275	279	rBV3	768	1030	0.09%	0.017%
8	5.753	279	280	285	rBV2	611	636	0.05%	0.010%
9	5.847	297	298	306	rBV	630	836	0.07%	0.014%
10	6.077	340	342	348	rVB2	502	551	0.05%	0.009%
11	6.140	353	354	359	rBV	427	587	0.05%	0.010%
[illegible]	6.202	364	366	373	rVB2	509	620	0.05%	0.010%
[illegible]	6.270	377	379	385	rBV2	476	555	0.05%	0.009%
14	6.349	392	394	403	rVB2	817	915	0.08%	0.015%
15	6.412	403	406	411	rBV2	565	562	0.05%	0.009%
16	6.684	457	458	464	rBV2	551	844	0.07%	0.014%
17	6.752	468	471	479	rVV2	604	962	0.08%	0.016%
18	6.872	489	494	498	rVV2	487	597	0.05%	0.010%
19	7.102	534	538	544	rBV2	535	784	0.07%	0.013%
20	7.337	578	583	587	rVB2	564	665	0.06%	0.011%
21	7.363	587	588	601	rVB2	414	898	0.08%	0.015%
22	7.442	601	603	610	rBV2	365	599	0.05%	0.010%
23	7.594	617	632	678	rBV	43134	208177	17.68%	3.369%
24	7.913	691	693	699	rVB3	736	743	0.06%	0.012%
25	8.069	715	723	726	rBV2	305	720	0.06%	0.012%
26	8.216	748	751	761	rBV	533	888	0.08%	0.014%
27	8.990	895	899	902	rBV2	521	715	0.06%	0.012%
28	9.199	932	939	942	rVB2	290	569	0.05%	0.009%
29	9.597	1004	1015	1025	rBV	247922	585454	49.71%	9.476%
30	9.696	1025	1034	1064	rVB	138399	353041	29.98%	5.714%
31	10.094	1100	1110	1144	rVB	123257	288684	24.51%	4.672%
32	10.475	1171	1183	1208	rBV	320887	742624	63.06%	12.020%
33	10.747	1233	1235	1240	rVB2	368	568	0.05%	0.009%
34	11.113	1299	1305	1307	rBV	476	729	0.06%	0.012%
35	11.380	1353	1356	1361	rVB	435	622	0.05%	0.010%
[illegible]	11.432	1361	1366	1368	rBB	476	546	0.05%	0.009%
[illegible]	12.091	1479	1492	1526	rVV	466142	1034682	87.86%	16.747%
38	12.275	1526	1527	1530	rVV2	1551	1414	0.12%	0.023%

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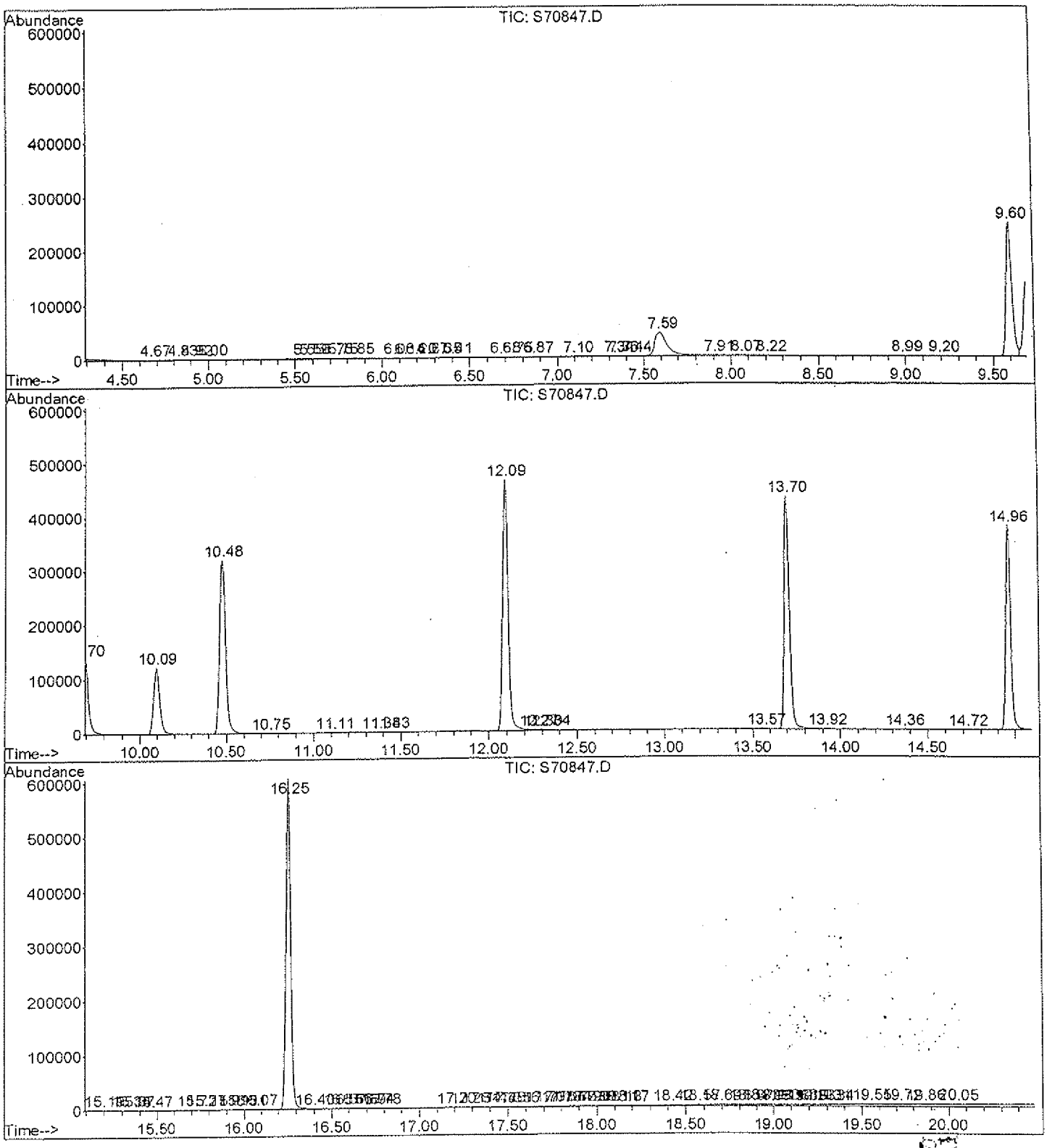
40	12.343	1537	1540	1544	rVV	879	1307	0.11%	0.021%
41	13.572	1767	1775	1779	rBV2	836	1176	0.10%	0.019%
42	13.702	1789	1800	1834	rBV	432787	913817	77.59%	14.791%
43	13.917	1834	1841	1844	rVV2	863	2123	0.18%	0.034%
44	14.361	1921	1926	1932	rVB2	588	898	0.08%	0.015%
	14.722	1991	1995	2002	rVB	529	944	0.08%	0.015%
46	14.963	2031	2041	2073	rVV	378426	775757	65.87%	12.556%
47	15.193	2076	2085	2088	rVB2	688	1571	0.13%	0.025%
48	15.345	2106	2114	2115	rVV2	602	1190	0.10%	0.019%
49	15.366	2115	2118	2122	rVV2	622	728	0.06%	0.012%
50	15.470	2136	2138	2146	rBV	515	847	0.07%	0.014%
51	15.721	2179	2186	2192	rVV3	941	1878	0.16%	0.030%
52	15.773	2192	2196	2205	rVV3	726	1623	0.14%	0.026%
53	15.909	2219	2222	2226	rVB	604	637	0.05%	0.010%
54	15.957	2226	2231	2238	rBV2	960	1986	0.17%	0.032%
55	16.009	2238	2241	2245	rVB2	506	656	0.06%	0.011%
56	16.072	2245	2253	2259	rBV3	793	2134	0.18%	0.035%
57	16.255	2273	2288	2312	rBV	606392	1177692	100.00%	19.062%
58	16.396	2312	2315	2319	rVB3	787	970	0.08%	0.016%
59	16.553	2341	2345	2347	rBV2	946	1160	0.10%	0.019%
60	16.574	2347	2349	2354	rVV2	722	732	0.06%	0.012%
61	16.616	2354	2357	2362	rVV2	412	679	0.06%	0.011%
62	16.689	2365	2371	2378	rBV2	705	1884	0.16%	0.030%
63	16.736	2378	2380	2387	rVV2	1014	1201	0.10%	0.019%
64	16.778	2387	2388	2400	rVB	471	580	0.05%	0.009%
65	17.201	2468	2469	2473	rVB2	535	548	0.05%	0.009%
66	17.280	2476	2484	2487	rBV2	773	1246	0.11%	0.020%
67	17.343	2494	2496	2502	rVB2	678	908	0.08%	0.015%
	17.426	2508	2512	2518	rVB2	730	1186	0.10%	0.019%
	17.479	2518	2522	2524	rBV2	751	745	0.06%	0.012%
	17.510	2525	2528	2533	rVB2	515	619	0.05%	0.010%
71	17.557	2533	2537	2539	rBV3	408	562	0.05%	0.009%
72	17.698	2563	2564	2573	rBV3	671	1555	0.13%	0.025%
73	17.756	2573	2575	2578	rBV	673	561	0.05%	0.009%
74	17.787	2578	2581	2588	rVB2	702	1330	0.11%	0.022%
75	17.845	2589	2592	2596	rBV2	677	969	0.08%	0.016%
76	17.871	2596	2597	2602	rBV3	698	788	0.07%	0.013%
77	17.928	2602	2608	2611	rVV	608	719	0.06%	0.012%
78	17.954	2611	2613	2618	rVB2	886	1083	0.09%	0.018%
79	17.991	2618	2620	2623	rBV2	611	617	0.05%	0.010%
80	18.111	2635	2643	2645	rVB3	627	1028	0.09%	0.017%
81	18.132	2645	2647	2650	rVB2	541	546	0.05%	0.009%
82	18.174	2653	2655	2657	rBV2	728	577	0.05%	0.009%
83	18.420	2700	2702	2711	rBV3	1211	2001	0.17%	0.032%
84	18.572	2723	2731	2737	rBV3	1291	3181	0.27%	0.051%
85	18.692	2752	2754	2763	rVB5	862	1579	0.13%	0.026%
86	18.844	2777	2783	2786	rVB3	818	976	0.08%	0.016%
87	18.875	2786	2789	2796	rBV4	698	1360	0.12%	0.022%
88	18.922	2796	2798	2807	rVB3	1615	3054	0.26%	0.049%
89	18.985	2807	2810	2813	rBV2	864	989	0.08%	0.016%
90	19.079	2817	2828	2830	rVB5	1104	2107	0.18%	0.034%
91	19.105	2830	2833	2836	rBV4	711	863	0.07%	0.014%
	19.126	2836	2837	2843	rBV3	928	847	0.07%	0.014%
	19.178	2843	2847	2849	rBV2	817	1054	0.09%	0.017%
94	19.225	2852	2856	2870	rBV7	1166	3259	0.28%	0.053%
95	19.314	2870	2873	2874	rBV2	1015	763	0.06%	0.012%

LSC Report - Integrated Chromatogram

File : C:\HPCHEM\1\DATA\S70847.D
Operator : mei
Acquired : 23 Dec 2004 11:19 pm using AcqMethod MS2585
Instrument : MSS
Sample Name: mb1
Misc Info : MS8694,VS2588,5,,,,1
Vial Number: 100
Quant File :MS2585.RES (RTE Integrator)



S70847.D MS2585.M Tue Dec 28 12:53:33 2004 RPT1

Tentatively Identified Compound (LSC) summary

Operator ID: mei Date Acquired: 23 Dec 2004 11:19 pm
Data File: C:\HPCHEM\1\DATA\S70847.D
Name: mbl
Misc: MS8694,VS2588,5,,,,1
Method: C:\HPCHEM\1\METHODS\MS2585.M (RTE Integrator)
Title: SW-846 Method 8260
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

S70847.D MS2585.M Tue Dec 28 12:53:33 2004 RPT1

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SEMI-VOLATILE

SII-SSA-0014-002766

ACCUTEST

GC/MS Analysis Case Narrative/Conformance/Non-Conformance Summary

Fraction Semi Volatile

	NO	YES
1. Chromatograms Labeled/Compounds Identified *(Field Samples and Method Blanks)*		✓
2. GC/MS Tune Meet Criteria		✓
3. GC/MS Tuning Frequency – Performed every 24 hours for 600 series and 12 hours for 8000 series.		✓
4. GC/MS Calibration – Initial and Continuing Calibration Meet Method Requirements		✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds		✓
b. System Performance Check Compounds		✓
6. Blank Contamination	✓	
If yes, the sample result is qualified with a "B".		
7. Surrogate Recoveries Meet Criteria		✓
If the requirement is not met, refer to the Surrogate Summary for comment.		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓
If the requirement is not met, refer to MS/MSD Summary for comment.		
9. Internal Standard Area/Retention Time Shift Meet Criteria		✓
If the requirement is not met, refer to the Internal Standard Summary for comment.		
10. Extraction Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
11. Analysis Holding Time Met		✓
If the holding time is not met, refer to the Sample Result page for comment.		
12. Volatile Sample Preservation – pH should be < 2. *List any non-compliant samples below:*		

Additional Comments:

QC Review Signature: Elva Chang Date: 1/10/05

Form: RG04
Rev. Date: 2/9/00

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-MB1	F47472.D	1	01/08/05	NAP	12/16/04	OP19045	EF2508

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-MB1	F47472.D	1	01/08/05	NAP	12/16/04	OP19045	EF2508

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Compound	Result	RL	MDL	Units	Q
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	60%	10-88%
4165-62-2	Phenol-d5	40%	10-71%
118-79-6	2,4,6-Tribromophenol	103%	45-134%
4165-60-0	Nitrobenzene-d5	105%	32-128%

Method Blank Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-MB1	F47472.D	1	01/08/05	NAP	12/16/04	OP19045	EF2508

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	96%	34-121%
1718-51-0	Terphenyl-d14	106%	41-129%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.88	5.2	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-BS1	F47511.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	40.4	81	49-101
59-50-7	4-Chloro-3-methyl phenol	50	47.1	94	52-111
120-83-2	2,4-Dichlorophenol	50	46.0	92	54-110
105-67-9	2,4-Dimethylphenol	50	37.4	75	40-108
51-28-5	2,4-Dinitrophenol	100	93.7	94	32-129
534-52-1	4,6-Dinitro-o-cresol	50	49.3	99	49-125
95-48-7	2-Methylphenol	50	32.9	66	40-98
	3&4-Methylphenol	50	29.7	59	32-97
88-75-5	2-Nitrophenol	50	48.4	97	50-112
100-02-7	4-Nitrophenol	50	14.7	29	1-88
87-86-5	Pentachlorophenol	50	39.9	80	37-121
108-95-2	Phenol	50	16.7	33	1-84
95-95-4	2,4,5-Trichlorophenol	50	45.5	91	57-118
88-06-2	2,4,6-Trichlorophenol	50	45.3	91	55-114
83-32-9	Acenaphthene	50	41.9	84	53-109
208-96-8	Acenaphthylene	50	38.8	78	48-101
120-12-7	Anthracene	50	42.9	86	61-113
56-55-3	Benzo(a)anthracene	50	44.5	89	62-115
50-32-8	Benzo(a)pyrene	50	44.2	88	60-118
205-99-2	Benzo(b)fluoranthene	50	46.2	92	58-122
191-24-2	Benzo(g,h,i)perylene	50	44.2	88	52-131
207-08-9	Benzo(k)fluoranthene	50	45.5	91	51-131
101-55-3	4-Bromophenyl phenyl ether	50	46.0	92	57-115
85-68-7	Butyl benzyl phthalate	50	48.2	96	61-124
91-58-7	2-Chloronaphthalene	50	41.3	83	50-109
106-47-8	4-Chloroaniline	50	34.4	69	27-115
86-74-8	Carbazole	50	47.2	94	60-133
218-01-9	Chrysene	50	43.5	87	61-118
111-91-1	bis(2-Chloroethoxy)methane	50	46.5	93	50-115
111-44-4	bis(2-Chloroethyl)ether	50	46.9	94	45-113
108-60-1	bis(2-Chloroisopropyl)ether	50	46.2	92	46-109
7005-72-3	4-Chlorophenyl phenyl ether	50	44.9	90	54-115
95-50-1	1,2-Dichlorobenzene	50	41.5	83	41-106
541-73-1	1,3-Dichlorobenzene	50	38.9	78	38-102
106-46-7	1,4-Dichlorobenzene	50	40.6	81	39-103
121-14-2	2,4-Dinitrotoluene	50	48.0	96	62-118

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-BS1	F47511.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
606-20-2	2,6-Dinitrotoluene	50	47.5	95	57-118
91-94-1	3,3'-Dichlorobenzidine	50	39.7	79	39-131
53-70-3	Dibenzo(a,h)anthracene	50	44.6	89	53-130
132-64-9	Dibenzofuran	50	42.7	85	55-115
84-74-2	Di-n-butyl phthalate	50	54.6	109	61-125
117-84-0	Di-n-octyl phthalate	50	56.9	114	55-140
84-66-2	Diethyl phthalate	50	49.9	100	57-118
131-11-3	Dimethyl phthalate	50	47.2	94	45-123
117-81-7	bis(2-Ethylhexyl)phthalate	50	51.2	102	57-128
206-44-0	Fluoranthene	50	47.7	95	60-122
86-73-7	Fluorene	50	45.0	90	54-112
118-74-1	Hexachlorobenzene	50	47.5	95	58-114
87-68-3	Hexachlorobutadiene	50	45.2	90	41-116
77-47-4	Hexachlorocyclopentadiene	100	60.6	61	19-107
67-72-1	Hexachloroethane	50	42.8	86	36-104
193-39-5	Indeno(1,2,3-cd)pyrene	50	45.3	91	52-131
78-59-1	Isophorone	50	47.6	95	46-113
91-57-6	2-Methylnaphthalene	50	43.7	87	47-109
88-74-4	2-Nitroaniline	50	51.4	103	53-122
99-09-2	3-Nitroaniline	50	39.8	80	43-127
100-01-6	4-Nitroaniline	50	46.6	93	47-140
91-20-3	Naphthalene	50	41.3	83	44-105
98-95-3	Nitrobenzene	50	42.5	85	46-108
621-64-7	N-Nitroso-di-n-propylamine	50	49.1	98	50-117
86-30-6	N-Nitrosodiphenylamine	50	41.4	83	60-121
85-01-8	Phenanthrene	50	41.9	84	59-110
129-00-0	Pyrene	50	41.1	82	60-115
120-82-1	1,2,4-Trichlorobenzene	50	41.8	84	44-103

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	38%	10-88%
4165-62-2	Phenol-d5	25%	10-71%
118-79-6	2,4,6-Tribromophenol	95%	45-134%
4165-60-0	Nitrobenzene-d5	84%	32-128%

Blank Spike Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-BS1	F47511.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	78%	34-121%
1718-51-0	Terphenyl-d14	83%	41-129%

SII-SSA-0014-002773

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-MS	F47515.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
OP19045-MSD	F47516.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
N86299-1	F47514.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Compound	N86299-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		100	88.5	89	91.5	92	3	30-117/28
59-50-7	4-Chloro-3-methyl phenol	ND		100	101	101	105	105	4	36-129/25
120-83-2	2,4-Dichlorophenol	ND		100	95.5	96	98.9	99	3	37-124/27
105-67-9	2,4-Dimethylphenol	2.4	J	100	97.9	96	103	101	5	28-121/28
51-28-5	2,4-Dinitrophenol	ND		200	205	103	217	109	6	8-144/32
534-52-1	4,6-Dinitro-o-cresol	ND		100	110	110	113	113	3	24-142/29
95-48-7	2-Methylphenol	ND		100	80.9	81	82.8	83	2	30-114/28
	3&4-Methylphenol	ND		100	78.1	78	80.0	80	2	21-122/28
88-75-5	2-Nitrophenol	ND		100	100	100	104	104	4	34-123/27
100-02-7	4-Nitrophenol	ND		100	55.6	56	59.3	59	6	1-129/33
87-86-5	Pentachlorophenol	ND		100	96.9	97	96.5	97	0	36-143/24
108-95-2	Phenol	ND		100	51.9	52	53.7	54	3	1-102/32
95-95-4	2,4,5-Trichlorophenol	ND		100	95.9	96	98.4	98	3	41-131/24
88-06-2	2,4,6-Trichlorophenol	ND		100	95.6	96	99.0	99	3	43-121/25
83-32-9	Acenaphthene	34.2		100	119	85	119	85	0	40-114/30
208-96-8	Acenaphthylene	0.68	J	100	79.6	79	80.8	80	1	36-106/31
120-12-7	Anthracene	1.2	J	100	90.8	90	92.0	91	1	54-119/23
56-55-3	Benzo(a)anthracene	ND		100	93.7	94	93.2	93	1	57-122/22
50-32-8	Benzo(a)pyrene	ND		100	92.2	92	91.0	91	1	53-126/23
205-99-2	Benzo(b)fluoranthene	ND		100	100	100	105	105	5	50-135/26
191-24-2	Benzo(g,h,i)perylene	ND		100	92.0	92	92.4	92	0	35-141/29
207-08-9	Benzo(k)fluoranthene	ND		100	91.6	92	86.1	86	6	37-144/24
101-55-3	4-Bromophenyl phenyl ether	ND		100	97.0	97	98.2	98	1	49-121/25
85-68-7	Butyl benzyl phthalate	ND		100	102	102	102	102	0	56-132/23
91-58-7	2-Chloronaphthalene	ND		100	84.3	84	86.3	86	2	34-115/30
106-47-8	4-Chloroaniline	ND		100	62.3	62	65.7	66	5	10-108/37
86-74-8	Carbazole	13.4		100	113	100	115	102	2	49-146/22
218-01-9	Chrysene	ND		100	90.8	91	91.1	91	0	55-125/23
111-91-1	bis(2-Chloroethoxy)methane	ND		100	93.7	94	95.5	96	2	37-119/32
111-44-4	bis(2-Chloroethyl)ether	ND		100	94.9	95	96.5	97	2	32-122/37
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	94.4	94	95.4	95	1	34-112/32
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	91.7	92	93.9	94	2	43-118/27
95-50-1	1,2-Dichlorobenzene	ND		100	86.7	87	89.1	89	3	31-110/31
541-73-1	1,3-Dichlorobenzene	ND		100	81.6	82	84.2	84	3	27-107/32
106-46-7	1,4-Dichlorobenzene	ND		100	84.7	85	87.4	87	3	29-108/31
121-14-2	2,4-Dinitrotoluene	ND		100	98.0	98	101	101	3	50-125/31

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-MS	F47515.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
OP19045-MSD	F47516.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
N86299-1	F47514.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Compound	N86299-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
606-20-2	2,6-Dinitrotoluene	ND		100	98.3	98	101	101	3	45-124/28
91-94-1	3,3'-Dichlorobenzidine	ND		100	74.8	75	82.9	83	10	1-145/37
53-70-3	Dibenzo(a,h)anthracene	ND		100	93.5	94	94.1	94	1	40-138/27
132-64-9	Dibenzofuran	27.3		100	111	84	115	88	4	42-119/28
84-74-2	Di-n-butyl phthalate	ND		100	117	117	113	113	3	54-131/22
117-84-0	Di-n-octyl phthalate	ND		100	123	123	121	121	2	49-151/25
84-66-2	Diethyl phthalate	ND		100	103	103	102	102	1	49-123/24
131-11-3	Dimethyl phthalate	ND		100	98.0	98	98.5	99	1	39-124/27
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	110	110	108	108	2	51-140/29
206-44-0	Fluoranthene	1.9	J	100	102	100	102	100	0	52-129/22
86-73-7	Fluorene	7.1		100	98.5	91	101	94	3	43-116/26
118-74-1	Hexachlorobenzene	ND		100	103	103	99.1	99	4	49-121/24
87-68-3	Hexachlorobutadiene	ND		100	95.7	96	97.8	98	2	30-126/33
77-47-4	Hexachlorocyclopentadiene	ND		200	120	60	131	66	9	1-109/41
67-72-1	Hexachloroethane	ND		100	91.6	92	94.4	94	3	22-113/34
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	95.1	95	94.7	95	0	40-139/28
78-59-1	Isophorone	ND		100	95.7	96	96.9	97	1	34-116/37
91-57-6	2-Methylnaphthalene	1.3	J	100	90.3	89	92.0	91	2	28-123/32
88-74-4	2-Nitroaniline	ND		100	102	102	107	107	5	30-135/33
99-09-2	3-Nitroaniline	ND		100	78.9	79	79.0	79	0	15-134/35
100-01-6	4-Nitroaniline	ND		100	97.8	98	103	103	5	18-153/32
91-20-3	Naphthalene	37.2		100	117	80	119	82	2	22-120/30
98-95-3	Nitrobenzene	ND		100	86.8	87	88.4	88	2	31-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		100	99.2	99	100	100	1	32-125/33
86-30-6	N-Nitrosodiphenylamine	ND		100	88.1	88	89.7	90	2	49-131/24
85-01-8	Phenanthrene	6.6		100	94.3	88	94.7	88	0	51-117/23
129-00-0	Pyrene	0.91	J	100	86.6	86	86.7	86	0	54-122/22
120-82-1	1,2,4-Trichlorobenzene	ND		100	86.7	87	89.1	89	3	27-115/31

CAS No.	Surrogate Recoveries	MS	MSD	N86299-1	Limits
367-12-4	2-Fluorophenol	56%	56%	40%	10-88%
4165-62-2	Phenol-d5	42%	43%	25%	10-71%
118-79-6	2,4,6-Tribromophenol	102%	101%	102%	45-134%
4165-60-0	Nitrobenzene-d5	85%	87%	91%	32-128%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19045-MS	F47515.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
OP19045-MSD	F47516.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509
N86299-1	F47514.D	1	01/10/05	NAP	12/16/04	OP19045	EF2509

The QC reported here applies to the following samples: **Method:** SW846 8270C

N86261-1, N86261-2, N86261-3, N86261-4, N86261-6

CAS No.	Surrogate Recoveries	MS	MSD	N86299-1	Limits
321-60-8	2-Fluorobiphenyl	80%	81%	82%	34-121%
1718-51-0	Terphenyl-d14	85%	87%	98%	41-129%

Instrument Performance Check (DFTPP)

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2491-DFTPP	**Injection Date:**	12/14/04
Lab File ID:	F46939.D	**Injection Time:**	16:21
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	4643	45.7	Pass
68	Less than 2.0% of mass 69	52	0.51 (1.1) [a]	Pass
69	Mass 69 relative abundance	4650	45.8	Pass
70	Less than 2.0% of mass 69	0	0.0 (0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	5573	54.9	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	10149	100.0	Pass
199	5.0 - 9.0% of mass 198	607	6.0	Pass
275	10.0 - 30.0% of mass 198	2337	23.0	Pass
365	1.0 - 100.0% of mass 198	192	1.9	Pass
441	Present, but less than mass 443	1092	10.8 (77.2) [b]	Pass
442	40.0 - 100.0% of mass 198	7223	71.2	Pass
443	17.0 - 23.0% of mass 442	1414	13.9 (19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2491-ICC2491	F46940.D	12/14/04	16:45	00:24	Initial cal 50
EF2491-IC2491	F46941.D	12/14/04	17:22	01:01	Initial cal 100
EF2491-IC2491	F46942.D	12/14/04	17:59	01:38	Initial cal 80
EF2491-IC2491	F46943.D	12/14/04	18:36	02:15	Initial cal 25
EF2491-IC2491	F46944.D	12/14/04	19:12	02:51	Initial cal 10
EF2491-IC2491	F46945.D	12/14/04	19:49	03:28	Initial cal 5
EF2491-IC2491	F46946.D	12/14/04	20:26	04:05	Initial cal 2
OP18875-MB1	F46948.D	12/14/04	21:39	05:18	Method Blank
ZZZZZZ	F46949.D	12/14/04	22:15	05:54	(unrelated sample)
ZZZZZZ	F46950.D	12/14/04	22:52	06:31	(unrelated sample)
ZZZZZZ	F46951.D	12/14/04	23:29	07:08	(unrelated sample)
ZZZZZZ	F46952.D	12/15/04	00:05	07:44	(unrelated sample)
ZZZZZZ	F46953.D	12/15/04	00:42	08:21	(unrelated sample)
ZZZZZZ	F46954.D	12/15/04	01:19	08:58	(unrelated sample)
ZZZZZZ	F46955.D	12/15/04	01:56	09:35	(unrelated sample)
ZZZZZZ	F46956.D	12/15/04	02:32	10:11	(unrelated sample)
ZZZZZZ	F46957.D	12/15/04	03:09	10:48	(unrelated sample)
ZZZZZZ	F46958.D	12/15/04	03:47	11:26	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2508-DFTPP	**Injection Date:**	01/08/05
Lab File ID:	F47468.D	**Injection Time:**	08:59
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	10455	42.3		Pass
68	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
69	Mass 69 relative abundance	10463	42.3		Pass
70	Less than 2.0% of mass 69	189	0.76	(1.8) [a]	Pass
127	40.0 - 60.0% of mass 198	12101	49.0		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	24717	100.0		Pass
199	5.0 - 9.0% of mass 198	1661	6.7		Pass
275	10.0 - 30.0% of mass 198	5676	23.0		Pass
365	1.0 - 100.0% of mass 198	596	2.4		Pass
441	Present, but less than mass 443	2901	11.7	(75.4) [b]	Pass
442	40.0 - 100.0% of mass 198	19728	79.8		Pass
443	17.0 - 23.0% of mass 442	3850	15.6	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2508-CC2491	F47469.D	01/08/05	09:13	00:14	Continuing cal 25
OP19048-MB1	F47470.D	01/08/05	09:50	00:51	Method Blank
OP19048-BS1	F47471.D	01/08/05	10:25	01:26	Blank Spike
OP19045-MB1	F47472.D	01/08/05	11:01	02:02	Method Blank
ZZZZZZ	F47473.D	01/08/05	11:37	02:38	(unrelated sample)
N86261-3	F47474.D	01/08/05	12:13	03:14	WELL X
N86261-4	F47475.D	01/08/05	12:49	03:50	FB-2
N86157-4A	F47476.D	01/08/05	13:25	04:26	(used for QC only; not part of job N86261)
ZZZZZZ	F47477.D	01/08/05	14:01	05:02	(unrelated sample)
OP19048-MS	F47478.D	01/08/05	14:37	05:38	Matrix Spike
OP19048-MSD	F47479.D	01/08/05	15:13	06:14	Matrix Spike Duplicate
ZZZZZZ	F47481.D	01/08/05	16:24	07:25	(unrelated sample)
N86261-6	F47484.D	01/08/05	18:12	09:13	WELL AX
ZZZZZZ	F47485.D	01/08/05	18:48	09:49	(unrelated sample)
ZZZZZZ	F47486.D	01/08/05	19:24	10:25	(unrelated sample)
ZZZZZZ	F47488.D	01/08/05	20:35	11:36	(unrelated sample)

SII-SSA-0014-002778

Instrument Performance Check (DFTPP)

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample:	EF2509-DFTPP	Injection Date:	01/10/05
Lab File ID:	F47509.D	Injection Time:	08:29
Instrument ID:	GCMSF		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	10423	45.8		Pass
68	Less than 2.0% of mass 69	65	0.29	(0.62) [a]	Pass
69	Mass 69 relative abundance	10514	46.2		Pass
70	Less than 2.0% of mass 69	59	0.26	(0.56) [a]	Pass
127	40.0 - 60.0% of mass 198	12127	53.3		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	22741	100.0		Pass
199	5.0 - 9.0% of mass 198	1687	7.4		Pass
275	10.0 - 30.0% of mass 198	5424	23.9		Pass
365	1.0 - 100.0% of mass 198	510	2.2		Pass
441	Present, but less than mass 443	2546	11.2	(73.6) [b]	Pass
442	40.0 - 100.0% of mass 198	17620	77.5		Pass
443	17.0 - 23.0% of mass 442	3458	15.2	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF2509-CC2491	F47510.D	01/10/05	09:20	00:51	Continuing cal 25
OP19045-BS1	F47511.D	01/10/05	09:55	01:26	Blank Spike
N86261-1	F47512.D	01/10/05	10:31	02:02	WELL AY
N86261-2	F47513.D	01/10/05	11:07	02:38	WELL AV
N86299-1	F47514.D	01/10/05	11:43	03:14	(used for QC only; not part of job N86261)
OP19045-MS	F47515.D	01/10/05	12:19	03:50	Matrix Spike
OP19045-MSD	F47516.D	01/10/05	12:54	04:25	Matrix Spike Duplicate
ZZZZZZ	F47517.D	01/10/05	13:30	05:01	(unrelated sample)
ZZZZZZ	F47518.D	01/10/05	14:06	05:37	(unrelated sample)
ZZZZZZ	F47519.D	01/10/05	14:42	06:13	(unrelated sample)
ZZZZZZ	F47520.D	01/10/05	15:18	06:49	(unrelated sample)
ZZZZZZ	F47521.D	01/10/05	15:54	07:25	(unrelated sample)

SII-SSA-0014-002779

Semivolatile Internal Standard Area Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	EF2508-CC2491	**Injection Date:**	01/08/05
Lab File ID:	F47469.D	**Injection Time:**	09:13
Instrument ID:	GCMSF	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	304882	6.30	1177480	8.92	627020	13.00	1093894	16.48	1052973	22.03	641020	24.35
Upper Limit [a]	609764	6.80	2354960	9.42	1254040	13.50	2187788	16.98	2105946	22.53	1282040	24.85
Lower Limit [b]	152441	5.80	588740	8.42	313510	12.50	546947	15.98	526487	21.53	320510	23.85
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP19048-MB1	290780	6.29	1153908	8.91	604412	13.00	1035876	16.48	978057	22.02	616877	24.35
OP19048-BS1	315575	6.30	1206755	8.91	626141	13.00	1056617	16.48	1020167	22.03	644226	24.35
OP19045-MB1	225134	6.30	881061	8.91	461964	12.99	810039	16.48	746263	22.02	468309	24.35
ZZZZZZ	254499	6.30	1009087	8.91	523740	12.99	928946	16.48	864232	22.02	524368	24.35
N86261-3	275454	6.30	1087924	8.91	579461	12.99	1029463	16.48	973213	22.02	601234	24.35
N86261-4	268040	6.30	1062546	8.91	567538	12.99	990871	16.48	929862	22.03	572690	24.35
N86157-4A	326851	6.30	1217622	8.91	586225	13.00	1055946	16.48	901557	22.05	284923*	24.39
ZZZZZZ	332270	6.30	1273633	8.91	613638	13.00	984607	16.48	956688	22.03	574188	24.35
OP19048-MS	286571	6.30	1027025	8.91	522788	13.00	926214	16.48	781487	22.05	238131*	24.39
OP19048-MSD	303601	6.30	1093151	8.92	557933	13.01	977841	16.49	738918	22.06	220048*	24.40
ZZZZZZ	281300	6.30	1042068	8.92	527097	13.01	933405	16.49	739929	22.04	224922*	24.37
N86261-6	262235	6.31	1023952	8.92	548337	13.00	960822	16.48	762285	22.03	320964	24.35
ZZZZZZ	280957	6.31	1151672	8.92	586856	13.00	981884	16.48	763009	22.03	336624	24.36
ZZZZZZ	285402	6.30	1154127	8.92	607026	13.01	1043352	16.48	831987	22.03	357701	24.35
ZZZZZZ	319466	6.30	1176903	8.92	557101	13.00	922832	16.48	760480	22.03	272838*	24.36

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Check Std:	EF2509-CC2491	**Injection Date:**	01/10/05
Lab File ID:	F47510.D	**Injection Time:**	09:20
Instrument ID:	GCMSF	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	365765	6.30	1393234	8.92	762933	13.01	1292189	16.49	1283387	22.03	761360	24.36
Upper Limit [a]	731530	6.80	2786468	9.42	1525866	13.51	2584378	16.99	2566774	22.53	1522720	24.86
Lower Limit [b]	182883	5.80	696617	8.42	381467	12.51	646095	15.99	641694	21.53	380680	23.86
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP19045-BS1	308096	6.30	1203834	8.92	659759	13.01	1153939	16.49	1237770	22.03	756439	24.36
N86261-1	297550	6.30	1216250	8.91	663970	13.00	1182796	16.48	1161702	22.03	734866	24.35
N86261-2	291001	6.30	1200521	8.92	650226	13.01	1152209	16.49	1089300	22.03	660811	24.35
N86299-1	294024	6.30	1162419	8.91	651252	13.00	1157250	16.48	1086544	22.03	674896	24.35
OP19045-MS	345318	6.30	1349187	8.92	732434	13.01	1248428	16.49	1345413	22.04	822905	24.36
OP19045-MSD	321713	6.30	1264000	8.92	687635	13.01	1192382	16.49	1262890	22.04	779765	24.36
ZZZZZZ	298109	6.30	1171009	8.91	656582	13.00	1119745	16.48	1103065	22.03	674192	24.35
ZZZZZZ	286270	6.30	1102060	8.95	654209	13.01	1097060	16.49	1142762	22.03	730436	24.36
ZZZZZZ	247401	6.30	1002919	8.96	604556	13.01	1018232	16.48	914473	22.03	553378	24.36
ZZZZZZ	306358	6.30	1318907	8.92	719014	13.00	1263470	16.48	1181240	22.03	737778	24.36
ZZZZZZ	287586	6.29	1156414	8.91	632419	13.00	1107798	16.48	1140641	22.03	697416	24.36

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Method: SW846 8270C Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
N86261-1	F47512.D	44.0	29.0	87.0	76.0	70.0	83.0
N86261-2	F47513.D	46.0	32.0	99.0	78.0	73.0	93.0
N86261-3	F47474.D	39.0	27.0	88.0	72.0	69.0	95.0
N86261-4	F47475.D	45.0	29.0	81.0	85.0	75.0	92.0
N86261-6	F47484.D	49.0	32.0	96.0	89.0	85.0	112.0
OP19045-BS1	F47511.D	38.0	25.0	95.0	84.0	78.0	83.0
OP19045-MB1	F47472.D	60.0	40.0	103.0	105.0	96.0	106.0
OP19045-MB1	P11389.D	60.0	39.0	124.0	101.0	95.0	106.0
OP19045-MS	F47515.D	56.0	42.0	102.0	85.0	80.0	85.0
OP19045-MSD	F47516.D	56.0	43.0	101.0	87.0	81.0	87.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-88%
S2 = Phenol-d5	10-71%
S3 = 2,4,6-Tribromophenol	45-134%
S4 = Nitrobenzene-d5	32-128%
S5 = 2-Fluorobiphenyl	34-121%
S6 = Terphenyl-d14	41-129%

Initial Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2491-ICC2491
Lab FileID: F46940.D

Response Factor Report MSF

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Dec 20 09:17:47 2004
Response via : Initial Calibration

Calibration Files
2 =F46946.D 5 =F46945.D 25 =F46943.D 80 =F46942.D
100 =F46941.D 50 =F46940.D 10 =F46944.D =

Compound	2	5	25	80	100	50	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD								
2) 1,4-Dioxane	0.829	0.741	0.653	0.583	0.594	0.628	0.708	0.676	13.05
3) Pyridine	1.702	1.719	1.682	1.489	1.514	1.594	1.780	1.640	6.69
4) N-Nitrosodim	0.621	0.550	0.532	0.481	0.488	0.514	0.581	0.538	9.37
5) 2-Fluorophen	1.486	1.528	1.409	1.250	1.257	1.344	1.491	1.395	8.19
6) Indene	2.452	2.509	2.532	2.320	2.349	2.429	2.670	2.466	4.81
7) Cumene	3.078	3.209	3.184	3.030	3.075	3.134	3.361	3.153	3.54
8) Phenol-d5	1.825	1.872	1.724	1.450	1.450	1.605	1.829	1.679	10.69
9) Phenol	1.969	1.989	1.927	1.569	1.567	1.765	2.048	1.833	10.98
10) Aniline	2.140	2.285	2.232	1.837	1.852	2.040	2.380	2.110	9.96
11) bis(2-Chloro	1.345	1.370	1.348	1.213	1.213	1.276	1.418	1.312	6.05
12) Benzaldehyde	0.275	0.361	0.593	0.238	0.181	0.401	0.405	0.351	38.87
13) 2-Chlorophen	1.433	1.462	1.447	1.271	1.281	1.366	1.537	1.399	7.02
14) Decane	1.292	1.363	1.313	1.174	1.166	1.231	1.423	1.280	7.47
15) 1,3-Dichloro	1.535	1.598	1.584	1.468	1.492	1.529	1.669	1.554	4.43
16) 1,4-Dichloro	1.637	1.653	1.595	1.490	1.499	1.552	1.690	1.588	4.87
17) Benzyl alcoh	0.909	0.925	0.949	0.823	0.826	0.901	0.985	0.903	6.67
18) 1,2-Dichloro	1.495	1.533	1.489	1.365	1.382	1.441	1.584	1.470	5.39
19) Acetophenone	1.926	1.959	1.948	1.703	1.731	1.837	2.056	1.880	6.85
20) 2-Methylphen	1.309	1.336	1.303	1.103	1.116	1.210	1.370	1.250	8.60
21) 2,2'-oxybis(	0.460	0.466	0.459	0.419	0.420	0.437	0.490	0.450	5.74
22) 3&4-Methylph	1.348	1.374	1.388	1.150	1.163	1.276	1.455	1.308	8.87
23) n-Nitroso-di	0.758	0.811	0.823	0.717	0.728	0.772	0.850	0.780	6.36
24) Hexachloroet	0.479	0.507	0.525	0.500	0.511	0.515	0.547	0.512	4.14
25) I Naphthalene-d8	ISTD								
26) Nitrobenzene	0.349	0.372	0.390	0.371	0.378	0.383	0.408	0.379	4.84
27) Nitrobenzene	0.161	0.172	0.181	0.172	0.176	0.177	0.188	0.175	4.81
28) Quinoline	0.664	0.679	0.691	0.618	0.640	0.662	0.727	0.669	5.29
29) Isophorone	0.607	0.637	0.645	0.580	0.593	0.614	0.681	0.622	5.56
30) 2-Nitropheno	0.131	0.154	0.183	0.180	0.184	0.181	0.184	0.171	12.07
31) 2,4-Dimethyl	0.317	0.338	0.349	0.313	0.322	0.334	0.355	0.332	4.81
32) Benzoic acid			0.238	0.253	0.263	0.244	0.181	0.236	13.56
33) bis(2-Chloro	0.382	0.398	0.396	0.364	0.370	0.376	0.418	0.386	4.90
34) 2,4-Dichloro	0.251	0.264	0.278	0.256	0.262	0.269	0.289	0.267	4.90
35) 1,3,5-Trichl	0.335	0.343	0.335	0.326	0.331	0.331	0.354	0.337	2.75
36) 1,2,4-Trichl	0.324	0.326	0.322	0.313	0.320	0.318	0.343	0.324	2.94
37) 1,2,3-Trichl	0.310	0.314	0.309	0.297	0.306	0.305	0.329	0.310	3.22
38) alpha-Terpin	0.268	0.278	0.277	0.241	0.240	0.255	0.297	0.265	7.90
39) Naphthalene	1.111	1.110	1.063	0.983	0.998	1.027	1.137	1.061	5.68
40) 4-Chloroanil	0.404	0.441	0.444	0.389	0.396	0.421	0.470	0.423	6.98
41) 2,3-Dichloro	0.311	0.332	0.335	0.299	0.307	0.322	0.352	0.323	5.68
42) Caprolactam	0.100	0.121	0.137	0.117	0.122	0.128	0.139	0.124	10.68
43) Hexachlorobu	0.182	0.183	0.184	0.182	0.186	0.183	0.195	0.185	2.54
44) 4-Chloro-3-m	0.248	0.276	0.296	0.265	0.274	0.284	0.300	0.278	6.47
45) 2-Methylnaph	0.673	0.693	0.702	0.641	0.657	0.675	0.740	0.681	5.77

Initial Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2491-ICC2491
Lab FileID: F46940.D

46)	1-Methylnaph	0.655	0.676	0.678	0.620	0.636	0.659	0.713	0.662	4.56
47)	Dimethylnaph	0.565	0.591	0.601	0.541	0.552	0.578	0.633	0.580	5.38
48)	I Acenaphthene-d10	----------	ISTD	----------						
49)	Hexachlorocy	0.180	0.209	0.304	0.358	0.369	0.335	0.283	0.291	24.99
	----- Linear regression ----- Coefficient = 0.9984									
	Response Ratio = -0.05128 + 0.37242 *A									
50)	2,4,6-Trichl	0.324	0.369	0.397	0.395	0.405	0.392	0.406	0.384	7.56
51)	2,4,5-Trichl	0.369	0.401	0.438	0.433	0.444	0.435	0.445	0.424	6.68
52)	2-Fluorobiph	1.530	1.522	1.507	1.523	1.537	1.491	1.591	1.529	2.06
53)	2-Chloronaph	1.222	1.229	1.212	1.177	1.183	1.182	1.281	1.212	3.03
54)	Biphenyl	1.692	1.699	1.663	1.598	1.598	1.617	1.763	1.662	3.70
55)	2-Nitroanili	0.239	0.305	0.341	0.297	0.299	0.317	0.349	0.307	11.70
56)	Dimethylphth	1.184	1.256	1.289	1.220	1.250	1.255	1.331	1.255	3.72
57)	Acenaphthyle	1.782	1.899	1.991	1.912	1.961	1.944	2.056	1.935	4.41
58)	2,6-Dinitrot	0.162	0.221	0.278	0.279	0.285	0.275	0.267	0.252	17.95
	----- Linear regression ----- Coefficient = 0.9997									
	Response Ratio = -0.00705 + 0.28508 *A									
59)	3-Nitroanili	0.228	0.287	0.337	0.309	0.316	0.322	0.341	0.306	12.65
60)	Acenaphthene	1.241	1.243	1.226	1.177	1.209	1.203	1.305	1.229	3.31
61)	2,4-Dinitrop		0.064	0.137	0.168	0.175	0.151	0.108	0.134	31.28
	----- Linear regression ----- Coefficient = 0.9975									
	Response Ratio = -0.04432 + 0.17979 *A									
62)	4-Nitropheno		0.141	0.170	0.165	0.170	0.173	0.167	0.164	7.28
63)	Dibenzofuran	1.716	1.734	1.674	1.597	1.629	1.642	1.786	1.683	3.94
64)	2,4-Dinitrot	0.217	0.315	0.381	0.364	0.378	0.371	0.371	0.342	17.45
	----- Linear regression ----- Coefficient = 0.9993									
	Response Ratio = -0.00471 + 0.37513 *A									
65)	2,3,4,6-Tetr	0.220	0.284	0.331	0.325	0.339	0.329	0.328	0.308	13.81
66)	Diethylphtha	1.160	1.241	1.267	1.167	1.195	1.227	1.320	1.225	4.67
67)	Fluorene	1.288	1.341	1.341	1.259	1.288	1.303	1.411	1.319	3.81
68)	4-Chlorophen	0.671	0.674	0.682	0.655	0.675	0.662	0.710	0.676	2.56
69)	4-Nitroanili	0.211	0.286	0.327	0.271	0.267	0.303	0.328	0.285	14.31
70)	I Phenanthrene-d10	----------	ISTD	----------						
71)	4,6-Dinitro-		0.058	0.106	0.132	0.135	0.117	0.089	0.106	27.52
	----- Linear regression ----- Coefficient = 0.9973									
	Response Ratio = -0.01635 + 0.13942 *A									
72)	Atrazine	0.096	0.121	0.132	0.110	0.106	0.118	0.134	0.117	11.75
73)	n-Nitrosodip	0.533	0.563	0.569	0.556	0.562	0.559	0.595	0.563	3.24
74)	1,2-Diphenyl	0.749	0.772	0.742	0.687	0.716	0.705	0.805	0.739	5.51
75)	2,4,6-Tribro	0.068	0.082	0.089	0.094	0.097	0.090	0.087	0.087	11.21
76)	4-Bromopheny	0.188	0.205	0.209	0.217	0.224	0.210	0.216	0.210	5.52
77)	Hexachlorobe	0.205	0.210	0.205	0.214	0.222	0.209	0.217	0.212	2.88
78)	Pentachlorop	0.146	0.112	0.144	0.155	0.161	0.154	0.136	0.144	11.48
79)	Phenanthrene	1.214	1.210	1.167	1.133	1.169	1.153	1.250	1.185	3.43
80)	Anthracene	1.149	1.228	1.207	1.174	1.202	1.192	1.273	1.204	3.31
81)	Carbazole	0.922	0.993	0.977	0.830	0.810	0.904	1.039	0.925	9.16
82)	Di-n-butylph	0.793	1.063	1.144	1.089	1.114	1.128	1.142	1.068	11.66
83)	Fluoranthene	0.989	1.189	1.170	1.113	1.161	1.181	1.211	1.145	6.56
84)	Octadecane	0.384	0.431	0.420	0.399	0.391	0.397	0.447	0.410	5.63
85)	I Chrysene-d12	----------	ISTD	----------						
86)	Benzidine	0.127	0.189	0.231	0.165	0.153	0.205	0.221	0.184	20.65
87)	Pyrene	1.205	1.323	1.315	1.313	1.314	1.291	1.357	1.303	4.63

Initial Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2491-ICC2491
Lab FileID: F46940.D

```
 88) Terphenyl-d1 0.815 0.908 0.914 0.919 0.929 0.895 0.934        0.902   4.48
 89) Butylbenzylp 0.262 0.425 0.485 0.479 0.479 0.474 0.464        0.438  18.29
            ----- Linear regression -----  Coefficient =  0.9999
              Response Ratio = -0.00607 + 0.48182 *A

 90) Butyl steara 0.156 0.249 0.280 0.251 0.236 0.255 0.280        0.244  17.27
            ----- Linear regression -----  Coefficient =  0.9966
              Response Ratio = 0.00901 + 0.23987 *A

 91) Benzo[a]anth 0.979 1.142 1.155 1.163 1.184 1.156 1.192        1.139   6.39
 92) 3,3'-Dichlor 0.256 0.313 0.363 0.337 0.320 0.363 0.347        0.329  11.37
 93) Chrysene     1.181 1.187 1.162 1.139 1.156 1.128 1.241        1.171   3.20
 94) bis(2-Ethylh 0.337 0.552 0.629 0.624 0.611 0.608 0.610        0.567  18.49
            ----- Linear regression -----  Coefficient =  0.9997
              Response Ratio = -0.00518 + 0.61819 *A


 95) I   Perylene-d12          ----------------ISTD--------------------
 96) Di-n-octylph 0.477 1.060 1.414 1.439 1.419 1.399 1.238        1.206  28.98
            ----- Linear regression -----  Coefficient =  0.9998
              Response Ratio = -0.04348 + 1.44516 *A

 97) Benzo[b]fluo 1.370 1.553 1.746 1.846 1.780 1.723 1.725        1.677   9.67
 98) Benzo[k]fluo 1.675 1.822 1.811 1.684 1.851 1.848 1.856        1.792   4.40
 99) Benzo[a]pyre 1.196 1.482 1.592 1.630 1.689 1.639 1.604        1.547  10.81
100) Indeno[1,2,3 1.014 1.239 1.441 1.630 1.647 1.570 1.428        1.424  16.11
            ----- Linear regression -----  Coefficient =  0.9994
              Response Ratio = -0.07280 + 1.66364 *A

101) Dibenz(a,h)a 0.683 0.923 1.099 1.275 1.286 1.210 1.065        1.077  20.06
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.06856 + 1.30299 *A

102) Dibenz[a,h]a 0.878 1.058 1.255 1.421 1.441 1.366 1.245        1.238  16.60
            ----- Linear regression -----  Coefficient =  0.9993
              Response Ratio = -0.06637 + 1.45402 *A

103) 7,12-Dimethy 0.544 0.664 0.774 0.770 0.796 0.777 0.756        0.726  12.53
104) 3-Methylchol                                                  0.000# -1.00
105) Benzo[g,h,i] 0.826 1.008 1.164 1.358 1.368 1.309 1.162        1.171  17.04
            ----- Linear regression -----  Coefficient =  0.9992
              Response Ratio = -0.06719 + 1.38666 *A

-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MF2491.M          Mon Dec 20 16:50:35 2004    RPT1
```

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2508-CC2491
Lab FileID: F47469.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF2508\F47469.D Vial: 2
Acq On : 8 Jan 2005 9:13 am Operator: NINAP
Sample : CC2491-25 Inst : MSF
Misc : OP19067,EF2508 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	6.30
2	t	1,4-Dioxane	0.676	0.576	14.8	91	0.00	2.57
3	t	Pyridine	1.640	1.564	4.6	96	0.00	2.89
4	t	N-Nitrosodimethylamine	0.538	0.631	-17.3	123	0.00	2.87
5	S	2-Fluorophenol	1.395	1.386	0.6	102	0.00	4.33
6	t	Indene	2.466	2.576	-4.5	106	0.00	6.83
7	t	Cumene	3.153	3.251	-3.1	106	0.00	5.02
8	S	Phenol-d5	1.679	1.673	0.4	101	0.00	5.79
9	t	Phenol	1.833	1.938	-5.7	104	0.00	5.81
10	t	Aniline	2.110	1.956	7.3	91	0.00	5.79
11	t	bis(2-Chloroethyl)ether	1.312	1.219	7.1	94	0.00	5.89
12	t	Benzaldehyde	0.351	0.605	-72.4#	106	0.00	5.55
13	t	2-Chlorophenol	1.399	1.444	-3.2	104	0.00	6.00
14	t	Decane	1.280	1.424	-11.2	113	0.00	6.07
15	t	1,3-Dichlorobenzene	1.554	1.554	0.0	102	0.00	6.24
16	t	1,4-Dichlorobenzene	1.588	1.658	-4.4	108	0.00	6.33
17	t	Benzyl alcohol	0.903	0.886	1.9	97	0.00	6.63
18	t	1,2-Dichlorobenzene	1.470	1.513	-2.9	105	0.00	6.68
19	t	Acetophenone	1.880	1.980	-5.3	106	0.00	7.14
20	t	2-Methylphenol	1.250	1.213	3.0	97	0.00	6.92
21	t	2,2'-oxybis(1-Chloropropa	0.450	0.453	-0.7	103	0.00	6.93
22	t	3&4-Methylphenol	1.308	1.319	-0.8	99	0.00	7.22
23	t	n-Nitroso-di-n-propylamin	0.780	0.835	-7.1	105	0.00	7.20
24	t	Hexachloroethane	0.512	0.565	-10.4	112	0.00	7.28
25	I	Naphthalene-d8	1.000	1.000	0.0	104	0.00	8.92
26	S	Nitrobenzene-d5	0.379	0.416	-9.8	111	0.00	7.44
27	t	Nitrobenzene	0.175	0.181	-3.4	104	0.00	7.48
28	t	Quinoline	0.669	0.681	-1.8	103	0.00	9.73
29	t	Isophorone	0.622	0.668	-7.4	108	0.00	7.97
30	t	2-Nitrophenol	0.171	0.197	-15.2	112	0.00	8.15
31	t	2,4-Dimethylphenol	0.332	0.359	-8.1	107	0.00	8.33
32	t	Benzoic acid	0.236	0.181	23.3#	79	0.00	8.63
33	t	bis(2-Chloroethoxy)methan	0.386	0.388	-0.5	102	0.00	8.50
34	t	2,4-Dichlorophenol	0.267	0.284	-6.4	106	0.00	8.70
35		1,3,5-Trichlorobenzene	0.337	0.347	-3.0	108	0.00	8.16
36	t	1,2,4-Trichlorobenzene	0.324	0.338	-4.3	109	0.00	8.84
37		1,2,3-Trichlorobenzene	0.310	0.324	-4.5	109	0.00	9.37
38	t	alpha-Terpineol	0.265	0.298	-12.5	112	0.00	9.01
39	t	Naphthalene	1.061	1.082	-2.0	106	0.00	8.96
40	t	4-Chloroaniline	0.423	0.411	2.8	96	0.00	9.18
41	t	2,3-Dichloroaniline	0.323	0.345	-6.8	107	0.00	9.30

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2508-CC2491
Lab FileID: F47469.D

42	t	Caprolactam	0.124	0.132	-6.5	100	0.00	9.90
43	t	Hexachlorobutadiene	0.185	0.202	-9.2	114	0.00	9.40
44	t	4-Chloro-3-methylphenol	0.278	0.312	-12.2	110	0.00	10.40
45	t	2-Methylnaphthalene	0.683	0.721	-5.6	107	0.00	10.54
46	t	1-Methylnaphthalene	0.662	0.690	-4.2	106	0.00	10.78
47	t	Dimethylnaphthalene	0.580	0.628	-8.3	109	0.00	12.01
48	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00	13.00
			True	Calc.	% Drift			
49	t	Hexachlorocyclopentadiene	50.000	46.321	7.4	109	0.00	11.08
			AvgRF	CCRF	% Dev			
50	t	2,4,6-Trichlorophenol	0.384	0.399	-3.9	110	0.00	11.31
51	t	2,4,5-Trichlorophenol	0.424	0.433	-2.1	108	0.00	11.43
52	S	2-Fluorobiphenyl	1.529	1.526	0.2	111	0.00	11.48
53	t	2-Chloronaphthalene	1.212	1.204	0.7	109	0.00	11.65
54	t	Biphenyl	1.662	1.642	1.2	108	0.00	11.66
55	t	2-Nitroaniline	0.307	0.381	-24.1#	122	0.00	12.03
56	t	Dimethylphthalate	1.255	1.291	-2.9	110	0.00	12.58
57	t	Acenaphthylene	1.935	1.971	-1.9	108	0.00	12.63
			True	Calc.	% Drift			
58	t	2,6-Dinitrotoluene	25.000	27.049	-8.2	117	0.00	12.71
			AvgRF	CCRF	% Dev			
59	t	3-Nitroaniline	0.306	0.321	-4.9	104	0.00	13.03
60	t	Acenaphthene	1.229	1.227	0.2	110	0.00	13.07
			True	Calc.	% Drift			
61	t	2,4-Dinitrophenol	50.000	57.114	-14.2	136	0.00	13.28
			AvgRF	CCRF	% Dev			
62	t	4-Nitrophenol	0.164	0.161	1.8	104	0.00	13.64
63	t	Dibenzofuran	1.683	1.694	-0.7	111	0.00	13.46
			True	Calc.	% Drift			
64	t	2,4-Dinitrotoluene	25.000	27.391	-9.6	116	0.00	13.64
			AvgRF	CCRF	% Dev			
65		2,3,4,6-Tetrachlorophenol	0.308	0.337	-9.4	112	0.00	13.91
66	t	Diethylphthalate	1.225	1.286	-5.0	111	0.00	14.28
67	t	Fluorene	1.319	1.351	-2.4	110	0.00	14.28
68	t	4-Chlorophenyl-phenylethe	0.676	0.694	-2.7	112	0.00	14.34
69	t	4-Nitroaniline	0.285	0.273	4.2	91	0.00	14.50
70	I	Phenanthrene-d10	1.000	1.000	0.0	112	0.00	16.48
			True	Calc.	% Drift			
71	t	4,6-Dinitro-2-methylpheno	25.000	28.693	-14.8	141	0.00	14.59
			AvgRF	CCRF	% Dev			
72	t	Atrazine	0.117	0.114	2.6	96	0.00	16.07
73	t	n-Nitrosodiphenylamine	0.563	0.543	3.6	107	0.00	14.66
74	t	1,2-Diphenylhydrazine	0.739	0.748	-1.2	113	0.00	14.71
75	S	2,4,6-Tribromophenol	0.087	0.094	-8.0	118	0.00	14.91
76	t	4-Bromophenyl-phenylether	0.210	0.212	-1.0	114	0.00	15.48
77	t	Hexachlorobenzene	0.212	0.214	-0.9	116	0.00	15.78
78	t	Pentachlorophenol	0.144	0.132	8.3	103	0.00	16.25
79	t	Phenanthrene	1.185	1.120	5.5	107	0.00	16.54

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2508-CC2491
Lab FileID: F47469.D

80	t	Anthracene	1.204	1.154	4.2	107	0.00	16.64
81	t	Carbazole	0.925	0.897	3.0	103	0.00	17.10
82	t	Di-n-butylphthalate	1.068	1.100	-3.0	108	0.00	18.19
83	t	Fluoranthene	1.145	1.160	-1.3	111	0.00	19.27
84	t	Octadecane	0.410	0.454	-10.7	121	0.00	16.48
85	I	Chrysene-d12	1.000	1.000	0.0	113	0.00	22.03
86	t	Benzidine	0.184	0.109	40.8#	53	0.00	19.65
87	t	Pyrene	1.303	1.259	3.4	108	0.00	19.71
88	S	Terphenyl-d14	0.902	0.904	-0.2	112	0.00	20.13
			True	Calc.	% Drift			
89	t	Butylbenzylphthalate	25.000	24.213	3.1	106	0.00	21.18
90		Butyl stearate	25.000	26.590	-6.4	109	0.00	21.29
			AvgRF	CCRF	% Dev			
91	t	Benzo[a]anthracene	1.139	1.138	0.1	111	0.00	22.00
92	t	3,3'-Dichlorobenzidine	0.329	0.344	-4.6	107	0.00	22.03
93	t	Chrysene	1.171	1.143	2.4	111	0.00	22.07
			True	Calc.	% Drift			
94	t	bis(2-Ethylhexyl)phthalat	25.000	23.048	7.8	101	0.00	22.28
			AvgRF	CCRF	% Dev			
95	I	Perylene-d12	1.000	1.000	0.0	111	0.00	24.35
			True	Calc.	% Drift			
96	t	Di-n-octylphthalate	25.000	23.034	7.9	99	0.00	23.26
			AvgRF	CCRF	% Dev			
97	t	Benzo[b]fluoranthene	1.677	1.780	-6.1	113	0.00	23.76
98	t	Benzo[k]fluoranthene	1.792	1.790	0.1	110	0.00	23.80
99	t	Benzo[a]pyrene	1.547	1.612	-4.2	112	0.00	24.26
			True	Calc.	% Drift			
100	t	Indeno[1,2,3-cd]pyrene	25.000	24.156	3.4	115	0.00	26.33
101	t	Dibenz(a,h)acridine	25.000	23.837	4.7	114	0.00	25.87
102	t	Dibenz[a,h]anthracene	25.000	23.729	5.1	113	0.00	26.36
			AvgRF	CCRF	% Dev			
103	t	7,12-Dimethylbenz(a)anthr	0.726	0.710	2.2	102	0.00	23.79
104	t	3-Methylcholanthrene		----------NA----------				
			True	Calc.	% Drift			
105	t	Benzo[g,h,i]perylene	25.000	24.439	2.2	119	0.00	26.89

(#) = Out of Range SPCC's out = 0 CCC's out = 0

F47469.D MF2491.M Sat Jan 08 13:01:11 2005 RPT1

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2509-CC2491
Lab FileID: F47510.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF2509\F47510.D
Acq On : 10 Jan 2005 9:20 am
Sample : CC2491-25
Misc : OP19067,EF2509
MS Integration Params: LSCINT.P

Vial: 2
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	0.00	6.30
2	t	1,4-Dioxane	0.676	0.625	7.5	119	-0.12	2.45
3	t	Pyridine	1.640	1.541	6.0	114	-0.11	2.78
4	t	N-Nitrosodimethylamine	0.538	0.593	-10.2	139	-0.09	2.78
5	S	2-Fluorophenol	1.395	1.376	1.4	122	0.00	4.33
6	t	Indene	2.466	2.566	-4.1	126	0.00	6.83
7	t	Cumene	3.153	3.320	-5.3	130	0.00	5.02
8	S	Phenol-d5	1.679	1.619	3.6	117	-0.01	5.78
9	t	Phenol	1.833	1.898	-3.5	123	0.00	5.80
10	t	Aniline	2.110	1.749	17.1	98	0.00	5.79
11	t	bis(2-Chloroethyl)ether	1.312	1.489	-13.5	138	0.00	5.89
12	t	Benzaldehyde	0.351	0.623	-77.5#	131	0.00	5.55
13	t	2-Chlorophenol	1.399	1.424	-1.8	123	0.00	5.99
14	t	Decane	1.280	1.507	-17.7	143	0.00	6.07
15	t	1,3-Dichlorobenzene	1.554	1.549	0.3	122	0.00	6.23
16	t	1,4-Dichlorobenzene	1.588	1.636	-3.0	128	0.00	6.33
17	t	Benzyl alcohol	0.903	0.866	4.1	114	0.00	6.64
18	t	1,2-Dichlorobenzene	1.470	1.536	-4.5	128	0.00	6.68
19	t	Acetophenone	1.880	1.961	-4.3	125	0.00	7.14
20	t	2-Methylphenol	1.250	1.234	1.3	118	0.00	6.92
21	t	2,2'-oxybis(1-Chloropropa	0.450	0.467	-3.8	127	0.00	6.93
22	t	3&4-Methylphenol	1.308	1.339	-2.4	120	0.00	7.22
23	t	n-Nitroso-di-n-propylamin	0.780	0.881	-12.9	133	0.00	7.20
24	t	Hexachloroethane	0.512	0.557	-8.8	132	0.00	7.28
25	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	8.92
26	S	Nitrobenzene-d5	0.379	0.416	-9.8	131	0.00	7.44
27	t	Nitrobenzene	0.175	0.182	-4.0	123	0.00	7.48
28	t	Quinoline	0.669	0.687	-2.7	122	0.01	9.74
29	t	Isophorone	0.622	0.697	-12.1	133	0.00	7.97
30	t	2-Nitrophenol	0.171	0.192	-12.3	129	0.00	8.15
31	t	2,4-Dimethylphenol	0.332	0.358	-7.8	126	0.00	8.32
32	t	Benzoic acid	0.236	0.192	18.6	99	0.02	8.65
33	t	bis(2-Chloroethoxy)methan	0.386	0.400	-3.6	124	0.00	8.50
34	t	2,4-Dichlorophenol	0.267	0.285	-6.7	126	0.00	8.70
35		1,3,5-Trichlorobenzene	0.337	0.356	-5.6	131	0.00	8.17
36	t	1,2,4-Trichlorobenzene	0.324	0.344	-6.2	132	0.00	8.84
37		1,2,3-Trichlorobenzene	0.310	0.333	-7.4	132	0.00	9.37
38	t	alpha-Terpineol	0.265	0.312	-17.7	139	0.00	9.01
39	t	Naphthalene	1.061	1.085	-2.3	126	0.00	8.96
40	t	4-Chloroaniline	0.423	0.368	13.0	102	0.00	9.19
41	t	2,3-Dichloroaniline	0.323	0.357	-10.5	131	0.00	9.30

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2509-CC2491
Lab FileID: F47510.D

42	t	Caprolactam	0.124	0.143	-15.3	128	0.02	9.92
43	t	Hexachlorobutadiene	0.185	0.208	-12.4	139	0.00	9.40
44	t	4-Chloro-3-methylphenol	0.278	0.313	-12.6	130	0.00	10.40
45	t	2-Methylnaphthalene	0.683	0.732	-7.2	128	0.00	10.54
46	t	1-Methylnaphthalene	0.662	0.728	-10.0	132	0.00	10.78
47	t	Dimethylnaphthalene	0.580	0.645	-11.2	132	0.00	12.01
48	I	Acenaphthene-d10	1.000	1.000	0.0	133	0.00	13.01
			True	Calc.	% Drift			
49	t	Hexachlorocyclopentadiene	50.000	41.968	16.1	119	0.00	11.08
			AvgRF	CCRF	% Dev			
50	t	2,4,6-Trichlorophenol	0.384	0.386	-0.5	130	0.00	11.31
51	t	2,4,5-Trichlorophenol	0.424	0.433	-2.1	132	0.00	11.43
52	S	2-Fluorobiphenyl	1.529	1.500	1.9	133	0.00	11.48
53	t	2-Chloronaphthalene	1.212	1.172	3.3	129	0.00	11.65
54	t	Biphenyl	1.662	1.601	3.7	128	0.00	11.67
55	t	2-Nitroaniline	0.307	0.367	-19.5	143	0.00	12.04
56	t	Dimethylphthalate	1.255	1.301	-3.7	134	0.00	12.58
57	t	Acenaphthylene	1.935	1.940	-0.3	130	0.00	12.63
			True	Calc.	% Drift			
58	t	2,6-Dinitrotoluene	25.000	26.485	-5.9	140	0.00	12.71
			AvgRF	CCRF	% Dev			
59	t	3-Nitroaniline	0.306	0.279	8.8	110	0.01	13.04
60	t	Acenaphthene	1.229	1.209	1.6	131	0.00	13.07
			True	Calc.	% Drift			
61	t	2,4-Dinitrophenol	50.000	51.973	-3.9	147	0.00	13.28
			AvgRF	CCRF	% Dev			
62	t	4-Nitrophenol	0.164	0.150	8.5	117	0.00	13.63
63	t	Dibenzofuran	1.683	1.635	2.9	130	0.00	13.46
			True	Calc.	% Drift			
64	t	2,4-Dinitrotoluene	25.000	26.416	-5.7	136	0.00	13.64
			AvgRF	CCRF	% Dev			
65		2,3,4,6-Tetrachlorophenol	0.308	0.334	-8.4	135	0.00	13.91
66	t	Diethylphthalate	1.225	1.322	-7.9	139	0.00	14.28
67	t	Fluorene	1.319	1.322	-0.2	131	0.00	14.28
68	t	4-Chlorophenyl-phenylethe	0.676	0.675	0.1	132	0.00	14.34
69	t	4-Nitroaniline	0.285	0.256	10.2	104	0.02	14.51
70	I	Phenanthrene-d10	1.000	1.000	0.0	132	0.00	16.49
			True	Calc.	% Drift			
71	t	4,6-Dinitro-2-methylpheno	25.000	27.528	-10.1	159	0.01	14.60
			AvgRF	CCRF	% Dev			
72	t	Atrazine	0.117	0.118	-0.9	118	0.00	16.07
73	t	n-Nitrosodiphenylamine	0.563	0.545	3.2	127	0.00	14.66
74	t	1,2-Diphenylhydrazine	0.739	0.746	-0.9	133	0.00	14.71
75	S	2,4,6-Tribromophenol	0.087	0.094	-8.0	138	0.00	14.91
76	t	4-Bromophenyl-phenylether	0.210	0.217	-3.3	137	0.00	15.48
77	t	Hexachlorobenzene	0.212	0.228	-7.5	147	0.00	15.78
78	t	Pentachlorophenol	0.144	0.141	2.1	129	0.00	16.26
79	t	Phenanthrene	1.185	1.127	4.9	128	0.00	16.54

Continuing Calibration Summary

Job Number: N86261
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG-Salem, Artificial Island, Salem, NJ

Sample: EF2509-CC2491
Lab FileID: F47510.D

80	t	Anthracene	1.204	1.191	1.1	130	0.00	16.64
81	t	Carbazole	0.925	0.841	9.1	114	0.01	17.11
82	t	Di-n-butylphthalate	1.068	1.221	-14.3	141	0.00	18.19
83	t	Fluoranthene	1.145	1.199	-4.7	135	0.00	19.27
84	t	Octadecane	0.410	0.482	-17.6	151	0.00	16.48
85	I	Chrysene-d12	1.000	1.000	0.0	138	0.00	22.03
86	t	Benzidine	0.184	0.081	56.0#	48	0.02	19.67
87	t	Pyrene	1.303	1.281	1.7	134	0.00	19.72
88	S	Terphenyl-d14	0.902	0.924	-2.4	139	0.00	20.14
			True	Calc.	% Drift			
89	t	Butylbenzylphthalate	25.000	26.473	-5.9	142	0.00	21.18
90		Butyl stearate	25.000	28.834	-15.3	143	0.00	21.29
			AvgRF	CCRF	% Dev			
91	t	Benzo[a]anthracene	1.139	1.142	-0.3	136	0.00	22.00
92	t	3,3'-Dichlorobenzidine	0.329	0.312	5.2	118	0.01	22.04
93	t	Chrysene	1.171	1.162	0.8	138	0.00	22.08
			True	Calc.	% Drift			
94	t	bis(2-Ethylhexyl)phthalat	25.000	26.593	-6.4	142	0.00	22.28
			AvgRF	CCRF	% Dev			
95	I	Perylene-d12	1.000	1.000	0.0	132	0.00	24.36
			True	Calc.	% Drift			
96	t	Di-n-octylphthalate	25.000	28.270	-13.1	146	0.00	23.26
			AvgRF	CCRF	% Dev			
97	t	Benzo[b]fluoranthene	1.677	1.781	-6.2	134	0.00	23.76
98	t	Benzo[k]fluoranthene	1.792	1.805	-0.7	131	0.00	23.80
99	t	Benzo[a]pyrene	1.547	1.609	-4.0	133	0.00	24.26
			True	Calc.	% Drift			
100	t	Indeno[1,2,3-cd]pyrene	25.000	25.239	-1.0	143	0.00	26.34
101	t	Dibenz(a,h)acridine	25.000	25.163	-0.7	144	0.00	25.88
102	t	Dibenz[a,h]anthracene	25.000	25.119	-0.5	142	0.01	26.37
			AvgRF	CCRF	% Dev			
103	t	7,12-Dimethylbenz(a)anthr	0.726	0.703	3.2	120	0.00	23.79
104	t	3-Methylcholanthrene		----------NA----------				
			True	Calc.	% Drift			
105	t	Benzo[g,h,i]perylene	25.000	24.991	0.0	145	0.01	26.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F47469.D MF2491.M Mon Jan 10 10:00:14 2005 RPT1

Data File : C:\MSDCHEM\1\DATA\EF2509\F47512.D Vial: 4
Acq On : 10 Jan 2005 10:31 am Operator: NINAP
Sample : N86261-1 Inst : MSF
Misc : OP19045,EF2509,940 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 11:12:14 2005 Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.30	152	297550	40.00	ppb	0.00
25) Naphthalene-d8	8.91	136	1216250	40.00	ppb	0.00
48) Acenaphthene-d10	13.00	164	663970	40.00	ppb	0.00
70) Phenanthrene-d10	16.48	188	1182796	40.00	ppb	0.00
85) Chrysene-d12	22.03	240	1161702	40.00	ppb	0.00
95) Perylene-d12	24.35	264	734866	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.31	112	225765	21.75	ppb	-0.02
Spiked Amount 50.000			Recovery = 43.50%			
8) Phenol-d5	5.79	99	183381	14.68	ppb	0.00
Spiked Amount 50.000			Recovery = 29.36%			
26) Nitrobenzene-d5	7.44	82	439761	38.16	ppb	0.00
Spiked Amount 50.000			Recovery = 76.32%			
52) 2-Fluorobiphenyl	11.48	172	884815	34.87	ppb	0.00
Spiked Amount 50.000			Recovery = 69.74%			
75) 2,4,6-Tribromophenol	14.91	330	111837	43.55	ppb	0.00
Spiked Amount 50.000			Recovery = 87.10%			
98) Terphenyl-d14	20.13	244	1088136	41.54	ppb	0.00
Spiked Amount 50.000			Recovery = 83.08%			

Target Compounds Qvalue

1/10/05

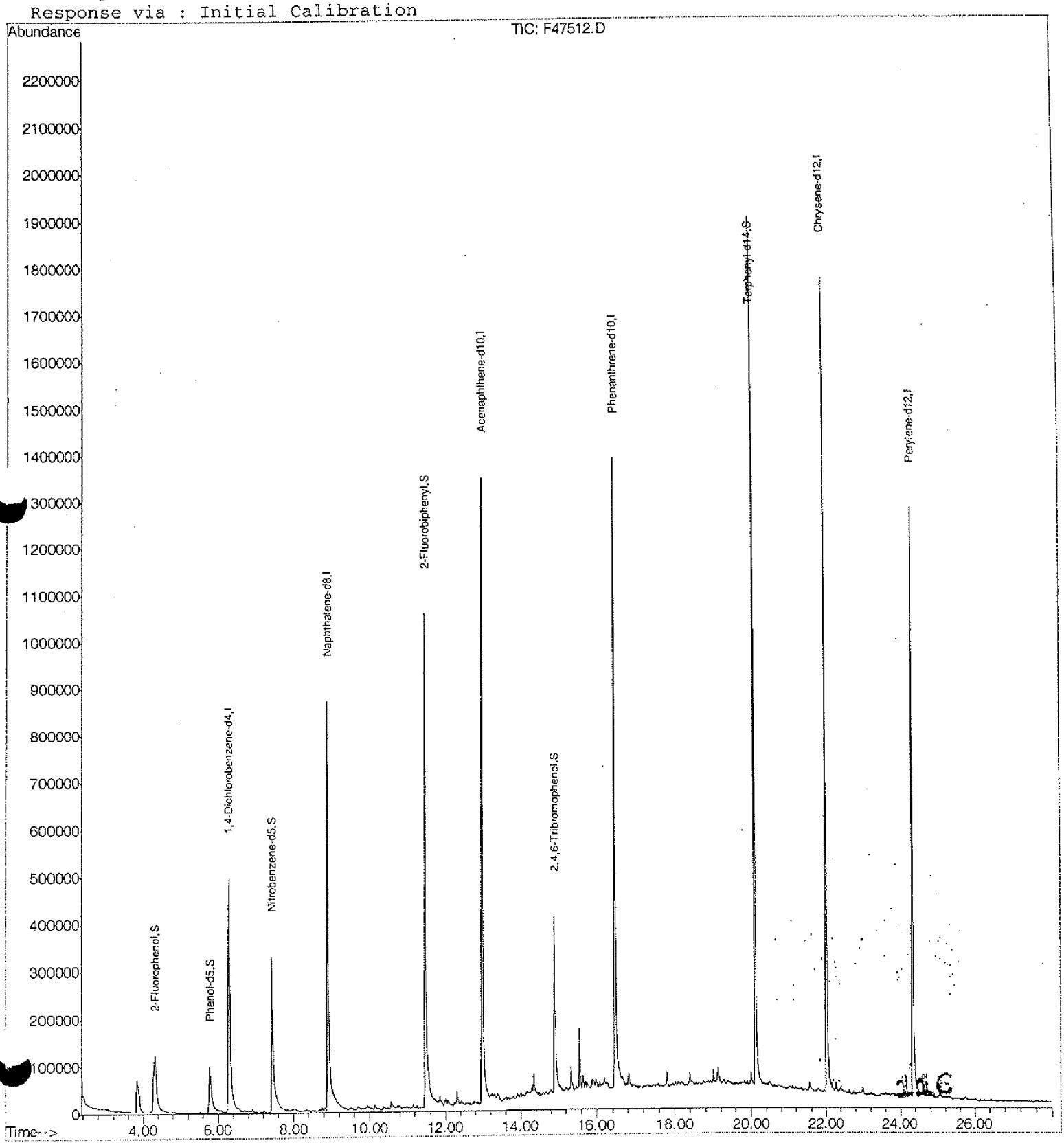
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F47512.D MF2491.M Mon Jan 10 11:13:25 2005 RPT1 Page 1

Data File : C:\MSDCHEM\1\DATA\EF2509\F47512.D
Acq On : 10 Jan 2005 10:31 am
Sample : N86261-1
Misc : OP19045,EF2509,940
MS Integration Params: LSCINT.P
Quant Time: Jan 10 11:13 2005

Vial: 4
Operator: NINAP
Inst : MSF
Multiplr: 1.00

Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\EF2509\F47513.D Vial: 5
Acq On : 10 Jan 2005 11:07 am Operator: NINAP
Sample : N86261-2 Inst : MSF
Misc : OP19045,EF2509,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 12:12:34 2005 Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.30	152	291001	40.00	ppb	0.00
25) Naphthalene-d8	8.92	136	1200521	40.00	ppb	0.00
48) Acenaphthene-d10	13.01	164	650226	40.00	ppb	0.00
70) Phenanthrene-d10	16.49	188	1152209	40.00	ppb	0.00
85) Chrysene-d12	22.03	240	1089300	40.00	ppb	0.00
95) Perylene-d12	24.35	264	660811	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.32	112	233505m /	23.01	ppb	-0.01
Spiked Amount 50.000			Recovery =	46.02%		
8) Phenol-d5	5.79	99	192794	15.78	ppb	0.00
Spiked Amount 50.000			Recovery =	31.56%		
26) Nitrobenzene-d5	7.44	82	446357	39.24	ppb	0.00
Spiked Amount 50.000			Recovery =	78.48%		
52) 2-Fluorobiphenyl	11.48	172	909539	36.60	ppb	0.00
Spiked Amount 50.000			Recovery =	73.20%		
75) 2,4,6-Tribromophenol	14.91	330	124389	49.72	ppb	0.00
Spiked Amount 50.000			Recovery =	99.44%		
98) Terphenyl-d14	20.14	244	1138860	46.36	ppb	0.00
Spiked Amount 50.000			Recovery =	92.72%		
Target Compounds						Qvalue
39) Naphthalene	8.96	128	112424	3.53	ppb	97
45) 2-Methylnaphthalene	10.54	142	33095	1.61	ppb	98
60) Acenaphthene	13.07	153	11496m	0.58	ppb	
63) Dibenzofuran	13.46	168	17558	0.64	ppb	94
67) Fluorene	14.28	166	27862	1.30	ppb	99
83) Fluoranthene	19.27	202	29694	0.90	ppb	95
87) Pyrene	19.72	202	30572	0.86	ppb	97

1/10/05

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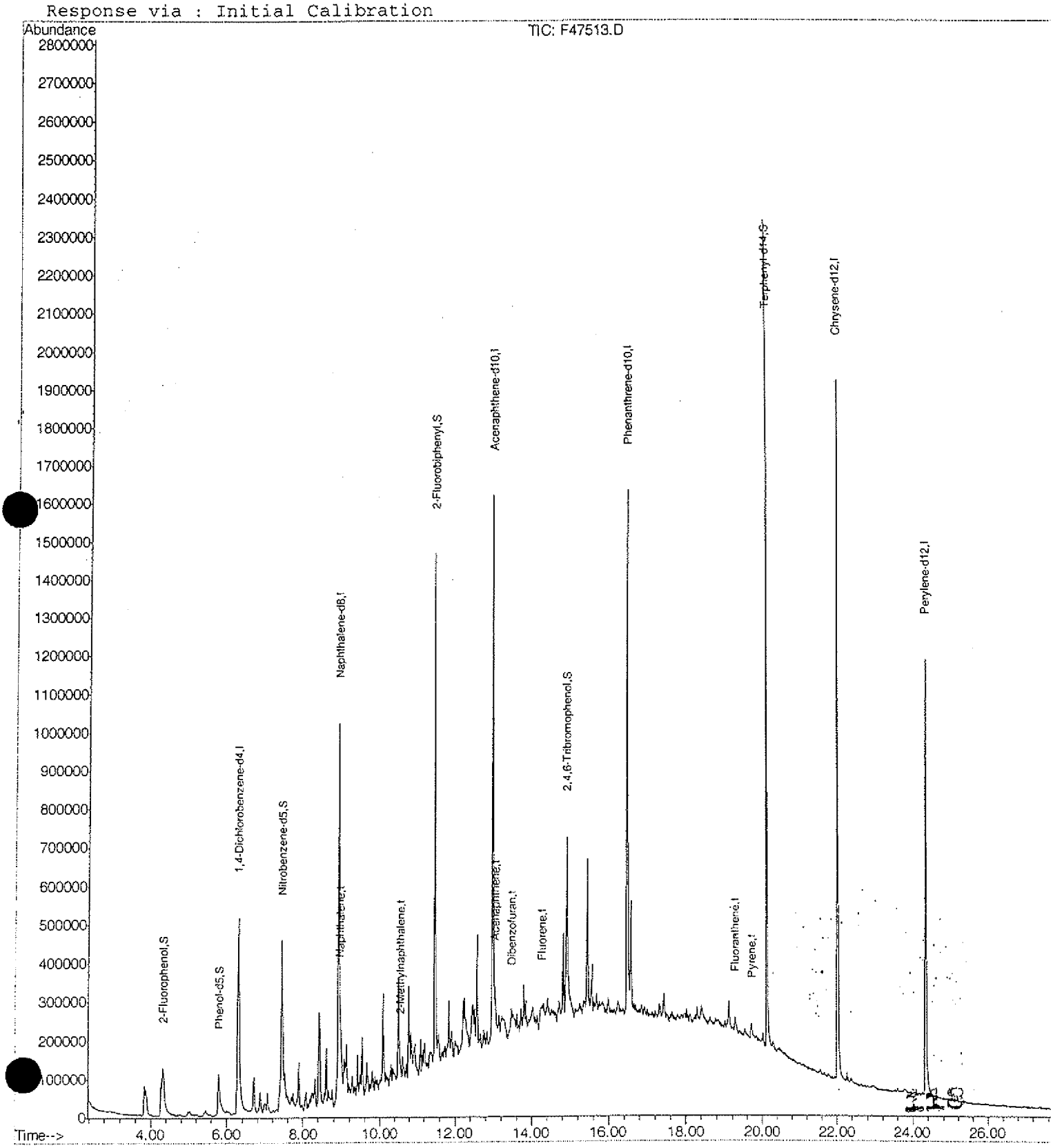
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\EF2509\F47513.D Vial: 5
Acq On : 10 Jan 2005 11:07 am Operator: NINAP
Sample : N86261-2 Inst : MSF
Misc : OP19045,EF2509,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 12:14 2005 Quant Results File: MF2491.RES

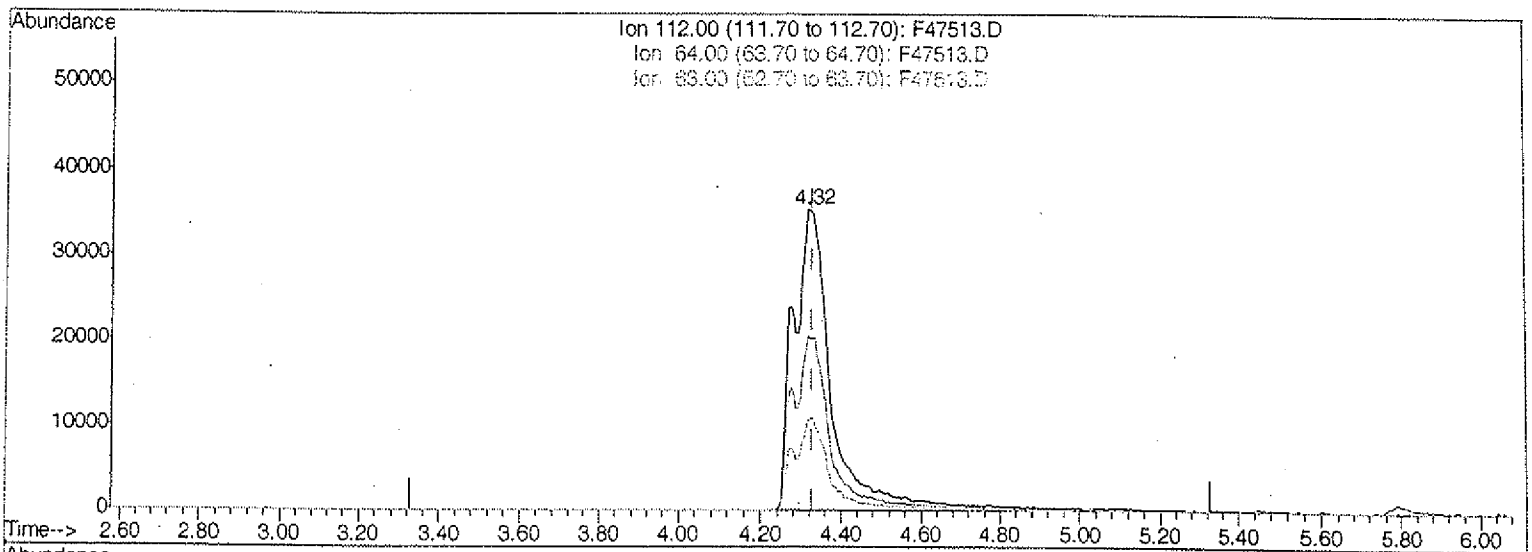
Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration

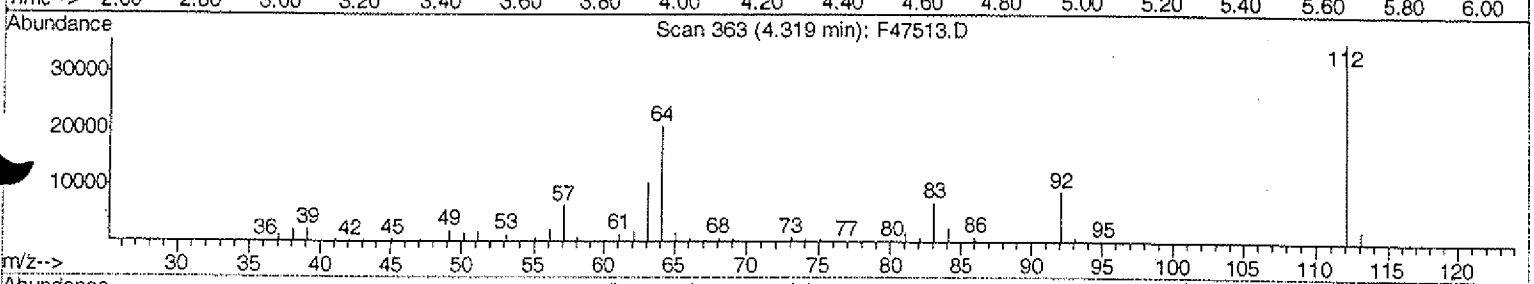


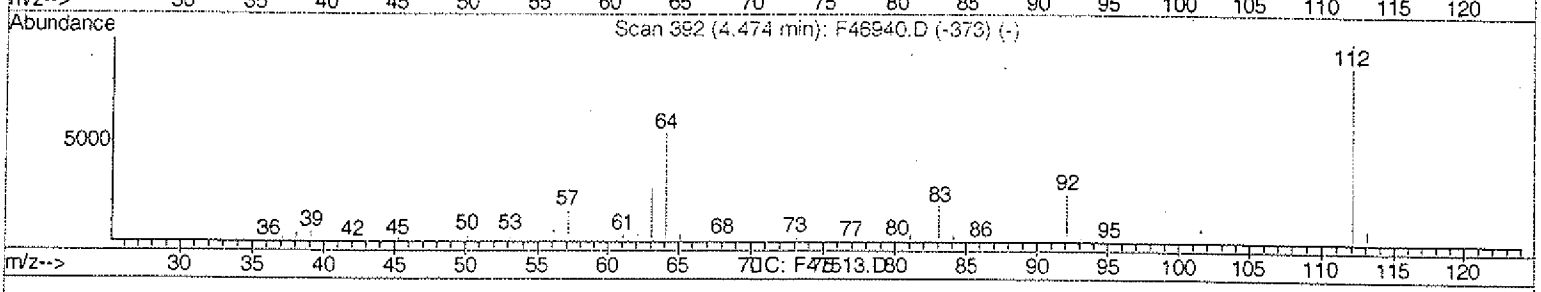
F47513.D MF2491.M Mon Jan 10 12:15:04 2005 RPT1 Pag

Data File : C:\MSDCHEM\1\DATA\EF2509\F47513.D Vial: 5
Acq On : 10 Jan 2005 11:07 am Operator: NINAP
Sample : N86261-2 Inst : MSF
Misc : OP19045,EF2509,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 12:12 2005 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Multiple Level Calibration







(5) 2-Fluorophenol (S)

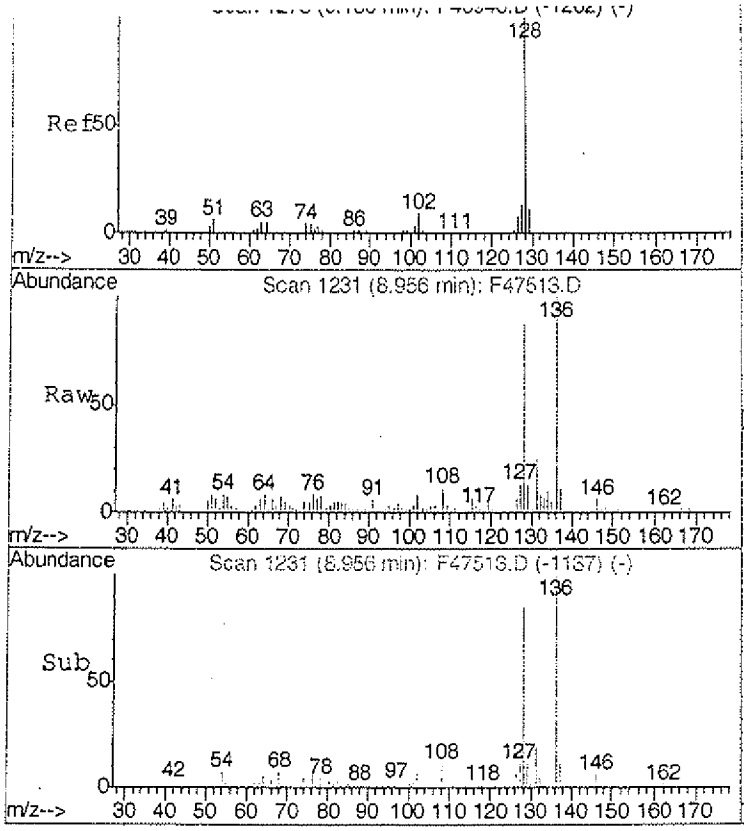
4.32min (-0.011) 23.01ppb m

response 233505

Ion	Exp%	Act%
112.00	100	100
64.00	54.00	57.87
63.00	26.50	29.65
0.00	0.00	0.00

119

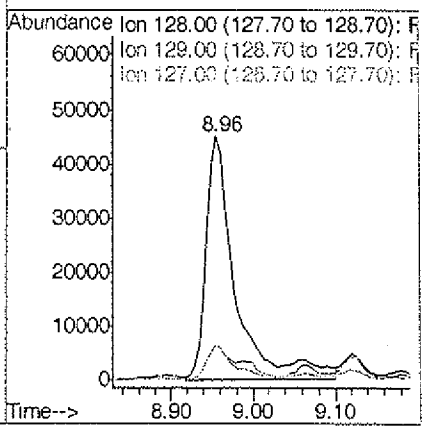
F47513.D MF2491.M Mon Jan 10 12:12:52 2005 RPT1

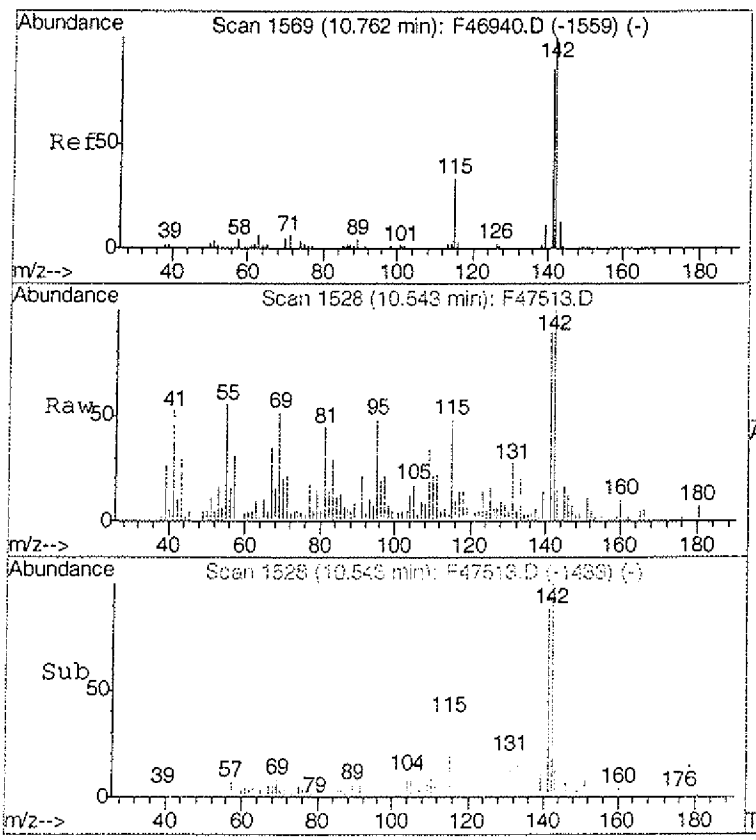


#39
Naphthalene
Concen: 3.53 ppb
RT: 8.96 min Scan# 1231
Delta R.T. 0.00 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:128 Resp: 112424

Ion	Ratio	Lower	Upper
128	100		
129	12.7	0.0	41.0
127	13.5	0.0	43.0

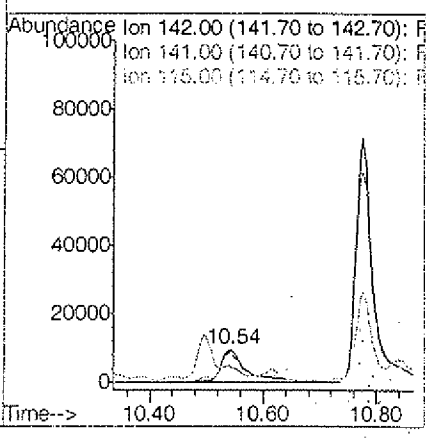




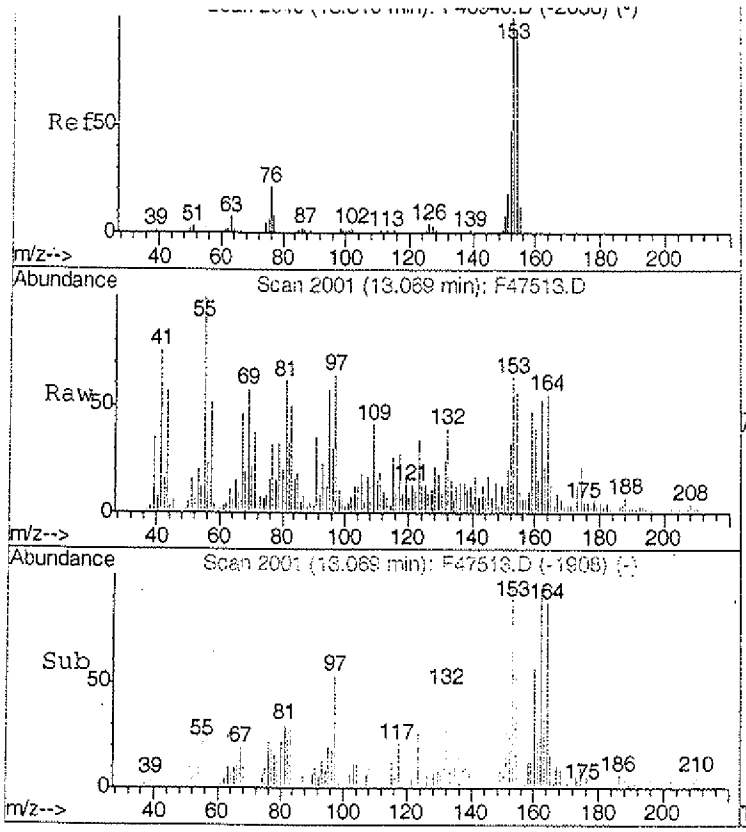
#45
2-Methylnaphthalene
Concen: 1.61 ppb
RT: 10.54 min Scan# 1528
Delta R.T. 0.01 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:142 Resp: 33095

Ion	Ratio	Lower	Upper
142	100		
141	86.4	55.0	115.0
115	34.9	2.8	62.8



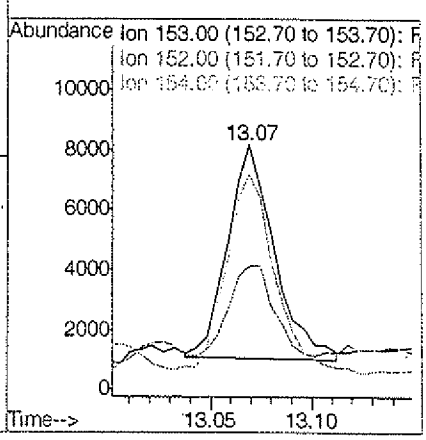
SII-SSA-0014-002797

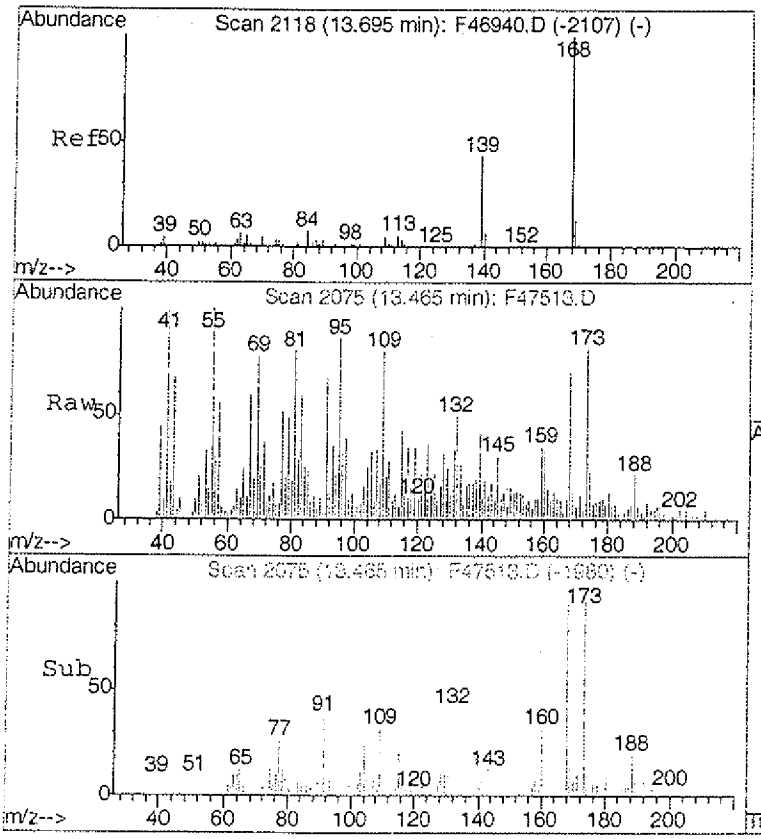


#60
Acenaphthene
Concen: 0.58 ppb m
RT: 13.07 min Scan# 2001
Delta R.T. -0.01 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:153 Resp: 11496

Ion	Ratio	Lower	Upper
153	100		
152	50.8	17.0	77.0
154	88.1	61.8	121.8

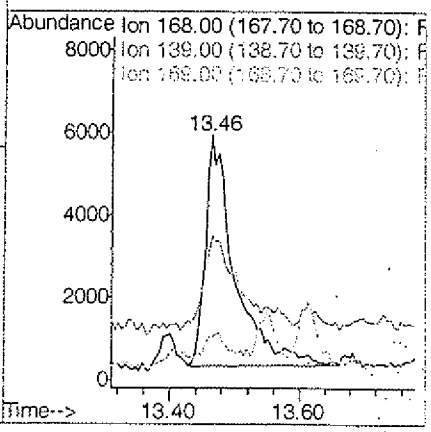




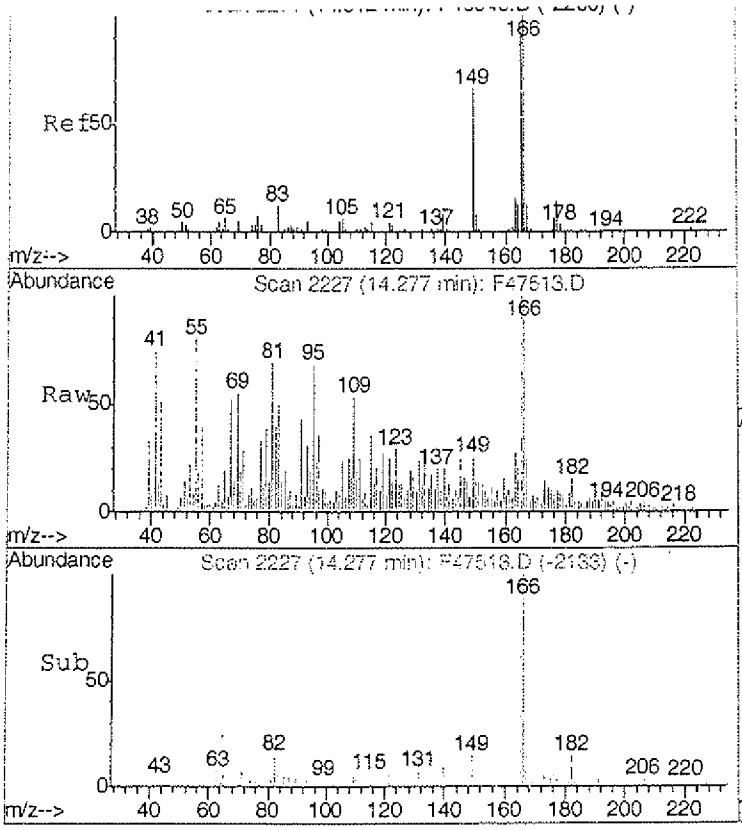
#63
Dibenzofuran
Concen: 0.64 ppb
RT: 13.46 min Scan# 2075
Delta R.T. 0.01 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:168 Resp: 17558

Ion	Ratio	Lower	Upper
168	100		
139	39.3	12.8	72.8
169	9.8	0.0	43.2



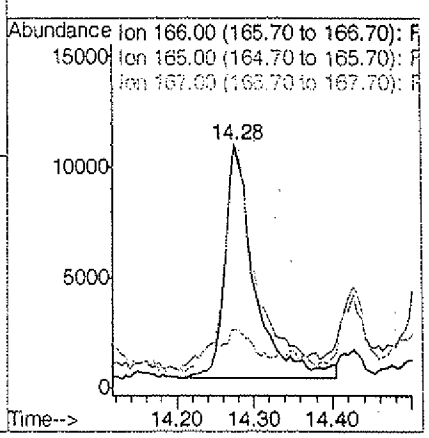
SII-SSA-0014-002798

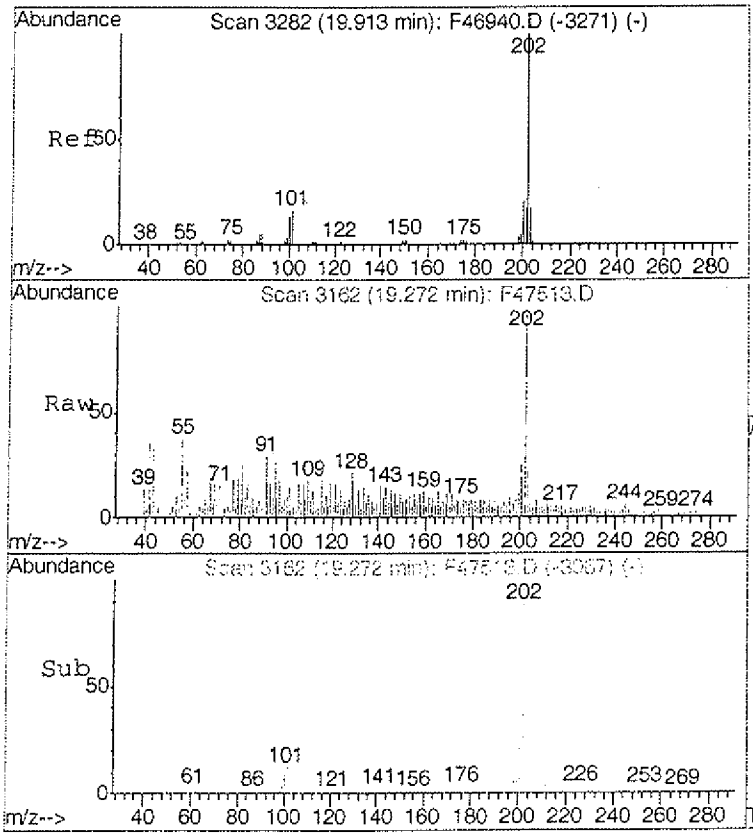


#67
Fluorene
Concen: 1.30 ppb
RT: 14.28 min Scan# 2227
Delta R.T. 0.00 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:166 Resp: 27862

Ion	Ratio	Lower	Upper
166	100		
165	92.0	61.7	121.7
167	14.7	0.0	43.2

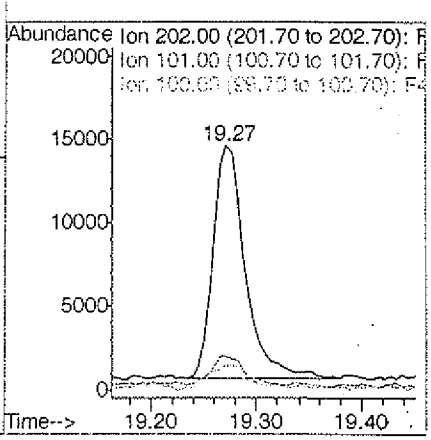




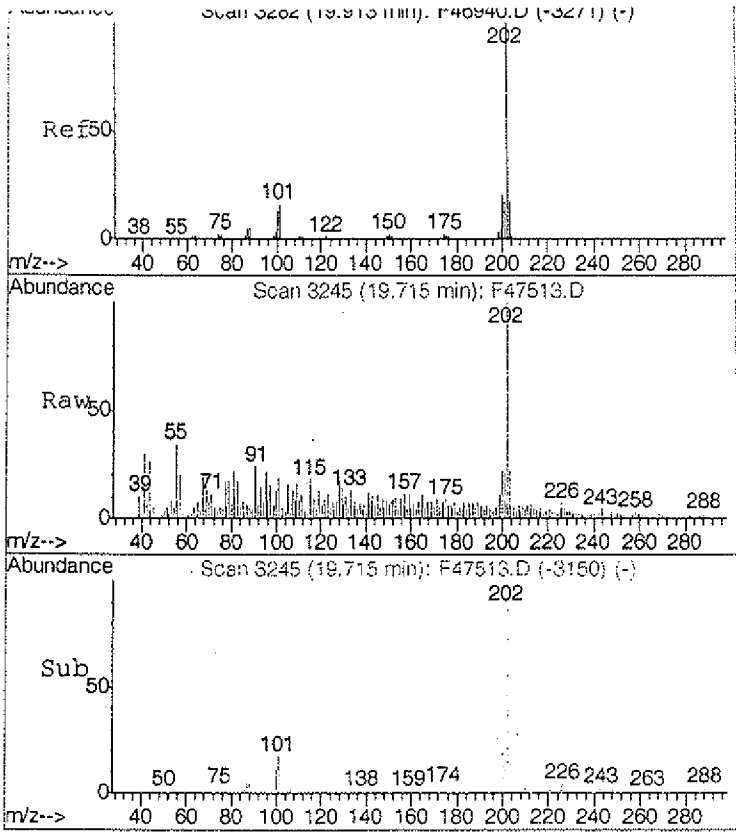
#83
Fluoranthene
Concen: 0.90 ppb
RT: 19.27 min Scan# 3162
Delta R.T. 0.01 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:202 Resp: 29694

Ion	Ratio	Lower	Upper
202	100		
101	12.1	0.0	44.3
100	8.7	0.0	40.4



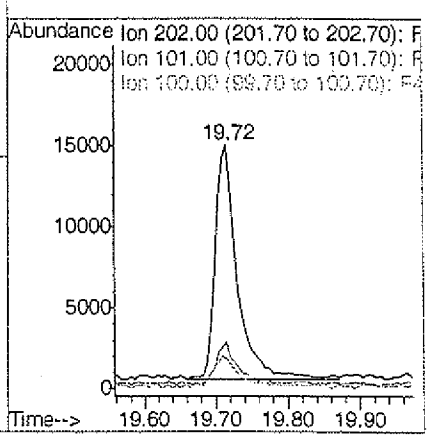
SII-SSA-0014-002799



#87
Pyrene
Concen: 0.86 ppb
RT: 19.72 min Scan# 3245
Delta R.T. 0.01 min
Lab File: F47513.D
Acq: 10 Jan 2005 11:07 am

Tgt Ion:202 Resp: 30572

Ion	Ratio	Lower	Upper
202	100		
101	17.6	0.0	46.4
100	11.5	0.0	43.0



123

Data File : C:\MSDCHEM\1\DATA\EF2508\F47474.D Vial: 7
Acq On : 8 Jan 2005 12:13 pm Operator: NINAP
Sample : N86261-3 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 08 12:41:10 2005 Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.30	152	275454	40.00	ppb	0.00
25) Naphthalene-d8	8.91	136	1087924	40.00	ppb	0.00
48) Acenaphthene-d10	12.99	164	579461	40.00	ppb	0.00
70) Phenanthrene-d10	16.48	188	1029463	40.00	ppb	0.00
85) Chrysene-d12	22.02	240	973213	40.00	ppb	0.00
95) Perylene-d12	24.35	264	601234	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.32	112	186709	19.43	ppb	0.00
Spiked Amount 50.000			Recovery = 38.86%			
8) Phenol-d5	5.80	99	153756	13.30	ppb	0.00
Spiked Amount 50.000			Recovery = 26.60%			
26) Nitrobenzene-d5	7.44	82	372622	36.15	ppb	0.00
Spiked Amount 50.000			Recovery = 72.30%			
52) 2-Fluorobiphenyl	11.48	172	764954	34.54	ppb	0.00
Spiked Amount 50.000			Recovery = 69.08%			
75) 2,4,6-Tribromophenol	14.91	330	98851	44.23	ppb	0.00
Spiked Amount 50.000			Recovery = 88.46%			
3) Terphenyl-d14	20.14	244	1037287	47.27	ppb	0.00
Spiked Amount 50.000			Recovery = 94.54%			

Target Compounds Qvalue

1/10/05

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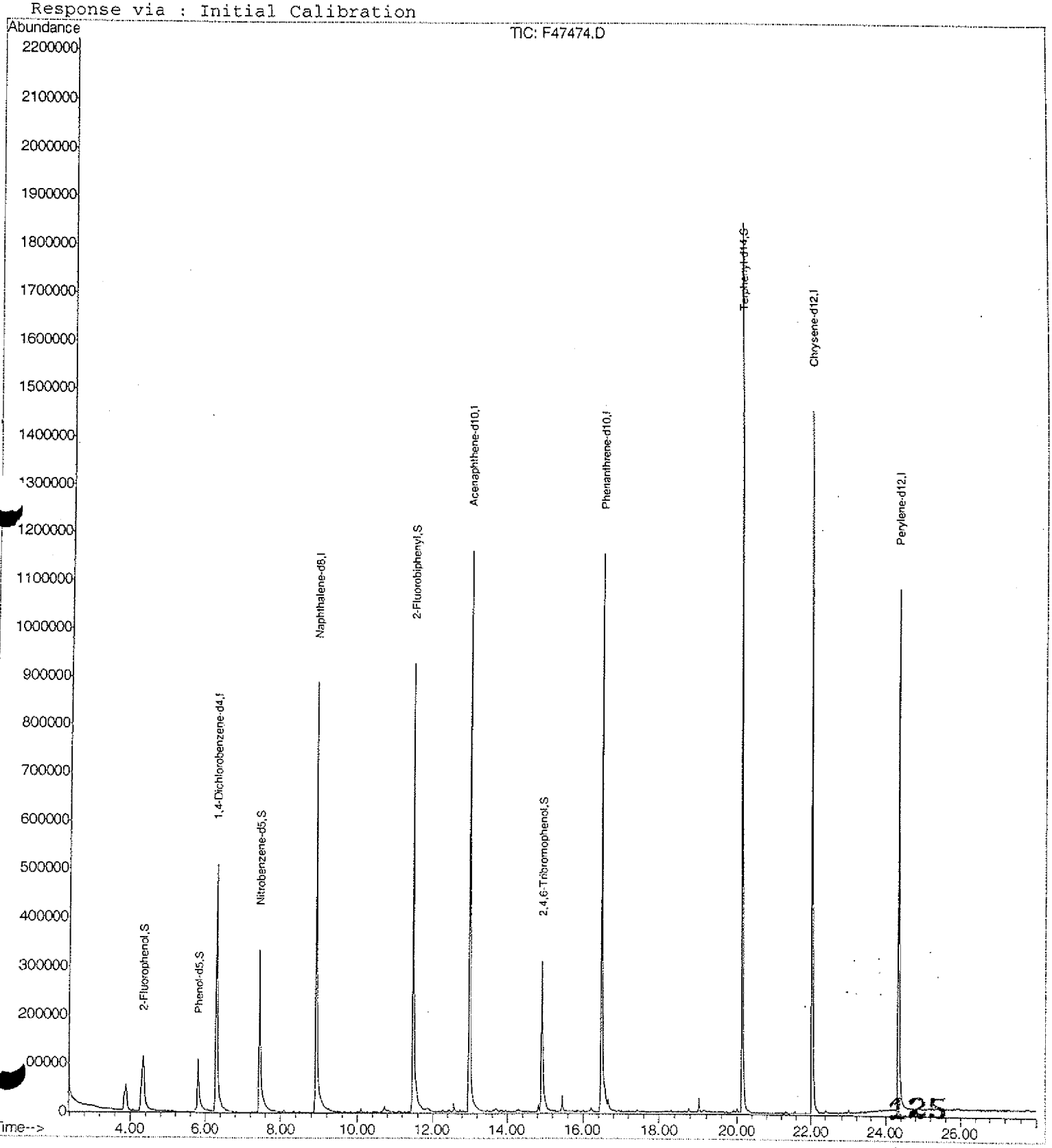
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\EF2508\F47474.D Vial: 7
Acq On : 8 Jan 2005 12:13 pm Operator: NINAP
Sample : N86261-3 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 9:41 2005 Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration



F47474.D MF2491.M Mon Jan 10 09:41:17 2005 RPT1 Page 1

Data File : C:\MSDCHEM\1\DATA\EF2508\F47475.D Vial: 8
Acq On : 8 Jan 2005 12:49 pm Operator: NINAP
Sample : N86261-4 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 08 13:17:14 2005 Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.30	152	268040	40.00	ppb	0.00
25) Naphthalene-d8	8.91	136	1062546	40.00	ppb	0.00
48) Acenaphthene-d10	12.99	164	567538	40.00	ppb	0.00
70) Phenanthrene-d10	16.48	188	990871	40.00	ppb	0.00
85) Chrysene-d12	22.03	240	929862	40.00	ppb	0.00
95) Perylene-d12	24.35	264	572690	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.32	112	212331	22.71	ppb	0.00
Spiked Amount 50.000			Recovery =	45.42%		
8) Phenol-d5	5.79	99	164941	14.66	ppb	0.00
Spiked Amount 50.000			Recovery =	29.32%		
26) Nitrobenzene-d5	7.44	82	426336	42.35	ppb	0.00
Spiked Amount 50.000			Recovery =	84.70%		
52) 2-Fluorobiphenyl	11.48	172	816966	37.67	ppb	0.00
Spiked Amount 50.000			Recovery =	75.34%		
75) 2,4,6-Tribromophenol	14.91	330	87573	40.71	ppb	0.00
Spiked Amount 50.000			Recovery =	81.42%		
8) Terphenyl-d14	20.14	244	964776	46.01	ppb	0.00
Spiked Amount 50.000			Recovery =	92.02%		

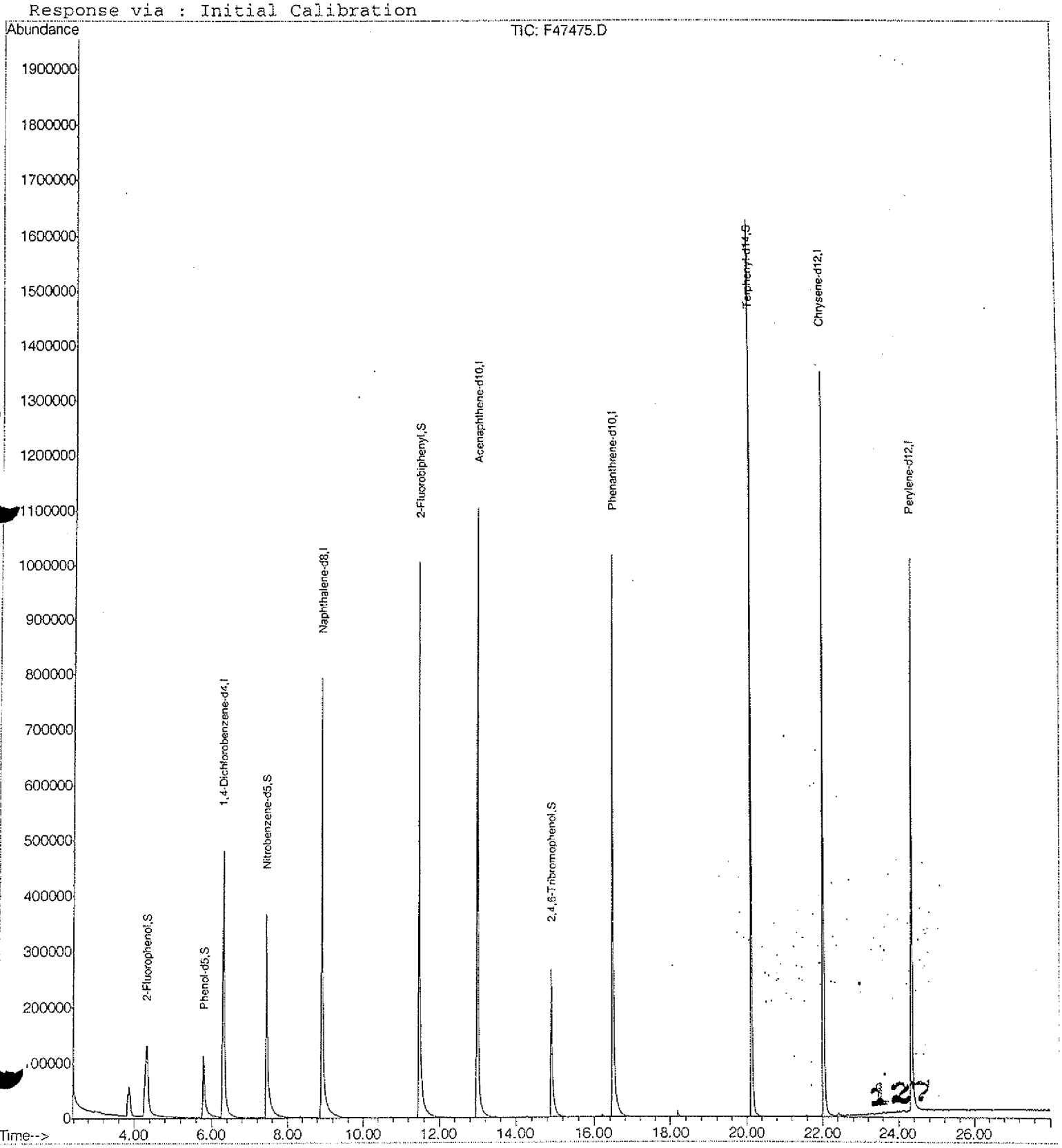
Target Compounds Qvalue

126

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\EF2508\F47475.D Vial: 8
Acq On : 8 Jan 2005 12:49 pm Operator: NINAP
Sample : N86261-4 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 9:41 2005 Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration



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Data File : C:\MSDCHEM\1\DATA\EF2508\F47484.D Vial: 17
Acq On : 8 Jan 2005 6:12 pm Operator: NINAP
Sample : N86261-6 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 08 18:40:09 2005 Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.31	152	262235	40.00	ppb	0.00
25) Naphthalene-d8	8.92	136	1023952	40.00	ppb	0.00
48) Acenaphthene-d10	13.00	164	548337	40.00	ppb	0.00
70) Phenanthrene-d10	16.48	188	960822	40.00	ppb	0.00
85) Chrysene-d12	22.03	240	762285	40.00	ppb	0.00
95) Perylene-d12	24.35	264	320964	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.34	112	221989	24.27	ppb	0.00
Spiked Amount 50.000			Recovery = 48.54%			
8) Phenol-d5	5.80	99	176846	16.06	ppb	0.01
Spiked Amount 50.000			Recovery = 32.12%			
26) Nitrobenzene-d5	7.44	82	432155	44.55	ppb	0.00
Spiked Amount 50.000			Recovery = 89.10%			
52) 2-Fluorobiphenyl	11.48	172	890279	42.48	ppb	0.00
Spiked Amount 50.000			Recovery = 84.96%			
75) 2,4,6-Tribromophenol	14.91	330	100542	48.20	ppb	0.00
Spiked Amount 50.000			Recovery = 96.40%			
98) Terphenyl-d14	20.14	244	958499	55.76	ppb	0.00
Spiked Amount 50.000			Recovery = 111.52%			

Target Compounds Qvalue

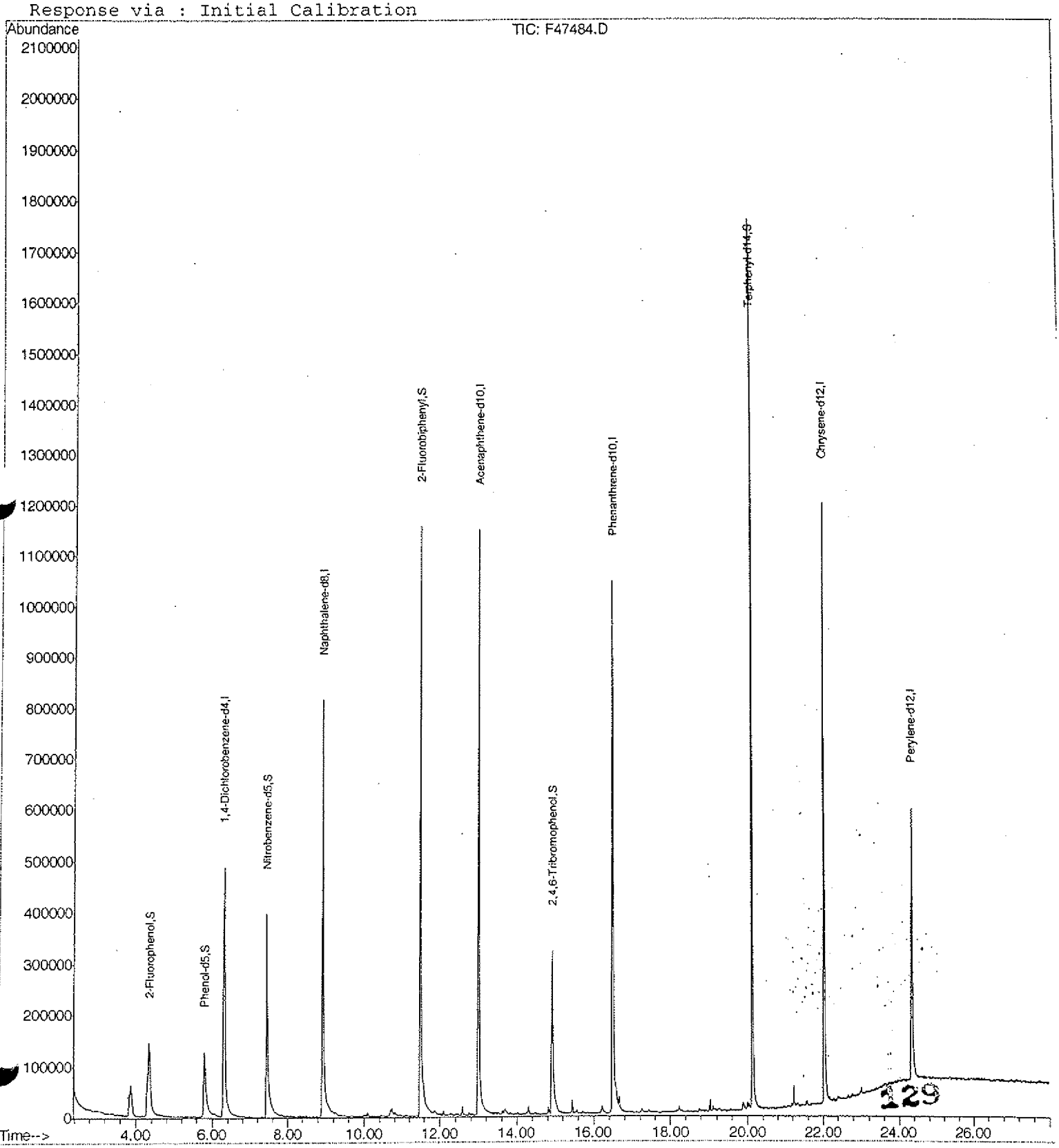
1/10/05

128

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : C:\MSDCHEM\1\DATA\EF2508\F47484.D Vial: 17
Acq On : 8 Jan 2005 6:12 pm Operator: NINAP
Sample : N86261-6 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 10:42 2005 Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration



129

Data File : C:\MSDCHEM\1\DATA\EF2508\F47472.D Vial: 5
Acq On : 8 Jan 2005 11:01 am Operator: NINAP
Sample : OP19045-MB1 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 08 11:29:34 2005 Quant Results File: MF2491.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration
DataAcq Meth : MF2491

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.30	152	225134	40.00	ppb	0.00
25) Naphthalene-d8	8.91	136	881061	40.00	ppb	0.00
48) Acenaphthene-d10	12.99	164	461964	40.00	ppb	0.00
70) Phenanthrene-d10	16.48	188	810039	40.00	ppb	0.00
85) Chrysene-d12	22.02	240	746263	40.00	ppb	0.00
95) Perylene-d12	24.35	264	468309	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.33	112	235289	29.97	ppb	0.00
Spiked Amount 50.000			Recovery = 59.94%			
8) Phenol-d5	5.79	99	188254	19.92	ppb	0.00
Spiked Amount 50.000			Recovery = 39.84%			
26) Nitrobenzene-d5	7.44	82	436986	52.35	ppb	0.00
Spiked Amount 50.000			Recovery = 104.70%			
52) 2-Fluorobiphenyl	11.48	172	849223	48.10	ppb	0.00
Spiked Amount 50.000			Recovery = 96.20%			
75) 2,4,6-Tribromophenol	14.91	330	90255	51.32	ppb	0.00
Spiked Amount 50.000			Recovery = 102.64%			
93) Terphenyl-d14	20.13	244	892990	53.07	ppb	0.00
Spiked Amount 50.000			Recovery = 106.14%			
Target Compounds						Qvalue

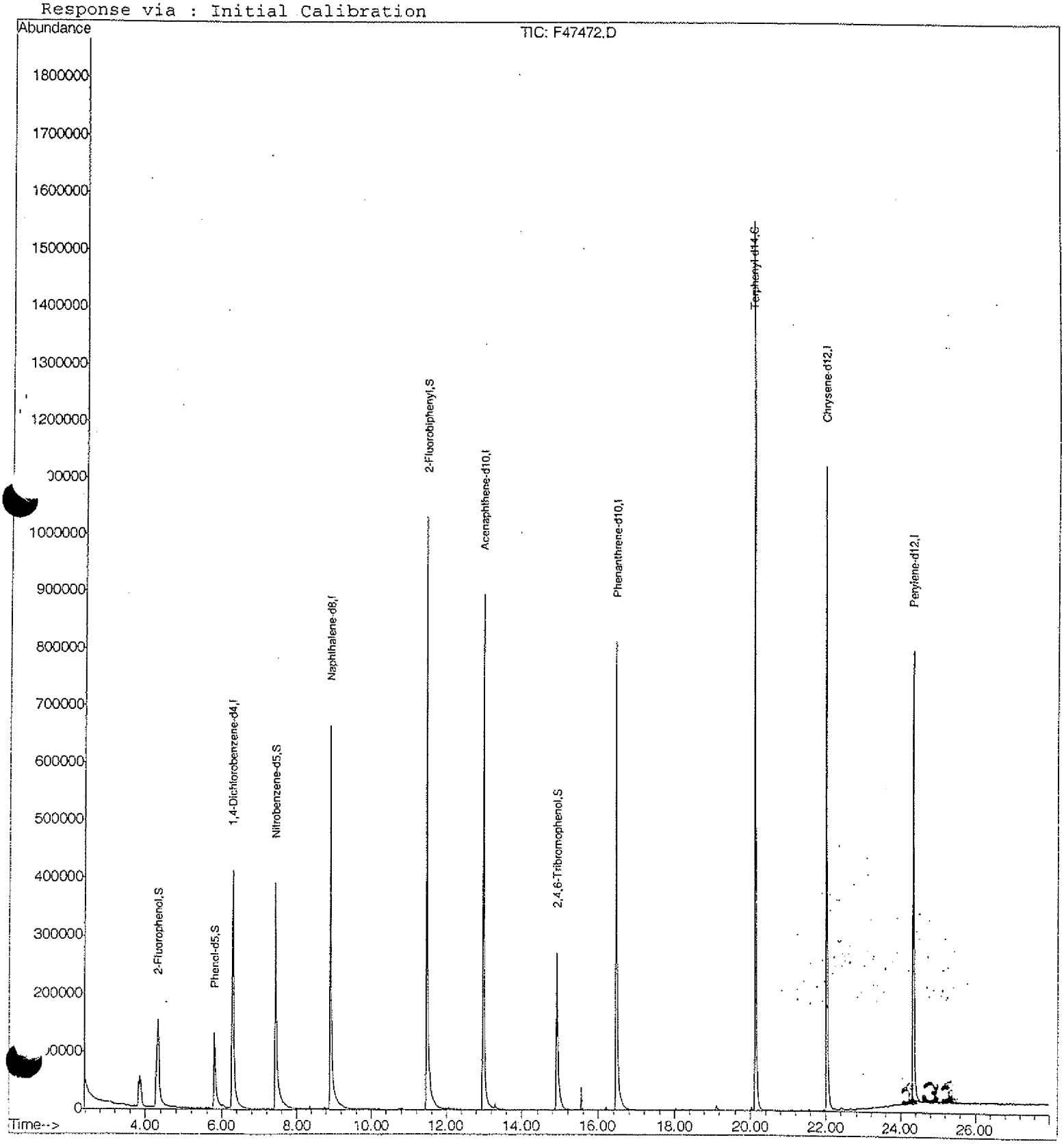
1/11/05

130

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F47472.D MF2491.M Mon Jan 10 09:39:20 2005 RPT1 Page 1

Data File : C:\MSDCHEM\1\DATA\EF2508\F47472.D Vial: 5
Acq On : 8 Jan 2005 11:01 am Operator: NINAP
Sample : OP19045-MB1 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Jan 10 9:39 2005 Quant Results File: MF2491.RES

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Jan 08 09:45:35 2005
Response via : Initial Calibration



F47472.D MF2491.M Mon Jan 10 09:39:21 2005 RPM1 Page 1

Data File : C:\MSDCHEM\1\DATA\EF2508\F47472.D Vial: 5
Acq On : 8 Jan 2005 11:01 am Operator: NINAP
Sample : OP19045-MB1 Inst : MSF
Misc : OP19045,EF2508,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 125
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.325	174	177	181	rBV5	955	1387	0.05%	0.007%
2	3.539	214	217	225	rVB6	1579	3385	0.13%	0.017%
3	3.646	235	237	244	rVB5	864	1178	0.04%	0.006%
4	3.838	265	273	276	rBV	43179	79097	2.96%	0.390%
5	3.876	276	280	300	rVB2	51404	182779	6.85%	0.902%
6	4.330	348	365	402	rBV3	150481	779806	29.23%	3.847%
7	4.565	408	409	415	rVB6	1323	1738	0.07%	0.009%
8	4.698	433	434	441	rVB4	1077	1794	0.07%	0.009%
9	4.805	453	454	460	rVB4	907	1282	0.05%	0.006%
10	5.355	550	557	564	rVB5	588	1167	0.04%	0.006%
11	5.558	588	595	597	rBV4	990	1508	0.06%	0.007%
12	5.660	610	614	623	rVB6	923	1966	0.07%	0.010%
13	5.793	629	639	678	rBV2	130697	514816	19.30%	2.540%
14	6.301	722	734	792	rBV	409934	1413511	52.98%	6.974%
15	6.696	805	808	815	rVB4	1291	2358	0.09%	0.012%
16	7.017	863	868	873	rVB6	702	1278	0.05%	0.006%
17	7.161	890	895	901	rVB3	517	1157	0.04%	0.006%
18	7.332	920	927	934	rBV4	608	1322	0.05%	0.007%
19	7.444	939	948	1008	rBV	389979	1269929	47.60%	6.265%
20	7.962	1043	1045	1050	rVB3	1058	1140	0.04%	0.006%
21	8.085	1063	1068	1069	rVB3	989	1036	0.04%	0.005%
22	8.342	1111	1116	1127	rBV	5819	8349	0.31%	0.041%
23	8.758	1188	1194	1199	rBV4	4190	5783	0.22%	0.029%
24	8.913	1215	1223	1294	rBV	664596	1810597	67.86%	8.933%
25	9.298	1294	1295	1299	rVV3	2374	2325	0.09%	0.011%
26	9.335	1299	1302	1308	rVB5	1064	1825	0.07%	0.009%
27	10.719	1555	1561	1570	rBV3	1823	4234	0.16%	0.021%
28	10.794	1570	1575	1583	rVB2	3648	5139	0.19%	0.025%
29	11.478	1691	1703	1765	rBV	1032295	2462653	92.30%	12.150%
30	11.825	1765	1768	1774	rVB4	1576	2727	0.10%	0.013%
31	11.926	1784	1787	1793	rVB4	1154	1539	0.06%	0.008%
32	11.985	1793	1798	1803	rVB4	2376	3463	0.13%	0.017%
33	12.060	1809	1812	1823	rVB5	3047	4956	0.19%	0.024%
34	12.605	1909	1914	1920	rVB2	452	1090	0.04%	0.005%
35	2.995	1976	1987	2038	rBV2	896023	1988014	74.51%	9.808%
36	13.305	2038	2045	2053	rVB2	9478	14320	0.54%	0.071%
37	13.486	2078	2079	2089	rVB3	881	1923	0.07%	0.009%
38	14.256	2218	2223	2226	rBV3	1357	1608	0.06%	0.008%

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40	14.907	2333	2345	2394	rBV2	271075	845385	31.69%	4.171%
41	15.180	2394	2396	2400	rVV2	1317	1669	0.06%	0.008%
42	15.228	2400	2405	2410	rVB4	995	1513	0.06%	0.007%
43	15.393	2429	2436	2441	rBV3	839	1250	0.05%	0.006%
44	15.458	2445	2448	2452	rBB2	1128	1420	0.05%	0.007%
45	15.564	2461	2468	2479	rBB2	38922	60624	2.27%	0.299%
46	16.211	2581	2589	2604	rBB3	4343	11923	0.45%	0.059%
47	16.478	2629	2639	2691	rBV2	813193	2090094	78.34%	10.312%
48	16.772	2691	2694	2703	rVB4	1343	2914	0.11%	0.014%
49	16.911	2714	2720	2726	rVB2	1664	3471	0.13%	0.017%
50	17.605	2840	2850	2854	rBV3	1364	2298	0.09%	0.011%
51	18.027	2924	2929	2935	rVB3	2363	3473	0.13%	0.017%
52	18.193	2954	2960	2968	rBV2	1202	2688	0.10%	0.013%
53	18.412	2995	3001	3007	rBV3	3346	6659	0.25%	0.033%
54	18.460	3007	3010	3020	rVB3	1349	2517	0.09%	0.012%
55	18.893	3089	3091	3098	rBV3	967	1337	0.05%	0.007%
56	19.138	3126	3137	3149	rBV3	8660	24542	0.92%	0.121%
57	19.299	3160	3167	3171	rVB2	1265	1518	0.06%	0.007%
58	20.020	3294	3302	3312	rBB3	5920	13074	0.49%	0.065%
59	20.132	3312	3323	3360	rBV2	1553461	2668076	100.00%	13.163%
60	20.730	3427	3435	3439	rBV2	941	1636	0.06%	0.008%
61	21.216	3523	3526	3530	rVB	861	1186	0.04%	0.006%
62	21.564	3584	3591	3597	rBV3	2993	5585	0.21%	0.028%
63	21.793	3630	3634	3640	rBV4	1337	2946	0.11%	0.015%
64	21.916	3653	3657	3659	rBV2	1145	1196	0.04%	0.006%
65	21.932	3659	3660	3662	rBV2	1368	1090	0.04%	0.005%
66	22.023	3669	3677	3705	rBV	1122600	2043421	76.59%	10.082%
67	22.280	3719	3725	3730	rVB5	1515	1933	0.07%	0.010%
68	22.333	3730	3735	3738	rVB5	1030	1154	0.04%	0.006%
69	22.402	3742	3748	3758	rBV5	4782	13554	0.51%	0.067%
70	22.504	3765	3767	3771	rVB4	1472	1493	0.06%	0.007%
71	22.547	3771	3775	3779	rVB6	1219	2088	0.08%	0.010%
72	22.589	3782	3783	3788	rVB4	1514	1537	0.06%	0.008%
73	22.643	3788	3793	3797	rBV6	2795	3891	0.15%	0.019%
74	22.702	3801	3804	3808	rVV5	1079	1665	0.06%	0.008%
75	22.734	3808	3810	3815	rVB5	1225	1975	0.07%	0.010%
76	22.808	3821	3824	3825	rBV3	1912	1644	0.06%	0.008%
77	22.824	3825	3827	3829	rVV3	1511	1214	0.05%	0.006%
78	22.979	3852	3856	3861	rVB7	1994	2358	0.09%	0.012%
79	23.022	3861	3864	3867	rBV4	1616	1820	0.07%	0.009%
80	23.092	3873	3877	3878	rVB4	1310	1533	0.06%	0.008%
81	23.118	3880	3882	3885	rBV3	1045	1157	0.04%	0.006%
82	23.252	3900	3907	3912	rBV7	2402	5732	0.21%	0.028%
83	23.348	3921	3925	3928	rBV5	1973	2594	0.10%	0.013%
84	23.433	3938	3941	3946	rBV5	1568	1753	0.07%	0.009%
85	23.578	3965	3968	3970	rBV4	1841	1336	0.05%	0.007%
86	23.610	3971	3974	3978	rVB5	1538	2186	0.08%	0.011%
87	23.722	3988	3995	3998	rBV8	3567	7414	0.28%	0.037%
88	23.754	4000	4001	4006	rVV5	1723	2508	0.09%	0.012%
89	23.834	4008	4016	4017	rVV7	1835	3785	0.14%	0.019%
90	23.941	4033	4036	4038	rVB4	1900	1614	0.06%	0.008%
91	23.962	4038	4040	4041	rBV2	1893	1484	0.06%	0.007%
92	24.010	4047	4049	4051	rVB3	1868	1209	0.05%	0.006%
93	24.059	4054	4058	4059	rBV4	2312	2510	0.09%	0.012%
94	24.112	4067	4068	4071	rBV3	1578	1470	0.06%	0.007%
95	24.160	4076	4077	4080	rBV3	2111	1721	0.06%	0.008%

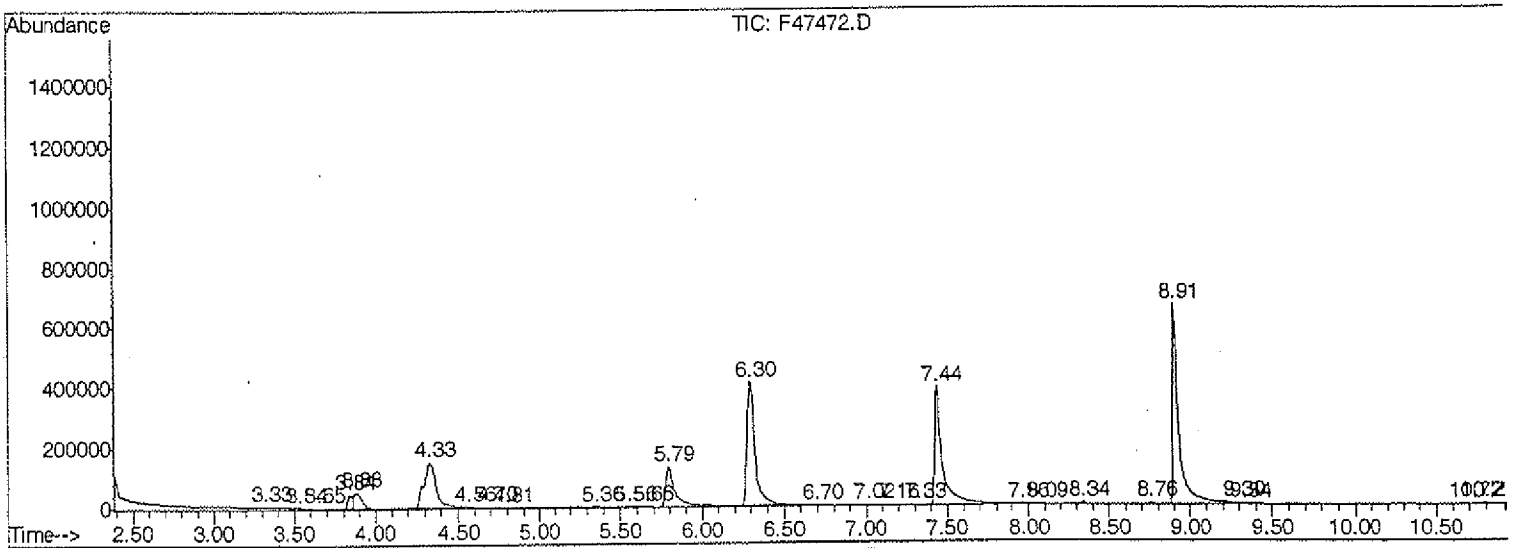
96	24.240	4089	4092	4094	rBV4	1773	1777	0.07%	0.009%
97	24.352	4102	4113	4145	rBV2	785793	1726509	64.71%	8.518%
98	24.801	4196	4197	4199	rBV2	1640	1484	0.06%	0.007%
99	24.849	4204	4206	4208	rVB3	1948	1739	0.07%	0.009%
100	24.865	4208	4209	4212	rBV3	2082	1956	0.07%	0.010%
101	24.961	4218	4227	4236	rBV3	2513	9628	0.36%	0.048%
10[illegible]	25.036	4238	4241	4244	rBV5	3444	3906	0.15%	0.019%
10[illegible]	25.138	4258	4260	4264	rVB5	2461	2876	0.11%	0.014%
104	25.164	4264	4265	4267	rBV2	2267	1274	0.05%	0.006%
105	25.223	4273	4276	4278	rBV4	1870	1893	0.07%	0.009%
106	25.271	4283	4285	4288	rBV4	2812	2086	0.08%	0.010%
107	25.405	4308	4310	4313	rBV4	3239	3355	0.13%	0.017%
108	25.442	4314	4317	4319	rVB4	2010	2216	0.08%	0.011%
109	25.581	4337	4343	4345	rBV7	2902	4507	0.17%	0.022%
110	25.640	4352	4354	4357	rVB3	2114	1688	0.06%	0.008%
111	25.854	4393	4394	4396	rVB2	2562	1529	0.06%	0.008%
112	25.875	4396	4398	4402	rBV5	2525	3211	0.12%	0.016%
113	26.158	4447	4451	4453	rBV4	2915	3183	0.12%	0.016%
114	26.484	4509	4512	4516	rBV6	1581	1764	0.07%	0.009%
115	26.537	4519	4522	4524	rVV4	1581	1588	0.06%	0.008%
116	26.612	4533	4536	4538	rBV4	2762	2111	0.08%	0.010%
117	26.671	4545	4547	4549	rBV3	2204	1960	0.07%	0.010%
118	26.698	4551	4552	4560	rVV8	2215	4355	0.16%	0.021%
119	26.804	4567	4572	4573	rBV4	2182	3290	0.12%	0.016%
120	26.997	4607	4608	4610	rBV2	1900	1360	0.05%	0.007%
121	27.077	4621	4623	4627	rBV5	1514	2070	0.08%	0.010%
122	27.376	4676	4679	4682	rBV5	2074	2755	0.10%	0.014%
123	27.488	4698	4700	4702	rVB3	2111	1523	0.06%	0.008%
124	27.515	4702	4705	4709	rBV5	1994	3256	0.12%	0.016%
125	27.958	4786	4788	4791	rBV4	2534	2579	0.10%	0.013%

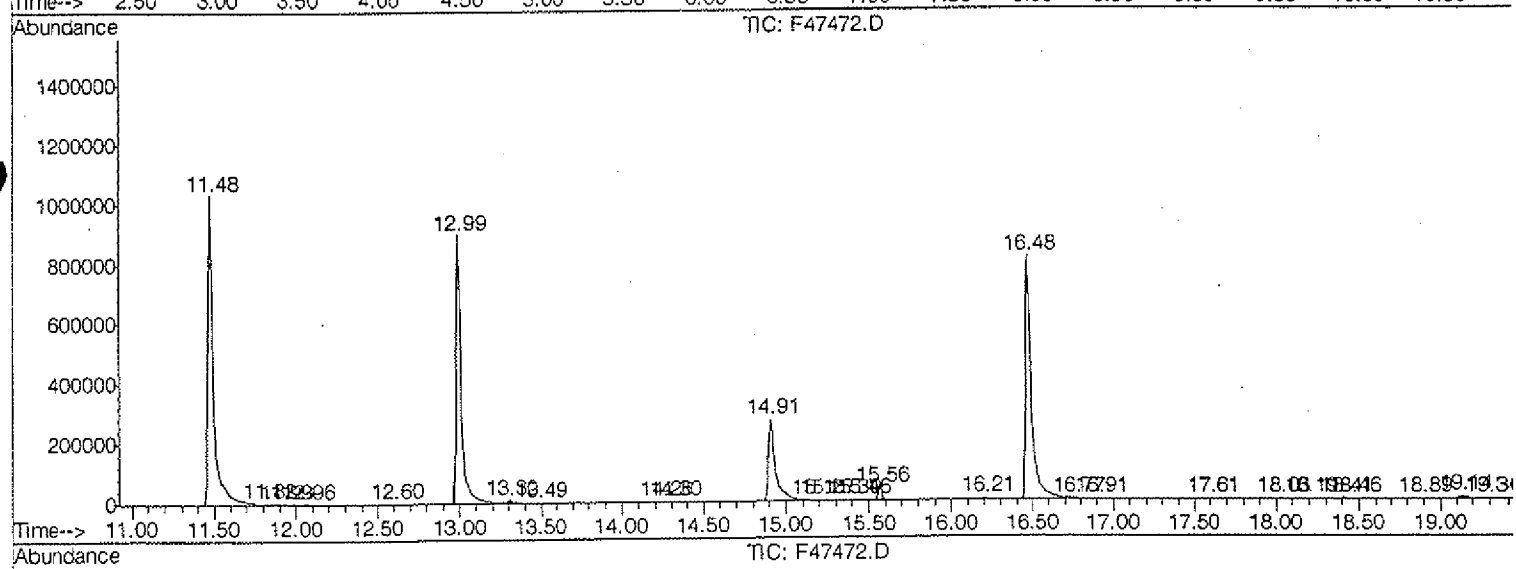
Sum of corrected areas: 20268949

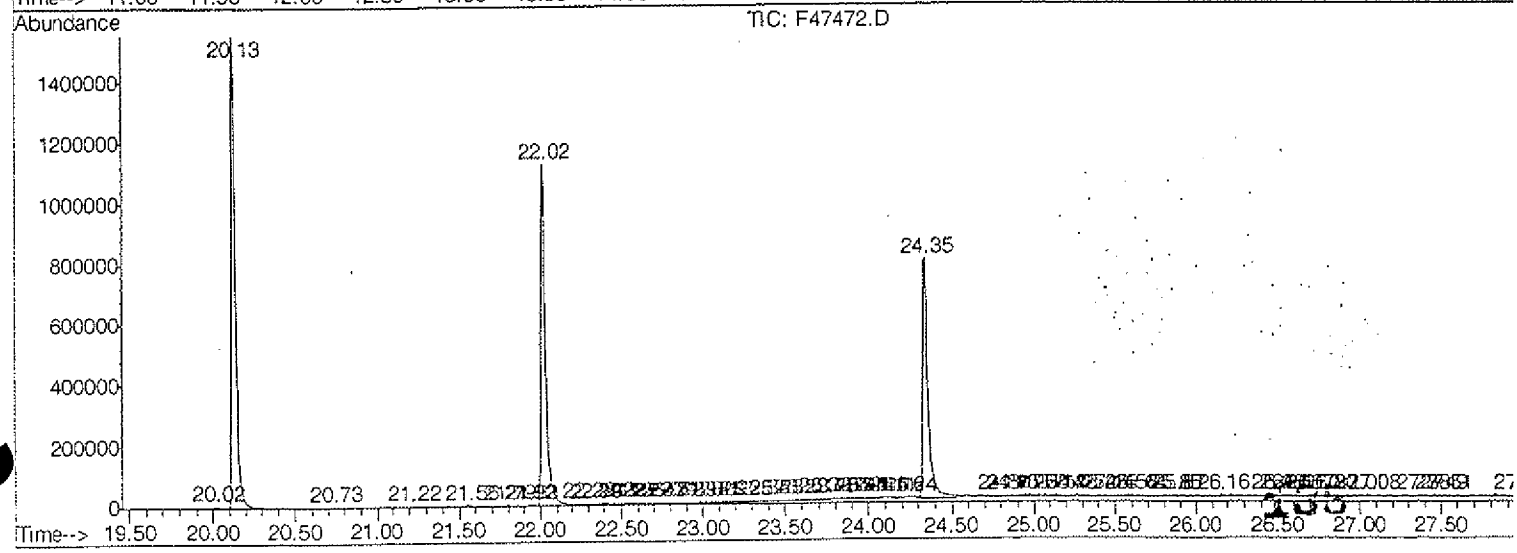
SII-SSA-0014-002811

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\EF2508\F47472.D
Operator : NINAP
Acquired : 8 Jan 2005 11:01 am using AcqMethod MF2491
Instrument : MSF
Sample Name: OP19045-MB1
Misc Info : OP19045,EF2508,1000
Vial Number: 5
Quant File :MF2491.RES (RTE Integrator)







Data File : C:\MSDCHEM\1\DATA\EF2508\F47472.D
Acq On : 8 Jan 2005 11:01 am
Sample : OP19045-MB1
Misc : OP19045,EF2508,1000
MS Integration Params: LSCINT.P

Vial: 5
Operator: NINAP
Inst : MSF
Multiplr: 1.00

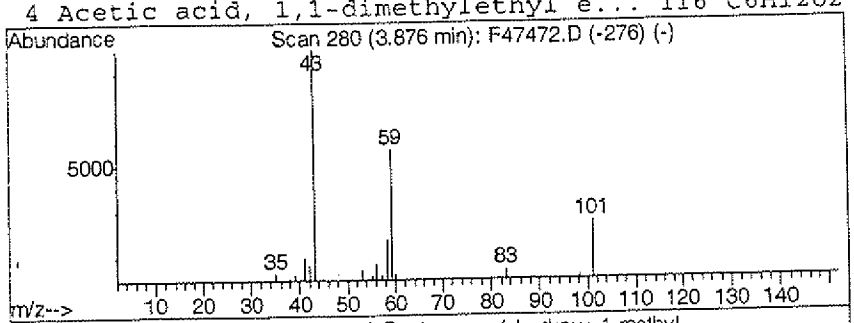
nt Method : C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Library : C:\DATABASE\NIST98.L

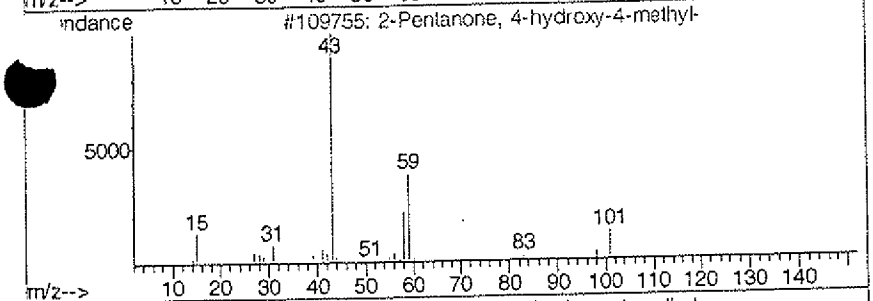
****

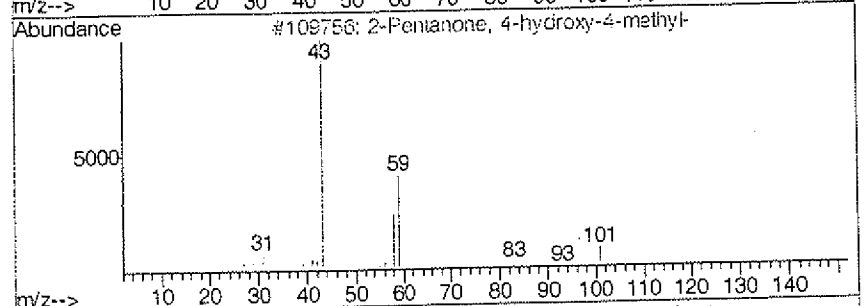
Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

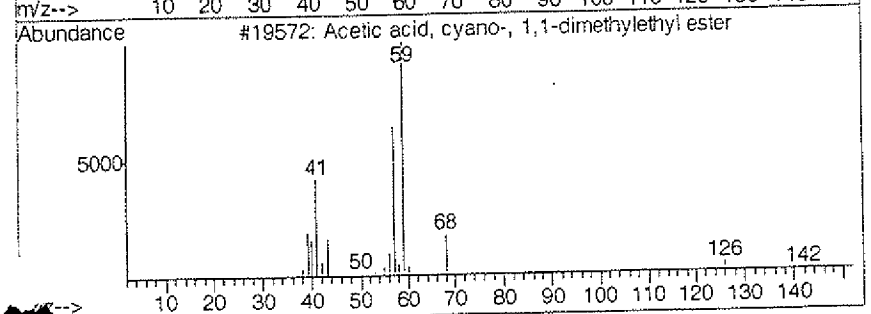
R.T.	EstConc	Area	Relative to ISTD	R.T.
3.88	5.17 ppb	182779	1,4-Dichlorobenzene-d4	6.30

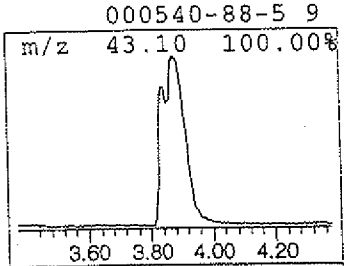
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	36
3	Acetic acid, cyano-, 1,1-dimethy...	141	C7H11NO2	001116-98-9	17
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	9

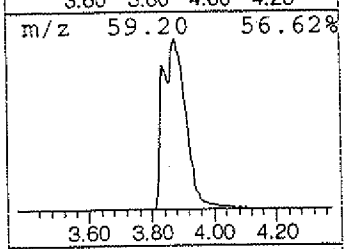


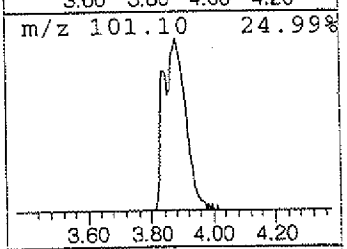


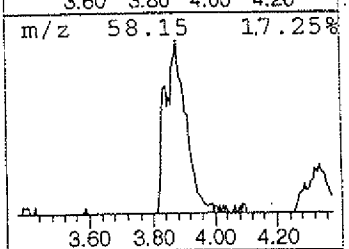


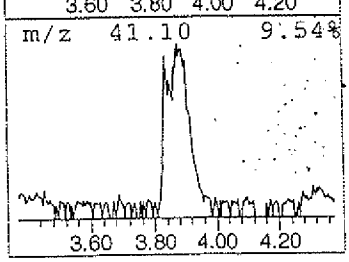












136

Operator ID: NINAP Date Acquired: 8 Jan 2005 11:01 am
Data File: C:\MSDCHEM\1\DATA\EF2508\F47472.D
Name: OP19045-MB1
Misc: OP19045,EF2508,1000
Method: C:\MSDCHEM\1\METHODS\MF2491.M (RTE Integrator)
Hit Semi Volatile Extractables by GC/MS
Library Searched: C:\DATABASE\NIST98.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc
2-Pentanone, 4-hy...	3.88	5.2	ppb	182779	1	6.30	1413510	40.0

SII-SSA-0014-002814

New Jersey
ACCUTEST.
Laboratories

04/05/05

Technical Report for

Arcadis Geraghty & Miller

PSEG, Hancock's Bridge, NJ

Accutest Job Number: N93379

Sampling Date: 03/15/05

Report to:

Arcadis Geraghty & Miller
6 Terry Drive
Newtown, PA 18940

ATTN: Brad Pierce

Total number of pages in report: 122

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese
President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Accutest Laboratories

Sample Summary

Arcadis Geraghty & Miller

Job No: N93379

PSEG, Hancock's Bridge, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
N93379-1	03/15/05	09:05	RDM	03/16/05	AQ	Ground Water	WELL AY
N93379-2	03/15/05	11:00	RDM	03/16/05	AQ	Ground Water	WELL X
N93379-3	03/15/05	13:12	RDM	03/16/05	AQ	Ground Water	WELL AV
N93379-4	03/15/05	14:25	RDM	03/16/05	AQ	Ground Water	WELL AVD
N93379-5	03/15/05	14:05	RDM	03/16/05	AQ	Field Blank Water	FB-031505
N93379-6	03/15/05	14:25	RDM	03/16/05	AQ	Trip Blank Water	TRIP BLANK

SII-SSA-0014-002818

ACCUTEST Laboratories

2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Arcadis Geraghty & Miller	**Job No**	N93379
Site:	PSEG, Hancock's Bridge, NJ	**Report Date**	4/5/2005 11:51:07 AM

4 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were collected on 03/15/2005 and were received at Accutest on 03/16/2005 properly preserved, at 4 Deg. C and intact. These Samples received an Accutest job number of N93379. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** VA2990

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) N93391-3DUP, N93391-4MS were used as the QC samples indicated.
- Blank Spike Recovery(s) for Chloromethane are outside control limits.
- VA2990-BS for Chloromethane: High percent recoveries and no associated positive found in the QC batch.

Extractables by GCMS By Method SW846 8270C

Matrix AQ **Batch ID:** OP19692

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) N93090-14MS, N93090-14MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 3,3'-Dichlorobenzidine are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 3,3'-Dichlorobenzidine are outside control limits. Probable cause due to matrix interference.
- OP19692-MS for 3,3'-Dichlorobenzidine: Outside of in house control limits.

The Accutest Laboratories of New Jersey certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NJ, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(N93379).

SII-SSA-0014-002819

Accutest Laboratories

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N93379-1	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A94444.D	1	03/22/05	NDJ	n/a	n/a	VA2990
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

3.1

Client Sample ID:	WELL AY		
Lab Sample ID:	N93379-1	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No..	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		79-119%
17060-07-0	1,2-Dichloroethane-D4	107%		68-129%
2037-26-5	Toluene-D8	87%		83-118%
460-00-4	4-Bromofluorobenzene	113%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SII-SSA-0014-002821

Raw Data: H74037.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N93379-1	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H74037.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N93379-1	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		14-81%
4165-62-2	Phenol-d5	27%		10-64%
118-79-6	2,4,6-Tribromophenol	80%		43-126%
4165-60-0	Nitrobenzene-d5	90%		28-125%
321-60-8	2-Fluorobiphenyl	82%		32-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AY		
Lab Sample ID:	N93379-1	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	89%		42-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

3.2

Client Sample ID:	WELL X		
Lab Sample ID:	N93379-2	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A94445.D	1	03/22/05	NDJ	n/a	n/a	VA2990
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	0.83	1.0	0.27	ug/l	J
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

3.2

Client Sample ID:	WELL X		
Lab Sample ID:	N93379-2	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	88%		79-119%
17060-07-0	1,2-Dichloroethane-D4	110%		68-129%
2037-26-5	Toluene-D8	87%		83-118%
460-00-4	4-Bromofluorobenzene	111%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: H74038.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N93379-2	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H74038.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	4.8	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.1	0.74	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.66	ug/l	
95-48-7	2-Methylphenol	ND	5.1	0.74	ug/l	
	3&4-Methylphenol	ND	5.1	0.72	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.75	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.77	ug/l	
108-95-2	Phenol	ND	5.1	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	0.76	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.82	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.28	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.39	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.38	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.51	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.38	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.55	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.55	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.44	ug/l	
86-74-8	Carbazole	ND	2.0	0.35	ug/l	
218-01-9	Chrysene	ND	2.0	0.27	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.45	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N93379-2	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.33	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.79	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.63	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	0.40	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.59	ug/l	
132-64-9	Dibenzofuran	ND	5.1	0.50	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.80	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.64	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.5	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.59	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.75	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.65	ug/l	
86-73-7	Fluorene	ND	2.0	0.91	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.46	ug/l	
67-72-1	Hexachloroethane	ND	5.1	0.68	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.6	ug/l	
78-59-1	Isophorone	ND	2.0	0.55	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.74	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.62	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.51	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.81	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.24	ug/l	
129-00-0	Pyrene	ND	2.0	0.60	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.33	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	36%		14-81%
4165-62-2	Phenol-d5	23%		10-64%
118-79-6	2,4,6-Tribromophenol	78%		43-126%
4165-60-0	Nitrobenzene-d5	71%		28-125%
321-60-8	2-Fluorobiphenyl	67%		32-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL X		
Lab Sample ID:	N93379-2	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	83%		42-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N93379-3	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A94446.D	1	03/22/05	NDJ	n/a	n/a	VA2990
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N93379-3	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		79-119%
17060-07-0	1,2-Dichloroethane-D4	110%		68-129%
2037-26-5	Toluene-D8	87%		83-118%
460-00-4	4-Bromofluorobenzene	108%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: H74039.D

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Report of Analysis

3.3

Client Sample ID:	WELL AV		
Lab Sample ID:	N93379-3	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H74039.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	5.0	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	0.95	2.0	0.22	ug/l	J
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	9.9	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N93379-3	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	2.7	5.0	0.49	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	1.4	2.0	0.63	ug/l	J
86-73-7	Fluorene	4.4	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	2.0	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	4.3	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	5.3	2.0	0.23	ug/l	
129-00-0	Pyrene	0.94	2.0	0.58	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		14-81%
4165-62-2	Phenol-d5	28%		10-64%
118-79-6	2,4,6-Tribromophenol	95%		43-126%
4165-60-0	Nitrobenzene-d5	93%		28-125%
321-60-8	2-Fluorobiphenyl	82%		32-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AV		
Lab Sample ID:	N93379-3	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	90%		42-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	WELL AVD		
Lab Sample ID:	N93379-4	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A94447.D	1	03/22/05	NDJ	n/a	n/a	VA2990
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

3.4

Client Sample ID:	WELL AVD		
Lab Sample ID:	N93379-4	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	87%		79-119%
17060-07-0	1,2-Dichloroethane-D4	107%		68-129%
2037-26-5	Toluene-D8	87%		83-118%
460-00-4	4-Bromofluorobenzene	108%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: H74040.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	WELL AVD		
Lab Sample ID:	N93379-4	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H74040.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	5.1	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	0.97	2.0	0.22	ug/l	J
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	10	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AVD		
Lab Sample ID:	N93379-4	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	2.7	5.0	0.49	ug/l	J
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	1.4	2.0	0.63	ug/l	J
86-73-7	Fluorene	4.7	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	2.3	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	4.6	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	5.6	2.0	0.23	ug/l	
129-00-0	Pyrene	0.97	2.0	0.58	ug/l	J
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		14-81%
4165-62-2	Phenol-d5	29%		10-64%
118-79-6	2,4,6-Tribromophenol	96%		43-126%
4165-60-0	Nitrobenzene-d5	97%		28-125%
321-60-8	2-Fluorobiphenyl	84%		32-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL AVD		
Lab Sample ID:	N93379-4	Date Sampled:	03/15/05
Matrix:	AQ - Ground Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	89%		42-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

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Report of Analysis

Client Sample ID:	FB-031505	Date Sampled:	03/15/05
Lab Sample ID:	N93379-5	Date Received:	03/16/05
Matrix:	AQ - Field Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A94448.D	1	03/22/05	NDJ	n/a	n/a	VA2990
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-031505		
Lab Sample ID:	N93379-5	Date Sampled:	03/15/05
Matrix:	AQ - Field Blank Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		79-119%
17060-07-0	1,2-Dichloroethane-D4	104%		68-129%
2037-26-5	Toluene-D8	87%		83-118%
460-00-4	4-Bromofluorobenzene	115%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: H74041.D

Accutest Laboratories

Report of Analysis

3.5

Client Sample ID:	FB-031505		
Lab Sample ID:	N93379-5	Date Sampled:	03/15/05
Matrix:	AQ - Field Blank Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H74041.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-031505		
Lab Sample ID:	N93379-5	Date Sampled:	03/15/05
Matrix:	AQ - Field Blank Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		14-81%
4165-62-2	Phenol-d5	28%		10-64%
118-79-6	2,4,6-Tribromophenol	80%		43-126%
4165-60-0	Nitrobenzene-d5	92%		28-125%
321-60-8	2-Fluorobiphenyl	83%		32-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-031505		
Lab Sample ID:	N93379-5	Date Sampled:	03/15/05
Matrix:	AQ - Field Blank Water	Date Received:	03/16/05
Method:	SW846 8270C SW846 3510C	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	92%		42-125%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: A94449D

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK	Date Sampled:	03/15/05
Lab Sample ID:	N93379-6	Date Received:	03/16/05
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	PSEG, Hancock's Bridge, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A94449.D	1	03/22/05	NDJ	n/a	n/a	VA2990
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

3.6

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	N93379-6	Date Sampled:	03/15/05
Matrix:	AQ - Trip Blank Water	Date Received:	03/16/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	PSEG, Hancock's Bridge, NJ		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		79-119%
17060-07-0	1,2-Dichloroethane-D4	107%		68-129%
2037-26-5	Toluene-D8	87%		83-118%
460-00-4	4-Bromofluorobenzene	117%		82-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

2235 Route 130, Dayton NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/0480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: N9 3379

Client / Reporting Information

Company Name: Arcadis
Address: 6 Terry Drive Suite 300
City: Newtown State: PA Zip: 18940
Project Contact: Brad Pierce E-mail: bpierce@arcadis-us.com
Phone #: 267-685-1800
Sampler's Name: Ryan McKinney

Project Information

Project Name: FSEG
Street:
City: Ironrock's Bridge State: NJ
Project #:
Fax #: 267-685-1801
Client Purchase Order #:

Requested Analyses

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OL - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles								LAB USE ONLY
	~~Well AZ~~ Omitted		3.15.05	905	RDM	GW	5	3			2					EX6 2255
-1	Well AY			1100			5	3			2					2255
-2	Well X			1312			5	3			2					
-3	Well AV			1425			5	3			2					
-4	Well ~~AVC~~ AVD			1425			5	3			2					
-5	EB-031505			1405			4	2			2					
-6	Trip Blank						2	2								

Turnaround Time (Business Days)

- ☐ Std. 15 Business Days — Approved By / Date:
- ☐ 10 Day RUSH
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☐ Other

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- ☐ Commercial "A"
- ☐ Commercial "B"
- ☐ NJ Reduced
- ☐ NJ Full
- ☐ Other
- ☐ FULL CLP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format

Commercial "A" = Results Only

Comments / Remarks

• tb filled 3/14/05 6:30 3/15/05 PVO

TCL pm NL 3/12/05

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received by	Relinquished by	Date Time	Received by
1	3/16/05 1540	2	3-16-05 1432	3-16-05 1600	2
Relinquished by	Date Time	Received by	Relinquished by	Date Time	Received by
3		3	4		4
Relinquished by	Date Time	Received by	Custody Seal #	Preserved where applicable	On Ice	Cooler Temp
5		5				1/2 C

IB

4.1.4

N93379: Chain of Custody
Page 1 of 1

SII-SSA-0014-002848

4.2

Internal Sample Tracking Chronicle

Arcadis Geraghty & Miller

Job No: N93379

PSEG, Hancock's Bridge, NJ

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
N93379-1	Collected: 15-MAR-05 09:05 By: RDM	Received: 16-MAR-05 By: MPC				
WELL AY						
N93379-1	SW846 8260B	22-MAR-05 05:13	NDJ			V8260TCL
N93379-1	SW846 8270C	02-APR-05 03:12	SSW	16-MAR-05	RL	AB8270TCL
N93379-2	Collected: 15-MAR-05 11:00 By: RDM	Received: 16-MAR-05 By: MPC				
WELL X						
N93379-2	SW846 8260B	22-MAR-05 05:43	NDJ			V8260TCL
N93379-2	SW846 8270C	02-APR-05 03:46	SSW	16-MAR-05	RL	AB8270TCL
N93379-3	Collected: 15-MAR-05 13:12 By: RDM	Received: 16-MAR-05 By: MPC				
WELL AV						
N93379-3	SW846 8260B	22-MAR-05 06:27	NDJ			V8260TCL
N93379-3	SW846 8270C	02-APR-05 04:31	SSW	16-MAR-05	RL	AB8270TCL
N93379-4	Collected: 15-MAR-05 14:25 By: RDM	Received: 16-MAR-05 By: MPC				
WELL AVD						
N93379-4	SW846 8260B	22-MAR-05 06:57	NDJ			V8260TCL
N93379-4	SW846 8270C	02-APR-05 05:01	SSW	16-MAR-05	RL	AB8270TCL
N93379-5	Collected: 15-MAR-05 14:05 By: RDM	Received: 16-MAR-05 By: MPC				
FB-031505						
N93379-5	SW846 8260B	22-MAR-05 07:26	NDJ			V8260TCL
N93379-5	SW846 8270C	02-APR-05 05:45	SSW	16-MAR-05	RL	AB8270TCL
N93379-6	Collected: 15-MAR-05 14:25 By: RDM	Received: 16-MAR-05 By: MPC				
TRIP BLANK						
N93379-6	SW846 8260B	22-MAR-05 07:56	NDJ			V8260TCL

Accutest Internal Chain of Custody

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ
Received: 03/16/05

4.3

4

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
N93379-1.2	Secured Storage	Karl M. Rosko	03/16/05 16:51	Retrieve from Storage
N93379-1.2	Karl M. Rosko		03/16/05 20:07	Depleted
N93379-1.2.1	Karl M. Rosko	Organics Prep	03/16/05 16:51	Extract from N93379-1.2
N93379-1.2.1	Organics Prep	Karl M. Rosko	03/16/05 20:08	Extract from N93379-1.2
N93379-1.2.1	Karl M. Rosko	Extract Storage	03/16/05 20:08	Return to Storage
N93379-1.3	Secured Storage	Naresh Jadeja	03/21/05 16:36	Retrieve from Storage
N93379-1.3	Naresh Jadeja	GCMSA	03/21/05 16:36	Load on Instrument
N93379-1.3	GCMSA	Naresh Jadeja	03/22/05 16:34	Unload from Instrument
N93379-1.3	Naresh Jadeja	Secured Storage	03/22/05 16:34	Return to Storage
N93379-2.2	Secured Storage	Karl M. Rosko	03/16/05 16:51	Retrieve from Storage
N93379-2.2	Karl M. Rosko		03/16/05 20:07	Depleted
N93379-2.2.1	Karl M. Rosko	Organics Prep	03/16/05 16:51	Extract from N93379-2.2
N93379-2.2.1	Organics Prep	Karl M. Rosko	03/16/05 20:08	Extract from N93379-2.2
N93379-2.2.1	Karl M. Rosko	Extract Storage	03/16/05 20:08	Return to Storage
N93379-2.3	Secured Storage	Naresh Jadeja	03/21/05 16:36	Retrieve from Storage
N93379-2.3	Naresh Jadeja	GCMSA	03/21/05 16:36	Load on Instrument
N93379-2.3	GCMSA	Naresh Jadeja	03/22/05 16:34	Unload from Instrument
N93379-2.3	Naresh Jadeja	Secured Storage	03/22/05 16:34	Return to Storage
N93379-3.2	Secured Storage	Karl M. Rosko	03/16/05 16:51	Retrieve from Storage
N93379-3.2	Karl M. Rosko		03/16/05 20:07	Depleted
N93379-3.2.1	Karl M. Rosko	Organics Prep	03/16/05 16:51	Extract from N93379-3.2
N93379-3.2.1	Organics Prep	Karl M. Rosko	03/16/05 20:08	Extract from N93379-3.2
N93379-3.2.1	Karl M. Rosko	Extract Storage	03/16/05 20:08	Return to Storage
N93379-3.4	Secured Storage	Naresh Jadeja	03/21/05 16:36	Retrieve from Storage
N93379-3.4	Naresh Jadeja	GCMSA	03/21/05 16:36	Load on Instrument
N93379-3.4	GCMSA	Naresh Jadeja	03/22/05 16:34	Unload from Instrument
N93379-3.4	Naresh Jadeja	Secured Storage	03/22/05 16:34	Return to Storage
N93379-4.1	Secured Storage	Karl M. Rosko	03/16/05 16:51	Retrieve from Storage
N93379-4.1	Karl M. Rosko		03/16/05 20:07	Depleted
N93379-4.1.1	Karl M. Rosko	Organics Prep	03/16/05 16:51	Extract from N93379-4.1
N93379-4.1.1	Organics Prep	Karl M. Rosko	03/16/05 20:08	Extract from N93379-4.1
N93379-4.1.1	Karl M. Rosko	Extract Storage	03/16/05 20:08	Return to Storage
N93379-4.4	Secured Storage	Naresh Jadeja	03/21/05 16:36	Retrieve from Storage

SII-SSA-0014-002850

Accutest Internal Chain of Custody

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ
Received: 03/16/05

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
N93379-4.4	Naresh Jadeja	GCMSA	03/21/05 16:36	Load on Instrument
N93379-4.4	GCMSA	Naresh Jadeja	03/22/05 16:34	Unload from Instrument
N93379-4.4	Naresh Jadeja	Secured Storage	03/22/05 16:34	Return to Storage
N93379-5.2	Secured Storage	Karl M. Rosko	03/16/05 16:51	Retrieve from Storage
N93379-5.2	Karl M. Rosko		03/16/05 20:07	Depleted
N93379-5.2.1	Karl M. Rosko	Organics Prep	03/16/05 16:51	Extract from N93379-5.2
N93379-5.2.1	Organics Prep	Karl M. Rosko	03/16/05 20:08	Extract from N93379-5.2
N93379-5.2.1	Karl M. Rosko	Extract Storage	03/16/05 20:08	Return to Storage
N93379-5.4	Secured Storage	Naresh Jadeja	03/21/05 16:36	Retrieve from Storage
N93379-5.4	Naresh Jadeja	GCMSA	03/21/05 16:36	Load on Instrument
N93379-5.4	GCMSA	Naresh Jadeja	03/22/05 16:34	Unload from Instrument
N93379-5.4	Naresh Jadeja	Secured Storage	03/22/05 16:34	Return to Storage
N93379-6.3	Secured Storage	Naresh Jadeja	03/21/05 16:36	Retrieve from Storage
N93379-6.3	Naresh Jadeja	GCMSA	03/21/05 16:36	Load on Instrument
N93379-6.3	GCMSA	Naresh Jadeja	03/22/05 16:34	Unload from Instrument
N93379-6.3	Naresh Jadeja	Secured Storage	03/22/05 16:34	Return to Storage

SII-SSA-0014-002851

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA2990-MB1	A94436.D	1	03/22/05	NDJ	n/a	n/a	VA2990

5.1
5

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.3	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.11	ug/l	
75-25-2	Bromoform	ND	4.0	0.17	ug/l	
74-83-9	Bromomethane	ND	2.0	0.15	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.23	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.15	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.081	ug/l	
74-87-3	Chloromethane	ND	1.0	0.13	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.18	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.13	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.35	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.81	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.24	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.17	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.11	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.071	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.080	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	0.73	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.59	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	5.0	0.12	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.14	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.37	ug/l	
108-88-3	Toluene	ND	1.0	0.14	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.17	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.13	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.66	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.17	ug/l	

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA2990-MB1	A94436.D	1	03/22/05	NDJ	n/a	n/a	VA2990

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	84%	79-119%
17060-07-0	1,2-Dichloroethane-D4	100%	68-129%
2037-26-5	Toluene-D8	86%	83-118%
460-00-4	4-Bromofluorobenzene	113%	82-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA2990-BS	A94442.D	1	03/22/05	NDJ	n/a	n/a	VA2990

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	61.3	123	53-153
71-43-2	Benzene	50	50.0	100	77-119
75-27-4	Bromodichloromethane	50	55.8	112	82-126
75-25-2	Bromoform	50	54.6	109	73-135
74-83-9	Bromomethane	50	60.7	121	61-138
78-93-3	2-Butanone (MEK)	50	48.0	96	58-142
75-15-0	Carbon disulfide	50	57.3	115	60-130
56-23-5	Carbon tetrachloride	50	62.4	125	72-140
108-90-7	Chlorobenzene	50	51.6	103	81-117
75-00-3	Chloroethane	50	56.3	113	69-135
67-66-3	Chloroform	50	52.4	105	80-122
74-87-3	Chloromethane	50	66.6	133* [a]	59-132
124-48-1	Dibromochloromethane	50	54.8	110	80-125
75-34-3	1,1-Dichloroethane	50	50.5	101	78-121
107-06-2	1,2-Dichloroethane	50	68.2	136	66-137
75-35-4	1,1-Dichloroethene	50	50.0	100	73-124
156-59-2	cis-1,2-Dichloroethene	50	44.3	89	76-120
156-60-5	trans-1,2-Dichloroethene	50	46.9	94	73-119
78-87-5	1,2-Dichloropropane	50	50.8	102	82-117
10061-01-5	cis-1,3-Dichloropropene	50	48.5	97	81-120
10061-02-6	trans-1,3-Dichloropropene	50	51.1	102	81-125
100-41-4	Ethylbenzene	50	55.6	111	79-120
591-78-6	2-Hexanone	50	53.5	107	66-140
108-10-1	4-Methyl-2-pentanone(MIBK)	50	53.1	106	70-134
75-09-2	Methylene chloride	50	48.9	98	75-122
100-42-5	Styrene	50	55.8	112	80-125
79-34-5	1,1,2,2-Tetrachloroethane	50	53.3	107	76-117
127-18-4	Tetrachloroethene	50	52.7	105	69-130
108-88-3	Toluene	50	49.8	100	81-120
71-55-6	1,1,1-Trichloroethane	50	54.6	109	77-132
79-00-5	1,1,2-Trichloroethane	50	49.7	99	85-117
79-01-6	Trichloroethene	50	53.2	106	83-119
75-01-4	Vinyl chloride	50	63.2	126	65-135
1330-20-7	Xylene (total)	150	158	105	81-119

Blank Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA2990-BS	A94442.D	1	03/22/05	NDJ	n/a	n/a	VA2990

5.2 5

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	85%	79-119%
17060-07-0	1,2-Dichloroethane-D4	103%	68-129%
2037-26-5	Toluene-D8	91%	83-118%
460-00-4	4-Bromofluorobenzene	108%	82-120%

(a) High percent recoveries and no associated positive found in the QC batch.

Matrix Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N93391-4MS	A94451.D	1	03/22/05	NDJ	n/a	n/a	VA2990
N93391-4	A94440.D	1	03/22/05	NDJ	n/a	n/a	VA2990

5.3
5

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Compound	N93391-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		50	58.8	118	47-163
71-43-2	Benzene	ND		50	46.5	93	51-138
75-27-4	Bromodichloromethane	ND		50	53.6	107	80-128
75-25-2	Bromoform	ND		50	51.0	102	68-137
74-83-9	Bromomethane	ND		50	55.9	112	61-141
78-93-3	2-Butanone (MEK)	ND		50	47.6	95	55-149
75-15-0	Carbon disulfide	ND		50	53.0	106	59-128
56-23-5	Carbon tetrachloride	ND		50	61.7	123	71-143
108-90-7	Chlorobenzene	ND		50	48.7	97	78-120
75-00-3	Chloroethane	ND		50	51.3	103	67-139
67-66-3	Chloroform	0.64	J	50	51.3	101	78-126
74-87-3	Chloromethane	ND		50	57.4	115	57-134
124-48-1	Dibromochloromethane	ND		50	52.9	106	79-127
75-34-3	1,1-Dichloroethane	ND		50	49.1	98	75-125
107-06-2	1,2-Dichloroethane	ND		50	66.0	132	63-142
75-35-4	1,1-Dichloroethene	ND		50	46.9	94	69-129
156-59-2	cis-1,2-Dichloroethene	1.4		50	45.4	88	73-127
156-60-5	trans-1,2-Dichloroethene	ND		50	44.4	89	71-123
78-87-5	1,2-Dichloropropane	ND		50	49.4	99	81-120
10061-01-5	cis-1,3-Dichloropropene	ND		50	45.6	91	78-121
10061-02-6	trans-1,3-Dichloropropene	ND		50	49.6	99	77-128
100-41-4	Ethylbenzene	ND		50	51.0	102	51-142
591-78-6	2-Hexanone	ND		50	51.7	103	64-145
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	51.8	104	66-140
75-09-2	Methylene chloride	ND		50	45.3	91	73-126
100-42-5	Styrene	ND		50	48.6	97	79-130
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	50.9	102	74-121
127-18-4	Tetrachloroethene	13.6		50	64.2	101	70-128
108-88-3	Toluene	ND		50	46.4	93	49-147
71-55-6	1,1,1-Trichloroethane	ND		50	54.0	108	74-136
79-00-5	1,1,2-Trichloroethane	ND		50	48.2	96	83-121
79-01-6	Trichloroethene	1.4		50	53.3	104	75-128
75-01-4	Vinyl chloride	ND		50	57.3	115	60-141
1330-20-7	Xylene (total)	ND		150	147	98	44-146

Matrix Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N93391-4MS	A94451.D	1	03/22/05	NDJ	n/a	n/a	VA2990
N93391-4	A94440.D	1	03/22/05	NDJ	n/a	n/a	VA2990

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Surrogate Recoveries	MS	N93391-4	Limits
1868-53-7	Dibromofluoromethane	85%	86%	79-119%
17060-07-0	1,2-Dichloroethane-D4	105%	107%	68-129%
2037-26-5	Toluene-D8	90%	87%	83-118%
460-00-4	4-Bromofluorobenzene	107%	116%	82-120%

Duplicate Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N93391-3DUP	A94450.D	1	03/22/05	NDJ	n/a	n/a	VA2990
N93391-3	A94439.D	1	03/22/05	NDJ	n/a	n/a	VA2990

5.4 5

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Compound	N93391-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	10
71-43-2	Benzene	ND		ND		nc	17
75-27-4	Bromodichloromethane	ND		ND		nc	10
75-25-2	Bromoform	ND		ND		nc	10
74-83-9	Bromomethane	ND		ND		nc	10
78-93-3	2-Butanone (MEK)	ND		ND		nc	10
75-15-0	Carbon disulfide	ND		ND		nc	10
56-23-5	Carbon tetrachloride	ND		ND		nc	10
108-90-7	Chlorobenzene	ND		ND		nc	10
75-00-3	Chloroethane	ND		ND		nc	10
67-66-3	Chloroform	4.6		4.6		0	10
74-87-3	Chloromethane	ND		ND		nc	10
124-48-1	Dibromochloromethane	ND		ND		nc	10
75-34-3	1,1-Dichloroethane	ND		ND		nc	10
107-06-2	1,2-Dichloroethane	ND		ND		nc	10
75-35-4	1,1-Dichloroethene	ND		ND		nc	10
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	10
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	10
78-87-5	1,2-Dichloropropane	ND		ND		nc	10
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	10
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	10
100-41-4	Ethylbenzene	ND		ND		nc	19
591-78-6	2-Hexanone	ND		ND		nc	10
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	10
75-09-2	Methylene chloride	ND		ND		nc	10
100-42-5	Styrene	ND		ND		nc	10
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	10
127-18-4	Tetrachloroethene	ND		ND		nc	10
108-88-3	Toluene	ND		ND		nc	19
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	10
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	10
79-01-6	Trichloroethene	ND		ND		nc	10
75-01-4	Vinyl chloride	ND		ND		nc	10
1330-20-7	Xylene (total)	ND		ND		nc	16

Duplicate Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
N93391-3DUP	A94450.D	1	03/22/05	NDJ	n/a	n/a	VA2990
N93391-3	A94439.D	1	03/22/05	NDJ	n/a	n/a	VA2990

The QC reported here applies to the following samples: Method: SW846 8260B

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5, N93379-6

CAS No.	Surrogate Recoveries	DUP	N93391-3	Limits
1868-53-7	Dibromofluoromethane	87%	86%	79-119%
17060-07-0	1,2-Dichloroethane-D4	109%	107%	68-129%
2037-26-5	Toluene-D8	87%	87%	83-118%
460-00-4	4-Bromofluorobenzene	115%	115%	82-120%

Instrument Performance Check (BFB)

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample:	VA2955-BFB	Injection Date:	02/28/05
Lab File ID:	A93585.D	Injection Time:	13:43
Instrument ID:	GCMSA		

5.5

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	6075	16.2		Pass
75	30.0 - 60.0% of mass 95	16435	43.9		Pass
95	Base peak, 100% relative abundance	37405	100.0		Pass
96	5.0 - 9.0% of mass 95	2582	6.9		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	37288	99.7		Pass
175	5.0 - 9.0% of mass 174	2670	7.1	(7.2) [a]	Pass
176	95.0 - 101.0% of mass 174	36416	97.4	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	2428	6.5	(6.7) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA2955-IC2955	A93586.D	02/28/05	14:14	00:31	Initial cal 1
VA2955-IC2955	A93587.D	02/28/05	14:44	01:01	Initial cal 2
VA2955-IC2955	A93588.D	02/28/05	15:13	01:30	Initial cal 5
VA2955-IC2955	A93589.D	02/28/05	15:40	01:57	Initial cal 20
VA2955-ICC2955	A93590.D	02/28/05	16:21	02:38	Initial cal 50
VA2955-IC2955	A93591.D	02/28/05	16:50	03:07	Initial cal 100
VA2955-IC2955	A93592.D	02/28/05	17:17	03:34	Initial cal 200

SII-SSA-0014-002861

Instrument Performance Check (BFB)

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample:	VA2990-BFB	Injection Date:	03/21/05
Lab File ID:	A94433.D	Injection Time:	23:18
Instrument ID:	GCMSA		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	9949	20.5		Pass
75	30.0 - 60.0% of mass 95	24779	51.2		Pass
95	Base peak, 100% relative abundance	48440	100.0		Pass
96	5.0 - 9.0% of mass 95	3309	6.8		Pass
173	Less than 2.0% of mass 174	0	0.0	(0.0) [a]	Pass
174	50.0 - 150.0% of mass 95	48235	99.6		Pass
175	5.0 - 9.0% of mass 174	3419	7.1	(7.1) [a]	Pass
176	95.0 - 101.0% of mass 174	47427	97.9	(98.3) [a]	Pass
177	5.0 - 9.0% of mass 176	3074	6.3	(6.5) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VA2990-CC2955	A94434.D	03/22/05	00:18	01:00	Continuing cal 20
VA2990-MB1	A94436.D	03/22/05	01:17	01:59	Method Blank
ZZZZZZ	A94437.D	03/22/05	01:46	02:28	(unrelated sample)
ZZZZZZ	A94438.D	03/22/05	02:16	02:58	(unrelated sample)
N93391-3	A94439.D	03/22/05	02:45	03:27	(used for QC only; not part of job N93379)
N93391-4	A94440.D	03/22/05	03:15	03:57	(used for QC only; not part of job N93379)
ZZZZZZ	A94441.D	03/22/05	03:44	04:26	(unrelated sample)
VA2990-BS	A94442.D	03/22/05	04:14	04:56	Blank Spike
N93379-1	A94444.D	03/22/05	05:13	05:55	WELL AY
N93379-2	A94445.D	03/22/05	05:43	06:25	WELL X
N93379-3	A94446.D	03/22/05	06:27	07:09	WELL AV
N93379-4	A94447.D	03/22/05	06:57	07:39	WELL AVD
N93379-5	A94448.D	03/22/05	07:26	08:08	FB-031505
N93379-6	A94449.D	03/22/05	07:56	08:38	TRIP BLANK
N93391-3DUP	A94450.D	03/22/05	08:26	09:08	Duplicate
N93391-4MS	A94451.D	03/22/05	08:56	09:38	Matrix Spike
ZZZZZZ	A94452.D	03/22/05	09:30	10:12	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Check Std:	VA2990-CC2955	Injection Date:	03/22/05
Lab File ID:	A94434.D	Injection Time:	00:18
Instrument ID:	GCMSA	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	104408	6.77	124013	9.17	162300	10.11	168719	13.57	111994	16.21
Upper Limit [a]	208816	7.27	248026	9.67	324600	10.61	337438	14.07	223988	16.71
Lower Limit [b]	52204	6.27	62007	8.67	81150	9.61	84360	13.07	55997	15.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VA2990-MB1	105413	6.77	119136	9.17	158088	10.11	161683	13.56	97691	16.21
ZZZZZZ	106544	6.77	120487	9.17	159851	10.11	162976	13.56	97706	16.21
ZZZZZZ	101009	6.77	113642	9.17	149861	10.11	155384	13.56	92146	16.21
N93391-3	102054	6.78	107192	9.17	144510	10.11	149685	13.57	88975	16.21
N93391-4	102275	6.77	111983	9.17	148004	10.11	152869	13.57	90854	16.21
ZZZZZZ	98502	6.77	100182	9.17	134733	10.11	139055	13.56	82147	16.21
VA2990-BS	96311	6.77	108558	9.17	143936	10.11	154216	13.57	105177	16.21
N93379-1	103014	6.77	110179	9.17	146955	10.11	151089	13.57	90934	16.20
N93379-2	98730	6.77	102885	9.17	137953	10.11	141938	13.56	89222	16.21
N93379-3	95007	6.77	103245	9.17	137633	10.11	142913	13.57	92848	16.20
N93379-4	101322	6.76	107547	9.17	144383	10.11	148737	13.57	96926	16.21
N93379-5	104607	6.77	116729	9.17	153426	10.11	157916	13.57	94260	16.21
N93379-6	95564	6.77	106370	9.17	141632	10.11	146081	13.56	86401	16.21
N93391-3DUP	95675	6.76	103827	9.17	139325	10.11	140637	13.56	84821	16.21
N93391-4MS	99590	6.77	107518	9.17	143585	10.11	153351	13.56	104312	16.20
ZZZZZZ	103285	6.76	108881	9.17	144765	10.11	151678	13.56	97406	16.20

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

5.6

Volatile Surrogate Recovery Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Method: SW846 8260B Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
N93379-1	A94444.D	87.0	107.0	87.0	113.0
N93379-2	A94445.D	88.0	110.0	87.0	111.0
N93379-3	A94446.D	87.0	110.0	87.0	108.0
N93379-4	A94447.D	87.0	107.0	87.0	108.0
N93379-5	A94448.D	85.0	104.0	87.0	115.0
N93379-6	A94449.D	86.0	107.0	87.0	117.0
N93391-3DUP	A94450.D	87.0	109.0	87.0	115.0
N93391-4MS	A94451.D	85.0	105.0	90.0	107.0
VA2990-BS	A94442.D	85.0	103.0	91.0	108.0
VA2990-MB1	A94436.D	84.0	100.0	86.0	113.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	79-119%
S2 = 1,2-Dichloroethane-D4	68-129%
S3 = Toluene-D8	83-118%
S4 = 4-Bromofluorobenzene	82-120%

5.7

Initial Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: VA2955-ICC2955
Lab FileID: A93590.D

Response Factor Report MSA

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Tue Mar 01 09:35:12 2005
Response via : Initial Calibration

Calibration Files
5 =A93588.D 2 =A93587.D 20 =A93589.D 50 =A93590.D
100 =A93591.D 1 =A93586.D 200 =A93592.D

Compound	5	2	20	50	100	1	200	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD								
2)M ethanol	0.062	0.095	0.071	0.078	0.065	0.057	0.060	0.070	18.86
----- Linear regression ----- Coefficient = 0.9948									
Response Ratio = 0.04349 + 0.06062 *A									
3)M tertiary butyl al	0.883	0.824	0.802	0.876	0.867	0.825	0.873	0.850	3.78
4) I pentafluorobenzene	ISTD								
5)M chlorodifluoromet	0.685	0.659	0.604	0.695	0.693	0.631	0.701	0.667	5.54
6)M dichlorodifluorom	0.593	0.463	0.520	0.541	0.509	0.430	0.544	0.514	10.50
7)M chloromethane	0.713	0.657	0.634	0.662	0.625	0.656	0.610	0.651	5.12
8)M vinyl chloride	0.693	0.609	0.645	0.692	0.667	0.597	0.713	0.659	6.71
9)M bromomethane	0.542	0.477	0.470	0.486	0.441	0.528	0.437	0.483	8.30
10)M chloroethane	0.432	0.412	0.370	0.362	0.318	0.443		0.389	12.28
11)M trichlorofluorome	0.899	0.756	0.825	0.866	0.817	0.734	0.851	0.821	7.19
12)M ethyl ether	0.314	0.293	0.315	0.342	0.318	0.287	0.313	0.312	5.73
13)M acrolein	0.082	0.073	0.070	0.070	0.063	0.084	0.062	0.072	11.62
14)M 1,1-dichloroethen	0.576	0.579	0.530	0.563	0.523	0.563	0.536	0.553	4.18
15)M acetone	0.248		0.199	0.200	0.178		0.180	0.201	13.97
16)M allyl chloride	0.360	0.335	0.342	0.365	0.348		0.362	0.352	3.50
17)M acetonitrile	0.068	0.062	0.064	0.066	0.063	0.076	0.056	0.065	9.23
18)M iodomethane	1.183	1.082	1.109	1.193	1.134	1.104	1.176	1.140	3.86
19)M iso-butyl alcohol	0.018	0.014	0.017	0.019	0.018		0.016	0.017	9.31
20)M carbon disulfide	1.769	1.685	1.644	1.756	1.661	1.726	1.721	1.709	2.77
21)M methylene chlorid	0.641	0.602	0.604	0.652	0.619	0.641	0.637	0.628	3.14
22)M methyl acetate	0.562	0.574	0.487	0.522	0.485	0.607	0.486	0.532	9.32
23)M methyl tert butyl	1.918	1.783	1.790	1.915	1.835	1.896	1.853	1.856	3.04
24)M trans-1,2-dichlor	0.620	0.632	0.563	0.596	0.561	0.636	0.568	0.597	5.52
25)M di-isopropyl ethe	1.463	1.355	1.300	1.415	1.379	1.374	1.348	1.376	3.76
26)M ethyl tert-butyl	1.448	1.346	1.295	1.418	1.386	1.295	1.381	1.367	4.27
27)M 2-butanone	0.155		0.177	0.186	0.191		0.194	0.181	8.65
28)M 1,1-dichloroethan	0.722	0.686	0.689	0.732	0.697	0.675	0.713	0.702	2.97
29)M chloroprene	0.502	0.459	0.430	0.484	0.473	0.454	0.466	0.467	4.89
30)M acrylonitrile	0.248	0.216	0.234	0.253	0.238	0.228	0.245	0.238	5.34
31)M vinyl acetate	0.066		0.070	0.077	0.076		0.077	0.073	6.62
32)M ethyl acetate	0.055		0.057	0.061	0.059		0.057	0.058	3.91
33)M 2,2-dichloropropa	0.650	0.604	0.595	0.637	0.597	0.634	0.596	0.616	3.79
34)M cis-1,2-dichloroe	0.455	0.417	0.429	0.463	0.444	0.424	0.454	0.441	4.02
35)M propionitrile	0.064	0.052	0.062	0.066	0.062	0.056	0.063	0.061	7.96
36)M bromochloromethan	0.228	0.188	0.231	0.250	0.239	0.211	0.248	0.228	9.70
37)M tetrahydrofuran	0.135	0.110	0.133	0.143	0.136		0.137	0.132	8.50
38)M chloroform	0.726	0.678	0.690	0.744	0.707	0.730	0.722	0.714	3.26
39)S dibromofluorometh	0.560	0.582	0.514	0.539	0.522	0.610	0.534	0.551	6.29
40)S 1,2-dichloroethan	0.573	0.570	0.538	0.562	0.532	0.590	0.538	0.558	3.94
41)M freon 113	0.522	0.479	0.444	0.519	0.500	0.443	0.496	0.486	6.71
42)M methacrylonitrile	0.270	0.240	0.267	0.286	0.270	0.194	0.275	0.257	12.12

Initial Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: VA2955-ICC2955
Lab FileID: A93590.D

43)M 1,1,1-trichloroet	0.617	0.583	0.595	0.647	0.623	0.627	0.635	0.618	3.60
44)M tert-amyl methyl	1.385	1.322	1.243	1.327	1.273	1.314	1.221	1.298	4.32
45) I 1,4-difluorobenzene	ISTD								
46)M Di-isobutylene	0.572	0.567	0.587	0.659	0.618	0.528	0.647	0.597	7.82
47)M epichlorohydrin	0.035	0.029	0.033	0.036	0.035	0.025	0.035	0.033	12.48
48)M n-butyl alcohol	0.011		0.010	0.011	0.011		0.010	0.011	3.56
49)M carbon tetrachlor	0.393	0.359	0.385	0.417	0.403	0.369	0.402	0.390	5.19
50)M 1,1-dichloroprope	0.369	0.355	0.345	0.374	0.357	0.318	0.354	0.353	5.15
51)M hexane	0.306	0.299	0.262	0.301	0.291	0.289	0.285	0.290	5.00
52)M benzene	1.106	1.064	1.040	1.096	1.049	1.093	1.031	1.069	2.80
53)M heptane	0.148	0.137	0.125	0.145	0.140		0.136	0.139	5.95
54)M isopropyl acetate	0.603	0.538	0.543	0.581	0.573	0.564	0.545	0.564	4.20
55)M 1,2-dichloroethan	0.367	0.334	0.361	0.383	0.367	0.339	0.359	0.358	4.71
56)M trichloroethene	0.283	0.266	0.280	0.299	0.288	0.271	0.285	0.282	3.84
57)M 2-nitropropane	0.035		0.034	0.039	0.038		0.035	0.036	5.74
58)m methylcyclohexane	0.445	0.411	0.366	0.434	0.428	0.430	0.420	0.419	6.13
59)M 2-chloroethyl vin	0.181	0.169	0.174	0.192	0.188	0.178	0.179	0.180	4.31
60)M methyl methacryla	0.209		0.200	0.218	0.213		0.215	0.211	3.37
61)M 1,2-dichloropropa	0.292	0.266	0.288	0.308	0.295	0.282	0.291	0.289	4.42
62)M dibromomethane	0.183	0.176	0.187	0.200	0.195	0.168	0.195	0.186	6.14
63)M 1,4-dioxane	0.004		0.004	0.004	0.004		0.004	0.004#	3.36
64)M bromodichlorometh	0.399	0.370	0.391	0.423	0.410	0.373	0.413	0.397	5.06
65)M cis-1,3-dichlorop	0.514	0.474	0.493	0.530	0.518	0.457	0.518	0.501	5.35
66)S toluene-d8 (s)	1.393	1.411	1.289	1.354	1.314		1.307	1.345	3.67
67)M 4-methyl-2-pentan	0.512	0.479	0.491	0.531	0.512	0.531	0.507	0.509	3.83
68)M toluene	0.716	0.680	0.685	0.738	0.714	0.746	0.717	0.714	3.41
69)M 3-methyl-1-butano	0.018		0.017	0.019	0.018		0.017	0.018	4.13
70)M trans-1,3-dichlor	0.460	0.431	0.462	0.499	0.486	0.450	0.490	0.468	5.22
71)M ethyl methacrylat	0.385		0.391	0.420	0.410		0.409	0.403	3.59
72)M 1,1,2-trichloroet	0.231	0.212	0.227	0.244	0.242	0.232	0.245	0.233	5.07
73)M 2-hexanone	0.225		0.221	0.236	0.224		0.219	0.225	2.91
74) I chlorobenzene-d5	ISTD								
75)M tetrachloroethene	0.268	0.263	0.256	0.266	0.257	0.261	0.256	0.261	1.80
76)M 1,3-dichloropropa	0.414	0.385	0.405	0.422	0.402	0.400	0.398	0.404	2.98
77)M butyl acetate	0.196	0.182	0.183	0.197	0.190	0.168	0.184	0.186	5.25
78)M dibromochlorometh	0.335	0.294	0.328	0.349	0.339	0.318	0.343	0.329	5.64
79)M 1,2-dibromoethane	0.276	0.245	0.271	0.281	0.276	0.259	0.279	0.269	4.87
80)M chlorobenzene	0.827	0.781	0.782	0.827	0.799	0.809	0.806	0.804	2.33
81)M 1,1,1,2-tetrachlo	0.323	0.292	0.306	0.324	0.317	0.306	0.318	0.312	3.76
82)M ethylbenzene	1.260	1.199	1.210	1.263	1.208	1.277	1.194	1.230	2.85
83)M m,p-xylene	0.522	0.494	0.500	0.523	0.501	0.527	0.498	0.510	2.76
84)M o-xylene	0.535	0.508	0.520	0.544	0.533	0.550	0.535	0.532	2.70
85)M styrene	0.852	0.793	0.831	0.870	0.847	0.811	0.847	0.836	3.15
86)M bromoform	0.278	0.237	0.275	0.293	0.290	0.235	0.303	0.273	9.91
87) I 1,4-dichlorobenzene-d	ISTD								
88)M isopropylbenzene	1.775	1.705	1.704	1.858	1.761	1.802	1.845	1.779	3.44
89)S 4-bromofluorobenz	0.753	0.776	0.703	0.735	0.705		0.733	0.734	3.83
90)M bromobenzene	0.598	0.541	0.584	0.621	0.602	0.585	0.626	0.594	4.78
91)M 1,1,2,2-tetrachlo	0.573	0.527	0.551	0.589	0.566	0.573	0.588	0.567	3.87
92)M trans-1,4-dichlor	0.149	0.133	0.151	0.163	0.156	0.113	0.162	0.147	12.21
93)M 1,2,3-trichloropr	0.157	0.137	0.153	0.165	0.156	0.120	0.162	0.150	10.62
94)M n-propylbenzene	2.250	2.149	2.146	2.283	2.187	2.302	2.253	2.225	2.85
95)M 2-chlorotoluene	1.606	1.525	1.516	1.638	1.576	1.598	1.625	1.584	2.99
96)M 4-chlorotoluene	1.488	1.369	1.388	1.481	1.435	1.428	1.488	1.439	3.38
97)M 1,3,5-trimethylbe	1.693	1.567	1.614	1.726	1.649	1.713	1.690	1.665	3.45
98)M tert-butylbenzene	1.505	1.462	1.474	1.590	1.516	1.532	1.569	1.521	3.08
99)M pentachloroethane	0.430	0.382	0.415	0.445	0.433	0.400	0.443	0.421	5.55

5.8

Initial Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: VA2955-ICC2955
Lab FileID: A93590.D

100)M 1,2,4-trimethylbe	1.758	1.666	1.707	1.819	1.743	1.783	1.756	1.748	2.84
101)M sec-butylbenzene	2.162	2.081	2.069	2.227	2.136	2.229	2.181	2.155	2.97
102)M 1,3-dichlorobenze	1.188	1.087	1.123	1.206	1.151	1.222	1.163	1.163	4.09
103)M p-isopropyltoluen	1.896	1.805	1.820	1.972	1.885	1.923	1.898	1.886	3.04
104)M 1,4-dichlorobenze	1.202	1.123	1.143	1.226	1.183	1.213	1.200	1.184	3.19
105)M 1,2-dichlorobenze	1.107	1.061	1.090	1.167	1.126	1.125	1.129	1.115	3.00
106)M n-butylbenzene	1.589	1.504	1.538	1.634	1.567	1.605	1.563	1.571	2.74
107)M 1,2-dibromo-3-chl	0.105	0.086	0.107	0.114	0.110		0.113	0.106	9.91
108)M 1,2,4-trichlorobe	0.724	0.703	0.724	0.806	0.784	0.736	0.808	0.755	5.70
109)M hexachlorobutadie	0.336	0.334	0.330	0.356	0.340	0.327	0.342	0.338	2.85
110)M naphthalene	1.572	1.422	1.591	1.730	1.669	1.548	1.699	1.605	6.57
111)M 1,2,3-trichlorobe	0.638	0.629	0.644	0.708	0.691	0.660	0.706	0.668	4.97
112)M hexachloroethane	0.379	0.349	0.376	0.416	0.408	0.357	0.423	0.387	7.47
113) 2-methylnaphthale								0.000#	-1.00
114)M Cyclohexane	0.457	0.430	0.444	0.477	0.441	0.393	0.455	0.442	5.94

(#) = Out of Range

MA2955.M Wed Mar 02 10:09:55 2005 MSA

5.8

5

Continuing Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: VA2990-CC2955
Lab FileID: A94434.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\A94434.D
Acq On : 22 Mar 2005 12:18 am
Sample : CC2955-20
Misc : MS12433,VA2990,W,,,,1
MS Integration Params: LSCINT.P

Vial: 29
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	77	-0.03	6.77
			True	Calc.	% Drift			
2	M	ethanol	2000.000	2654.118	-32.7#	99	-0.03	5.48
			AvgRF	CCRF	% Dev			
3	M	tertiary butyl alcohol	0.850	0.905	-6.5	87	-0.02	6.90
4	I	pentafluorobenzene	1.000	1.000	0.0	89	-0.02	9.17
5	M	chlorodifluoromethane	0.667	0.786	-17.8	116	-0.02	3.48
6	M	dichlorodifluoromethane	0.514	0.680	-32.3#	117	-0.02	3.47
7	M	chloromethane	0.651	0.770	-18.3	108	-0.03	3.74
8	M	vinyl chloride	0.659	0.750	-13.8	104	-0.02	3.98
9	M	bromomethane	0.483	0.563	-16.6	107	-0.02	4.60
10	M	chloroethane	0.389	0.411	-5.7	99	-0.01	4.79
11	M	trichlorofluoromethane	0.821	1.080	-31.5#	117	-0.04	5.26
12	M	ethyl ether	0.312	0.312	0.0	88	-0.02	5.67
13	M	acrolein	0.072	0.129	-79.2#	163	-0.02	5.87
14	M	1,1-dichloroethene	0.553	0.537	2.9	90	-0.03	6.08
15	M	acetone	0.201	0.237	-17.9	106	-0.02	6.10
16	M	allyl chloride	0.352	0.340	3.4	89	-0.02	6.61
17	M	acetonitrile	0.065	0.063	3.1	89	-0.03	6.52
18	M	iodomethane	1.140	1.136	0.4	91	-0.03	6.33
19	M	iso-butyl alcohol	0.017	0.017	0.0	85	-0.02	9.45
20	M	carbon disulfide	1.709	1.937	-13.3	105	-0.03	6.47
21	M	methylene chloride	0.628	0.612	2.5	90	-0.03	6.79
22	M	methyl acetate	0.532	0.523	1.7	96	-0.02	6.60
23	M	methyl tert butyl ether	1.856	1.808	2.6	90	-0.03	7.19
24	M	trans-1,2-dichloroethene	0.597	0.568	4.9	90	-0.02	7.21
25	M	di-isopropyl ether	1.376	1.354	1.6	93	-0.03	7.85
26	M	ethyl tert-butyl ether	1.367	1.294	5.3	89	-0.03	8.34
27	M	2-butanone	0.181	0.161	11.0	81	-0.02	8.55
28	M	1,1-dichloroethane	0.702	0.714	-1.7	92	-0.03	7.79
29	M	chloroprene	0.467	0.501	-7.3	104	-0.02	7.93
30	M	acrylonitrile	0.238	0.229	3.8	87	-0.03	7.11
31	M	vinyl acetate	0.073	0.054	26.0#	68	-0.02	7.81
32	M	ethyl acetate	0.058	0.054	6.9	84	-0.02	8.60
33	M	2,2-dichloropropane	0.616	0.552	10.4	83	-0.03	8.59
34	M	cis-1,2-dichloroethene	0.441	0.406	7.9	84	-0.02	8.58
35	M	propionitrile	0.061	0.059	3.3	86	-0.02	8.61
36	M	bromochloromethane	0.228	0.220	3.5	85	-0.03	8.88
37	M	tetrahydrofuran	0.132	0.120	9.1	80	-0.02	8.96

5.8.5

Continuing Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: VA2990-CC2955
Lab FileID: A94434.D

38 M	chloroform	0.714	0.748	-4.8	97	-0.02	8.96
39 S	dibromofluoromethane (s)	0.551	0.451	18.1	78	-0.02	9.17
40 S	1,2-dichloroethane-d4 (s)	0.558	0.537	3.8	89	-0.03	9.61
41 M	freon 113	0.486	0.486	0.0	98	-0.03	6.08
42 M	methacrylonitrile	0.257	0.255	0.8	85	-0.03	8.82
43 M	1,1,1-trichloroethane	0.618	0.669	-8.3	100	-0.02	9.25
44 M	tert-amyl methyl ether	1.298	1.190	8.3	85	-0.03	9.79
45 I	1,4-difluorobenzene	1.000	1.000	0.0	82	-0.03	10.11
46 M	Di-isobutylene	0.597	0.570	4.5	79	-0.02	10.41
47 M	epichlorohydrin	0.033	0.032	3.0	78	-0.02	11.43
48 M	n-butyl alcohol	0.011	0.010#				
49 M	carbon tetrachloride	0.390	0.485	-24.4#	103	-0.03	9.47
50 M	1,1-dichloropropene	0.353	0.396	-12.2	93	-0.02	9.44
51 M	hexane	0.290	0.263	9.3	82	-0.03	7.59
52 M	benzene	1.069	1.086	-1.6	85	-0.03	9.71
53 M	heptane	0.139	0.117	15.8	77	-0.02	9.97
54 M	isopropyl acetate	0.564	0.590	-4.6	89	-0.03	9.67
55 M	1,2-dichloroethane	0.358	0.477	-33.2#	108	-0.02	9.70
56 M	trichloroethene	0.282	0.304	-7.8	89	-0.03	10.47
57 M	2-nitropropane	0.036	0.046	-27.8#	110	-0.02	11.33
58 m	methylcyclohexane	0.419	0.398	5.0	89	-0.03	10.74
59 M	2-chloroethyl vinyl ether	0.180	0.178	1.1	83	-0.03	11.33
60 M	methyl methacrylate	0.211	0.195	7.6	79	-0.02	10.79
61 M	1,2-dichloropropane	0.289	0.302	-4.5	86	-0.03	10.74
62 M	dibromomethane	0.186	0.208	-11.8	91	-0.02	10.89
63 M	1,4-dioxane	0.004	0.003#	25.0#	70	-0.03	10.86
64 M	bromodichloromethane	0.397	0.443	-11.6	92	-0.03	11.04
65 M	cis-1,3-dichloropropene	0.501	0.498	0.6	82	-0.03	11.55
66 S	toluene-d8 (s)	1.345	1.185	11.9	75	-0.02	11.89
67 M	4-methyl-2-pentanone	0.509	0.513	-0.8	85	-0.02	11.69
68 M	toluene	0.714	0.717	-0.4	85	-0.03	11.97
69 M	3-methyl-1-butanol	0.018	0.017	5.6	81	-0.02	11.71
70 M	trans-1,3-dichloropropene	0.468	0.485	-3.6	86	-0.02	12.17
71 M	ethyl methacrylate	0.403	0.374	7.2	78	-0.02	12.22
72 M	1,1,2-trichloroethane	0.233	0.238	-2.1	86	-0.03	12.40
73 M	2-hexanone	0.225	0.217	3.6	80	-0.02	12.63
74 I	chlorobenzene-d5	1.000	1.000	0.0	77	-0.03	13.57
75 M	tetrachloroethene	0.261	0.287	-10.0	86	-0.02	12.63
76 M	1,3-dichloropropane	0.404	0.454	-12.4	86	-0.02	12.60
77 M	butyl acetate	0.186	0.189	-1.6	79	-0.02	12.74
78 M	dibromochloromethane	0.329	0.368	-11.9	86	-0.02	12.89
79 M	1,2-dibromoethane	0.269	0.297	-10.4	84	-0.03	13.05
80 M	chlorobenzene	0.804	0.851	-5.8	83	-0.02	13.60
81 M	1,1,1,2-tetrachloroethane	0.312	0.352	-12.8	88	-0.03	13.67
82 M	ethylbenzene	1.230	1.370	-11.4	87	-0.02	13.69
83 M	m,p-xylene	0.510	0.545	-6.9	83	-0.02	13.82
84 M	o-xylene	0.532	0.559	-5.1	82	-0.02	14.28
85 M	styrene	0.836	0.875	-4.7	81	-0.03	14.29
86 M	bromoform	0.273	0.286	-4.8	80	-0.02	14.54
87 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	74	-0.03	16.21
88 M	isopropylbenzene	1.779	1.950	-9.6	84	-0.02	14.68
89 S	4-bromofluorobenzene (s)	0.734	0.772	-5.2	81	-0.02	14.88
90 M	bromobenzene	0.594	0.689	-16.0	87	-0.02	15.10
91 M	1,1,2,2-tetrachloroethane	0.567	0.613	-8.1	82	-0.03	14.99
92 M	trans-1,4-dichloro-2-bute	0.147	0.138	6.1	67	-0.02	15.05
93 M	1,2,3-trichloropropane	0.150	0.183	-22.0#	88	-0.02	15.07
94 M	n-propylbenzene	2.225	2.509	-12.8	86	-0.02	15.15

5.8

Continuing Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: VA2990-CC2955
Lab FileID: A94434.D

95	M	2-chlorotoluene	1.584	1.842	-16.3	89	-0.02	15.29
96	M	4-chlorotoluene	1.439	1.674	-16.3	89	-0.02	15.41
97	M	1,3,5-trimethylbenzene	1.665	1.892	-13.6	86	-0.02	15.33
98	M	tert-butylbenzene	1.521	1.656	-8.9	83	-0.02	15.72
99	M	pentachloroethane	0.421	0.479	-13.8	85	-0.02	15.78
100	M	1,2,4-trimethylbenzene	1.748	2.020	-15.6	87	-0.02	15.77
101	M	sec-butylbenzene	2.155	2.297	-6.6	82	-0.02	15.97
102	M	1,3-dichlorobenzene	1.163	1.272	-9.4	83	-0.02	16.14
103	M	p-isopropyltoluene	1.886	1.997	-5.9	81	-0.02	16.11
104	M	1,4-dichlorobenzene	1.184	1.287	-8.7	83	-0.02	16.24
105	M	1,2-dichlorobenzene	1.115	1.217	-9.1	82	-0.03	16.67
106	M	n-butylbenzene	1.571	1.595	-1.5	76	-0.02	16.57
107	M	1,2-dibromo-3-chloropropa	0.106	0.113	-6.6	78	-0.02	17.52
108	M	1,2,4-trichlorobenzene	0.755	0.654	13.4	66	-0.03	18.44
109	M	hexachlorobutadiene	0.338	0.373	-10.4	83	-0.02	18.60
110	M	naphthalene	1.605	1.243	22.6#	58	-0.02	18.74
111	M	1,2,3-trichlorobenzene	0.668	0.578	13.5	66	-0.02	19.01
112	M	hexachloroethane	0.387	0.425	-9.8	83	-0.02	16.99
113		2-methylnaphthalene		----------	NA	----------		
114	M	Cyclohexane	0.442	0.541	-22.4#	90	-0.02	9.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A93589.D MA2955.M Tue Mar 22 10:14:18 2005 MSA

5.8

SII-SSA-0014-002870

GC/MS Volatiles

6

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94444.D
Acq On : 22 Mar 2005 5:13 am
Sample : N93379-1
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 9:23 2005

Vial: 39
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.77	65	103014	500.00	ug/L	-0.03
4) pentafluorobenzene	9.17	168	110179	50.00	ug/L	-0.03
45) 1,4-difluorobenzene	10.11	114	146955	50.00	ug/L	-0.03
74) chlorobenzene-d5	13.57	117	151089	50.00	ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.20	152	90934	50.00	ug/L	-0.03
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.16	113	52796	43.45	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 86.90%			
40) 1,2-dichloroethane-d4 (s)	9.60	65	66014	53.73	ug/L	-0.03
Spiked Amount 50.000	Range 68 - 129		Recovery = 107.46%			
66) toluene-d8 (s)	11.89	98	171165	43.31	ug/L	-0.03
Spiked Amount 50.000	Range 83 - 118		Recovery = 86.62%			
89) 4-bromofluorobenzene (s)	14.88	95	75500	56.53	ug/L	-0.03
Spiked Amount 50.000	Range 82 - 120		Recovery = 113.06%			

Qvalue

Target Compounds

(#) = qualifier out of range (m) = manual integration
A94444.D MA2955.M Tue Mar 22 10:24:45 2005 MSA

57 of 12:
ACCUTEST
N93379

ACCUTEST LABORATORIES

6.1.1 9

SII-SSA-0014-002872

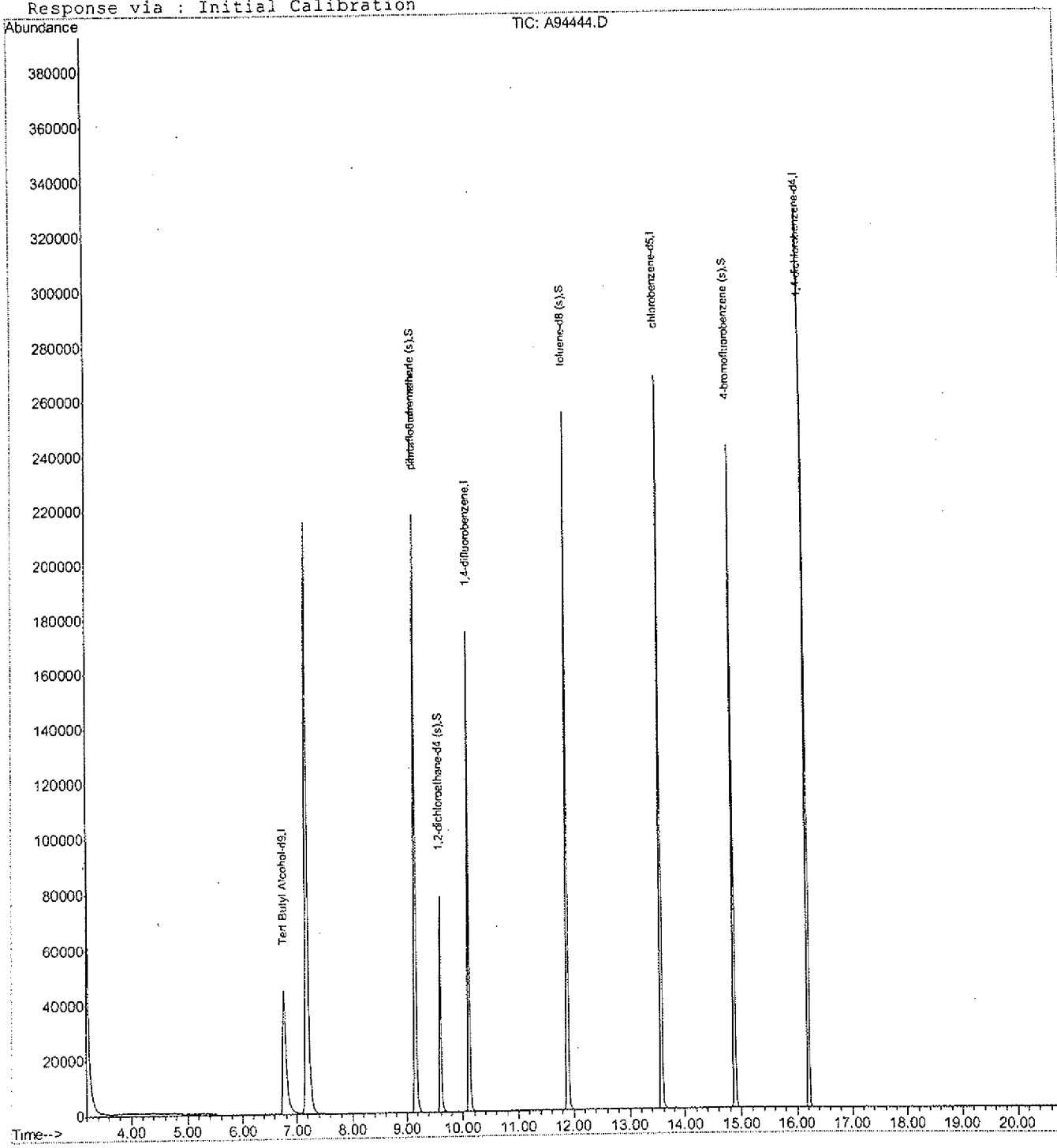
Quantitation Report

Data File : C:\HPCHEM\1\DATA\A94444.D
Acq On : 22 Mar 2005 5:13 am
Sample : N93379-1
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 9:23 2005

Vial: 39
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration



6.1.1 6

ACCUTEST
N93379

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94445.D
Acq On : 22 Mar 2005 5:43 am
Sample : N93379-2
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:58 2005

Vial: 40
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.77	65	98730	500.00 ug/L	-0.03
4) pentafluorobenzene	9.17	168	102885	50.00 ug/L	-0.03
45) 1,4-difluorobenzene	10.11	114	137953	50.00 ug/L	-0.03
74) chlorobenzene-d5	13.56	117	141938	50.00 ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.21	152	89222	50.00 ug/L	-0.03
System Monitoring Compounds					
39) dibromofluoromethane (s)	9.16	113	49831	43.92 ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 87.84%		
40) 1,2-dichloroethane-d4 (s)	9.60	65	62901	54.83 ug/L	-0.03
Spiked Amount 50.000	Range 68 - 129		Recovery = 109.66%		
66) toluene-d8 (s)	11.89	98	160546	43.28 ug/L	-0.03
Spiked Amount 50.000	Range 83 - 118		Recovery = 86.56%		
89) 4-bromofluorobenzene (s)	14.88	95	72601	55.41 ug/L	-0.02
Spiked Amount 50.000	Range 82 - 120		Recovery = 110.82%		
Target Compounds					Qvalue
82) ethylbenzene	13.69	91	2913	0.83 ug/L	95

(#) = qualifier out of range (m) = manual integration
A94445.D MA2955.M Tue Mar 22 10:59:09 2005 MSA

ACCUTEST
N93379

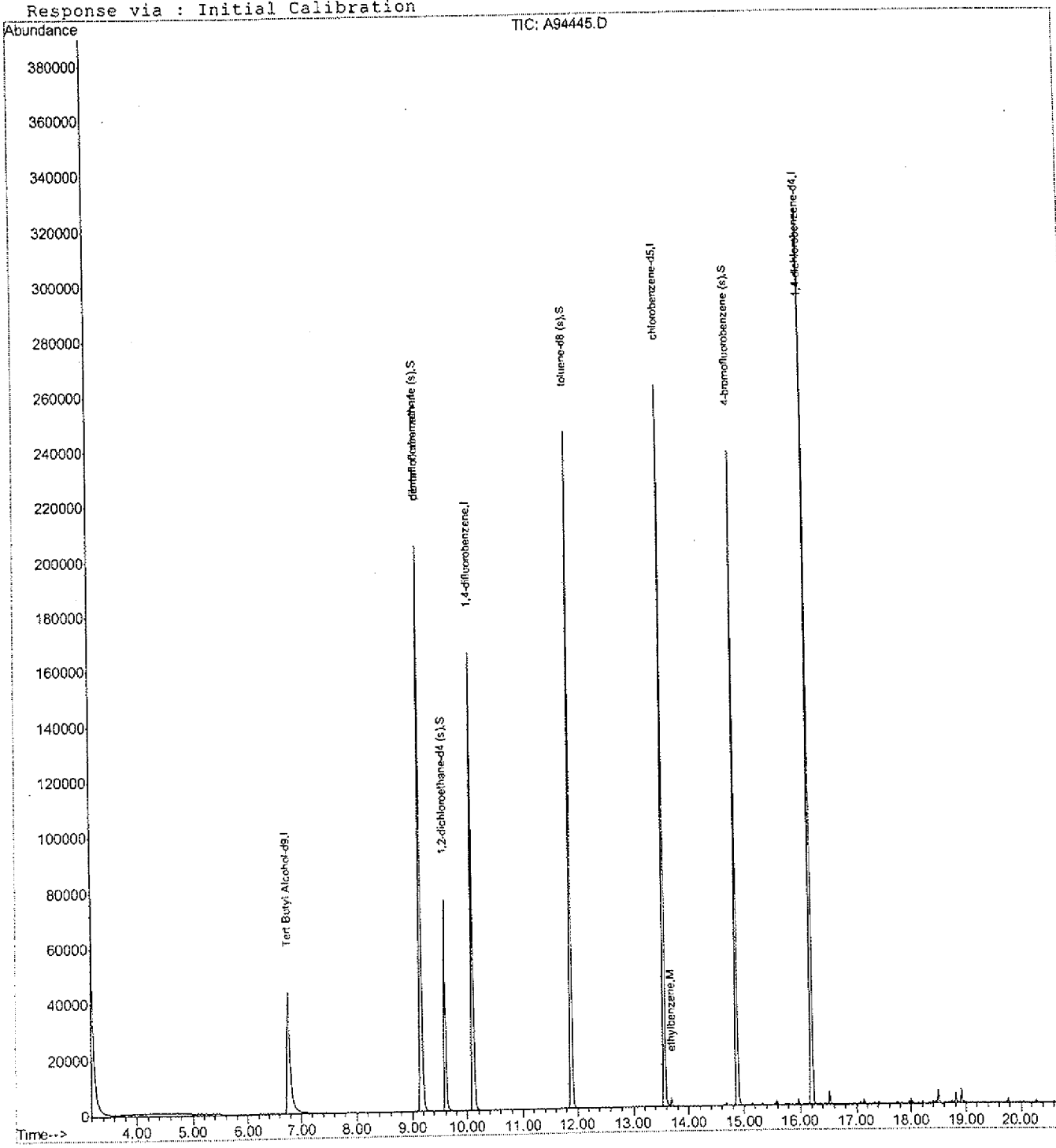
Quantitation Report

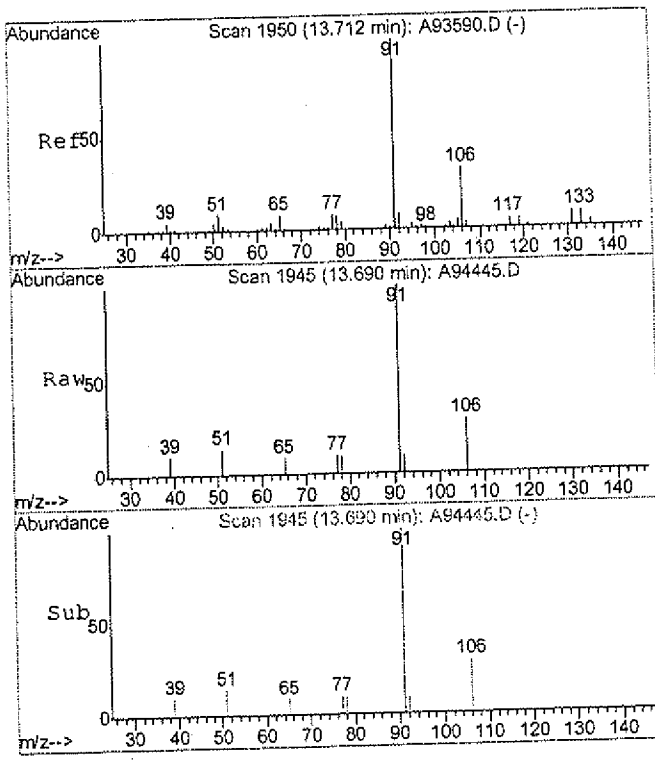
Data File : C:\HPCHEM\1\DATA\A94445.D
Acq On : 22 Mar 2005 5:43 am
Sample : N93379-2
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:58 2005

Vial: 40
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration

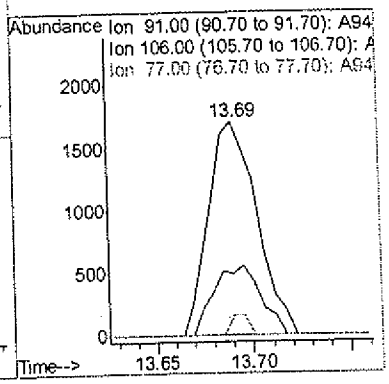




#82
ethylbenzene
Concen: 0.83 ug/L
RT: 13.69 min Scan# 1945
Delta R.T. -0.02 min
Lab File: A94445.D
Acq: 22 Mar 2005 5:43 am

Tgt Ion: 91 Resp: 2913

Ion	Ratio	Lower	Upper
91	100		
106	29.2	2.4	62.4
77	9.6	0.0	38.1



6.1.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94446.D
Acq On : 22 Mar 2005 6:27 am
Sample : N93379-3
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 9:59 2005

Vial: 41
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.77	65	95007	500.00 ug/L	-0.02
4) pentafluorobenzene	9.17	168	103245	50.00 ug/L	-0.03
45) 1,4-difluorobenzene	10.11	114	137633	50.00 ug/L	-0.03
74) chlorobenzene-d5	13.57	117	142913	50.00 ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.20	152	92848	50.00 ug/L	-0.03
System Monitoring Compounds					
39) dibromofluoromethane (s)	9.16	113	49493	43.47 ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 86.94%		
40) 1,2-dichloroethane-d4 (s)	9.60	65	63588	55.23 ug/L	-0.03
Spiked Amount 50.000	Range 68 - 129		Recovery = 110.46%		
66) toluene-d8 (s)	11.89	98	161794	43.72 ug/L	-0.03
Spiked Amount 50.000	Range 83 - 118		Recovery = 87.44%		
89) 4-bromofluorobenzene (s)	14.88	95	73863	54.17 ug/L	-0.03
Spiked Amount 50.000	Range 82 - 120		Recovery = 108.34%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A94446.D MA2955.M Tue Mar 22 10:25:11 2005 MSA

ACCUTEST
N93379

6.1.3

6

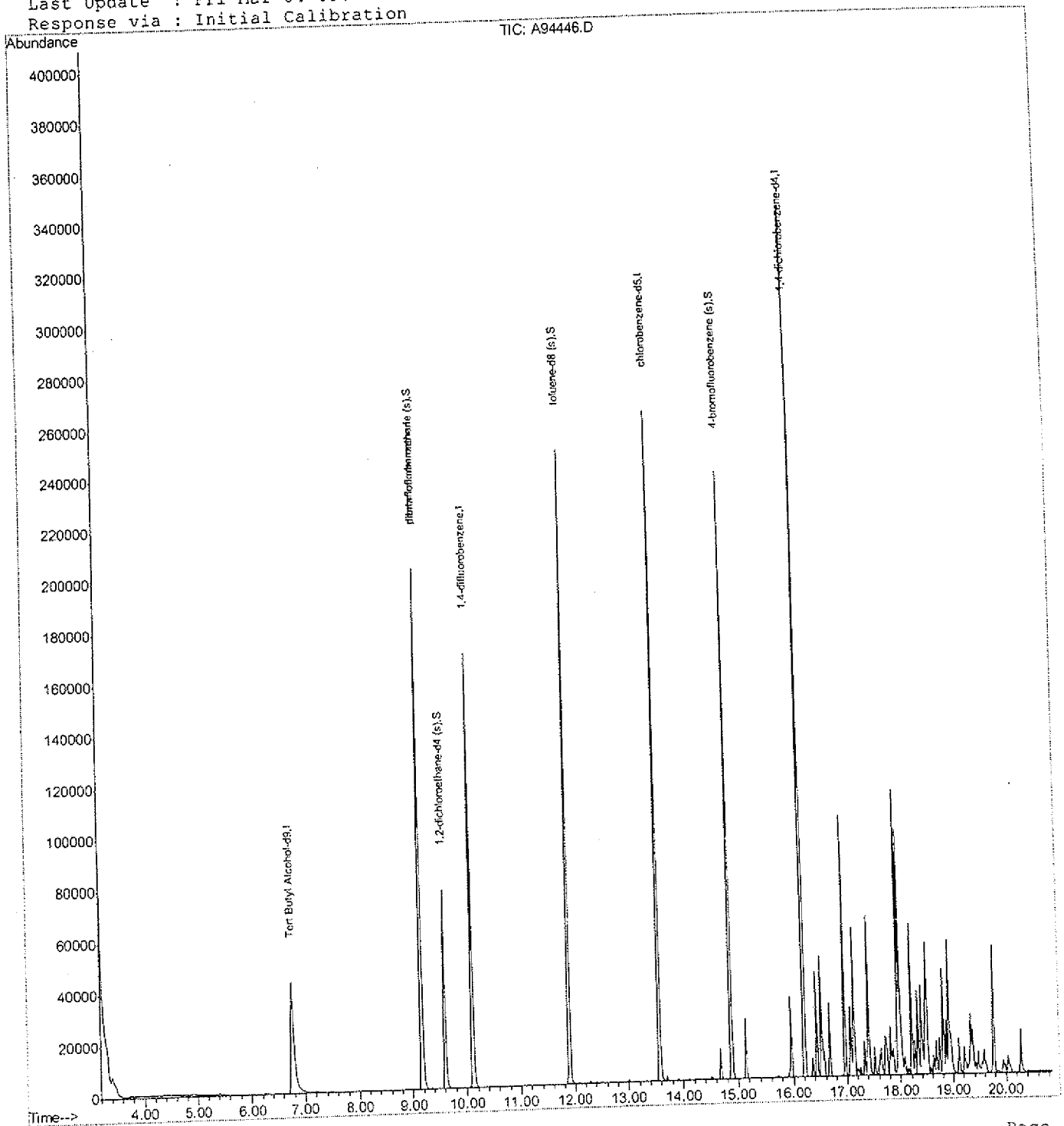
Quantitation Report

Data File : C:\HPCHEM\1\DATA\A94446.D
Acq On : 22 Mar 2005 6:27 am
Sample : N93379-3
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 9:59 2005

Vial: 41
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration



6.1.3

SII-SSA-0014-002878

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94447.D
Acq On : 22 Mar 2005 6:57 am
Sample : N93379-4
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:00 2005

Vial: 42
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.76	65	101322	500.00 ug/L	-0.03
4) pentafluorobenzene	9.17	168	107547	50.00 ug/L	-0.03
45) 1,4-difluorobenzene	10.11	114	144383	50.00 ug/L	-0.03
74) chlorobenzene-d5	13.57	117	148737	50.00 ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.21	152	96926	50.00 ug/L	-0.03
System Monitoring Compounds					
39) dibromofluoromethane (s)	9.16	113	51748	43.63 ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 87.26%		
40) 1,2-dichloroethane-d4 (s)	9.60	65	64310	53.62 ug/L	-0.03
Spiked Amount 50.000	Range 68 - 129		Recovery = 107.24%		
66) toluene-d8 (s)	11.89	98	169137	43.56 ug/L	-0.03
Spiked Amount 50.000	Range 83 - 118		Recovery = 87.12%		
89) 4-bromofluorobenzene (s)	14.88	95	76895	54.02 ug/L	-0.03
Spiked Amount 50.000	Range 82 - 120		Recovery = 108.04%		
Target Compounds					Qvalue

(#) = qualifier out of range (m) = manual integration
A94447.D MA2955.M Tue Mar 22 10:25:24 2005 MSA

ACCUTEST
N93379

Quantitation Report

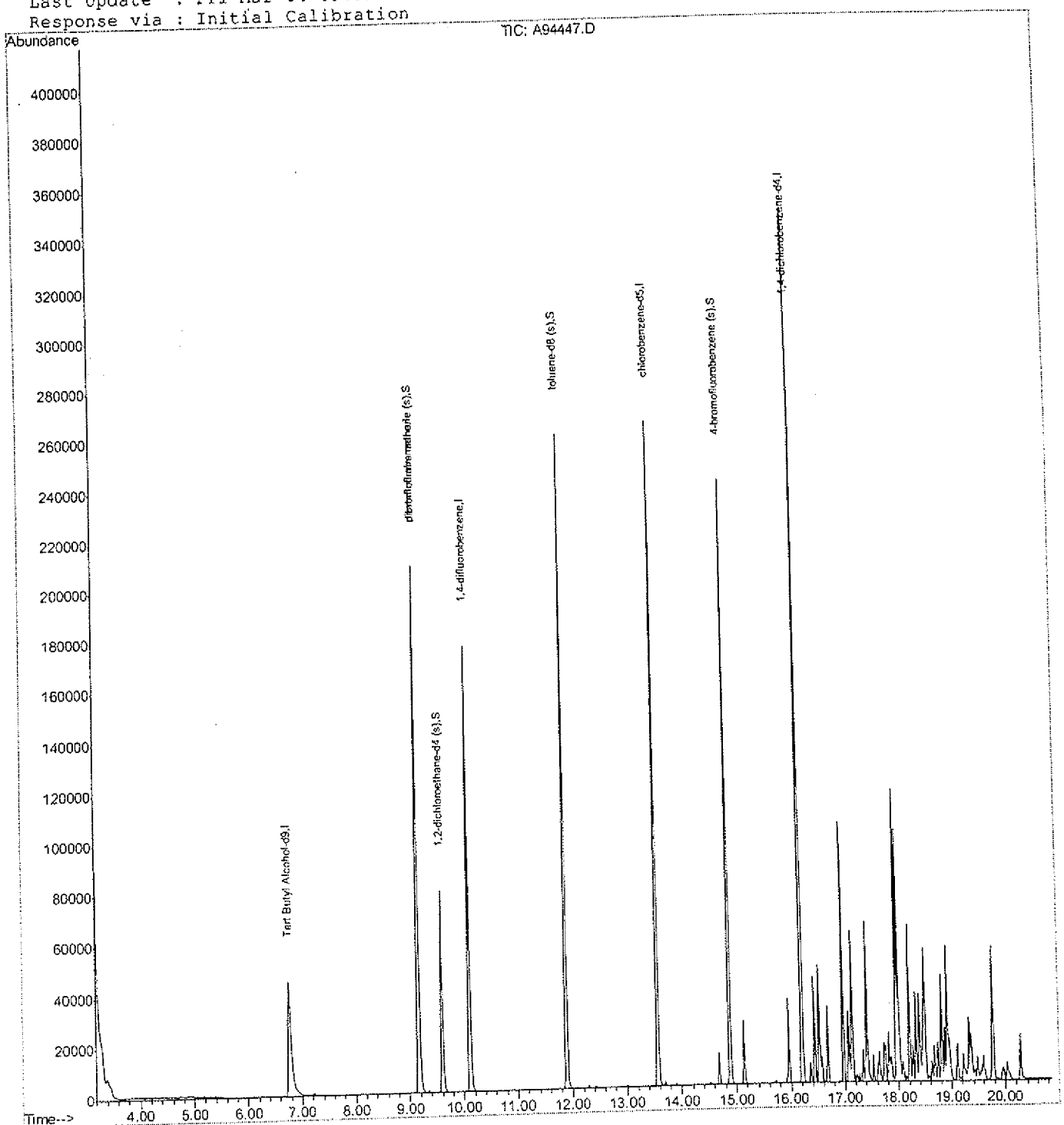
Data File : C:\HPCHEM\1\DATA\A94447.D
Acq On : 22 Mar 2005 6:57 am
Sample : N93379-4
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:00 2005

Vial: 42
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration

6.1.4 6



A94447.D MA2955.M Tue Mar 22 10:25:25 2005 MSA

ACCUTEST.
N93379

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94448.D
Acq On : 22 Mar 2005 7:26 am
Sample : N93379-5
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:00 2005

Vial: 43
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.77	65	104607	500.00	ug/L	-0.03
4) pentafluorobenzene	9.17	168	116729	50.00	ug/L	-0.03
45) 1,4-difluorobenzene	10.11	114	153426	50.00	ug/L	-0.03
74) chlorobenzene-d5	13.57	117	157916	50.00	ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.21	152	94260	50.00	ug/L	-0.03
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.16	113	54687	42.48	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 84.96%			
40) 1,2-dichloroethane-d4 (s)	9.60	65	67421	51.80	ug/L	-0.03
Spiked Amount 50.000	Range 68 - 129		Recovery = 103.60%			
66) toluene-d8 (s)	11.89	98	180377	43.72	ug/L	-0.03
Spiked Amount 50.000	Range 83 - 118		Recovery = 87.44%			
89) 4-bromofluorobenzene (s)	14.88	95	79541	57.46	ug/L	-0.03
Spiked Amount 50.000	Range 82 - 120		Recovery = 114.92%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A94448.D MA2955.M Tue Mar 22 10:25:37 2005 MSA

ACCUTEST. N93379

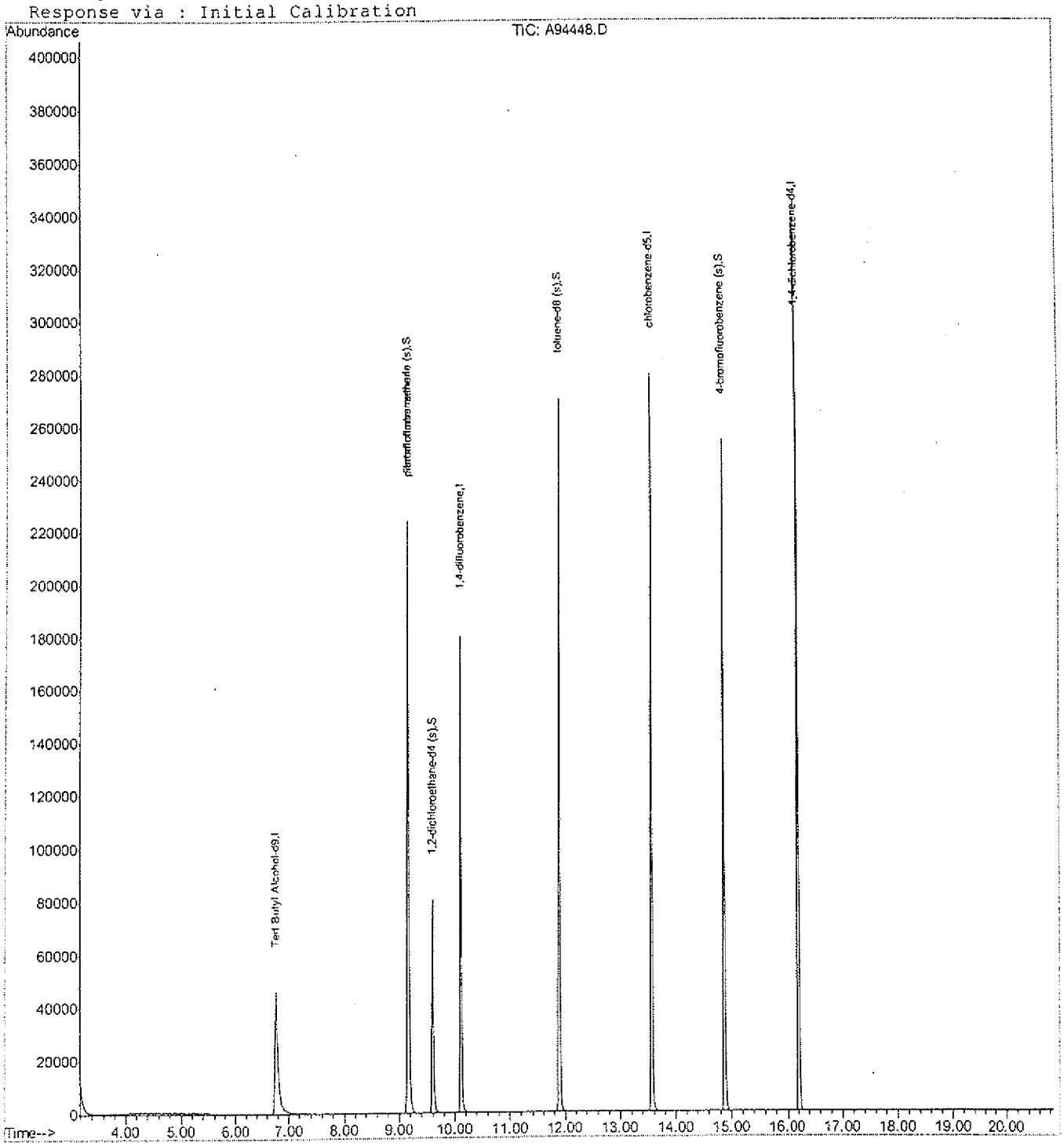
Quantitation Report

Data File : C:\HPCHEM\1\DATA\A94448.D
Acq On : 22 Mar 2005 7:26 am
Sample : N93379-5
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:00 2005

Vial: 43
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration



A94448.D MA2955.M Tue Mar 22 10:25:38 2005 MSA Page 2

6.1.5

ACCUTEST.
N93379

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94449.D Vial: 44
Acq On : 22 Mar 2005 7:56 am Operator: NARESHJ
Sample : N93379-6 Inst : MSA
Misc : MS12445,VA2990,W,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:01 2005 Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.77	65	95564	500.00	ug/L	-0.03
4) pentafluorobenzene	9.17	168	106370	50.00	ug/L	-0.03
45) 1,4-difluorobenzene	10.11	114	141632	50.00	ug/L	-0.03
74) chlorobenzene-d5	13.56	117	146081	50.00	ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.21	152	86401	50.00	ug/L	-0.03
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.16	113	50623	43.15	ug/L	-0.03
Spiked Amount 50.000	Range 79 - 119		Recovery = 86.30%			
40) 1,2-dichloroethane-d4 (s)	9.59	65	63545	53.57	ug/L	-0.04
Spiked Amount 50.000	Range 68 - 129		Recovery = 107.14%			
66) toluene-d8 (s)	11.89	98	166245	43.65	ug/L	-0.03
Spiked Amount 50.000	Range 83 - 118		Recovery = 87.30%			
89) 4-bromofluorobenzene (s)	14.88	95	73973	58.30	ug/L	-0.03
Spiked Amount 50.000	Range 82 - 120		Recovery = 116.60%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A94449.D MA2955.M Tue Mar 22 10:25:51 2005 MSA

ACCUTEST. N93379

SII-SSA-0014-002883

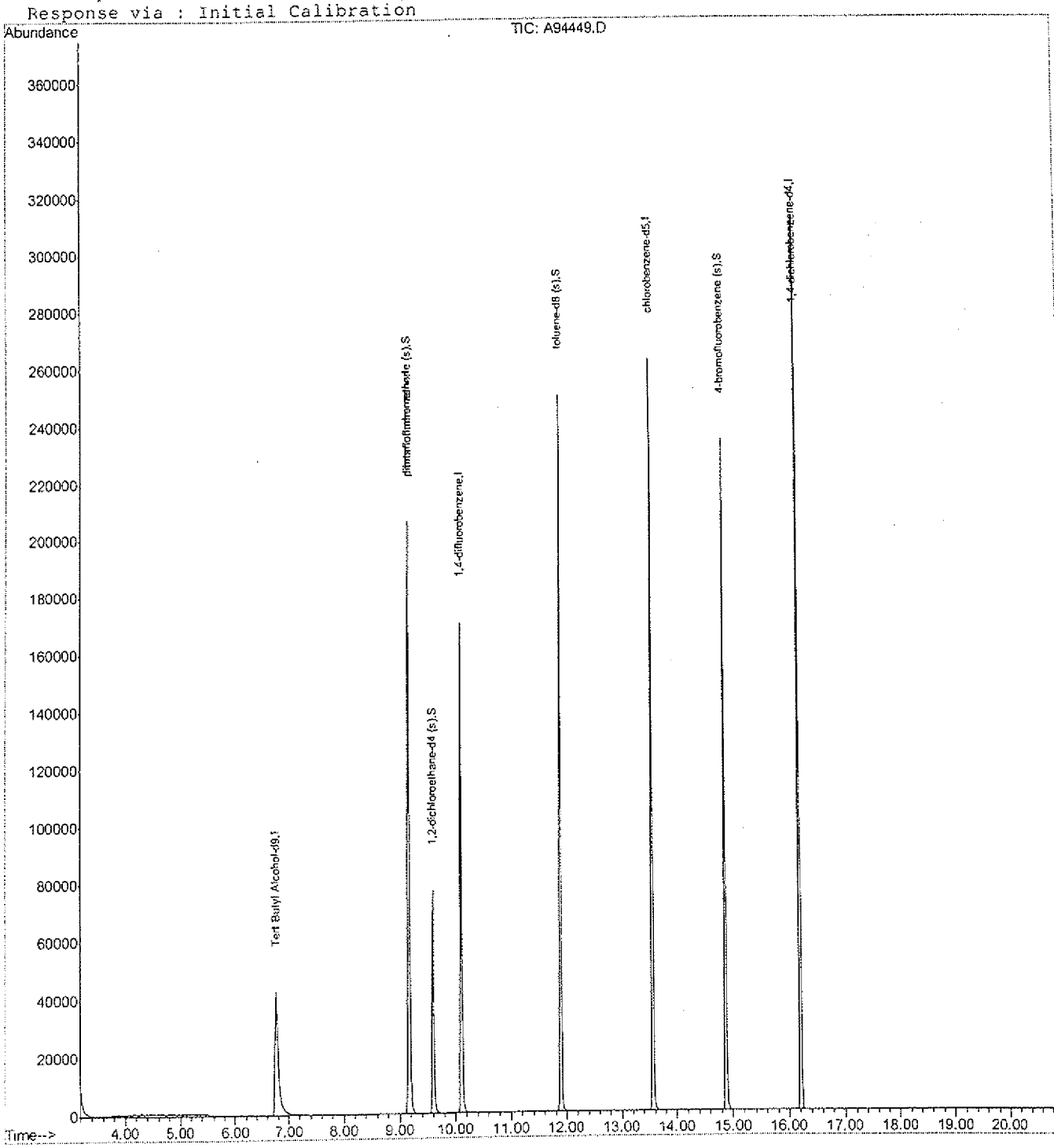
Quantitation Report

Data File : C:\HPCHEM\1\DATA\A94449.D
Acq On : 22 Mar 2005 7:56 am
Sample : N93379-6
Misc : MS12445,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 10:01 2005

Vial: 44
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration



6.1.6

ACCUTEST. N9337S

[redacted]

SII-SSA-0014-002884

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\A94436.D Vial: 31
Acq On : 22 Mar 2005 1:17 am Operator: NARESHJ
Sample : MB1 Inst : MSA
Misc : MS12433,VA2990,W,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Mar 22 8:09 2005 Quant Results File: MA2955.RES

Quant Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration
DataAcq Meth : MA2955

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	6.77	65	105413	500.00	ug/L	-0.03
4) pentafluorobenzene	9.17	168	119136	50.00	ug/L	-0.02
45) 1,4-difluorobenzene	10.11	114	158088	50.00	ug/L	-0.03
74) chlorobenzene-d5	13.56	117	161683	50.00	ug/L	-0.03
87) 1,4-dichlorobenzene-d4	16.21	152	97691	50.00	ug/L	-0.03
System Monitoring Compounds						
39) dibromofluoromethane (s)	9.17	113	55166	41.99	ug/L	-0.02
Spiked Amount 50.000	Range 79 - 119		Recovery = 83.98%			
40) 1,2-dichloroethane-d4 (s)	9.60	65	66697	50.20	ug/L	-0.03
Spiked Amount 50.000	Range 68 - 129		Recovery = 100.40%			
66) toluene-d8 (s)	11.89	98	183126	43.08	ug/L	-0.02
Spiked Amount 50.000	Range 83 - 118		Recovery = 86.16%			
89) 4-bromofluorobenzene (s)	14.88	95	80831	56.34	ug/L	-0.02
Spiked Amount 50.000	Range 82 - 120		Recovery = 112.68%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
A94436.D MA2955.M Tue Mar 22 10:16:07 2005 MSA

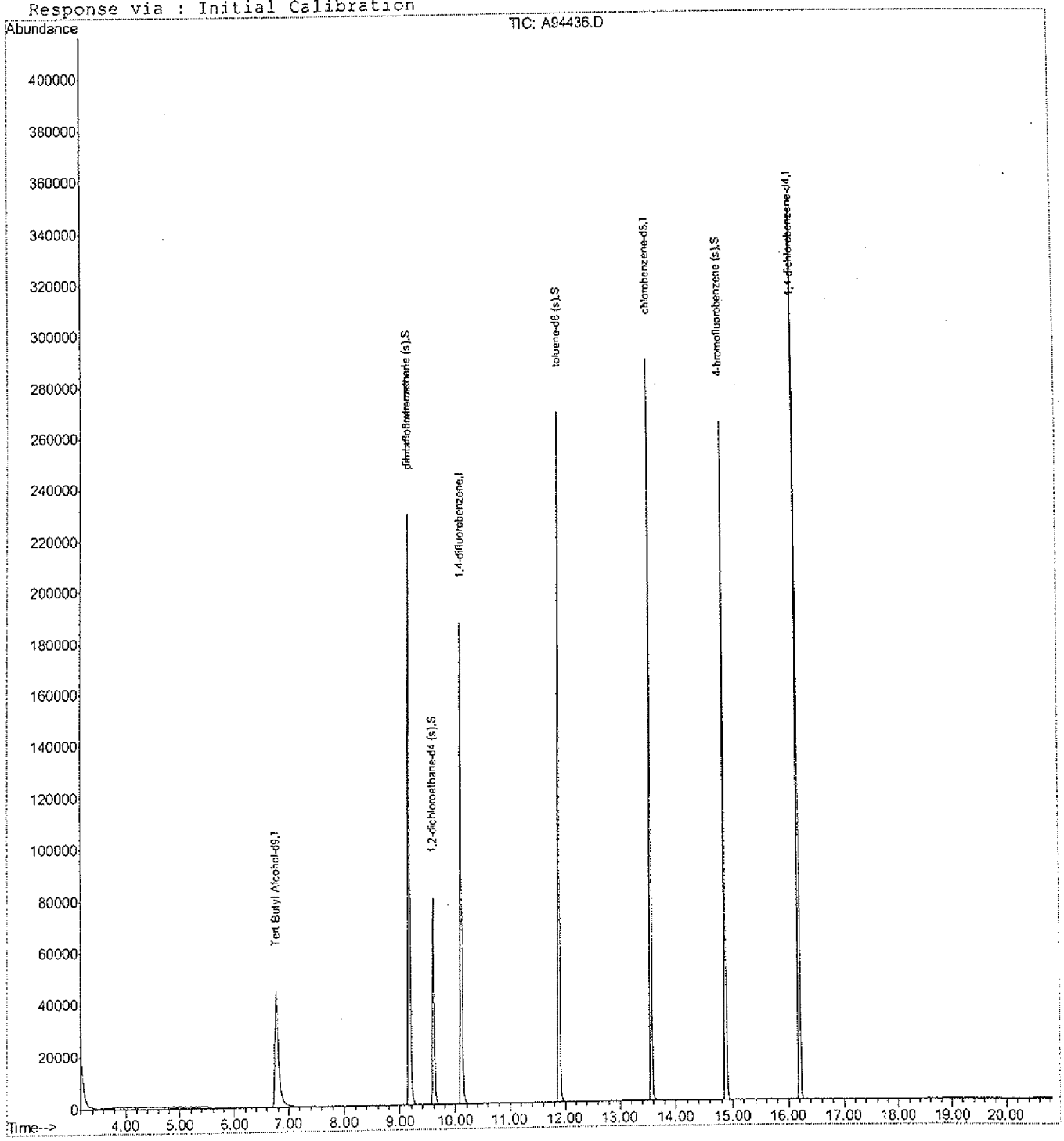
Quantitation Report

Data File : C:\HPCHEM\1\DATA\A94436.D
Acq On : 22 Mar 2005 1:17 am
Sample : MB1
Misc : MS12433,VA2990,W,,,,1
MS Integration Params: LSCINT.P
Quant Time: Mar 22 8:09 2005

Vial: 31
Operator: NARESHJ
Inst : MSA
Multiplr: 1.00

Quant Results File: MA2955.RES

Method : C:\HPCHEM\1\METHODS\MA2955.M (RTE Integrator)
Title : SW-846 Method 8260
Last Update : Fri Mar 04 09:32:21 2005
Response via : Initial Calibration



6.2.1 6

ACCUTEST. N93379

[redacted] VA2990MB1 Method Blank Page 2 of 2

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MB2	H74032.D	1	04/01/05	SSW	03/16/05	OP19692	EH3145

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

7.1

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MB2	H74032.D	1	04/01/05	SSW	03/16/05	OP19692	EH3145

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

7.1

7

CAS No.	Compound	Result	RL	MDL	Units	Q
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	58%	14-81%
4165-62-2	Phenol-d5	43%	10-64%
118-79-6	2,4,6-Tribromophenol	72%	43-126%
4165-60-0	Nitrobenzene-d5	85%	28-125%

SII-SSA-0014-002889

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MB2	H74032.D	1	04/01/05	SSW	03/16/05	OP19692	EH3145

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

7.1

7

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	77%	32-120%
1718-51-0	Terphenyl-d14	86%	42-125%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	5.92	32	ug/l	J
	unknown	17.26	4.1	ug/l	J
	Total TIC, Semi-Volatile		4.1	ug/l	J

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MB1	R43744.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479

The QC reported here applies to the following samples: Method: SW846 8270C

OP19692-MS, OP19692-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	4.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	4.7	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.73	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	1.1	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	20	0.65	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.72	ug/l	
	3&4-Methylphenol	ND	5.0	0.70	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.73	ug/l	
100-02-7	4-Nitrophenol	ND	20	2.3	ug/l	
87-86-5	Pentachlorophenol	ND	20	0.75	ug/l	
108-95-2	Phenol	ND	5.0	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.74	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.80	ug/l	
83-32-9	Acenaphthene	ND	2.0	0.30	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.35	ug/l	
120-12-7	Anthracene	ND	2.0	0.22	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.27	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	0.38	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.37	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	0.50	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.37	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.54	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.54	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.38	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.43	ug/l	
86-74-8	Carbazole	ND	2.0	0.34	ug/l	
218-01-9	Chrysene	ND	2.0	0.26	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.49	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.24	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.32	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.78	ug/l	

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MB1	R43744.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479

The QC reported here applies to the following samples: Method: SW846 8270C

OP19692-MS, OP19692-MSD

7.1

CAS No.	Compound	Result	RL	MDL	Units	Q
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.62	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.39	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	0.58	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.49	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.79	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.63	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	1.4	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.58	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.74	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.63	ug/l	
86-73-7	Fluorene	ND	2.0	0.89	ug/l	
118-74-1	Hexachlorobenzene	ND	2.0	1.2	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.41	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.45	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.67	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.5	ug/l	
78-59-1	Isophorone	ND	2.0	0.54	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.72	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	1.4	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.2	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.61	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.23	ug/l	
129-00-0	Pyrene	ND	2.0	0.58	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.32	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	43%	10-88%
4165-62-2	Phenol-d5	24%	10-71%
118-79-6	2,4,6-Tribromophenol	67%	45-134%
4165-60-0	Nitrobenzene-d5	70%	32-128%

Method Blank Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MB1	R43744.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479

The QC reported here applies to the following samples: Method: SW846 8270C

OP19692-MS, OP19692-MSD

CAS No.	Surrogate Recoveries		Limits
321-60-8	2-Fluorobiphenyl	72%	34-121%
1718-51-0	Terphenyl-d14	88%	41-129%

7.1

SII-SSA-0014-002893

Blank Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-BS2	H74033.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	36.5	73	50-108
59-50-7	4-Chloro-3-methyl phenol	50	40.5	81	55-116
120-83-2	2,4-Dichlorophenol	50	39.2	78	55-115
105-67-9	2,4-Dimethylphenol	50	39.1	78	40-115
51-28-5	2,4-Dinitrophenol	100	70.9	71	33-130
534-52-1	4,6-Dinitro-o-cresol	50	40.7	81	51-125
95-48-7	2-Methylphenol	50	33.0	66	36-101
	3&4-Methylphenol	50	31.9	64	29-96
88-75-5	2-Nitrophenol	50	38.3	77	52-120
100-02-7	4-Nitrophenol	50	28.1	56	1-74
87-86-5	Pentachlorophenol	50	28.6	57	35-124
108-95-2	Phenol	50	19.0	38	4-64
95-95-4	2,4,5-Trichlorophenol	50	39.9	80	57-118
88-06-2	2,4,6-Trichlorophenol	50	42.8	86	59-117
83-32-9	Acenaphthene	50	39.6	79	58-109
208-96-8	Acenaphthylene	50	36.8	74	50-107
120-12-7	Anthracene	50	42.1	84	65-113
56-55-3	Benzo(a)anthracene	50	41.6	83	63-114
50-32-8	Benzo(a)pyrene	50	42.9	86	63-117
205-99-2	Benzo(b)fluoranthene	50	40.7	81	60-121
191-24-2	Benzo(g,h,i)perylene	50	40.9	82	58-125
207-08-9	Benzo(k)fluoranthene	50	49.5	99	60-123
101-55-3	4-Bromophenyl phenyl ether	50	42.8	86	62-117
85-68-7	Butyl benzyl phthalate	50	43.0	86	63-123
91-58-7	2-Chloronaphthalene	50	40.0	80	58-110
106-47-8	4-Chloroaniline	50	32.7	65	38-116
86-74-8	Carbazole	50	44.4	89	68-122
218-01-9	Chrysene	50	44.4	89	65-114
111-91-1	bis(2-Chloroethoxy)methane	50	40.5	81	57-119
111-44-4	bis(2-Chloroethyl)ether	50	38.6	77	53-116
108-60-1	bis(2-Chloroisopropyl)ether	50	39.4	79	56-113
7005-72-3	4-Chlorophenyl phenyl ether	50	41.8	84	61-114
95-50-1	1,2-Dichlorobenzene	50	35.6	71	54-106
541-73-1	1,3-Dichlorobenzene	50	35.5	71	51-104
106-46-7	1,4-Dichlorobenzene	50	35.2	70	52-104
121-14-2	2,4-Dinitrotoluene	50	43.2	86	62-122

SII-SSA-0014-002894

Blank Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-BS2	H74033.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
606-20-2	2,6-Dinitrotoluene	50	43.1	86	63-122
91-94-1	3,3'-Dichlorobenzidine	50	34.7	69	43-129
53-70-3	Dibenzo(a,h)anthracene	50	42.4	85	60-126
132-64-9	Dibenzofuran	50	40.2	80	62-114
84-74-2	Di-n-butyl phthalate	50	42.5	85	67-122
117-84-0	Di-n-octyl phthalate	50	50.6	101	60-139
84-66-2	Diethyl phthalate	50	41.4	83	60-123
131-11-3	Dimethyl phthalate	50	41.5	83	63-116
117-81-7	bis(2-Ethylhexyl)phthalate	50	43.9	88	61-124
206-44-0	Fluoranthene	50	42.2	84	64-117
86-73-7	Fluorene	50	42.3	85	61-114
118-74-1	Hexachlorobenzene	50	42.8	86	62-116
87-68-3	Hexachlorobutadiene	50	37.2	74	50-118
77-47-4	Hexachlorocyclopentadiene	100	53.6	54	24-114
67-72-1	Hexachloroethane	50	35.1	70	50-106
193-39-5	Indeno(1,2,3-cd)pyrene	50	43.1	86	58-124
78-59-1	Isophorone	50	39.6	79	51-111
91-57-6	2-Methylnaphthalene	50	36.1	72	55-108
88-74-4	2-Nitroaniline	50	41.5	83	57-128
99-09-2	3-Nitroaniline	50	34.1	68	48-128
100-01-6	4-Nitroaniline	50	41.3	83	51-131
91-20-3	Naphthalene	50	37.0	74	53-106
98-95-3	Nitrobenzene	50	37.3	75	55-110
621-64-7	N-Nitroso-di-n-propylamine	50	39.3	79	54-123
86-30-6	N-Nitrosodiphenylamine	50	42.7	85	62-119
85-01-8	Phenanthrene	50	41.7	83	63-111
129-00-0	Pyrene	50	43.9	88	61-113
120-82-1	1,2,4-Trichlorobenzene	50	35.6	71	52-105

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	46%	14-81%
4165-62-2	Phenol-d5	36%	10-64%
118-79-6	2,4,6-Tribromophenol	83%	43-126%
4165-60-0	Nitrobenzene-d5	71%	28-125%

Blank Spike Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-BS2	H74033.D	1	04/02/05	SSW	03/16/05	OP19692	EH3145

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	74%	32-120%
1718-51-0	Terphenyl-d14	85%	42-125%

7.2

SII-SSA-0014-002896

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MS	R43747.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479
OP19692-MSD	R43748.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479
N93090-14	R43746.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

7.3

7

CAS No.	Compound	N93090-14 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		50	39.8	80	38.6	77	3	30-117/28
59-50-7	4-Chloro-3-methyl phenol	ND		50	49.2	98	47.6	95	3	36-129/25
120-83-2	2,4-Dichlorophenol	ND		50	49.4	99	47.7	95	4	37-124/27
105-67-9	2,4-Dimethylphenol	ND		50	41.1	82	40.5	81	1	28-121/28
51-28-5	2,4-Dinitrophenol	ND		100	90.7	91	84.2	84	7	8-144/32
534-52-1	4,6-Dinitro-o-cresol	ND		50	48.2	96	46.3	93	4	24-142/29
95-48-7	2-Methylphenol	ND		50	32.6	65	31.5	63	3	30-114/28
	3&4-Methylphenol	ND		50	30.0	60	28.7	57	4	21-122/28
88-75-5	2-Nitrophenol	ND		50	51.3	103	49.3	99	4	34-123/27
100-02-7	4-Nitrophenol	ND		50	25.7	51	22.9	46	12	1-129/33
87-86-5	Pentachlorophenol	ND		50	52.0	104	49.4	99	5	36-143/24
108-95-2	Phenol	ND		50	13.6	27	12.5	25	8	1-102/32
95-95-4	2,4,5-Trichlorophenol	ND		50	52.3	105	49.7	99	5	41-131/24
88-06-2	2,4,6-Trichlorophenol	ND		50	52.1	104	50.3	101	4	43-121/25
83-32-9	Acenaphthene	ND		50	40.8	82	40.0	80	2	40-114/30
208-96-8	Acenaphthylene	ND		50	39.3	79	38.4	77	2	36-106/31
120-12-7	Anthracene	ND		50	42.9	86	42.5	85	1	54-119/23
56-55-3	Benzo(a)anthracene	ND		50	45.5	91	44.1	88	3	57-122/22
50-32-8	Benzo(a)pyrene	ND		50	45.3	91	43.3	87	5	53-126/23
205-99-2	Benzo(b)fluoranthene	ND		50	54.3	109	52.2	104	4	50-135/26
191-24-2	Benzo(g,h,i)perylene	ND		50	27.3	55	28.0	56	3	35-141/29
207-08-9	Benzo(k)fluoranthene	ND		50	48.4	97	46.7	93	4	37-144/24
101-55-3	4-Bromophenyl phenyl ether	ND		50	51.0	102	49.7	99	3	49-121/25
85-68-7	Butyl benzyl phthalate	ND		50	50.0	100	47.9	96	4	56-132/23
91-58-7	2-Chloronaphthalene	ND		50	45.7	91	45.0	90	2	34-115/30
106-47-8	4-Chloroaniline	ND		50	26.2	52	27.8	56	6	10-108/37
86-74-8	Carbazole	ND		50	47.3	95	47.1	94	0	49-146/22
218-01-9	Chrysene	ND		50	45.8	92	44.0	88	4	55-125/23
111-91-1	bis(2-Chloroethoxy)methane	ND		50	45.0	90	43.6	87	3	37-119/32
111-44-4	bis(2-Chloroethyl)ether	ND		50	41.1	82	40.1	80	2	32-122/37
108-60-1	bis(2-Chloroisopropyl)ether	ND		50	46.0	92	45.5	91	1	34-112/32
7005-72-3	4-Chlorophenyl phenyl ether	ND		50	50.7	101	48.9	98	4	43-118/27
95-50-1	1,2-Dichlorobenzene	ND		50	41.5	83	41.3	83	0	31-110/31
541-73-1	1,3-Dichlorobenzene	ND		50	40.9	82	40.8	82	0	27-107/32
106-46-7	1,4-Dichlorobenzene	ND		50	40.1	80	39.1	78	3	29-108/31
121-14-2	2,4-Dinitrotoluene	ND		50	53.7	107	52.3	105	3	50-125/31

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MS	R43747.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479
OP19692-MSD	R43748.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479
N93090-14	R43746.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

7.3

CAS No.	Compound	N93090-14 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
606-20-2	2,6-Dinitrotoluene	ND		50	55.1	110	53.1	106	4	45-124/28
91-94-1	3,3'-Dichlorobenzidine	ND		50	ND	0* [a]	ND	0* [a]	nc	1-145/37
53-70-3	Dibenzo(a,h)anthracene	ND		50	32.3	65	32.9	66	2	40-138/27
132-64-9	Dibenzofuran	ND		50	45.0	90	43.8	88	3	42-119/28
84-74-2	Di-n-butyl phthalate	ND		50	47.1	94	46.1	92	2	54-131/22
117-84-0	Di-n-octyl phthalate	ND		50	68.0	136	63.4	127	7	49-151/25
84-66-2	Diethyl phthalate	ND		50	45.9	92	44.6	89	3	49-123/24
131-11-3	Dimethyl phthalate	ND		50	48.0	96	46.8	94	3	39-124/27
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50	50.1	100	48.0	96	4	51-140/29
206-44-0	Fluoranthene	ND		50	47.0	94	46.9	94	0	52-129/22
86-73-7	Fluorene	ND		50	45.4	91	45.3	91	0	43-116/26
118-74-1	Hexachlorobenzene	ND		50	52.1	104	50.9	102	2	49-121/24
87-68-3	Hexachlorobutadiene	ND		50	45.2	90	44.5	89	2	30-126/33
77-47-4	Hexachlorocyclopentadiene	ND		100	61.8	62	58.1	58	6	1-109/41
67-72-1	Hexachloroethane	ND		50	43.2	86	43.1	86	0	22-113/34
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50	31.0	62	32.1	64	3	40-139/28
78-59-1	Isophorone	ND		50	40.5	81	40.6	81	0	34-116/37
91-57-6	2-Methylnaphthalene	ND		50	42.3	85	41.4	83	2	28-123/32
88-74-4	2-Nitroaniline	ND		50	41.3	83	40.1	80	3	30-135/33
99-09-2	3-Nitroaniline	ND		50	27.7	55	26.9	54	3	15-134/35
100-01-6	4-Nitroaniline	ND		50	46.2	92	45.6	91	1	18-153/32
91-20-3	Naphthalene	ND		50	41.2	82	40.8	82	1	22-120/30
98-95-3	Nitrobenzene	ND		50	45.3	91	44.4	89	2	31-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		50	41.0	82	39.9	80	3	32-125/33
86-30-6	N-Nitrosodiphenylamine	ND		50	42.6	85	41.7	83	2	49-131/24
85-01-8	Phenanthrene	ND		50	43.4	87	42.7	85	2	51-117/23
129-00-0	Pyrene	ND		50	45.5	91	44.2	88	3	54-122/22
120-82-1	1,2,4-Trichlorobenzene	ND		50	43.8	88	42.7	85	3	27-115/31

CAS No.	Surrogate Recoveries	MS	MSD	N93090-14	Limits
367-12-4	2-Fluorophenol	38%	35%	31%	10-88%
4165-62-2	Phenol-d5	22%	26%	16%	10-71%
118-79-6	2,4,6-Tribromophenol	99%	95%	87%	45-134%
4165-60-0	Nitrobenzene-d5	72%	71%	80%	32-128%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP19692-MS	R43747.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479
OP19692-MSD	R43748.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479
N93090-14	R43746.D	1	03/18/05	WHS	03/14/05	OP19692	ER1479

The QC reported here applies to the following samples: Method: SW846 8270C

N93379-1, N93379-2, N93379-3, N93379-4, N93379-5

CAS No.	Surrogate Recoveries	MS	MSD	N93090-14	Limits
321-60-8	2-Fluorobiphenyl	81%	79%	80%	34-121%
1718-51-0	Terphenyl-d14	94%	88%	95%	41-129%

(a) Outside of in house control limits.

SII-SSA-0014-002899

Instrument Performance Check (DFTPP)

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample:	EH3145-DFTPP	Injection Date:	04/01/05
Lab File ID:	H74023.D	Injection Time:	18:02
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4103	42.3		Pass
68	Less than 2.0% of mass 69	52	0.54	(0.88) [a]	Pass
69	Mass 69 relative abundance	5933	61.2		Pass
70	Less than 2.0% of mass 69	0	0.0	(0.0) [a]	Pass
127	40.0 - 60.0% of mass 198	5552	57.2		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	9701	100.0		Pass
199	5.0 - 9.0% of mass 198	726	7.5		Pass
275	10.0 - 30.0% of mass 198	2259	23.3		Pass
365	1.0 - 100.0% of mass 198	237	2.4		Pass
441	Present, but less than mass 443	1027	10.6	(74.0) [b]	Pass
442	40.0 - 100.0% of mass 198	7484	77.1		Pass
443	17.0 - 23.0% of mass 442	1387	14.3	(18.5) [c]	Pass

7.4 2

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EH3145-ICC3145	H74024.D	04/01/05	19:04	01:02	Initial cal 25
EH3145-IC3145	H74025.D	04/01/05	19:35	01:33	Initial cal 50
EH3145-IC3145	H74026.D	04/01/05	20:06	02:04	Initial cal 80
EH3145-IC3145	H74027.D	04/01/05	20:51	02:49	Initial cal 100
EH3145-IC3145	H74028.D	04/01/05	21:21	03:19	Initial cal 10
EH3145-IC3145	H74029.D	04/01/05	22:06	04:04	Initial cal 5
EH3145-IC3145	H74030.D	04/01/05	22:36	04:34	Initial cal 2
OP19692-MB2	H74032.D	04/01/05	23:54	05:52	Method Blank
OP19692-BS2	H74033.D	04/02/05	00:39	06:37	Blank Spike
ZZZZZZ	H74034.D	04/02/05	01:23	07:21	(unrelated sample)
ZZZZZZ	H74035.D	04/02/05	01:52	07:50	(unrelated sample)
ZZZZZZ	H74036.D	04/02/05	02:28	08:26	(unrelated sample)
N93379-1	H74037.D	04/02/05	03:12	09:10	WELL AY
N93379-2	H74038.D	04/02/05	03:46	09:44	WELL X
N93379-3	H74039.D	04/02/05	04:31	10:29	WELL AV
N93379-4	H74040.D	04/02/05	05:01	10:59	WELL AVD
N93379-5	H74041.D	04/02/05	05:45	11:43	FB-031505

Instrument Performance Check (DFTPP)

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample:	ER1468-DFTPP	Injection Date:	03/03/05
Lab File ID:	R43545.D	Injection Time:	16:50
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	32145	44.3		Pass
68	Less than 2.0% of mass 69	382	0.53	(1.1) [a]	Pass
69	Mass 69 relative abundance	35172	48.5		Pass
70	Less than 2.0% of mass 69	58	0.08	(0.16) [a]	Pass
127	40.0 - 60.0% of mass 198	39640	54.6		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	72552	100.0		Pass
199	5.0 - 9.0% of mass 198	5075	7.0		Pass
275	10.0 - 30.0% of mass 198	17659	24.3		Pass
365	1.0 - 100.0% of mass 198	2540	3.5		Pass
441	Present, but less than mass 443	7677	10.6	(80.7) [b]	Pass
442	40.0 - 100.0% of mass 198	50147	69.1		Pass
443	17.0 - 23.0% of mass 442	9514	13.1	(19.0) [c]	Pass

7.4

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER1468-ICC1468	R43546.D	03/03/05	17:00	00:10	Initial cal 50
ER1468-IC1468	R43547.D	03/03/05	17:48	00:58	Initial cal 100
ER1468-IC1468	R43548.D	03/03/05	18:32	01:42	Initial cal 80
ER1468-IC1468	R43549.D	03/03/05	19:15	02:25	Initial cal 25
ER1468-IC1468	R43550.D	03/03/05	19:59	03:09	Initial cal 10
ER1468-IC1468	R43551.D	03/03/05	20:43	03:53	Initial cal 5
ER1468-IC1468	R43552.D	03/03/05	21:26	04:36	Initial cal 2

Instrument Performance Check (DFTPP)

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample:	ER1479-DFTPP	Injection Date:	03/18/05
Lab File ID:	R43740.D	Injection Time:	10:30
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	42965	34.2		Pass
68	Less than 2.0% of mass 69	261	0.21	(0.54) [a]	Pass
69	Mass 69 relative abundance	48635	38.7		Pass
70	Less than 2.0% of mass 69	211	0.17	(0.43) [a]	Pass
127	40.0 - 60.0% of mass 198	61345	48.8		Pass
197	Less than 1.0% of mass 198	0	0.0		Pass
198	Base peak, 100% relative abundance	125768	100.0		Pass
199	5.0 - 9.0% of mass 198	8364	6.7		Pass
275	10.0 - 30.0% of mass 198	34584	27.5		Pass
365	1.0 - 100.0% of mass 198	4956	3.9		Pass
441	Present, but less than mass 443	16859	13.4	(74.9) [b]	Pass
442	40.0 - 100.0% of mass 198	114779	91.3		Pass
443	17.0 - 23.0% of mass 442	22499	17.9	(19.6) [c]	Pass

7.4

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER1479-CC1468	R43741.D	03/18/05	10:45	00:15	Continuing cal 25
OP19709-LS2	R43742.D	03/18/05	11:21	00:51	Leachate Spike
ZZZZZZ	R43743.D	03/18/05	12:07	01:37	(unrelated sample)
OP19692-MB1	R43744.D	03/18/05	12:53	02:23	Method Blank
OP19692-BS1	R43745.D	03/18/05	13:36	03:06	Blank Spike
N93090-14	R43746.D	03/18/05	14:19	03:49	(used for QC only; not part of job N93379)
OP19692-MS	R43747.D	03/18/05	15:03	04:33	Matrix Spike
OP19692-MSD	R43748.D	03/18/05	15:47	05:17	Matrix Spike Duplicate
ZZZZZZ	R43749.D	03/18/05	16:29	05:59	(unrelated sample)
ZZZZZZ	R43750.D	03/18/05	17:13	06:43	(unrelated sample)
ZZZZZZ	R43751.D	03/18/05	17:56	07:26	(unrelated sample)
ZZZZZZ	R43752.D	03/18/05	18:40	08:10	(unrelated sample)
ZZZZZZ	R43753.D	03/18/05	19:23	08:53	(unrelated sample)
ZZZZZZ	R43754.D	03/18/05	20:06	09:36	(unrelated sample)
ZZZZZZ	R43755.D	03/18/05	20:50	10:20	(unrelated sample)
ZZZZZZ	R43756.D	03/18/05	21:33	11:03	(unrelated sample)

SII-SSA-0014-002902

Semivolatile Internal Standard Area Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Check Std:	EH3145-ICC3145	Injection Date:	04/01/05
Lab File ID:	H74024.D	Injection Time:	19:04
Instrument ID:	GCMSH	Method:	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	153158	8.63	636381	10.66	276929	14.10	409247	17.47	335074	22.51	315770	24.90
Upper Limit [a]	306316	9.13	1272762	11.16	553858	14.60	818494	17.97	670148	23.01	631540	25.40
Lower Limit [b]	76579	8.13	318191	10.16	138465	13.60	204624	16.97	167537	22.01	157885	24.40

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP19692-MB2	157294	8.63	608911	10.66	294346	14.10	442111	17.47	330113	22.52	291971	24.91
OP19692-BS2	161578	8.64	703386	10.67	292342	14.11	413336	17.49	302017	22.52	262436	24.91
ZZZZZZ	132716	8.64	520478	10.67	248554	14.11	353134	17.48	261497	22.52	234528	24.91
ZZZZZZ	181943	8.64	713707	10.68	357643	14.13	449966	17.50	300475	22.52	286321	24.93
ZZZZZZ	187046	8.64	736247	10.67	350343	14.11	500411	17.49	356482	22.52	309192	24.92
N93379-1	162438	8.64	631491	10.67	301014	14.12	424267	17.49	323807	22.52	303459	24.92
N93379-2	151724	8.64	578453	10.68	271059	14.13	384031	17.49	304464	22.52	305873	24.93
N93379-3	166034	8.65	627729	10.68	295517	14.13	410401	17.50	312340	22.52	306595	24.93
N93379-4	159765	8.65	611615	10.68	285582	14.13	397200	17.50	304682	22.53	295846	24.93
N93379-5	157954	8.65	620822	10.68	295023	14.12	425212	17.50	320843	22.53	300804	24.93

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

7.5

Semivolatile Internal Standard Area Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Check Std:	ER1479-CC1468	Injection Date:	03/18/05
Lab File ID:	R43741.D	Injection Time:	10:45
Instrument ID:	GCMSR	Method:	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	352195	7.80	1274165	11.96	653525	18.24	1013796	22.23	811227	28.67	689790	31.83
Upper Limit [a]	704390	8.30	2548330	12.46	1307050	18.74	2027592	22.73	1622454	29.17	1379580	32.33
Lower Limit [b]	176098	7.30	637083	11.46	326763	17.74	506898	21.73	405614	28.17	344895	31.33
Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP19709-LS2	332974	7.81	1227618	11.95	655631	18.23	1098964	22.24	850404	28.68	671296	31.83
ZZZZZZ	346220	7.80	1267163	11.95	631027	18.24	989766	22.24	792767	28.67	657628	31.83
OP19692-MB1	367504	7.81	1274885	11.95	680764	18.24	1107702	22.24	888996	28.68	694727	31.83
OP19692-BS1	353877	7.81	1346002	11.95	715568	18.23	1153467	22.24	985923	28.67	837675	31.83
N93090-14	299940	7.82	1020291	11.96	572424	18.23	1003530	22.23	892918	28.67	676803	31.82
OP19692-MS	394331	7.81	1501241	11.96	824139	18.24	1341781	22.24	1133754	28.67	757628	31.82
OP19692-MSD	335399	7.81	1279709	11.96	702791	18.24	1137541	22.24	995673	28.67	698726	31.82
ZZZZZZ	361145	7.81	1256143	11.95	695124	18.24	1155644	22.23	1010936	28.67	823956	31.82
ZZZZZZ	326038	7.81	1262732	11.95	730390	18.24	1247066	22.24	1078502	28.67	764920	31.82
ZZZZZZ	347617	7.81	1285817	11.95	731717	18.24	1241462	22.23	1027959	28.67	700013	31.83
ZZZZZZ	314792	7.81	1085439	11.96	589102	18.23	977125	22.24	804080	28.68	583952	31.83
ZZZZZZ	382064	7.83	1425453	11.96	711118	18.23	1146483	22.23	933393	28.67	673506	31.82
ZZZZZZ	378553	7.81	1329413	11.95	706117	18.23	1146848	22.23	944187	28.67	721182	31.82
ZZZZZZ	414688	7.81	1512042	11.95	794951	18.24	1289419	22.23	1039205	28.67	786817	31.82
ZZZZZZ	333353	7.81	1157767	11.95	633028	18.24	1068194	22.23	933424	28.67	739134	31.82

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

7.5

Semivolatile Surrogate Recovery Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Method: SW846 8270C Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
N93379-1	H74037.D	45.0	27.0	80.0	90.0	82.0	89.0
N93379-2	H74038.D	36.0	23.0	78.0	71.0	67.0	83.0
N93379-3	H74039.D	45.0	28.0	95.0	93.0	82.0	90.0
N93379-4	H74040.D	47.0	29.0	96.0	97.0	84.0	89.0
N93379-5	H74041.D	44.0	28.0	80.0	92.0	83.0	92.0
OP19692-BS2	H74033.D	46.0	36.0	83.0	71.0	74.0	85.0
OP19692-MB2	H74032.D	58.0	43.0	72.0	85.0	77.0	86.0
OP19692-MS	R43747.D	38.0	22.0	99.0	72.0	81.0	94.0
OP19692-MSD	R43748.D	35.0	26.0	95.0	71.0	79.0	88.0
OP19692-MB1	R43744.D	43.0	24.0	67.0	70.0	72.0	88.0

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	14-81%
S2 = Phenol-d5	10-64%
S3 = 2,4,6-Tribromophenol	43-126%
S4 = Nitrobenzene-d5	28-125%
S5 = 2-Fluorobiphenyl	32-120%
S6 = Terphenyl-d14	42-125%

7.6

SII-SSA-0014-002905

Initial Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: EH3145-ICC3145
Lab FileID: H74024.D

Response Factor Report MSH

Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration

Calibration Files
100 =H74027.D 2 =H74030.D 5 =H74029.D 10 =H74028.D
25 =H74024.D 50 =H74025.D 80 =H74026.D

Compound	100	2	5	10	25	50	80	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD								
2)t 1,4-Dioxane	0.539	0.941	0.797	0.715	0.642	0.625	0.615	0.696	19.44
----- Linear regression ----- Coefficient = 0.9912									
Response Ratio = 0.04514 + 0.55440 *A									
3)t Pyridine	1.460	1.356	1.548	1.744	1.289	1.492	1.593	1.497	10.11
4)t N-Nitrosodimethyl	0.521	0.602	0.560	0.646	0.583	0.575	0.560	0.578	6.76
5)S 2-Fluorophenol	1.464	1.336	1.431	1.645	1.676	1.709	1.735	1.571	10.03
6)t Indene	2.257	2.258	2.368	2.717	2.505	2.500	2.465	2.439	6.63
7)t Cumene	2.468	2.643	2.716	3.089	2.902	2.838	2.722	2.768	7.17
8)S Phenol-d5	1.981	1.781	1.948	2.255	2.280	2.295	2.320	2.123	10.15
9)t Phenol	2.130	1.862	2.002	2.304	2.036	2.241	2.265	2.120	7.63
10)t Aniline	1.762	1.895	1.945	0.858	1.767	1.848	1.851	1.704	22.21
----- Linear regression ----- Coefficient = 0.9962									
Response Ratio = -0.04649 + 1.82345 *A									
11)t bis(2-Chloroethyl	1.641	1.604	1.742	2.426	1.788	1.720	1.613	1.791	16.12
----- Linear regression ----- Coefficient = 0.9976									
Response Ratio = 0.08515 + 1.60374 *A									
12) Benzaldehyde	0.095	0.636	0.967	0.913	0.483	0.399	0.182	0.525	64.00
13)t 2-Chlorophenol	1.445	1.410	1.452	1.686	1.532	1.511	1.553	1.513	6.08
14)t Decane	1.316	1.691	1.499	1.648	1.538	1.450	1.423	1.509	8.62
15)t 1,3-Dichlorobenze	1.405	1.528	1.536	1.715	1.557	1.537	1.516	1.542	5.90
16)t 1,4-Dichlorobenze	1.450	1.595	1.627	1.787	1.638	1.599	1.568	1.609	6.22
17)t Benzyl alcohol	0.920	0.591	0.692	0.791	0.980	0.898	0.803	0.811	16.77
18)t 1,2-Dichlorobenze	1.405	1.466	1.461	1.679	1.510	1.519	1.539	1.511	5.72
19)t Acetophenone	1.776	1.774	1.921	2.176	1.994	1.978	1.973	1.942	7.15
20)t 2-Methylphenol	1.271	1.187	1.367	1.537	1.382	1.399	1.403	1.364	8.10
21)t 2,2'-oxybis(1-Chl	0.511	0.551	0.525	0.609	0.540	0.536	0.536	0.544	5.73
22)t 3&4-Methylphenol	1.372	1.218	1.467	1.723	1.465	1.457	1.334	1.434	10.91
23)t n-Nitroso-di-n-pr	0.944	0.952	0.972	1.145	1.037	1.009	1.011	1.010	6.79
24)t Hexachloroethane	0.546	0.594	0.610	0.670	0.620	0.608	0.592	0.606	6.12
25) I Naphthalene-d8	ISTD								
26)S Nitrobenzene-d5	0.279	0.366	0.369	0.418	0.361	0.341	0.312	0.349	12.82
27)t Nitrobenzene	0.258	0.342	0.350	0.387	0.333	0.318	0.281	0.324	13.38
28)t Quinoline	0.478	0.653	0.654	0.761	0.649	0.601	0.540	0.619	14.74
29)t Isophorone	0.516	0.684	0.688	0.801	0.692	0.637	0.573	0.656	14.09
30)t 2-Nitrophenol	0.172	0.202	0.218	0.247	0.212	0.204	0.189	0.206	11.42
31)t 2,4-Dimethylpheno		0.278	0.325	0.364	0.312	0.284	0.239	0.300	14.38
32)t Benzoic acid	0.182		0.154	0.229	0.204	0.219	0.197	0.197	13.70
33)t bis(2-Chloroethox	0.334	0.439	0.453	0.516	0.431	0.406	0.372	0.422	13.94
34)t 2,4-Dichloropheno	0.209	0.270	0.267	0.294	0.264	0.238	0.222	0.252	11.84
35)t 1,3,5-Trichlorobe	0.207	0.283	0.268	0.306	0.272	0.255	0.234	0.261	12.50
36)T 1,2,4-Trichlorobe	0.202	0.268	0.272	0.300	0.262	0.245	0.226	0.254	12.76

7.7

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: EH3145-ICC3145
Lab FileID: H74024.D

37)T 1,2,3-Trichlorobe	0.193	0.256	0.260	0.288	0.255	0.235	0.213	0.243	13.05
38)t alpha-Terpineol	0.217	0.291	0.288	0.329	0.292	0.270	0.242	0.276	13.32
39)t Naphthalene	0.750	1.015	1.003	1.137	0.972	0.912	0.842	0.947	13.33
40)t 4-Chloroaniline		0.419	0.428	0.374	0.363	0.363	0.292	0.373	13.08
41)t 2,3-Dichloroanili	0.231	0.316	0.312	0.347	0.311	0.287	0.258	0.295	13.28
42)t Caprolactam		0.139	0.157	0.177	0.151	0.134	0.125	0.147	12.72
43)t Hexachlorobutadie	0.094	0.125	0.122	0.140	0.120	0.114	0.106	0.117	12.49
44)t 4-Chloro-3-methyl	0.209	0.272	0.277	0.316	0.271	0.251	0.217	0.259	14.31
45)t 2-Methylnaphthale	0.482	0.667	0.661	0.742	0.654	0.599	0.555	0.623	13.71
46)t 1-Methylnaphthale	0.440	0.626	0.616	0.693	0.602	0.560	0.519	0.579	14.13
47)t Dimethylnaphthale	0.382	0.509	0.514	0.580	0.512	0.482	0.434	0.488	13.07
48) I Acenaphthene-d10	ISTD								
49)t Hexachlorocyclope			0.029	0.094	0.141	0.205	0.241	0.142	59.68
----- Linear regression ----- Coefficient = 0.9905									
Response Ratio = -0.09414 + 0.25625 *A									
50)t 2,4,6-Trichloroph	0.342	0.250	0.323	0.371	0.361	0.345	0.333	0.332	11.95
51)t 2,4,5-Trichloroph	0.380		0.282	0.410	0.399	0.421	0.419	0.385	13.67
52)S 2-Fluorobiphenyl	1.346	1.312	1.373	1.586	1.493	1.504	1.513	1.447	7.07
53)t 2-Chloronaphthale	1.113	1.127	1.156	1.331	1.272	1.249	1.223	1.210	6.71
54)t Biphenyl	1.419	1.505	1.498	1.741	1.630	1.649	1.592	1.576	6.92
55)t 2-Nitroaniline	0.344	0.326	0.342	0.414	0.389	0.396	0.382	0.371	8.91
56)t Dimethylphthalate	1.257	1.327	1.362	1.590	1.427	1.404	1.349	1.388	7.54
57)t Acenaphthylene	1.776	1.796	1.883	2.182	2.050	2.015	1.918	1.946	7.49
58)t 2,6-Dinitrotoluen	0.319	0.286	0.315	0.381	0.363	0.365	0.354	0.341	10.04
59)t 3-Nitroaniline	0.389	0.348	0.401	0.473	0.434	0.442	0.419	0.415	9.76
60)t Acenaphthene	1.089	1.175	1.140	1.337	1.252	1.236	1.194	1.203	6.72
61)t 2,4-Dinitrophenol	0.214			0.203	0.207	0.235	0.233	0.218	6.77
62)t 4-Nitrophenol	0.109		0.092	0.127	0.129	0.119	0.109	0.114	11.99
63)t Dibenzofuran	1.556	1.574	1.646	1.886	1.783	1.786	1.736	1.710	7.12
64)t 2,4-Dinitrotoluen	0.441	0.371	0.439	0.531	0.490	0.506	0.492	0.467	11.56
65)t Diethylphthalate	1.270	1.354	1.389	1.604	1.489	1.458	1.379	1.420	7.58
66)t Fluorene	1.227	1.216	1.287	1.472	1.374	1.384	1.336	1.328	6.90
67)t 4-Chlorophenyl-ph	0.527	0.521	0.535	0.624	0.558	0.584	0.565	0.559	6.52
68)t 4-Nitroaniline	0.383	0.318	0.394	0.479	0.453	0.452	0.424	0.415	13.19
69) I Phenanthrene-d10	ISTD								
70)t 4,6-Dinitro-2-met	0.192		0.136	0.200	0.189	0.199	0.208	0.187	13.77
71)t Atrazine		0.174	0.176	0.212	0.204	0.170		0.187	10.27
72)t n-Nitrosodiphenyl	0.614	0.578	0.584	0.704	0.626	0.641	0.659	0.630	6.97
73)t 1,2-Diphenylhydra	0.966	0.876	0.899	1.086	1.010	1.050	1.080	0.995	8.51
74)S 2,4,6-Tribromophe	0.147	0.115	0.119	0.146	0.152	0.161	0.165	0.144	13.48
75)t 4-Bromophenyl-phe	0.220	0.187	0.200	0.244	0.217	0.216	0.230	0.216	8.62
76)t Hexachlorobenzene	0.264	0.252	0.253	0.290	0.262	0.269	0.277	0.267	5.04
77)t Pentachlorophenol	0.153			0.128	0.137	0.155	0.170	0.149	11.13
78)t Phenanthrene	1.099	1.162	1.138	1.323	1.190	1.188	1.182	1.183	5.89
79)t Anthracene	1.148	1.125	1.139	1.368	1.259	1.257	1.243	1.220	7.18
80)t Carbazole	1.035	1.000	1.064	1.281	1.180	1.167	1.132	1.123	8.63
81)t Di-n-butylphthala	1.579	1.571	1.581	1.917	1.725	1.704	1.678	1.679	7.32
82)t Fluoranthene	1.041	1.047	1.081	1.298	1.192	1.133	1.106	1.128	8.07
83)t Octadecane	0.642	0.670	0.608	0.724	0.657	0.685	0.716	0.672	6.08
84) I Chrysene-d12	ISTD								
85)t Benzidine	0.302	0.378	0.364	0.369	0.285	0.248	0.172	0.302	25.01
86)t Pyrene	1.411	1.423	1.411	1.609	1.472	1.480	1.594	1.486	5.65
87)S Terphenyl-d14	1.003	0.956	0.918	1.127	1.056	1.057	1.122	1.034	7.67
88)t Butylbenzylphthal	0.904	0.859	0.859	1.028	0.923	0.928	0.959	0.923	6.41
89)t Butyl stearate	0.151	0.127	0.120	0.145	0.127	0.139	0.156	0.138	9.71
90)t Benzo[a]anthracen	1.154	1.313	1.214	1.444	1.259	1.243	1.275	1.272	7.15

SII-SSA-0014-002907

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: EH3145-ICC3145
Lab FileID: H74024.D

91)t 3,3'-Dichlorobenz	0.440	0.464	0.450	0.528	0.495	0.494	0.483	0.479	6.28
92)t Chrysene	1.043	1.091	1.077	1.263	1.216	1.165	1.140	1.142	6.90
93)t bis(2-Ethylhexyl)	1.237	1.211	1.166	1.379	1.251	1.306	1.321	1.267	5.71
94) I Perylene-d12	ISTD								
95)t Di-n-octylphthala	1.995	1.804	1.917	2.300	2.107	2.146	2.068	2.048	7.88
96)t Benzo[b]fluoranth	1.295	1.347	1.338	1.539	1.490	1.519	1.653	1.454	8.98
97)t Benzo[k]fluoranth	1.228	1.126	1.118	1.396	1.280	1.243	1.103	1.214	8.77
98)t Benzo[a]pyrene	1.190	1.107	1.152	1.388	1.287	1.262	1.283	1.238	7.67
99)t Indeno[1,2,3-cd]p	1.437	1.277	1.293	1.616	1.452	1.479	1.609	1.452	9.25
100)t Dibenz(a,h)acridi	1.127	0.980	1.004	1.217	1.132	1.172	1.292	1.132	9.80
101)t Dibenz[a,h]anthra	1.259	1.127	1.131	1.396	1.297	1.298	1.419	1.275	9.02
102)t 7,12-Dimethylbenz	0.573	0.486	0.483	0.542	0.634	0.617	0.603	0.562	10.88
103)t Benzo[g,h,i]peryl	1.080	1.186	1.118	1.343	1.179	1.156	1.192	1.179	7.04

(#) = Out of Range

MH3145.M Sat Apr 02 08:51:59 2005 MSH

7.7

Initial Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: ER1468-ICC1468
Lab FileID: R43546.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR1468.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 04 10:17:31 2005
Response via : Initial Calibration

Calibration Files
2 =R43552.D 5 =R43551.D 100 =R43547.D 50 =R43546.D
10 =R43550.D 80 =R43548.D 25 =R43549.D =

Compound	2	5	100	50	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD								
2) 1,4-Dioxane	1.190	0.795	0.622	0.651	0.734	0.623	0.662	0.754	26.85
----- Linear regression ----- Coefficient = 0.9998									
Response Ratio = 0.03050 + 0.61141 *A									
3) Pyridine	1.832	1.789	1.604	1.593	1.699	1.511	1.627	1.665	6.87
4) N-Nitrosodim	0.983	0.952	0.778	0.867	0.875	0.798	0.846	0.871	8.61
5) 2-Fluorophen	1.514	1.246	1.162	1.368	1.322	1.303	1.314	1.318	8.24
6) Indene	3.076	2.711	2.484	2.544	2.523	2.508	2.453	2.614	8.41
7) Cumene	3.954	3.395	2.855	2.978	3.114	2.827	2.871	3.142	13.03
8) Phenol-d5	2.205	2.142	1.723	1.976	2.047	1.944	1.850	1.984	8.37
9) Phenol	2.092	1.608	1.770	1.854	1.800	1.801	1.725	1.807	8.18
10) Aniline	2.245	2.264	1.788	2.079	2.018	1.714	1.644	1.965	12.82
11) bis(2-Chloro	1.518	1.369	1.393	1.471	1.367	1.420	1.377	1.416	4.09
12) Benzaldehyde	0.630	0.839		0.190	0.587		0.482	0.546	43.51
13) 2-Chlorophen	1.568	1.428	1.339	1.344	1.349	1.330	1.310	1.381	6.54
14) Decane		2.498	1.943	2.110	2.268	1.957	2.082	2.143	9.81
15) 1,3-Dichloro	1.915	1.623	1.586	1.527	1.567	1.501	1.477	1.600	9.25
16) 1,4-Dichloro	2.100	1.761	1.598	1.580	1.603	1.563	1.536	1.677	11.92
17) Benzyl alcoh	0.559	0.520	0.834	0.894	0.615	0.837	0.749	0.715	20.94
----- Linear regression ----- Coefficient = 0.9978									
Response Ratio = -0.03389 + 0.85709 *A									
18) 1,2-Dichloro	1.866	1.592	1.517	1.501	1.500	1.484	1.431	1.556	9.30
19) Acetophenone	2.433	2.110	1.744	1.937	1.921	1.831	1.867	1.978	11.65
20) 2-Methylphen	1.604	1.344	1.165	1.258	1.209	1.201	1.223	1.286	11.76
21) 2,2'-oxybis(	0.554	0.463	0.419	0.447	0.441	0.421	0.419	0.452	10.60
22) 3&4-Methylph	1.294	1.200	1.234	1.299	1.208	1.267	1.221	1.246	3.26
23) n-Nitroso-di	1.280	1.169	0.992	1.087	1.068	1.015	1.060	1.096	9.02
24) Hexachloroet	0.597	0.533	0.521	0.513	0.511	0.507	0.493	0.525	6.50
25) I Naphthalene-d8	ISTD								
26) Nitrobenzene	0.534	0.497	0.473	0.466	0.473	0.465	0.455	0.480	5.59
27) Nitrobenzene	0.195	0.176	0.190	0.177	0.177	0.183	0.175	0.182	4.31
28) Quinoline	0.696	0.635	0.627	0.623	0.606	0.631	0.607	0.632	4.77
29) Isophorone	0.928	0.800	0.735	0.754	0.734	0.737	0.733	0.774	9.29
30) 2-Nitropheno	0.158	0.168	0.199	0.184	0.171	0.188	0.172	0.177	7.83
31) 2,4-Dimethyl	0.390	0.349	0.372	0.355	0.332	0.357	0.329	0.355	6.05
32) Benzoic acid			0.230	0.225	0.168	0.232	0.202	0.212	12.73
33) bis(2-Chloro	0.493	0.446	0.440	0.423	0.410	0.427	0.405	0.435	6.78
34) 2,4-Dichloro		0.229	0.279	0.259	0.242	0.267	0.247	0.254	7.13
35) 1,3,5-Trichl	0.364	0.312	0.367	0.330	0.303	0.347	0.301	0.332	8.42
36) 1,2,4-Trichl	0.356	0.303	0.339	0.313	0.295	0.330	0.295	0.319	7.31
37) 1,2,3-Trichl	0.344	0.302	0.330	0.308	0.286	0.336	0.291	0.314	7.25
38) alpha-Terpin	0.457	0.411	0.356	0.374	0.376	0.365	0.361	0.386	9.44
39) Naphthalene	1.316	1.148	1.164	1.087	1.069	1.132	1.040	1.137	8.00

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: ER1468-ICC1468
Lab FileID: R43546.D

40)	4-Chloroanil	0.443	0.384	0.432	0.407	0.359	0.406	0.359		0.399	8.32
41)	2,3-Dichloro	0.347	0.319	0.329	0.322	0.292	0.332	0.296		0.320	6.10
42)	Caprolactam	0.159	0.156	0.163	0.170	0.151	0.166	0.165		0.161	4.00
43)	Hexachlorobu	0.220	0.189	0.211	0.193	0.178	0.201	0.179		0.196	7.99
44)	4-Chloro-3-m		0.250	0.282	0.262	0.239	0.267	0.226		0.254	7.87
45)	2-Methylnaph	0.775	0.685	0.764	0.727	0.648	0.736	0.657		0.713	7.07
46)	1-Methylnaph	1.018	0.783	0.719	0.705	0.682	0.725	0.670		0.757	15.93
	----- Linear regression ----- Coefficient = 0.9994										
	Response Ratio = -0.00412 + 0.71988 *A										
47)	Dimethylnaph	0.608	0.562	0.622	0.597	0.509	0.619	0.544		0.580	7.37
48)	I Acenaphthene-d10	----------ISTD----------									
49)	Hexachlorocy		0.204	0.392	0.350	0.232	0.366	0.284		0.305	25.14
	----- Linear regression ----- Coefficient = 0.9966										
	Response Ratio = -0.09778 + 0.40056 *A										
50)	2,4,6-Trichl	0.314	0.299	0.393	0.333	0.301	0.357	0.303		0.329	10.71
51)	2,4,5-Trichl	0.347	0.340	0.404	0.365	0.295	0.386	0.320		0.351	10.73
52)	2-Fluorobiph	1.645	1.437	1.644	1.556	1.390	1.573	1.380		1.518	7.52
53)	2-Chloronaph	1.263	1.130	1.260	1.129	1.091	1.197	1.066		1.162	6.79
54)	Biphenyl	1.706	1.549	1.708	1.575	1.476	1.648	1.467		1.590	6.33
55)	2-Nitroanili	0.354	0.388	0.444	0.415	0.409	0.425	0.400		0.405	7.15
56)	Dimethylphth	1.308	1.214	1.366	1.228	1.152	1.291	1.162		1.246	6.34
57)	Acenaphthyle	2.015	1.860	2.101	1.955	1.816	1.987	1.791		1.932	5.89
58)	2,6-Dinitrot	0.187	0.229	0.298	0.269	0.239	0.286	0.250		0.251	14.99
59)	3-Nitroanili	0.299	0.253	0.318	0.297	0.279	0.306	0.284		0.291	7.26
60)	Acenaphthene	1.452	1.276	1.377	1.302	1.209	1.314	1.205		1.305	6.77
61)	2,4-Dinitrop			0.181	0.149	0.060	0.168	0.118		0.135	35.72
	----- Linear regression ----- Coefficient = 0.9965										
	Response Ratio = -0.08867 + 0.19387 *A										
62)	4-Nitropheno			0.169	0.147	0.103	0.154	0.134		0.141	17.51
	----- Linear regression ----- Coefficient = 0.9948										
	Response Ratio = -0.02484 + 0.17328 *A										
63)	Dibenzofuran	1.890	1.640	1.820	1.699	1.570	1.741	1.596		1.708	6.89
64)	2,4-Dinitrot	0.299	0.331	0.388	0.354	0.334	0.364	0.330		0.343	8.36
65)	2,3,4,6-Tetr	0.218	0.235	0.322	0.272	0.235	0.293	0.245		0.260	14.25
66)	Diethylphtha	1.454	1.300	1.379	1.351	1.217	1.308	1.222		1.319	6.44
67)	Fluorene	1.414	1.298	1.442	1.349	1.224	1.389	1.247		1.337	6.26
68)	4-Chlorophen	0.626	0.572	0.676	0.594	0.539	0.623	0.548		0.597	8.13
69)	4-Nitroanili	0.245	0.260	0.307	0.288	0.286	0.300	0.290		0.282	7.76
70)	I Phenanthrene-d10	----------ISTD----------									
71)	4,6-Dinitro-			0.153	0.130	0.086	0.140	0.103		0.122	22.25
	----- Linear regression ----- Coefficient = 0.9949										
	Response Ratio = -0.02971 + 0.15979 *A										
72)	Atrazine	0.093	0.087	0.104	0.101	0.088	0.102	0.091		0.095	7.26
73)	n-Nitrosodip	0.607	0.541	0.666	0.627	0.543	0.620	0.562		0.595	8.00
74)	1,2-Diphenyl	1.260	1.122	1.054	1.046	1.087	1.029	1.031		1.090	7.52
75)	2,4,6-Tribro		0.118	0.150	0.142	0.117	0.153	0.127		0.135	11.89
76)	4-Bromopheny	0.230	0.198	0.258	0.225	0.194	0.240	0.202		0.221	10.81
77)	Hexachlorobe	0.259	0.226	0.281	0.255	0.211	0.271	0.225		0.247	10.63
78)	Pentachlorop		0.091	0.179	0.151	0.098	0.169	0.125		0.135	27.40
	----- Linear regression ----- Coefficient = 0.9950										
	Response Ratio = -0.05203 + 0.18458 *A										
79)	Phenanthrene	1.303	1.122	1.289	1.207	1.077	1.217	1.092		1.187	7.73

7.7

Initial Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: ER1468-ICC1468
Lab FileID: R43546.D

80)	Anthracene	1.331	1.176	1.332	1.287	1.132	1.299	1.155	1.245	6.98
81)	Carbazole	1.105	0.976	1.053	0.979	0.961	1.013	0.944	1.004	5.68
82)	Di-n-butylph	1.319	1.216	1.413	1.370	1.161	1.357	1.222	1.294	7.29
83)	Fluoranthene	1.192	1.056	1.277	1.221	1.015	1.225	1.053	1.148	9.06
84)	Octadecane	0.783	0.696	0.632	0.668	0.658	0.644	0.641	0.675	7.75
85)	I Chrysene-d12	ISTD								
86)	Benzidine	0.274	0.303	0.233	0.289	0.242	0.220	0.236	0.257	12.34
87)	Pyrene	1.533	1.341	1.614	1.494	1.332	1.487	1.298	1.443	8.28
88)	Butyl steara	0.531	0.495	0.523	0.483	0.483	0.476	0.478	0.496	4.54
89)	Terphenyl-d1	1.041	0.924	1.147	1.062	0.914	1.061	0.935	1.012	8.75
90)	Butylbenzylp	0.581	0.567	0.700	0.628	0.558	0.638	0.580	0.607	8.40
91)	Benzo[a]anth	1.368	1.212	1.393	1.309	1.205	1.326	1.168	1.283	6.84
92)	3,3'-Dichlor	0.359	0.349	0.379	0.363	0.343	0.357	0.353	0.357	3.25
93)	Chrysene	1.459	1.219	1.389	1.313	1.177	1.289	1.168	1.288	8.47
94)	bis(2-Ethylh	0.822	0.781	0.985	0.902	0.761	0.915	0.832	0.857	9.34
95)	I Perylene-d12	ISTD								
96)	Di-n-octylph	1.360	1.341		1.603	1.339	1.861	1.407	1.485	14.11
97)	Benzo[b]fluo	1.303	1.291		1.580	1.273	1.759	1.348	1.426	13.93
98)	Benzo[k]fluo	1.631	1.390	1.925	1.667	1.380	1.714	1.439	1.592	12.62
99)	Benzo[a]pyre	1.209	1.151	1.626	1.419	1.172	1.538	1.209	1.332	14.55
100)	Indeno[1,2,3	1.275	1.183	1.282	1.490	1.249	1.388	1.353	1.317	7.71
101)	Dibenz(a,h)a	0.901	0.872	0.945	1.076	0.893	1.015	0.954	0.951	7.67
102)	Dibenz[a,h]a	1.092	1.013	1.097	1.237	1.031	1.175	1.123	1.110	7.04
103)	7,12-Dimethy	0.618	0.598	0.927	0.808	0.607	0.861	0.657	0.725	18.90

----- Linear regression ----- Coefficient = 0.9944
Response Ratio = -0.08178 + 0.92515 *A

104)	Benzo[g,h,i]	1.114	0.981	0.910	1.143	0.964	1.000	1.058	1.024	8.21

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR1468.M Mon Mar 07 09:22:48 2005 RPT1

7.7

Continuing Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: ER1479-CC1468
Lab FileID: R43741.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER1479\R43741.D
Acq On : 18 Mar 2005 10:45 am
Sample : CC1468-25
Misc : OP19709,ER1479
MS Integration Params: LSCINT.P

Vial: 2
Operator: WENDYS
Inst : MSR
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\MR1468.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Mar 18 11:31:36 2005
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	-0.17	7.80
			True	Calc.	% Drift			
2	t	1,4-Dioxane	25.000	24.449	2.2	134	-0.07	2.13
			AvgRF	CCRF	% Dev			
3	t	Pyridine	1.665	1.466	12.0	108	0.00	2.66
4	t	N-Nitrosodimethylamine	0.871	0.639	26.6#	91	-0.07	2.68
5	S	2-Fluorophenol	1.318	1.333	-1.1	122	-0.07	4.96
6	t	Indene	2.614	2.547	2.6	125	-0.16	8.64
7	t	Cumene	3.142	3.059	2.6	128	-0.15	5.81
8	S	Phenol-d5	1.984	1.877	5.4	122	-0.09	7.36
9	t	Phenol	1.807	1.534	15.1	107	-0.09	7.39
10	t	Aniline	1.965	1.882	4.2	138	-0.14	7.12
11	t	bis(2-Chloroethyl)ether	1.416	1.259	11.1	110	-0.16	7.32
12	t	Benzaldehyde	0.546	0.303	44.5#	76	-0.12	6.75
13	t	2-Chlorophenol	1.381	1.322	4.3	121	-0.13	7.41
14	t	Decane	2.143	1.668	22.2#	96	-0.16	7.58
15	t	1,3-Dichlorobenzene	1.600	1.600	0.0	130	-0.16	7.69
16	t	1,4-Dichlorobenzene	1.677	1.597	4.8	125	-0.16	7.85
			True	Calc.	% Drift			
17	t	Benzyl alcohol	25.000	26.311	-5.2	136	-0.12	8.56
			AvgRF	CCRF	% Dev			
18	t	1,2-Dichlorobenzene	1.556	1.524	2.1	128	-0.16	8.39
19	t	Acetophenone	1.978	1.815	8.2	117	-0.15	9.26
20	t	2-Methylphenol	1.286	1.211	5.8	119	-0.12	9.13
21	t	2,2'-oxybis(1-Chloropropa	0.452	0.449	0.7	129	-0.16	8.95
22	t	3&4-Methylphenol	1.246	1.223	1.8	120	-0.07	9.69
23	t	n-Nitroso-di-n-propylamin	1.096	0.900	17.9	102	-0.17	9.42
24	t	Hexachloroethane	0.525	0.537	-2.3	131	-0.17	9.30
25	I	Naphthalene-d8	1.000	1.000	0.0	117	-0.18	11.96
26	S	Nitrobenzene-d5	0.480	0.429	10.6	110	-0.16	9.68
27	t	Nitrobenzene	0.182	0.182	0.0	121	-0.16	9.74
28	t	Quinoline	0.632	0.636	-0.6	122	-0.14	13.40
29	t	Isophorone	0.774	0.695	10.2	111	-0.16	10.57
30	t	2-Nitrophenol	0.177	0.189	-6.8	129	-0.15	10.85
31	t	2,4-Dimethylphenol	0.355	0.342	3.7	121	-0.13	11.37
32	t	Benzoic acid	0.212	0.177	16.5	102	-0.06	12.37
33	t	bis(2-Chloroethoxy)methan	0.435	0.395	9.2	114	-0.17	11.54
34	t	2,4-Dichlorophenol	0.254	0.263	-3.5	125	-0.07	11.88

Continuing Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: ER1479-CC1468
Lab FileID: R43741.D

35 t	1,3,5-Trichlorobenzene	0.332	0.341	-2.7	132	-0.17	10.78
36 t	1,2,4-Trichlorobenzene	0.319	0.327	-2.5	130	-0.17	11.88
37 t	1,2,3-Trichlorobenzene	0.314	0.323	-2.9	130	-0.17	12.71
38 t	alpha-Terpineol	0.386	0.317	17.9	103	-0.18	12.26
39 t	Naphthalene	1.137	1.102	3.1	124	-0.18	12.02
40 t	4-Chloroaniline	0.399	0.409	-2.5	133	-0.12	12.61
41 t	2,3-Dichloroaniline	0.320	0.328	-2.5	130	-0.17	15.91
42 t	Caprolactam	0.161	0.129	19.9	91	-0.20	13.93
43 t	Hexachlorobutadiene	0.196	0.209	-6.6	136	-0.18	12.80
44 t	4-Chloro-3-methylphenol	0.254	0.277	-9.1	143	-0.08	14.83
45 t	2-Methylnaphthalene	0.713	0.698	2.1	124	-0.18	14.59
		True	Calc.	% Drift			
46 t	1-Methylnaphthalene	25.000	25.858	-3.4	129	-0.18	14.96
		AvgRF	CCRF	% Dev			
47 t	Dimethylnaphthalene	0.580	0.584	-0.7	125	-0.17	16.93
48 I	Acenaphthene-d10	1.000	1.000	0.0	116	-0.16	18.24
		True	Calc.	% Drift			
49 t	Hexachlorocyclopentadiene	50.000	41.427	17.1	104	-0.18	15.49
		AvgRF	CCRF	% Dev			
50 t	2,4,6-Trichlorophenol	0.329	0.360	-9.4	138	-0.14	16.02
51 t	2,4,5-Trichlorophenol	0.351	0.363	-3.4	131	-0.05	16.31
52 S	2-Fluorobiphenyl	1.518	1.536	-1.2	129	-0.18	16.19
53 t	2-Chloronaphthalene	1.162	1.226	-5.5	133	-0.18	16.36
54 t	Biphenyl	1.590	1.599	-0.6	126	-0.18	16.45
55 t	2-Nitroaniline	0.405	0.369	8.9	107	-0.10	17.16
56 t	Dimethylphthalate	1.246	1.265	-1.5	126	-0.15	17.91
57 t	Acenaphthylene	1.932	1.926	0.3	125	-0.16	17.74
58 t	2,6-Dinitrotoluene	0.251	0.274	-9.2	127	-0.14	18.07
59 t	3-Nitroaniline	0.291	0.292	-0.3	119	-0.07	18.55
60 t	Acenaphthene	1.305	1.244	4.7	120	-0.16	18.33
		True	Calc.	% Drift			
61 t	2,4-Dinitrophenol	50.000	43.458	13.1	96	-0.01	18.90
62 t	4-Nitrophenol	25.000	20.906	16.4	91	0.27	19.80
		AvgRF	CCRF	% Dev			
63 t	Dibenzofuran	1.708	1.738	-1.8	126	-0.15	18.85
64 t	2,4-Dinitrotoluene	0.343	0.377	-9.9	132	-0.11	19.24
65	2,3,4,6-Tetrachlorophenol	0.260	0.289	-11.2	137	-0.11	19.50
66 t	Diethylphthalate	1.319	1.250	5.2	119	-0.15	19.99
67 t	Fluorene	1.337	1.325	0.9	123	-0.15	19.81
68 t	4-Chlorophenyl-phenylethe	0.597	0.640	-7.2	135	-0.14	19.95
69 t	4-Nitroaniline	0.282	0.305	-8.2	122	-0.04	20.35
70 I	Phenanthrene-d10	1.000	1.000	0.0	115	-0.14	22.23
		True	Calc.	% Drift			
71 t	4,6-Dinitro-2-methylpheno	25.000	24.043	3.8	119	-0.08	20.37
		AvgRF	CCRF	% Dev			
72 t	Atrazine	0.095	0.103	-8.4	130	-0.14	21.98
73 t	n-Nitrosodiphenylamine	0.595	0.562	5.5	115	-0.14	20.36
74 t	1,2-Diphenylhydrazine	1.090	0.884	18.9	99	-0.15	20.36
75 S	2,4,6-Tribromophenol	0.135	0.157	-16.3	143	-0.11	20.59
76 t	4-Bromophenyl-phenylether	0.221	0.240	-8.6	137	-0.14	21.21

SII-SSA-0014-002913

Continuing Calibration Summary

Job Number: N93379
Account: AGMPAL Arcadis Geraghty & Miller
Project: PSEG, Hancock's Bridge, NJ

Sample: ER1479-CC1468
Lab FileID: R43741.D

77	t	Hexachlorobenzene	0.247	0.276	-11.7	142	-0.14	21.49
			True	Calc.	% Drift			
78	t	Pentachlorophenol	50.000	47.075	5.8	122	-0.09	22.10
			AvgRF	CCRF	% Dev			
79	t	Phenanthrene	1.187	1.151	3.0	122	-0.14	22.29
80	t	Anthracene	1.245	1.245	0.0	124	-0.14	22.41
81	t	Carbazole	1.004	1.010	-0.6	123	-0.09	23.00
82	t	Di-n-butylphthalate	1.294	1.224	5.4	116	-0.14	24.14
83	t	Fluoranthene	1.148	1.127	1.8	124	-0.13	25.23
84	t	Octadecane	0.675	0.536	20.6#	96	-0.14	22.38
85	I	Chrysene-d12	1.000	1.000	0.0	106	-0.14	28.67
86	t	Benzidine	0.257	0.216	16.0	97	-0.02	25.84
87	t	Pyrene	1.443	1.479	-2.5	121	-0.12	25.74
88		Butyl stearate	0.496	0.405	18.3	90	-0.14	27.88
89	S	Terphenyl-d14	1.012	1.107	-9.4	126	-0.13	26.30
90	t	Butylbenzylphthalate	0.607	0.591	2.6	108	-0.14	27.67
91	t	Benzo[a]anthracene	1.283	1.228	4.3	112	-0.13	28.64
92	t	3,3'-Dichlorobenzidine	0.357	0.394	-10.4	119	-0.08	28.79
93	t	Chrysene	1.288	1.322	-2.6	120	-0.13	28.73
94	t	bis(2-Ethylhexyl)phthalat	0.857	0.850	0.8	109	-0.14	29.19
95	I	Perylene-d12	1.000	1.000	0.0	104	-0.13	31.83
96	t	Di-n-octylphthalate	1.485	1.413	4.8	104	-0.14	30.57
97	t	Benzo[b]fluoranthene	1.426	1.322	7.3	102	-0.13	31.07
98	t	Benzo[k]fluoranthene	1.592	1.611	-1.2	116	-0.14	31.12
99	t	Benzo[a]pyrene	1.332	1.324	0.6	113	-0.13	31.72
100	t	Indeno[1,2,3-cd]pyrene	1.317	1.276	3.1	98	-0.10	33.85
101	t	Dibenz(a,h)acridine	0.951	0.965	-1.5	105	-0.11	33.47
102	t	Dibenz[a,h]anthracene	1.110	1.071	3.5	99	-0.11	33.88
			True	Calc.	% Drift			
103	t	7,12-Dimethylbenz(a)anthr	25.000	22.037	11.9	108	-0.16	31.08
			AvgRF	CCRF	% Dev			
104	t	Benzo[g,h,i]perylene	1.024	0.983	4.0	96	-0.09	34.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0

R43741.D MR1468.M Fri Mar 18 12:38:53 2005 RPT1

7.7

GC/MS Semi-volatiles

Raw Data

8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EH3145\H74037.D Vial: 26
Acq On : 2 Apr 2005 3:12 am Operator: SEANWE
Sample : N93379-1 Inst : MSH
Misc : OP19692,EH3145,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:14 2005 Quant Results File: MH3145.RES

Quant Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration
DataAcq Meth : MH3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.64	152	162438	40.00	ppb	0.01
25) Naphthalene-d8	10.67	136	631491	40.00	ppb	0.01
48) Acenaphthene-d10	14.12	164	301014	40.00	ppb	0.02
69) Phenanthrene-d10	17.49	188	424267	40.00	ppb	0.01
84) Chrysene-d12	22.52	240	323807	40.00	ppb	0.01
94) Perylene-d12	24.92	264	303459	40.00	ppb	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	6.76	112	142017	22.26	ppb	0.01
Spiked Amount 50.000			Recovery =	44.52%		
8) Phenol-d5	8.24	99	117204	13.59	ppb	0.03
Spiked Amount 50.000			Recovery =	27.18%		
26) Nitrobenzene-d5	9.51	82	246932	44.77	ppb	0.02
Spiked Amount 50.000			Recovery =	89.54%		
52) 2-Fluorobiphenyl	12.67	172	443934	40.77	ppb	0.01
Spiked Amount 50.000			Recovery =	81.54%		
74) 2,4,6-Tribromophenol	15.89	330	61347	40.24	ppb	0.01
Spiked Amount 50.000			Recovery =	80.48%		
87) Terphenyl-d14	20.81	244	373881	44.66	ppb	0.01
Spiked Amount 50.000			Recovery =	89.32%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
H74037.D MH3145.M Mon Apr 04 09:04:47 2005 MSH

ACCUTEST.
N93379

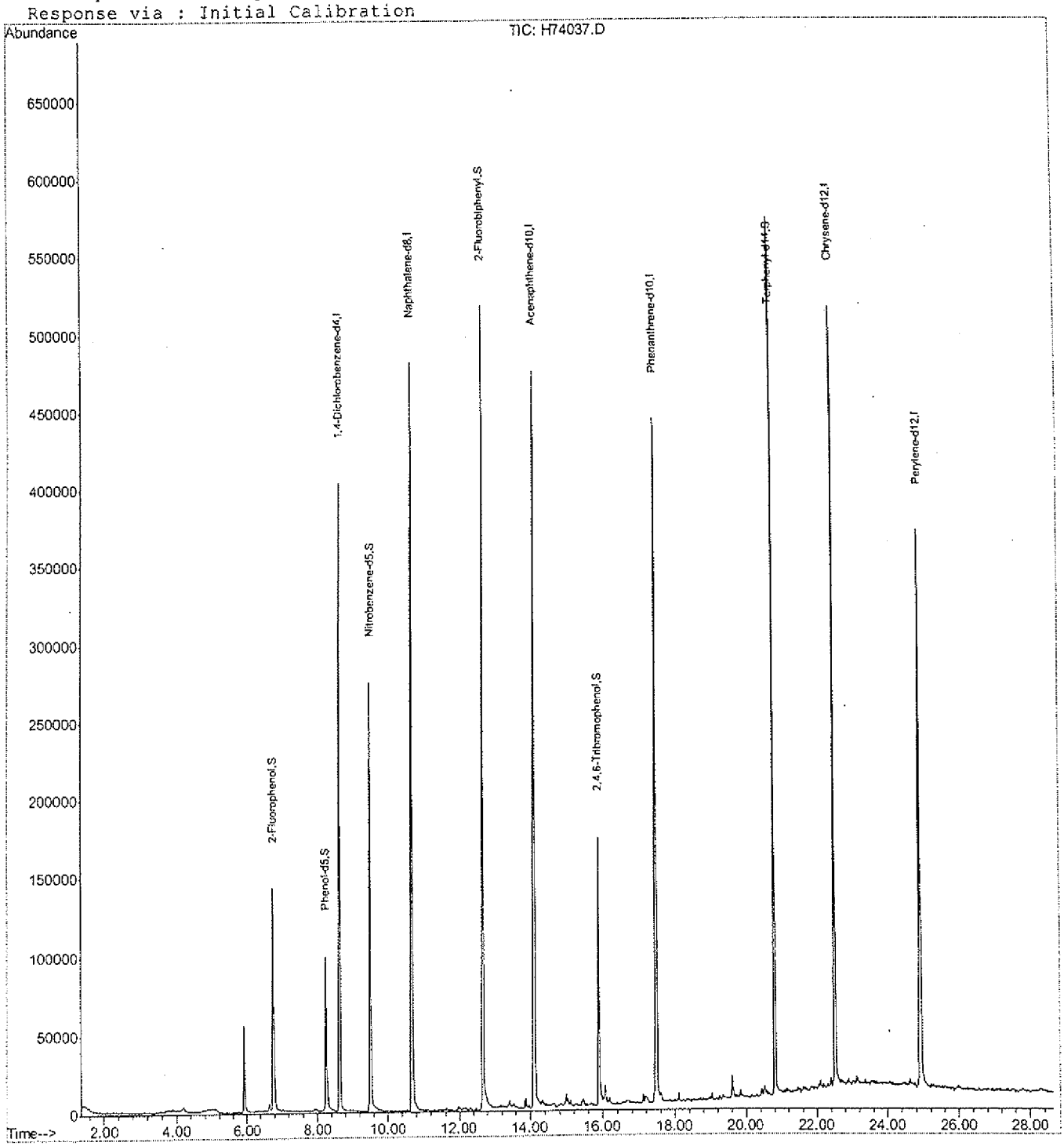
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EH3145\H74037.D
Acq On : 2 Apr 2005 3:12 am
Sample : N93379-1
Misc : OP19692,EH3145,1000
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:14 2005

Vial: 26
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration



8.1.1 8

ACCUTEST. N93379

H74037.D: N93379-1 WELL A7 page 2 of 2

SII-SSA-0014-002917

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EH3145\H74038.D
Acq On : 2 Apr 2005 3:46 am
Sample : N93379-2
Misc : OP19692,EH3145,980
MS Integration Params: RTEINT.P
Quant Time: Apr 4 10:11 2005

Vial: 27
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Quant Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration
DataAcq Meth : MH3145

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.64	152	151724	40.00 ppb	0.02
25) Naphthalene-d8	10.68	136	578453	40.00 ppb	0.02
48) Acenaphthene-d10	14.13	164	271059	40.00 ppb	0.03
69) Phenanthrene-d10	17.49	188	384031	40.00 ppb	0.02
84) Chrysene-d12	22.52	240	304464	40.00 ppb	0.02
94) Perylene-d12	24.93	264	305873	40.00 ppb	0.03
System Monitoring Compounds					
5) 2-Fluorophenol	6.76	112	106710	17.91 ppb	0.02
Spiked Amount 50.000			Recovery = 35.82%		
8) Phenol-d5	8.25	99	91451	11.36 ppb	0.04
Spiked Amount 50.000			Recovery = 22.72%		
26) Nitrobenzene-d5	9.50	82	179591	35.54 ppb	0.02
Spiked Amount 50.000			Recovery = 71.08%		
52) 2-Fluorobiphenyl	12.67	172	328120	33.47 ppb	0.02
Spiked Amount 50.000			Recovery = 66.94%		
74) 2,4,6-Tribromophenol	15.90	330	53579	38.83 ppb	0.02
Spiked Amount 50.000			Recovery = 77.66%		
87) Terphenyl-d14	20.82	244	328062	41.67 ppb	0.02
Spiked Amount 50.000			Recovery = 83.34%		

Target Compounds Qvalue

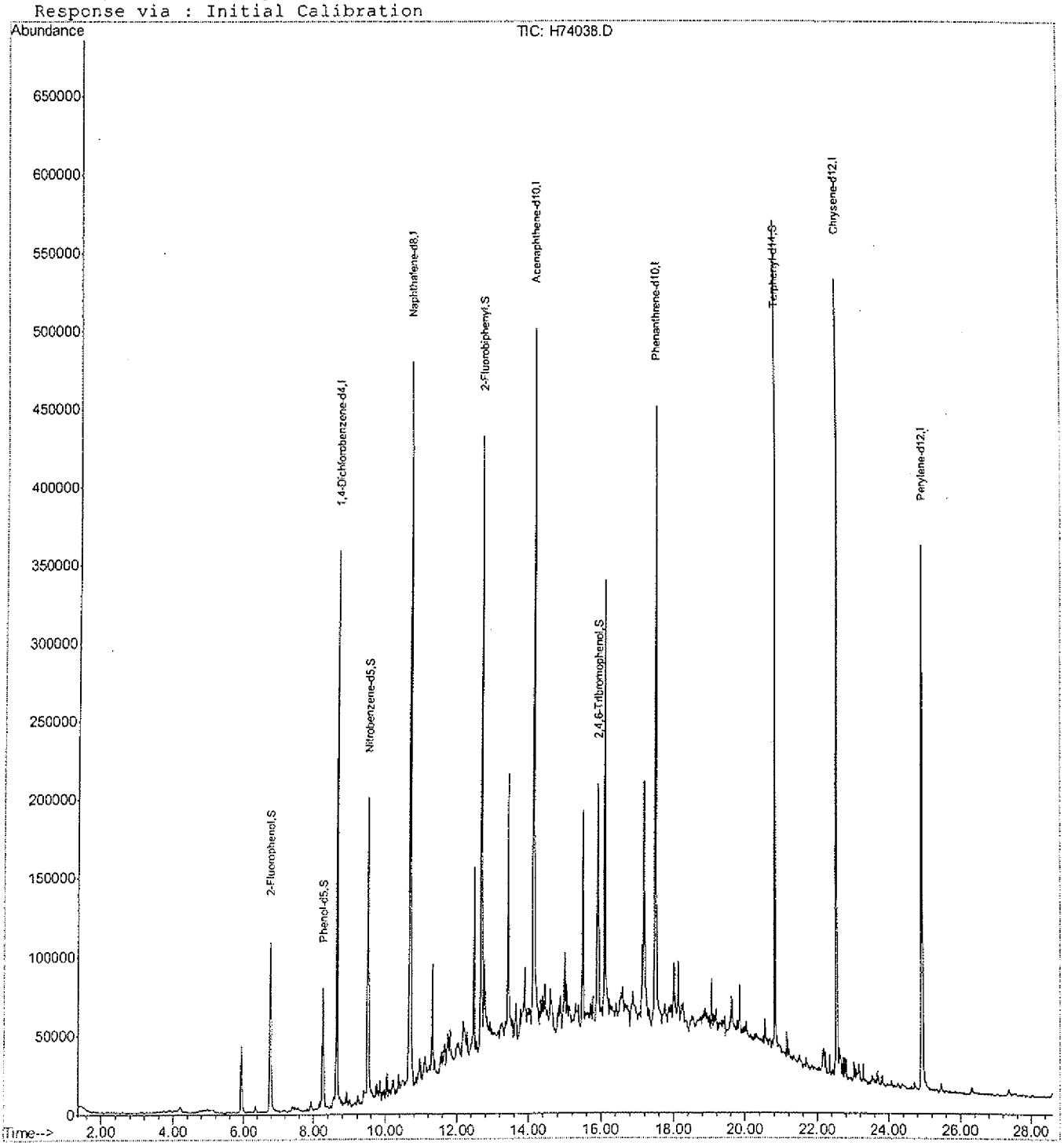
(#) = qualifier out of range (m) = manual integration
H74038.D MH3145.M Mon Apr 04 10:11:24 2005 MSH

ACCUTEST
N93379

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EH3145\H74038.D Vial: 27
Acq On : 2 Apr 2005 3:46 am Operator: SEANWE
Sample : N93379-2 Inst : MSH
Misc : OP19692,EH3145,980 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 10:11 2005 Quant Results File: MH3145.RES

Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 04 10:09:32 2005
Response via : Initial Calibration



H74038.D MH3145.M Mon Apr 04 10:11:25 2005 MSH Page 2

8.1.2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EH3145\H74039.D Vial: 28
Acq On : 2 Apr 2005 4:31 am Operator: SEANWE
Sample : N93379-3 Inst : MSH
Misc : OP19692,EH3145,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:15 2005 Quant Results File: MH3145.RES

Quant Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration
DataAcq Meth : MH3145

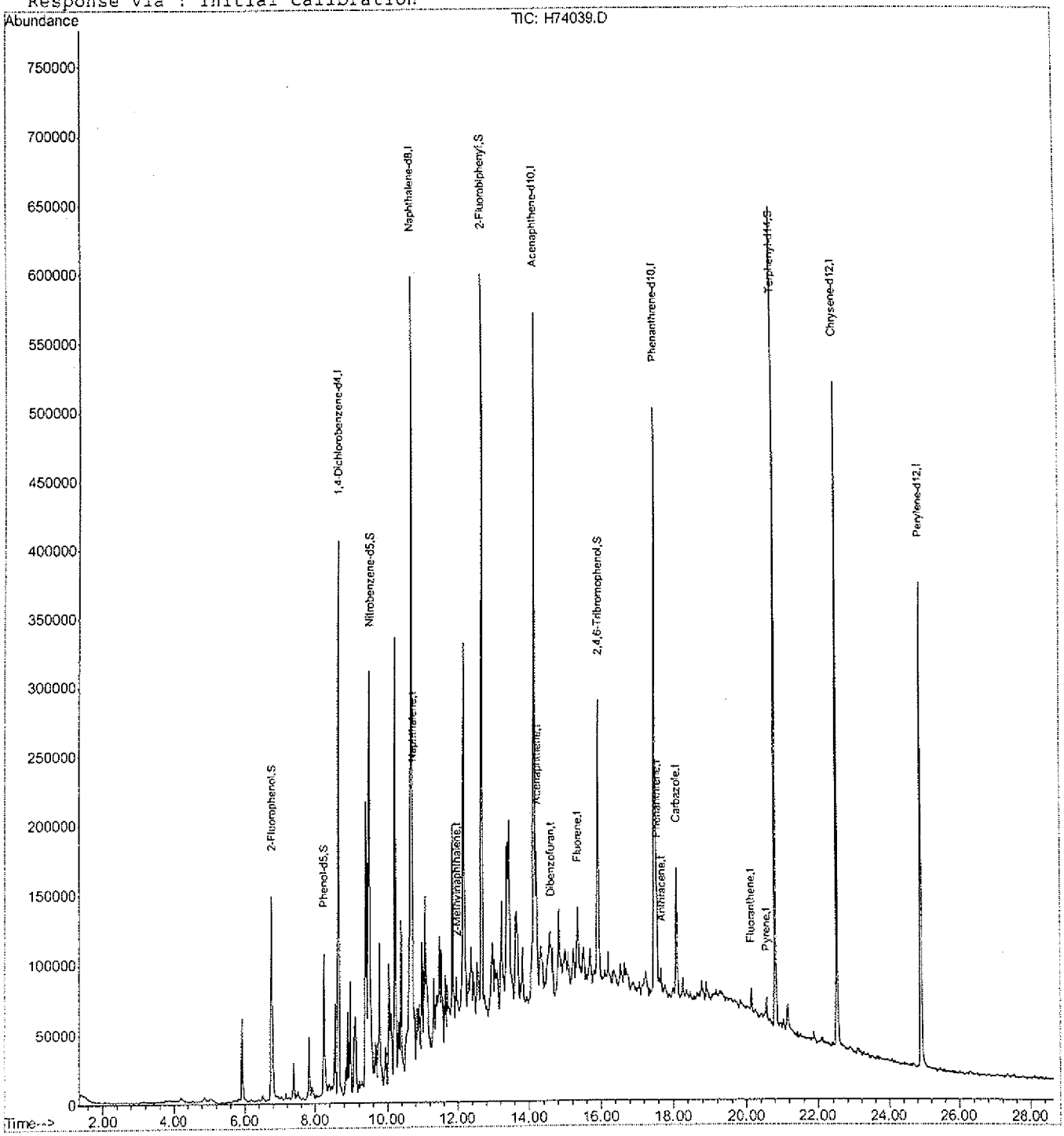
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.65	152	166034	40.00	ppb	0.02
25) Naphthalene-d8	10.68	136	627729	40.00	ppb	0.02
48) Acenaphthene-d10	14.13	164	295517	40.00	ppb	0.03
69) Phenanthrene-d10	17.50	188	410401	40.00	ppb	0.03
84) Chrysene-d12	22.52	240	312340	40.00	ppb	0.02
94) Perylene-d12	24.93	264	306595	40.00	ppb	0.03
System Monitoring Compounds						
5) 2-Fluorophenol	6.76	112	145444	22.31	ppb	0.02
Spiked Amount 50.000			Recovery =	44.62%		
8) Phenol-d5	8.25	99	122114	13.86	ppb	0.04
Spiked Amount 50.000			Recovery =	27.72%		
26) Nitrobenzene-d5	9.51	82	255163	46.53	ppb	0.03
Spiked Amount 50.000			Recovery =	93.06%		
52) 2-Fluorobiphenyl	12.67	172	438377	41.01	ppb	0.02
Spiked Amount 50.000			Recovery =	82.02%		
74) 2,4,6-Tribromophenol	15.91	330	70262	47.65	ppb	0.03
Spiked Amount 50.000			Recovery =	95.30%		
87) Terphenyl-d14	20.83	244	362898	44.94	ppb	0.03
Spiked Amount 50.000			Recovery =	89.88%		
Target Compounds						Qvalue
39) Naphthalene	10.71	128	63953	4.30	ppb	84
45) 2-Methylnaphthalene	11.97	142	19579	2.00	ppb	91
60) Acenaphthene	14.20	153	44489	5.01	ppb	98
63) Dibenzofuran	14.57	168	33920	2.69	ppb	98
66) Fluorene	15.34	166	43632	4.45	ppb	95
78) Phenanthrene	17.55	178	64336	5.30	ppb	99
79) Anthracene	17.67	178	11877	0.95	ppb	98
80) Carbazole	18.09	167	114412	9.93	ppb	99
82) Fluoranthene	20.14	202	15769	1.36	ppb	96
86) Pyrene	20.57	202	10864	0.94	ppb	93

(#) = qualifier out of range (m) = manual integration
H74039.D MH3145.M Mon Apr 04 09:05:03 2005 MSH

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EH3145\H74039.D Vial: 28
Acq On : 2 Apr 2005 4:31 am Operator: SEANWE
Sample : N93379-3 Inst : MSH
Misc : OP19692,EH3145,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:15 2005 Quant Results File: MH3145.RES

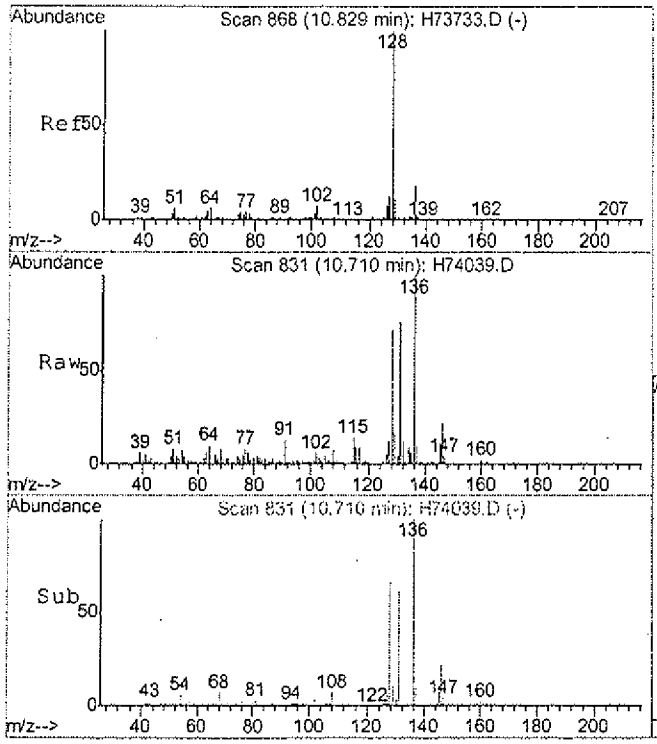
Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration



8.13

8

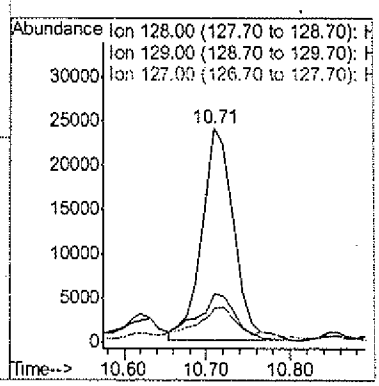
ACCUTEST. N93379

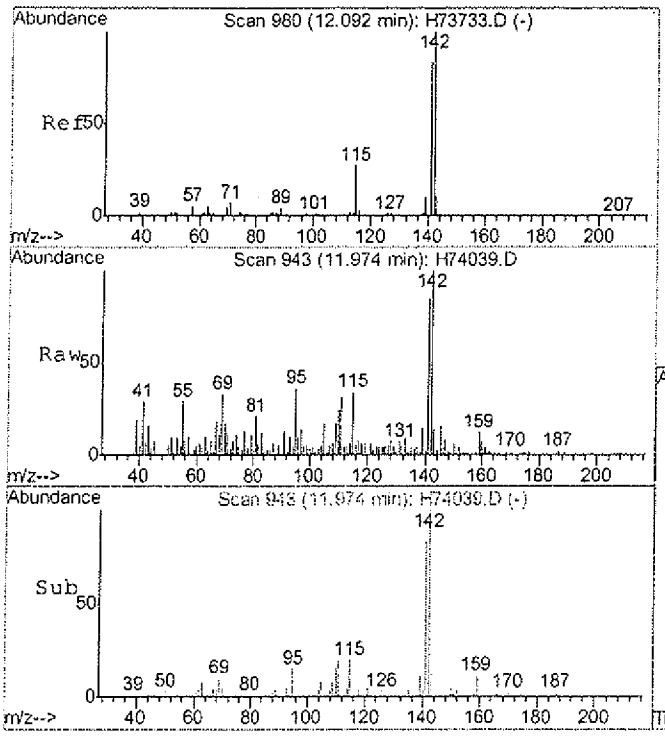


#39
Naphthalene
Concen: 4.30 ppb
RT: 10.71 min Scan# 831
Delta R.T. 0.02 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:128 Resp: 63953

Ion	Ratio	Lower	Upper
128	100		
129	21.0	0.0	40.9
127	13.2	0.0	40.9

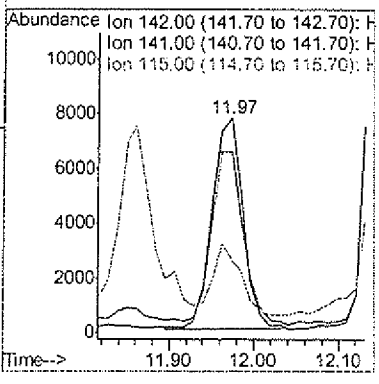




#45
2-Methylnaphthalene
Concen: 2.00 ppb
RT: 11.97 min Scan# 943
Delta R.T. 0.03 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

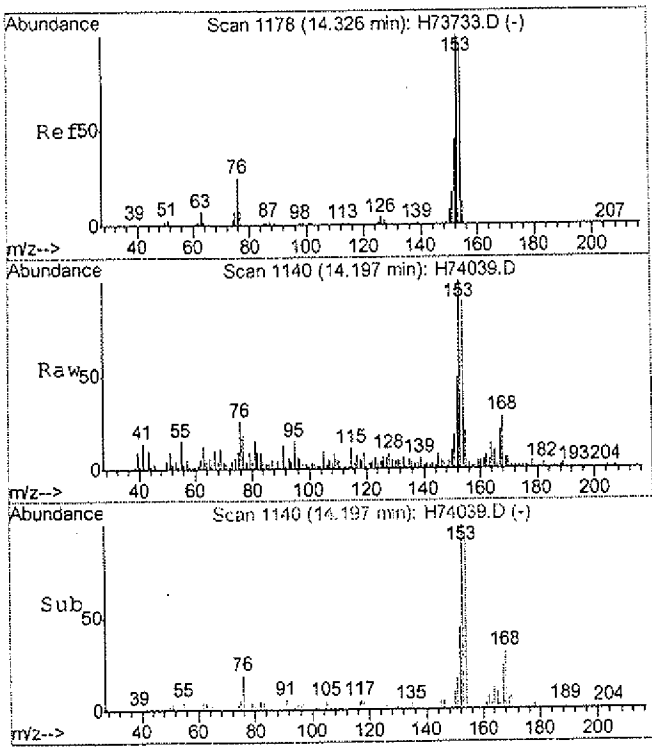
Tgt Ion:142 Resp: 19579

Ion	Ratio	Lower	Upper
142	100		
141	80.6	54.4	114.4
115	16.6	0.0	58.7



8.1.3

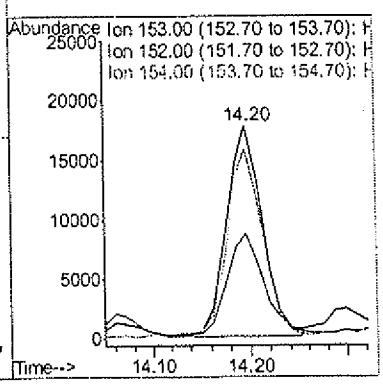
8

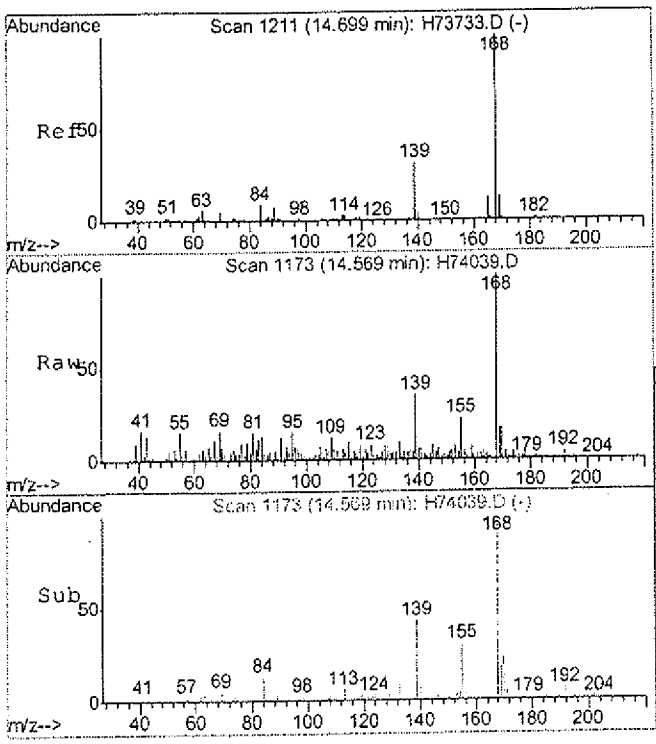


#60
Acenaphthene
Concen: 5.01 ppb
RT: 14.20 min Scan# 1140
Delta R.T. 0.03 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:153 Resp: 44489

Ion	Ratio	Lower	Upper
153	100		
152	48.2	15.6	75.6
154	89.4	59.1	119.1

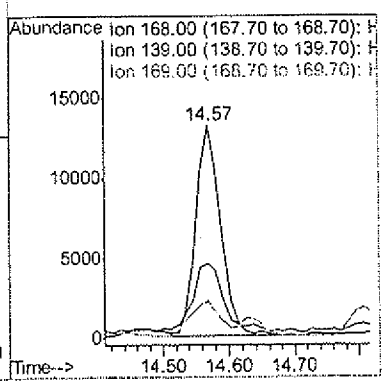




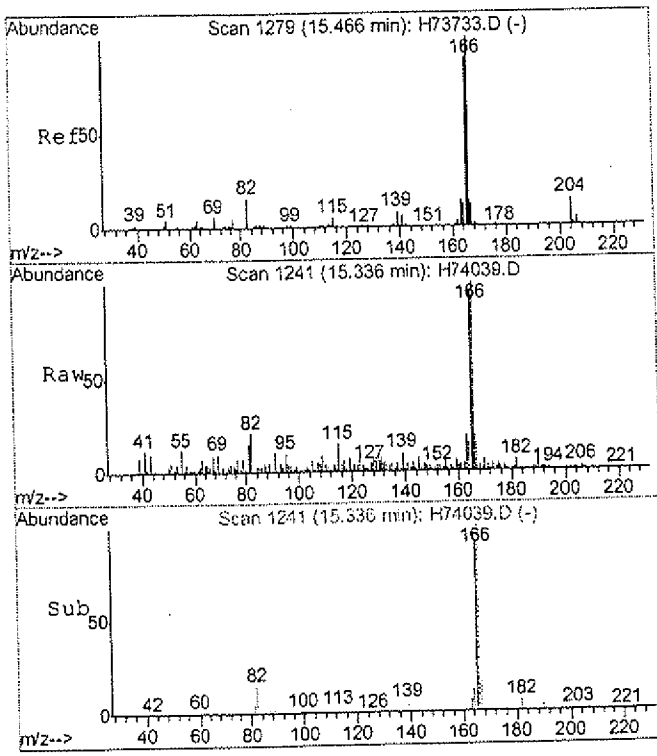
#63
Dibenzofuran
Concen: 2.69 ppb
RT: 14.57 min Scan# 1173
Delta R.T. 0.02 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:168 Resp: 33920

Ion	Ratio	Lower	Upper
168	100		
139	31.7	2.2	62.2
169	16.4	0.0	44.0



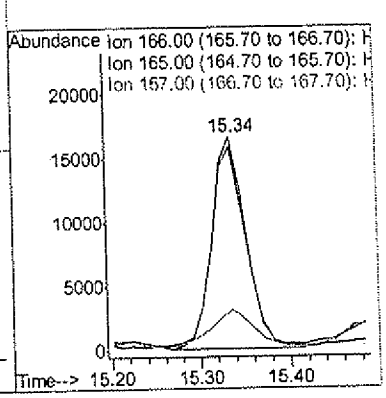
8.1.3 8

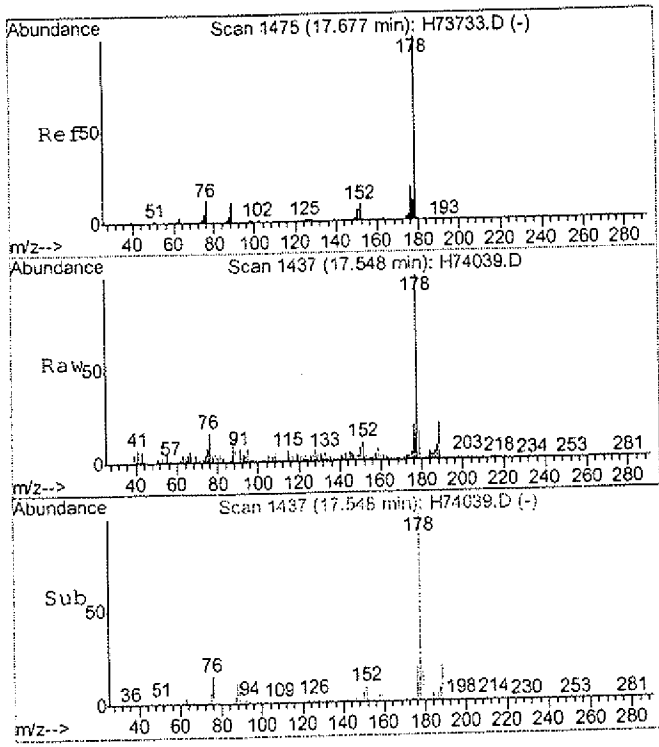


#66
Fluorene
Concen: 4.45 ppb
RT: 15.34 min Scan# 1241
Delta R.T. 0.03 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:166 Resp: 43632

Ion	Ratio	Lower	Upper
166	100		
165	93.5	59.7	119.7
167	17.3	0.0	43.2

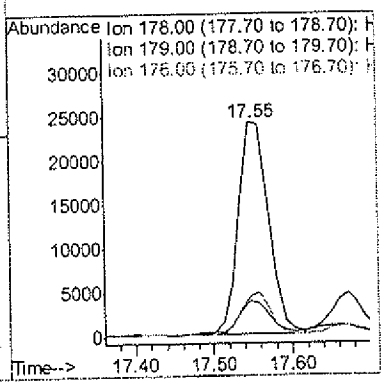




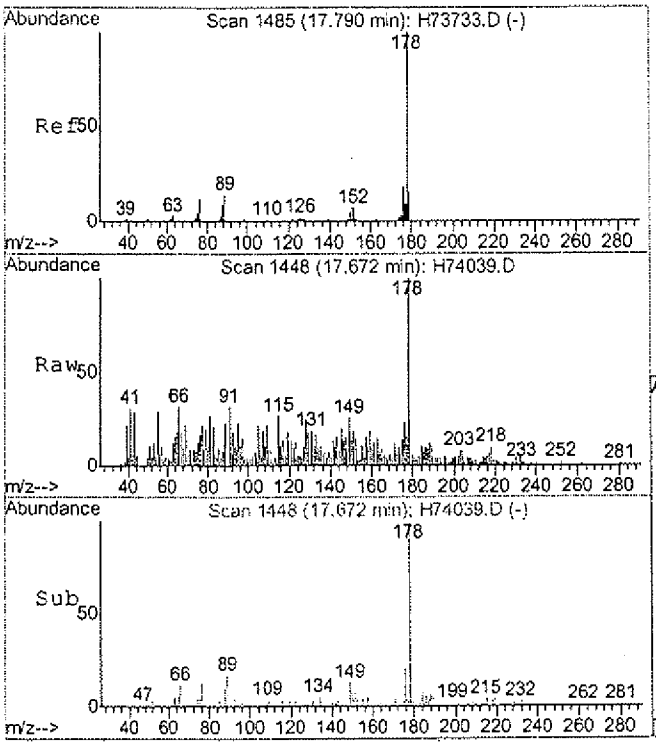
#78
Phenanthrene
Concen: 5.30 ppb
RT: 17.55 min Scan# 1437
Delta R.T. 0.02 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:178 Resp: 64336

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	44.6
176	17.8	0.0	48.6



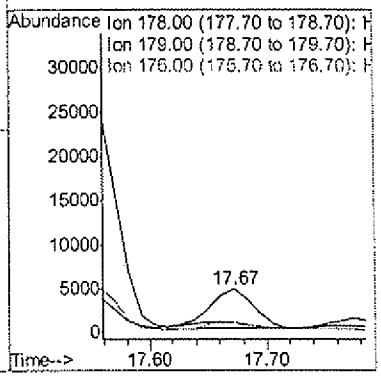
8.1.3 8

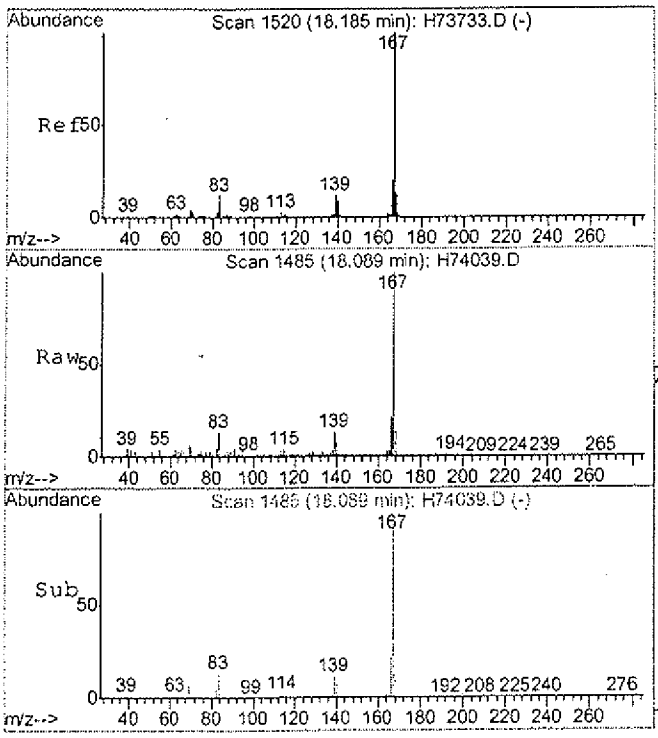


#79
Anthracene
Concen: 0.95 ppb
RT: 17.67 min Scan# 1448
Delta R.T. 0.03 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:178 Resp: 11877

Ion	Ratio	Lower	Upper
178	100		
179	13.7	0.0	45.2
176	17.9	0.0	48.2

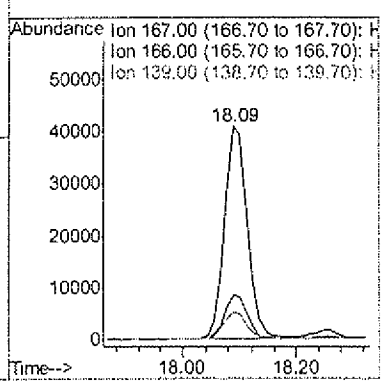




#80
Carbazole
Concen: 9.93 ppb
RT: 18.09 min Scan# 1485
Delta R.T. 0.03 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

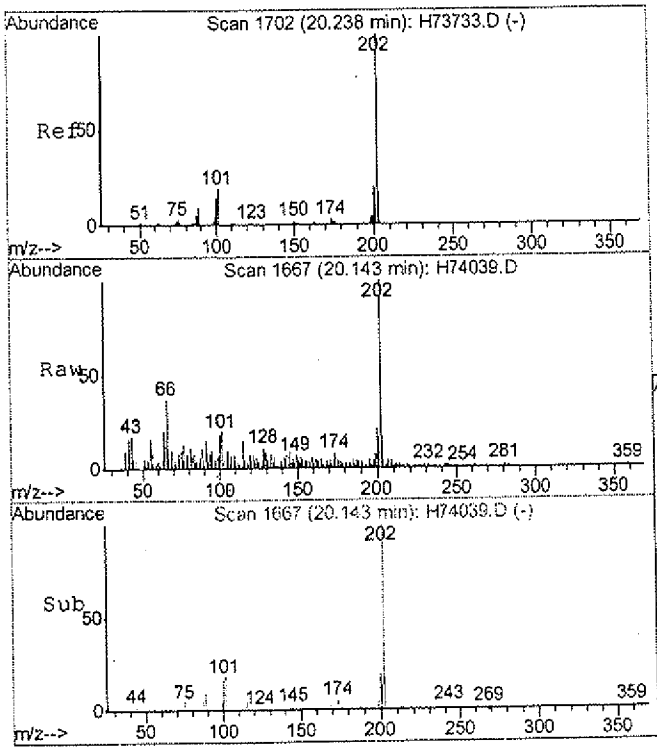
Tgt Ion:167 Resp: 114412

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	50.2
139	12.3	0.0	42.1



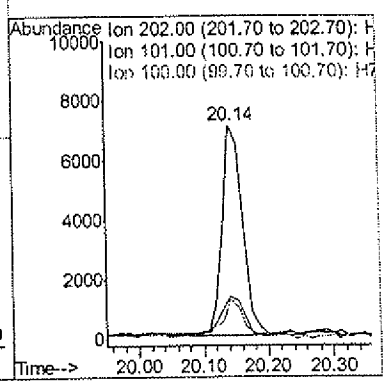
8.1.3

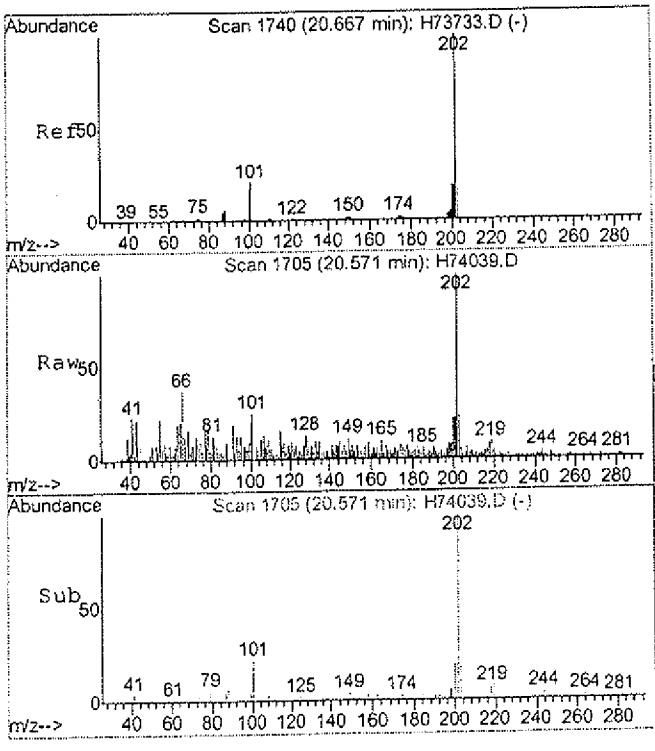
8



#82
Fluoranthene
Concen: 1.36 ppb
RT: 20.14 min Scan# 1667
Delta R.T. 0.02 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

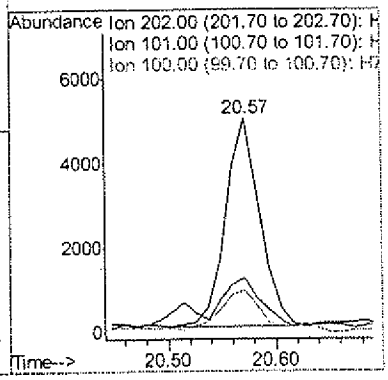
Tgt Ion:202	Resp:	15769	
Ion	Ratio	Lower	Upper
202	100		
101	18.2	0.0	48.1
100	17.8	0.0	44.5





#86
Pyrene
Concen: 0.94 ppb
RT: 20.57 min Scan# 1705
Delta R.T. 0.03 min
Lab File: H74039.D
Acq: 2 Apr 2005 4:31 am

Tgt Ion:202	Resp:	10864	
Ion	Ratio	Lower	Upper
202	100		
101	19.2	0.0	54.2
100	18.0	0.0	49.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EH3145\H74040.D
Acq On : 2 Apr 2005 5:01 am
Sample : N93379-4
Misc : OP19692,EH3145,1000
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:16 2005

Vial: 29
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Quant Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration
DataAcq Meth : MH3145

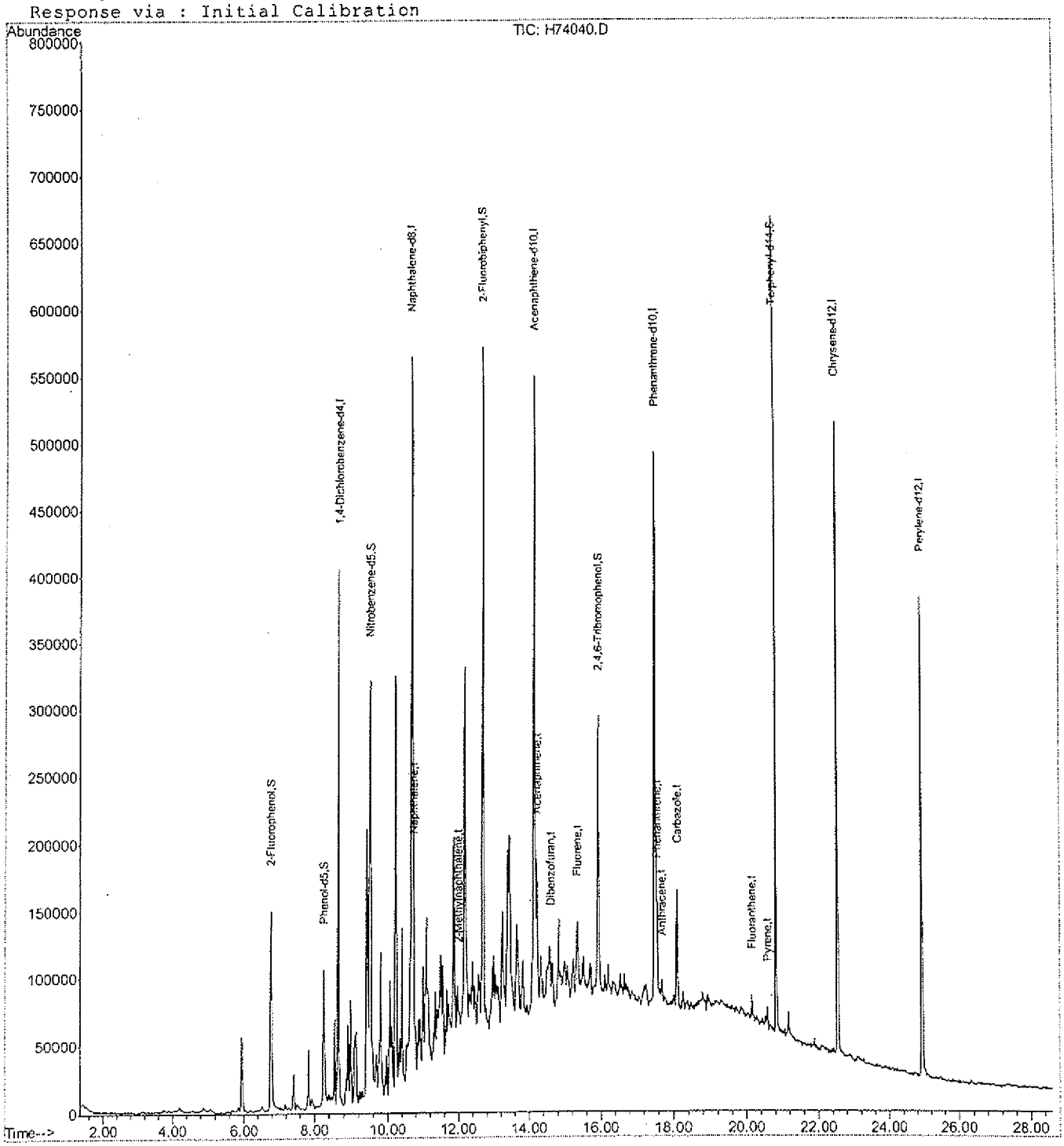
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.65	152	159765	40.00	ppb	0.02
25) Naphthalene-d8	10.68	136	611615	40.00	ppb	0.02
48) Acenaphthene-d10	14.13	164	285582	40.00	ppb	0.03
69) Phenanthrene-d10	17.50	188	397200	40.00	ppb	0.03
84) Chrysene-d12	22.53	240	304682	40.00	ppb	0.03
94) Perylene-d12	24.93	264	295846	40.00	ppb	0.03
System Monitoring Compounds						
5) 2-Fluorophenol	6.76	112	146408	23.34	ppb	0.02
Spiked Amount 50.000			Recovery =	46.68%		
8) Phenol-d5	8.25	99	121598	14.34	ppb	0.04
Spiked Amount 50.000			Recovery =	28.68%		
26) Nitrobenzene-d5	9.51	82	260327	48.73	ppb	0.03
Spiked Amount 50.000			Recovery =	97.46%		
52) 2-Fluorobiphenyl	12.67	172	431961	41.82	ppb	0.02
Spiked Amount 50.000			Recovery =	83.64%		
74) 2,4,6-Tribromophenol	15.91	330	68452	47.96	ppb	0.03
Spiked Amount 50.000			Recovery =	95.92%		
87) Terphenyl-d14	20.83	244	349838	44.41	ppb	0.03
Spiked Amount 50.000			Recovery =	88.82%		
Target Compounds						Qvalue
39) Naphthalene	10.72	128	66667	4.60	ppb	79
45) 2-Methylnaphthalene	11.97	142	22294	2.34	ppb	94
60) Acenaphthene	14.20	153	44118	5.14	ppb	94
63) Dibenzofuran	14.57	168	33378	2.73	ppb	95
66) Fluorene	15.34	166	44414	4.68	ppb	99
78) Phenanthrene	17.56	178	65966	5.61	ppb	99
79) Anthracene	17.67	178	11733	0.97	ppb	96
80) Carbazole	18.10	167	111152	9.97	ppb	98
82) Fluoranthene	20.15	202	15291	1.36	ppb	93
86) Pyrene	20.57	202	10984	0.97	ppb	91

(#) = qualifier out of range (m) = manual integration
H74040.D MH3145.M Mon Apr 04 09:05:14 2005 MSH

Quantitation Report

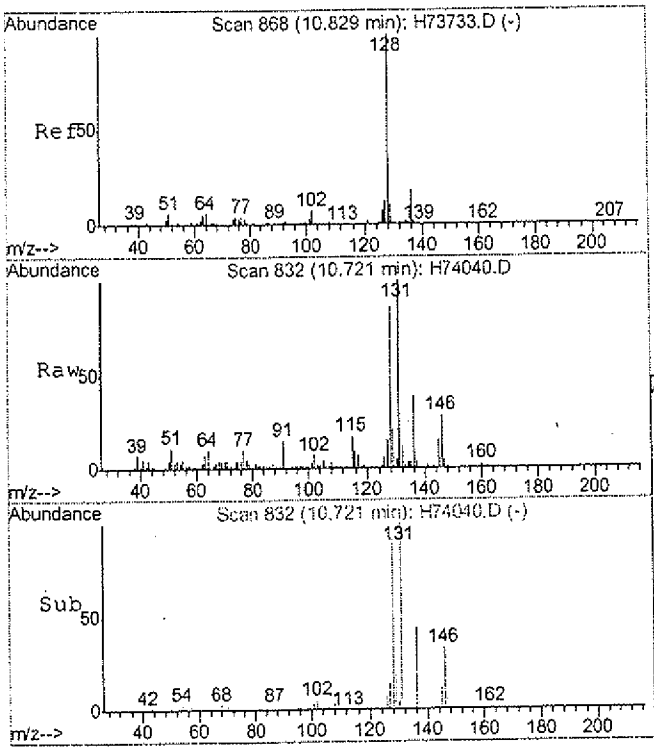
Data File : C:\HPCHEM\1\DATA\EH3145\H74040.D Vial: 29
Acq On : 2 Apr 2005 5:01 am Operator: SEANWE
Sample : N93379-4 Inst : MSH
Misc : OP19692,EH3145,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:16 2005 Quant Results File: MH3145.RES

Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration



8.1.4

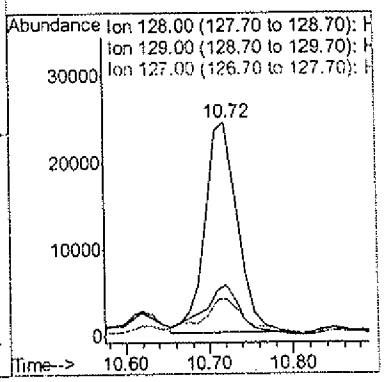
8

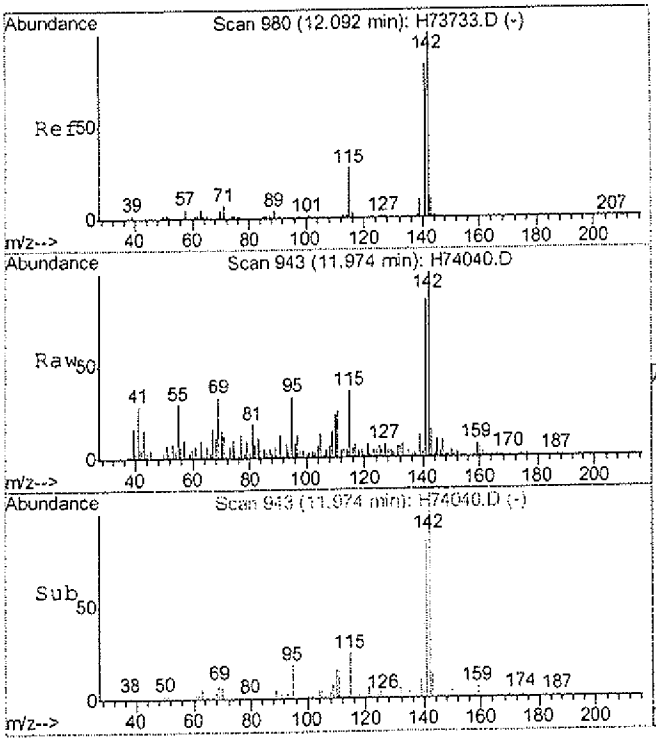


#39
Naphthalene
Concen: 4.60 ppb
RT: 10.72 min Scan# 832
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:128 Resp: 66667

Ion	Ratio	Lower	Upper
128	100		
129	22.4	0.0	40.9
127	15.6	0.0	40.9

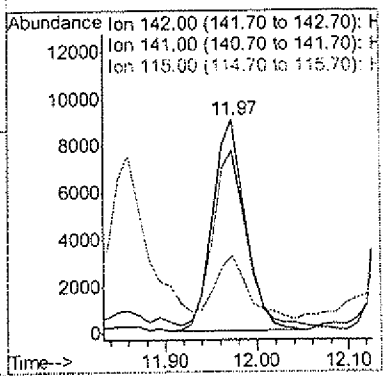




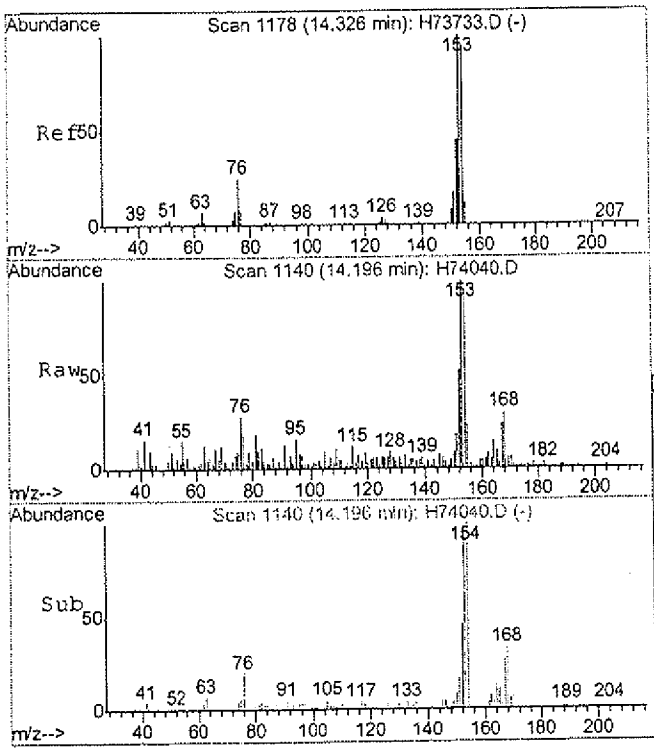
#45
2-Methylnaphthalene
Concen: 2.34 ppb
RT: 11.97 min Scan# 943
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:142 Resp: 22294

Ion	Ratio	Lower	Upper
142	100		
141	81.7	54.4	114.4
115	21.2	0.0	58.7



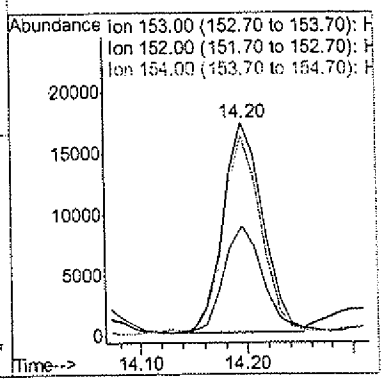
8.1.4

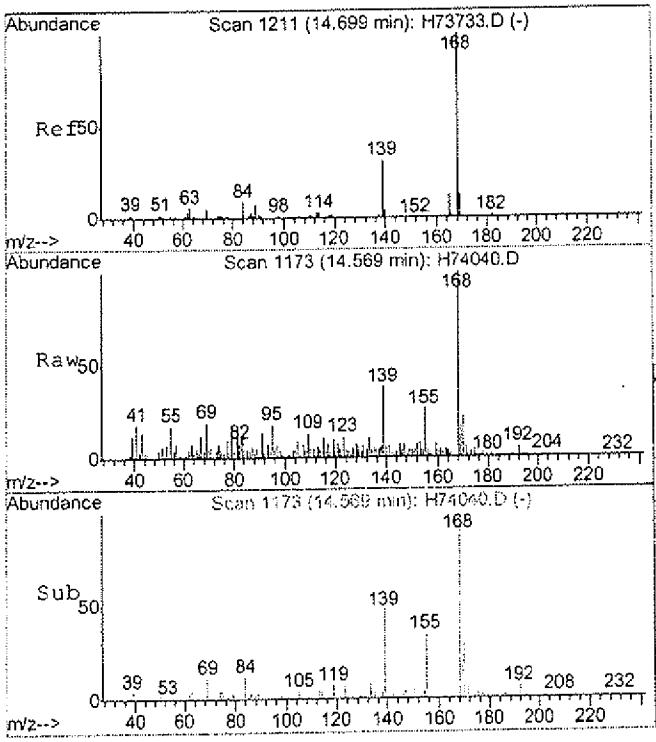


#60
Acenaphthene
Concen: 5.14 ppb
RT: 14.20 min Scan# 1140
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:153 Resp: 44118

Ion	Ratio	Lower	Upper
153	100		
152	50.6	15.6	75.6
154	93.6	59.1	119.1

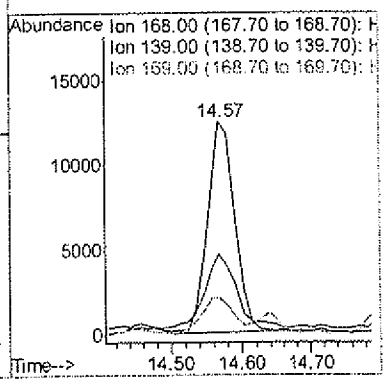




#63
Dibenzofuran
Concen: 2.73 ppb
RT: 14.57 min Scan# 1173
Delta R.T. 0.02 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

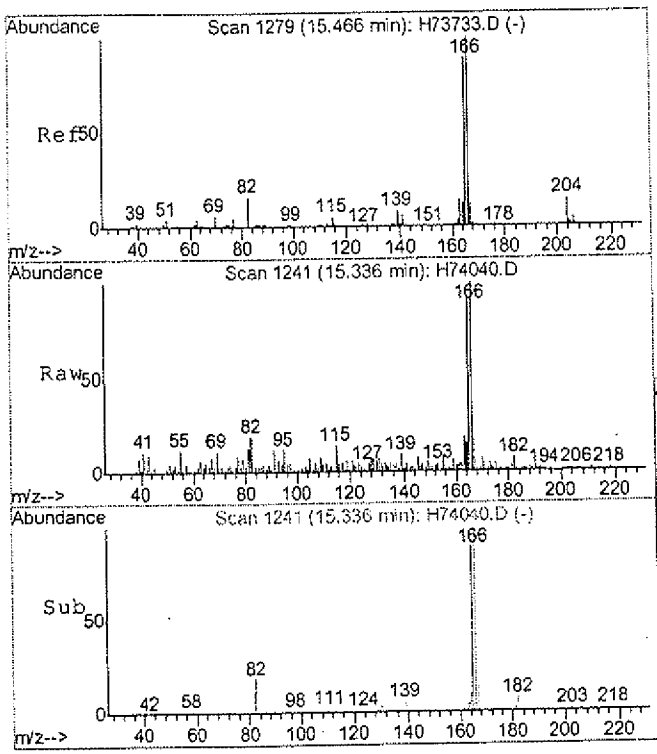
Tgt Ion:168 Resp: 33378

Ion	Ratio	Lower	Upper
168	100		
139	34.6	2.2	62.2
169	16.4	0.0	44.0



8.1.4

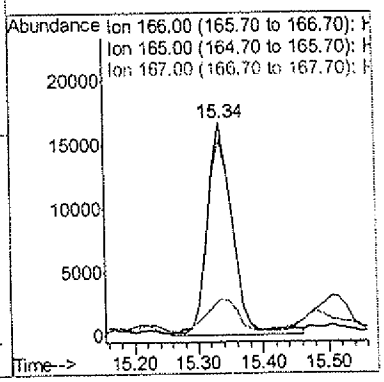
8

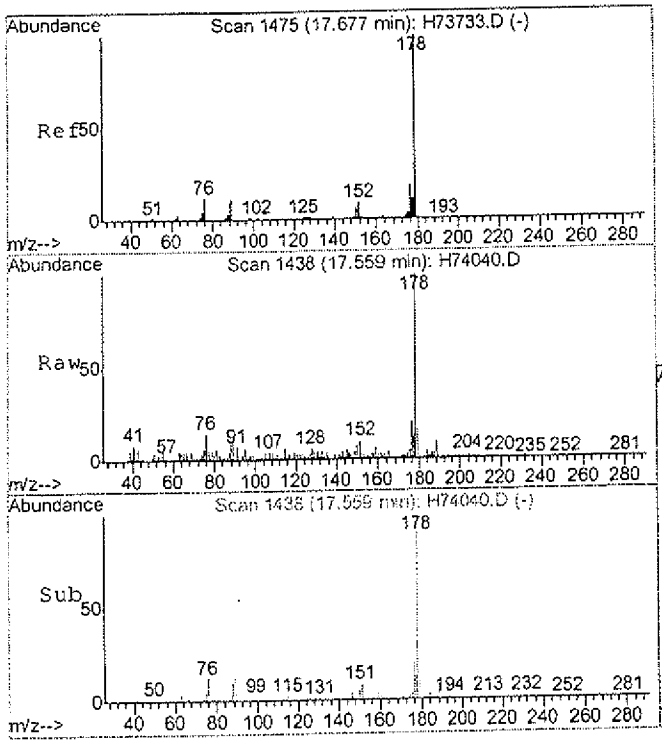


#66
Fluorene
Concen: 4.68 ppb
RT: 15.34 min Scan# 1241
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:166 Resp: 44414

Ion	Ratio	Lower	Upper
166	100		
165	89.0	59.7	119.7
167	12.4	0.0	43.2

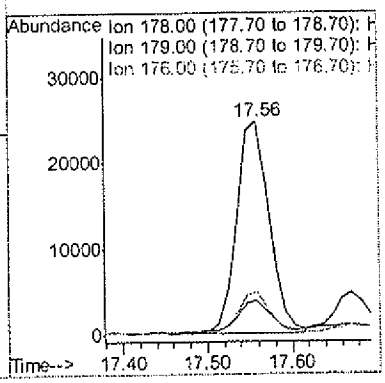




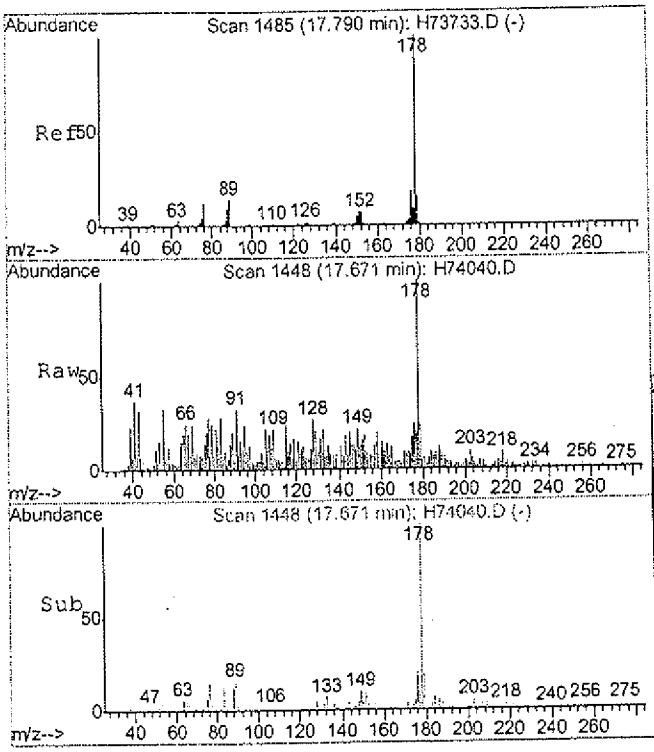
#78
Phenanthrene
Concen: 5.61 ppb
RT: 17.56 min Scan# 1438
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:178 Resp: 65966

Ion	Ratio	Lower	Upper
178	100		
179	14.1	0.0	44.6
176	19.2	0.0	48.6



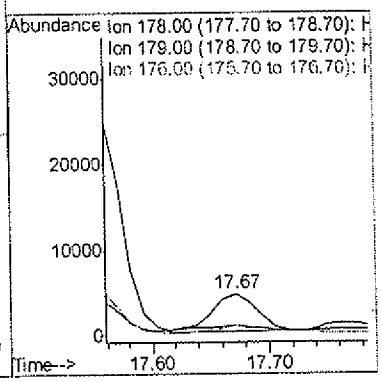
8.1.4

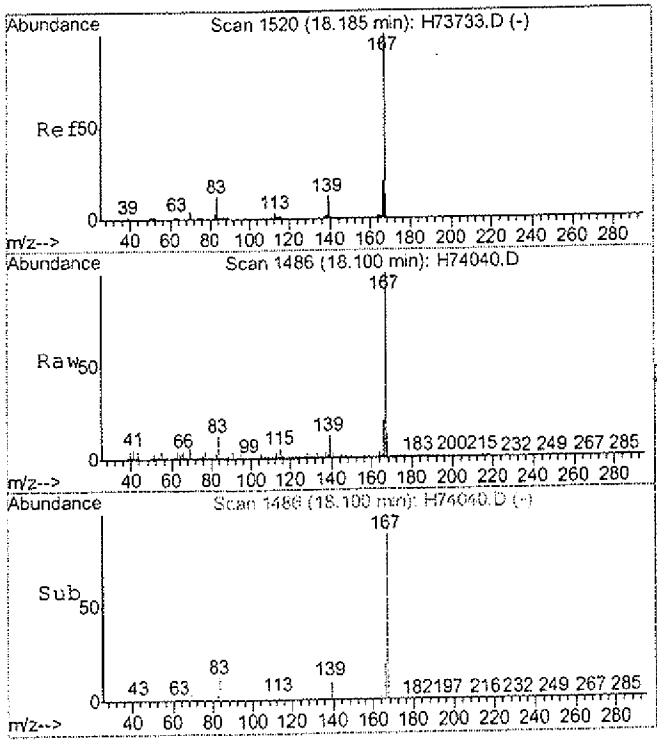


#79
Anthracene
Concen: 0.97 ppb
RT: 17.67 min Scan# 1448
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:178 Resp: 11733

Ion	Ratio	Lower	Upper
178	100		
179	13.5	0.0	45.2
176	19.7	0.0	48.2

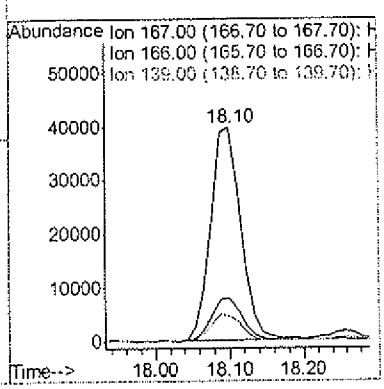




#80
Carbazole
Concen: 9.97 ppb
RT: 18.10 min Scan# 1486
Delta R.T. 0.04 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:167 Resp: 111152

Ion	Ratio	Lower	Upper
167	100		
166	19.8	0.0	50.2
139	11.0	0.0	42.1



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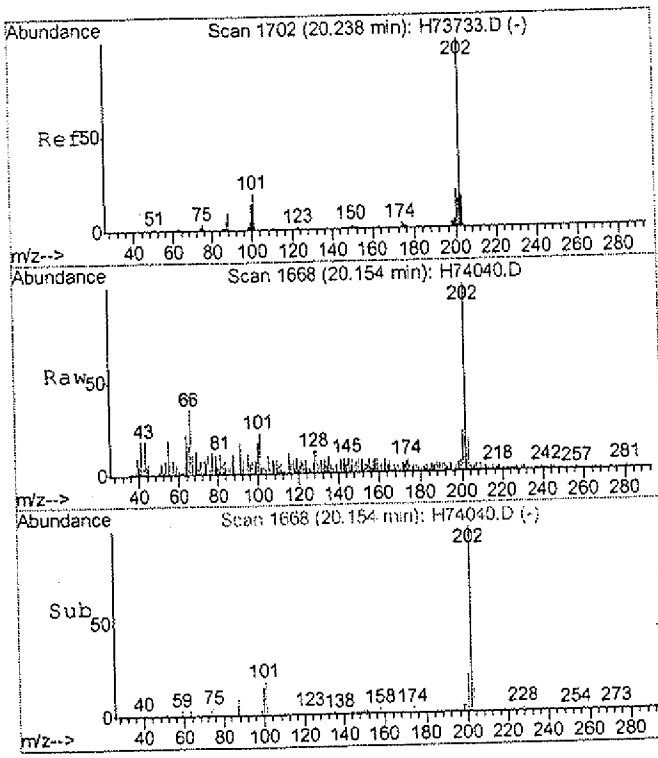
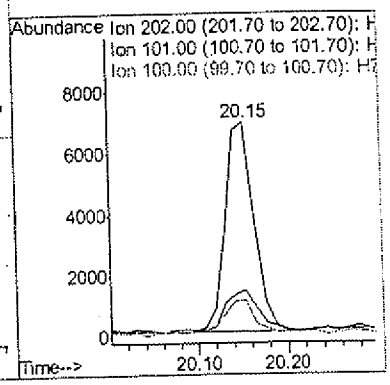
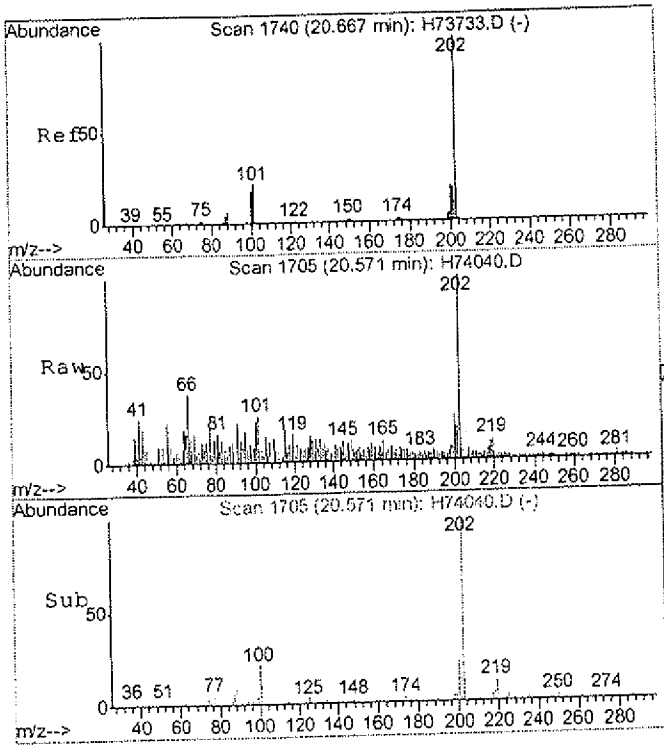


#82
Fluoranthene
Concen: 1.36 ppb
RT: 20.15 min Scan# 1668
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:202 Resp: 15291

Ion	Ratio	Lower	Upper
202	100		
101	22.7	0.0	48.1
100	15.4	0.0	44.5

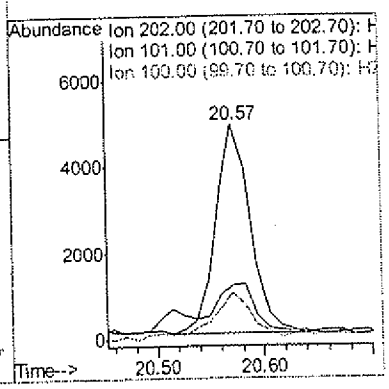




#86
Pyrene
Concen: 0.97 ppb
RT: 20.57 min Scan# 1705
Delta R.T. 0.03 min
Lab File: H74040.D
Acq: 2 Apr 2005 5:01 am

Tgt Ion:202 Resp: 10984

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	54.2
100	19.9	0.0	49.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EH3145\H74041.D
Acq On : 2 Apr 2005 5:45 am
Sample : N93379-5
Misc : OP19692,EH3145,1000
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:16 2005

Vial: 30
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Quant Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration
DataAcq Meth : MH3145

Internal Standards	R.T.	Qion	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.65	152	157954	40.00	ppb	0.02
25) Naphthalene-d8	10.68	136	620822	40.00	ppb	0.02
48) Acenaphthene-d10	14.12	164	295023	40.00	ppb	0.02
69) Phenanthrene-d10	17.50	188	425212	40.00	ppb	0.02
84) Chrysene-d12	22.53	240	320843	40.00	ppb	0.02
94) Perylene-d12	24.93	264	300804	40.00	ppb	0.03
System Monitoring Compounds						
5) 2-Fluorophenol	6.77	112	138001	22.25	ppb	0.02
Spiked Amount 50.000			Recovery =	44.50%		
8) Phenol-d5	8.26	99	117869	14.06	ppb	0.05
Spiked Amount 50.000			Recovery =	28.12%		
26) Nitrobenzene-d5	9.52	82	248562	45.84	ppb	0.03
Spiked Amount 50.000			Recovery =	91.68%		
52) 2-Fluorobiphenyl	12.68	172	440211	41.25	ppb	0.02
Spiked Amount 50.000			Recovery =	82.50%		
74) 2,4,6-Tribromophenol	15.91	330	60981	39.91	ppb	0.02
Spiked Amount 50.000			Recovery =	79.82%		
87) Terphenyl-d14	20.83	244	383264	46.20	ppb	0.02
Spiked Amount 50.000			Recovery =	92.40%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
H74041.D MH3145.M Mon Apr 04 09:05:25 2005 MSH

ACCUTEST
N93379

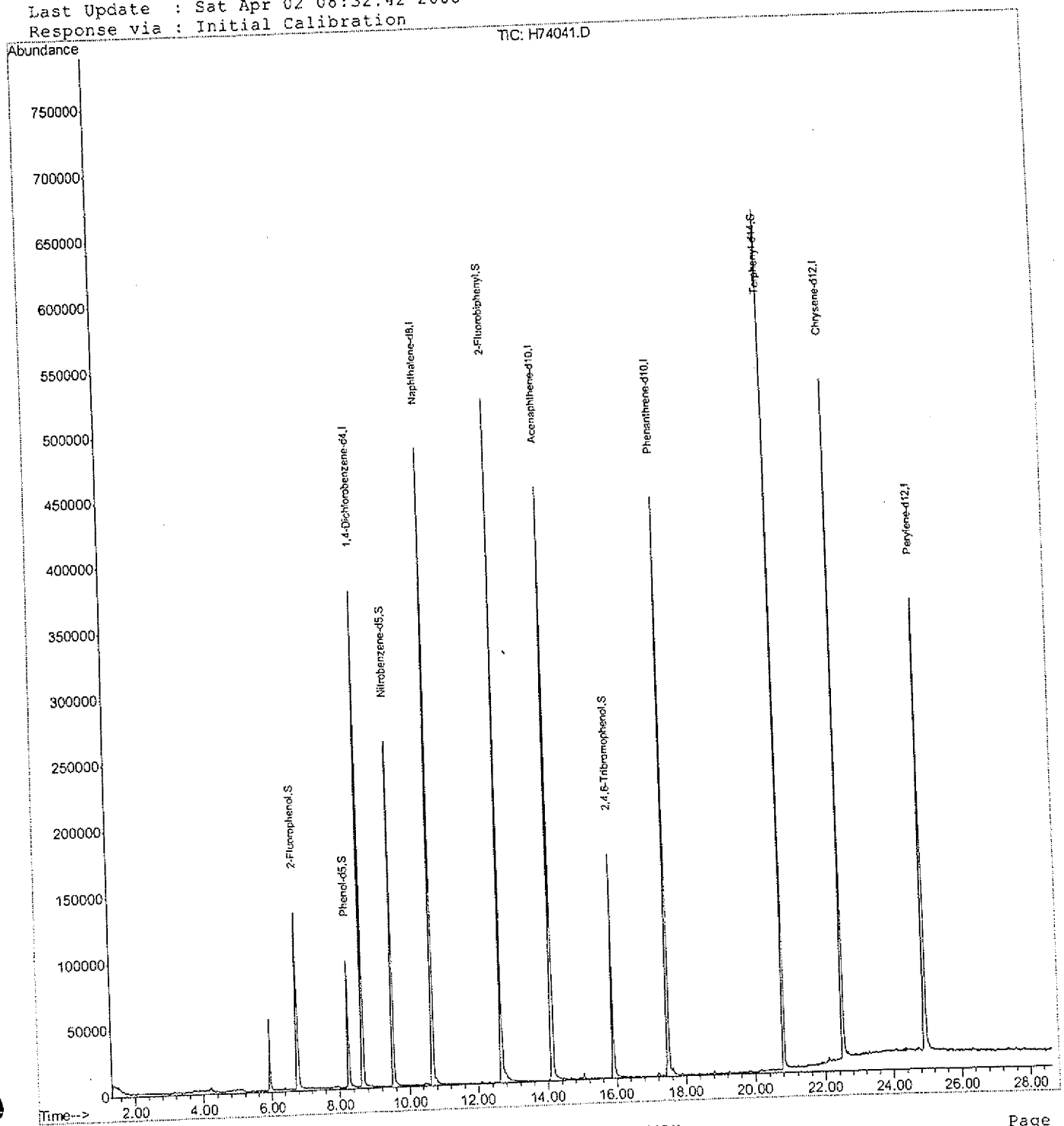
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EH3145\H74041.D
Acq On : 2 Apr 2005 5:45 am
Sample : N93379-5
Misc : OP19692,EH3145,1000
MS Integration Params: RTEINT.P
Quant Time: Apr 2 11:16 2005

Vial: 30
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration



8.1.5 8

H74041.D MH3145.M Mon Apr 04 09:05:26 2005 MSH

ACCUTEST
N93379

Quantitation Report (QT/LSC Reviewed)

Data File : C:\HPCHEM\1\DATA\EH3145\H74032.D
Acq On : 1 Apr 2005 11:54 pm
Sample : OP19692-MB2
Misc : OP19692,EH3145,1000
MS Integration Params: RTEINT.P
Quant Time: Apr 4 10:08 2005

Vial: 21
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Quant Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration
DataAcq Meth : MH3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.63	152	157294	40.00	ppb	0.00
25) Naphthalene-d8	10.66	136	608911	40.00	ppb	0.00
48) Acenaphthene-d10	14.10	164	294346	40.00	ppb	0.00
69) Phenanthrene-d10	17.47	188	442111	40.00	ppb	0.00
84) Chrysene-d12	22.52	240	330113	40.00	ppb	0.01
94) Perylene-d12	24.91	264	291971	40.00	ppb	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	6.76	112	180182	29.17	ppb	0.01
Spiked Amount 50.000			Recovery = 58.34%			
8) Phenol-d5	8.23	99	179936	21.55	ppb	0.02
Spiked Amount 50.000			Recovery = 43.10%			
26) Nitrobenzene-d5	9.50	82	225156	42.33	ppb	0.01
Spiked Amount 50.000			Recovery = 84.66%			
52) 2-Fluorobiphenyl	12.66	172	407492	38.27	ppb	0.00
Spiked Amount 50.000			Recovery = 76.54%			
74) 2,4,6-Tribromophenol	15.88	330	57264	36.05	ppb	0.00
Spiked Amount 50.000			Recovery = 72.10%			
87) Terphenyl-d14	20.81	244	368723	43.20	ppb	0.01
Spiked Amount 50.000			Recovery = 86.40%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
H74032.D MH3145.M Mon Apr 04 10:08:58 2005 MSH

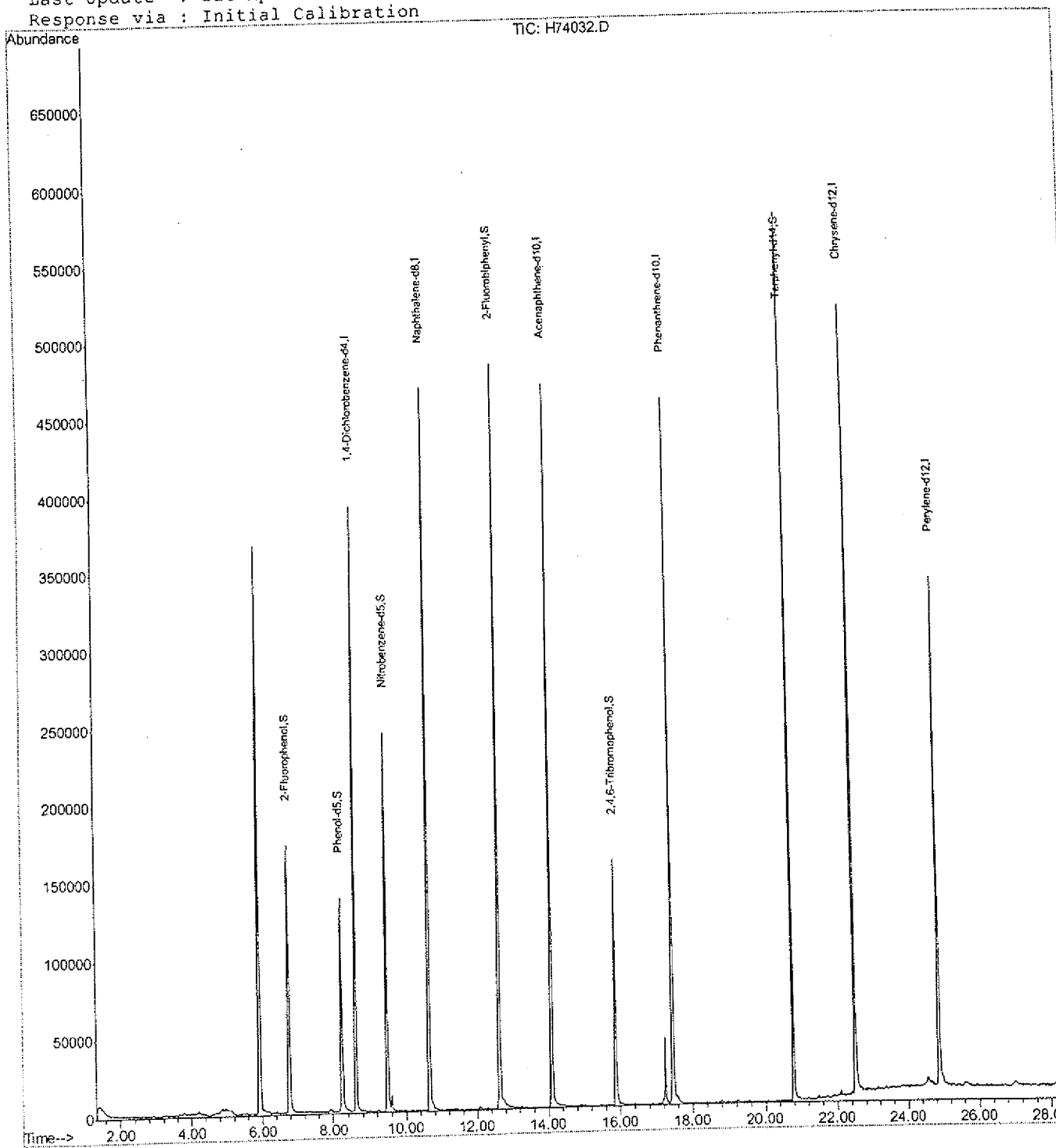
Quantitation Report

Data File : C:\HPCHEM\1\DATA\EH3145\H74032.D
Acq On : 1 Apr 2005 11:54 pm
Sample : OP19692-MB2
Misc : OP19692,EH3145,1000
MS Integration Params: RTEINT.P
Quant Time: Apr 4 10:08 2005

Vial: 21
Operator: SEANWE
Inst : MSH
Multiplr: 1.00

Quant Results File: MH3145.RES

Method : C:\HPCHEM\1\METHODS\MH3145.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sat Apr 02 08:32:42 2005
Response via : Initial Calibration



8.2.1 8

H74032.D MH3145.M Mon Apr 04 10:08:58 2005 MSH

ACCUTEST
N93379

Appendix G

Baseline Ecological Evaluation Report

ARCADIS

Baseline Ecological Evaluation

PSEG Salem Generation Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

PREPARED FOR

PSEG Nuclear, LLC

ARCADIS

Baseline Ecological Evaluation

PSEG Services Corporation
Salem Generating Station
Hancock's Bridge, New Jersey

Incident No. 04-08-02-2350-16

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Principal Scientist

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Our Ref.:
NP000603.0001

Date:
June 2005

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2 Summary of Soil Sampling Results

3 Comparison of Estimated Groundwater Concentrations to Surface Water Criteria

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2 Site Map

3 New Well Locations

4 Photograph Map

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A New Jersey Department of Environmental Protection Geographic Information System Database Search Results

B Photo Log

1. Introduction

ARCADIS prepared this Baseline Ecological Evaluation (BEE) for the PSEG Nuclear, LLC Salem Generating Station (the Site) located in Hancock's Bridge, New Jersey (**Figure 1**). The BEE was conducted in accordance with the New Jersey Department of Environmental Protection's (NJDEP's) tiered approach for conducting ecological evaluations and ecological risk assessments. The BEE comprises Tier I, which is a screening process required for all NJDEP Site Remediation Program (SRP) sites. The objectives of the BEE are to ensure that all sites are assessed for potential ecological effects and that sites without ecological concern are quickly eliminated from further, more rigorous site-specific investigation. Only those sites that have the potential for adverse ecological effects are retained for further investigation and/or risk assessment at the Tier II level. It is only at the Tier II level that definitive estimates of risk and the basis for determining clean-up goals are provided.

In accordance with NJDEP guidance (Hamill and Demarest 1997) and regulations N.J.A.C. 7:26E-3.11 (Technical Requirements for Site Remediation [Technical Requirements]; N.J.A.C. 7:26E-3.11), this BEE evaluates the co-occurrence of (a) chemicals of potential ecological concern (COPECs); (b) environmentally sensitive areas; and (c) chemical migration pathways at the Site. Existing site documents and analytical data, along with the results of a site reconnaissance, are used together to document these conditions.

The Site is located on a 740-acre parcel adjacent to the Delaware River, in Hancock's Bridge, New Jersey. The Salem Generation Station consists of two nuclear generating stations. A third nuclear generation station is located to the north at the adjoining Hope Creek Generating Station (ARCADIS 2005). This BEE is specific to the area of the diesel fuel release (Incident No. 04-08-02-2350-16), which occurred just to the south of the Salem Unit 1 Fuel Handling Building. The remainder of the Site is an operating nuclear generating station and was not evaluated as a part of this BEE.

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the storm water collection system just south of the Salem Unit 1 Fuel Handling Building (ARCADIS 2005). A pressure test on the underground diesel line was performed and revealed the leak was within a 300-foot section of piping. A "Tracer Tight" gas analysis was performed and the approximate location of the leak was identified. An excavation was opened around the piping to expose and repair the piping. The excavation was backfilled with clean fill material. The diesel leak area consists of asphalt covered drive and a gravel area adjacent to and south of the Salem Unit 1 Fuel

Handling Building (see Section 3.2). The leak occurred approximately 300 feet from the Delaware River.

2. Chemicals of Potential Ecological Concern

According to NJDEP guidance (Hamill and Demarest 1997) and regulations (N.J.A.C. 7:26E-3.11), COPECs should be identified based on their ability to biomagnify or bioaccumulate and/or the presence of maximum measured concentrations greater than ecotoxicologically-based benchmarks or screening values. In general, BEEs identify COPECs only for those impacted environmental media that are accessible to ecological receptors (e.g., surface soil, sediment, and surface water). Analytical data for the CEA area are available only for subsurface soil (Table 1) and groundwater (Table 2).

Currently, no impacted soils remain in the diesel leak area. The source has been temporarily mitigated, prior to implementation of the final remedy. Impacted soils were excavated from around the leak area and backfilled with clean fill (ARCADIS 2005). All historic soil sampling locations were at depths of at least 3.5 feet below ground surface (bgs) and were collected during the installation of monitoring wells AW through AZ (Figure 3). Soil sampling results are presented in Table 1, in the interest of completeness. However, all impacted soils have either been excavated or are covered by pavement or buildings, thus precluding ecological exposures to chemicals in subsurface soil. Therefore, no COPECs are identified for subsurface soil.

Groundwater monitoring activities at the Site have focused on volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCS). Table 2 summarizes the most recent analytical data for groundwater at the site, including the results of the December 2004 and March 2005 groundwater sampling events.

The Technical Requirements do not list any criteria or guidelines for use in selecting COPECs in groundwater, presumably because of the limited potential for ecological receptors to contact groundwater. It is only upon discharge of groundwater to surface water that ecological receptors could theoretically contact COPECs. Groundwater from this site discharges to the Delaware River, which is located approximately 300 feet from the diesel leak area. Given this distance and the relatively low concentrations of constituents detected in groundwater, concentrations are likely diluted to non-detectable concentrations prior to discharge to the Delaware River. Groundwater monitoring confirms that groundwater impacts are confined to a limited area of the Site. Separate-phase product has only been detected in Wells AU and AW, the two wells closest to the location of the leak. SVOCs have only been detected in Well-AV, located approximately 30 feet west-southwest of the leak area. VOCs have only been detected in Well X,

located adjacent to the fuel handling building. Well X is approximately 20 feet east-southeast of the diesel leak area, more than 300 feet from the river.

To ensure the conservatism of this BEE, ARCADIS compared average and maximum downgradient concentrations in groundwater to the lower value of the chronic marine and freshwater values listed in the National Oceanographic and Atmospheric Administration's Screening Quick Reference Tables (NOAA SQuiRTs) (Table 3). New Jersey Surface Water Quality Standards are not an appropriate basis for selecting COPECs at this Site, because those chemicals detected in groundwater only have standards established to protect human health, rather than aquatic organisms. In contrast, NOAA SQuiRTs are based on protection of aquatic organisms and, therefore, serve as appropriate ecological screening criteria. Other potential sources of ecologically-based surface water screening values, including the Delaware River Basin Committee and the U.S. Environmental Protection Agency's (USEPA's) Ambient Water Quality Criteria (AWQC) also lacked values for the compounds detected at the CEA.

Because there are no data from groundwater wells between the Well-AV and the Delaware River, the use of maximum detected groundwater concentrations represents worst case conditions. Average concentrations are more likely to reflect actual concentrations as groundwater migrates to and discharges to the Delaware River. As illustrated in Table 3, with one exception, the maximum concentrations of constituents detected in groundwater are less than the NOAA SQuiRTs values. That one exception is phenathrene, which was detected in two of nine samples. The two samples were duplicate samples and thus represent a single round of sampling at a single well. The average concentration of phenanthrene was below the NOAA SQuiRT value. Thus, following dilution and attention as the groundwater migrates to the river, as well as mixing within the river, exposures of aquatic life within the river to phenanthrene are expected to be well below the screening level.

In addition to considering concentrations relative to screening criteria, it is necessary to evaluate the bioaccumulative/biomagnifying potential of detected constituents. Based on NJDEP's guidance regarding biomagnifying compounds in sediment (NJDEP, 2005d) and the logarithms of the octanol water partitioning coefficients (log Kow values), dibenzofuran is the only detected compound in groundwater with the potential to bioaccumulate. Dibenzofuran was detected as an estimated concentration below the detection limit (J-qualified) in three out of nine samples. Given its low prevalence, low detected concentrations, and the likelihood of dilution and attenuation as it travels from groundwater to the Delaware River, it does not warrant inclusion as a COPEC.

No samples have currently been taken from wells AU and AW due to the presence of separate phase diesel in the well. This product is being actively remediated by a Spill Buster® unit which removes the separate phase diesel on a periodic schedule. Proof that this technique is working is illustrated by the lack of BTEX detected above the reporting limit in surrounding wells (Table 1). Further evidence to support this is that no TPH was detected in soil removed during well instillation (Table 2). The evidence shown above of and the continued active remediation of free product, no exposure pathways are open.

Based on the above information, no COPECs are selected for groundwater. As previously noted, the absence of accessible surface soil on the site precludes identification of any COPECs in soil. Thus, there are no COPECs in any media at this Site.

3. Environmentally Sensitive Area

The second element of the BEE is the documentation of any environmentally sensitive areas present on-site or immediately adjacent to the Site. Environmentally sensitive areas, as defined in N.J.A.C. 7:1E-4.10, include:

- River channels;
- Lakes and ponds;
- Reservoirs;
- Bays and estuaries;
- Cranberry bogs;
- Coastal wetlands;
- Interior wetlands;
- Beaches;
- Deciduous forest;
- Coniferous forest;
- Mixed forest; and
- Brush land and scrubland.

Based on a site reconnaissance conducted on April 26, 2005, information provided in technical reports on the Site, and a search of the NJDEP Geographic Information System (GIS) database, this section describes ecological habitat types and potential environmentally sensitive areas at the Site and within a one-half mile radius of the Site.

3.1 Site Setting and Land Use

A site location map is shown on **Figure 1**. As previously noted, the Site is located on a 740-acre parcel adjacent to a brackish reach of the Delaware River. The Site is bounded to the south and west by the Delaware River, to the north by Hope Creek Generation Station, and to the east by undeveloped land. Land surrounding the site is zoned for industrial, residential, and agricultural uses (ARCADIS 2005). However, there are no homes located within several miles of the station. As illustrated on the GIS

map provided in **Attachment A**, no natural heritage priority sites are located within one-half mile of the site.

3.2 Characterization of Environmentally Sensitive Area

Environmentally sensitive areas located within and adjacent to the Site were characterized during a site reconnaissance conducted on April 26, 2005. The Site reconnaissance was conducted by ARCADIS scientists familiar with the Site. No environmentally sensitive areas were identified within the diesel leak area. The cover in the immediate vicinity of the leak area is limited to dirt and gravel, with various sparsely growing grasses, approximately one to two inches in height (**Attachment B**, Photographs 1, 2 and 3). Cover in the surrounding area is comprised of asphalt, gravel, concrete and buildings (**Attachment B**, Photographs 4-10).

Environmentally sensitive areas located near the diesel fuel leak area include the Delaware River, the associated riparian buffer along the river, and extensive wetlands. The Delaware River basin and its tributaries drain an area of approximately 1,341 square miles (NJDEP 2005a, 2005b, 2005c). The Salem Generation Station is located on a reach of the river known as the Central Delaware River. The Central Delaware River and its tributaries drain an area of approximately 274 square miles (NJDEP 2005b). From the Site, the Delaware River flows into the Delaware Bay and the Atlantic Ocean, approximately 50 miles away.

The Delaware River and its tributaries provides habitat for numerous aquatic and terrestrial species, including aquatic birds [e.g., ospreys (*Pandion haliaetus*), great egrets (*Ardea alba*) mallards (*Anas platyrhynchos*)] and reptiles and amphibians [e.g., Eastern painted turtle (*Chrysemys picta*)]. Bird species observed during the Site reconnaissance included numerous bank swallows, a gull, an American robin, a common crow, and a great egret. In addition, the river provides habitat for many fish species, including striped bass (*Morone saxatulus),* bluefish (*Pomatomus salatrix)*, and Atlantic shad (*Alosa sapidissima.*).

The majority of land immediately adjacent to the river in the vicinity of the Site is classified as forest by NJDEP GIS. However, the area is in fact dominated by wetlands, with an estimated canopy cover of less then five percent at the time of the April 2005 site visit. The sandy soil is approximately 100 percent vegetated, with various native and exotic grasses. Arrow arum (*Peltandra virginica*), golden ragwort (*Senecio aureus*) and phragmites (*Phragmites austalis [communi])* are abundant and stabilize the banks. Limited areas within one-half mile of the Site are also characterized as mowed lawn and service roads.

3.3 NJDEP Geographic Information System Search Results

As part of the evaluation of the presence of environmentally sensitive area, the NJDEP GIS database was searched. The following data layers were downloaded for land within approximately one-half mile of the Site:

- Coastal centers
- Hydrography
- Natural Heritage priority sites
- Lakes
- 1995/97 Land use/landcover
- Linear wetlands
- Streams
- Wetlands

The GIS map is presented in **Attachment A**. Data layers that contain relevant information on the area searched include: the 1995/97 land use/land planning data layer, the streams data layer, and the wetlands area with Cowardin classifications data layer. Other features listed in the NJDEP GIS database, such as Natural Heritage priority sites, are not located within the area searched.

4. Migration Pathways to Environmentally Sensitive Areas

The third element of the BEE is an evaluation of the potential for COPECs to migrate from the source to receptors that may be present in environmentally sensitive areas identified above. In order for a pathway to be complete, the following five components must be present: (a) COPECs in environmental media; (b) a source of release of COPECs; (c) a migration pathway that allows the COPEC to move from its source to a point of possible contact; (d) an exposure point, where the receptor may come into contact with the COPEC; and (e) an exposure pathway, through which the receptor receives an absorbed dose of the COPEC. If one of these five components is not present, exposure of the receptor to COPECs is not physically possible.

Because COPECs were not identified for the diesel leak area, no pathways are complete, and exposure of ecological receptors to site-related COPECs is not possible. No COPECs were identified in soil, as all constituents have either been excavated or are covered by pavement or buildings. Although groundwater from the diesel leak area discharges to the Delaware River, there are no COPECs for groundwater and the groundwater-to-surface water migration pathway is incomplete.

The finding of no complete pathways is supported by the lack of evidence of potential effects in environmentally sensitive areas. For example, none of the following were observed during the site inspection:

- Stressed or dead vegetation;
- Discolored soil, sediment, or water;
- Absence of biota in a specified area of the system as compared to other similar area of the same system; or
- Presence of a seep or discharge.

5. Summary and Conclusions

In accordance with NJDEP guidance (Hamill and Demarest 1997) and regulations (N.J.A.C. 7:26E-3.11 of the NJDEP Technical Requirements), this BEE evaluates the co-occurrence of (a) COPECs; (b) environmentally sensitive areas; and (c) chemical migration pathways.

COPECs were not identified in either soil or groundwater at the diesel fuel leak area. Although SVOCs and VOCs have been detected in groundwater, concentrations in groundwater are below appropriate ecologically-based screening criteria for surface water. As a result of dilution and attenuation during transport, the concentrations that potentially discharge to surface water will be even lower. Thus, aquatic organisms are not expected to be exposed to harmful chemical concentrations. COPECs were not selected for soil because impacted soils either have been excavated or are covered by pavement or buildings. Therefore, no contact with ecological receptors is possible. Although the Site is largely surrounded by the Delaware River and its associated riparian corridor and wetlands, the NJDEP GIS database did not identify any Natural Heritage priority sites within one half mile of the Site. Because no COPECs are present at the CEA area, no further ecological evaluation is warranted.

6. References

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Tables

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Table 1. Summary of Groundwater Sampling Results
PSE&G Salem, Artificial Island, Salem, New Jersey.

Sample ID	Well X		Well AX*	Well AV		Well AVD**	Well AY		Well AZ	
	12/13/04	3/15/05	12/13/04	12/13/04	3/15/05	3/15/05	12/13/04	3/15/05	12/10/04	3/15/05
Semivolatile Organic Compounds										
2-Chlorophenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
4-Chloro-3-methyl phenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
2,4-Dichlorophenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
2,4-Dimethylphenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
2,4-Dinitrophenol	<20	<20	<20	<22	<20	<20	<21	<20	<20	NA
4,6-Dinitro-o-cresol	<20	<20	<20	<22	<20	<20	<21	<20	<20	NA
2-Methylphenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
3&4-Methylphenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
2-Nitrophenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
4-Nitrophenol	<20	<20	<20	<22	<20	<20	<21	<20	<20	NA
Pentachlorophenol	<20	<20	<20	<22	<20	<20	<21	<20	<20	NA
Phenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
2,4,5-Trichlorophenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
2,4,6-Trichlorophenol	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
Acenaphthene	<2	<2	<2	**0.64 J**	**5.0**	**5.1**	<2.1	<2	<2	NA
Acenaphthylene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Anthracene	<2	<2	<2	<2.2	**0.95 J**	**0.97 J**	<2.1	<2	<2	NA
Benzo(a)anthracene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Benzo(a)pyrene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Benzo(b)fluoranthene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Benzo(g,h,i)perylene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Benzo(k)fluoranthene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
4-Bromophenyl phenyl ether	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Butyl benzyl phthalate	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
2-Chloronaphthalene	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
4-Chloroaniline	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
Carbazole	<2	<2	<2	<2.2	**9.9**	**10**	<2.1	<2	<2	NA
Chrysene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
bis-(2-Chloroethoxy)methane	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
bis(2-Chloroethyl)ether	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
bis(2-Chloroisopropyl)ether	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
4-Chlorophenyl phenyl ether	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
1,2-Dichlorobenzene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
1,3-Dichlorobenzene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
1,4-Dichlorobenzene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
2,4-Dinitrotoluene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
2,6-Dinitrotoluene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
3,3'-Dichlorobenzidine	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
Dibenzo(a,h)anthracene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Dibenzofuran	<5	<5	<5	**0.71 J**	**2.7 J**	**2.7 J**	<5.3	<5	<5	NA
Di-n-butyl phthalate	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Di-n-octyl phthalate	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Diethyl phthalate	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Dimethyl phthalate	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
bis(2-Ethylhexyl)phthalate	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Fluoranthene	<2	<2	<2	**1 J**	**1.4 J**	**1.4 J**	<2.1	<2	<2	NA
Fluorene	<2	<2	<2	**1.4 J**	**4.4**	**4.7**	<2.1	<2	<2	NA
Hexachlorobenzene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Hexaclorobutadiene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Hexachlorocyclopentadiene	<20	<20	<20	<22	<20	<20	<21	<20	<20	NA
Hexachloroethane	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
Indeno(1,2,3-cd)pyrene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
Isophorone	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
2-Methylnaphthalene	<2	<2	<2	**1.8 J**	**2.0**	**2.3**	<2.1	<2	<2	NA
2-Nitroaniline	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
3-Nitroaniline	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
4-Nitroaniline	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
Naphthalene	<2	<2	<2	**3.9**	**4.3**	**4.6**	<2.1	<2	<2	NA
Nitrobenzene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
N-Nitroso-di-n-propylamine	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA
N-Nitrosodiphenylamine	<5	<5	<5	<5.6	<5	<5	<5.3	<5	<5	NA
Phenanthrene	<2	<2	<2	<2.2	**5.3**	**5.6**	<2.1	<2	<2	NA
Pyrene	<2	<2	<2	**0.96 J**	**0.94 J**	**0.97 J**	<2.1	<2	<2	NA
1,2,4-Trichlorobenzene	<2	<2	<2	<2.2	<2	<2	<2.1	<2	<2	NA

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Table 1. Summary of Groundwater Sampling Results
PSE&G Salem, Artificial Island, Salem, New Jersey.

Sample ID	Well X		Well AX*	Well AV		Well AVD**	Well AY		Well AZ	
	12/13/04	3/15/05	12/13/04	12/13/04	3/15/05	3/15/05	12/13/04	3/15/05	12/10/04	3/15/05
Volatile Organic Compounds										
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Bromoform	<4	<4	<4	<4	<4	<4	<4	<4	<4	NA
Bromomethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	NA
2-Butanone (MEK)	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA
Carbon Disulfide	<2	<2	<2	<2	<2	<2	<2	<2	<2	NA
Carbon Tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Ethylbenzene	<1	**0.83 J**	<1	<1	<1	<1	<1	<1	<1	NA
2-Hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
4-Methly-2-pentanone (MIBK)	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
Methylene Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	NA
Styrene	<5	<5	<5	<5	<5	<5	<5	<5	<5	NA
1,1,2,2-Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Tetrachloroethene	**0.87 J**	<1	<1	<1	<1	<1	<1	<1	<1	NA
Toulene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Vinyl Chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA
Xylenes (total)	<1	<1	<1	<1	<1	<1	<1	<1	<1	NA

Notes:

ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates compound is above the method detection limit.
<	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV

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Table 2. Summary of Soil Sampling Results
PSE&G Salem, Artificial Island, Salem, New Jersey.

Sample ID Monitoring Well Location Sample Date	D-2 (3.5-4.0) Well AW 11/8/04	D-3 (3.5-4.0) Well AV 11/8/04	D-4 (3.5-4.0) Well AY 11/8/04	D-4 (9.0-9.5) Well AY 11/8/04	D-5 (3.5-4.0) Well AZ 11/9/04	D-50 (3.5-4.0) Well AZ 11/9/04
Analyte (mg/kg)						
Petroleum Hydrocarbons	<28	<29	<32	<29	<27	<26
Benzene	<1	<1		<1	<1	<1
Bromodichloromethane	<1	<1		<1	<1	<1
Bromoform	<4	<4		<4	<4	<4
Bromomethane	<2	<2		<2	<2	<2
2-Butanone (MEK)	<10	<10		<10	<10	<10
Carbon Disulfide	<2	<2		<2	<2	<2
Carbon Tetrachloride	<1	<1		<1	<1	<1
Chlorobenzene	<1	<1		<1	<1	<1
Chloroethane	<1	<1		<1	<1	<1
Chloroform	<1	<1		<1	<1	<1
Chloromethane	<1	<1		<1	<1	<1
Dibromochloromethane	<1	<1		<1	<1	<1
1,1-Dichloroethane	<1	<1		<1	<1	<1
1,2-Dichloroethane	<1	<1		<1	<1	<1
1,1-Dichloroethene	<1	<1		<1	<1	<1
cis-1,2-Dichloroethene	<1	<1		<1	<1	<1
trans-1,2-Dichloroethene	<1	<1		<1	<1	<1
1,2-Dichloropropane	<1	<1		<1	<1	<1
cis-1,3-Dichloropropene	<1	<1		<1	<1	<1
trans-1,3-Dichloropropene	<1	<1		<1	<1	<1
Ethylbenzene	<1	<1		<1	<1	<1
2-Hexanone	<5	<5		<5	<5	<5
4-Methly-2-pentanone (MIBK)	<5	<5		<5	<5	<5
Methylene Chloride	<2	<2		<2	<2	<2
Styrene	<5	<5		<5	<5	<5
1,1,2,2-Tetrachloroethene	<1	<1		<1	<1	<1
Tetrachloroethene	**0.87 J**	<1		<1	<1	<1
Toulene	<1	<1		<1	<1	<1
1,1,1-Trichloroethane	<1	<1		<1	<1	<1
1,1,2-Trichloroethane	<1	<1		<1	<1	<1
Trichloroethene	<1	<1		<1	<1	<1
Vinyl Chloride	<1	<1		<1	<1	<1
Xylenes (total)	<1	<1		<1	<1	<1
Tentatively Identified Compounds (total)				4.2 J	27.1	
Acetone				**4.2 JN**		
Chlorotrifluoroethene					**20 JN**	
1,2-Dichloro-1,2,2-trifluoroethane					**7.1 JN**	
Freon 113						

Notes:

0.87	Bold value indicates compound is above the NJGWQC standard
mg/kg	Milligrams per kilograms (equivalent to parts per million)
<	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
N	Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the indication is based on a library search
NA	Not analyzed

Table 3. Comparison of Estimated Groundwater Concentrations to Surface Water Criteria
PSE&G Salem, Artificial Island, Salem, New Jersey.

Constituents Detected in Groundwater	Maximum Concentration in Downgradient Wells (a) (ug/L)	Avarage Concentration in Downgradient Wells (a) (ug/L)	Log Kow (c)	NOAA SQuiRTs(d) (ug/L)
Acenaphthene	5.1	1.87	3.92	520 [e]
Anthracene	0.97	1.01	4.45	300 [f]
Carbazole	10	3.01	3.72	NA
Dibenzofuran	2.7	2.36	4.12	NA
Fluoranthene	1.4	1.09	5.15	16 [g]
Fluorene	4.7	1.84	4.18	300 [f]
2-Methylnaphthalene	2.3	1.35	3.3	300 [f]
Naphthalene	4.6	2.09	3.86	620 [e]
Phenanthrene	5.6	2.12	4.46	4.6 [g]
Pyrene	0.97	0.99	4.88	300 [f]
Ethylbenzene	0.83	0.54	3.15	430 [f]
Tetrachloroethene	0.87	0.54	3.4	450 [g]

Notes:

ug/L = Micrograms per liter (equivalent to parts per billion)

FCV = Final chronic value

MIDEQ = Michigan Department of Environmental Quality

NA Not Available

(a) Includes samples collected from Well-X, Well-AV, Well-AY and Well-AZ.

(b) Includes samples collected from Well-X, Well-AV, Well-AY and Well-AZ. Non-detects are assumed to be one half of the detection limit

(c) Risk Assessment Information System (RAIS), 2004.

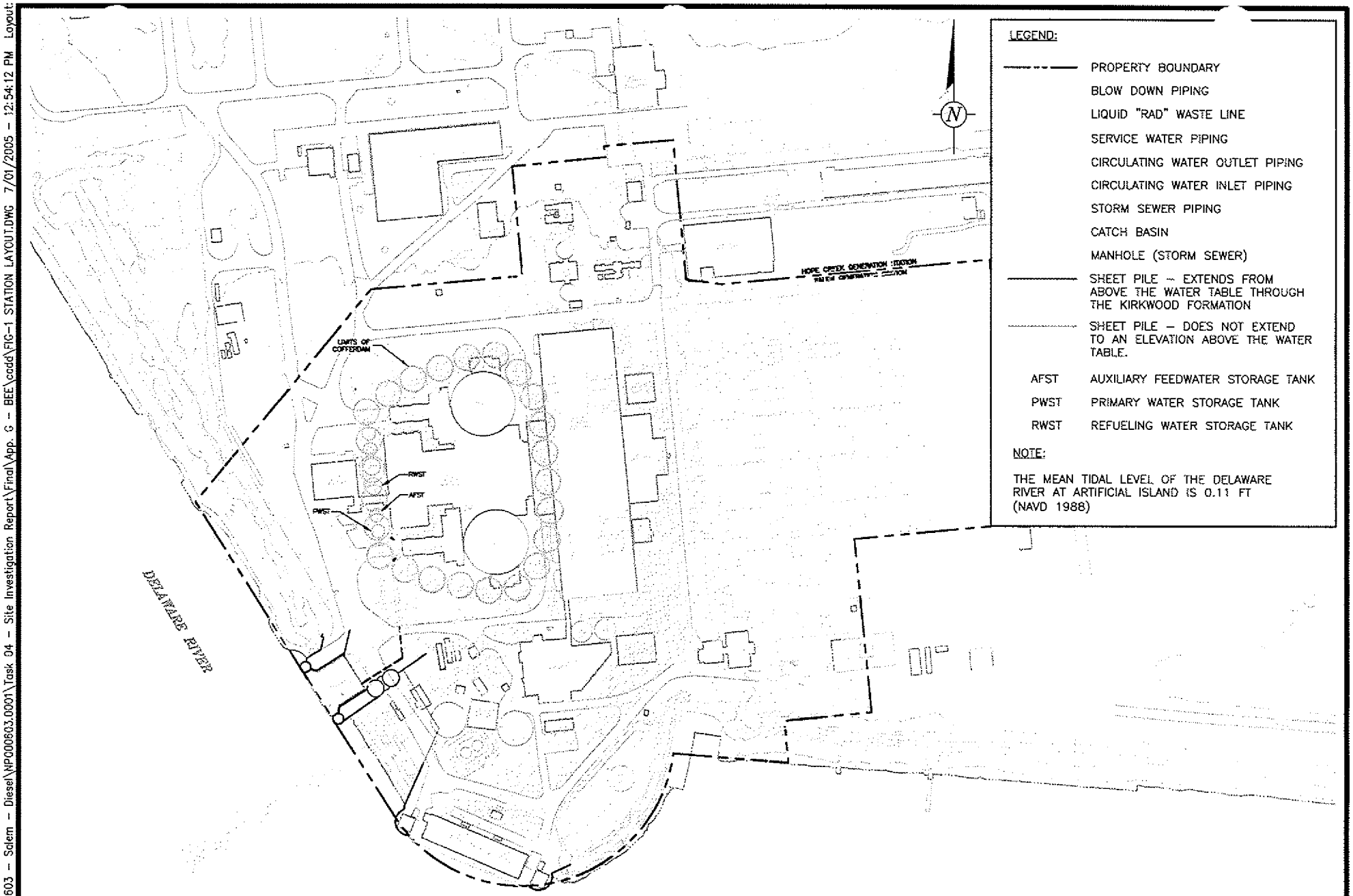
(d) The values used from the NOAA SQuiRTs are as followed: The lower value between the chronic freshwater and chronic marine is used. If only one chronic value is listed, then it is used. If no chronic values are listed then the lower values between the acute freshwater and the acute marine criteria is used.

(e) Value used is NOAA SQuiRTs freshwater chronic criteria

(f) Value used is NOAA SQuiRTs marine acute criteria

(g) Value used is NOAA SQuiRTs marine chronic criteria

Figures



G:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0001\Task 04 – Site Investigation Report\Final\App. G – BEE\cadd\FIG-1 STATION LAYOUT.DWG 7/01/2005 – 12:54:12 PM Layout:

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0 300
SCALE: 1"=300'

ARCADIS

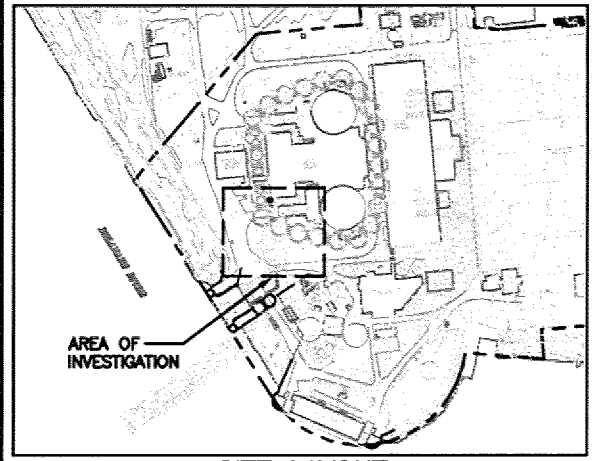
DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

STATION LAYOUT

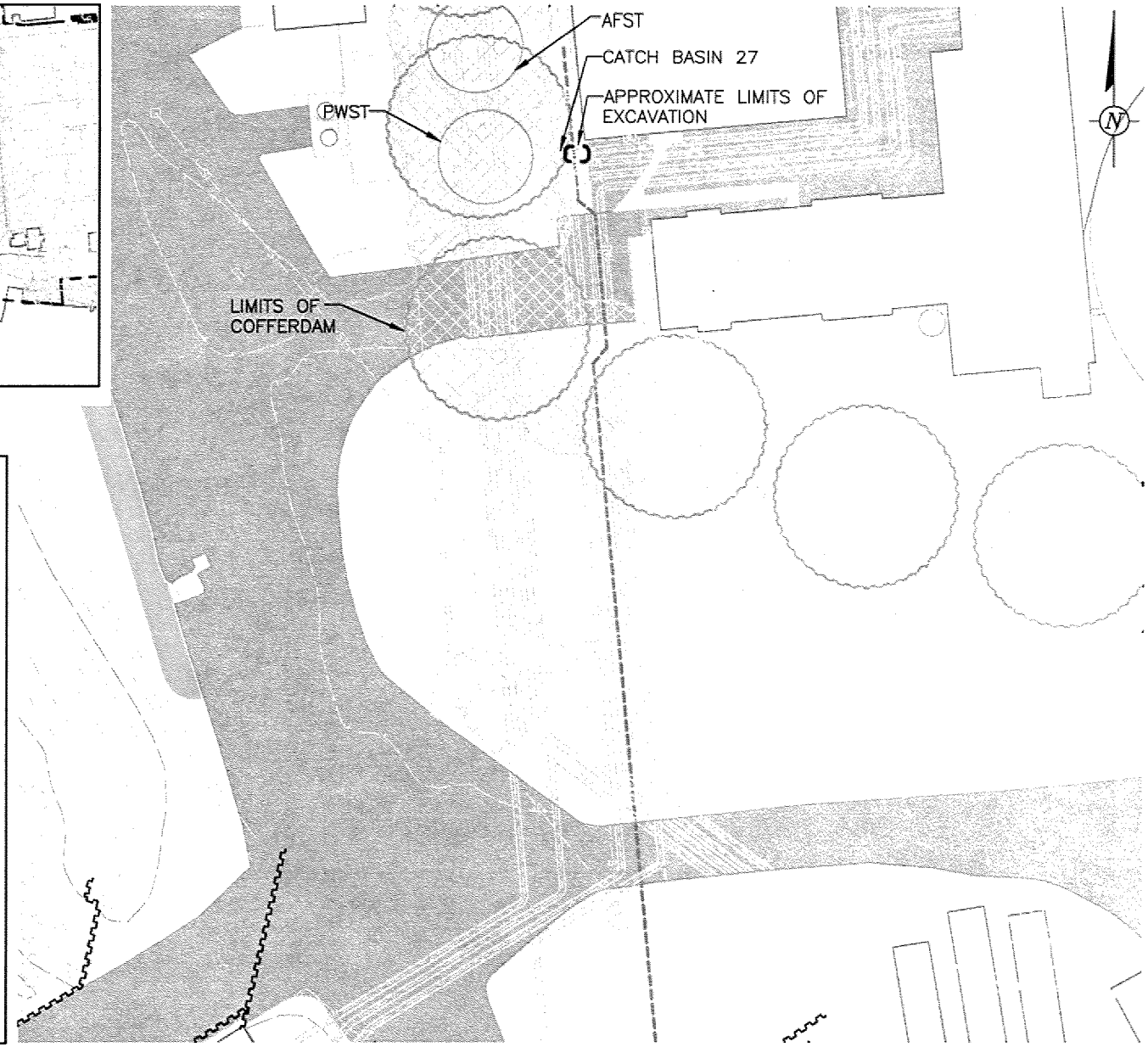
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
HANCOCK'S BRIDGE, NEW JERSEY

PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	1

SII-SSA-0014-002958



SITE LAYOUT
SCALE: 1"=600'



LEGEND:

- WETLAND
- GRAVEL AND STONE
- CONCRETE
- ASPHALT
- SANDY AREA
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- CHAINLINK FENCE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE – EXTENDS FROM ABOVE THE WATER TABLE THROUGH THE KIRKWOOD FORMATION
- SHEET PILE – DOES NOT EXTEND TO AN ELEVATION ABOVE THE WATER TABLE.

G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\Task 04 - Site Investigation Report\Final Draft\App. G - BEE\cadd\FIG-2 SITE MAP-2.DWG 5/13/2005 - 2:10:52 PM Layout: 8.5x11

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0 50
SCALE: 1"=50'

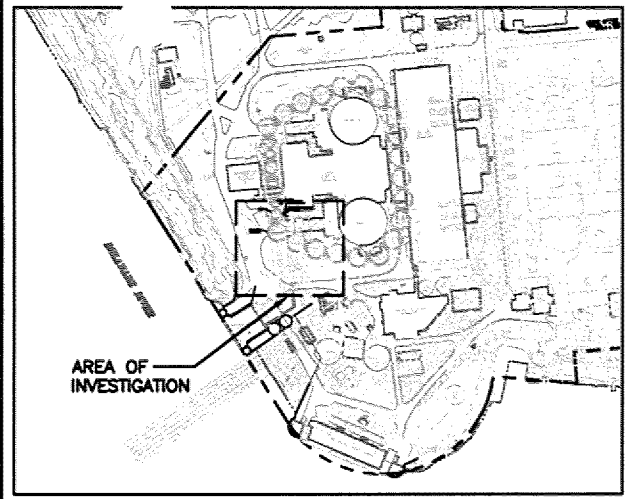
ARCADIS

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER	DRAWING NUMBER
		NP000603.0001	2

SITE MAP

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
HANCOCK'S BRIDGE, NEW JERSEY

SII-SSA-0014-002959



SITE LAYOUT
SCALE: 1"=600'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL-AU
WELL-X
WELL-AW
WELL-AV
LIMITS OF COFFERDAM
WELL-AY
WELL-AZ
N

LEGEND:

- WELL-AZ ⊙ MONITORING WELL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- CHAINLINK FENCE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE – EXTENDS FROM ABOVE THE WATER TABLE THROUGH THE KIRKWOOD FORMATION
- SHEET PILE – DOES NOT EXTEND TO AN ELEVATION ABOVE THE WATER TABLE.

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SCALE: 1"=50'

ARCADIS

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

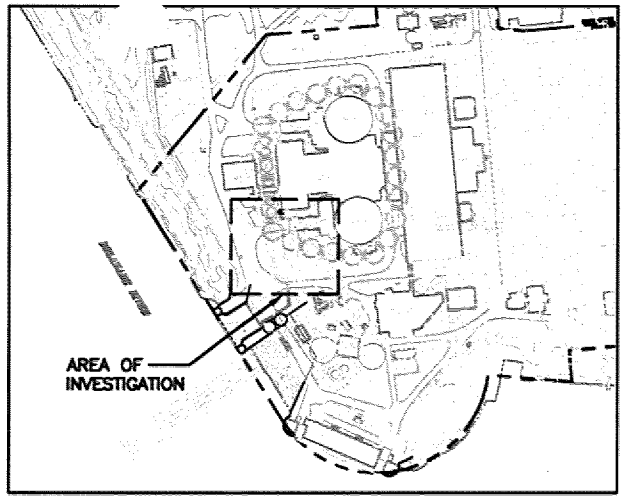
MONITORING WELL LOCATIONS

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
HANCOCK'S BRIDGE, NEW JERSEY

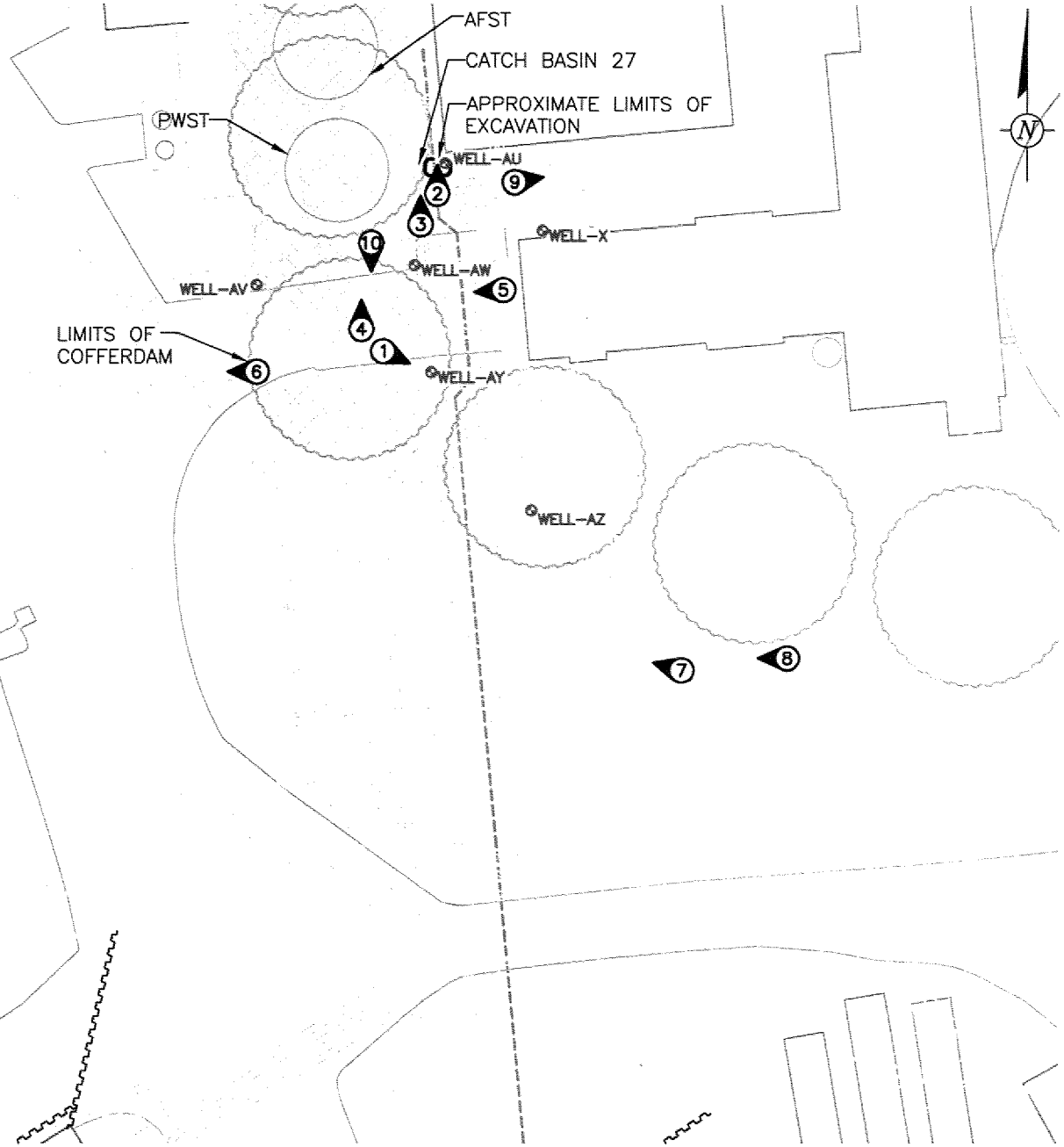
PROJECT NUMBER	DRAWING NUMBER
NP000603.0001	3

G:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0001\Task 04 – Site Investigation Report\Final\App. G – BEE\cadd\FIG-3 MONITORING WELL LOCATIONS.DWG 7/01/2005 – 4:08:44 PM

SII-SSA-0014-002960



SITE LAYOUT
SCALE: 1"=600'



LEGEND:

- PHOTOGRAPH NUMBER AND DIRECTION
- WELL-AZ — MONITORING WELL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- CHAINLINK FENCE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
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- SHEET PILE – DOES NOT EXTEND TO AN ELEVATION ABOVE THE WATER TABLE.

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SCALE: 1"=50'

ARCADIS

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	5/12/05	P. MILIONIS	A. ROBINSON
PHOTOGRAPH MAP		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER	DRAWING NUMBER
PSEG NUCLEAR, LLC SALEM GENERATING STATION HANCOCK'S BRIDGE, NEW JERSEY		NP000603.0001	4

G:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0001\Task 04 – Site Investigation Report\Final\App. G – BEE\cadd\FIG-4 PHOTOGRAPH MAP.DWG 7/01/2005 – 1:02:52 PM Layout:

SII-SSA-0014-002961

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Attachment A

New Jersey Department of Environmental Protection Geographic Information System Database Search Results

ARCADIS

Salem Generation Station
Hancock's Bridge, New Jersey

SII-SSA-0014-002964

ARCADIS

Attachment B

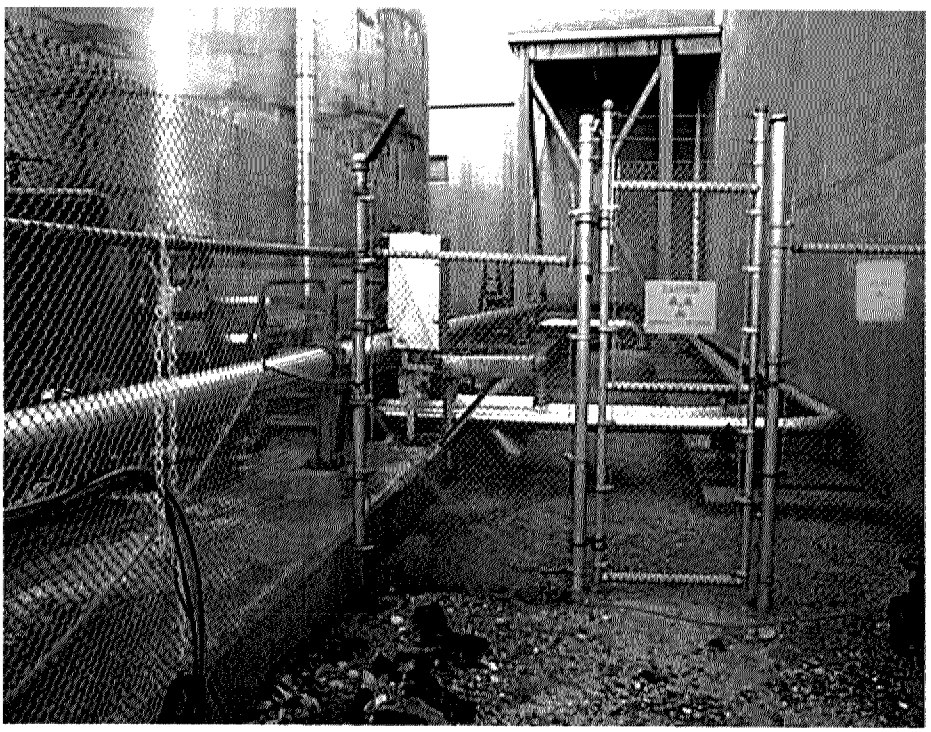
Photo Log

Attachment B
Photo Log

Salem Generation Station
Hancock's Bridge, New Jersey

Photograph 1

Radiation yard south of the fuel handling building. The radiation yard is covered by sand, gravel and hard packed dirt. Grasses grow sparsely in the yard.

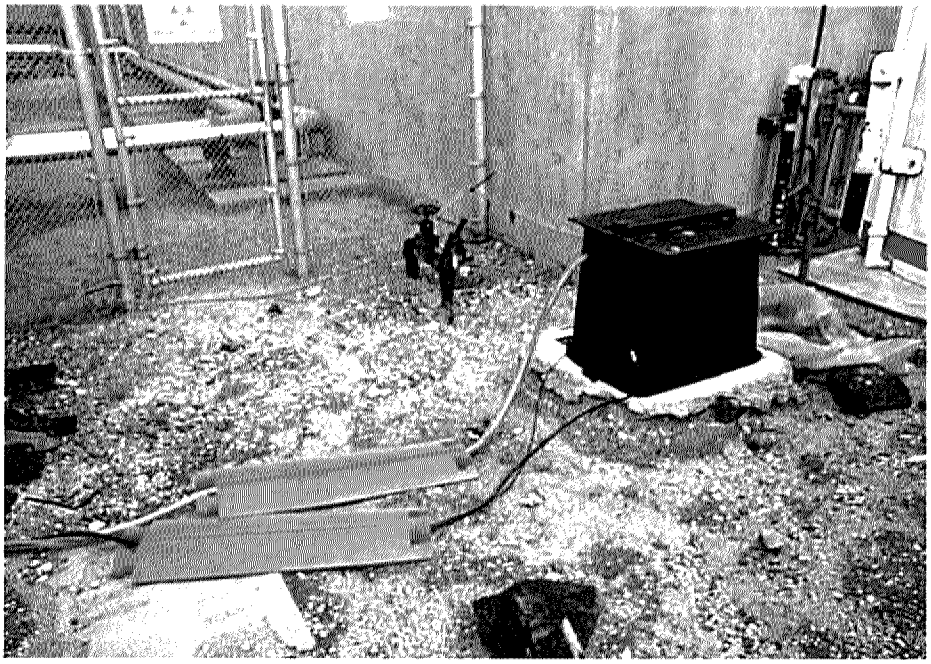


Photograph 2

View from well au, looking north at a radiation area. Ground is covered by concrete, sand and hard packed dirt. Grasses grow sparsely in this area.

Attachment B
Photo Log

Salem Generation Station
Hancock's Bridge, New Jersey



Photograph 3

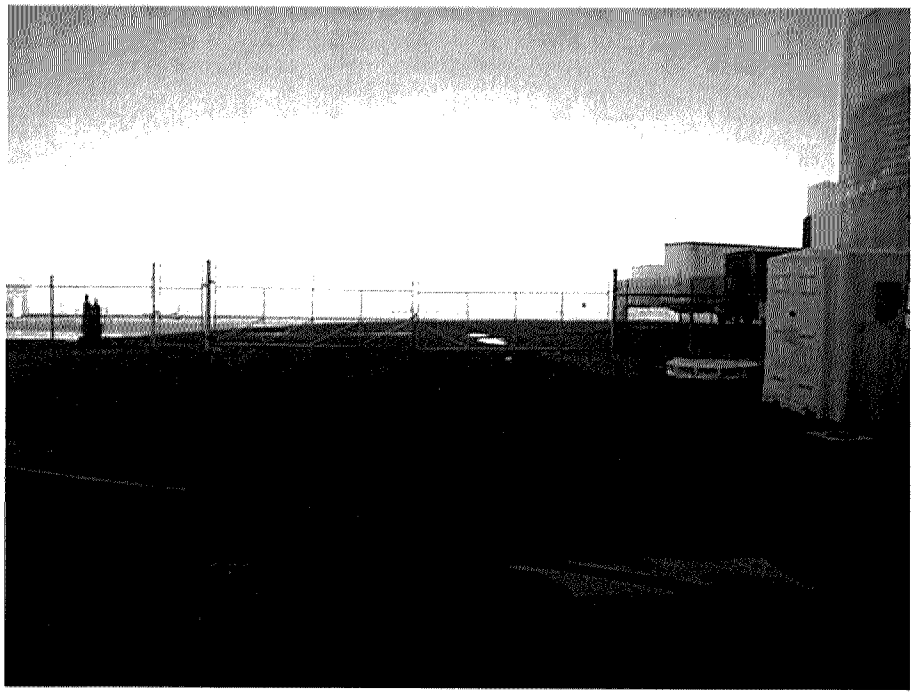
Well au, site of soil excavation, and Spill Buster® oil and water separation system.

Photograph 4

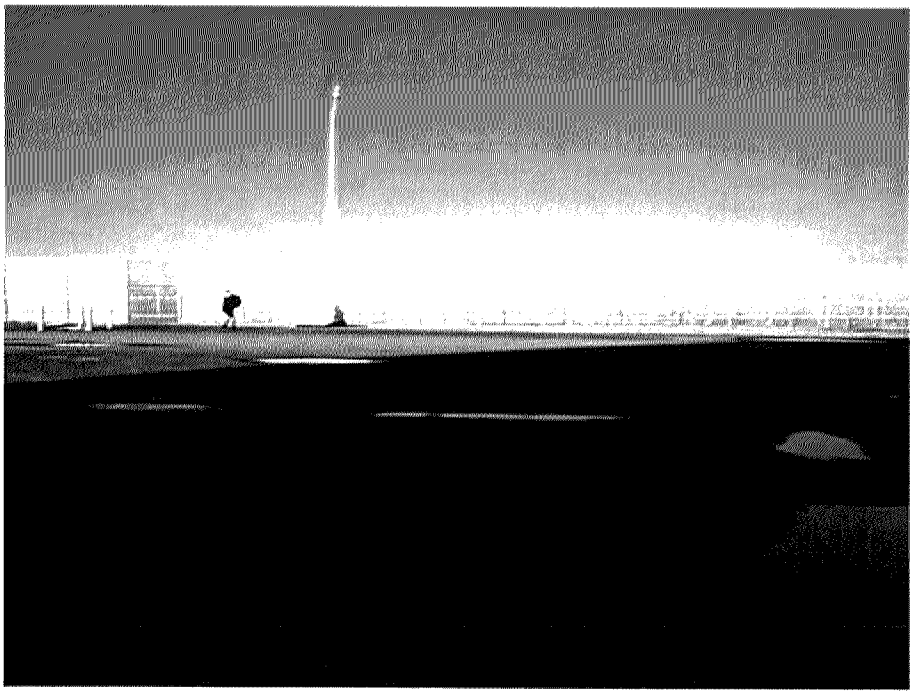
View of oil containment building from the south. Asphalt and gravel cover the ground.

Attachment B
Photo Log

Salem Generation Station
Hancock's Bridge, New Jersey



Photograph 5
View from the fuel handling building looking west. Asphalt, concrete and gravel cover the soil.

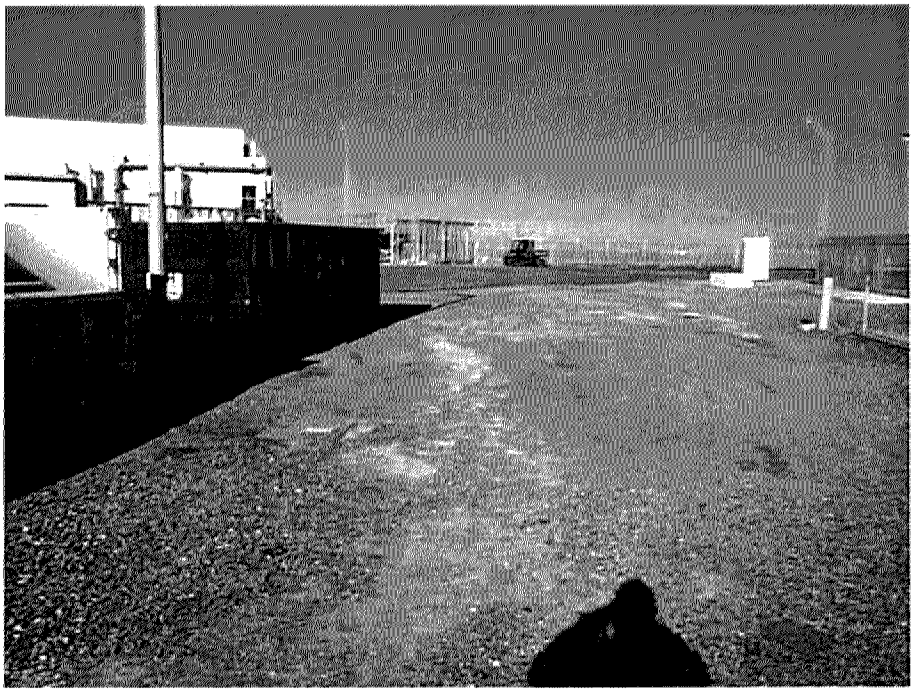


Photograph 6

View from gate outside of the diesel leak area, looking west. Asphalt covers the soil.

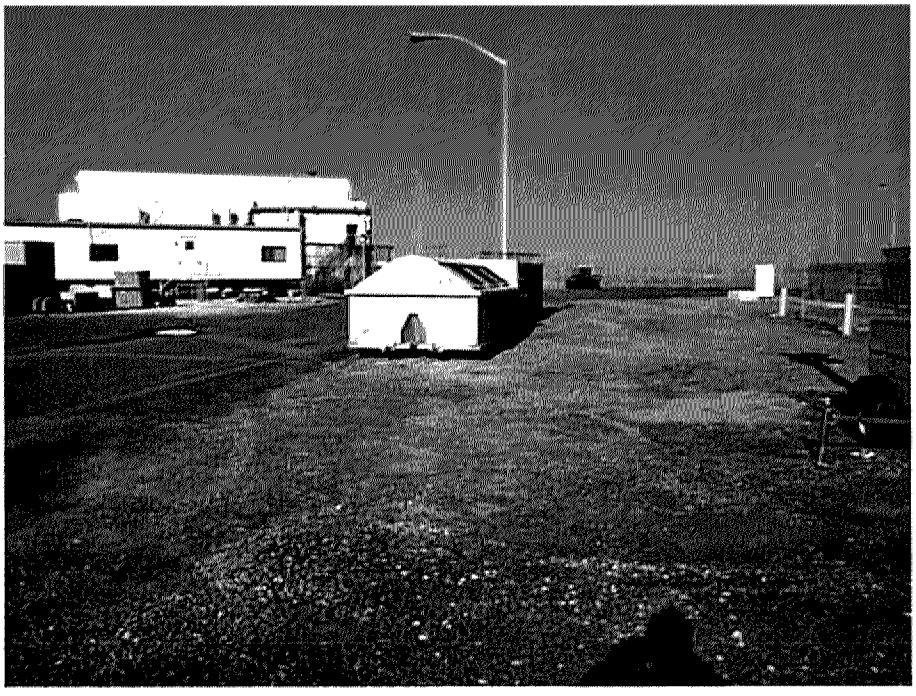
Attachment B
Photo Log

Salem Generation Station
Hancock's Bridge, New Jersey



Photograph 7

View from well ad, looking northwest. Soil is covered by gravel, sand and asphalt.

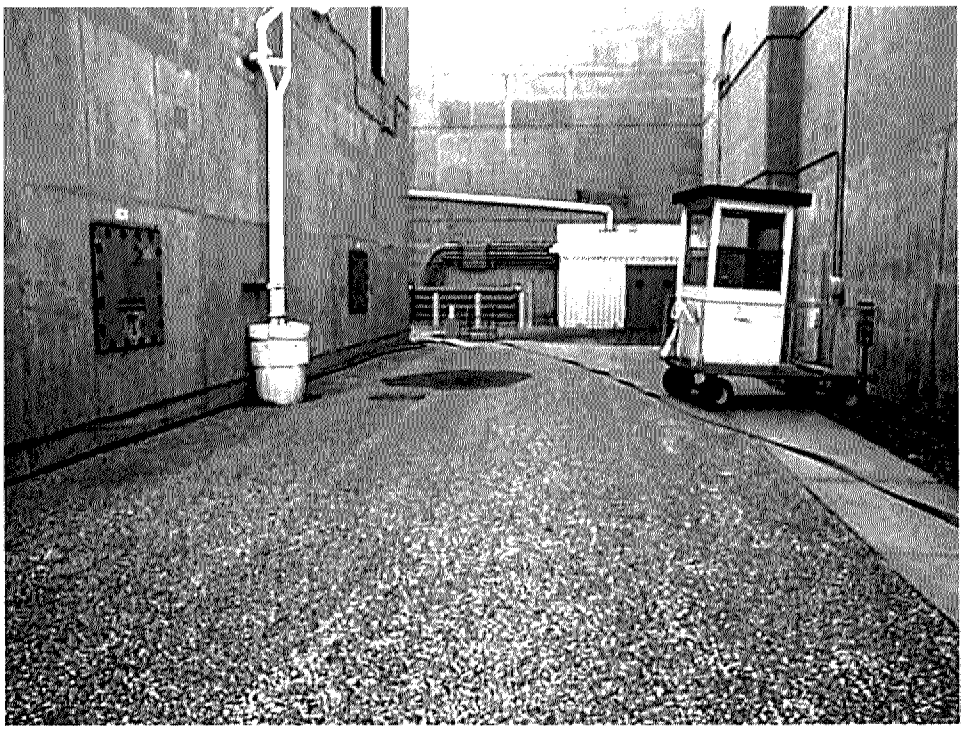


Photograph 8

View from well aj, looking west. Soil is covered by gravel, sand and asphalt.

Attachment B
Photo Log

Salem Generation Station
Hancock's Bridge, New Jersey



Photograph 9

View from well au, looking east between the fuel handling building and the diesel generating building.

Photograph 10

View from well aw looking south. Soil is covered by asphalt in the foreground and gravel in the back. Miscellaneous containers are against a gate and rest on top of gravel.

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE
Governor

LISA P. JACKSON
Commissioner

March 14, 2006

RECEIVED

MAR 17 2006

Environment, Health and Safety Department

Jeffrey Pantazes
PSEG
Environment, Health and Safety
130 Money Island Rd
Salem, NJ 08079

Re: Hope Creek Generating Station – January '05 Remedial Investigation Work Plan
June '05 Remedial Investigation
& Interim Remedial Action Report
January 2006 Remedial Action Progress Report
Aka Salem Generating Station; PSEG Nuclear, LLC
Hancock's Bridge, Salem County
Case #04-08-02-2350-16; File #17-04-08

cc C. McA
JPR
Rich Blackmore
JGV
EJK
DHB
Mahoney
Response Doc
4/17/06
Action

Dear Mr. Pantazes:

A review of the above referenced submittals has been completed by this office in conjunction with the Bureau of Ground Water Pollution Abatement. Comments and questions are as follows:

CASE HISTORY

The Salem Generating Station is part of a nuclear complex on 740 acres of Artificial Island, located on the eastern side of the Delaware River. The unconsolidated overburden at the facility consists of approximately 25.0-40.0 feet (ft.) of dredge spoils, engineered fill material, tidal marsh deposits and river bed deposits. For structural stability, engineered fill replaced the existing material within a ring of cofferdams sunk 10.0 ft. into the Vincentown Formation. The cofferdams are 24 interlocking sheet-piling cells constructed in a ring around what would be the Auxiliary Building, the Fuel Handling Building, and the Reactor Containment Building. The excavated area was then filled with 5.0-50.0 ft. of concrete prior to facility construction.

The spill originated from a leak in the underground piping that services the diesel/generator storage tanks located in the Auxiliary Building, and the boilers for the service water and the circulating water. Diesel fuel was detected in Catch Basin 27 and

subsequent investigations led to the repair of the pipe and removal of approximately 150 gallons of diesel from the excavation.

Ground water is shallow and is generally higher within the cofferdam area, which creates a slight mounding effect. A total of six (6) monitoring wells have been installed for delineation and recovery purposes. Monitoring wells are designated MW-X, MW-AU, MW-AV, MW-AW, MW-AY and MW-AZ, and product recovery is being implemented in wells MW-AU, MW-AW, and MW-AZ. Product is being recovered with at "Spill Buster" in MW-AU, through the installation of a passive skimmer in MW-AW, and through the use of sorbent socks in MW-AZ.

The RIR contains ground water monitoring data from July, August, and October 2005. Dissolved constituents of diesel fuel have been identified in three (3) of the wells sampled. July 2005 data indicates benzene was detected above the Ground Water Quality Standard (GWQS) in MW-X, at a concentration of 2.3 ppb. Benzene was not detected above the GWQS in the August and October sampling rounds. Base Neutral results indicate that several compounds were identified above their respective detection limits in wells MW-AV and MW-AW.

PROPOSAL

The proposal is to continue product recovery in MW-AU, MW-AW, and MW-AZ through the means currently used, until measurable separate phase product is no longer detected. Quarterly monitoring, including gauging all wells and sampling the wells that do not contain product for VO+10 and B/N+15, is proposed until measurable product is no longer detected. After the recovery operations have been completed, eight (8) consecutive quarterly rounds of ground water monitoring will be collected and evaluated by the Mann-Whitney U-Test to determine if a Classification Exception Area (CEA), or No Further Action (NFA) is appropriate for the site.

RECOMMENDATIONS

The proposal is conditionally acceptable. Since the product has moved preferentially along the utility lines, an additional horizontal delineation well shall be installed south of monitoring well MW-AY, outside the cofferdam structure.

Monitoring wells shall be installed in accordance with N.J.A.C. 7:9D. Once the required well installations have been completed, construction details and Form A & B Monitoring Well Certification Forms for all monitoring wells shall be submitted.

New and existing monitoring wells shall be analyzed for VO's + 10, and B/N+15. In the event that the wells contain Separate Phase Product and/or sheens, the information shall be recorded and the wells do not need to be sampled. Field parameters such as temperature, DO, pH, and specific conductance shall be recorded on the well sampling

sheets. Additional monitoring wells may be required pending ground water analytical results or receipt of information related to contaminant transport.

BASELINE ECOLOGICAL EVALUATION

As indicated, a diesel odor was noted in Catch Basin 27, south of Salem Unit 1 Fuel Handling Bldg. Upon discovery, both up & down gradient drains were blocked, and diesel removed from the basin. Additional information is needed, however, as to the pathway and extent the discharge traveled prior to discovery, as well as what impacts were experienced along that pathway. Did the discharge enter a body of water? Were sediments, soil or vegetation along the route affected?

If you have any questions, please contact this office.

Sincerely,

Linda S. Range

Linda S. Range

C: Stanley LaBruna, PSEG Services LLC, 80 Park Plz T17A, Newark, NJ 07102
Salem County Health Department
William Dunfee
File #17-04-08

Remedial Action Progress Report – June 2006 through December 2006

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

February 2007

ARCADIS

Alison Cattani
Scientist

Bradley D. Pierce
Project Scientist

Peter N. Milionis
Project Manager

Remedial Action Progress Report – June 2006 through December 2006

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

Prepared for:
PSEG Services Corporation
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Prepared by:
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Our Ref.:
NP000603.0002.00004

Date:
February 2007

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Table 3 Groundwater Elevations and Product Thickness

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Figure 3 Results of Groundwater Monitoring Activities

Figure 4 Cumulative Product Recovered from Well AU

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B Groundwater Analytical Results (June 2006 / September 2006 and December 2006)

C Well Construction Details

1. Introduction

ARCADIS U.S., Inc. (ARCADIS), on behalf of PSEG Services Corporation (PSEG), has prepared this Remedial Action Progress Report (RAPR) to present the details and results of ongoing groundwater monitoring and product recovery activities being conducted at the PSEG Nuclear, LLC Salem Generating Station (the Station). The Station is located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. The Station location and layout are depicted on **Figures 1** and **2**, respectively.

Groundwater monitoring and product recovery activities are being conducted in accordance with the scope of work proposed in the Remedial Investigation Report (RIR) that was submitted to the New Jersey Department of Environmental Protection (NJDEP) in June 2005. The remedial investigation was conducted to determine the extent of constituents of concern in soil and groundwater associated with a release of diesel fuel (Incident Number 04-08-02-2350-16). This RAPR covers activities completed at the Station between June 2006 and December 2006. These activities include the installation of an additional monitoring well, the completion of quarterly groundwater monitoring activities in June 2006, September 2006, and December 2006, and the ongoing operation of the product recovery systems in Wells AU and AW. These activities are discussed in Sections 3, 4, and 5, respectively, followed by the proposed schedule for the upcoming reporting period (January through June 2007).

2. Project Background

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the stormwater collection system just to the south of the Salem Unit 1 Auxiliary Building. Investigation of the catch basin, which is identified as "Catch Basin 27" on **Figure 2**, revealed the presence of a red-dyed diesel fuel (the red-dye is more typical of a recent release of diesel fuel). At this time, PSEG notified the NJDEP through its spill hotline.

Investigations into the source of the diesel fuel focused on the underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tanks to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. The location of the underground piping is shown on **Figure 2**. PSEG performed a pressure test on this underground piping. The results revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot

section of piping, PSEG subcontracted Praxair Services, Inc. to perform a "Tracer Tight" gas analysis. The results of this test showed that the location of the leak was directly adjacent to Catch Basin 27. The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). Separate-phase diesel fuel was observed on standing water within the excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation.

In November 2004, PSEG initiated remedial investigation and interim product recovery activities. As presented in the Remedial Investigation Work Plan (RIWP) submitted to the NJDEP in January 2005, soil borings were advanced at locations downgradient of the source area to delineate the horizontal extent of diesel related constituents of concern in soil. Due to the presence of extensive, facility-critical infrastructure within the area of investigation, the boring locations were limited. Soil samples collected from the borings were submitted for total petroleum hydrocarbons (TPHC) analysis. Analytical results of the soil samples did not indicate concentrations of TPHC above laboratory detection limits. Results of the soil investigation indicated that the release of diesel fuel had not migrated a significant distance beyond the source area and that diesel related constituents of concern in soil were likely limited to the source area and the "smear-zone" where separate phase diesel had migrated.

The soil borings were converted to monitoring/product recovery wells to facilitate the collection of groundwater samples and for the recovery of separate-phase diesel, if present. Water-level and product gauging and groundwater sampling were completed following installation of the wells. These activities utilized six monitoring wells (the five newly installed wells, and one previously existing monitoring well). The locations of the monitoring wells are shown on **Figure 2**. Water-level and product measurements indicated that the extent of measurable product is limited to the area of Well AU, located at the source area, and Well AW, located downgradient of the source area along the service water pipes. Measurable product was detected during a single gauging event in Well AZ.

The extent to which product has migrated is controlled by the significant facility-related subsurface infrastructure. The foundation for the primary water storage tank located to the west of Well AU has prevented the migration of separate phase product in this

direction. The service water piping that runs to the south from Well AU provided a preferential pathway for the migration of separate phase product towards Well AW. To delineate the extent of separate phase product to the south of Well AW along the service water piping, an additional monitoring well was installed in December 2006, as required by the NJDEP. Details regarding the monitoring well installation are included in Section 3. Product recovery efforts completed to date have included the installation of a Spill Buster® Unit in Well AU, the installation and operation of a passive skimmer in Well AW, and the installation of sorbent socks within Well AZ. Details regarding the ongoing product recovery efforts are presented in Section 4.

Since the installation of the monitoring wells, groundwater monitoring activities have been completed on a quarterly basis. During the sampling events, groundwater samples are collected from wells that do not indicate the presence of separate phase product. The groundwater samples are submitted to a laboratory and are analyzed for VOCs and SVOCs. The details of groundwater monitoring activities completed during the reporting period and the results of groundwater monitoring activities completed to date are presented in Section 3 and Section 4.

3. Monitoring Well Installation

In accordance with NJDEP correspondence dated 17 March 2006, an additional groundwater monitoring well (Well BV) was installed on 5 December 2006. The NJDEP correspondence, prepared in response to the June 2005 Remedial Investigation and Interim Remedial Action Report, stated the following:

> *"Since the product has moved preferentially along the utility lines, an additional horizontal delineation well shall be installed south of monitoring well MW-AY, outside the cofferdam structure."*

The monitoring well was installed using vacuum excavation techniques due to the extensive subsurface utilities and infrastructure located within the area of investigation. The location and well construction details of the groundwater monitoring well is shown on **Figure 2** and are summarized in **Table 2**, respectively. NJDEP Bureau of Water Allocation Monitoring Well Records, well construction logs, and boring logs are included in **Appendix C**. The monitoring well was developed using a combination of surging and pumping techniques. In accordance with N.J.A.C. 7:26E-4.4(g) [7], the monitoring well was surveyed by a New Jersey-licensed surveyor. The Monitoring Well Certification Form B is provided in **Appendix C**. Well BV was not sampled during the reporting period, but will be gauged and sampled during the next scheduled

sampling event (March 2007). Diesel fuel was not observed during monitoring well installation.

4. Quarterly Groundwater Monitoring

During the reporting period quarterly groundwater monitoring activities were completed in June 2006, September 2006, and December 2006. Details regarding the sampling activities are presented in **Table 1**. The monitoring well network associated with the quarterly gauging and sampling activities consists of the following six monitoring wells: Well X; Well AU; Well AV; Well AW; Well AY; and Well AZ. A summary table of well construction details for these wells is presented in **Table 2**. Quarterly groundwater monitoring activities consist of the gauging of groundwater and separate-phase product levels and the collection and analysis of groundwater samples from those wells that do not contain separate-phase product. The following sections provide the details and results of the gauging and sampling activities.

4.1 Water Level and Separate-Phase Product Measurements

Prior to the initiation of groundwater sampling activities, water-level and separate phase product measurements were obtained from each monitoring well using an electronic oil/water interface probe prior to initiating sampling activities. Water-level and separate phase product measurements were also collected during routine maintenance of the product recovery systems. A summary of historic product gauging and groundwater elevation data is presented in **Table 3**. With the exception of a one time detection of product in Well AZ, measurable product is limited to the area of Well AU and downgradient towards Well AW, consistent with the last reporting period. The extent to which product has migrated to date has been controlled by the subsurface infrastructure located within the investigation area. With the repair of the diesel fuel underground piping, the ongoing product recovery efforts being conducted in Well AU and Well AW, when in operation (see Section 5), are successfully preventing further migration of product. Separate phase product measurements obtained from Well AY, located to the south and downgradient of Well AW along the service water pipes, provide delineation of the extent of separate phase product.

4.2 Monitoring Well Sampling

As discussed above, quarterly groundwater monitoring activities were completed in June 2006, September 2006, and December 2006. During these sampling events, groundwater samples were only collected from monitoring wells that did not indicate a

measurable thickness (i.e., greater than 0.01 feet) of separate-phase product. For this reason, Well AU and Well AW were not sampled during the reporting period.

Due to the nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples are collected utilizing low-flow sampling methodology. Sample collection procedures, as well as quality assurance/quality control (QA/QC) sampling requirements, were completed in accordance with the Quality Assurance Project Plan (QAPP) presented in the January 2005 RIWP. Groundwater sampling logs for the samples collected during the reporting period are included in **Appendix A**. Groundwater samples were submitted to Accutest Laboratories of Dayton, New Jersey. The groundwater samples were analyzed for priority pollutant list volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) including a library search. Laboratory reports and HazSite deliverables for the groundwater monitoring events are included as **Appendix B**. Analytical results of the groundwater samples collected during the reporting period, as well as analytical result of groundwater samples collected since the initiation of investigation activities, are discussed in the following section.

4.3 Analytical Results

A summary of historic analytical results for groundwater samples collected from the monitoring wells, including those collected in June 2006, September 2006, and December 2006, is presented in **Tables 4** and **5**. A figure showing all constituent detections during the three sampling events is provided as **Figure 3**. Analytical results of these samples indicate the following:

- The analytical results of the groundwater samples collected to date indicate that other than benzene in one well, concentrations of diesel related constituents of concern (both VOC and SVOC) were below their respective GWQC.

- Benzene continued to be detected above its GWQC in groundwater samples collected from Well X in September 2006 and December 2006. Well X was not sampled during the June event due to insufficient available groundwater. During the September and December sampling events, benzene was detected at concentrations of 10.2 µg/l (micrograms per liter, equivalent to parts per billion) and 6.9 µg/L, which is above the GWQC for benzene of 1 µg/L.

- With the exception of groundwater samples collected from Well AV SVOCs consistent with a diesel release have not been detected at concentrations above

laboratory detection limits, but significantly below GWQS. Analytical results of the groundwater samples collected from Well AV indicate concentrations of acenaphthene, fluorene, 2-methylnaphthalene, and naphthalene above laboratory detection limits. The detection of these constituents is consistent with a diesel release. Analytical results of the groundwater samples collected from Well AY, which is located to the east of the service water pipes, indicate a concentration of bis(2-Ethylhexyl)phthalate above laboratory detection limits. This analyte was also detected in the associated method blank and is not indicative of a diesel fuel release.

- Analytical results of groundwater monitoring activities completed to date continue to indicate that impacts associated with the release of diesel fuel from the bulk storage tanks are limited to the area of separate-phase product, which extends down gradient from the source area to Well AW.

5. Ongoing Product Recovery

Consistent with historic observations, the extent of separate-phase product is limited to Well AU, installed within the source area, and Well AW, installed immediately downgradient of the source area along the service water piping. Product recovery efforts completed to date have included the operation and maintenance of the Spill Buster® product recovery system in Well AU and the operation of a passive skimmer in Well AW. Operation of the Spill Buster® unit in Well AU to date has resulted in the recovery of approximately 650 gallons of separate phase product through 11 December 2006. **Figure 4** provides details regarding the cumulative product recovered with the Spill Buster® unit through December 11, 2006. Operation of the passive skimmer in Well AW has resulted in a limited amount of recovery of separate phase product during the reporting period due to low water levels that were observed. The skimmer is retrieved from the well one to two times per week, and any recovered product is transferred to the storage tank utilized by the Spill Buster® unit.

Product recovery rates had decreased from approximately two gallons per day (gpd) to 0.5 gpd during the last reporting period. The recovery rate during this reporting period continued to decrease with product recovery rates of less than 0.1 gpd. The decrease in product recovery rates likely coincide with a decrease in available product within the vicinity of Well AU. To maximize product recovery in Wells AU and AW, the Spill Buster® unit was removed from Well AU in January 2007 and was installed in Well AW, which indicated greater product thicknesses over the reporting period. A sorbent sock has been installed in Well AU to recover residual diesel fuel within the vicinity of

the well. Product recovery system maintenance will continue to be performed on a routine basis and will include the removal and reinstallation of new sorbent socks from Well AU. Use of the Spill Buster® unit, the passive skimmer, and the sorbent socks will be adaptively managed to ensure that product recovery rates are maximized.

6. Proposed Actions

Based on the results of investigation activities and interim remedial actions completed to date, the following actions are proposed for the upcoming reporting period of January through June 2007:

- Due to the extremely low recovery rates in Well AU, the Spill Buster® unit was transferred to AW where there is more available product for recovery. A sorbent sock will was placed in AU to recover the remaining product. This transition occurred in January 2007. The operation and maintenance of the Spill Buster® unit and the maintenance of the sorbent sock will continue until measurable separate phase product is no longer detected. Routine maintenance of the system will continue to be performed to ensure the timely change out of the product storage tank and the proper operation of the unit. Use of the Spill Buster® unit, the passive skimmer, and the sorbent socks will be adaptively managed to ensure that product recovery rates are maximized;

- Due to the consistent analytical results of groundwater samples that have been collected from the monitoring wells since December 2004, PSEG is proposing that collection of groundwater samples be reduced to a semi-annual basis with samples collected in March and September. Groundwater monitoring will be conducted concurrently with the product recovery efforts. The groundwater monitoring will continue to consist of the collection and analysis of groundwater samples from those wells not indicating the presence of separate phase product. The groundwater samples will be analyzed for VOCs and SVOCs to evaluate the extent, if any, of dissolved phase constituents of concern. Semi-Annual Remedial Action Progress Reports will continue to be prepared to update the NJDEP with the status of product recovery efforts and groundwater analytical results;

- Following completion of the product recovery efforts (i.e., measurable separate phase product is no longer detected) eight consecutive rounds of quarterly sampling will be completed (assuming concentrations of constituents of concern are above applicable GWQC) as required by the Mann-Whitney U-Test. The

analytical results from these sampling events will be evaluated to determine if there are decreasing analytical trends; and,

- Following completion of the eight consecutive rounds of quarterly sampling, PSEG will either: 1) propose no further action for groundwater if groundwater analytical results continue to be below applicable GWQC; or, 2) establish a classification exception area and prepare a Remedial Action Work Plan that proposes a groundwater remediation strategy.

7. Groundwater Monitoring Program Details and Schedule

Following completion of the next groundwater monitoring event, currently scheduled for March 2007, groundwater analytical results will be reported to the NJDEP in a RAPR covering January through June 2007 activities.

Groundwater Monitoring:

Semi-Annual events (VOCs and SVOCs)…….....March 2007

Reporting:

Remedial Action Progress Report……January 2007 through June 2007

Tables

Table 01. Summary of Sampling Activities Completed During the Reporting Period (June 2006 through December 2006), PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sampling Event	Wells Sampled[1]	Wells Not Sampled
June-06	MW-AV MW-AY[3] MW-AZ	MW-AU[2] MW-AW[2] MW-X[4]
September-06	MW-AY[3] MW-AV MW-AZ MW-X	MW-AU[2] MW-AW[2]
December-06	MW-AY[3] MW-AV MW-AZ MW-X	MW-AU[2] MW-AW[2]

Notes

1 If sampled, groundwater samples were submitted to laboratory for VOCs and SVOC analysis using methods 8260b and 8270c, respectively.

2 Samples were not collected due to detection of separate-phase liquid.

3 Insufficient volume of water was available within well column to sample via low-flow; collected sample with bailer.

4 Sample was not collected due to insufficient volume of available water.

Table 02. Well Construction Details, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well ID	Installation Date	Well Permit Number	Well Purpose	Construction Materials	Diameter (inches)	GS Elevation (feet amsl)	MP Elevation (feet amsl)	Northing (NAD 83)	Easting (NAD 83)	Total Depth (feet bgs)	Monitoring Interval (feet bgs)	Monitoring Interval (feet amsl)
Well X	06/11/03	3400007018	Monitoring	Sch-40 PVC	1.0	9.47	12.00	230,851	199,547	10.0	2.0 to 10.0	7.5 to -0.5
Well AU	11/09/04	3400007375	Product Recovery	Sch-40 PVC	6.0	9.44	8.46	230,868	199,525	7.0	4.0 to 7.0	5.4 to 2.4
Well AV	11/08/04	3400007370	Monitoring	Sch-40 PVC	4.0	9.17	8.82	230,831	199,469	10.0	3.0 to 10.0	6.2 to -0.8
Well AW	11/08/04	3400007372	Product Recovery	Sch-40 PVC	4.0	9.48	9.16	230,837	199,516	9.0	3.0 to 9.0	6.5 to 0.5
Well AY	11/08/04	3400007373	Monitoring	Sch-40 PVC	4.0	9.40	9.04	230,805	199,521	8.0	3.0 to 8.0	6.4 to 1.4
Well AZ	11/08/04	3400007374	Monitoring	Sch-40 PVC	4.0	9.33	8.66	230,764	199,551	9.0	3.0 to 9.0	6.3 to 0.3
Well BV	12/05/06	3400007816	Monitoring	Sch-40 PVC	4.0	9.32	8.85	230,768	199,526	10.0	3.0 to 10.0	6.3 to -0.7

Notes:

GS	Ground Surface
MP	Measuring Point
bgs	Below ground surface
amsl	Feet above mean sea level (NAVD88)

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well X	12/07/04	12.00	--	7.16	--	4.84	--
	12/10/04	12.00	--	6.36	--	5.64	--
	12/13/04	12.00	--	6.68	--	5.32	--
	12/22/04	12.00	NM	NM	NM	NM	NM
	1/13/05	12.00	--	7.66	--	4.34	--
	1/27/05	12.00	--	8.11	--	3.89	--
	2/10/05	12.00	--	7.70	--	4.30	--
	2/23/05	12.00	Sheen	7.47	<0.01	4.53	--
	3/24/05	12.00	--	7.81	--	4.19	--
	4/8/05	12.00	--	6.78	--	5.22	--
	4/26/05	12.00	--	7.65	--	4.35	--
	6/28/05	12.00	--	8.57	--	3.43	--
	7/20/05	12.00	--	8.01	--	3.99	--
	8/17/05	12.00	--	7.60	--	4.40	--
	9/13/05	12.00	--	8.45	--	3.55	--
	10/3/05	12.00	--	9.46	--	2.54	--
	12/15/05	12.00	--	9.28	--	2.72	--
	3/28/06	12.00	Dry	Dry	--	--	--
	9/26/06	12.00	--	8.74	--	3.26	--
	12/4/06	12.00	--	8.09	--	3.91	--
Well AU	12/07/04	8.46	NM	NM	NM	NM	NM
	12/10/04	8.46	1.84	2.29	0.45	6.17	6.50
	12/13/04	8.46	2.84	3.35	0.51	5.11	5.49
	12/22/04	8.46	4.22	5.45	1.23	3.01	3.92
	1/13/05	8.46	3.68	5.44	1.76	3.02	4.32
	1/17/05*	9.81	4.15	4.40	0.25	5.41	5.60
	1/24/05	9.81	5.40	5.50	0.10	4.31	4.38
	1/26/05	9.81	4.90	5.10	0.20	4.71	4.86
	1/27/05	9.81	5.50	5.69	0.19	4.12	4.26
	1/31/05	9.81	5.45	5.50	0.05	4.31	4.35
	2/4/05	9.81	5.40	5.60	0.20	4.21	4.36
	2/8/05	9.81	5.15	5.40	0.25	4.41	4.60
	2/10/05	9.81	5.34	5.68	0.34	4.13	4.38
	2/16/05	9.81	3.90	4.30	0.40	5.51	5.81
	2/22/05	9.81	4.60	4.80	0.20	5.01	5.16
	2/23/05	9.81	4.96	5.12	0.16	4.69	4.81
	2/28/05	9.81	4.60	4.78	0.18	5.03	5.16
	3/7/05	9.81	4.74	5.00	0.26	4.81	5.00
	3/14/05	9.81	5.16	5.48	0.32	4.33	4.57
	3/21/05	9.81	5.40	5.70	0.30	4.11	4.33
	3/24/05	9.81	3.41	3.42	0.01	6.39	6.40
	3/29/05	9.81	3.10	3.70	0.60	6.11	6.55
	4/5/05	9.81	4.00	4.10	0.10	5.71	5.78
	4/8/05	9.81	2.87	2.91	0.04	6.90	6.93
	4/26/05	9.81	4.35	4.55	0.20	5.26	5.41
	6/28/05	9.81	5.66	5.74	0.08	4.07	4.13
	7/8/05	9.81	1.10	1.20	0.10	8.61	8.68
	7/20/05	9.81	5.25	5.60	0.35	4.21	4.47
	7/25/05	9.81	4.78	5.05	0.27	4.76	4.96
	7/28/05	9.81	3.08	3.55	0.47	6.26	6.61
	8/1/05	9.81	5.08	5.30	0.22	4.51	4.67
	8/5/05	9.81	5.50	5.85	0.35	3.96	4.22
	8/8/05	9.81	5.35	5.60	0.25	4.21	4.40
	8/12/05	9.81	4.75	4.85	0.10	4.96	5.03
	8/16/05	9.81	4.60	4.70	0.10	5.11	5.18

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation
NA	Water not detected in well at time of measurement

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	8/17/05	9.81	3.36	3.38	0.02	6.43	6.44
	8/19/05	9.81	4.05	4.20	0.15	5.61	5.72
	8/22/05	9.81	5.65	5.85	0.20	3.96	4.11
	8/26/05	9.81	5.35	5.55	0.20	4.26	4.41
	8/29/05	9.81	4.75	5.15	0.40	4.66	4.96
	9/2/05	9.81	4.75	5.10	0.35	4.71	4.97
	9/6/05	9.81	5.50	5.75	0.25	4.06	4.25
	9/9/05	9.81	5.55	5.65	0.10	4.16	4.23
	9/12/05	9.81	5.70	6.00	0.30	3.81	4.03
	10/3/05	9.81	6.34	NA	NA	NA	NA
	10/10/05	9.81	3.35	4.70	1.35	5.11	6.11
	10/14/05	9.81	3.05	3.35	0.30	6.46	6.68
	10/28/05	9.81	4.00	4.20	0.20	5.61	5.76
	10/19/05	9.81	4.86	5.65	0.79	4.16	4.74
	10/31/05	9.81	4.60	5.20	0.60	4.61	5.05
	11/4/05	9.81	5.45	5.55	0.10	4.26	4.33
	11/7/05	9.81	5.90	6.15	0.25	3.66	3.85
	11/11/05	9.81	6.01	6.58	0.57	3.23	3.65
	11/15/05	9.81	6.30	NA	NA	NA	NA
	11/18/05	9.81	5.58	6.40	0.82	3.41	4.02
	11/28/05	9.81	5.86	6.45	0.59	3.36	3.80
	12/2/05	9.81	4.20	5.60	1.40	4.21	5.25
	12/5/05	9.81	5.40	5.50	0.10	4.31	4.38
	12/8/05	9.81	6.05	6.58	0.53	3.23	3.62
	12/12/05	9.81	5.20	6.58	1.38	3.23	4.25
	12/15/05	9.81	5.99	6.06	0.07	3.75	3.80
	12/16/05	9.81	3.20	6.58	3.38	3.23	5.73
	12/23/05	9.81	5.95	6.58	0.63	3.23	3.70
	12/27/05	9.81	5.85	6.58	0.73	3.23	3.77
	12/30/05	9.81	4.10	4.25	0.15	5.56	5.67
	1/3/06	9.81	3.35	3.45	0.10	6.36	6.43
	1/6/06	9.81	4.55	4.75	0.20	5.06	5.21
	1/10/06	9.81	5.90	6.05	0.15	3.76	3.87
	1/12/06	9.81	5.95	6.00	0.05	3.81	3.85
	1/16/06	9.81	5.80	6.25	0.45	3.56	3.89
	1/16/06	9.81	6.15	6.25	0.10	3.56	3.63
	1/19/06	9.81	4.25	4.30	0.05	5.51	5.55
	1/23/06	9.81	2.20	2.40	0.20	7.41	7.56
	1/30/06	9.81	5.15	5.25	0.10	4.56	4.63
	2/3/06	9.81	5.75	5.85	0.10	3.96	4.03
	2/6/06	9.81	5.45	5.55	0.10	4.26	4.33
	2/9/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/13/06	9.81	4.50	5.20	0.70	4.61	5.13
	2/17/06	9.81	4.70	4.90	0.20	4.91	5.06
	2/21/06	9.81	5.60	5.75	0.15	4.06	4.17
	2/24/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/27/06	9.81	6.20	6.35	0.15	3.46	3.57
	3/3/06	9.81	6.30	6.55	0.25	3.26	3.45
	3/6/06	9.81	6.40	NA	NA	NA	NA
	3/10/06	9.81	6.53	NA	NA	NA	NA
	3/13/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/20/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/24/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/28/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/29/06	9.81	Dry	Dry	Dry	Dry	Dry

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
NA	Water not detected in well at time of measurement

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Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	4/4/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/10/06	9.81	6.38	6.40	0.02	3.41	3.42
	4/17/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/24/06	9.81	3.15	3.60	0.45	6.21	6.54
	4/28/06	9.81	4.70	4.80	0.10	5.01	5.08
	5/1/06	9.81	5.85	5.90	0.05	3.91	3.95
	5/5/06	9.81	6.10	6.20	0.10	3.61	3.68
	5/9/06	9.81	6.28	NA	NA	NA	NA
	5/12/06	9.81	5.44	6.15	0.71	3.66	4.19
	5/12/06	9.81	5.92	6.00	0.08	3.81	3.87
	5/15/06	9.81	4.60	4.70	0.10	5.11	5.18
	5/19/06	9.81	5.80	5.90	0.10	3.91	3.98
	5/22/06	9.81	6.25	6.38	0.13	3.43	3.53
	5/30/06	9.81	Dry	Dry	Dry	Dry	Dry
	6/6/06	9.81	4.30	4.90	0.60	4.91	5.35
	6/16/06	9.81	5.10	5.25	0.15	4.56	4.67
	6/22/06	9.81	5.50	5.70	0.20	4.11	4.26
	6/23/06	9.81	5.70	5.80	0.10	4.01	4.08
	6/30/06	9.81	3.08	3.15	0.07	6.66	6.71
	7/5/06	9.81	2.25	2.35	0.10	7.46	7.53
	7/10/06	9.81	3.40	3.50	0.10	6.31	6.38
	7/14/06	9.81	3.65	3.75	0.10	6.06	6.13
	7/17/06	9.81	4.07	4.25	0.18	5.56	5.69
	7/21/06	9.81	4.35	4.50	0.15	5.31	5.42
	7/24/06	9.81	2.55	2.70	0.15	7.11	7.22
	7/28/06	9.81	3.35	3.45	0.10	6.36	6.43
	7/31/06	9.81	3.55	3.60	0.05	6.21	6.25
	8/3/06	9.81	3.70	3.75	0.05	6.06	6.10
	8/7/06	9.81	4.20	4.25	0.05	5.56	5.60
	8/11/06	9.81	4.55	4.60	0.05	5.21	5.25
	8/14/06	9.81	5.00	5.05	0.05	4.76	4.80
	8/18/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/21/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/28/06	9.81	3.15	3.20	0.05	6.61	6.65
	8/31/06	9.81	3.90	3.95	0.05	5.86	5.90
	9/5/06	9.81	3.55	3.60	0.05	6.21	6.25
	9/8/06	9.81	3.75	3.80	0.05	6.01	6.05
	9/11/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/14/06	9.81	4.90	4.95	0.05	4.86	4.90
	9/22/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/25/06	9.81	4.60	4.65	0.05	5.16	5.20
	10/2/06	9.81	4.50	4.65	0.15	5.16	5.27
	10/5/06	9.81	5.05	5.10	0.05	4.71	4.75
	10/9/06	9.81	3.80	3.90	0.10	5.91	5.98
	10/12/06	9.81	2.65	2.70	0.05	7.11	7.15
	10/17/06	9.81	4.35	4.40	0.05	5.41	5.45
	10/20/06	9.81	1.85	1.90	0.05	7.91	7.95
	10/23/06	9.81	3.85	3.90	0.05	5.91	5.95
	10/31/06	9.81	3.80	3.85	0.05	5.96	6.00
	11/6/06	9.81	5.45	5.50	0.05	4.31	4.35
	11/10/06	9.81	3.25	3.30	0.05	6.51	6.55
	11/13/06	9.81	2.60	2.65	0.05	7.16	7.20
	11/20/06	9.81	3.65	3.70	0.05	6.11	6.15
	11/27/06	9.81	4.10	4.15	0.05	5.66	5.70
	12/4/06	9.81	5.05	5.10	0.05	4.71	4.75
	12/8/06	9.81	5.80	5.85	0.05	3.96	4.00
	12/11/06	9.81	6.00	6.05	0.05	3.76	3.80

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
NA	Water not detected in well at time of measurement
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AV	12/07/04	8.82	--	4.85	--	3.97	--
	12/10/04	8.82	--	4.60	--	4.22	--
	12/13/04	8.82	--	4.55	--	4.27	--
	12/22/04	8.82	--	5.11	--	3.71	--
	1/13/05	8.82	--	5.09	--	3.73	--
	2/10/05	8.82	--	4.86	--	3.96	--
	2/23/05	8.82	--	4.69	--	4.13	--
	3/24/05	8.82	--	4.83	--	3.99	--
	4/8/05	8.82	--	4.20	--	4.62	--
	4/26/05	8.82	--	4.72	--	4.10	--
	6/28/05	8.82	--	5.07	--	3.75	--
	7/20/05	8.82	--	4.81	--	4.01	--
	8/17/05	8.82	--	5.10	--	3.72	--
	9/13/05	8.82	--	5.21	--	3.61	--
	10/3/05	8.82	--	5.89	--	2.93	--
	12/15/05	8.82	--	6.14	--	2.68	--
	3/28/06	8.82	--	7.04	--	1.78	--
	6/22/06	8.82	--	5.86	--	2.96	--
	9/26/06	8.82	--	5.44	--	3.38	--
	12/4/06	8.82	--	5.28	--	3.54	--
Well AW	12/07/04	9.16	4.14	4.17	0.03	4.99	5.01
	12/10/04	9.16	3.71	5.83	2.12	3.33	4.90
	12/13/04	9.16	3.99	7.06	3.07	2.10	4.37
	12/22/04*	10.10	6.06	6.16	0.10	3.94	4.01
	12/27/04*	10.10	6.70	6.75	0.05	3.35	3.39
	1/3/05*	10.10	6.30	6.50	0.20	3.60	3.75
	1/10/05*	10.10	5.90	6.00	0.10	4.10	4.17
	1/13/05*	10.10	6.95	7.01	0.06	3.09	3.13
	1/27/05	9.16	5.37	6.12	0.75	3.04	3.60
	2/10/05	9.16	5.11	6.11	1.00	3.05	3.79
	2/23/05	9.16	4.78	6.11	1.33	3.05	4.03
	3/24/05	9.16	4.44	6.25	1.81	2.91	4.25
	4/8/05	9.16	3.66	6.05	2.39	3.11	4.88
	4/26/05	9.16	4.72	6.85	2.13	2.31	3.89
	6/28/05	9.16	5.31	7.29	1.98	1.87	3.34
	7/20/05	9.16	4.78	6.84	2.06	2.32	3.84
	8/17/05	9.16	4.69	6.33	1.64	2.83	4.04
	9/9/05	9.16	5.4	7.20	1.80	1.96	3.29
	9/13/05	9.16	5.57	7.41	1.84	1.75	3.11
	10/3/05	9.16	6.12	7.49	1.37	1.67	2.68
	12/12/05	9.16	5.9	6.90	1.00	2.26	3.00
	12/15/005	9.16	5.92	6.97	1.05	2.19	2.97
	2/17/06	9.16	5.7	5.90	0.20	3.26	3.41
	3/3/06	9.16	6.25	7.00	0.75	2.16	2.72
	3/10/06	9.16	6.4	7.05	0.65	2.11	2.59
	3/28/06	9.16	7.01	7.65	0.64	1.51	1.98
	5/15/06	9.16	7.5	7.85	0.35	1.31	1.57
	6/22/06	9.16	5.9	6.15	0.25	3.01	3.20
	8/21/06	9.16	5.8	6.45	0.65	2.71	3.19
	12/4/06	9.16	5.97	6.41	0.44	2.75	3.08

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
NA	Water not detected in well at time of measurement
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AY	12/07/04	9.04	--	4.68	--	4.36	--
	12/10/04	9.04	--	4.35	--	4.69	--
	12/13/04	9.04	--	4.43	--	4.61	--
	12/22/04	9.04	--	5.13	--	3.91	--
	1/13/05	9.04	--	5.08	--	3.96	--
	1/27/05	9.04	--	5.29	--	3.75	--
	2/23/05	9.04	--	4.82	--	4.22	--
	3/24/05	9.04	--	4.82	--	4.22	--
	4/8/05	9.04	--	4.03	--	5.01	--
	4/26/05	9.04	--	4.77	--	4.27	--
	6/28/05	9.04	--	5.51	--	3.53	--
	7/20/05	9.04	--	5.04	--	4.00	--
	8/17/05	9.04	--	5.10	--	3.94	--
	9/13/05	9.04	--	5.57	--	3.47	--
	10/3/05	9.04	--	6.18	--	2.86	--
	12/15/05	9.04	--	6.12	--	2.92	--
	3/28/06	9.04	--	6.76	--	2.28	--
	6/23/06	9.04	--	5.97	--	3.07	--
	9/26/06	9.04	--	5.58	--	3.46	--
	12/4/06	9.04	--	5.35	--	3.69	--
Well AZ	12/07/04	8.66	--	4.45	--	4.21	--
	12/10/04	8.66	--	4.09	--	4.57	--
	12/13/04	8.66	--	4.08	--	4.58	--
	12/22/04	8.66	--	4.69	--	3.97	--
	1/13/05	8.66	--	4.70	--	3.96	--
	1/27/05	8.66	--	4.91	--	3.75	--
	2/10/05	8.66	--	4.69	--	3.97	--
	2/23/05	8.66	--	4.46	--	4.20	--
	3/24/2005**	8.66	4.66	4.75	0.09	3.91	3.98
	4/8/05	8.66	--	3.78	--	4.88	--
	4/26/05	8.66	--	4.74	--	3.92	--
	6/28/05	8.66	--	5.42	--	3.24	--
	7/20/05	8.66	--	5.1	--	3.56	--
	8/17/05	8.66	--	5.41	--	3.25	--
	9/13/05	8.66	--	5.46	--	3.20	--
	10/3/05	8.66	--	6.11	--	2.55	--
	12/15/05	8.66	--	6.05	--	2.61	--
	3/28/06	8.66	--	6.59	--	2.07	--
	6/22/2006	8.66	--	5.99	--	2.67	--
	9/26/2006	8.66	--	5.66	--	3	--
	12/4/2006	8.66	--	5.21	--	3.45	--
	1/2/2007	8.66	--	5.51	--	3.15	--

Notes

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation
**	Due to the operation of a groundwater extraction well (Well AO) in the vicinity of Well AZ, separate-phase product migrated in the direction of this well. Following the detection of separate-phase product in Well AZ, groundwater extraction from Well AO was discontinued.

Table 04. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Constituent of Concern	GWQC	Well X							Well AX*	Well AV					
		12/13/04	3/15/05	7/21/05	10/4/05	12/16/05	9/27/06	12/5/06	12/13/04	12/13/04	3/15/05	8/17/05	10/4/05	12/16/05	3/28/06
Acetone	700	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzene	1	<1 U	<1 U	**2.3**	<1 U	**1.9**	**10.2**	**6.9**	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromodichloromethane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromoform	4	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U
Bromomethane	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
2-Butanone (MEK)	--	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Carbon Disulfide	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Carbon Tetrachloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chlorobenzene	4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroethane	--	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform	6	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Dibromochloromethane	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,2-Dichloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,2-Dichloroethene	100	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloropropane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,3-Dichloropropene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,3-Dichloropropene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	700	<1 U	**0.83 J**	<1 U	<1 U	<1 U	<1 U	**0.58 J**	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-Hexanone	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
4-Methly-2-pentanone (MIBK)	400	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Methylene Chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Styrene	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
1,1,2,2-Tetrachloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Tetrachloroethene	1	**0.87 J**	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Toulene	1000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,1-Trichloroethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,2-Trichloroethane	3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Xylenes (total)	40	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	**1.0**	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value. where the indication is based on a library search
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV
***	Well VV is a blind duplicate of Well AV

Table 04. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Constituent of Concern	GWQC	Well AV			Well AVD**	Well VV***						Well AY			
		6/22/06	9/27/06	12/4/06	3/15/05	8/17/05	12/16/05	3/28/06	6/22/06	9/27/06	12/4/06	12/13/04	3/15/05	7/21/05	10/4/05
Acetone	700	**8.1 J**	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	**11.8**	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromodichloromethane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromoform	4	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U
Bromomethane	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
2-Butanone (MEK)	--	**7.9 J**	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	**7.9 J**	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Carbon Disulfide	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Carbon Tetrachloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chlorobenzene	4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroethane	--	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform	6	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Dibromochloromethane	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,2-Dichloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,2-Dichloroethene	100	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloropropane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,3-Dichloropropene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,3-Dichloropropene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	700	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-Hexanone	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
4-Methly-2-pentanone (MIBK)	400	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Methylene Chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Styrene	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
1,1,2,2-Tetrachloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Tetrachloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Toulene	1000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,1-Trichloroethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,2-Trichloroethane	3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Xylenes (total)	40	<1 U	<1 U	**0.43 J**	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value. where the indication is based on a library search
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV
***	Well VV is a blind duplicate of Well AV

Table 04. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Constituent of Concern	GWQC	Well AY					Well AZ								
		12/16/05	3/29/06	6/23/06	9/27/06	12/5/06	12/10/04	3/15/05	8/17/05	10/4/05	12/19/05	3/28/06	6/22/06	9/27/06	12/5/06
Acetone	700	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	NA	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromodichloromethane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromoform	4	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	NA	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U
Bromomethane	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
2-Butanone (MEK)	--	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	NA	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Carbon Disulfide	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Carbon Tetrachloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chlorobenzene	4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroethane	--	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform	6	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Dibromochloromethane	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,2-Dichloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,2-Dichloroethene	100	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloropropane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,3-Dichloropropene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,3-Dichloropropene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	700	<1 U	**2.0**	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-Hexanone	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
4-Methly-2-pentanone (MIBK)	400	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Methylene Chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Styrene	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
1,1,2,2-Tetrachloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Tetrachloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Toulene	1000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,1-Trichloroethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,2-Trichloroethane	3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Xylenes (total)	40	<1 U	**1.2**	<1 U	<1 U	<1 U	<1 U	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value. where the indication is based on a library search
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV
***	Well VV is a blind duplicate of Well AV

Table 04. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Constituent of Concern	GWQC	Field Blank												
		12/10/04	12/13/04	3/15/05	8/17/05	10/4/05	12/16/05	12/19/05	3/28/06	3/29/06	6/22/06	6/23/06	9/27/06	12/4/06	12/5/06
Acetone	700	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromodichloromethane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromoform	4	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U
Bromomethane	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
2-Butanone (MEK)	--	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Carbon Disulfide	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Carbon Tetrachloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chlorobenzene	4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroethane	--	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform	6	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Dibromochloromethane	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,2-Dichloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,2-Dichloroethene	100	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloropropane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,3-Dichloropropene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,3-Dichloropropene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	700	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-Hexanone	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
4-Methly-2-pentanone (MIBK)	400	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Methylene Chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Styrene	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
1,1,2,2-Tetrachloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Tetrachloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Toulene	1000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,1-Trichloroethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,2-Trichloroethane	3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Xylenes (total)	40	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value. where the indication is based on a library search
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV
***	Well VV is a blind duplicate of Well AV

Table 04. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Constituent of Concern	GWQC	Trip Blank										
		12/10/04	3/15/05	7/21/05	8/17/05	10/4/05	12/16/2005	12/19/05	3/29/06	6/23/06	9/27/06	12/5/06
Acetone	700	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Benzene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromodichloromethane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Bromoform	4	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U	<4 U
Bromomethane	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
2-Butanone (MEK)	--	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U
Carbon Disulfide	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Carbon Tetrachloride	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chlorobenzene	4	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroethane	--	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloroform	6	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Chloromethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Dibromochloromethane	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethane	70	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloroethane	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1-Dichloroethene	2	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,2-Dichloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,2-Dichloroethene	100	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2-Dichloropropane	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
cis-1,3-Dichloropropene	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
trans-1,3-Dichloropropene	7	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Ethylbenzene	700	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-Hexanone	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
4-Methly-2-pentanone (MIBK)	400	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
Methylene Chloride	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
Styrene	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
1,1,2,2-Tetrachloroethene	10	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Tetrachloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Toulene	1000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,1-Trichloroethane	30	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,1,2-Trichloroethane	3	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Trichloroethene	1	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Vinyl Chloride	5	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Xylenes (total)	40	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value. where the indication is based on a library search
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV
***	Well VV is a blind duplicate of Well AV

Table 05. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds,
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sample Identification	GWQC	Well X							Well AX*	Well AV									Well AVD**	Well VV***						Well AY	
		12/13/04	3/15/05	7/21/05	10/4/05	12/16/05	9/27/06	12/5/06	12/13/04	12/13/04	3/15/05	8/17/05	10/4/05	1/3/2006	3/28/2006	6/22/2006	9/27/2006	12/4/2006	3/15/05	8/17/05	12/16/05	3/28/06	6/22/06	9/27/06	12/4/06	12/13/04	3/15/05
Semivolatile Organic Compounds (ug/L)																											
2-Chlorophenol	40	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
4-Chloro-3-methyl phenol	20	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
2,4-Dichlorophenol	20	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
2,4-Dimethylphenol	100	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
2,4-Dinitrophenol	10	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U
4,6-Dinitro-o-cresol	60	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U
2-Methylphenol	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
3&4-Methylphenol	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
2-Nitrophenol	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
4-Nitrophenol	--	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U
Pentachlorophenol	0.3	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U
Phenol	4000	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
2,4,5-Trichlorophenol	700	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
2,4,6-Trichlorophenol	3	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
Acenaphthene	400	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**1.6 J**	<2 U	**0.64 J**	**5.0**	**1.8 J**	**1.5 J**	**1.1 J**	**2.4**	**2.3**	**1.1 J**	**1.1 J**	**5.1**	**1.7 J**	**1.6 J**	**3.3**	**2.5**	**1.3 J**	0.93 **J**	<2.1 U	<2 U
Acenaphthylene	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Anthracene	2000	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	**0.95 J**	<2 U	**0.54 J**	**0.53 J**	**0.92 J**	**0.5 J**	**0.44 J**	<2 U	**0.97 J**	<2 U	**0.98 J**	**1.1 J**	**0.62 J**	**0.54 J**	<2 U	<2.1 U	<2 U
Benzo(a)anthracene	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	**0.43 J**	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Benzo(a)pyrene	20	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Benzo(b)fluoranthene	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Benzo(g,h,i)perylene	20	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Benzo(k)fluoranthene	2	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
4-Bromophenyl phenyl ether	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Butyl benzyl phthalate	100	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
2-Chloronaphthalene	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
4-Chloroaniline	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
Carbazole	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	**9.9**	<2 U	<2 U	<2 U	**0.87 J**	<2.1 U	<2 U	<2 U	**10**	<2 U	<2 U	**1.2 J**	<2 U	<2 U	<2 U	<2.1 U	<2 U
Chrysene	20	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	**0.42 J**	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
bis-(2-Chloroethoxy)methane	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
bis(2-Chloroethyl)ether	0.03	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
bis(2-Chloroisopropyl)ether	300	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
4-Chlorophenyl phenyl ether	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
1,2-Dichlorobenzene	600	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
1,3-Dichlorobenzene	600	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
1,4-Dichlorobenzene	75	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
2,4-Dinitrotoluene	0.05	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
2,6-Dinitrotoluene	0.05	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
3,3'-Dichlorobenzidine	0.08	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
Dibenzo(a,h)anthracene	20	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Dibenzofuran	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	**0.71 J**	**2.7 J**	**2.2 J**	**1.3 J**	**1.3 J**	**1.7 J**	**1.8 J**	<5 U	**0.93 J**	**2.7 J**	**2.1 J**	**1.6 J**	**2 J**	**2 J**	**3 J**	**0.97 J**	<5.3 U	<5 U
Di-n-butyl phthalate	900	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Di-n-octyl phthalate	100	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Diethyl phthalate	5000	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Dimethyl phthalate	10	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
bis(2-Ethylhexyl)phthalate	3	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	**1 J**	**1.1** J	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**1.1 J**	<2.1 U	**2.7**
Fluoranthene	300	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**1.0 J**	**1.4 J**	**0.86 J**	**1.2 J**	**0.96 J**	**1.1 J**	**1.2 J**	**1.1 J**	**1.1 J**	**1.4 J**	**0.84 J**	**1.7 J**	**1.1 J**	**1.2 J**	**1.1 J**	**0.88 J**	<2.1 U	<2 U
Fluorene	300	<2 U	**0.74 J**	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**1.4 J**	**4.4**	**3.5**	**2.4**	**2 J**	**2.4**	**3.1**	**2.4**	**2.0**	**4.7**	**3.3**	**3.1**	**3.0**	**3.5**	**2.6**	**2.3**	<2.1 U	<2 U
Hexachlorobenzene	0.02	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Hexaclorobutadiene	1	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Hexachlorocyclopentadiene	50	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U
Hexachloroethane	0.7	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
Indeno(1,2,3-cd)pyrene	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
Isophorone	100	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
2-Methylnaphthalene	--	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**1.8 J**	**2.0**	**8.0**	<2 U	**2.0**	**0.84 J**	<2.1 U	**2.2**	**1.3 J**	**2.3**	**7.6**	**2.7**	**1.2 J**	<2 U	**2.7**	**1.2 J**	<2.1 U	<2 U
2-Nitroaniline	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
3-Nitroaniline	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
4-Nitroaniline	--	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
Naphthalene	300	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**1.5 J**	<2 U	**3.9**	**4.3**	**5.6**	**3.1**	**2.3**	**1.2 J**	**1.6 J**	**2.1**	**2.0**	**4.6**	**5.5**	**2.8**	**1.3 J**	**1.8 J**	**2.5**	**1.9 J**	<2.1 U	<2 U
Nitrobenzene	3	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
N-Nitroso-di-n-propylamine	0.005	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U
N-Nitrosodiphenylamine	7	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.3 U	<5 U
Phenanthrene	100	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**5.3**	**2.5**	**2.7**	**1 J**	**1.7 J**	**1.2 J**	<2.1 U	**0.75 J**	**0.69 J**	**5.6**	**2.3**	**2.8**	**1.9 J**	**1.3 J**	**0.86 J**	**0.68 J**	<2.1 U	<2 U
Pyrene	200	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	**0.96 J**	**0.94 J**	**0.74 J**	**1.0 J**	**1 J**	**0.65 J**	**1.3 J**	**1 J**	**0.86 J**	**0.97 J**	**0.74 J**	**1.2 J**	**0.64 J**	**1.4 J**	**0.99 J**	**0.63 J**	<2.1 U	<2 U
1,2,4-Trichlorobenzene	9	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<3 U	<2 U	<2 U	<2.1 U	<2 U

Notes:

GWQC New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L Micrograms per liter (equivalent to parts per billion)
5.0 Bold value indicates concentration is above the method detection limit.
U The compound was not detected at the indicated concentration.
J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
-- No standard published
N Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the indication is based on a library search
NA Not analyzed
* Well AX is a blind duplicate of Well X
** Well AVD is a blind duplicate of Well AV
*** Well VV ia blind duplicate of Well AV

Table 05. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds,
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sample Identification	GWQC	Well AY								Well AZ								Field Blank										
		7/21/05	10/4/05	12/16/05	3/29/06	6/23/06	9/27/06	12/5/06	12/10/04	3/15/05	8/17/05	10/4/05	12/19/05	3/28/06	6/22/06	9/27/06	12/5/06	12/10/04	12/13/04	3/15/05	8/17/05	10/4/05	12/16/05	12/19/05	3/28/06	3/29/06	6/22/06	6/23/06
Semivolatile Organic Compounds (ug/L)																												
2-Chlorophenol	40	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
4-Chloro-3-methyl phenol	20	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
2,4-Dichlorophenol	20	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
2,4-Dimethylphenol	100	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
2,4-Dinitrophenol	10	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	NS	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U
4,6-Dinitro-o-cresol	60	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	NS	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U
2-Methylphenol	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
3&4-Methylphenol	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
2-Nitrophenol	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
4-Nitrophenol	--	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	NS	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U
Pentachlorophenol	0.3	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	NS	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U
Phenol	4000	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
2,4,5-Trichlorophenol	700	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
2,4,6-Trichlorophenol	3	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Acenaphthene	400	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Acenaphthylene	10	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Anthracene	2000	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Benzo(a)anthracene	10	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Benzo(a)pyrene	20	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Benzo(b)fluoranthene	10	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Benzo(g,h,i)perylene	20	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Benzo(k)fluoranthene	2	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
4-Bromophenyl phenyl ether	--	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Butyl benzyl phthalate	100	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
2-Chloronaphthalene	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
4-Chloroaniline	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Carbazole	--	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Chrysene	20	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
bis-(2-Chloroethoxy)methane	--	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
bis(2-Chloroethyl)ether	0.03	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
bis(2-Chloroisopropyl)ether	300	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
4-Chlorophenyl phenyl ether	--	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
1,2-Dichlorobenzene	600	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
1,3-Dichlorobenzene	600	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
1,4-Dichlorobenzene	75	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
2,4-Dinitrotoluene	0.05	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
2,6-Dinitrotoluene	0.05	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
3,3'-Dichlorobenzidine	0.08	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Dibenzo(a,h)anthracene	20	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Dibenzofuran	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Di-n-butyl phthalate	900	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Di-n-octyl phthalate	100	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Diethyl phthalate	5000	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Dimethyl phthalate	10	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
bis(2-Ethylhexyl)phthalate	3	<2 U	<2 U	**1.4 J**	**1.3 J**	**1.3 J**	**2.2 B**	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	**1.3 BJ**	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Fluoranthene	300	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Fluorene	300	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Hexachlorobenzene	0.02	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Hexaclorobutadiene	1	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Hexachlorocyclopentadiene	50	<20 U	<20 U	<22 U	<20 U	<20 U	<20 U	<20 U	<20 U	NS	<20 U	<21 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<20 U	<21 U	<20 U	<20 U	<20 U
Hexachloroethane	0.7	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Indeno(1,2,3-cd)pyrene	--	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Isophorone	100	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
2-Methylnaphthalene	--	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
2-Nitroaniline	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
3-Nitroaniline	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
4-Nitroaniline	--	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Naphthalene	300	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Nitrobenzene	3	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
N-Nitroso-di-n-propylamine	0.005	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
N-Nitrosodiphenylamine	7	<5 U	<5 U	<5.6 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	NS	<5.1 U	<5.2 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 U	<5.3 U	<5 U	<5 U	<5 U
Phenanthrene	100	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
Pyrene	200	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U
1,2,4-Trichlorobenzene	9	<2 U	<2 U	<2.2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	NS	<2.0 U	<2.1 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U	<2.0 U	<2 U	<2 U	<2 U	<2.1 U	<2 U	<2 U	<2 U

Notes:

GWQC New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L Micrograms per liter (equivalent to parts per billion)
5.0 Bold value indicates concentration is above the method detection limit.
U The compound was not detected at the indicated concentration.
J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
-- No standard published
N Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the indication is based on a library search
NA Not analyzed
* Well AX is a blind duplicate of Well X
** Well AVD is a blind duplicate of Well AV
*** Well VV ia blind duplicate of Well AV

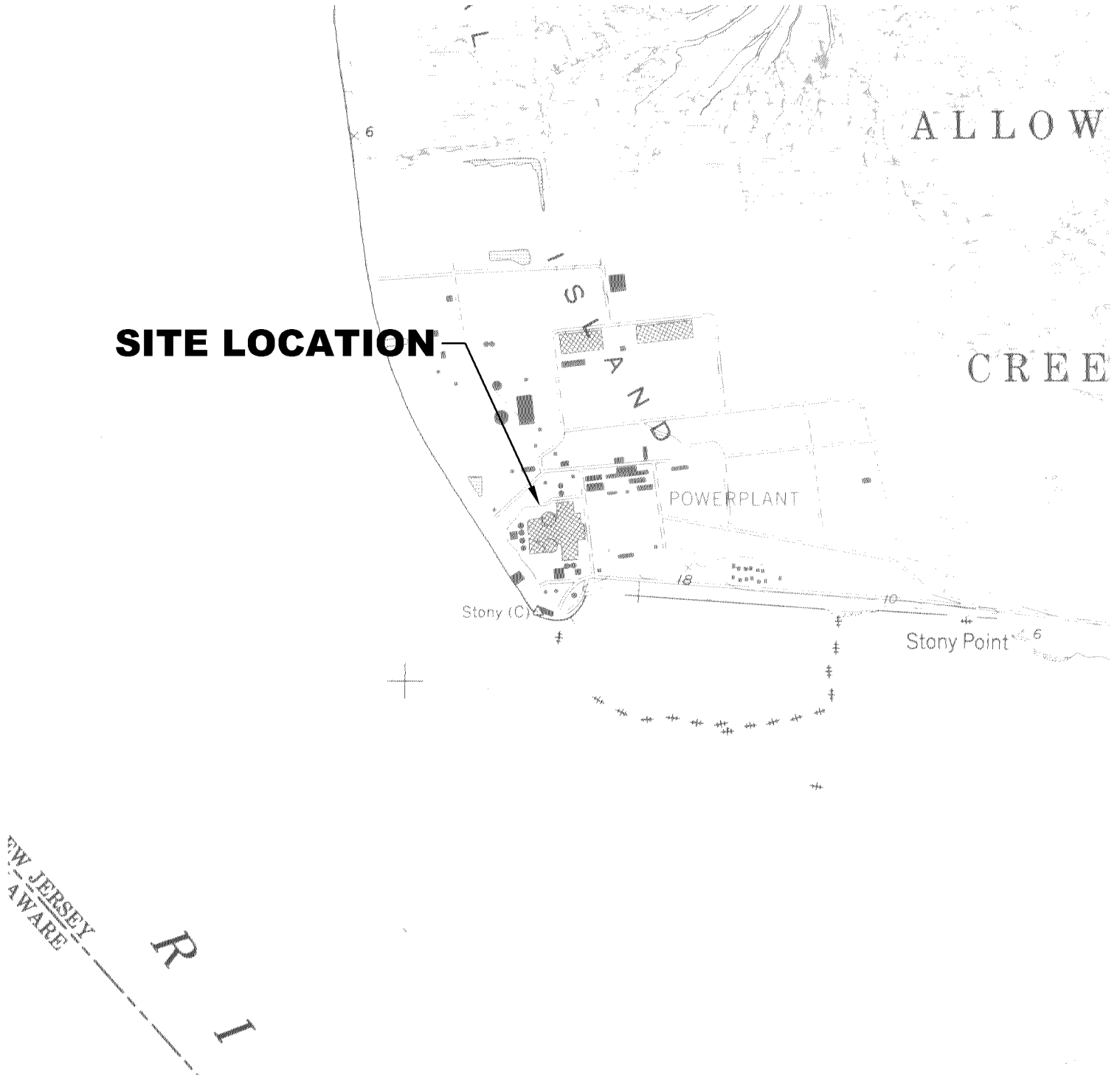
Table 05. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sample Identification	GWQC	Field Blank		
		9/27/06	12/4/2006	12/5/2006
Semivolatile Organic Compounds (ug/L)				
2-Chlorophenol	40	<5.2 U	<5 U	<5 U
4-Chloro-3-methyl phenol	20	<5.2 U	<5 U	<5 U
2,4-Dichlorophenol	20	<5.2 U	<5 U	<5 U
2,4-Dimethylphenol	100	<5.2 U	<5 U	<5 U
2,4-Dinitrophenol	10	<21 U	<20 U	<20 U
4,6-Dinitro-o-cresol	60	<21 U	<20 U	<20 U
2-Methylphenol	--	<5.2 U	<5 U	<5 U
3&4-Methylphenol	--	<5.2 U	<5 U	<5 U
2-Nitrophenol	--	<5.2 U	<5 U	<5 U
4-Nitrophenol	--	<21 U	<20 U	<20 U
Pentachlorophenol	0.3	<21 U	<20 U	<20 U
Phenol	4000	<5.2 U	<5 U	<5 U
2,4,5-Trichlorophenol	700	<5.2 U	<5 U	<5 U
2,4,6-Trichlorophenol	3	<5.2 U	<5 U	<5 U
Acenaphthene	400	<2.1 U	<2 U	<2 U
Acenaphthylene	10	<2.1 U	<2 U	<2 U
Anthracene	2000	<2.1 U	<2 U	<2 U
Benzo(a)anthracene	10	<2.1 U	<2 U	<2 U
Benzo(a)pyrene	20	<2.1 U	<2 U	<2 U
Benzo(b)fluoranthene	10	<2.1 U	<2 U	<2 U
Benzo(g,h,i)perylene	20	<2.1 U	<2 U	<2 U
Benzo(k)fluoranthene	2	<2.1 U	<2 U	<2 U
4-Bromophenyl phenyl ether	--	<2.1 U	<2 U	<2 U
Butyl benzyl phthalate	100	<2.1 U	<2 U	<2 U
2-Chloronaphthalene	--	<5.2 U	<5 U	<5 U
4-Chloroaniline	--	<5.2 U	<5 U	<5 U
Carbazole	--	<2.1 U	<2 U	<2 U
Chrysene	20	<2.1 U	<2 U	<2 U
bis-(2-Chloroethoxy)methane	--	<2.1 U	<2 U	<2 U
bis(2-Chloroethyl)ether	0.03	<2.1 U	<2 U	<2 U
bis(2-Chloroisopropyl)ether	300	<2.1 U	<2 U	<2 U
4-Chlorophenyl phenyl ether	--	<2.1 U	<2 U	<2 U
1,2-Dichlorobenzene	600	<2.1 U	<2 U	<2 U
1,3-Dichlorobenzene	600	<2.1 U	<2 U	<2 U
1,4-Dichlorobenzene	75	<2.1 U	<2 U	<2 U
2,4-Dinitrotoluene	0.05	<2.1 U	<2 U	<2 U
2,6-Dinitrotoluene	0.05	<2.1 U	<2 U	<2 U
3,3'-Dichlorobenzidine	0.08	<5.2 U	<5 U	<5 U
Dibenzo(a,h)anthracene	20	<2.1 U	<2 U	<2 U
Dibenzofuran	--	<5.2 U	<5 U	<5 U
Di-n-butyl phthalate	900	<2.1 U	<2 U	<2 U
Di-n-octyl phthalate	100	<2.1 U	<2 U	<2 U
Diethyl phthalate	5000	<2.1 U	<2 U	<2 U
Dimethyl phthalate	10	<2.1 U	<2 U	<2 U
bis(2-Ethylhexyl)phthalate	3	<2.1 U	<2 U	<2 U
Fluoranthene	300	<2.1 U	<2 U	<2 U
Fluorene	300	<2.1 U	<2 U	<2 U
Hexachlorobenzene	0.02	<2.1 U	<2 U	<2 U
Hexaclorobutadiene	1	<2.1 U	<2 U	<2 U
Hexachlorocyclopentadiene	50	<21 U	<20 U	<20 U
Hexachloroethane	0.7	<5.2 U	<5 U	<5 U
Indeno(1,2,3-cd)pyrene	--	<2.1 U	<2 U	<2 U
Isophorone	100	<2.1 U	<2 U	<2 U
2-Methylnaphthalene	--	<2.1 U	<2 U	<2 U
2-Nitroaniline	--	<5.2 U	<5 U	<5 U
3-Nitroaniline	--	<5.2 U	<5 U	<5 U
4-Nitroaniline	--	<5.2 U	<5 U	<5 U
Naphthalene	300	<2.1 U	<2 U	<2 U
Nitrobenzene	3	<2.1 U	<2 U	<2 U
N-Nitroso-di-n-propylamine	0.005	<2.1 U	<2 U	<2 U
N-Nitrosodiphenylamine	7	<5.2 U	<5 U	<5 U
Phenanthrene	100	<2.1 U	<2 U	<2 U
Pyrene	200	<2.1 U	<2 U	<2 U
1,2,4-Trichlorobenzene	9	<2.1 U	<2 U	<2 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
N	Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the indication is based on a library search
NA	Not analyzed
*	Well AX is a blind duplicate of Well X
**	Well AVD is a blind duplicate of Well AV
***	Well VV ia blind duplicate of Well AV

Figures



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

MN GN
10 ½° 187 MILS
0°21' 6 MIL
UTM GRID AND 1981 MAGNETIC NORTH

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

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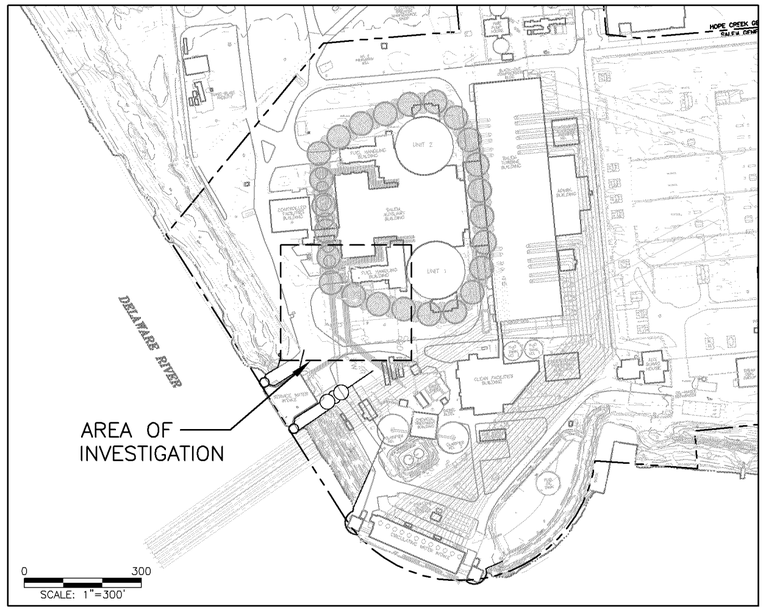
ARCADIS

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	6/14/06	P. MILIONIS	R. GAN
		LEAD DESIGN PROF.	CHECKED
		S. POTTER	B. PIERCE

SITE LOCATION
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
SALEM, NEW JERSEY

PROJECT NUMBER	DRAWING NUMBER
NP000603.0002	1

G:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0002\Task 04 – RAPR\200602\Final\Figures\Figure 01 – Station Location.dwg Feb. 23, 2007



SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL–AU
WELL–X
WELL–AW
WELL–AV
FUEL HANDLING BUILDING
LIMITS OF COFFERDAM
WELL–AY
WELL BV
WELL–AZ
VALVE

LEGEND:

- WELL–AZ — MONITORING WELL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD — BLOW DOWN PIPING
- FW — LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST — STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST — AUXILIARY FEEDWATER STORAGE TANK
- PWST — PRIMARY WATER STORAGE TANK

0 20 20
SCALE: 1"=20'

NO.	DATE	REVISION DESCRIPTION	BY CKD

ARCADIS
6 Terry Drive
Suite 300 , Newtown, PA 18940
Tel: 267/685–1800 Fax: 267/685–1801

PSEG NUCLEAR, LLC
SALEM GENERATING STATION

ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	12/28/05	P. MILIONIS	A. ROBINSON
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE

STATION LAYOUT

PROJECT NUMBER	DRAWING NUMBER
NP000603.0002	2

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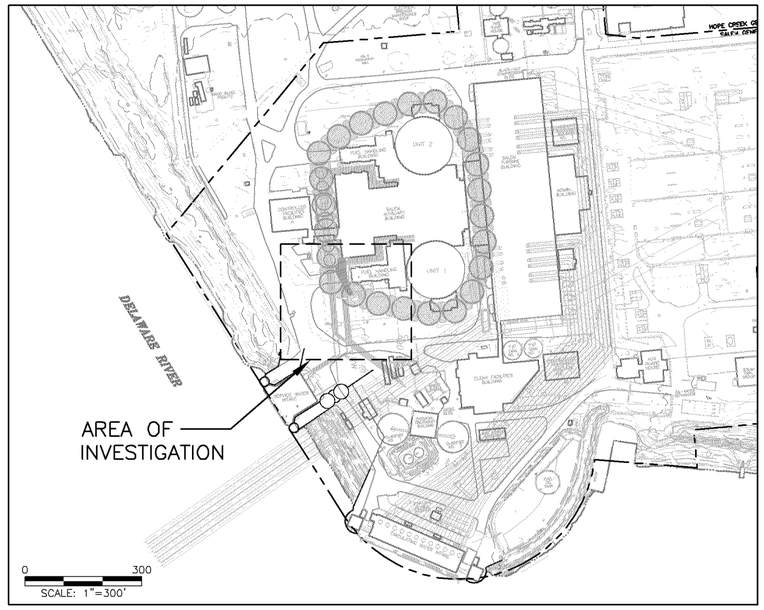
C:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0002\Task 04 – RAPR\200602\Final\Figures\Figure 02 – Station Layout.dwg, 23/ 2/2007 9:51am



SITE LAYOUT
SCALE: 1"=300'

LEGEND:

- WELL–AZ ⊗ MONITORING WELL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD BLOW DOWN PIPING
- RW LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK
- GWQC NEW JERSEY GROUND WATER QUALITY CRITERIA FOR CLASS IIA AQUIFERS
- NS NO PUBLISHED STANDARDS
- J ESTIMATED VALUE
- 10.2 BOLD AND GRAY–SHADED VALUES ARE ABOVE THEIR RESPECTIVE GWQC.

WELL ID — NEW JERSEY GROUNDWATER QUALITY CRITERIA FOR CLASS IIA AQUIFER

Well AV	GWQC	Jun-06	Sep-06	Dec-06
Acetone	700	11.8	<10 U	<10 U
Acenaphthene	400	2.3	1.1 J	1.1 J
Fluorene	300	3.1	2.4	2.0
2-Methylnaphthalene	NS	<2.1 U	2.2	1.3 J
Naphthalene	300	1.6 J	2.1	2

CONSTITUENT OF CONCERN — SAMPLE DATE — ANALYTICAL RESULT

1. PRIOR TO INITIATING GROUNDWATER SAMPLE COLLECTION, DEPTH–TO–WATER AND SEPARATE PHASE PRODUCT THICKNESS MEASUREMENTS WERE COLLECTED FROM THE INDIVIDUAL WELLS USING AN ELECTRONIC OIL–WATER INTERFACE PROBE.
2. MONITORING WELLS NOT INDICATING A MEASURABLE THICKNESS OF SEPARATE PRODUCT (I.E., GREATER THAN 0.01 FEET) WERE SAMPLED UTILIZING LOW–FLOW SAMPLING METHODS.
3. GROUNDWATER SAMPLES WERE ANALYZED FOR PRIORITY POLLUTANT SEMI–VOLATILE AND VOLATILE ORGANICS INCLUDING A LIBRARY SEARCH.
4. UNITS ARE IN ug/l – MICROGRAMS PER LITER (EQUIVALENT TO PARTS PER BILLION) CONCENTRATIONS ARE ONLY SHOWN FOR THOSE CONSTITUENTS DETECTED ABOVE THE LABORTORY DETECTION LIMITS.

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
APPROXIMATE EXTENT OF SEPERATE–PHASE DIESEL FUEL
WELL–AU
WELL–X
WELL–AW
WELL–AV
LIMITS OF COFFERDAM
WELL–AY
WELL BV
WELL–AZ
HANDLING BUILDING
VALVE

Well X	GWQC	Sep-06	Dec-06
Benzene	1	10.2	6.9
Xylenes (total)	40	<1 U	1

Well AV	GWQC	Jun-06	Sep-06	Dec-06
Acetone	700	11.8	<10 U	<10 U
Acenaphthene	400	2.5	1.3 J	1.1 J
Fluorene	300	3.5	2.6	2.3
2-Methylnaphthalene	NS	<2.1 U	2.7	1.3 J
Naphthalene	300	1.8 J	2.5	2.0

0 20 20
SCALE: 1"=20'

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NO.	DATE	REVISION DESCRIPTION	BY CKD

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PSEG NUCLEAR, LLC
SALEM GENERATING STATION

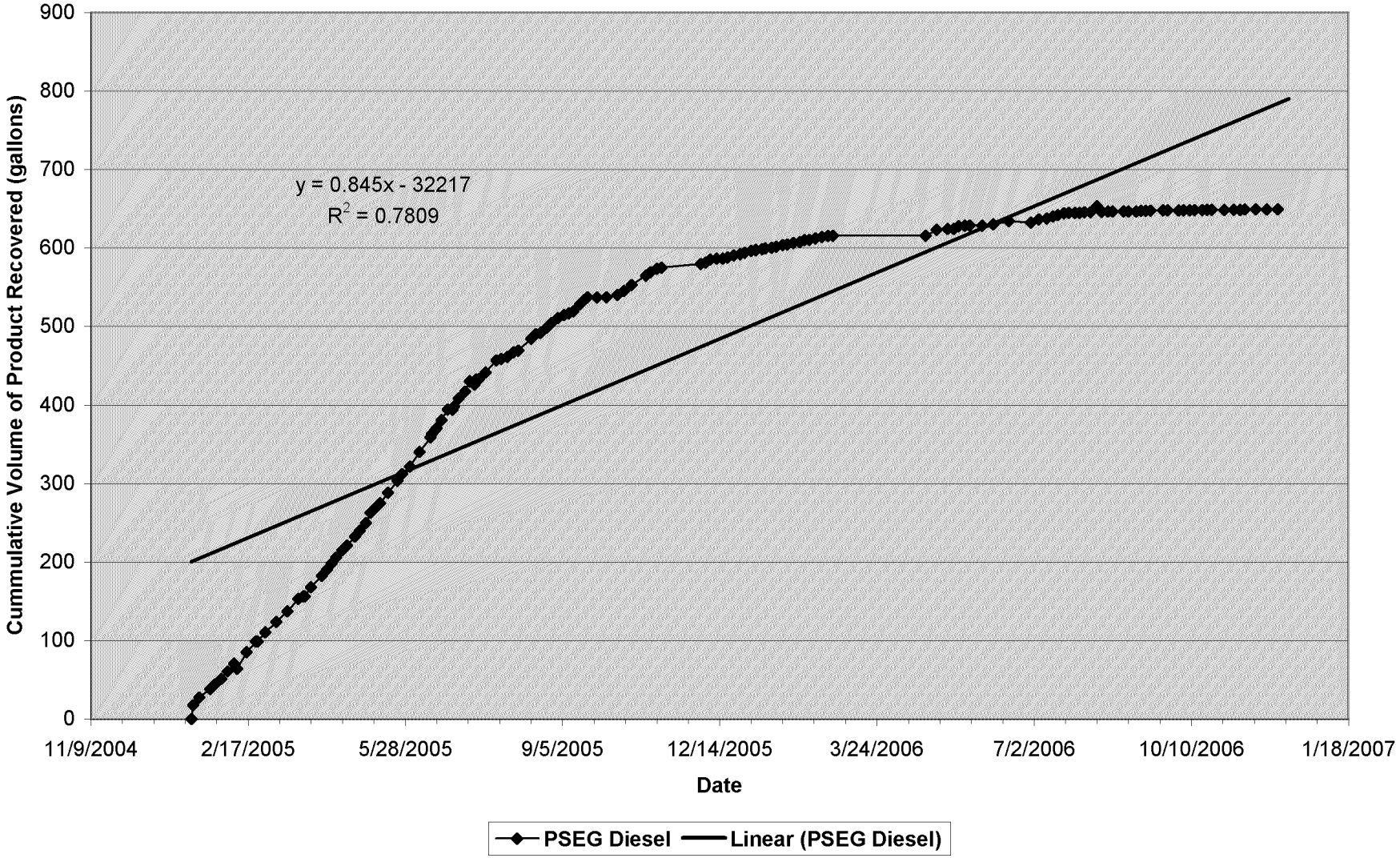
ARTIFICIAL ISLAND
HANCOCK'S BRIDGE, NEW JERSEY

GROUNDWATER MONITORING RESULTS
JUNE 2006 THROUGH DECEMBER 2006

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
M. WASILEWSKI	2/6/07	P. MILIONIS	R. GAN
		LEAD DESIGN PROF. S. POTTER	CHECKED B. PIERCE
		PROJECT NUMBER NP000603.0002	DRAWING NUMBER 3

G:\APROJECT\PSE&G\NP000603 – Salem – Diesel\NP000603.0002\Task 04 – RAPR\200602\Final\Figures\Figure 03 – GROUNDWATER MONITORING RESULTS – JUNE 2006 – DECEMBER 2006.dwg, 23/ 2/2007 9:50am

Recovery Well AU



Appendix A

Groundwater Low-flow
Smapling Logs

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AV | Date 12/4/2006

Project Name/Location PSEG-Diesel Salem Generating Station, Hancock's Bridge, NJ | Weather clear, 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.17 to -0.83 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.29 | Total Depth (ft-bmp): 9.66 | Water Column/ Gallons in Well: --

MP Elevation: 8.82 | Pump Intake (ft-bmp): 7 | Purge Method: Centrifugal, Submersible, Other bladder | Sample Method: low flow

Pump On/Off: 13:20/15:25 | Volumes Purged: -- | Sample Time: Label 14:10, Start 14:10, End 15:25 | Replicate/ Code No.: Well V V @1415 | Sampled by: FS/AC

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1330	0	150	5.33	--	6.26	0.243	18.0	1.16	11.78	-45.1	clear	none
1335	5	150	5.33	--	6.2	0.242	18.5	1.35	12.15	-46.1	clear	none
1340	10	150	5.33	--	6.18	0.241	12.8	1.42	12.23	-44.2	clear	none
1345	15	150	5.33	--	6.16	0.241	12.7	1.27	12.50	-44.5	clear	none
1350	20	150	5.33	--	6.15	0.240	15.2	1.16	12.45	-44.1	clear	none
1355	25	150	5.33	--	6.14	0.240	11.8	1.00	12.37	-44.3	clear	none
1400	30	150	5.33	--	6.13	0.240	12.0	1.03	12.40	-43.7	clear	none
1405	35	150	5.33	--	6.11	0.239	11.9	1.05	12.32	-44.5	clear	none
1410	40	150	5.33	--	6.10	0.238	11.8	1.07	12.26	-43.1	clear	none

Constituents Sampled	Container	Number	Preservative
SVOCs- 8270	1 Liter Amber	4	None
VOCs - 8260	40 ml VOA	6	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: Adjacent to Unit One Reactor | Well Locked at Arrival: Yes

Condition of Well: OK | Well Locked at Departure: Yes

Well Completion: Flush Mount | Key Number To Well:

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AY | Date 12/5/2006

Project Name/Location PSEG-Diesel, Salem Generating Station, Hancock's Island, NJ | Weather clear, 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.40 to 1.40 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.45 | Total Depth (ft-bmp): 7.3 | Water Column/ Gallons in Well: --

MP Elevation: 9.04 | Pump Intake (ft-bm): -- | Purge Method: NA; Centrifugal; Submersible; Other: Bailer | Sample Method: Grab sample

Pump On/Off: NA | Volumes Purged: NA

Sample Time: Label 1355; Start NA; End NA | Replicate/ Code No.: -- | Sampled by: Frank Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
			Due to insufficient available groundwater only a grab sample was collected from this well									

Constituents Sampled	Container	Number	Preservative
SVOCs - 8270	1 L amber	2	None
VOCs- 8260	40 ml VOA	3	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AZ | Date 12/5/2006

Project Name/Location PSEG- Diesel, Salem Generating Station, Hancock's Bridge NJ | Weather clear, 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.33 to 0.33 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.28 | Total Depth (ft-bmp): 9.07 | Water Column/ Gallons in Well: --

MP Elevation: 8.66 | Pump Intake (ft-bmp): 7 | Purge Method: Centrifugal, Submersible x, Other bladder | Sample Method: low flow

Pump On/Off: 1350/1457 | Volumes Purged:

Sample Time: Label 1435, Start 1437, End 1457 | Replicate/ Code No.: -- | Sampled by: FS/AC

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1355	5	200	5.32	--	7.33	0.571	54.9	8.51	9.68	55.6	clear	None
1400	10	200	5.33	--	7.37	0.580	37.4	9.3	10.03	65.1	clear	None
1405	15	200	5.33	--	7.39	0.587	29.6	8.94	10.43	70.6	clear	None
1410	20	200	5.36	--	7.41	0.590	36.4	8.71	10.58	74.7	clear	None
1415	25	200	5.36	--	7.41	0.589	37.9	8.78	10.23	78.3	clear	None
1420	30	200	5.37	--	7.41	0.589	36.4	9.51	10.29	81.2	clear	None
1425	35	200	5.38	--	7.41	0.590	36.1	9.53	10.07	83	clear	None
1430	40	200	5.38	--	7.42	0.590	36.5	9.57	10.04	85.5	clear	None

Constituents Sampled	Container	Number	Preservative
SVOCs - 8280b	1 Liter Amber	2	NONE
VOCS- 8270c	40 ml VOA	3	HCl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Near rad. yard fence	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well X | Date 12/5/2006

Project Name/Location PSEG-Diesel Salem Generating Station, Hancock's Bridge, NJ | Weather clear, 30s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 7.47 to -2.53 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 8.3 | Total Depth (ft-bmp): 13.3 | Water Column/ Gallons in Well: --

MP Elevation: 8.82 | Pump Intake (ft-bmp): 10.5 | Purge Method: Centrifugal, Submersible, Other bladder | Sample Method: low flow

Pump On/Off: 1002/1114 | Volumes Purged: -- | Sample Time: Label 1050, Start 1047, End 1112 | Replicate/ Code No.:

Sampled by: F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1008	6	200	8.31	--	6.8	0.38	17.1	2.73	8.04	-49.2	clear	slight
1013	11	200	8.31	--	6.77	0.386	15.8	1.65	8.84	-65.4	clear	slight
1018	16	200	8.31	--	6.75	0.403	6.69	1.27	9.42	-71.8	clear	slight
1023	21	200	8.31	--	6.72	0.601	4.45	0.94	9.43	-76.3	clear	slight
1028	26	200	8.31	--	6.73	0.426	4.47	0.91	9.35	-78.3	clear	slight
1033	31	200	8.31	--	6.71	0.427	4.56	0.90	9.25	-79.7	clear	slight
1038	36	200	8.31	--	6.71	0.421	4.92	1.02	9.12	-80.2	clear	slight
1043	41	200	8.31	--	6.71	0.425	4.50	0.94	9.51	-80.9	clear	slight
1048	46	200	8.32	--	6.71	0.423	4.51	0.93	9.52	-80.7	clear	slight

Constituents Sampled	Container	Number	Preservative
SVOCs- 8270	1 Liter Amber	2	None
VOCs - 8260	40 ml VOA	3	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: | Well Locked at Arrival: Yes

Condition of Well: OK | Well Locked at Departure: Yes

Well Completion: Flush Mount | Key Number To Well: combo

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AV | Date 6/22/2006

Project Name/Location PSEG-Diesel Salem Generating Station, Hancock's Bridge, NJ | Weather overcast, 80s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.17 to -0.83 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.86 | Total Depth (ft-bmp): 9.66 | Water Column/ Gallons in Well: --

MP Elevation: 8.82 | Pump Intake (ft-bmp): 8 | Purge Method: Centrifugal, Submersible, Other bladder | Sample Method: low flow

Pump On/Off: 1015/1135 | Volumes Purged: --

Sample Time: Label 1105, Start 1105, End 1133 | Replicate/ Code No.: Well V V | Sampled by: F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1010	0	250	5.94	--	6.61	0.578	8.7	1.92	22.49	-3.1	clear	none
1015	5	250	5.95	--	6.63	0.553	8.4	1.20	22.62	-2.1	clear	none
1020	10	250	5.95	--	6.69	0.548	6.3	1.36	22.60	-2.3	clear	none
1025	15	250	5.95	--	6.74	0.540	3.9	1.68	22.7	-4.8	clear	none
1030	20	250	5.95	--	6.74	0.536	2.8	1.93	22.72	-4.0	clear	none
1035	25	250	5.95	--	6.74	0.531	2.1	2.02	22.75	-3.1	clear	none
1040	30	250	5.95	--	6.75	0.531	2	2.09	22.78	-3.9	clear	none
1045	35	250	5.95	--	6.75	0.531	2.2	2.08	22.79	-3.4	clear	none

Constituents Sampled	Container	Number	Preservative
SVOCs- 8270	1 Liter Amber	4	None
VOCs - 8260	40 ml VOA	6	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	OK	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AY | Date 6/23/2006

Project Name/Location PSEG-Diesel, Salem Generating Station, Hancock's Island, NJ | Weather hot, hazy 80s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.40 to 1.40 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.97 | Total Depth (ft-bmp): 7.3 | Water Column/ Gallons in Well: --

MP Elevation: 9.04 | Pump Intake (ft-bm): -- | Purge Method: NA; Centrifugal; Submersible; Other: Bailer | Sample Method: Grab sample

Pump On/Off: NA | Volumes Purged: NA

Sample Time: Label NA; Start 1020; End NA | Replicate/ Code No.: -- | Sampled by: Frank Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
			Due to insufficient available groundwater only a grab sample was collected from this well									

Constituents Sampled	Container	Number	Preservative
SVOCs - 8270	1 L amber	2	None
VOCs- 8260	40 ml VOA	3	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AZ | Date 6/22/2006

Project Name/Location PSEG- Diesel, Salem Generating Station, Hancock's Bridge NJ | Weather humid, hot, 90s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.33 to 0.33 | Casing Diameter (in.): 4''

Well Material: X PVC / SS

Static Water Level (ft-bmp): 5.99 | Total Depth (ft-bmp): 9.07 | Water Column/ Gallons in Well: 2.41 / 1.5665

MP Elevation: 8.66 | Pump Intake (ft-bmp): 7.5 | Purge Method: Centrifugal / Submersible x / Other bladder

Sample Method: low flow

Pump On/Off: 1215/1317 | Volumes Purged:

Sample Time: Label 1310, Start 1310, End 1321 | Replicate/ Code No.: --

Sampled by: F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1220	5	250	6.07	--	7.07	0.527	45	7.41	22.37	146.4	cloudy	None
1225	10	250	6.07	--	7.23	0.563	22	7.69	22.07	152.4	cloudy	None
1230	15	250	6.09	--	7.21	0.555	20	7.89	23.9	153.8	cloudy	None
1235	20	250	6.09	--	7.17	0.531	23	7.77	23.16	158.0	cloudy	None
1240	25	250	6.09	--	7.2	0.537	17	8	23.06	158.6	cloudy	None
1245	30	250	6.10	--	7.18	0.545	15	8.3	23.08	162.2	clear	None
1250	35	250	6.10	--	7.17	0.536	14	8.3	23.39	163.2	clear	None
1255	40	250	6.10	--	7.15	0.541	12	8.42	23.16	165.6	clear	None
1300	45	250	6.10	--	7.14	0.541	12	8.45	23.19		clear	None
1305	50	250	6.10	--	7.12	0.540	11.8	8.45	23.18		clear	None

Constituents Sampled	Container	Number	Preservative
SVOCs - 8280b	1 Liter Amber	2	NONE
VOCS- 8270c	40 ml VOA	3	HCl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Near rad. yard fence	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AV | Date 9/27/2006

Project Name/Location PSEG-Diesel Salem Generating Station, Hancock's Bridge, NJ | Weather partly cloudy, 70

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.17 to -0.83 | Casing Diameter (in.): 4''

Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.47 | Total Depth (ft-bmp): 9.66 | Water Column/ Gallons in Well: --

MP Elevation: 8.82 | Pump Intake (ft-bmp): 6 | Purge Method: Centrifugal, Submersible, Other bladder

Sample Method: low flow

Pump On/Off: 1011/1217 | Volumes Purged: --

Sample Time: Label 1040, Start 1047, End 1215 | Replicate/ Code No.: Well V V @1045

Sampled by: F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1016	5	150	5.47	--	6.22	0.456	12.0	3.85	23.38	-64.8	clear	slight
1021	10	150	5.47	--	6.23	0.457	9.3	3.49	23.59	-67.0	clear	slight
1026	15	150	5.47	--	6.22	0.459	8.0	3.05	23.90	-67.0	clear	slight
1031	20	150	5.47	--	6.21	0.460	6.8	2.70	23.85	-67.0	clear	slight
1036	25	150	5.47	--	6.21	0.460	6.8	2.74	23.83	-67.2	clear	slight
1041	30	150	5.48	--	6.2	0.461	6.5	2.77	23.84	-67.6	clear	slight
1046	35	150	5.48	--	6.19	0.464	6.2	2.70	23.90	-67.9	clear	slight

Constituents Sampled	Container	Number	Preservative
SVOCs- 8270	1 Liter Amber	4	None
VOCs - 8260	40 ml VOA	6	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	OK	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AY | Date 9/27/2006

Project Name/Location PSEG-Diesel, Salem Generating Station, Hancock's Island, NJ | Weather partly cloudy, 70s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.40 to 1.40 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.72 | Total Depth (ft-bmp): 7.3 | Water Column/ Gallons in Well: --

MP Elevation: 9.04 | Pump Intake (ft-bm): -- | Purge Method: NA (Centrifugal, Submersible, Other: Bailer) | Sample Method: Grab sample

Pump On/Off: NA | Volumes Purged: NA

Sample Time: Label 1605, Start NA, End NA | Replicate/ Code No.: -- | Sampled by: Frank Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
			Due to insufficient available groundwater only a grab sample was collected from this well									

Constituents Sampled	Container	Number	Preservative
SVOCs - 8270	1 L amber	2	None
VOCs- 8260	40 ml VOA	3	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Adjacent to Unit One Reactor	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well AZ | Date 9/27/2006

Project Name/Location PSEG- Diesel, Salem Generating Station, Hancock's Bridge NJ | Weather partly cloudy, 70s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 5.33 to 0.33 | Casing Diameter (in.): 4''

Well Material: X PVC / SS

Static Water Level (ft-bmp): 5.67 | Total Depth (ft-bmp): 9.07 | Water Column/ Gallons in Well: 2.41 / 1.5665

MP Elevation: 8.66 | Pump Intake (ft-bmp): 7 | Purge Method: Centrifugal / Submersible x / Other bladder

Sample Method: low flow

Pump On/Off: 1426/1535 | Volumes Purged:

Sample Time: Label 1310, Start 1310, End 1321 | Replicate/ Code No.: --

Sampled by: F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1430	4	210	5.67	--	6.95	0.989	19	6.77	24.73	-70.4	clear	None
1435	9	210	5.66	--	6.94	0.984	14	6.73	24.76	-69.6	clear	None
1440	14	210	5.66	--	6.70	0.981	14	6.69	24.79	-68.3	clear	None
1445	19	210	5.67	--	6.91	0.981	14	6.68	24.88	-66.7	clear	None
1450	24	210	5.67	--	6.89	0.979	14	6.66	25.04	-64.8	clear	None
1455	29	210	5.67	--	6.88	0.98	14	6.65	25.10	-63.5	clear	None
1500	34	210	5.67	--	6.88	0.979	12	6.66	25.12	-63.8	clear	None

Constituents Sampled	Container	Number	Preservative
SVOCs - 8280b	1 Liter Amber	2	NONE
VOCS- 8270c	40 ml VOA	3	HCl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:	Near rad. yard fence	Well Locked at Arrival:	Yes
Condition of Well:	Good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount	Key Number To Well:	

GW Samp Form
2/23/2007

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0002.00004 | Well ID Well X | Date 9/27/2006

Project Name/Location PSEG-Diesel Salem Generating Station, Hancock's Bridge, NJ | Weather parly cloudy, 70s

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 7.47 to -2.53 | Casing Diameter (in.): 4'' | Well Material: X PVC, SS

Static Water Level (ft-bmp): 8.81 | Total Depth (ft-bmp): 13.3 | Water Column/ Gallons in Well: --

MP Elevation: 8.82 | Pump Intake (ft-bmp): 10.5 | Purge Method: Centrifugal, Submersible, Other bladder | Sample Method: low flow

Pump On/Off: 1245/1412 | Volumes Purged: -- | Sample Time: Label 1330, Start 1326, End 1410 | Replicate/ Code No.:

Sampled by: F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1255	10	200	8.81	--	6.33	1.015	9.4	5.10	24.65	-96.0	clear	slight
1300	15	200	8.81	--	6.34	1.021	5.1	4.49	24.52	-95.0	clear	slight
1305	20	200	8.83	--	6.34	1.032	3.0	4.42	24.56	-94.4	clear	slight
1310	25	200	8.83	--	6.33	1.037	2.2	5.09	24.75	-92.5	clear	slight
1315	30	200	8.83	--	6.34	1.064	1.7	4.79	24.68	-94.5	clear	slight
1320	35	200	8.83	--	6.32	1.068	1.3	4.72	24.65	-94.7	clear	slight
1325	40	200	8.83	--	6.33	1.070	1.3	4.75	24.65	-94.9	clear	slight

Constituents Sampled	Container	Number	Preservative
SVOCs- 8270	1 Liter Amber	2	None
VOCs - 8260	40 ml VOA	3	Hcl

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location: | Well Locked at Arrival: Yes

Condition of Well: OK | Well Locked at Departure: Yes

Well Completion: Flush Mount | Key Number To Well:

GW Samp Form
2/23/2007

Appendix B

Groundwater Analytical Results
(June 2006 / September 2006
and December 2006)

Appendix C

Well Construction Details

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-BV

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.03" Latitude: North 39°27'44.46"

New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 230,768 East 199,526

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.24 PVC 98.77

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

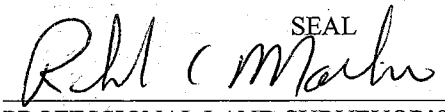
Site Mon. N 5+0, E 2+0 elev. 102.78 actual scaled elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL



PROFESSIONAL LAND SURVEYOR'S SIGNATURE 1/25/2007 DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

New Jersey Department of Environmental Protection
Bureau of Water Systems and Well Permitting

MONITORING WELL RECORD

Well Permit Number 3400007816

Atlas Sheet Coordinates 3401936

OWNER IDENTIFICATION PSE&G NUCLEAR LLC

Address END OF ALLOWAY CREEK NECK RD

City Lower Alloways Creek State New Jersey Zip Code 08079

WELL LOCATION - If not the same as owner please give address Owner's Well No. MW-3V

County Salem Municipality Lower Alloways Creek Twp Lot No. 4.01 Block No. 26

Address END OF ALLOWAY CREEK NECK RD PSE&G GENERATING STA

WELL USE Monitoring

DATE WELL STARTED 12/6/06

DATE WELL COMPLETED 12/6/06

WELL CONSTRUCTION

Total Depth Drilled 10 ft.

Finished Well Depth 10 ft.

Borehole Diameter:

Top 10 in.

Bottom 10 in.

Well was finished: ☐ above grade ☒ flush mounted

If finished above grade, casing height (stick up) above land surface 2 ft.

Steel protective casing installed? ☐ Yes ☒ No

Static Water Level after drilling 4 ft.

Water Level was Measured Using TAPE

Well was developed for .5 hours

at .5 gpm

Method of development PUMP

Pump Capacity gpm

Pump Type

Drilling Fluid Type of Rig Geo66

Health and Safety Plan Submitted? ☐ Yes ☐ No

Level of Protection used on site (circle one) None D C B A

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	.5	3	4	PVC	40
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used .010)	3	10	4	PVC	40
Blank Casings (No. Used)					
Tail Piece					
Gravel Pack	2	10	10	#2	600 lbs
Grout	.5	2	10	Neat Cement Bentonite	200 lbs

Grouting Method Placement

Drilling Method HSA

GEOLOGIC LOG

Note each depth where water was encountered in consolidated formations

0-10 Fill/SAND

AS-BUILT WELL LOCATION (NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING: EASTING:

OR

LATITUDE: ° ' " LONGITUDE: ° ' "

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

Drilling Company B L MYERS BROS INC

Well Driller (Print) Lou Davis

Driller's Signature

Registration No. 502656 Date 1/17/07

ORIGINAL: DEP COPIES: DRILLER OWNER HEALTH DEPARTMENT

SII-SSA-0014-003023

WELL CONSTRUCTION LOG

WELL NO.: **Well-BV**

TOTAL DEPTH OF BORING: **10.00**

PROJECT INFORMATION

PROJECT: **PSE&G: Salem**

SITE LOCATION: **Salem, NJ**

LOGGED BY: **Jon Shafer**

DATE STARTED: **12/5/2006**

DATE COMPLETED: **12/5/2006**

DRILLING INFORMATION

DRILLING CO.: **BL Myers**

DRILLER: **Lou Davis**

DRILLING METHOD: **Vaccum Extraction**

COORDINATES:

Northing: 230768

Easting: 199526

MP Elevation (ft rpd): 98.77

DEPTH	SOIL SYMBOLS	SOIL DESCRIPTION	SAMPLE ID	PID (ppm)	WELL CONSTRUCTION DETAILS
0		SM: Yellowish orange medium grain loose SAND with some silt and little subrounded fine to coarse gravel. wet at 6.5'			PVC sch 40 bent-cement grout sand pack PVC sch 40
5					
10					

State of New Jersey
Department of Environmental Protection

Jon S. Corzine
Governor

Lisa P. Jackson
Commissioner

Bureau of Southern Field Operations
Horizon Center
P.O. Box 407
Trenton, NJ 08625-0407
Phone #: 609-584-4150
Fax #: 609-584-4170

RECEIVED

March 24, 2008

Gregory Suey
Chemistry Envl & Radwaste Mgr
Salem Generation Station, PSEG Nuclear, LLC
PO Box 236, Hancock Bridge, NJ 08038-0236

Progress Report Approval

Re: Progress Reports
Hope Creek Generating Station
Buttonwood Ave
Lower Alloways Creek, Salem County
SRP PI# 004157
EA ID #: SUB080001
Case #04-08-02-2350-16

BFO File Number: 17-04-08

Dear Mr. Suey:

The New Jersey Department of Environmental Protection (Department) has completed review of the Progress Reports received on February 28, 2008, September 26, 2007, March 5, 2007 and August 7, 2006. The Department has determined that the Progress Reports are in compliance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E and other applicable requirements. The Department hereby approves the Progress Reports, effective the date of this letter. Based upon the benzene exceedences noted in MW-X in the June and December sampling events, however, **sampling is to be conducted in the months of June and December,** rather than March and September.

Pursuant to the schedule applicable to the site you shall submit a Progress Report by September 30, 2008. Please submit the document by that date, or submit a written request for an extension at least 2 weeks prior to the due date. Failure to submit the

Progress Report in accordance with the schedule may result in the initiation of MOA Termination. For your convenience, the regulations concerning the Department's remediation requirements can be found at http://www.state.nj.us/dep/srp/regs/ .

Thank you for your cooperation in this matter. If you have any questions, call Linda Range at (609) 584-4155.

Sincerely,

William H. Dunfee, Section Chief
Bureau of Southern Field Operations

C: Stanley LaBruna, PSE&G Services LLC, 80 Park Plaza T17A, Newark, NJ 07102
Jeffrey Pantazes, PSE&G, Environment, Health & Safety, 130 Money Island Rd, Salem, NJ 08079
Brad Pierce, Arcadis
Mayor/Clerk, Lower Alloways Creek
Salem County Health Department
File #17-04-08

ARCADIS
Infrastructure, environment, buildings

Imagine the result

Remedial Action Progress Report
July 2010 through January 2011

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

October 2011

ARCADIS

Jonathan Shafer
Staff Scientist

Bradley D. Pierce
Project Manager

Remedial Action Progress July 2010 through January 2011

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

Prepared for:
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Salem Generating Station
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1. Introduction

ARCADIS U.S., Inc. (ARCADIS), on behalf of PSEG Nuclear LLC (PSEG), has prepared this Remedial Action Progress Report (RAPR) to present the details and results of ongoing groundwater monitoring and product recovery activities being conducted at the PSEG Nuclear, LLC Salem Generating Station (the Station). The Station is located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. The Station location and layout are depicted on **Figures 1** and **2**, respectively.

Groundwater monitoring and product recovery activities are being conducted in accordance with the scope of work proposed in the Remedial Investigation Report (RIR) that was submitted to the New Jersey Department of Environmental Protection (NJDEP) in June 2005. The remedial investigation was conducted to determine the extent of constituents of concern in soil and groundwater associated with a release of diesel fuel (Incident Number 04-08-02-2350-16).

This RAPR includes activities completed at the Station from July 2010 through February 2011 including the completion of the semiannual groundwater monitoring activities conducted in December 2010 through February 2011 and the ongoing operation of the Separate-Phase Hydrocarbons (SPH) recovery systems in Wells AU and AW. These activities are discussed in Sections 3, 4 and 5 respectively, followed by the proposed schedule for subsequent reporting periods.

2. Project Background

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the storm water collection system just to the south of the Salem Unit 1 Auxiliary Building. Investigation of the catch basin, which is identified as "Catch Basin 27" on **Figure 2**, revealed the presence of a red-dyed diesel fuel (the red-dye is more typical of a recent release of diesel fuel). At this time, PSEG notified the NJDEP through its spill hotline.

Investigations into the source of the diesel fuel focused on the underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tanks to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. The location of the underground piping is shown on **Figure 2**. PSEG performed a pressure test on this underground piping. The results revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot

section of piping, PSEG subcontracted Praxair Services, Inc. to perform a "Tracer Tight" gas analysis. The results of this test showed that the location of the leak was directly adjacent to Catch Basin 27. The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). SPH was observed on standing water within the excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation.

In November 2004, PSEG initiated remedial investigation and interim product recovery activities. As presented in the Remedial Investigation Work Plan (RIWP) submitted to the NJDEP in January 2005, soil borings were advanced at locations down gradient of the source area to delineate the horizontal extent of diesel related constituents of concern in soil. Due to the presence of extensive, facility-critical infrastructure within the area of investigation, the boring locations were limited. Soil samples collected from the borings were submitted for total petroleum hydrocarbons (TPHC) analysis. Analytical results of the soil samples did not indicate concentrations of TPHC above laboratory detection limits. Results of the soil investigation indicated that the release of diesel fuel had not migrated a significant distance beyond the source area and that diesel related constituents of concern in soil were likely limited to the source area and the "smear-zone" where SPH had migrated.

The soil borings were converted to monitoring/product recovery wells to facilitate the collection of groundwater samples and for the recovery of SPH, if present. Water-level and product gauging and groundwater sampling were completed following installation of the wells. These activities utilized six monitoring wells (the five newly installed wells, and one previously existing monitoring well). The locations of the monitoring wells are shown on **Figure 2**. Water-level and product measurements indicated that the extent of measurable product is limited to the area of Well AU, located at the source area, and Well AW, located down gradient of the source area along the service water pipes. Measurable product was detected during a single gauging event in Well AZ. In April 2009, SPH was also observed in Well AI. This well is not sampled as part of the diesel remediation and investigation program.

The extent to which product has migrated is controlled by the significant facility-related subsurface infrastructure. The foundation for the primary water storage tank located to the west of Well AU has prevented the migration of SPH in this direction. The service

water piping that runs to the south from Well AU provided a preferential pathway for the migration of SPH towards Well AW. To delineate the extent of SPH to the south of Well AW along the service water piping, an additional monitoring well, Well BV, was installed in December 2006, as required by the NJDEP. In a June 21, 2010 Notice of Deficiency (NOD) to PSEG, the NJDEP required the installation of a shallow monitoring well adjacent to Well AI to delineate separate phase product (SPH) observed in April 2009. In addition, the NJDEP required the submission of a proposal for an active remediation system to recover SPH at the Station. In December 2010 well CG was installed to fulfill this requirement, details below in section 3. In January and February 2011 well CG was gauged for presence of separate phase product and sampled for VOCs and SVOCs, details below in section 4. Product recovery efforts completed to date, also presented in Section 4, have included the installation of a Spill Buster® Unit in Wells AU and/or AW, the installation and operation of a passive skimmer in Well AW, and the installation of sorbent socks within Wells AZ and AU.

Groundwater monitoring activities were completed on a quarterly basis following the installation of the monitoring wells through December 2007. However, in the Remedial Action Progress Report dated February 2008 PSEG recommended moving from quarterly groundwater sampling to semiannual sampling. In a March 24, 2008 letter, the NJDEP approved reducing groundwater monitoring to semi-annual events, completed in June and December. During the sampling events, groundwater samples are collected from wells that do not indicate the presence of SPH. The groundwater samples are submitted to a laboratory and are analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The details of groundwater monitoring activities completed during the reporting period and the results of groundwater monitoring activities completed to date are presented in Section 4.

3. Well CG Installation

In accordance with the previous Remedial Action Progress Report dated September 20, 2010, an additional groundwater monitoring well (Well CG) was installed on December 22, 2010. The monitoring well was installed in order to verify delineation of separate phase product in the area of well AI.

The monitoring well was installed using vacuum excavation techniques due to the extensive subsurface utilities and infrastructure located within the area of investigation. The location and well construction details of the groundwater monitoring well is shown on **Figure 2** and are summarized in **Table 2**, respectively. NJDEP Bureau of Water Allocation Monitoring Well Records, well construction logs, and boring logs are included in **Appendix C**. The monitoring well was developed using a combination of

surging and pumping techniques. In accordance with N.J.A.C. 7:26E-4.4(g) [7], the monitoring well was surveyed by a New Jersey-licensed surveyor. The Monitoring Well Certification Form B is provided in **Appendix C**. Well CG was sampled twice during the reporting period and details are below. Diesel fuel was not observed during monitoring well installation.

4. December 2010 through January 2011 Semiannual Groundwater Monitoring

On December 15, 2010 and January 21, 2011, semi-annual groundwater monitoring activities were conducted. Details regarding the sampling activities are presented in **Table 1**. The monitoring well network associated with the semi-annual gauging and sampling activities consists of the following seven monitoring wells: Well X, Well AU, Well AV, Well AW, Well AY, Well AZ, Well BV, and Well CG. A summary table of well construction details for these wells is presented in **Table 2**. Semiannual groundwater monitoring activities consist of the gauging of groundwater and SPH levels and the collection and analysis of groundwater samples from those wells that do not contain SPH. The following sections provide the details and results of the gauging and sampling activities.

4.1 Water Level and Separate Phase Product Measurements

Prior to the initiation of groundwater sampling activities, water-level and SPH measurements were obtained from each monitoring well using an electronic oil/water interface probe. Water-level and SPH measurements were also collected during routine maintenance of the product recovery systems. A summary of historic product gauging and groundwater elevation data is presented in **Table 3**. With the exception of a onetime detection of product in Well AZ and a recent detection in Well AI, measurable product is historically limited to the area of Well AU and down gradient towards Well AW, consistent with the previous reporting period. The extent to which product has migrated to date has been generally controlled by the subsurface infrastructure located within the investigation area. With the repair of the diesel fuel underground piping, the ongoing product recovery efforts being conducted in Well AU and Well AW, when in operation (see Section 4), are successfully preventing further migration of product. SPH measurements obtained from Well AY, located to the south and down gradient of Well AW along the service water pipes, provide delineation of the extent of SPH. After the recent installation of Well CG, SPH gauging was performed. No SPH was ever detected in this well, so the expansion of the remedial system to the southern portion of the well network is not needed.

4.2 Monitoring Well Sampling

As discussed above, semiannual groundwater monitoring activities were completed in December 2010 and January 2011. During this sampling event, groundwater samples were only collected from monitoring wells that did not indicate a measurable thickness (i.e., greater than 0.01 feet) of SPH. As such, Wells AU and AW were not sampled during the reporting period.

Due to the nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples are collected utilizing low-flow sampling methodology. Due to insufficient water in the wells and slow recharge rates, select wells need to be sampled with a disposable bailer to enable collection of sufficient sample volumes. Wells AY and X were sampled with a bailer during the December 2010 event. Sample collection procedures, as well as quality assurance/quality control (QA/QC) sampling requirements, were completed in accordance with the Quality Assurance Project Plan (QAPP) presented in the January 2005 RIWP. Groundwater sampling logs for the samples collected during the reporting period are included in **Appendix A**. Groundwater samples were submitted to Accutest Laboratories, a NJDEP certified laboratory, of Dayton, New Jersey. The groundwater samples were analyzed for priority pollutant list VOCs and SVOCs including a library search. Laboratory reports and HazSite deliverables for the groundwater monitoring events are included as **Appendix B**. Analytical results of the groundwater samples collected during the reporting period, as well as analytical results of groundwater samples collected since the initiation of investigation activities, are discussed in the following section.

4.3 Analytical Results

Tables 4 and **5** presents groundwater analytical results for VOCs and SVOCs obtained since December 2004 from monitoring wells utilized in the Salem Unit 1 diesel investigation. **Figure 3** illustrates the locations of monitoring wells and constituent detections during the recent sampling event. The following summary compares analytical results to the NJDEP Groundwater Quality Standards (GWQS) listed at New Jersey Administrative Code (N.J.A.C.) 7:9C. Analytical results of these samples indicate the following:

- Benzene was detected in monitoring well CG, just above the GWQS of 1 microgram per liter (µg/l) with a concentration of 1.1 µg/l.

- Concentrations of VOCs and SVOCs were not detected above their respective GWQS in Wells AV, AZ, BV, and X.

- Analytical results for groundwater monitoring activities completed to date continue to indicate that impacts associated with the release of diesel fuel from the bulk storage tanks are limited to the area of SPH, which extends down gradient from the source area to Well AI.

5. Ongoing Product Recovery

SPH recovery continues at Well AU, installed within the source area, and Well AW, installed immediately down gradient of the source area along the service water piping. SPH recovery includes the intermittent operation and maintenance of the Spill Buster® product recovery system, the operation of a passive skimmer, and the use of sorbent socks. Use of these methods has resulted in the recovery of approximately 718.9 gallons of SPH to date. During the reporting period, approximately 4.6 gallons of SPH were recovered. Due to the absence of SPH in the recently installed Well CG, there is no need to expand the remedial system at this time.

6. Future Actions

Based on the results of investigation activities and interim remedial actions completed to date, the following actions are planned for the upcoming reporting period, February 2011 through June 2011:

- PSEG will continue to collect groundwater samples on a semiannual basis with the next event to be conducted in June 2011. Groundwater monitoring will continue to consist of the collection and analysis of groundwater samples from those wells not indicating the presence of SPH. Groundwater samples will be analyzed for VOCs and SVOCs to evaluate the extent, if any, of dissolved phase constituents of concern. In addition, product recovery efforts will remain ongoing.

- Semiannual Remedial Action Progress Reports will continue to be prepared to update the NJDEP with the status of product recovery efforts and groundwater analytical results;

- Following completion of the product recovery efforts (i.e., measurable SPH is no longer detected) eight consecutive rounds of quarterly sampling will be completed (assuming concentrations of constituents of concern are above applicable GWQC) as required by the Mann-Whitney U-Test. The analytical results from these

sampling events will be evaluated to determine if there are decreasing analytical trends; and,

- Following completion of the eight consecutive rounds of quarterly sampling, PSEG will either: 1) propose no further action for groundwater if groundwater analytical results continue to be below applicable GWQC; or, 2) establish a classification exception area and prepare a Remedial Action Work Plan that proposes a groundwater remediation strategy.

7. Groundwater Monitoring Program Details and Schedule

Following completion of the next semiannual groundwater monitoring event, currently scheduled for June 2011, groundwater analytical results and the results of product recovery efforts will be reported in Remedial Action Progress Report February through June 2011. The anticipated schedule for the groundwater monitoring program through the next reporting period is summarized below.

Groundwater Monitoring:

Semiannual event (VOCs and SVOCs)	June 2011

Reporting:

Remedial Action Progress Report January 2011 through June 2011	November 31, 2011

Table 01. Summary of Sampling Activities Completed During the Reporting Period (Semiannual, December 2010 through February 2011), PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sampling Event	Wells Sampled*	Wells Not Sampled
Dec-10 through Feb-11	MW-AY MW-AZ MW-BV MW-X MW-AV MW-CG	MW-AU MW-AW

Notes

* Groundwater samples analyzed for VOCs and SVOCs analysis using methods 8260b and 8270c, respectively.

Table 02. Well Construction Details, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well ID	Installation Date	Well Permit Number	Well Purpose	Construction Materials	Diameter (inches)	GS Elevation (feet amsl)	MP Elevation (feet amsl)	Northing (NAD 83)	Easting (NAD 83)	Total Depth (feet bgs)	Monitoring Interval (feet bgs)	Monitoring Interval (feet amsl)
Well X	06/11/03	3400007018	Monitoring	Sch-40 PVC	1.0	9.47	12.00	230,851	199,547	10.0	2.0 to 10.0	7.5 to -0.5
Well AU	11/09/04	3400007375	Product Recovery	Sch-40 PVC	6.0	9.44	8.46	230,868	199,525	7.0	4.0 to 7.0	5.4 to 2.4
Well AV	11/08/04	3400007370	Monitoring	Sch-40 PVC	4.0	9.17	8.82	230,831	199,469	10.0	3.0 to 10.0	6.2 to -0.8
Well AW	11/08/04	3400007372	Product Recovery	Sch-40 PVC	4.0	9.48	9.16	230,837	199,516	9.0	3.0 to 9.0	6.5 to 0.5
Well AY	11/08/04	3400007373	Monitoring	Sch-40 PVC	4.0	9.40	9.04	230,805	199,521	8.0	3.0 to 8.0	6.4 to 1.4
Well AZ	11/08/04	3400007374	Monitoring	Sch-40 PVC	4.0	9.33	8.66	230,764	199,551	9.0	3.0 to 9.0	6.3 to 0.3
Well BV	12/05/06	3400007816	Monitoring	Sch-40 PVC	4.0	9.32	8.85	230,768	199,526	10.0	3.0 to 10.0	6.3 to -0.7
Well CG	12/22/11	E201006624	Monitoring	Sch-40 PVC	4.0	9.31	8.95	230,801	199,559	10.0	3.0 to 10.0	6.3 to -0.7

Notes:

GS	Ground Surface
MP	Measuring Point
bgs	Below ground surface
amsl	Feet above mean sea level (NAVD88)

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well X	12/07/04	12.00	--	7.16	--	4.84	--
	12/10/04	12.00	--	6.36	--	5.64	--
	12/13/04	12.00	--	6.68	--	5.32	--
	12/22/04	12.00	NM	NM	NM	NM	NM
	1/13/05	12.00	--	7.66	--	4.34	--
	1/27/05	12.00	--	8.11	--	3.89	--
	2/10/05	12.00	--	7.70	--	4.30	--
	2/23/05	12.00	Sheen	7.47	<0.01	4.53	--
	3/24/05	12.00	--	7.81	--	4.19	--
	4/8/05	12.00	--	6.78	--	5.22	--
	4/26/05	12.00	--	7.65	--	4.35	--
	6/28/05	12.00	--	8.57	--	3.43	--
	7/20/05	12.00	--	8.01	--	3.99	--
	8/17/05	12.00	--	7.60	--	4.40	--
	9/13/05	12.00	--	8.45	--	3.55	--
	10/3/05	12.00	--	9.46	--	2.54	--
	12/15/05	12.00	--	9.28	--	2.72	--
	3/28/06	12.00	Dry	Dry	--	--	--
	9/26/06	12.00	--	8.74	--	3.26	--
	12/4/06	12.00	--	8.09	--	3.91	--
	3/6/07	12.00	--	8.81	--	3.19	--
	6/12/07	12.00	--	8.16	--	3.84	--
	9/25/07	12.00	--	9.98	--	2.02	--
	12/10/07	12.00	--	9.08	--	2.92	--
	6/26/08	12.00	--	7.88	--	4.12	--
	12/15/08	12.00	--	8.20	--	3.80	--
	6/1/09	12.00	--	8.02	--	3.98	--
	12/7/09	12.00	--	6.77	--	5.23	--
	6/23/10	12.00	--	8.42	--	3.58	--
	12/14/10	12.00	--	8.15	--	3.85	--
Well AU	12/07/04	8.46	NM	NM	NM	NM	NM
	12/10/04	8.46	1.84	2.29	0.45	6.17	6.50
	12/13/04	8.46	2.84	3.35	0.51	5.11	5.49
	12/22/04	8.46	4.22	5.45	1.23	3.01	3.92
	1/13/05	8.46	3.68	5.44	1.76	3.02	4.32
	1/17/05*	9.81	4.15	4.40	0.25	5.41	5.60
	1/24/05	9.81	5.40	5.50	0.10	4.31	4.38
	1/26/05	9.81	4.90	5.10	0.20	4.71	4.86
	1/27/05	9.81	5.50	5.69	0.19	4.12	4.26
	1/31/05	9.81	5.45	5.50	0.05	4.31	4.35
	2/4/05	9.81	5.40	5.60	0.20	4.21	4.36
	2/8/05	9.81	5.15	5.40	0.25	4.41	4.60
	2/10/05	9.81	5.34	5.68	0.34	4.13	4.38
	2/16/05	9.81	3.90	4.30	0.40	5.51	5.81
	2/22/05	9.81	4.60	4.80	0.20	5.01	5.16
	2/23/05	9.81	4.96	5.12	0.16	4.69	4.81
	2/28/05	9.81	4.60	4.78	0.18	5.03	5.16
	3/7/05	9.81	4.74	5.00	0.26	4.81	5.00
	3/14/05	9.81	5.16	5.48	0.32	4.33	4.57
	3/21/05	9.81	5.40	5.70	0.30	4.11	4.33
	3/24/05	9.81	3.41	3.42	0.01	6.39	6.40
	3/29/05	9.81	3.10	3.70	0.60	6.11	6.55
	4/5/05	9.81	4.00	4.10	0.10	5.71	5.78
	4/8/05	9.81	2.87	2.91	0.04	6.90	6.93

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	4/26/05	9.81	4.35	4.55	0.20	5.26	5.41
	6/28/05	9.81	5.66	5.74	0.08	4.07	4.13
	7/8/05	9.81	1.10	1.20	0.10	8.61	8.68
	7/20/05	9.81	5.25	5.60	0.35	4.21	4.47
	7/25/05	9.81	4.78	5.05	0.27	4.76	4.96
	7/28/05	9.81	3.08	3.55	0.47	6.26	6.61
	8/1/05	9.81	5.08	5.30	0.22	4.51	4.67
	8/5/05	9.81	5.50	5.85	0.35	3.96	4.22
	8/8/05	9.81	5.35	5.60	0.25	4.21	4.40
	8/12/05	9.81	4.75	4.85	0.10	4.96	5.03
	8/16/05	9.81	4.60	4.70	0.10	5.11	5.18
	8/17/05	9.81	3.36	3.38	0.02	6.43	6.44
	8/19/05	9.81	4.05	4.20	0.15	5.61	5.72
	8/22/05	9.81	5.65	5.85	0.20	3.96	4.11
	8/26/05	9.81	5.35	5.55	0.20	4.26	4.41
	8/29/05	9.81	4.75	5.15	0.40	4.66	4.96
	9/2/05	9.81	4.75	5.10	0.35	4.71	4.97
	9/6/05	9.81	5.50	5.75	0.25	4.06	4.25
	9/9/05	9.81	5.55	5.65	0.10	4.16	4.23
	9/12/05	9.81	5.70	6.00	0.30	3.81	4.03
	10/3/05	9.81	6.34	NA	NA	NA	NA
	10/10/05	9.81	3.35	4.70	1.35	5.11	6.11
	10/14/05	9.81	3.05	3.35	0.30	6.46	6.68
	10/28/05	9.81	4.00	4.20	0.20	5.61	5.76
	10/19/05	9.81	4.86	5.65	0.79	4.16	4.74
	10/31/05	9.81	4.60	5.20	0.60	4.61	5.05
	11/4/05	9.81	5.45	5.55	0.10	4.26	4.33
	11/7/05	9.81	5.90	6.15	0.25	3.66	3.85
	11/11/05	9.81	6.01	6.58	0.57	3.23	3.65
	11/15/05	9.81	6.30	NA	NA	NA	NA
	11/18/05	9.81	5.58	6.40	0.82	3.41	4.02
	11/28/05	9.81	5.86	6.45	0.59	3.36	3.80
	12/2/05	9.81	4.20	5.60	1.40	4.21	5.25
	12/5/05	9.81	5.40	5.50	0.10	4.31	4.38
	12/8/05	9.81	6.05	6.58	0.53	3.23	3.62
	12/12/05	9.81	5.20	6.58	1.38	3.23	4.25
	12/15/05	9.81	5.99	6.06	0.07	3.75	3.80
	12/16/05	9.81	3.20	6.58	3.38	3.23	5.73
	12/23/05	9.81	5.95	6.58	0.63	3.23	3.70
	12/27/05	9.81	5.85	6.58	0.73	3.23	3.77
	12/30/05	9.81	4.10	4.25	0.15	5.56	5.67
	1/3/06	9.81	3.35	3.45	0.10	6.36	6.43
	1/6/06	9.81	4.55	4.75	0.20	5.06	5.21
	1/10/06	9.81	5.90	6.05	0.15	3.76	3.87
	1/12/06	9.81	5.95	6.00	0.05	3.81	3.85
	1/16/06	9.81	5.80	6.25	0.45	3.56	3.89
	1/16/06	9.81	6.15	6.25	0.10	3.56	3.63
	1/19/06	9.81	4.25	4.30	0.05	5.51	5.55
	1/23/06	9.81	2.20	2.40	0.20	7.41	7.56
	1/30/06	9.81	5.15	5.25	0.10	4.56	4.63
	2/3/06	9.81	5.75	5.85	0.10	3.96	4.03
	2/6/06	9.81	5.45	5.55	0.10	4.26	4.33
	2/9/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/13/06	9.81	4.50	5.20	0.70	4.61	5.13
	2/17/06	9.81	4.70	4.90	0.20	4.91	5.06
	2/21/06	9.81	5.60	5.75	0.15	4.06	4.17
	2/24/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/27/06	9.81	6.20	6.35	0.15	3.46	3.57
	3/3/06	9.81	6.30	6.55	0.25	3.26	3.45
	3/6/06	9.81	6.40	NA	NA	NA	NA
	3/10/06	9.81	6.53	NA	NA	NA	NA
	3/13/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/20/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/24/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/28/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/29/06	9.81	Dry	Dry	Dry	Dry	Dry

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	4/4/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/10/06	9.81	6.38	6.40	0.02	3.41	3.42
	4/17/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/24/06	9.81	3.15	3.60	0.45	6.21	6.54
	4/28/06	9.81	4.70	4.80	0.10	5.01	5.08
	5/1/06	9.81	5.85	5.90	0.05	3.91	3.95
	5/5/06	9.81	6.10	6.20	0.10	3.61	3.68
	5/9/06	9.81	6.28	NA	NA	NA	NA
	5/12/06	9.81	5.44	6.15	0.71	3.66	4.19
	5/12/06	9.81	5.92	6.00	0.08	3.81	3.87
	5/15/06	9.81	4.60	4.70	0.10	5.11	5.18
	5/19/06	9.81	5.80	5.90	0.10	3.91	3.98
	5/22/06	9.81	6.25	6.38	0.13	3.43	3.53
	5/30/06	9.81	Dry	Dry	Dry	Dry	Dry
	6/6/06	9.81	4.30	4.90	0.60	4.91	5.35
	6/16/06	9.81	5.10	5.25	0.15	4.56	4.67
	6/22/06	9.81	5.50	5.70	0.20	4.11	4.26
	6/23/06	9.81	5.70	5.80	0.10	4.01	4.08
	6/30/06	9.81	3.08	3.15	0.07	6.66	6.71
	7/5/06	9.81	2.25	2.35	0.10	7.46	7.53
	7/10/06	9.81	3.40	3.50	0.10	6.31	6.38
	7/14/06	9.81	3.65	3.75	0.10	6.06	6.13
	7/17/06	9.81	4.07	4.25	0.18	5.56	5.69
	7/21/06	9.81	4.35	4.50	0.15	5.31	5.42
	7/24/06	9.81	2.55	2.70	0.15	7.11	7.22
	7/28/06	9.81	3.35	3.45	0.10	6.36	6.43
	7/31/06	9.81	3.55	3.60	0.05	6.21	6.25
	8/3/06	9.81	3.70	3.75	0.05	6.06	6.10
	8/7/06	9.81	4.20	4.25	0.05	5.56	5.60
	8/11/06	9.81	4.55	4.60	0.05	5.21	5.25
	8/14/06	9.81	5.00	5.05	0.05	4.76	4.80
	8/18/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/21/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/28/06	9.81	3.15	3.20	0.05	6.61	6.65
	8/31/06	9.81	3.90	3.95	0.05	5.86	5.90
	9/5/06	9.81	3.55	3.60	0.05	6.21	6.25
	9/8/06	9.81	3.75	3.80	0.05	6.01	6.05
	9/11/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/14/06	9.81	4.90	4.95	0.05	4.86	4.90
	9/22/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/25/06	9.81	4.60	4.65	0.05	5.16	5.20
	10/2/06	9.81	4.50	4.65	0.15	5.16	5.27
	10/5/06	9.81	5.05	5.10	0.05	4.71	4.75
	10/9/06	9.81	3.80	3.90	0.10	5.91	5.98
	10/12/06	9.81	2.65	2.70	0.05	7.11	7.15
	10/17/06	9.81	4.35	4.40	0.05	5.41	5.45
	10/20/06	9.81	1.85	1.90	0.05	7.91	7.95
	10/23/06	9.81	3.85	3.90	0.05	5.91	5.95
	10/31/06	9.81	3.80	3.85	0.05	5.96	6.00
	11/6/06	9.81	5.45	5.50	0.05	4.31	4.35
	11/10/06	9.81	3.25	3.30	0.05	6.51	6.55
	11/13/06	9.81	2.60	2.65	0.05	7.16	7.20
	11/20/06	9.81	3.65	3.70	0.05	6.11	6.15
	11/27/06	9.81	4.10	4.15	0.05	5.66	5.70
	12/4/06	9.81	5.05	5.10	0.05	4.71	4.75
	12/8/06	9.81	5.80	5.85	0.05	3.96	4.00
	12/11/06	9.81	6.00	6.05	0.05	3.76	3.80
	9/25/07	9.81	--	5.15	--	4.66	--
	12/10/07	9.81	3.75	4.02	0.27	5.79	5.99
	6/25/08	9.81	3.46	3.62	0.16	6.19	6.31
	7/21/08	9.81	3.50	3.62	0.12	6.19	6.28
	8/15/08	9.81	3.25	3.42	0.17	6.39	6.52
	9/11/08	9.81	3.05	3.20	0.15	6.61	6.72
	10/8/08	9.81	4.21	4.45	0.24	5.36	5.54
	11/4/08	9.81	4.36	5.30	0.94	4.51	5.21
	12/15/08	9.81	3.31	3.90	0.59	5.91	6.35
	1/14/09	9.81	6.15	6.24	0.09	3.57	3.64

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	2/12/09	9.81	5.81	5.83	0.02	3.98	3.99
	3/9/09	9.81	--	7.20	--	2.61	--
	3/30/09	9.81	6.78	6.80	0.02	3.01	3.02
	5/28/09	9.81	5.55	5.90	0.35	3.91	4.17
	6/1/09	9.81	4.76	4.81	0.05	5.00	5.04
	6/30/09	9.81	4.65	4.67	0.02	5.14	5.15
	7/28/09	9.81	5.65	5.71	0.06	4.10	4.14
	8/24/09	9.81	3.23	3.24	0.01	6.57	6.58
	9/17/09	9.81	4.25	4.27	0.02	5.54	5.55
	10/13/09	9.81	6.17	6.20	0.03	3.61	3.63
	11/6/09	9.81	5.07	5.46	0.39	4.35	4.64
	12/7/09	9.81	4.55	4.61	0.06	5.20	5.24
	1/27/10	9.81	4.61	4.64	0.03	5.17	5.19
	2/25/10	9.81	3.36	3.38	0.02	6.43	6.44
	4/23/10	9.81	5.15	5.17	0.02	4.64	4.65
	5/21/10	9.81	4.25	4.26	0.01	5.55	5.56
	6/22/10	9.81	6.01	6.10	0.09	3.71	3.78
	12/14/10	9.81	5.68	5.72	0.04	4.09	4.12
Well AV	12/07/04	8.82	--	4.85	--	3.97	--
	12/10/04	8.82	--	4.60	--	4.22	--
	12/13/04	8.82	--	4.55	--	4.27	--
	12/22/04	8.82	--	5.11	--	3.71	--
	1/13/05	8.82	--	5.09	--	3.73	--
	2/10/05	8.82	--	4.86	--	3.96	--
	2/23/05	8.82	--	4.69	--	4.13	--
	3/24/05	8.82	--	4.83	--	3.99	--
	4/8/05	8.82	--	4.20	--	4.62	--
	4/26/05	8.82	--	4.72	--	4.10	--
	6/28/05	8.82	--	5.07	--	3.75	--
	7/20/05	8.82	--	4.81	--	4.01	--
	8/17/05	8.82	--	5.10	--	3.72	--
	9/13/05	8.82	--	5.21	--	3.61	--
	10/3/05	8.82	--	5.89	--	2.93	--
	12/15/05	8.82	--	6.14	--	2.68	--
	3/28/06	8.82	--	7.04	--	1.78	--
	6/22/06	8.82	--	5.86	--	2.96	--
	9/26/06	8.82	--	5.44	--	3.38	--
	12/4/06	8.82	--	5.28	--	3.54	--
	3/6/07	8.82	--	6.07	--	2.75	--
	6/12/07	8.82	--	4.90	--	3.92	--
	9/25/07	8.82	--	6.21	--	2.61	--
	12/10/07	8.82	--	5.88	--	2.94	--
	6/26/08	8.82	--	4.63	--	4.19	--
	12/15/08	8.82	--	5.17	--	3.65	--
	6/1/09	8.82	--	4.67	--	4.15	--
	12/7/09	8.82	--	3.70	--	5.12	--
	6/22/10	8.82	--	4.80	--	4.02	--
	12/14/10	8.82	--	4.50	--	4.32	--

Notes: See Last Page for Notes.

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AW	12/07/04	9.16	4.14	4.17	0.03	4.99	5.01
	12/10/04	9.16	3.71	5.83	2.12	3.33	4.90
	12/13/04	9.16	3.99	7.06	3.07	2.10	4.37
	12/22/04*	10.10	6.06	6.16	0.10	3.94	4.01
	12/27/04*	10.10	6.70	6.75	0.05	3.35	3.39
	1/3/05*	10.10	6.30	6.50	0.20	3.60	3.75
	1/10/05*	10.10	5.90	6.00	0.10	4.10	4.17
	1/13/05*	10.10	6.95	7.01	0.06	3.09	3.13
	1/27/05	9.16	5.37	6.12	0.75	3.04	3.60
	2/10/05	9.16	5.11	6.11	1.00	3.05	3.79
	2/23/05	9.16	4.78	6.11	1.33	3.05	4.03
	3/24/05	9.16	4.44	6.25	1.81	2.91	4.25
	4/8/05	9.16	3.66	6.05	2.39	3.11	4.88
	4/26/05	9.16	4.72	6.85	2.13	2.31	3.89
	6/28/05	9.16	5.31	7.29	1.98	1.87	3.34
	7/20/05	9.16	4.78	6.84	2.06	2.32	3.84
	8/17/05	9.16	4.69	6.33	1.64	2.83	4.04
	9/9/05	9.16	5.40	7.20	1.80	1.96	3.29
	9/13/05	9.16	5.57	7.41	1.84	1.75	3.11
	10/3/05	9.16	6.12	7.49	1.37	1.67	2.68
	12/12/05	9.16	5.90	6.90	1.00	2.26	3.00
	12/15/005	9.16	5.92	6.97	1.05	2.19	2.97
	2/17/06	9.16	5.70	5.90	0.20	3.26	3.41
	3/3/06	9.16	6.25	7.00	0.75	2.16	2.72
	3/10/06	9.16	6.40	7.05	0.65	2.11	2.59
	3/28/06	9.16	7.01	7.65	0.64	1.51	1.98
	5/15/06	9.16	7.50	7.85	0.35	1.31	1.57
	6/22/06	9.16	5.90	6.15	0.25	3.01	3.20
	8/21/06	9.16	5.80	6.45	0.65	2.71	3.19
	12/4/06	9.16	5.97	6.41	0.44	2.75	3.08
	3/6/07	9.16	7.00	7.02	0.02	2.14	2.15
	6/12/07	9.16	6.13	6.51	0.38	2.65	2.93
	9/25/07	9.16	6.72	6.87	0.15	2.29	2.40
	12/10/07	9.16	6.30	6.40	0.10	2.76	2.83
	6/25/08	9.16	5.61	6.61	1.00	2.55	3.29
	7/21/08	9.16	6.65	7.71	1.06	1.45	2.23
	8/15/08	9.16	6.35	7.25	0.90	1.91	2.58
	9/11/08	9.16	6.08	6.81	0.73	2.35	2.89
	10/8/08	9.16	6.78	6.90	0.12	2.26	2.35
	11/4/08	9.16	7.16	7.21	0.05	1.95	1.99
	12/15/08	9.16	6.42	6.45	0.03	2.71	2.73
	1/14/09	9.16	5.70	5.80	0.10	3.36	3.43
	2/12/09	9.16	--	6.71	--	2.45	--
	3/9/09	9.16	--	6.85	--	2.31	--
	3/30/09	9.16	--	6.81	--	2.35	--
	5/28/09	9.16	5.54	5.75	0.21	3.41	3.57
	6/1/09	9.16	5.51	5.62	0.11	3.54	3.62
	6/30/09	9.16	4.81	5.25	0.44	3.91	4.24
	9/17/09	9.16	4.22	4.41	0.19	4.75	4.89
	10/13/09	9.16	5.36	6.19	0.83	2.97	3.58
	11/6/09	9.16	5.00	5.65	0.65	3.51	3.99
	12/7/09	9.16	4.15	4.70	0.55	4.46	4.87
	1/27/10	9.16	4.04	4.38	0.34	4.78	5.03
	2/25/10	9.16	2.60	2.76	0.16	6.40	6.52
	4/23/10	9.16	--	5.57	--	3.59	--
	5/21/10	9.16	--	4.10	--	5.06	--
	6/22/10	9.16	5.56	5.57	0.01	3.59	3.60
	12/14/10	9.16	5.79	5.80	0.01	3.36	3.37

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AY	12/07/04	9.04	--	4.68	--	4.36	--
	12/10/04	9.04	--	4.35	--	4.69	--
	12/13/04	9.04	--	4.43	--	4.61	--
	12/22/04	9.04	--	5.13	--	3.91	--
	1/13/05	9.04	--	5.08	--	3.96	--
	1/27/05	9.04	--	5.29	--	3.75	--
	2/23/05	9.04	--	4.82	--	4.22	--
	3/24/05	9.04	--	4.82	--	4.22	--
	4/8/05	9.04	--	4.03	--	5.01	--
	4/26/05	9.04	--	4.77	--	4.27	--
	6/28/05	9.04	--	5.51	--	3.53	--
	7/20/05	9.04	--	5.04	--	4.00	--
	8/17/05	9.04	--	5.10	--	3.94	--
	9/13/05	9.04	--	5.57	--	3.47	--
	10/3/05	9.04	--	6.18	--	2.86	--
	12/15/05	9.04	--	6.12	--	2.92	--
	3/28/06	9.04	--	6.76	--	2.28	--
	6/23/06	9.04	--	5.97	--	3.07	--
	9/26/06	9.04	--	5.58	--	3.46	--
	12/4/06	9.04	--	5.35	--	3.69	--
	3/6/07	9.04	--	6.84	--	2.20	--
	6/12/07	9.04	--	5.32	--	3.72	--
	9/25/07	9.04	--	6.51	--	2.53	--
	12/10/07	9.04	--	6.34	--	2.70	--
	6/26/08	9.04	--	6.95	--	2.09	--
	12/15/08	9.04	--	6.57	--	2.47	--
	6/1/09	9.04	--	5.95	--	3.09	--
	12/7/09	9.04	--	4.07	--	4.97	--
	6/22/10	9.04	--	5.76	--	3.28	--
	12/14/10	9.04	--	5.35	--	3.69	--
Well AZ	12/07/04	8.66	--	4.45	--	4.21	--
	12/10/04	8.66	--	4.09	--	4.57	--
	12/13/04	8.66	--	4.08	--	4.58	--
	12/22/04	8.66	--	4.69	--	3.97	--
	1/13/05	8.66	--	4.70	--	3.96	--
	1/27/05	8.66	--	4.91	--	3.75	--
	2/10/05	8.66	--	4.69	--	3.97	--
	2/23/05	8.66	--	4.46	--	4.20	--
	3/24/2005**	8.66	4.66	4.75	0.09	3.91	3.98
	4/8/05	8.66	--	3.78	--	4.88	--
	4/26/05	8.66	--	4.74	--	3.92	--
	6/28/05	8.66	--	5.42	--	3.24	--
	7/20/05	8.66	--	5.10	--	3.56	--
	8/17/05	8.66	--	5.41	--	3.25	--
	9/13/05	8.66	--	5.46	--	3.20	--
	10/3/05	8.66	--	6.11	--	2.55	--
	12/15/05	8.66	--	6.05	--	2.61	--
	3/28/06	8.66	--	6.59	--	2.07	--
	6/22/2006	8.66	--	5.99	--	2.67	--
	9/26/2006	8.66	--	5.66	--	3.00	--
	12/4/2006	8.66	--	5.21	--	3.45	--
	1/2/2007	8.66	--	5.51	--	3.15	--
	3/6/07	8.66	--	6.09	--	2.57	--
	6/12/07	8.66	--	5.20	--	3.46	--
	9/25/07	8.66	--	6.31	--	2.35	--
	12/10/07	8.66	--	6.50	--	2.16	--
	6/26/08	8.66	--	4.62	--	4.04	--
	12/15/08	8.66	--	5.16	--	3.50	--
	6/1/09	8.66	--	4.85	--	3.81	--
	12/7/09	8.66	--	4.23	--	4.43	--
	6/22/10	8.66	--	5.55	--	3.11	--
	12/14/10	8.66	--	5.50	--	3.16	--

Notes: See Last Page for Notes.

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well BV	3/6/07	8.85	--	5.95	--	2.90	--
	6/12/07	8.85	--	5.12	--	3.73	--
	9/25/07	8.85	--	6.23	--	2.62	--
	12/10/07	8.85	--	6.00	--	2.85	--
	6/26/08	8.85	--	4.66	--	4.19	--
	12/15/08	8.85	--	5.33	--	3.52	--
	6/1/09	8.85	--	4.74	--	4.11	--
	12/7/09	8.85	--	4.21	--	4.64	--
	6/22/10	8.85	--	5.45	--	3.40	--
	12/14/10	8.85	--	5.25	--	3.60	--
Well CG	1/21/11	8.95	--	5.17	--	3.78	--
	2/17/11	8.95	--	5.24	--	3.71	--

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation
**	Due to the operation of a groundwater extraction well (Well AO) in the vicinity of Well AZ, separate-phase product migrated in the direction of this well. Following the detection of separate-phase product in Well AZ, groundwater extraction from Well AO was discontinued.

SII-SSA-0014-003046

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AV													
	Sample Date	12/13/2004	3/15/2005		8/17/2005		10/4/2005	3/28/2006		6/22/2006		9/27/2006		12/4/2006	
	Sample Type Code	N	FD	N	FD	N	N	FD	N	FD	N	FD	N	FD	N
	GWQC (ug/L)														
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**7.9 J**	**7.9 J**	< 10	< 10	< 10	< 10
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5	< 5
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5	< 5
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**11.8**	**8.1 J**	< 10	< 10	< 10	< 10
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4	< 4	< 4	< 4
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2	< 2
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2	< 2
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2	< 2
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5	< 5
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	**0.43**

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AV													
	Sample Date	9/26/2007		12/11/2007		6/26/2008		12/16/2008		6/2/2009		6/24/2010		12/15/2010	
	Sample Type Code	FD	N	FD	N	FD	N	N	FD	FD	N	FD	N	FD	N
	GWQC (ug/L)														
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	**0.26 J**	**0.25 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AY															
	Sample Date	12/13/2004	7/21/2005	10/4/2005	3/29/2006	6/23/2006	9/27/2006	12/5/2006	9/27/2007	12/12/2007	6/27/2008	12/17/2008	6/3/2009	12/8/2009	12/8/2009	6/24/2010	1/21/2011
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
	GWQC (ug/L)																
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.4**	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4	< 4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	**2**	< 1 U	< 1	< 1	< 1 U	**2**	< 1 U	**1.2**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	**1.2**	< 1 U	< 1	< 1	< 1 U	**2.7**	< 1 U	**2.5**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AZ														
	Sample Date	12/10/2004	8/17/2005	10/4/2005	3/28/2006	6/22/2006	9/27/2006	12/5/2006	9/26/2007	12/11/2007	6/26/2008	12/16/2008	6/2/2009	6/2/2009	6/23/2010	12/15/2010
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)															
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	**0.42 J**	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4	< 4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-BV							Well - CG		WELL-X		
	Sample Date	12/8/2009	12/12/2007	6/26/2008	12/17/2008	6/2/2009	6/23/2010	1/21/2011	1/21/2011	2/17/2011	12/13/2004		3/15/2005
	Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N	N
	GWQC (ug/L)												
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**6.7 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**1.1**	**0.34 J**	< 1 U	< 1 U	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.4**	< 1 U	< 1 U	< 1 U	**0.83 J**
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.87 J**	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**1.3**	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-X										
	Sample Date	7/21/2005	10/4/2005	9/27/2006	12/5/2006	12/12/2007	6/27/2008	12/16/2008	6/3/2009	12/8/2009	6/23/2010	1/21/2011
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)											
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10	< 10	< 10 U	**44.8**	< 10 U	**15.2**	< 10 U	< 10 U	< 10 U
Benzene	1	**2.3**	< 1 U	**10.2**	**6.9**	**5.2**	**0.92 J**	< 1 U	**0.38 J**	< 1 U	**0.39 J**	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4	< 4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2	< 2	**1.2 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1	**0.58**	**0.94 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1	< 1	< 1 U	**0.41 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1	**1**	**1.4**	< 1 U	< 1 U	< 1 U	**0.54 J**	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AV																							
	Sample Date	12/13/2004	3/15/2005		8/17/2005		10/4/2005	1/3/2006	3/28/2006		6/22/2006		9/27/2006		12/4/2006		9/26/2007		12/11/2007		6/26/2008		12/16/2008	
	Sample Type Code	N	FD	N	FD	N	N	N	FD	N	FD	N	FD	N	FD	N	FD	N	FD	N	FD	N	N	FD
	GWQC (ug/L)																								
1,2,4-Trichlorobenzene	9	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
1,2-Dichlorobenzene	600	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
1,3-Dichlorobenzene	600	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
1,4-Dichlorobenzene	75	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2,4,5-Trichlorophenol	700	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4,6-Trichlorophenol	20	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4-Dichlorophenol	20	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4-Dimethylphenol	100	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4-Dinitrophenol	40	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U
2,4-Dinitrotoluene	10	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2,6-Dinitrotoluene	10	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2-Chloronaphthalene	600	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2-Chlorophenol	40	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2-Methylnaphthalene	---	**1.8 J**	**2.3**	**2**	**7.6**	**8**	**4.6**	**2**	**1.2 J**	**0.84 J**	< 2 U	< 2.1 U	**2.7**	**2.2**	**1.2**	**1.3**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**1 J**	< 2.1 U	< 2.1 U
2-Methylphenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2-Nitroaniline	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2-Nitrophenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
3&4-Methylphenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	**6.7**	**9.1**	< 2.1 U	< 2.1 U
3,3'-Dichlorobenzidine	30	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
3-Nitroaniline	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4,6-Dinitro-o-cresol	---	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U
4-Bromophenyl phenyl ether	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
4-Chloro-3-methyl phenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4-Chloroaniline	30	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4-Chlorophenyl phenyl ether	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
4-Nitroaniline	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4-Nitrophenol	---	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 11 U
Acenaphthene	400	**0.64 J**	**5.1**	**5**	**1.7 J**	**1.8 J**	**1.5 J**	**1.1 J**	**3.3**	**2.4**	**2.5**	**2.3**	**1.3**	**1.1**	**0.93**	**1.1**	**1.1 J**	**1.1 J**	< 2 U	< 2 U	**0.62 J**	**0.44 J**	< 1 U	< 1.1 U
Acenaphthylene	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Anthracene	2000	< 2.2 U	**0.97 J**	**0.95 J**	< 2 U	< 2 U	**0.54 J**	**0.53 J**	**1.1 J**	**0.92 J**	**0.62 J**	**0.5 J**	**0.54**	**0.44**	< 2	< 2	**0.61 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(a)anthracene	0.1	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	0.43	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(a)pyrene	0.1	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(b)fluoranthene	0.2	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(g,h,i)perylene	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(k)fluoranthene	0.5	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
bis(2-Chloroethoxy)methane	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
bis(2-Chloroethyl)ether	7	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
bis(2-Chloroisopropyl)ether	300	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
bis(2-Ethylhexyl)phthalate	3	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**1 J**	< 2 U	**1.1 J**	< 2 U	< 2.1 U	< 2	< 2	**1.1**	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**1.8 J**	< 2.1 U	**1.4 J**
Butyl benzyl phthalate	100	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Carbazole	---	< 2.2 U	**10**	**9.9**	< 2 U	< 2 U	< 2 U	< 2 U	**1.2 J**	**0.87 J**	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Chrysene	5	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	**0.42**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Dibenzo(a,h)anthracene	0.3	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Dibenzofuran	---	**0.71 J**	**2.7 J**	**2.7 J**	**2.1 J**	**2.2 J**	**1.3 J**	**1.1 J**	**2 J**	**1.7 J**	**2 J**	**1.8 J**	< 5	< 5	**0.97**	**0.93**	**0.97 J**	**0.95 J**	**0.66 J**	**0.56 J**	**0.89 J**	**0.76 J**	< 5.2 U	< 5.3 U
Diethyl phthalate	6000	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Dimethyl phthalate	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Di-n-butyl phthalate	700	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Di-n-octyl phthalate	100	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Fluoranthene	300	**1 J**	**1.4 J**	**1.4 J**	**0.84 J**	**0.86 J**	**1.2 J**	**0.96 J**	**1.1 J**	**1.1 J**	**1.2 J**	**1.2 J**	**1.1**	**1.1**	**0.88**	**1.1**	**2.7**	**3**	< 2 U	< 2 U	< 2 U	**0.36 J**	< 1 U	< 1.1 U
Fluorene	300	**1.4 J**	**4.7**	**4.4**	**3.3**	**3.5**	**2.4**	**2**	**3**	**2.4**	**3.5**	**3.1**	**2.6**	**2.4**	**2.3**	**2**	**2.3**	**2**	**0.99 J**	**0.81 J**	**1.6 J**	**1.6 J**	< 1 U	< 1.1 U
Hexachlorobenzene	0.02	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Hexachlorobutadiene	1	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Hexachlorocyclopentadiene	40	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U
Hexachloroethane	7	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
Indeno(1,2,3-cd)pyrene	.2	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Isophorone	40	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Naphthalene	300	**3.9**	**4.6**	**4.3**	**5.5**	**5.6**	**3.1**	**2.3**	**1.3 J**	**1.2 J**	**1.8 J**	**1.6 J**	**2.5**	**2.1**	**1.9**	**2**	**0.44 J**	< 2 U	**0.68 J**	**0.61 J**	**0.89 J**	**1.3 J**	< 1 U	< 1.1 U
Nitrobenzene	6	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
N-Nitroso-di-n-propylamine	10	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
N-Nitrosodiphenylamine	10	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
Pentachlorophenol	0.3	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U
Phenanthrene	---	< 2.2 U	**5.6**	**5.3**	**2.3**	**2.5**	**2.7**	**1 J**	**1.9 J**	**1.7 J**	**1.3 J**	**1.2 J**	**0.86**	**0.75**	**0.68**	**0.69**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**0.62 J**	< 1 U	< 1.1 U
Phenol	2000	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Pyrene	200	**0.96 J**	**0.97 J**	**0.94 J**	**0.74 J**	**0.74 J**	**1 J**	**1 J**	**0.64 J**	**0.65 J**	**1.4 J**	**1.3 J**	**0.99**	**1**	**0.63**	**0.86**	**2.1**	**2.4**	**0.42 J**	**0.41 J**	< 2 U	**0.46 J**	< 1 U	< 1.1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-003053

Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AY																							
	Sample Date	6/2/2009		6/24/2010		12/15/2010		12/13/2004	3/15/2005	7/21/2005	10/4/2005	3/29/2006	6/23/2006	9/27/2006	12/5/2006	9/27/2007	12/12/2007	6/27/2008	12/17/2008	6/3/2009	12/8/2009		6/24/2010	1/21/2011
	Sample Type Code	FD	N	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
	GWQC (ug/L)																							
1,2,4-Trichlorobenzene	9	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
2,4,5-Trichlorophenol	700	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4,6-Trichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dimethylphenol	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U
2,4-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2,6-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 5 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 2 U	< 2 U
2-Chlorophenol	40	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Methylnaphthalene	---	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
2-Methylphenol	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Nitrophenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3&4-Methylphenol	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4,6-Dinitro-o-cresol	---	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Chloro-3-methyl phenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chloroaniline	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Nitrophenol	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Acenaphthene	400	**0.58 J**	**0.4 J**	**0.54 J**	**0.44 J**	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Acenaphthylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Anthracene	2000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)anthracene	0.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)pyrene	0.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(b)fluoranthene	0.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(k)fluoranthene	0.5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	**2.7**	**1.3 J**	< 2 U	**2.2**	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Carbazole	---	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
Chrysene	5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzo(a,h)anthracene	0.3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzofuran	---	**0.64 J**	**0.45 J**	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	**8.7**
Dimethyl phthalate	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	**2.4**	< 2 U	< 2.1 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	**1.5 J**
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Fluoranthene	300	**0.39 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Fluorene	300	**1.2**	**0.88 J**	**0.87 J**	**0.77 J**	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorobenzene	0.02	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
Hexachlorobutadiene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U
Hexachloroethane	7	< 5 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Isophorone	40	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Naphthalene	300	**0.67 J**	**0.5 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Pentachlorophenol	0.3	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Phenanthrene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Phenol	2000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Pyrene	200	**0.47 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-003054

Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AZ															WELL-BV							
	Sample Date	12/10/2004	8/17/2005	10/4/2005	3/28/2006	6/22/2006	9/27/2006	12/5/2006	9/26/2007	12/11/2007	6/26/2008	12/16/2008	6/2/2009	12/8/2009	6/23/2010	12/15/2010	9/27/2007	12/12/2007	6/26/2008	12/17/2008	6/2/2009	12/8/2009	6/23/2010	1/21/2011
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)																							
1,2,4-Trichlorobenzene	9	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
2,4,5-Trichlorophenol	700	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4,6-Trichlorophenol	20	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4-Dichlorophenol	20	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4-Dimethylphenol	100	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U	< 20 U
2,4-Dinitrotoluene	10	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
2,6-Dinitrotoluene	10	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 2 U	< 2 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 2 U	< 2 U
2-Chlorophenol	40	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2-Methylnaphthalene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
2-Methylphenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 5 U	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
2-Nitroaniline	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2-Nitrophenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
3&4-Methylphenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 5 U	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4,6-Dinitro-o-cresol	---	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U	< 20 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
4-Chloro-3-methyl phenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4-Chloroaniline	30	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4-Nitrophenol	---	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Acenaphthene	400	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Acenaphthylene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Anthracene	2000	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)anthracene	0.1	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)pyrene	0.1	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(b)fluoranthene	0.2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(k)fluoranthene	0.5	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	**1.3**	< 2	< 2 U	< 2 U	< 2 U	**1.4 J**	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Carbazole	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
Chrysene	5	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzo(a,h)anthracene	0.3	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzofuran	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Dimethyl phthalate	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Fluoranthene	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	**0.24 J**	< 1.1 U	< 1 U	< 1 U
Fluorene	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorobenzene	0.02	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
Hexachlorobutadiene	1	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U	< 20 U
Hexachloroethane	7	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 2 U	< 2 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	.2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Isophorone	40	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Naphthalene	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
Pentachlorophenol	0.3	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Phenanthrene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Phenol	2000	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 5 U	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Pyrene	200	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	**0.25 J**	< 1.1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-003055

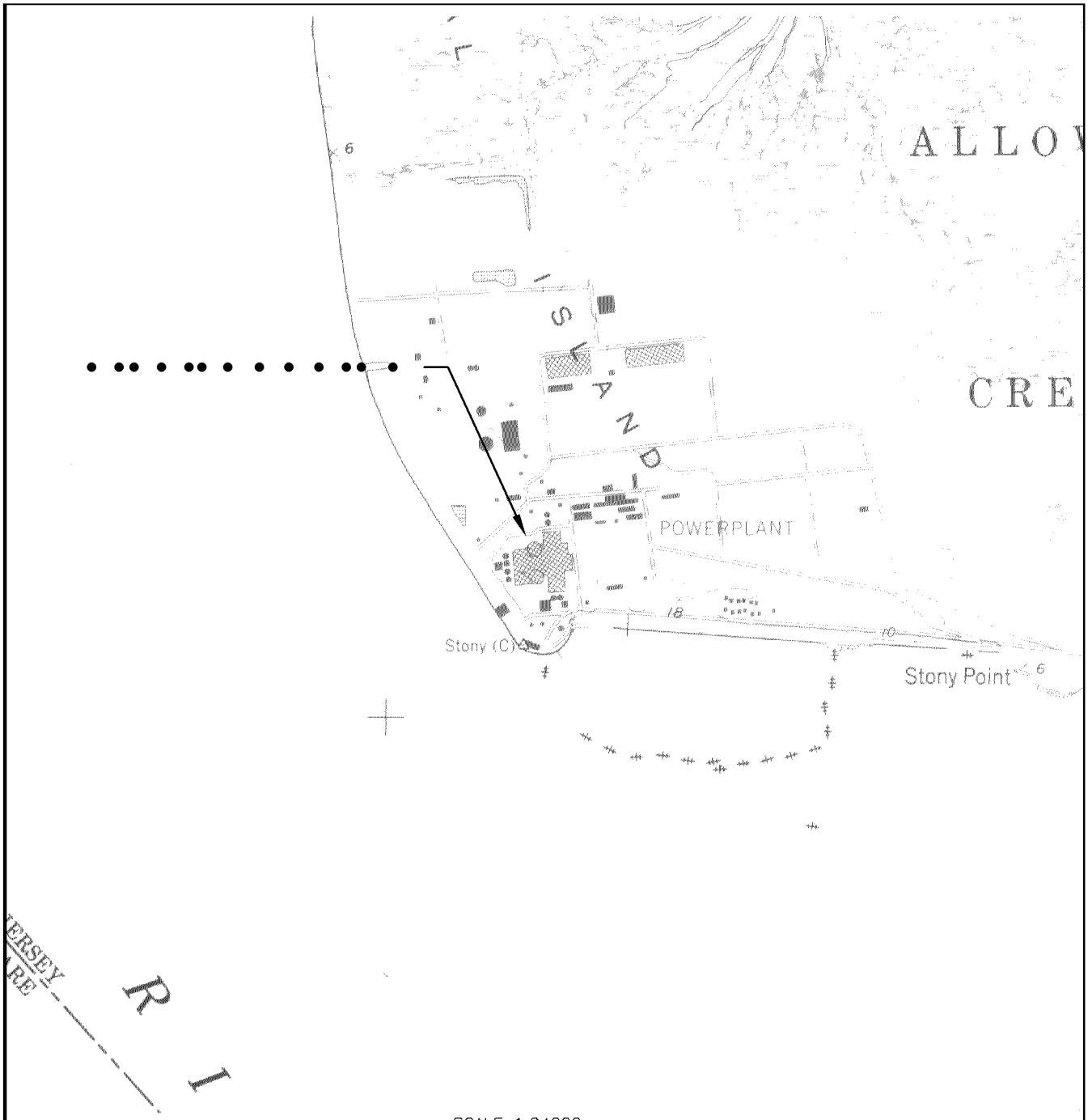
Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	Well CG		WELL-X													
	Sample Date	1/21/2011	2/17/2011	12/13/2004		3/15/2005	7/21/2005	10/4/2005	9/27/2006	12/5/2006	12/12/2007	6/27/2008	12/16/2008	6/3/2009	12/8/2009	6/23/2010	1/21/2011
	Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)																
1,2,4-Trichlorobenzene	9	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
2,4,5-Trichlorophenol	700	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4,6-Trichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dimethylphenol	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U
2,4-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2,6-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 2 U	< 2 U
2-Chlorophenol	40	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Methylnaphthalene	---	**0.84 J**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	**1.7 J**	< 2 U	< 2.1 U	< 2 U	**1.9 J**	< 1 U	< 1 U
2-Methylphenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Nitrophenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3&4-Methylphenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	**4.4 J**	**25.4**	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4,6-Dinitro-o-cresol	---	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Chloro-3-methyl phenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chloroaniline	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Nitrophenol	---	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Acenaphthene	400	**0.33**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	**1.6**	< 2 U	< 2 U	< 1 U	< 1 U	**0.64 J**	< 1 U	< 1 U
Acenaphthylene	---	< 2 U	**0.442**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Anthracene	2000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	**0.73 J**	< 1 U	< 1 U
Benzo(a)anthracene	0.1	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)pyrene	0.1	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(b)fluoranthene	0.2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(k)fluoranthene	0.5	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	**2 J**	< 2 U	< 2.1 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Carbazole	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	**0.51 J**	< 1 U	< 1 U
Chrysene	5	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzo(a,h)anthracene	0.3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzofuran	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Dimethyl phthalate	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Fluoranthene	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Fluorene	300	**0.203**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	**0.74 J**	< 2	< 2	**0.38 J**	< 2 U	< 1 U	**0.42 J**	**0.81 J**	< 1 U	< 1 U
Hexachlorobenzene	0.02	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
Hexachlorobutadiene	1	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U
Hexachloroethane	7	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	.2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Isophorone	40	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Naphthalene	300	**2.13**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	**1.5**	**0.85 J**	< 2 U	< 1 U	**0.89 J**	< 1.1 U	< 1 U	< 1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Pentachlorophenol	0.3	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Phenanthrene	---	**0.11**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	**1.3**	< 1 U	< 1 U
Phenol	2000	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 2 U	< 2.1 U	< 2 U	**3.2**	< 2 U	< 2 U
Pyrene	200	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-003056



SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

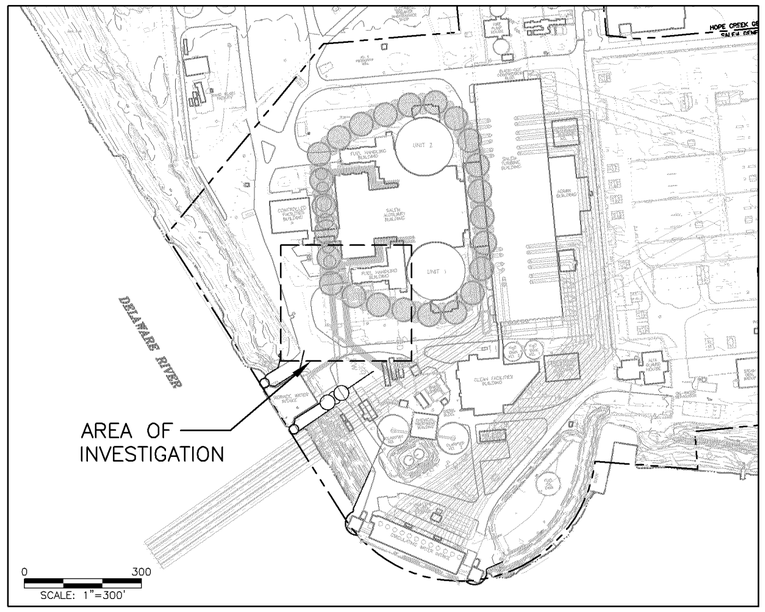
PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
REMEDIAL ACTION PROGRESS REPORT

SITE LOCATION

ARCADIS

FIGURE
1

CITY: Newtown_Pa DIV/GROUP: Env. DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(Opt)ON=*;OFF=*REF*
G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0007\Task 2 - RAPR\Sept. 2009\Draft\Figures\Figure 01 - Station Location.dwg LAYOUT: 1 SAVED: 9/3/2009 7:16 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 11/11/2009 11:36
AM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
taylors bridge.jpg



SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL–AU
HEAVY HAUL PATH
WELL–X
WELL–AW
FUEL HANDLING BUILDING
WELL–AV
LIMITS OF COFFERDAM
WELL–AY
Well AI
WELL–CG
WELL BV
Well AO
WELL–AZ
N

LEGEND:

WELL–AZ — MONITORING WELL UTILIZED IN THE DIESEL INVESTIGATION AND SCREENED ACROSS THE WATER TABLE.

WELL AO — MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.

- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK

NOTE:

1. PUMPING AT WELL AO WILL BE PERMANENTLY SUSPENDED.

0 20 20
SCALE: 1"=20'

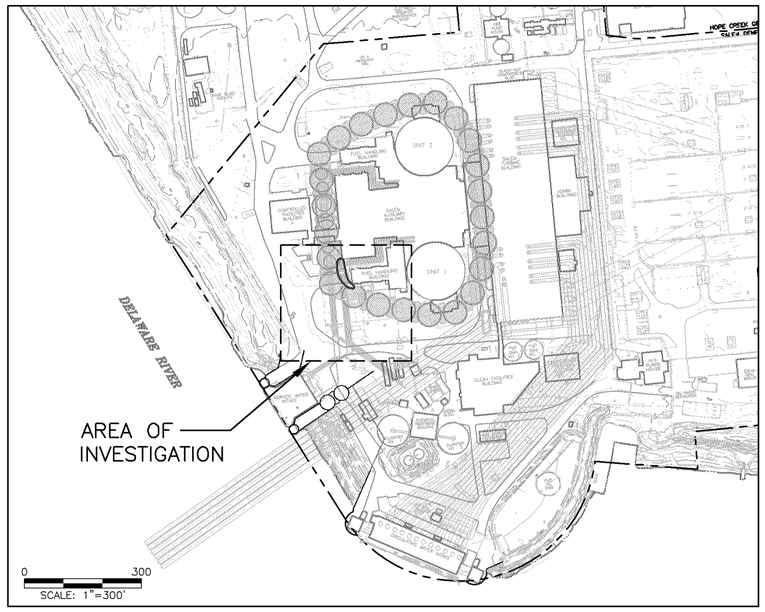
PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
REMEDIAL ACTION PROGRESS REPORT

STATION LAYOUT

ARCADIS

FIGURE **2**

CITY: Newtown, Pa DIV/GROUP: Env DB: M.Wasilewski LD: M.Wasilewski PIC: J.Balletto PM: B.Pierce TM: B.Pierce LYR:(On)(On)=OFF=*REF*
G:\ENVCAD\Newtown\ACTIVE\00603001\100002\Figure 02- STATION LAYOUT.dwg LAYOUT: 2 SAVED: 5/24/2011 4:49 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 8/13/2011 2:27 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME:
AGM-BASE_12-01-04

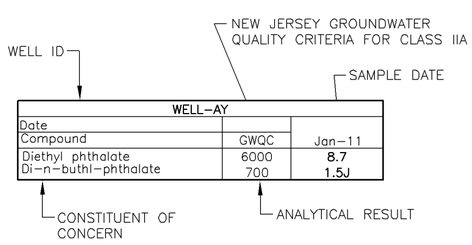


SITE LAYOUT

SCALE: 1"=300'

LEGEND:

- WELL-AZ ⊗ — MONITORING WELL UTILIZED IN THE DIESEL INVESTIGATION AND SCREENED ACROSS THE WATER TABLE.
- WELL AO ▣ — MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.
- APPROXIMATE EXTENT OF SEPERATE – PHASE DIESEL FUEL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD — BLOW DOWN PIPING
- RW — LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST — STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST — AUXILIARY FEEDWATER STORAGE TANK
- PWST — PRIMARY WATER STORAGE TANK
- GWQC — NEW JERSEY GROUND WATER QUALITY CRITERIA FOR CLASS IIA AQUIFERS
- NS — NO STANDARD
- J — ESTIMATED VALUE
- 1.1 — BOLD AND GRAY-SHADED VALUES ARE ABOVE THEIR RESPECTIVE GWQC.
- -- — NO GROUNDWATER QUALITY CRITERIA AVAILABLE
- * — AVERAGE OF PARENT AND BLIND DUPLICATE CONCENTRATION



NOTES:

1. PRIOR TO INITIATING GROUNDWATER SAMPLE COLLECTION, DEPTH-TO-WATER AND SEPARATE PHASE PRODUCT THICKNESS MEASUREMENTS WERE COLLECTED FROM THE INDIVIDUAL WELLS USING AN ELECTRONIC OIL-WATER INTERFACE PROBE.
2. MONITORING WELLS NOT INDICATING A MEASURABLE THICKNESS OF SEPARATE PRODUCT (I.E., GREATER THAN 0.01 FEET) WERE SAMPLED UTILIZING LOW-FLOW SAMPLING METHODS.
3. GROUNDWATER SAMPLES WERE ANALYZED FOR PRIORITY POLLUTANT SEMI-VOLATILE AND VOLATILE ORGANICS INCLUDING A LIBRARY SEARCH.
4. UNITS ARE IN ug/l – MICROGRAMS PER LITER (EQUIVALENT TO PARTS PER BILLION) CONCENTRATIONS ARE ONLY SHOWN FOR THOSE CONSTITUENTS DETECTED ABOVE THE LABORTORY DETECTION LIMITS.
5. WELL AO IS A PUMPING EXTRACTION WELL UTILIZED IN A SEPARATE INVESTIGATION.

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
HEAVY HAUL PATH
LIMITS OF COFFERDAM
WELL-AU
WELL-AV
WELL-AW
WELL-X
WELL-AY
Well AI
WELL-CG
WELL BV
Well AO
WELL-AZ
FUEL HANDLING BUILDING

WELL-X	
Date	Jan-11
All constituents below reporting limit	

Well-AV	
Date	Dec-10
All constituents below reporting limit	

WELL-AY		
Date		
Compound	GWQC	Jan-11
Diethyl phthalate	6000	8.7
Di-n-buthl-phthalate	700	1.5J

WELL-CG			
Date			
Compound	GWQC	Jan-11	Feb-11
Benzene	1	1.1	0.34J
Ethylbenzene	700	2.4	<1U
Xylene (total)	1000	1.3	<1U
2-Methylnapthalene	NS	0.84J	<1U
Acenapthene	400	0.33	<1U
Fluorene	300	0.203	<1U
Napthalene	300	2.13	<1U
Phenanthrene	NS	0.11	<1U
Acenapthylene	NS	<2U	0.442

WELL-BV	
Date	Jan-11
All constituents below reporting limit	

Well-AZ	
Date	Dec-10
All constituents below reporting limit	

N

0 20 20
SCALE: 1"=20'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
REMEDIAL ACTION PROGRESS REPORT

GROUNDWATER MONITORING RESULTS DECEMBER 2010 THROUGH JANUARY 2011

ARCADIS

FIGURE 3

SII-SSA-0014-003059

CITY: Newtown, Pa DIV/GROUP: Env DB: M Wasilewski LD: M Wasilewski PIC: J. Ballido PM: B. Pierce TM: B. Pierce LYR:(On)=On*;Off=*REF*
G:\ENVIRON\Newtown\ACTIVE\80003001\160002\Figure 03 - GROUNDWATER MONITORING RESULTS - DEC 2009.dwg LAYOUT: 3 SAVED: 8/13/2011 2:29 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 8/13/2011 2:29 PM BY: WASILEVSKI, MATT
XREFS: IMAGES: PROJECTNAME: AGM-BASE_12-01-04

ARCADIS

Appendix A

Low-flow Groundwater Sampling Logs

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID AV | Date 12/15/2010

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather cloudy, 25

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3 - 10 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.50 | Total Depth (ft-bmp): 10 | Water Column/ Gallons in Well: NA

MP Elevation: 8.82 | Pump Intake (ft-bmp): 8 | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Low Flow

Pump On/Off: 1235/1325 | Volumes Purged: NA | Sampled by: FS

Sample Time: Label 1310, Start 1306, End 1325 | Replicate/ Code No.: VV | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1240	5	220	4.80		4.92	0.069	30	4.18	10.57	160.2	none	none
1245	10	220	4.95		4.73	0.071	22	2.93	10.65	176.0	none	none
1250	15	220	4.96		4.71	0.078	10	2.27	10.65	189.1	none	none
1255	20	220	4.97		5.19	0.080	9	2.25	10.55	175.1	none	none
1300	25	220	4.98		5.20	0.081	9	2.29	10.54	173.8	none	none
1305	30	220	4.99		5.20	0.081	8.2	2.27	10.54	171.2	none	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	6	HCL
SVOC	1 L Amber Glass	4	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID AY | Date 12/17/2010

Project Name/Location PSEG / Hancock's Bridge, NJ | Weather sunny, 23

Measuring Pt. Description: Top-of-Casing | Screen Setting (ft-bmp): 3 - 8 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 6.15 | Total Depth (ft-bmp): 8 | Water Column/ Gallons in Well: N/A

MP Elevation: 9.04 | Pump Intake (ft-bmp): N/A | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Bailer

Pump On/Off: N/A | Volumes Purged: N/A | Sampled by: F. Straker

Sample Time: Label 0855, Start, End | Replicate/ Code No. | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Other
		GRAB SAMPLE W/ BAILER										
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	6	HCL
SVOC	1 L Amber Glass	4	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location: | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: | Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID AZ | Date 12/15/2010

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather sunny, 25

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3 - 9 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.55 | Total Depth (ft-bmp): 9 | Water Column/ Gallons in Well: NA

MP Elevation: 8.66 | Pump Intake (ft-bmp): 7.0 | Purge Method (mark one): Centrifugal, Submersible: X, Bailer, Other | Sample Method: Low Flow

Pump On/Off: 1010/1059 | Volumes Purged: NA | Sampled by: FS

Sample Time: Label 1050, Start 1046, End 1058 | Replicate/ Code No.: NA

PID Reading (wellhead): | PID Reading (background):

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1015	5	250	5.75		7.15	0.418	100	39.0	12.97	80.4	none	none
1020	10	251	5.75		7.20	0.428	75	7.80	13.06	84.3	none	none
1025	15	252	5.75		7.20	0.428	50	7.80	12.84	85.8	none	none
1030	20	253	5.76		7.21	0.431	37	7.75	12.82	88.0	none	none
1035	25	254	5.76		7.21	0.432	35	7.70	12.87	89.4	none	none
1040	30	255	5.78		7.21	0.432	35	7.70	12.88	89.1	none	none
1045	35	256	5.78		7.21	0.430	33	7.71	12.90	89.3	none	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID BV | Date 1/21/2011

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather sunny, 20's

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3 - 10 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.52 | Total Depth (ft-bmp): 9 | Water Column/ Gallons in Well: NA

MP Elevation: 8.85 | Pump Intake (ft-bmp): 7.5 | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Low Flow

Pump On/Off: 1030 | Volumes Purged | Sampled by: R. Miller

Sample Time: Label 1115, Start 1110, End 1115 | Replicate/ Code No.: NA | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1035	5	250	5.77		7.88	0.121	571	11.23	5.57	114.9	grey	none
1040	10	251	5.86		8.03	0.119	542	10.85	5.38	111.8	grey	none
1045	15	252	5.91		8.19	0.117	453	10.33	5.52	105.3	grey	none
1050	20	253	5.99		8.27	0.117	389	10.19	5.43	101.9	grey	none
1055	25	254	6.02		8.32	0.116	356	10.20	5.31	97.0	grey	none
1100	30	255	6.03		8.35	0.115	400	10.21	5.24	94.9	grey	none
1105	35	256	6.02		8.35	0.115	395	10.19	5.27	94.2	grey	none
1110	40	257	6.02		8.35	0.115	412	10.15	5.21	93.9	grey	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID CG | Date 2/17/2011

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather sunny, 50

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3-10 | Casing Diameter (in.): 4 | Well Material: X PVC, ___ SS

Static Water Level (ft-bmp): 5.02 | Total Depth (ft-bmp): 10 | Water Column/ Gallons in Well: NA

MP Elevation: 8.95 | Pump Intake (ft-bmp): 8 | Purge Method (mark one): Centrifugal ___, Submersible X, Bailer ___, Other ___ | Sample Method: Low Flow

Pump On/Off: 1120/1220 | Volumes Purged ___ | Sampled by: FS

Sample Time: Label 1205, Start 1202, End 1218 | Replicate/ Code No. NA | PID Reading (wellhead) ___ | PID Reading (background) ___

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1125	5	200	5.25		5.61	0.402	110	8.62	16.34	211.4	some	none
1130	10	200	5.30		5.71	0.404	100	7.99	16.46	215.7	some	none
1135	15	200	5.40		5.70	0.406	95	7.94	16.47	218.3	cloudy	none
1140	20	200	5.40		5.70	0.409	80	7.55	16.48	220.4	cloudy	none
1145	25	200	5.45		5.70	0.410	65	7.59	16.52	220.6	cloudy	none
1150	30	200	5.45		5.70	0.411	62	7.54	16.59	221.0	cloudy	none
1155	35	200	5.45		5.70	0.410	59	7.55	16.57	220.6	cloudy	none
1200	40	200	5.45		5.70	0.410	58	7.52	16.53	222.7	cloudy	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID X | Date 12/17/2010

Project Name/Location PSEG / Hancock's Bridge, NJ | Weather sunny, 23

Measuring Pt. Description: Top-of-Casing | Screen Setting (ft-bmp): 2 - 10 | Casing Diameter (in.): 1 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 8.15 | Total Depth (ft-bmp): 10 | Water Column/ Gallons in Well: N/A

MP Elevation: 12.00 | Pump Intake (ft-bmp): N/A | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Bailer

Pump On/Off: N/A | Volumes Purged: N/A | Sampled by: F. Straker

Sample Time: Label 0930, Start, End | Replicate/ Code No.: N/A | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Other
		GRAB SAMPLE W/ BAILER										
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None
only able to collect 1.5L of sample for SVOC bottles			

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location: | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: | Key Number To Well:

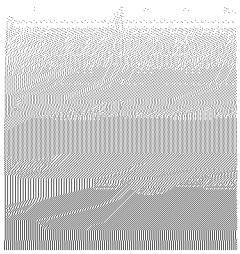
ARCADIS

Appendix B

Groundwater Analytical Results
(December 2010)

New Jersey
ACCUTEST
LABORATORIES

01/10/11



Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

NP000603.0008

Accutest Job Number: JA64438

Sampling Dates: 12/15/10 - 12/16/10

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **281**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Accutest Laboratories

Sample Summary

Arcadis

Job No: JA64438

PSEG-Diesel, Salem, NJ
Project No: NP000603.0008

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA64438-1	12/15/10	10:50	FS	12/17/10	AQ	Ground Water	AZ
JA64438-2	12/15/10	13:10	FS	12/17/10	AQ	Ground Water	AV
JA64438-3	12/15/10	13:30	FS	12/17/10	AQ	Ground Water	VV
JA64438-4	12/15/10	14:30	FS	12/17/10	AQ	Field Blank Water	FB-20101215
JA64438-5	12/16/10	13:55	FS	12/17/10	AQ	Ground Water	CE
JA64438-6	12/16/10	14:40	FS	12/17/10	AQ	Field Blank Water	FB-20101216
JA64438-7	12/16/10	14:40	FS	12/17/10	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA64438
Site:	PSEG-Diesel, Salem, NJ	**Report Date**	1/10/2011 11:33:25 A

On 12/17/2010, 4 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 2.3 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA64438 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V2A4429

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA65148-1MS, JA65148-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V3D2360

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA64438-1MS, JA64438-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V3D2361

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA64509-8MS, JA64509-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP47365

- All samples were extracted within the recommended method holding time.
- Sample(s) JA64353-2MS, JA64353-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorocyclopentadiene are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Recovery(s) for 2-Methylnaphthalene, 4-Nitroaniline, Atrazine, Caprolactam, Dibenzofuran, Hexachlorocyclopentadiene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 4-Nitroaniline, Atrazine, Caprolactam, Dibenzofuran, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, 3-Nitroaniline are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/ MSD for 3-Nitroaniline are outside control limits for sample OP47365-MSD. Outside of in house control limits.
- OP47365-BS1 for Hexachloroethane: Outside of in house control limits, but within reasonable method recovery limits.
- OP47365-MS for Hexachlorobutadiene: Outside of in house control limits, but within reasonable method recovery limits.
- OP47365-MS for Hexachloroethane: Outside of in house control limits, but within reasonable method recovery limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP47365A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA64353-2MS, JA64353-2MSD were used as the QC samples indicated.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Fluorene, Hexachlorobenzene, Naphthalene, Phenanthrene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Acenaphthene are outside control limits. Outside of in house control limits, but within reasonable method recovery limits.
- JA64438-5 for Terphenyl-d14: Outside of in house control limits, but within reasonable method recovery limits.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54538.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	101%		76-117%
460-00-4	4-Bromofluorobenzene	94%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84731.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		25-112%
321-60-8	2-Fluorobiphenyl	78%		31-106%
1718-51-0	Terphenyl-d14	78%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22982.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	111%		18-119%
321-60-8	2-Fluorobiphenyl	99%		18-104%
1718-51-0	Terphenyl-d14	98%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54544.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	94%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84732.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	92%		25-112%
321-60-8	2-Fluorobiphenyl	81%		31-106%
1718-51-0	Terphenyl-d14	86%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.7	ug/l	J
	Internal standard added for SIM test	15.60	4.3	ug/l	J
	Internal standard added for SIM test	20.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22983.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		18-119%
321-60-8	2-Fluorobiphenyl	98%		18-104%
1718-51-0	Terphenyl-d14	105%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54545.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	93%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84733.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		25-112%
321-60-8	2-Fluorobiphenyl	77%		31-106%
1718-51-0	Terphenyl-d14	82%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.3	ug/l	J
	Internal standard added for SIM test	15.60	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22984.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	104%		18-119%
321-60-8	2-Fluorobiphenyl	94%		18-104%
1718-51-0	Terphenyl-d14	96%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54564.D	1	12/29/10	TYG	n/a	n/a	V3D2361
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	93%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84729.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.1	0.42	ug/l	
1912-24-9	Atrazine	ND	5.2	0.41	ug/l	
100-52-7	Benzaldehyde	ND	5.2	0.42	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.36	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.26	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.44	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	0.26	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.1	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.32	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.23	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.31	ug/l	
132-64-9	Dibenzofuran	ND	5.2	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.41	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.25	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.22	ug/l	
78-59-1	Isophorone	ND	2.1	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	0.30	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	0.19	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.26	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	81%		31-106%
1718-51-0	Terphenyl-d14	87%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.5	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22985.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	108%		18-119%
321-60-8	2-Fluorobiphenyl	98%		18-104%
1718-51-0	Terphenyl-d14	105%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54546.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	94%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84734.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		25-112%
321-60-8	2-Fluorobiphenyl	81%		31-106%
1718-51-0	Terphenyl-d14	94%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.5	ug/l	J
	Internal standard added for SIM test	20.24	4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22986.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	108%		18-119%
321-60-8	2-Fluorobiphenyl	99%		18-104%
1718-51-0	Terphenyl-d14	114% [a]		13-109%

(a) Outside of in house control limits, but within reasonable method recovery limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A103869.D	1	12/29/10	HSS	n/a	n/a	V2A4429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	97%		64-135%
2037-26-5	Toluene-D8	97%		76-117%
460-00-4	4-Bromofluorobenzene	96%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84730.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	79%		31-106%
1718-51-0	Terphenyl-d14	76%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.2	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22987.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		18-119%
321-60-8	2-Fluorobiphenyl	96%		18-104%
1718-51-0	Terphenyl-d14	93%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA64438-7	**Date Sampled:**	12/16/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A103870.D	1	12/29/10	HSS	n/a	n/a	V2A4429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA64438-7	**Date Sampled:**	12/16/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	97%		64-135%
2037-26-5	Toluene-D8	97%		76-117%
460-00-4	4-Bromofluorobenzene	96%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

SW FB IW TB

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

PAGE ___ OF ___

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JA64438

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 FRIENDS LN
City State Zip: NEWTOWN PA 18940
Project Contact: Jim Shaffer | E-mail:
Phone #: 267-685-1800 | Fax #:
Sampler(s) Name(s): Frank Stalter | Phone #:

Project Information

Project Name: PSEG
Street:
City State:
Project #: NP000603-0008
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

VOC 8260B | SVOC 8270C

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOC	SVOC	LAB USE ONLY
1	AZ		12-15-10	1050	FS	GW	5	3				2				X	X	481
2	AV			1310		GW												72990
3	VV			1330		GW												
4	FB-20101215			1430		AQ	4	2										
5	CE		12-16-10	1355		GW	5	3										
6	FB-20101216		12-16-10	1440		AQ	4	2										
7	TRIP BLANK		12-13-10	0600		AQ	2											

Turnaround Time (Business days)

- [x] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 6 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Labink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		12-17-10 1545	1	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [x] Cooler Temp. 2-3C

1A

XN

4.1 4

JA64438: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA64438 Client: Immediate Client Services Action Required: No

Date / Time Received: 12/17/2010 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA64438: Chain of Custody
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Internal Sample Tracking Chronicle

Arcadis

Job No: JA64438

PSEG-Diesel, Salem, NJ
Project No: NP000603.0008

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA64438-1	Collected: 15-DEC-10 10:50 By: FS		Received: 17-DEC-10 By: MPC			
AZ						
JA64438-1	SW846 8270C BY SIM	23-DEC-10 17:56	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-1	SW846 8260B	28-DEC-10 16:06	TYG			V8260NJPTCL11+
JA64438-1	SW846 8270C	30-DEC-10 10:25	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-2	Collected: 15-DEC-10 13:10 By: FS		Received: 17-DEC-10 By: MPC			
AV						
JA64438-2	SW846 8270C BY SIM	23-DEC-10 18:27	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-2	SW846 8260B	28-DEC-10 18:48	TYG			V8260NJPTCL11+
JA64438-2	SW846 8270C	30-DEC-10 11:07	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-3	Collected: 15-DEC-10 13:30 By: FS		Received: 17-DEC-10 By: MPC			
VV						
JA64438-3	SW846 8270C BY SIM	23-DEC-10 18:57	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-3	SW846 8260B	28-DEC-10 19:14	TYG			V8260NJPTCL11+
JA64438-3	SW846 8270C	30-DEC-10 11:40	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-4	Collected: 15-DEC-10 14:30 By: FS		Received: 17-DEC-10 By: MPC			
FB-20101215						
JA64438-4	SW846 8270C BY SIM	23-DEC-10 19:28	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-4	SW846 8260B	29-DEC-10 03:46	TYG			V8260NJPTCL11+
JA64438-4	SW846 8270C	30-DEC-10 09:19	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-5	Collected: 16-DEC-10 13:55 By: FS		Received: 17-DEC-10 By: MPC			
CE						
JA64438-5	SW846 8270C BY SIM	23-DEC-10 19:59	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-5	SW846 8260B	28-DEC-10 19:41	TYG			V8260NJPTCL11+
JA64438-5	SW846 8270C	30-DEC-10 12:17	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-6	Collected: 16-DEC-10 14:40 By: FS		Received: 17-DEC-10 By: MPC			
FB-20101216						
JA64438-6	SW846 8270C BY SIM	23-DEC-10 20:29	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-6	SW846 8260B	29-DEC-10 20:44	HSS			V8260NJPTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA64438

PSEG-Diesel, Salem, NJ
Project No: NP000603.0008

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA64438-6	SW846 8270C	30-DEC-10 09:56	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-7	Collected: 16-DEC-10 14:40 By: FS		Received: 17-DEC-10 By: MPC			
TRIP BLANK						
JA64438-7	SW846 8260B	29-DEC-10 21:13	HSS			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 12/17/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA64438-1.2	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-1.2	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-1.2.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-1.2
JA64438-1.2.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-1.2
JA64438-1.2.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-1.2.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-1.2.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-1.2.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-1.2.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-1.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-1.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-1.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-1.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-1.3	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-1.3	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-1.3	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-1.3	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-2.2	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-2.2	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-2.2.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-2.2
JA64438-2.2.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-2.2
JA64438-2.2.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-2.2.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-2.2.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-2.2.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-2.2.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-2.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-2.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-2.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-2.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-2.4	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-2.4	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-2.4	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-2.4	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-3.1	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-3.1	Reginald Saint-Juste		12/20/10 18:15	Depleted

Accutest Internal Chain of Custody

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 12/17/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA64438-3.1.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-3.1
JA64438-3.1.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-3.1
JA64438-3.1.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-3.1.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-3.1.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-3.1.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-3.1.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-3.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-3.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-3.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-3.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-3.4	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-3.4	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-3.4	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-3.4	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-4.1	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-4.1	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-4.1.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-4.1
JA64438-4.1.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-4.1
JA64438-4.1.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-4.1.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-4.1.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-4.1.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-4.1.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-4.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-4.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-4.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-4.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-4.3	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-4.3	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-4.3	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-4.3	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-5.2	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-5.2	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-5.2.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-5.2
JA64438-5.2.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-5.2
JA64438-5.2.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 12/17/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA64438-5.2.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-5.2.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-5.2.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-5.2.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-5.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-5.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-5.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-5.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-5.4	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-5.4	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-5.4	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-5.4	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-6.1	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-6.1	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-6.1.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-6.1
JA64438-6.1.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-6.1
JA64438-6.1.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-6.1.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-6.1.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-6.1.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-6.1.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-6.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-6.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-6.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-6.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-6.3	Secured Storage	Henny Salim	12/29/10 15:02	Retrieve from Storage
JA64438-6.3	Henny Salim	GCMS2A	12/29/10 15:03	Load on Instrument
JA64438-6.3	GCMS2A	Henny Salim	12/30/10 07:46	Unload from Instrument
JA64438-6.3	Henny Salim	Secured Storage	12/30/10 07:46	Return to Storage
JA64438-7.1	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-7.1	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-7.1	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-7.1	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-7.1	Secured Storage	Henny Salim	12/29/10 15:02	Retrieve from Storage
JA64438-7.1	Henny Salim	GCMS2A	12/29/10 15:03	Load on Instrument
JA64438-7.1	GCMS2A	Henny Salim	12/30/10 07:46	Unload from Instrument
JA64438-7.1	Henny Salim	Secured Storage	12/30/10 07:46	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-MB	3D54530.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-MB	3D54530.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	113%	76-120%
17060-07-0	1,2-Dichloroethane-D4	110%	64-135%
2037-26-5	Toluene-D8	113%	76-117%
460-00-4	4-Bromofluorobenzene	104%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-MB	3D54553.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-MB	3D54553.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	96%	64-135%
2037-26-5	Toluene-D8	101%	76-117%
460-00-4	4-Bromofluorobenzene	92%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-MB	2A103849.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-MB	2A103849.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	96%	76-117%
460-00-4	4-Bromofluorobenzene	96%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-BS	3D54531.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	46.6	93	51-151
71-43-2	Benzene	50	50.9	102	75-122
74-97-5	Bromochloromethane	50	53.2	106	78-124
75-27-4	Bromodichloromethane	50	55.9	112	77-128
75-25-2	Bromoform	50	53.2	106	67-141
74-83-9	Bromomethane	50	58.9	118	53-152
78-93-3	2-Butanone (MEK)	50	55.2	110	64-130
75-15-0	Carbon disulfide	50	49.5	99	59-140
56-23-5	Carbon tetrachloride	50	54.3	109	75-148
108-90-7	Chlorobenzene	50	51.9	104	76-124
75-00-3	Chloroethane	50	52.0	104	54-147
67-66-3	Chloroform	50	52.5	105	77-124
74-87-3	Chloromethane	50	46.1	92	46-144
110-82-7	Cyclohexane	50	51.0	102	62-127
124-48-1	Dibromochloromethane	50	53.8	108	76-132
95-50-1	1,2-Dichlorobenzene	50	52.0	104	74-125
541-73-1	1,3-Dichlorobenzene	50	52.4	105	73-124
106-46-7	1,4-Dichlorobenzene	50	51.3	103	71-123
75-71-8	Dichlorodifluoromethane	50	45.0	90	42-152
75-34-3	1,1-Dichloroethane	50	51.0	102	72-124
107-06-2	1,2-Dichloroethane	50	53.5	107	66-150
75-35-4	1,1-Dichloroethene	50	50.4	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.1	114	71-119
156-60-5	trans-1,2-Dichloroethene	50	44.1	88	71-123
78-87-5	1,2-Dichloropropane	50	51.9	104	75-120
10061-01-5	cis-1,3-Dichloropropene	50	53.9	108	77-124
10061-02-6	trans-1,3-Dichloropropene	50	54.7	109	75-132
100-41-4	Ethylbenzene	50	50.8	102	77-124
76-13-1	Freon 113	50	54.0	108	58-149
591-78-6	2-Hexanone	50	58.0	116	58-136
98-82-8	Isopropylbenzene	50	54.8	110	60-136
79-20-9	Methyl Acetate	50	51.9	104	57-139
108-87-2	Methylcyclohexane	50	53.5	107	73-130
1634-04-4	Methyl Tert Butyl Ether	100	99.2	99	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	55.2	110	63-135
75-09-2	Methylene chloride	50	49.7	99	69-122

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-BS	3D54531.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.2	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	50.8	102	66-125
127-18-4	Tetrachloroethene	50	51.9	104	70-136
108-88-3	Toluene	50	52.5	105	76-126
87-61-6	1,2,3-Trichlorobenzene	50	55.0	110	62-132
120-82-1	1,2,4-Trichlorobenzene	50	54.4	109	67-132
71-55-6	1,1,1-Trichloroethane	50	52.7	105	77-136
79-00-5	1,1,2-Trichloroethane	50	53.3	107	75-123
79-01-6	Trichloroethene	50	53.9	108	79-126
75-69-4	Trichlorofluoromethane	50	55.1	110	56-154
75-01-4	Vinyl chloride	50	50.7	101	56-146
	m,p-Xylene	100	105	105	77-125
95-47-6	o-Xylene	50	52.8	106	76-126
1330-20-7	Xylene (total)	150	158	105	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	115%	76-120%
17060-07-0	1,2-Dichloroethane-D4	118%	64-135%
2037-26-5	Toluene-D8	117%	76-117%
460-00-4	4-Bromofluorobenzene	106%	72-122%

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-BS	3D54554.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.8	96	51-151
71-43-2	Benzene	50	48.0	96	75-122
74-97-5	Bromochloromethane	50	51.3	103	78-124
75-27-4	Bromodichloromethane	50	53.3	107	77-128
75-25-2	Bromoform	50	49.5	99	67-141
74-83-9	Bromomethane	50	54.1	108	53-152
78-93-3	2-Butanone (MEK)	50	52.4	105	64-130
75-15-0	Carbon disulfide	50	46.1	92	59-140
56-23-5	Carbon tetrachloride	50	50.8	102	75-148
108-90-7	Chlorobenzene	50	50.0	100	76-124
75-00-3	Chloroethane	50	49.2	98	54-147
67-66-3	Chloroform	50	50.1	100	77-124
74-87-3	Chloromethane	50	44.1	88	46-144
110-82-7	Cyclohexane	50	46.8	94	62-127
124-48-1	Dibromochloromethane	50	51.8	104	76-132
95-50-1	1,2-Dichlorobenzene	50	49.8	100	74-125
541-73-1	1,3-Dichlorobenzene	50	49.8	100	73-124
106-46-7	1,4-Dichlorobenzene	50	49.2	98	71-123
75-71-8	Dichlorodifluoromethane	50	39.8	80	42-152
75-34-3	1,1-Dichloroethane	50	48.4	97	72-124
107-06-2	1,2-Dichloroethane	50	51.2	102	66-150
75-35-4	1,1-Dichloroethene	50	47.7	95	61-132
156-59-2	cis-1,2-Dichloroethene	50	54.5	109	71-119
156-60-5	trans-1,2-Dichloroethene	50	41.7	83	71-123
78-87-5	1,2-Dichloropropane	50	49.7	99	75-120
10061-01-5	cis-1,3-Dichloropropene	50	49.7	99	77-124
10061-02-6	trans-1,3-Dichloropropene	50	50.2	100	75-132
100-41-4	Ethylbenzene	50	49.4	99	77-124
76-13-1	Freon 113	50	49.6	99	58-149
591-78-6	2-Hexanone	50	55.5	111	58-136
98-82-8	Isopropylbenzene	50	52.3	105	60-136
79-20-9	Methyl Acetate	50	50.1	100	57-139
108-87-2	Methylcyclohexane	50	49.5	99	73-130
1634-04-4	Methyl Tert Butyl Ether	100	95.7	96	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.9	104	63-135
75-09-2	Methylene chloride	50	47.5	95	69-122

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-BS	3D54554.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	48.5	97	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.2	98	66-125
127-18-4	Tetrachloroethene	50	49.5	99	70-136
108-88-3	Toluene	50	50.1	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	52.1	104	62-132
120-82-1	1,2,4-Trichlorobenzene	50	51.5	103	67-132
71-55-6	1,1,1-Trichloroethane	50	50.1	100	77-136
79-00-5	1,1,2-Trichloroethane	50	52.1	104	75-123
79-01-6	Trichloroethene	50	51.6	103	79-126
75-69-4	Trichlorofluoromethane	50	51.2	102	56-154
75-01-4	Vinyl chloride	50	47.7	95	56-146
	m,p-Xylene	100	99.8	100	77-125
95-47-6	o-Xylene	50	51.5	103	76-126
1330-20-7	Xylene (total)	150	151	101	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	95%	72-122%

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-BS	2A103850.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	51.1	102	51-151
71-43-2	Benzene	50	48.3	97	75-122
74-97-5	Bromochloromethane	50	52.5	105	78-124
75-27-4	Bromodichloromethane	50	53.6	107	77-128
75-25-2	Bromoform	50	57.0	114	67-141
74-83-9	Bromomethane	50	56.8	114	53-152
78-93-3	2-Butanone (MEK)	50	49.5	99	64-130
75-15-0	Carbon disulfide	50	49.3	99	59-140
56-23-5	Carbon tetrachloride	50	53.8	108	75-148
108-90-7	Chlorobenzene	50	52.3	105	76-124
75-00-3	Chloroethane	50	53.4	107	54-147
67-66-3	Chloroform	50	52.2	104	77-124
74-87-3	Chloromethane	50	51.4	103	46-144
110-82-7	Cyclohexane	50	48.3	97	62-127
124-48-1	Dibromochloromethane	50	52.8	106	76-132
95-50-1	1,2-Dichlorobenzene	50	54.2	108	74-125
541-73-1	1,3-Dichlorobenzene	50	55.0	110	73-124
106-46-7	1,4-Dichlorobenzene	50	53.6	107	71-123
75-71-8	Dichlorodifluoromethane	50	37.7	75	42-152
75-34-3	1,1-Dichloroethane	50	51.1	102	72-124
107-06-2	1,2-Dichloroethane	50	51.3	103	66-150
75-35-4	1,1-Dichloroethene	50	50.3	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.0	114	71-119
156-60-5	trans-1,2-Dichloroethene	50	46.2	92	71-123
78-87-5	1,2-Dichloropropane	50	50.9	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	51.7	103	75-132
100-41-4	Ethylbenzene	50	49.9	100	77-124
76-13-1	Freon 113	50	53.1	106	58-149
591-78-6	2-Hexanone	50	52.8	106	58-136
98-82-8	Isopropylbenzene	50	53.9	108	60-136
79-20-9	Methyl Acetate	50	48.6	97	57-139
108-87-2	Methylcyclohexane	50	48.4	97	73-130
1634-04-4	Methyl Tert Butyl Ether	100	108	108	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	50.0	100	63-135
75-09-2	Methylene chloride	50	50.9	102	69-122

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-BS	2A103850.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	49.3	99	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	54.2	108	66-125
127-18-4	Tetrachloroethene	50	52.7	105	70-136
108-88-3	Toluene	50	49.3	99	76-126
87-61-6	1,2,3-Trichlorobenzene	50	56.4	113	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.9	112	67-132
71-55-6	1,1,1-Trichloroethane	50	53.5	107	77-136
79-00-5	1,1,2-Trichloroethane	50	53.1	106	75-123
79-01-6	Trichloroethene	50	52.6	105	79-126
75-69-4	Trichlorofluoromethane	50	53.6	107	56-154
75-01-4	Vinyl chloride	50	52.7	105	56-146
	m,p-Xylene	100	100	100	77-125
95-47-6	o-Xylene	50	52.7	105	76-126
1330-20-7	Xylene (total)	150	153	102	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	97%	64-135%
2037-26-5	Toluene-D8	96%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64438-1MS	3D54541.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1MSD	3D54542.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1	3D54538.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	JA64438-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	47.5	95	46.8	94	1	44-157/20
71-43-2	Benzene	ND		50	43.3	87	45.7	91	5	38-139/13
74-97-5	Bromochloromethane	ND		50	49.6	99	51.7	103	4	70-129/11
75-27-4	Bromodichloromethane	ND		50	49.2	98	50.7	101	3	70-135/13
75-25-2	Bromoform	ND		50	47.1	94	48.0	96	2	53-139/13
74-83-9	Bromomethane	ND		50	49.7	99	54.3	109	9	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	53.0	106	54.5	109	3	58-140/14
75-15-0	Carbon disulfide	ND		50	33.8	68	36.6	73	8	34-136/21
56-23-5	Carbon tetrachloride	ND		50	40.9	82	43.3	87	6	50-161/18
108-90-7	Chlorobenzene	ND		50	45.6	91	47.6	95	4	65-128/12
75-00-3	Chloroethane	ND		50	42.7	85	45.7	91	7	41-151/18
67-66-3	Chloroform	ND		50	45.8	92	48.1	96	5	66-132/14
74-87-3	Chloromethane	ND		50	41.3	83	44.4	89	7	35-149/22
110-82-7	Cyclohexane	ND		50	39.8	80	42.3	85	6	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.4	99	51.0	102	3	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	47.2	94	48.9	98	4	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	45.3	91	47.1	94	4	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	45.6	91	47.1	94	3	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	40.3	81	44.0	88	9	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	43.9	88	46.1	92	5	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	50.4	101	51.2	102	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	39.3	79	41.9	84	6	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.0	90	47.6	95	6	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	41.6	83	43.8	88	5	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	46.3	93	48.8	98	5	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	46.3	93	48.6	97	5	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.6	95	49.1	98	3	68-134/13
100-41-4	Ethylbenzene	ND		50	43.1	86	45.5	91	5	37-143/13
76-13-1	Freon 113	ND		50	34.9	70	37.4	75	7	33-159/19
591-78-6	2-Hexanone	ND		50	55.5	111	57.5	115	4	53-145/17
98-82-8	Isopropylbenzene	ND		50	44.0	88	46.7	93	6	48-141/15
79-20-9	Methyl Acetate	ND		50	52.8	106	52.0	104	2	46-147/18
108-87-2	Methylcyclohexane	ND		50	34.7	69	37.3	75	7	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	49.3	99	50.4	101	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	53.1	106	53.2	106	0	57-141/14
75-09-2	Methylene chloride	ND		50	46.2	92	48.0	96	4	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64438-1MS	3D54541.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1MSD	3D54542.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1	3D54538.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	JA64438-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.6	89	46.5	93	4	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	50.3	101	50.5	101	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	43.7	87	46.5	93	6	48-145/15
108-88-3	Toluene	ND		50	43.8	88	46.9	94	7	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	49.9	100	51.7	103	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.2	96	51.1	102	6	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	42.3	85	45.0	90	6	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	50.5	101	51.9	104	3	70-127/12
79-01-6	Trichloroethene	ND		50	44.3	89	46.6	93	5	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	41.9	84	45.7	91	9	35-169/23
75-01-4	Vinyl chloride	ND		50	39.3	79	42.7	85	8	34-151/20
	m,p-Xylene	ND		100	87.8	88	93.2	93	6	32-146/13
95-47-6	o-Xylene	ND		50	45.0	90	47.3	95	5	46-141/12
1330-20-7	Xylene (total)	ND		150	133	89	140	93	5	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA64438-1	Limits
1868-53-7	Dibromofluoromethane	101%	102%	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	96%	64-135%
2037-26-5	Toluene-D8	103%	104%	101%	76-117%
460-00-4	4-Bromofluorobenzene	95%	95%	94%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64509-8MS	3D54559.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8MSD	3D54560.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8	3D54558.D	5	12/29/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	JA64509-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	237	95	242	97	2	44-157/20
71-43-2	Benzene	5.5		250	237	93	236	92	0	38-139/13
74-97-5	Bromochloromethane	ND		250	243	97	241	96	1	70-129/11
75-27-4	Bromodichloromethane	ND		250	243	97	246	98	1	70-135/13
75-25-2	Bromoform	ND		250	224	90	229	92	2	53-139/13
74-83-9	Bromomethane	ND		250	255	102	253	101	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		250	235	94	245	98	4	58-140/14
75-15-0	Carbon disulfide	ND		250	216	86	214	86	1	34-136/21
56-23-5	Carbon tetrachloride	ND		250	244	98	242	97	1	50-161/18
108-90-7	Chlorobenzene	ND		250	232	93	232	93	0	65-128/12
75-00-3	Chloroethane	ND		250	242	97	239	96	1	41-151/18
67-66-3	Chloroform	ND		250	237	95	236	94	0	66-132/14
74-87-3	Chloromethane	ND		250	240	96	238	95	1	35-149/22
110-82-7	Cyclohexane	ND		250	258	103	249	100	4	29-158/18
124-48-1	Dibromochloromethane	ND		250	238	95	243	97	2	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		250	232	93	231	92	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		250	229	92	231	92	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		250	227	91	228	91	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	275	110	266	106	3	24-170/24
75-34-3	1,1-Dichloroethane	ND		250	232	93	231	92	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		250	239	96	243	97	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	234	94	233	93	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		250	232	93	231	92	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		250	231	92	228	91	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		250	232	93	236	94	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		250	231	92	231	92	0	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		250	233	93	235	94	1	68-134/13
100-41-4	Ethylbenzene	27.3		250	264	95	263	94	0	37-143/13
76-13-1	Freon 113	ND		250	222	89	215	86	3	33-159/19
591-78-6	2-Hexanone	ND		250	255	102	264	106	3	53-145/17
98-82-8	Isopropylbenzene	ND		250	246	98	243	97	1	48-141/15
79-20-9	Methyl Acetate	ND		250	266	106	271	108	2	46-147/18
108-87-2	Methylcyclohexane	ND		250	227	91	223	89	2	36-156/18
1634-04-4	Methyl Tert Butyl Ether	858		250	1100	97	1110	101	1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	241	96	255	102	6	57-141/14
75-09-2	Methylene chloride	ND		250	228	91	230	92	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64509-8MS	3D54559.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8MSD	3D54560.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8	3D54558.D	5	12/29/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	JA64509-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		250	239	96	240	96	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	227	91	235	94	3	62-126/13
127-18-4	Tetrachloroethene	ND		250	244	98	239	96	2	48-145/15
108-88-3	Toluene	253		250	485	93	479	90	1	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		250	236	94	245	98	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		250	238	95	242	97	2	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		250	243	97	240	96	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	238	95	242	97	2	70-127/12
79-01-6	Trichloroethene	ND		250	243	97	243	97	0	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	258	103	249	100	4	35-169/23
75-01-4	Vinyl chloride	ND		250	240	96	234	94	3	34-151/20
	m,p-Xylene	121		500	597	95	592	94	1	32-146/13
95-47-6	o-Xylene	111		250	348	95	348	95	0	46-141/12
1330-20-7	Xylene (total)	232		750	945	95	940	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA64509-8	Limits
1868-53-7	Dibromofluoromethane	102%	103%	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	105%	96%	64-135%
2037-26-5	Toluene-D8	104%	104%	103%	76-117%
460-00-4	4-Bromofluorobenzene	96%	95%	94%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA65148-1MS	2A103857.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1MSD	2A103858.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1	2A103852.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	JA65148-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	44.6	89	49.0	98	9	44-157/20
71-43-2	Benzene	ND		50	43.0	86	43.1	86	0	38-139/13
74-97-5	Bromochloromethane	ND		50	46.9	94	49.9	100	6	70-129/11
75-27-4	Bromodichloromethane	ND		50	48.3	97	50.1	100	4	70-135/13
75-25-2	Bromoform	ND		50	51.4	103	54.6	109	6	53-139/13
74-83-9	Bromomethane	ND		50	46.8	94	46.5	93	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.2	90	46.6	93	3	58-140/14
75-15-0	Carbon disulfide	ND		50	40.5	81	39.8	80	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	46.5	93	45.1	90	3	50-161/18
108-90-7	Chlorobenzene	ND		50	45.8	92	47.1	94	3	65-128/12
75-00-3	Chloroethane	ND		50	45.2	90	43.4	87	4	41-151/18
67-66-3	Chloroform	ND		50	46.7	93	46.8	94	0	66-132/14
74-87-3	Chloromethane	ND		50	48.4	97	46.6	93	4	35-149/22
110-82-7	Cyclohexane	ND		50	43.0	86	42.4	85	1	29-158/18
124-48-1	Dibromochloromethane	ND		50	48.6	97	51.7	103	6	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	48.2	96	50.1	100	4	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.9	96	49.7	99	4	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	46.8	94	49.3	99	5	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	43.2	86	41.0	82	5	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	44.9	90	44.7	89	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	48.1	96	49.6	99	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	43.2	86	42.0	84	3	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.1	90	46.1	92	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	44.7	89	44.4	89	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	46.7	93	47.8	96	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	48.1	96	49.9	100	4	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.4	95	49.5	99	4	68-134/13
100-41-4	Ethylbenzene	ND		50	44.1	88	44.1	88	0	37-143/13
76-13-1	Freon 113	ND		50	43.1	86	42.0	84	3	33-159/19
591-78-6	2-Hexanone	ND		50	46.2	92	49.6	99	7	53-145/17
98-82-8	Isopropylbenzene	ND		50	45.2	90	45.9	92	2	48-141/15
79-20-9	Methyl Acetate	ND		50	44.7	89	46.7	93	4	46-147/18
108-87-2	Methylcyclohexane	ND		50	39.7	79	38.7	77	3	36-156/18
1634-04-4	Methyl Tert Butyl Ether	55.1		50	103	96	108	106	5	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.3	91	48.7	97	7	57-141/14
75-09-2	Methylene chloride	ND		50	46.2	92	47.3	95	2	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA65148-1MS	2A103857.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1MSD	2A103858.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1	2A103852.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	JA65148-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.2	88	45.5	91	3	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.1	98	53.5	107	9	62-126/13
127-18-4	Tetrachloroethene	ND		50	46.7	93	46.1	92	1	48-145/15
108-88-3	Toluene	ND		50	43.8	88	43.6	87	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	49.3	99	53.3	107	8	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	49.0	98	52.5	105	7	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	46.1	92	45.1	90	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	49.2	98	51.6	103	5	70-127/12
79-01-6	Trichloroethene	ND		50	45.4	91	45.4	91	0	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	43.8	88	42.1	84	4	35-169/23
75-01-4	Vinyl chloride	ND		50	42.5	85	40.8	82	4	34-151/20
	m,p-Xylene	ND		100	87.8	88	87.9	88	0	32-146/13
95-47-6	o-Xylene	ND		50	44.8	90	45.7	91	2	46-141/12
1330-20-7	Xylene (total)	ND		150	133	89	134	89	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA65148-1	Limits
1868-53-7	Dibromofluoromethane	100%	100%	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	96%	95%	64-135%
2037-26-5	Toluene-D8	98%	97%	97%	76-117%
460-00-4	4-Bromofluorobenzene	99%	101%	97%	72-122%

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2A4305-BFB	**Injection Date:**	10/14/10
Lab File ID:	2A100913.D	**Injection Time:**	09:43
Instrument ID:	GCMS2A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8062	17.8		Pass
75	30.0 - 60.0% of mass 95	20133	44.3		Pass
95	Base peak, 100% relative abundance	45416	100.0		Pass
96	5.0 - 9.0% of mass 95	2989	6.58		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	46458	102.3		Pass
175	5.0 - 9.0% of mass 174	3610	7.95	(7.77) [a]	Pass
176	95.0 - 101.0% of mass 174	45408	100.0	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	3048	6.71	(6.71) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2A4305-IC4305	2A100914.D	10/14/10	10:17	00:34	Initial cal 0.5
V2A4305-IC4305	2A100915.D	10/14/10	10:46	01:03	Initial cal 1
V2A4305-IC4305	2A100916.D	10/14/10	11:16	01:33	Initial cal 2
V2A4305-IC4305	2A100917.D	10/14/10	11:45	02:02	Initial cal 5
V2A4305-IC4305	2A100918.D	10/14/10	12:15	02:32	Initial cal 20
V2A4305-ICC4305	2A100919.D	10/14/10	12:44	03:01	Initial cal 50
V2A4305-IC4305	2A100920.D	10/14/10	13:14	03:31	Initial cal 100
V2A4305-IC4305	2A100921.D	10/14/10	13:43	04:00	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2A4429-BFB	**Injection Date:**	12/29/10
Lab File ID:	2A103847.D	**Injection Time:**	09:31
Instrument ID:	GCMS2A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10097	16.8		Pass
75	30.0 - 60.0% of mass 95	26888	44.7		Pass
95	Base peak, 100% relative abundance	60216	100.0		Pass
96	5.0 - 9.0% of mass 95	3934	6.53		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	63096	104.8		Pass
175	5.0 - 9.0% of mass 174	4820	8.00	(7.64) [a]	Pass
176	95.0 - 101.0% of mass 174	61821	102.7	(98.0) [a]	Pass
177	5.0 - 9.0% of mass 176	4136	6.87	(6.69) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2A4429-CC4305	2A103848.D	12/29/10	09:59	00:28	Continuing cal 20
V2A4429-MB	2A103849.D	12/29/10	10:35	01:04	Method Blank
V2A4429-BS	2A103850.D	12/29/10	11:10	01:39	Blank Spike
ZZZZZZ	2A103851.D	12/29/10	11:49	02:18	(unrelated sample)
JA65148-1	2A103852.D	12/29/10	12:19	02:48	(used for QC only; not part of job JA64438)
ZZZZZZ	2A103853.D	12/29/10	12:48	03:17	(unrelated sample)
ZZZZZZ	2A103854.D	12/29/10	13:18	03:47	(unrelated sample)
ZZZZZZ	2A103855.D	12/29/10	13:48	04:17	(unrelated sample)
ZZZZZZ	2A103856.D	12/29/10	14:18	04:47	(unrelated sample)
JA65148-1MS	2A103857.D	12/29/10	14:47	05:16	Matrix Spike
JA65148-1MSD	2A103858.D	12/29/10	15:17	05:46	Matrix Spike Duplicate
ZZZZZZ	2A103859.D	12/29/10	15:47	06:16	(unrelated sample)
ZZZZZZ	2A103860.D	12/29/10	16:17	06:46	(unrelated sample)
ZZZZZZ	2A103861.D	12/29/10	16:46	07:15	(unrelated sample)
ZZZZZZ	2A103862.D	12/29/10	17:16	07:45	(unrelated sample)
ZZZZZZ	2A103863.D	12/29/10	17:46	08:15	(unrelated sample)
ZZZZZZ	2A103864.D	12/29/10	18:15	08:44	(unrelated sample)
ZZZZZZ	2A103865.D	12/29/10	18:45	09:14	(unrelated sample)
ZZZZZZ	2A103866.D	12/29/10	19:14	09:43	(unrelated sample)
ZZZZZZ	2A103867.D	12/29/10	19:44	10:13	(unrelated sample)
ZZZZZZ	2A103868.D	12/29/10	20:14	10:43	(unrelated sample)
JA64438-6	2A103869.D	12/29/10	20:44	11:13	FB-20101216
JA64438-7	2A103870.D	12/29/10	21:13	11:42	TRIP BLANK

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3D2292-BFB	**Injection Date:**	11/15/10
Lab File ID:	3D52923.D	**Injection Time:**	20:35
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9835	20.8		Pass
75	30.0 - 60.0% of mass 95	22834	48.2		Pass
95	Base peak, 100% relative abundance	47341	100.0		Pass
96	5.0 - 9.0% of mass 95	3170	6.70		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	37010	78.2		Pass
175	5.0 - 9.0% of mass 174	2760	5.83	(7.46) [a]	Pass
176	95.0 - 101.0% of mass 174	36328	76.7	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	2413	5.10	(6.64) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D2292-IC2292	3D52924.D	11/15/10	21:01	00:26	Initial cal 1
ZZZZZZ	3D52924A.D	11/15/10	21:01	00:26	(unrelated sample)
V3D2292-IC2292	3D52925.D	11/15/10	21:28	00:53	Initial cal 2
V3D2292-IC2292	3D52926.D	11/15/10	21:55	01:20	Initial cal 5
V3D2292-IC2292	3D52927.D	11/15/10	22:21	01:46	Initial cal 10
V3D2292-IC2292	3D52928.D	11/15/10	22:48	02:13	Initial cal 20
V3D2292-ICC2292	3D52929.D	11/15/10	23:15	02:40	Initial cal 50
V3D2292-IC2292	3D52930.D	11/15/10	23:42	03:07	Initial cal 100
V3D2292-IC2292	3D52931.D	11/16/10	00:08	03:33	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3D2360-BFB	**Injection Date:**	12/28/10
Lab File ID:	3D54526.D	**Injection Time:**	09:05
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14311	20.3		Pass
75	30.0 - 60.0% of mass 95	34549	48.9		Pass
95	Base peak, 100% relative abundance	70602	100.0		Pass
96	5.0 - 9.0% of mass 95	4856	6.88		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	55101	78.0		Pass
175	5.0 - 9.0% of mass 174	4402	6.23	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	53877	76.3	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3573	5.06	(6.63) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D2360-CC2292	3D54528.D	12/28/10	10:40	01:35	Continuing cal 20
V3D2360-MB	3D54530.D	12/28/10	11:51	02:46	Method Blank
V3D2360-BS	3D54531.D	12/28/10	12:28	03:23	Blank Spike
ZZZZZZ	3D54532.D	12/28/10	13:25	04:20	(unrelated sample)
ZZZZZZ	3D54533.D	12/28/10	13:52	04:47	(unrelated sample)
ZZZZZZ	3D54535.D	12/28/10	14:45	05:40	(unrelated sample)
ZZZZZZ	3D54536.D	12/28/10	15:12	06:07	(unrelated sample)
ZZZZZZ	3D54537.D	12/28/10	15:39	06:34	(unrelated sample)
JA64438-1	3D54538.D	12/28/10	16:06	07:01	AZ
ZZZZZZ	3D54539.D	12/28/10	16:33	07:28	(unrelated sample)
ZZZZZZ	3D54540.D	12/28/10	17:00	07:55	(unrelated sample)
JA64438-1MS	3D54541.D	12/28/10	17:27	08:22	Matrix Spike
JA64438-1MSD	3D54542.D	12/28/10	17:54	08:49	Matrix Spike Duplicate
ZZZZZZ	3D54543.D	12/28/10	18:21	09:16	(unrelated sample)
JA64438-2	3D54544.D	12/28/10	18:48	09:43	AV
JA64438-3	3D54545.D	12/28/10	19:14	10:09	VV
JA64438-5	3D54546.D	12/28/10	19:41	10:36	CE
ZZZZZZ	3D54547.D	12/28/10	20:08	11:03	(unrelated sample)
ZZZZZZ	3D54548.D	12/28/10	20:35	11:30	(unrelated sample)
ZZZZZZ	3D54549.D	12/28/10	21:02	11:57	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3D2361-BFB	**Injection Date:**	12/28/10
Lab File ID:	3D54550.D	**Injection Time:**	21:29
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10016	20.2		Pass
75	30.0 - 60.0% of mass 95	24565	49.5		Pass
95	Base peak, 100% relative abundance	49613	100.0		Pass
96	5.0 - 9.0% of mass 95	3360	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	41605	83.9		Pass
175	5.0 - 9.0% of mass 174	3390	6.83	(8.15) [a]	Pass
176	95.0 - 101.0% of mass 174	40160	80.9	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	2565	5.17	(6.39) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D2361-CC2292	3D54551.D	12/28/10	21:56	00:27	Continuing cal 50
V3D2361-MB	3D54553.D	12/28/10	22:50	01:21	Method Blank
V3D2361-BS	3D54554.D	12/28/10	23:17	01:48	Blank Spike
ZZZZZZ	3D54555.D	12/28/10	23:44	02:15	(unrelated sample)
ZZZZZZ	3D54556.D	12/29/10	00:11	02:42	(unrelated sample)
ZZZZZZ	3D54557.D	12/29/10	00:38	03:09	(unrelated sample)
JA64509-8	3D54558.D	12/29/10	01:05	03:36	(used for QC only; not part of job JA64438)
JA64509-8MS	3D54559.D	12/29/10	01:32	04:03	Matrix Spike
JA64509-8MSD	3D54560.D	12/29/10	01:59	04:30	Matrix Spike Duplicate
ZZZZZZ	3D54562.D	12/29/10	02:52	05:23	(unrelated sample)
ZZZZZZ	3D54563.D	12/29/10	03:19	05:50	(unrelated sample)
JA64438-4	3D54564.D	12/29/10	03:46	06:17	FB-20101215
ZZZZZZ	3D54565.D	12/29/10	04:13	06:44	(unrelated sample)
ZZZZZZ	3D54566.D	12/29/10	04:40	07:11	(unrelated sample)
ZZZZZZ	3D54568.D	12/29/10	05:34	08:05	(unrelated sample)
ZZZZZZ	3D54569.D	12/29/10	06:01	08:32	(unrelated sample)
ZZZZZZ	3D54570.D	12/29/10	06:28	08:59	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2A4429-CC4305	**Injection Date:**	12/29/10
Lab File ID:	2A103848.D	**Injection Time:**	09:59
Instrument ID:	GCMS2A	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	68321	8.24	206993	10.67	256456	11.59	220153	14.59	114553	16.74
Upper Limit [a]	136642	8.74	413986	11.17	512912	12.09	440306	15.09	229106	17.24
Lower Limit [b]	34161	7.74	103497	10.17	128228	11.09	110077	14.09	57277	16.24

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2A4429-MB	61001	8.23	193313	10.66	232437	11.59	195440	14.59	102476	16.74
V2A4429-BS	55270	8.24	171024	10.66	215000	11.59	186529	14.59	93229	16.74
ZZZZZZ	68006	8.23	203317	10.66	250253	11.59	210992	14.59	112796	16.74
JA65148-1	67502	8.23	216896	10.66	267090	11.59	226223	14.59	119955	16.74
ZZZZZZ	66557	8.24	212946	10.67	263381	11.59	222013	14.59	118148	16.74
ZZZZZZ	65413	8.24	209638	10.66	257829	11.59	222070	14.59	117434	16.74
ZZZZZZ	61441	8.23	202699	10.67	249800	11.59	212455	14.59	112039	16.74
ZZZZZZ	59305	8.23	195350	10.67	241595	11.59	204054	14.59	108834	16.74
JA65148-1MS	58047	8.23	185833	10.66	232838	11.59	203690	14.59	103746	16.74
JA65148-1MSD	57089	8.24	181637	10.67	227785	11.59	199472	14.59	100165	16.74
ZZZZZZ	65790	8.24	213199	10.67	261615	11.59	223692	14.59	114889	16.74
ZZZZZZ	65883	8.24	213261	10.67	262760	11.59	221659	14.59	117307	16.74
ZZZZZZ	69251	8.24	217419	10.67	268268	11.59	228009	14.59	119869	16.74
ZZZZZZ	65927	8.23	209156	10.67	259322	11.59	220293	14.59	118014	16.74
ZZZZZZ	67166	8.24	208789	10.67	257883	11.59	221057	14.59	116561	16.74
ZZZZZZ	61916	8.24	190844	10.67	236004	11.59	202964	14.59	105759	16.74
ZZZZZZ	66865	8.23	212914	10.67	262126	11.59	223324	14.59	117949	16.74
ZZZZZZ	62393	8.23	194236	10.66	240319	11.59	204550	14.59	109886	16.74
ZZZZZZ	65418	8.24	203289	10.67	252153	11.59	216165	14.59	116126	16.74
ZZZZZZ	63021	8.24	200906	10.67	248780	11.59	210777	14.59	112887	16.74
JA64438-6	63238	8.23	204630	10.67	251800	11.59	216936	14.59	114585	16.74
JA64438-7	65884	8.24	211973	10.66	259632	11.59	222234	14.59	117336	16.74

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3D2360-CC2292	**Injection Date:**	12/28/10
Lab File ID:	3D54528.D	**Injection Time:**	10:40
Instrument ID:	GCMS3D	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	109439	6.98	212042	9.19	295088	10.11	237611	13.29	123284	15.61
Upper Limit [a]	218878	7.48	424084	9.69	590176	10.61	475222	13.79	246568	16.11
Lower Limit [b]	54720	6.48	106021	8.69	147544	9.61	118806	12.79	61642	15.11

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D2360-MB	107276	6.98	181924	9.20	264897	10.11	212664	13.29	108316	15.61
V3D2360-BS	102141	6.98	177530	9.19	260643	10.11	213614	13.29	106690	15.61
ZZZZZZ	107234	6.97	179980	9.19	260740	10.11	215709	13.29	109982	15.61
ZZZZZZ	108980	6.98	181469	9.19	270221	10.11	224251	13.29	111450	15.61
ZZZZZZ	100776	6.98	186710	9.19	269203	10.11	219513	13.29	110605	15.61
ZZZZZZ	108583	6.98	181228	9.19	262929	10.11	214559	13.29	109362	15.61
ZZZZZZ	112122	6.98	185100	9.19	266234	10.11	217192	13.29	110684	15.61
JA64438-1	106633	6.98	182198	9.19	264330	10.11	212688	13.29	108806	15.61
ZZZZZZ	103811	6.98	180033	9.19	263151	10.11	216458	13.29	107604	15.61
ZZZZZZ	108440	6.97	181195	9.19	263356	10.11	213914	13.29	107757	15.61
JA64438-1MS	110079	6.98	183071	9.19	270126	10.11	216945	13.29	108613	15.61
JA64438-1MSD	106525	6.98	182365	9.19	270357	10.10	218611	13.29	109949	15.61
ZZZZZZ	109593	6.98	183070	9.19	265914	10.11	216391	13.29	109785	15.61
JA64438-2	107909	6.98	184979	9.19	268737	10.11	219785	13.29	112532	15.61
JA64438-3	103944	6.97	182490	9.19	265251	10.10	217397	13.29	111125	15.61
JA64438-5	103802	6.97	184396	9.19	266953	10.10	218352	13.29	111209	15.61
ZZZZZZ	109239	6.98	181753	9.19	263644	10.11	215924	13.29	110114	15.61
ZZZZZZ	100861	6.98	180987	9.19	262504	10.11	214395	13.29	109370	15.61
ZZZZZZ	98558	6.98	179406	9.19	258210	10.11	211522	13.29	108337	15.61

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3D2361-CC2292	**Injection Date:**	12/28/10
Lab File ID:	3D54551.D	**Injection Time:**	21:56
Instrument ID:	GCMS3D	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	102774	6.98	178703	9.19	262944	10.11	212614	13.29	107282	15.61
Upper Limit [a]	205548	7.48	357406	9.69	525888	10.61	425228	13.79	214564	16.11
Lower Limit [b]	51387	6.48	89352	8.69	131472	9.61	106307	12.79	53641	15.11

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D2361-MB	97766	6.98	178750	9.19	258408	10.11	207974	13.29	107757	15.61
V3D2361-BS	97357	6.98	177854	9.19	263189	10.10	214232	13.29	107210	15.61
ZZZZZZ	99346	6.98	179947	9.19	259249	10.11	210935	13.29	107254	15.61
ZZZZZZ	105047	6.98	178931	9.19	256091	10.11	209619	13.29	107888	15.61
ZZZZZZ	98667	6.97	176367	9.19	255273	10.10	208605	13.29	106178	15.61
JA64509-8	98783	6.98	177929	9.19	258939	10.10	213954	13.29	107914	15.61
JA64509-8MS	102385	6.98	176967	9.19	261446	10.11	213268	13.29	107558	15.61
JA64509-8MSD	108306	6.98	176278	9.19	261634	10.11	213422	13.29	107459	15.61
ZZZZZZ	96159	6.98	178758	9.19	258030	10.11	211556	13.29	109598	15.61
ZZZZZZ	95576	6.98	176191	9.19	254138	10.11	207799	13.29	107692	15.61
JA64438-4	95050	6.97	176467	9.19	255399	10.11	207922	13.29	105947	15.61
ZZZZZZ	100958	6.97	175160	9.19	254271	10.11	208119	13.29	104988	15.61
ZZZZZZ	108533	6.97	177482	9.19	258403	10.10	212732	13.29	105741	15.61
ZZZZZZ	100792	6.98	178426	9.19	260080	10.11	215829	13.29	109219	15.61
ZZZZZZ	102633	6.98	181359	9.19	262047	10.11	213826	13.29	108823	15.61
ZZZZZZ	101702	6.98	180886	9.19	263069	10.11	214506	13.29	110541	15.61

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA64438-1	3D54538.D	101.0	96.0	101.0	94.0
JA64438-2	3D54544.D	100.0	96.0	102.0	94.0
JA64438-3	3D54545.D	100.0	96.0	103.0	93.0
JA64438-4	3D54564.D	101.0	96.0	102.0	93.0
JA64438-5	3D54546.D	99.0	96.0	102.0	94.0
JA64438-6	2A103869.D	99.0	97.0	97.0	96.0
JA64438-7	2A103870.D	99.0	97.0	97.0	96.0
JA64438-1MS	3D54541.D	101.0	104.0	103.0	95.0
JA64438-1MSD	3D54542.D	102.0	104.0	104.0	95.0
JA64509-8MS	3D54559.D	102.0	103.0	104.0	96.0
JA64509-8MSD	3D54560.D	103.0	105.0	104.0	95.0
JA65148-1MS	2A103857.D	100.0	99.0	98.0	99.0
JA65148-1MSD	2A103858.D	100.0	96.0	97.0	101.0
V2A4429-BS	2A103850.D	99.0	97.0	96.0	100.0
V2A4429-MB	2A103849.D	94.0	91.0	96.0	96.0
V3D2360-BS	3D54531.D	115.0	118.0	117.0	106.0
V3D2360-MB	3D54530.D	113.0	110.0	113.0	104.0
V3D2361-BS	3D54554.D	102.0	104.0	104.0	95.0
V3D2361-MB	3D54553.D	100.0	96.0	101.0	92.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICC4305
Lab FileID: 2A100919.D

Response Factor Report MS2A

Method : C:\MSDCHEM\1\METHODS\M2A4305.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Mon Oct 18 11:06:16 2010
Response via : Initial Calibration

Calibration Files
1 =2A100915.D 2 =2A100916.D 100 =2A100920.D 50 =2A100919.D
20 =2A100918.D 200 =2A100921.D 5 =2A100917.D 0.5 =2A100914.D

Compound	1	2	100	50	20	200	5	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9			ISTD							
2) tertiary but			1.264	1.393	1.119	1.256	1.211		1.249	7.94
3) 1,4-dioxane			0.096	0.102	0.089	0.102	0.090		0.096	6.65
4) I pentafluorobenzene			ISTD							
5) chlorodifluo		0.304	0.360	0.379	0.335	0.398	0.277		0.342	13.47
6) dichlorodifl		0.504	0.650	0.673	0.613	0.680	0.486		0.601	14.20
7) chloromethan	0.569	0.592	0.684	0.707	0.622	0.705	0.566	0.477	0.615	13.11
8) vinyl chlori	0.471	0.506	0.640	0.674	0.596	0.680	0.510		0.582	14.86
9) bromomethane	0.288	0.315	0.376	0.399	0.364	0.389	0.334	0.279	0.343	13.37
10) chloroethane	0.203	0.274	0.305	0.326	0.296	0.307	0.282		0.285	14.02
11) trichloroflu		0.511	0.632	0.677	0.616	0.650	0.506		0.599	12.15
12) ethyl ether		0.162	0.213	0.230	0.208	0.218	0.179		0.202	12.72
13) acrolein	0.070	0.070		0.078	0.072		0.070		0.072	4.48
14) 1,1-dichloro	0.321	0.309	0.354	0.382	0.354	0.355	0.337		0.345	7.05
15) acetone			0.084	0.097	0.092	0.088	0.080		0.088	7.26
16) allyl chlori		0.167	0.215	0.232	0.216	0.217	0.188		0.206	11.56
17) acetonitrile	0.027	0.030	0.032	0.035	0.032	0.033	0.032		0.031	7.97
18) iodomethane	0.573	0.597	0.688	0.742	0.678	0.706	0.633	0.530	0.643	11.30
19) iso-butyl al			0.011	0.012	0.011	0.011	0.009		0.011	8.09
20) carbon disul	1.160	1.145	1.325	1.434	1.306	1.351	1.200	1.056	1.247	10.14
21) methylene ch	0.364	0.381	0.395	0.429	0.397	0.403	0.375	0.298	0.380	10.14
22) methyl aceta	0.290	0.271	0.247	0.274	0.249	0.251	0.241		0.260	6.99
23) methyl tert	1.817	1.888	1.935	2.148	1.951	1.981	1.880	1.711	1.914	6.65
24) trans-1,2-di	0.346	0.353	0.369	0.406	0.387	0.370	0.345	0.300	0.359	8.88
25) di-isopropyl	1.234	1.248	1.280	1.399	1.254	1.303	1.251	0.998	1.246	9.08
26) 2-butanone			0.037	0.040	0.038	0.038	0.019		0.034	24.94
----- Linear regression ----- Coefficient = 0.9990										
Response Ratio = -0.00085 + 0.03829 *A										
27) 1,1-dichloro	0.572	0.607	0.651	0.714	0.669	0.655	0.625	0.581	0.634	7.49
28) chloroprene	0.370	0.424	0.483	0.521	0.465	0.489	0.433		0.455	11.03
29) acrylonitril	0.108	0.114	0.121	0.135	0.130	0.123	0.117	0.096	0.118	10.45
30) vinyl acetat			0.063	0.069	0.061	0.066	0.054		0.063	9.09
31) ethyl tert-b	1.027	1.051	1.103	1.194	1.097	1.150	1.073		1.099	5.22
32) ethyl acetat			0.046	0.050	0.046	0.047	0.043		0.046	5.21
33) 2,2-dichloro	0.493	0.522	0.537	0.596	0.561	0.550	0.509	0.481	0.531	7.14
34) cis-1,2-dich	0.372	0.388	0.409	0.447	0.420	0.418	0.387		0.406	6.31
35) methylacryla			0.047	0.050	0.049	0.048	0.034		0.046	14.28
36) propionitril	0.039	0.042	0.046	0.050	0.048	0.047	0.045	0.030	0.043	14.81
37) bromochlorom		0.175	0.201	0.217	0.204	0.205	0.183		0.198	7.92
38) tetrahydrofu		0.115	0.109	0.120	0.113	0.113	0.116		0.114	3.20
39) chloroform	0.372	0.386	0.396	0.432	0.406	0.404	0.386	0.357	0.392	5.81
40) t-butyl form		0.318	0.330	0.364	0.343	0.346	0.323		0.337	5.11
41) dibromofluor		0.318	0.336	0.365	0.333	0.350	0.307		0.335	6.29
42) 1,2-dichloro		0.340	0.337	0.373	0.337	0.345	0.324		0.343	4.77

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICC4305
Lab FileID: 2A100919.D

43)	freon 113		0.270	0.343	0.376	0.337	0.351	0.298		0.329	11.70
44)	methacryloni	0.172	0.181	0.204	0.219	0.210	0.214	0.192		0.199	8.84
45)	1,1,1-trichl	0.458	0.493	0.542	0.593	0.550	0.559	0.502	0.402	0.512	12.03
46)	Cyclohexane	0.523	0.515	0.573	0.632	0.579	0.585	0.528	0.375	0.539	14.25
47)	I 1,4-difluorobenzene	----------	ISTD	----------							
48)	epichlorohyd		0.023	0.023	0.026	0.024	0.024	0.023		0.024	5.08
49)	n-butyl alco			0.006	0.007	0.007	0.006	0.006		0.007#	3.94
50)	carbon tetra	0.357	0.355	0.367	0.407	0.387	0.373	0.368	0.237	0.356	14.35
51)	1,1-dichloro	0.350	0.351	0.384	0.420	0.395	0.392	0.366	0.266	0.365	12.73
52)	hexane	0.276	0.336	0.394	0.432	0.393	0.396	0.341		0.367	14.21
53)	TERT AMYL AL		0.026	0.032	0.036	0.034	0.033	0.034		0.032	10.09
54)	2,2,4-TRIMET		1.045	1.190	1.337	1.161	1.172	1.087		1.165	8.65
55)	benzene	1.144	1.145	1.100	1.218	1.168	1.106	1.114	1.164	1.145	3.43
56)	tert-amyl me			0.164	0.183	0.176	0.168	0.170		0.172	4.34
57)	heptane		0.197	0.231	0.252	0.227	0.231	0.203		0.224	9.15
58)	isopropyl ac		0.984	0.936	1.049	0.976	0.942	0.982		0.978	4.12
59)	1,2-dichloro	0.296	0.308	0.303	0.341	0.334	0.303	0.314	0.286	0.311	6.00
60)	trichloroeth	0.259	0.261	0.289	0.312	0.294	0.300	0.268	0.252	0.279	7.99
61)	TERT-AMYL ET	0.612	0.636	0.613	0.668	0.636	0.643	0.596	0.487	0.611	9.02
62)	methyl metha	0.345	0.387	0.376	0.423	0.398	0.381	0.376	0.302	0.374	9.71
63)	2-nitropropa			0.011	0.013	0.013	0.012	0.009		0.012	13.19
64)	2-chloroethy	0.138	0.139	0.145	0.162	0.146	0.149	0.142	0.120	0.143	8.32
65)	1,2-dichloro	0.270	0.275	0.280	0.308	0.296	0.282	0.279	0.207	0.275	10.87
66)	dibromometha	0.127	0.148	0.163	0.176	0.167	0.165	0.152		0.157	10.35
67)	methylcycloh	0.404	0.473	0.512	0.576	0.517	0.516	0.467		0.495	10.87
68)	bromodichlor	0.331	0.336	0.360	0.390	0.361	0.369	0.337	0.291	0.347	8.62
69)	cis-1,3-dich	0.406	0.432	0.461	0.504	0.465	0.474	0.431	0.355	0.441	10.43
70)	toluene-d8 (		0.960	0.952	1.057	0.957	0.971	0.913		0.968	4.94
71)	4-methyl-2-p		0.084	0.090	0.100	0.096	0.092	0.092		0.092	5.67
72)	toluene	0.682	0.668	0.670	0.736	0.692	0.680	0.661	0.664	0.682	3.55
73)	3-methyl-1-b	0.009	0.010	0.010	0.011	0.011	0.010	0.010		0.010	8.52
74)	trans-1,3-di	0.356	0.373	0.389	0.428	0.397	0.398	0.375	0.368	0.386	5.87
75)	ethyl methac	0.283	0.277	0.306	0.337	0.309	0.319	0.288	0.258	0.297	8.54
76)	1,1,2-trichl	0.183	0.173	0.198	0.218	0.200	0.206	0.193	0.147	0.190	11.71
77)	2-hexanone		0.066	0.081	0.090	0.086	0.084	0.076		0.081	10.75
78)	I chlorobenzene-d5	----------	ISTD	----------							
79)	tetrachloroe	0.296	0.293	0.302	0.325	0.309	0.304	0.291	0.230	0.294	9.53
80)	1,3-dichloro	0.401	0.404	0.401	0.444	0.428	0.395	0.401	0.363	0.404	5.83
81)	butyl acetat	0.157	0.171	0.164	0.185	0.173	0.164	0.179		0.171	5.77
82)	3,3-dimethyl		0.028	0.023	0.029	0.028	0.024	0.029		0.027	9.48
83)	dibromochlor	0.307	0.313	0.326	0.355	0.335	0.331	0.308	0.281	0.319	7.06
84)	1,2-dibromoe	0.236	0.256	0.275	0.299	0.283	0.280	0.268	0.199	0.262	12.13
85)	chlorobenzen	0.809	0.804	0.851	0.913	0.866	0.858	0.800	0.811	0.839	4.75
86)	1,1,1,2-tetr	0.272	0.300	0.301	0.330	0.322	0.303	0.288	0.239	0.294	9.75
87)	ethylbenzene	1.351	1.408	1.374	1.509	1.438	1.367	1.324	1.333	1.388	4.46
88)	m,p-xylene	0.542	0.537	0.526	0.579	0.554	0.529	0.524	0.512	0.538	3.87
89)	o-xylene	0.531	0.523	0.550	0.593	0.560	0.562	0.515	0.514	0.544	5.10
90)	styrene	0.864	0.898	0.926	1.006	0.953	0.933	0.883	0.937	0.925	4.80
91)	bromoform	0.194	0.209	0.242	0.260	0.242	0.253	0.216	0.188	0.225	12.24
92)	I 1,4-dichlorobenzene-d	----------	ISTD	----------							
93)	isopropylben	2.576	2.483	2.735	2.964	2.779	2.733	2.586	2.505	2.670	6.08
94)	4-bromofluor		0.740	0.744	0.808	0.733	0.763	0.709		0.750	4.48
95)	cyclohexanon			0.011	0.016	0.017	0.011	0.014		0.014	21.36
	----- Quadratic regression -----								Coefficient =		0.9846
	Response Ratio = 0.01642 + 0.01239 *A + -0.00006 *A^2										
96)	bromobenzene	0.708	0.751	0.768	0.843	0.780	0.771	0.734	0.677	0.754	6.62

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICC4305
Lab FileID: 2A100919.D

97)	1,1,2,2-tetr	0.577	0.610	0.647	0.705	0.664	0.665	0.626	0.550	0.631	7.98
98)	trans-1,4-di			0.158	0.155	0.141	0.151	0.117		0.144	11.49
99)	1,2,3-trichl		0.129	0.151	0.166	0.157	0.156	0.155		0.153	8.34
100)	n-propylbenz	0.671	0.663	0.713	0.781	0.728	0.731	0.686	0.516	0.686	11.45
101)	2-chlorotolu	0.589	0.581	0.654	0.720	0.674	0.671	0.632	0.625	0.643	7.19
102)	4-chlorotolu	0.643	0.654	0.682	0.738	0.686	0.705	0.645	0.635	0.674	5.32
103)	1,3,5-trimet	2.215	2.081	2.256	2.440	2.272	2.341	2.092	2.172	2.234	5.45
104)	tert-butylbe	2.192	1.884	2.065	2.199	2.035	2.140	1.871	1.743	2.016	8.29
105)	pentachloroe	0.433	0.423	0.493	0.542	0.492	0.516	0.454		0.479	9.17
106)	1,2,4-trimet	2.162	2.134	2.265	2.473	2.289	2.331	2.145	2.107	2.238	5.59
107)	sec-butylben	2.789	2.684	3.037	3.287	3.031	3.159	2.850		2.977	7.17
108)	1,3-dichloro	1.331	1.333	1.457	1.582	1.474	1.514	1.380	1.239	1.414	7.96
109)	p-isopropylt	2.450	2.321	2.549	2.748	2.510	2.665	2.366	2.242	2.481	6.94
110)	1,4-dichloro	1.333	1.418	1.461	1.587	1.470	1.529	1.382	1.296	1.434	6.79
111)	1,2-dichloro	1.354	1.355	1.463	1.572	1.446	1.532	1.340	1.261	1.415	7.46
112)	benzyl chlor	1.348	1.329	1.350	1.468	1.351	1.397	1.300	1.205	1.344	5.62
113)	n-butylbenze	1.159	1.152	1.360	1.447	1.310	1.432	1.156	1.001	1.252	12.67
114)	1,2-dibromo-		0.127	0.166	0.176	0.153	0.167	0.131		0.153	13.23
115)	1,3,5-TRICHL	1.250	1.217	1.460	1.525	1.391	1.459	1.221	1.125	1.331	10.93
116)	1,2,4-trichl	1.172	1.126	1.383	1.454	1.319	1.345	1.125	1.017	1.243	12.31
117)	hexachlorobu	0.643	0.609	0.731	0.775	0.709	0.689	0.606		0.680	9.41
118)	naphthalene	2.167	2.123	2.458	2.635	2.456	2.365	2.127	2.011	2.293	9.44
119)	1,2,3-trichl	1.001	0.977	1.185	1.260	1.143	1.151	0.991	0.852	1.070	12.65
120)	hexachloroet	0.424	0.444	0.557	0.591	0.533	0.587	0.471		0.515	13.35

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2A4305.M Mon Oct 18 11:11:30 2010 MS2A

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICV4305
Lab FileID: 2A100930.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2A100930.D Vial: 5
Acq On : 14 Oct 2010 7:11 pm Operator: HennyS
Sample : icv4305-50 Inst : MS2A
Misc : MS2967,V2A4305,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2A4305.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Mon Oct 18 11:06:16 2010
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	111	0.00	8.25
2	M	tertiary butyl alcohol	1.249	1.174	6.0	94	0.00	8.39
3	M	1,4-dioxane	0.096	0.084	12.5	91	0.00	12.31
4	I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	10.68
5	M	chlorodifluoromethane	0.342	0.346	-1.2	102	0.00	4.37
6	M	dichlorodifluoromethane	0.601	0.621	-3.3	103	0.00	4.35
7	M	chloromethane	0.615	0.658	-7.0	104	0.00	4.73
8	M	vinyl chloride	0.582	0.624	-7.2	103	0.00	5.01
9	M	bromomethane	0.343	0.375	-9.3	105	0.00	5.77
10	M	chloroethane	0.285	0.309	-8.4	106	0.01	5.98
11	M	trichlorofluoromethane	0.599	0.627	-4.7	103	0.00	6.49
12	M	ethyl ether	0.202	0.211	-4.5	102	0.00	6.97
13	M	acrolein	0.072	0.075	-4.2	108	0.00	7.28
14	M	1,1-dichloroethene	0.345	0.356	-3.2	104	0.00	7.45
15	M	acetone	0.088	0.092	-4.5	106	0.00	7.53
16	M	allyl chloride	0.206	0.221	-7.3	106	0.00	8.06
17	M	acetonitrile	0.031	0.031	0.0	99	0.00	8.05
18	M	iodomethane	0.643	0.690	-7.3	103	0.00	7.77
19	M	iso-butyl alcohol	0.011	0.011	0.0	100	0.00	11.23
20	M	carbon disulfide	1.247	1.336	-7.1	104	0.00	7.90
21	M	methylene chloride	0.380	0.399	-5.0	104	0.00	8.28
22	M	methyl acetate	0.260	0.241	7.3	98	0.00	8.05
23	M	methyl tert butyl ether	1.914	1.958	-2.3	102	0.00	8.63
24	M	trans-1,2-dichloroethene	0.359	0.336	6.4	92	0.00	8.69
25	M	di-isopropyl ether	1.246	1.232	1.1	98	0.00	9.29
		----------	True	Calc.	% Drift	----------		
26	M	2-butanone	50.000	50.486	-1.0	106	0.00	10.10
		----------	AvgRF	CCRF	% Dev	----------		
27	M	1,1-dichloroethane	0.634	0.668	-5.4	104	0.00	9.32
28	M	chloroprene	0.455	0.452	0.7	97	0.00	9.43
29	M	acrylonitrile	0.118	0.124	-5.1	102	0.00	8.67
30	M	vinyl acetate	0.063	0.061	3.2	99	0.00	9.31
31	M	ethyl tert-butyl ether	1.099	1.066	3.0	99	0.00	9.80
32	M	ethyl acetate	0.046	0.045	2.2	100	0.00	10.11
33	M	2,2-dichloropropane	0.531	0.557	-4.9	104	0.00	10.12
34	M	cis-1,2-dichloroethene	0.406	0.462	-13.8	115	0.00	10.12
35		methylacrylate	0.046	0.047	-2.2	104	0.00	10.19
36	M	propionitrile	0.043	0.046	-7.0	103	0.00	10.21
37	M	bromochloromethane	0.198	0.202	-2.0	104	0.00	10.46

Initial Calibration Verification

Job Number: JA64438
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Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICV4305
Lab FileID: 2A100930.D

38	M	tetrahydrofuran	0.114	0.113	0.9	106	0.00	10.50
39	M	chloroform	0.392	0.408	-4.1	105	0.00	10.53
40		t-butyl formate	0.337	0.326	3.3	100	0.00	10.55
41	S	dibromofluoromethane (s)	0.335	0.336	-0.3	102	0.00	10.74
42	S	1,2-dichloroethane-d4 (s)	0.343	0.346	-0.9	103	0.00	11.17
43	M	freon 113	0.329	0.312	5.2	92	0.00	7.42
44	M	methacrylonitrile	0.199	0.211	-6.0	107	0.00	10.40
45	M	1,1,1-trichloroethane	0.512	0.546	-6.6	102	0.00	10.78
46	M	Cyclohexane	0.539	0.562	-4.3	99	0.00	10.84
47	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	11.60
48	M	epichlorohydrin	0.024	0.023	4.2	97	0.00	12.83
49	M	n-butyl alcohol	0.007	0.006#	14.3	99	0.00	11.75
50	M	carbon tetrachloride	0.356	0.379	-6.5	103	0.00	10.98
51	M	1,1-dichloropropene	0.365	0.392	-7.4	104	0.00	10.96
52	M	hexane	0.367	0.367	0.0	94	0.00	9.01
53		TERT AMYL ALCOHOL	0.032	0.033	-3.1	103	0.00	11.12
54		2,2,4-TRIMETHYLPENTANE	1.165	1.121	3.8	93	0.00	11.21
55	M	benzene	1.145	1.143	0.2	104	0.00	11.23
56	M	tert-amyl methyl ether	0.172	0.163	5.2	99	0.00	11.25
57	M	heptane	0.224	0.218	2.7	96	0.00	11.39
58	M	isopropyl acetate	0.978	0.931	4.8	99	0.00	11.16
59	M	1,2-dichloroethane	0.311	0.320	-2.9	104	0.00	11.26
60	M	trichloroethene	0.279	0.295	-5.7	105	0.00	11.93
61		TERT-AMYL ETHYL ETHER	0.611	0.603	1.3	100	0.00	12.08
62	M	methyl methacrylate	0.374	0.395	-5.6	104	0.00	12.20
63	M	2-nitropropane	0.012	0.012	0.0	101	0.00	13.02
64	M	2-chloroethyl vinyl ether	0.143	0.138	3.5	94	0.00	12.70
65	M	1,2-dichloropropane	0.275	0.295	-7.3	106	0.00	12.20
66	M	dibromomethane	0.157	0.163	-3.8	103	0.00	12.36
67	M	methylcyclohexane	0.495	0.486	1.8	94	0.00	12.13
68	M	bromodichloromethane	0.347	0.376	-8.4	107	0.00	12.48
69	M	cis-1,3-dichloropropene	0.441	0.476	-7.9	105	0.00	12.91
70	S	toluene-d8 (s)	0.968	1.002	-3.5	105	0.00	13.17
71	M	4-methyl-2-pentanone	0.092	0.098	-6.5	110	0.00	13.00
72	M	toluene	0.682	0.697	-2.2	105	0.00	13.25
73	M	3-methyl-1-butanol	0.010	0.010	0.0	100	0.00	13.02
74	M	trans-1,3-dichloropropene	0.386	0.412	-6.7	107	0.00	13.44
75	M	ethyl methacrylate	0.297	0.328	-10.4	108	0.00	13.42
76	M	1,1,2-trichloroethane	0.190	0.207	-8.9	105	0.00	13.64
77	M	2-hexanone	0.081	0.091	-12.3	112	0.00	13.80
78	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.60
79	M	tetrachloroethene	0.294	0.304	-3.4	104	0.00	13.79
80	M	1,3-dichloropropane	0.404	0.422	-4.5	106	0.00	13.82
81	M	butyl acetate	0.171	0.163	4.7	98	0.00	13.85
82		3,3-dimethyl-1-butanol	0.027	0.026	3.7	102	0.00	13.96
83	M	dibromochloromethane	0.319	0.326	-2.2	102	0.00	14.06
84	M	1,2-dibromoethane	0.262	0.279	-6.5	104	0.00	14.20
85	M	chlorobenzene	0.839	0.863	-2.9	105	0.00	14.63
86	M	1,1,1,2-tetrachloroethane	0.294	0.310	-5.4	105	0.00	14.69
87	M	ethylbenzene	1.388	1.408	-1.4	104	0.00	14.67
88	M	m,p-xylene	0.538	0.544	-1.1	105	0.00	14.76
89	M	o-xylene	0.544	0.567	-4.2	106	0.00	15.16
90	M	styrene	0.925	0.936	-1.2	104	0.00	15.17
91	M	bromoform	0.225	0.242	-7.6	104	0.00	15.43
92	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	16.75
93	M	isopropylbenzene	2.670	2.883	-8.0	106	0.00	15.47
94	S	4-bromofluorobenzene (s)	0.750	0.767	-2.3	104	0.00	15.67

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICV4305
Lab FileID: 2A100930.D

			True	Calc.	% Drift			
95		cyclohexanone	500.000	456.317	8.7	83	0.00	15.65

			AvgRF	CCRF	% Dev			
96	M	bromobenzene	0.754	0.787	-4.4	102	0.00	15.85
97	M	1,1,2,2-tetrachloroethane	0.631	0.663	-5.1	103	0.00	15.77
98	M	trans-1,4-dichloro-2-bute	0.144	0.175	-21.5#	123	0.00	15.80
99	M	1,2,3-trichloropropane	0.153	0.160	-4.6	105	0.00	15.84
100	M	n-propylbenzene	0.686	0.730	-6.4	102	0.00	15.85
101	M	2-chlorotoluene	0.643	0.695	-8.1	106	0.00	15.99
102	M	4-chlorotoluene	0.674	0.682	-1.2	101	0.00	16.08
103	M	1,3,5-trimethylbenzene	2.234	2.352	-5.3	105	0.00	15.98
104	M	tert-butylbenzene	2.016	2.106	-4.5	105	0.00	16.31
105	M	pentachloroethane	0.479	0.529	-10.4	107	0.00	16.40
106	M	1,2,4-trimethylbenzene	2.238	2.325	-3.9	103	0.00	16.35
107	M	sec-butylbenzene	2.977	3.095	-4.0	103	0.00	16.51
108	M	1,3-dichlorobenzene	1.414	1.508	-6.6	104	0.00	16.69
109	M	p-isopropyltoluene	2.481	2.661	-7.3	106	0.00	16.62
110	M	1,4-dichlorobenzene	1.434	1.493	-4.1	103	0.00	16.77
111	M	1,2-dichlorobenzene	1.415	1.502	-6.1	105	0.00	17.15
112	M	benzyl chloride	1.344	1.288	4.2	96	0.00	16.88
113	M	n-butylbenzene	1.252	1.397	-11.6	106	0.00	17.01
114	M	1,2-dibromo-3-chloropropa	0.153	0.169	-10.5	105	0.00	18.09
115		1,3,5-TRICHLOROBENZENE	1.331	1.441	-8.3	103	0.00	18.09
116	M	1,2,4-trichlorobenzene	1.243	1.365	-9.8	103	0.00	18.73
117	M	hexachlorobutadiene	0.680	0.694	-2.1	98	0.00	18.84
118	M	naphthalene	2.293	2.502	-9.1	104	0.00	19.02
119	M	1,2,3-trichlorobenzene	1.070	1.186	-10.8	103	0.00	19.27
120	M	hexachloroethane	0.515	0.566	-9.9	105	0.00	17.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2A100919.D M2A4305.M Mon Oct 18 11:13:39 2010 MS2A

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4429-CC4305
Lab FileID: 2A103848.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\2ADATA\v2a4429-4430\2A103848.D Vial: 2
Acq On : 29 Dec 2010 9:59 am Operator: HennyS
Sample : cc4305-20 Inst : MS2A
Misc : MS6454,V2A4429,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2A4305.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Oct 19 14:51:50 2010
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	96	-0.01	8.24
2	M	tertiary butyl alcohol	1.249	1.092	12.6	94	-0.02	8.37
3	M	1,4-dioxane	0.096	0.092	4.2	99	-0.01	12.30
4	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.67
5	M	chlorodifluoromethane	0.342	0.383	-12.0	120	0.00	4.37
6	M	dichlorodifluoromethane	0.601	0.579	3.7	99	0.02	4.36
7	M	chloromethane	0.615	0.673	-9.4	114	0.00	4.73
8	M	vinyl chloride	0.582	0.579	0.5	102	0.00	5.01
9	M	bromomethane	0.343	0.379	-10.5	110	0.00	5.76
10	M	chloroethane	0.285	0.299	-4.9	107	0.00	5.97
11	M	trichlorofluoromethane	0.599	0.580	3.2	99	-0.02	6.48
12	M	ethyl ether	0.202	0.201	0.5	102	0.00	6.97
13	M	acrolein	0.072	0.062	13.9	90	0.00	7.27
14	M	1,1-dichloroethene	0.345	0.337	2.3	100	0.00	7.45
15	M	acetone	0.088	0.080	9.1	92	0.00	7.53
16	M	allyl chloride	0.206	0.199	3.4	97	0.00	8.06
17	M	acetonitrile	0.031	0.031	0.0	104	0.00	8.04
18	M	iodomethane	0.643	0.692	-7.6	108	0.00	7.76
19	M	iso-butyl alcohol	0.011	0.011	0.0	101	-0.01	11.22
20	M	carbon disulfide	1.247	1.278	-2.5	103	0.00	7.89
21	M	methylene chloride	0.380	0.380	0.0	101	-0.01	8.27
22	M	methyl acetate	0.260	0.239	8.1	101	0.00	8.04
23	M	methyl tert butyl ether	0.957	0.980	-2.4	106	0.00	8.62
24	M	trans-1,2-dichloroethene	0.359	0.371	-3.3	101	-0.01	8.68
25	M	di-isopropyl ether	1.246	1.176	5.6	99	0.00	9.28
			True	Calc.	% Drift			
26	M	2-butanone	20.000	18.656	6.7	94	-0.01	10.09
			AvgRF	CCRF	% Dev			
27	M	1,1-dichloroethane	0.634	0.631	0.5	99	-0.01	9.31
28	M	chloroprene	0.455	0.520	-14.3	118	-0.01	9.42
29	M	acrylonitrile	0.118	0.117	0.8	95	0.00	8.65
30	M	vinyl acetate	0.063	0.056	11.1	97	-0.01	9.30
31	M	ethyl tert-butyl ether	1.099	1.112	-1.2	107	-0.01	9.78
32	M	ethyl acetate	0.046	0.040	13.0	92	-0.01	10.10
33	M	2,2-dichloropropane	0.531	0.533	-0.4	100	-0.01	10.11
34	M	cis-1,2-dichloroethene	0.406	0.400	1.5	100	-0.01	10.11
35		methylacrylate	0.046	0.045	2.2	98	0.00	10.19
36	M	propionitrile	0.043	0.044	-2.3	97	-0.01	10.20
37	M	bromochloromethane	0.198	0.196	1.0	101	0.00	10.45

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4429-CC4305
Lab FileID: 2A103848.D

38	M	tetrahydrofuran	0.114	0.103	9.6	96	0.00	10.50
39	M	chloroform	0.392	0.393	-0.3	102	-0.02	10.51
40		t-butyl formate	0.337	0.331	1.8	102	-0.01	10.54
41	S	dibromofluoromethane (s)	0.335	0.337	-0.6	107	-0.01	10.73
42	S	1,2-dichloroethane-d4 (s)	0.343	0.331	3.5	104	-0.01	11.15
43	M	freon 113	0.329	0.309	6.1	96	0.00	7.42
44	M	methacrylonitrile	0.199	0.187	6.0	94	-0.01	10.39
45	M	1,1,1-trichloroethane	0.512	0.525	-2.5	101	-0.01	10.76
46	M	Cyclohexane	0.539	0.509	5.6	93	0.00	10.83
47	I	1,4-difluorobenzene	1.000	1.000	0.0	105	-0.01	11.59
48	M	epichlorohydrin	0.024	0.022	8.3	97	-0.01	12.82
49	M	n-butyl alcohol	0.007	0.007#	0.0	106	-0.01	11.74
50	M	carbon tetrachloride	0.356	0.375	-5.3	102	0.00	10.97
51	M	1,1-dichloropropene	0.365	0.368	-0.8	98	-0.01	10.95
52	M	hexane	0.367	0.336	8.4	90	-0.01	9.00
53		TERT AMYL ALCOHOL		----------NA----------				
54		2,2,4-TRIMETHYLPENTANE	1.165	0.870	25.3#	79	-0.02	11.20
55	M	benzene	1.145	1.094	4.5	99	-0.01	11.22
56	M	tert-amyl methyl ether	0.172	0.184	-7.0	110	0.00	11.25
57	M	heptane	0.224	0.162	27.7#	75	-0.01	11.37
58	M	isopropyl acetate	0.978	0.837	14.4	90	-0.01	11.14
59	M	1,2-dichloroethane	0.311	0.321	-3.2	101	-0.01	11.24
60	M	trichloroethene	0.279	0.277	0.7	99	-0.01	11.92
61		TERT-AMYL ETHYL ETHER		----------NA----------				
62	M	methyl methacrylate	0.374	0.365	2.4	97	-0.01	12.19
63	M	2-nitropropane	0.012	0.010	16.7	85	0.00	13.02
64	M	2-chloroethyl vinyl ether	0.143	0.157	-9.8	113	-0.01	12.69
65	M	1,2-dichloropropane	0.275	0.271	1.5	96	0.00	12.19
66	M	dibromomethane	0.157	0.162	-3.2	102	-0.01	12.35
67	M	methylcyclohexane	0.495	0.413	16.6	84	0.00	12.13
68	M	bromodichloromethane	0.347	0.350	-0.9	102	0.00	12.47
69	M	cis-1,3-dichloropropene	0.441	0.438	0.7	99	0.00	12.90
70	S	toluene-d8 (s)	0.968	0.927	4.2	102	0.00	13.17
71	M	4-methyl-2-pentanone	0.092	0.085	7.6	94	0.00	12.99
72	M	toluene	0.682	0.642	5.9	98	0.00	13.24
73	M	3-methyl-1-butanol	0.010	0.010	0.0	94	0.00	13.02
74	M	trans-1,3-dichloropropene	0.386	0.377	2.3	100	-0.01	13.43
75	M	ethyl methacrylate	0.297	0.278	6.4	95	-0.01	13.41
76	M	1,1,2-trichloroethane	0.190	0.202	-6.3	106	-0.01	13.63
77	M	2-hexanone	0.081	0.077	4.9	94	-0.01	13.79
78	I	chlorobenzene-d5	1.000	1.000	0.0	103	-0.01	14.59
79	M	tetrachloroethene	0.294	0.297	-1.0	99	0.00	13.79
80	M	1,3-dichloropropane	0.404	0.411	-1.7	99	-0.01	13.81
81	M	butyl acetate	0.171	0.162	5.3	97	0.00	13.85
82		3,3-dimethyl-1-butanol	0.027	0.026	3.7	95	0.00	13.95
83	M	dibromochloromethane	0.319	0.336	-5.3	103	-0.01	14.05
84	M	1,2-dibromoethane	0.262	0.278	-6.1	101	-0.01	14.19
85	M	chlorobenzene	0.839	0.832	0.8	99	0.00	14.62
86	M	1,1,1,2-tetrachloroethane	0.294	0.323	-9.9	104	0.00	14.67
87	M	ethylbenzene	1.388	1.356	2.3	97	0.00	14.66
88	M	m,p-xylene	0.538	0.530	1.5	99	0.00	14.76
89	M	o-xylene	0.544	0.529	2.8	97	0.00	15.15
90	M	styrene	0.925	0.893	3.5	97	0.00	15.16
91	M	bromoform	0.225	0.254	-12.9	109	-0.01	15.42
92	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	-0.01	16.74
93	M	isopropylbenzene	2.670	2.634	1.3	97	-0.01	15.46
94	S	4-bromofluorobenzene (s)	0.750	0.726	3.2	101	-0.01	15.66

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4429-CC4305
Lab FileID: 2A103848.D

			True	Calc.	% Drift			
95		cyclohexanone	200.000	59.797	70.1#	47	0.00	15.64

			AvgRF	CCRF	% Dev			
96	M	bromobenzene	0.754	0.772	-2.4	101	-0.01	15.84
97	M	1,1,2,2-tetrachloroethane	0.631	0.649	-2.9	100	-0.01	15.76
98	M	trans-1,4-dichloro-2-bute	0.144	0.133	7.6	97	-0.01	15.79
99	M	1,2,3-trichloropropane	0.153	0.160	-4.6	104	-0.01	15.83
100	M	n-propylbenzene	0.686	0.687	-0.1	96	0.00	15.84
101	M	2-chlorotoluene	0.643	0.663	-3.1	100	-0.01	15.98
102	M	4-chlorotoluene	0.674	0.680	-0.9	101	0.00	16.08
103	M	1,3,5-trimethylbenzene	2.234	2.149	3.8	96	0.00	15.98
104	M	tert-butylbenzene	2.016	2.168	-7.5	109	0.00	16.30
105	M	pentachloroethane	0.479	0.503	-5.0	104	0.00	16.39
106	M	1,2,4-trimethylbenzene	2.238	2.196	1.9	98	0.00	16.34
107	M	sec-butylbenzene	2.977	2.807	5.7	94	0.00	16.50
108	M	1,3-dichlorobenzene	1.414	1.425	-0.8	98	0.00	16.69
109	M	p-isopropyltoluene	2.481	2.359	4.9	96	0.00	16.61
110	M	1,4-dichlorobenzene	1.434	1.410	1.7	98	0.00	16.77
111	M	1,2-dichlorobenzene	1.415	1.402	0.9	99	0.00	17.14
112	M	benzyl chloride	1.344	1.340	0.3	101	0.00	16.88
113	M	n-butylbenzene	1.252	1.198	4.3	93	-0.01	17.00
114	M	1,2-dibromo-3-chloropropa	0.153	0.145	5.2	96	0.00	18.08
115		1,3,5-TRICHLOROBENZENE	1.331	1.333	-0.2	98	0.00	18.08
116	M	1,2,4-trichlorobenzene	1.243	1.223	1.6	94	0.00	18.73
117	M	hexachlorobutadiene	0.680	0.654	3.8	94	0.00	18.83
118	M	naphthalene	2.293	2.228	2.8	92	0.00	19.02
119	M	1,2,3-trichlorobenzene	1.070	1.053	1.6	94	-0.01	19.26
120	M	hexachloroethane	0.515	0.551	-7.0	105	0.00	17.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2A100918.D M2A4305.M Wed Dec 29 14:45:56 2010 RPT1

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

Response Factor Report MS3D

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

Calibration Files
5 =3D52926.D 2 =3D52925.D 50 =3D52929.D 100 =3D52930.D
1 =3D52924.D 200 =3D52931.D 20 =3D52928.D 10 =3D52927.D
= =

Compound	5	2	50	100	1	200	20	10	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD									
2) 1,4-dioxane	0.058	0.077	0.078		0.064	0.071	0.080		0.071	12.24
3) tertiary butyl alcohol	0.938	1.096	1.000	1.057		0.984	0.987	1.079	1.020	5.70
4) I pentafluorobenzene	ISTD									
5) chlorodifluoromethane	0.687	0.708	0.668	0.702	0.623	0.648	0.668	0.673	0.672	4.15
6) dichlorodifluoromethane	0.879	0.792	0.764	0.798	0.708	0.798	0.813	0.805	0.795	6.04
7) chloromethane	0.934	0.900	0.847	0.899	0.860	0.911	0.896	0.884	0.891	3.11
8) vinyl chloride	0.750	0.742	0.655	0.701	0.716	0.711	0.692	0.682	0.706	4.39
9) bromomethane	0.395	0.408	0.362	0.330	0.348	0.335	0.380	0.392	0.369	7.94
10) chloroethane	0.410	0.372	0.349	0.349	0.338	0.316	0.377	0.388	0.362	8.26
11) vinyl bromide									0.000#	-1.00
12) trichlorofluoromethane	0.835	0.784	0.737	0.774	0.699	0.773	0.789	0.770	0.770	5.11
13) pentane	1.265	1.351	1.092	1.136	1.351	1.005	1.130	1.174	1.188	10.46
14) ethyl ether	0.244	0.225	0.258	0.261	0.202	0.264	0.260	0.262	0.247	9.07
15) acrolein	0.102	0.117	0.120		0.120	0.115	0.109		0.114	6.31
16) 1,1-dichloroethene	0.449	0.477	0.407	0.422	0.503	0.413	0.429	0.435	0.442	7.49
17) acetone		0.195	0.181		0.189	0.204	0.226		0.199	8.72
18) allyl chloride	0.220	0.282	0.244	0.253	0.226	0.255	0.229	0.215	0.241	9.31
19) acetonitrile		0.054	0.057		0.050	0.053	0.053		0.053	5.09
20) iodomethane	0.782	0.834	0.734	0.754	0.751	0.761	0.750	0.796	0.771	4.18
21) iso-butyl alcohol	0.136	0.146	0.117	0.119	0.151	0.116	0.120	0.126	0.129	10.81
22) carbon disulfide	1.885	1.969	1.665	1.734	1.924	1.708	1.746	1.816	1.806	6.11
23) methylene chloride										

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

		0.503	0.562	0.482	0.486	0.535	0.491	0.494	0.523	0.509	5.49
24)	methyl acetate										
		0.314		0.436	0.471		0.450	0.394	0.404	0.412	13.49
25)	methyl tert butyl ether										
		1.545	1.674	1.494	1.503	1.570	1.500	1.511	1.631	1.553	4.32
26)	trans-1,2-dichloroethene										
		0.472	0.493	0.434	0.442	0.519	0.432	0.457	0.479	0.466	6.55
27)	di-isopropyl ether										
		1.878	2.148	1.847	1.917	1.929	1.769	1.852	1.946	1.911	5.81
28)	ethyl tert-butyl ether										
		1.729	1.942	1.684	1.748	1.758	1.631	1.687	1.773	1.744	5.31
29)	2-butanone										
				0.054	0.057		0.059	0.048	0.043	0.052	12.02
30)	1,1-dichloroethane										
		0.950	0.972	0.893	0.901	0.927	0.882	0.922	0.982	0.929	3.96
31)	chloroprene										
		0.699	0.753	0.657	0.685	0.662	0.630	0.671	0.697	0.682	5.35
32)	acrylonitrile										
		0.221	0.220	0.224	0.219		0.217	0.219	0.239	0.223	3.28
33)	vinyl acetate										
				0.071	0.078		0.075	0.060	0.050	0.067	17.04

----- Linear regression ----- Coefficient = 0.9992
Response Ratio = -0.00509 + 0.07732 *A

34)	ethyl acetate									
	0.065		0.087	0.091		0.084	0.087	0.083	0.083	10.98
35)	2,2-dichloropropane									
	0.734	0.766	0.666	0.674	0.748	0.644	0.687	0.729	0.706	6.24
36)	cis-1,2-dichloroethene									
	0.499	0.523	0.470	0.472	0.497	0.469	0.482	0.507	0.490	4.00
37)	propionitrile									
	0.079	0.079	0.085	0.086	0.068	0.087	0.085	0.089	0.082	8.28
38)	methyl acrylate									
			0.572	0.602		0.617	0.535	0.485	0.562	9.51
39)	bromochloromethane									
	0.226	0.242	0.220	0.221	0.199	0.226	0.223	0.227	0.223	5.29
40)	tetrahydrofuran									
	0.230		0.197	0.201		0.205	0.196	0.213	0.207	6.26
41)	chloroform									
	0.851	0.897	0.797	0.801	0.860	0.800	0.818	0.861	0.836	4.43
42)	Tert-Butyl Formate									
	0.534	0.586	0.525	0.559	0.469	0.509	0.526	0.562	0.534	6.73
43)	dibromofluoromethane (s)									
	0.398	0.438	0.389	0.389	0.454	0.392	0.388	0.427	0.409	6.47
44)	1,2-dichloroethane-d4 (s)									
	0.513	0.621	0.532	0.530	0.595	0.505	0.505	0.592	0.549	8.40
45)	freon 113									
	0.372	0.372	0.343	0.358	0.316	0.322	0.350	0.356	0.349	6.03
46)	methacrylonitrile									
			0.320	0.349		0.367	0.297	0.308	0.328	8.95
47)	1,1,1-trichloroethane									
	0.727	0.760	0.682	0.702	0.751	0.687	0.702	0.731	0.718	4.04
48)	tert amyl alcohol									
										0.000# -1.00
49)	2,2,4-Trimethylpentane									
	2.028	2.093	1.922	2.035	1.939	1.789	1.943	1.941	1.961	4.71
50)	tert-amyl methyl ether									
	1.550	1.807	1.491	1.555	1.639	1.436	1.506	1.602	1.573	7.24

51) I 1,4-difluorobenzene ----------ISTD----------

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

52)	epichlorohydrin									
	0.035	0.039	0.033	0.036	0.034	0.033	0.035		0.035	6.01
53)	n-butyl alcohol									
	0.009	0.010	0.010	0.011	0.008	0.009	0.010	0.010	0.010#	8.45
54)	cyclohexane									
	0.514	0.551	0.452	0.457	0.554	0.438	0.471	0.486	0.490	9.13
55)	carbon tetrachloride									
	0.441	0.461	0.399	0.407	0.442	0.394	0.411	0.432	0.424	5.65
56)	1,1-dichloropropene									
	0.459	0.486	0.426	0.427	0.454	0.416	0.439	0.455	0.445	5.14
57)	hexane									
	0.488	0.499	0.443	0.451	0.476	0.396	0.456	0.466	0.459	6.95
58)	benzene									
	1.338	1.491	1.222	1.226	1.394	1.195	1.267	1.332	1.308	7.70
59)	heptane									
	0.269	0.256	0.239	0.244	0.222	0.214	0.242	0.246	0.241	7.23
60)	isopropyl acetate									
	0.666		0.795	0.759		0.718	0.816	0.766	0.753	7.24
61)	1,2-dichloroethane									
	0.451	0.475	0.432	0.428	0.417	0.431	0.451	0.472	0.445	4.76
62)	trichloroethene									
	0.313	0.346	0.297	0.301	0.291	0.301	0.301	0.308	0.307	5.54
63)	tert amyl ethyl ether									
									0.000#	-1.00
64)	2-nitropropane									
			0.007	0.007		0.007	0.007	0.006	0.007#	8.70
65)	2-chloroethyl vinyl ether									
	0.214	0.241	0.212	0.217	0.196	0.198	0.215	0.228	0.215	6.74
66)	methyl methacrylate									
			0.577	0.579		0.592	0.569	0.585	0.580	1.52
67)	1,2-dichloropropane									
	0.348	0.385	0.340	0.339	0.341	0.340	0.346	0.357	0.350	4.47
68)	methylcyclohexane									
	0.575		0.525	0.547		0.485	0.539	0.553	0.537	5.65
69)	dibromomethane									
	0.194	0.206	0.192	0.193	0.179	0.198	0.196	0.205	0.195	4.26
70)	bromodichloromethane									
	0.406	0.435	0.404	0.408	0.409	0.420	0.405	0.421	0.414	2.68
71)	cis-1,3-dichloropropene									
	0.509	0.544	0.499	0.503	0.498	0.518	0.501	0.522	0.512	3.06
72)	toluene-d8 (s)									
	0.955	1.088	0.898	0.902	1.089	0.913	0.897	1.008	0.969	8.57
73)	4-methyl-2-pentanone									
	0.129	0.136	0.139	0.141		0.144	0.137	0.146	0.139	4.00
74)	toluene									
	0.709	0.838	0.664	0.680	0.731	0.685	0.686	0.721	0.714	7.66
75)	3-methyl-1-butanol									
	0.007	0.007	0.008	0.009		0.008	0.008	0.008	0.008#	6.97
76)	trans-1,3-dichloropropene									
	0.452	0.474	0.448	0.453	0.428	0.458	0.452	0.473	0.455	3.23
77)	ethyl methacrylate									
	0.361	0.378	0.381	0.386	0.340	0.391	0.379	0.401	0.377	5.01
78)	1,1,2-trichloroethane									
	0.221	0.230	0.221	0.223	0.233	0.228	0.222	0.230	0.226	2.17
79)	2-hexanone									
	0.087		0.106	0.113		0.117	0.097	0.088	0.101	12.65
80)	I chlorobenzene-d5	----------ISTD----------								
81)	tetrachloroethene									
	0.354	0.384	0.342	0.347	0.359	0.346	0.346	0.358	0.355	3.79

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

82)	1,3-dichloropropane										
		0.545	0.566	0.524	0.521	0.520	0.530	0.531	0.552	0.536	3.09
83)	butyl acetate										
		0.214	0.239	0.242	0.254		0.241	0.239	0.246	0.239	5.08
84)	3,3-Dimethyl-1-Butanol										
		0.038	0.043	0.039	0.042	0.046	0.037	0.039	0.042	0.041	7.24
85)	dibromochloromethane										
		0.354	0.357	0.356	0.359	0.330	0.371	0.358	0.372	0.357	3.58
86)	1,2-dibromoethane										
		0.328	0.332	0.316	0.318	0.300	0.327	0.326	0.336	0.323	3.55
87)	n-Butyl Ether										
		1.514	1.544	1.531	1.586	1.296	1.673	1.653	1.472	1.534	7.70
88)	chlorobenzene										
		0.904	0.968	0.859	0.861	0.845	0.879	0.881	0.908	0.888	4.38
89)	1,1,1,2-tetrachloroethane										
		0.347	0.339	0.337	0.338	0.345	0.346	0.344	0.345	0.343	1.16
90)	ethylbenzene										
		1.615	1.767	1.526	1.531	1.656	1.525	1.585	1.633	1.605	5.18
91)	m,p-xylene										
		0.598	0.638	0.552	0.554	0.592	0.550	0.571	0.594	0.581	5.25
92)	o-xylene										
		0.598	0.654	0.557	0.561	0.599	0.566	0.575	0.606	0.590	5.48
93)	styrene										
		0.976	1.010	0.946	0.946	0.962	0.962	0.963	0.990	0.969	2.25
94)	Butyl Acrylate										
										0.000#	-1.00
95)	bromoform										
		0.241	0.268	0.255	0.261	0.223	0.272	0.254	0.261	0.254	6.31
96)	I 1,4-dichlorobenzene-d ----------ISTD----------										
97)	isopropylbenzene										
		2.995	3.262	2.955	2.966	3.047	2.903	3.033	3.066	3.028	3.58
98)	4-bromofluorobenzene (s)										
		0.871	0.997	0.846	0.836	1.037	0.845	0.841	0.943	0.902	8.81
99)	bromobenzene										
		0.741	0.780	0.742	0.738	0.750	0.750	0.751	0.774	0.753	2.05
100)	cyclohexanone										
		0.070	0.067	0.081	0.070	0.102	0.060	0.086	0.085	0.078	17.49
	----- Quadratic regression ----- Coefficient = 0.9993										
	Response Ratio = 0.00560 + 0.08248 *A + -0.00056 *A^2										
101)	1,1,2,2-tetrachloroethane										
		0.906	0.993	0.885	0.887	0.999	0.880	0.910	0.957	0.927	5.26
102)	trans-1,4-dichloro-2-butene										
		0.202	0.212	0.234	0.241	0.183	0.245	0.230	0.232	0.222	9.62
103)	1,2,3-trichloropropane										
		0.190	0.215	0.196	0.195	0.181	0.193	0.191	0.214	0.197	5.95
104)	n-propylbenzene										
		3.678	4.056	3.441	3.460	3.637	3.368	3.636	3.708	3.623	5.93
105)	4-Ethyltoluene										
										0.000#	-1.00
106)	2-chlorotoluene										
		0.677	0.744	0.679	0.685	0.715	0.678	0.694	0.706	0.697	3.35
107)	4-chlorotoluene										
		0.693	0.741	0.694	0.703	0.686	0.709	0.703	0.712	0.705	2.40
108)	1,3,5-trimethylbenzene										
		2.484	2.922	2.476	2.493	2.562	2.456	2.532	2.609	2.567	5.92
109)	tert-butylbenzene										
		1.991	2.195	1.994	2.056	2.112	2.069	2.036	2.061	2.064	3.21
110)	pentachloroethane										

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

	0.486	0.508	0.501	0.513	0.518	0.526	0.497	0.496	0.506	2.63
111)	1,2,4-trimethylbenzene									
	2.511	2.911	2.459	2.490	2.628	2.512	2.497	2.595	2.575	5.70
112)	sec-butylbenzene									
	3.205	3.566	3.151	3.228	3.265	3.157	3.204	3.283	3.257	4.09
113)	1,3-dichlorobenzene									
	1.422	1.546	1.385	1.401	1.515	1.433	1.417	1.485	1.451	3.99
114)	p-isopropyltoluene									
	2.573	2.806	2.550	2.601	2.557	2.568	2.592	2.614	2.608	3.19
115)	1,4-dichlorobenzene									
	1.512	1.663	1.446	1.449	1.616	1.483	1.477	1.554	1.525	5.22
116)	1,2-dichlorobenzene									
	1.419	1.540	1.427	1.433	1.534	1.466	1.436	1.509	1.470	3.39
117)	1,4-Diethylbenzene									
									0.000#	-1.00
118)	n-butylbenzene									
	1.436	1.536	1.405	1.456	1.419	1.421	1.452	1.453	1.447	2.79
119)	1,2,4,5-Tetramethylbenzene									
									0.000#	-1.00
120)	1,2-dibromo-3-chloropropane									
	0.183	0.197	0.189	0.188	0.181	0.187	0.188	0.197	0.189	3.15
121)	1,3,5-trichlorobenzene									
	1.222	1.248	1.227	1.266	1.242	1.217	1.225	1.238	1.236	1.31
122)	1,2,4-trichlorobenzene									
	1.093	1.093	1.199	1.195	1.043	1.119	1.172	1.169	1.135	5.00
123)	hexachlorobutadiene									
	0.619	0.612	0.614	0.648	0.630	0.576	0.624	0.621	0.618	3.29
124)	naphthalene									
	2.438	2.430	2.721	2.688	2.420	2.484	2.692	2.689	2.570	5.36
125)	1,2,3-trichlorobenzene									
	0.930	0.978	1.045	1.039	0.877	0.965	1.033	1.022	0.986	6.10
126)	hexachloroethane									
	0.500	0.541	0.550	0.580	0.515	0.577	0.541	0.528	0.541	5.12
127)	Benzyl chloride									
	1.510	1.794	1.591	1.653	1.706	1.531	1.567	1.647	1.625	5.85

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3D2292.M Tue Nov 16 14:09:00 2010 VOA-05

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2293-ICV2292
Lab FileID: 3D52936.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D...3d2292final\3D52936.D Vial: 2
Acq On : 16 Nov 2010 1:17 pm Operator: TAMIKAG
Sample : ICV2292-50 Inst : MS3D
Misc : MS4814,V3D2293,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	113	0.00	6.99
2		1,4-dioxane	0.071	0.076	-7.0	112	0.00	10.85
3	M	tertiary butyl alcohol	1.020	1.032	-1.2	117	0.00	7.11
4	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	9.20
5		chlorodifluoromethane	0.672	0.497	26.0#	81	0.00	3.72
6		dichlorodifluoromethane	0.795	0.825	-3.8	117	0.01	3.71
7		chloromethane	0.891	0.930	-4.4	119	0.00	4.03
8		vinyl chloride	0.706	0.718	-1.7	119	0.00	4.27
9		bromomethane	0.369	0.409	-10.8	123	0.00	4.87
10		chloroethane	0.362	0.373	-3.0	116	0.00	5.04
11		vinyl bromide		----------NA----------				
12		trichlorofluoromethane	0.770	0.802	-4.2	118	0.00	5.49
13		pentane	1.188	0.537	54.8#	53	0.00	5.56
14		ethyl ether	0.247	0.252	-2.0	106	0.00	5.88
15		acrolein	0.114	0.128	-12.3	119	0.00	6.13
16		1,1-dichloroethene	0.442	0.400	9.5	107	0.00	6.29
17		acetone	0.199	0.203	-2.0	113	0.00	6.42
18		allyl chloride	0.241	0.247	-2.5	110	0.00	6.81
19		acetonitrile	0.053	0.057	-7.5	115	0.00	6.81
20		iodomethane	0.771	0.719	6.7	106	0.00	6.56
21		iso-butyl alcohol	0.129	0.117	9.3	109	0.00	9.36
22		carbon disulfide	1.806	1.623	10.1	106	0.00	6.69
23		methylene chloride	0.509	0.477	6.3	107	0.00	7.00
24		methyl acetate	0.412	0.423	-2.7	105	0.00	6.83
25		methyl tert butyl ether	1.553	1.502	3.3	109	0.00	7.31
26		trans-1,2-dichloroethene	0.466	0.383	17.8	96	0.00	7.37
27		di-isopropyl ether	1.911	1.891	1.0	111	0.00	7.91
28		ethyl tert-butyl ether	1.744	1.693	2.9	109	0.00	8.37
29		2-butanone	0.052	0.058	-11.5	116	0.00	8.67
30	M	1,1-dichloroethane	0.929	0.896	3.6	109	0.00	7.93
31		chloroprene	0.682	0.695	-1.9	115	0.00	8.04
32		acrylonitrile	0.223	0.229	-2.7	111	0.00	7.34
		----------	True	Calc.	% Drift	----------		
33		vinyl acetate	50.000	53.042	-6.1	118	0.00	7.94
		----------	AvgRF	CCRF	% Dev	----------		
34		ethyl acetate	0.083	0.089	-7.2	111	0.00	8.67
35		2,2-dichloropropane	0.706	0.746	-5.7	122	0.00	8.66
36		cis-1,2-dichloroethene	0.490	0.529	-8.0	122	0.00	8.68
37		propionitrile	0.082	0.085	-3.7	109	0.00	8.75

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2293-ICV2292
Lab FileID: 3D52936.D

38		methyl acrylate	0.562	0.578	-2.8	110	0.00	8.76
39		bromochloromethane	0.223	0.220	1.3	109	0.00	8.98
40		tetrahydrofuran	0.207	0.203	1.9	112	0.00	9.03
41		chloroform	0.836	0.810	3.1	110	0.00	9.04
42		Tert-Butyl Formate	0.534	0.562	-5.2	116	0.00	9.07
43	S	dibromofluoromethane (s)	0.409	0.410	-0.2	114	0.00	9.24
44	S	1,2-dichloroethane-d4 (s)	0.549	0.564	-2.7	115	0.00	9.66
45		freon 113	0.349	0.319	8.6	101	0.00	6.26
46		methacrylonitrile	0.328	0.341	-4.0	116	0.00	8.93
47		1,1,1-trichloroethane	0.718	0.691	3.8	110	0.00	9.28
48		tert amyl alcohol		----------NA----------				
49		2,2,4-Trimethylpentane	1.961	1.668	14.9	94	0.00	9.72
50		tert-amyl methyl ether	1.573	1.501	4.6	109	0.00	9.76
51	I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00	10.11
52		epichlorohydrin	0.035	0.037	-5.7	118	0.00	11.39
53		n-butyl alcohol	0.010	0.010	0.0	115	0.02	10.28
54	M	cyclohexane	0.490	0.442	9.8	106	0.00	9.34
55		carbon tetrachloride	0.424	0.406	4.2	110	0.00	9.48
56		1,1-dichloropropene	0.445	0.428	3.8	109	0.00	9.46
57		hexane	0.459	0.309	32.7#	75	0.00	7.66
58	M	benzene	1.308	1.224	6.4	108	0.00	9.73
59		heptane	0.241	0.193	19.9	87	0.00	9.89
60		isopropyl acetate	0.753	0.823	-9.3	112	0.00	9.66
61		1,2-dichloroethane	0.445	0.433	2.7	108	0.00	9.75
62		trichloroethene	0.307	0.301	2.0	110	0.00	10.45
63		tert amyl ethyl ether		----------NA----------				
64		2-nitropropane	0.007	0.007#	0.0	106	0.00	11.25
65		2-chloroethyl vinyl ether	0.215	0.177	17.7	90	0.00	11.26
66		methyl methacrylate	0.580	0.577	0.5	108	0.00	10.73
67		1,2-dichloropropane	0.350	0.339	3.1	108	0.00	10.72
68		methylcyclohexane	0.537	0.432	19.6	89	0.00	10.66
69		dibromomethane	0.195	0.193	1.0	109	0.00	10.88
70		bromodichloromethane	0.414	0.417	-0.7	112	0.00	11.02
71		cis-1,3-dichloropropene	0.512	0.512	0.0	111	0.00	11.48
72	S	toluene-d8 (s)	0.969	0.952	1.8	115	0.00	11.77
73		4-methyl-2-pentanone	0.139	0.145	-4.3	113	0.00	11.58
74		toluene	0.714	0.677	5.2	110	0.00	11.84
75		3-methyl-1-butanol	0.008	0.009#	-12.5	117	0.00	11.61
76		trans-1,3-dichloropropene	0.455	0.466	-2.4	113	0.00	12.05
77		ethyl methacrylate	0.377	0.398	-5.6	113	0.00	12.04
78		1,1,2-trichloroethane	0.226	0.224	0.9	110	0.00	12.26
79		2-hexanone	0.101	0.117	-15.8	120	0.00	12.45
80	I	chlorobenzene-d5	1.000	1.000	0.0	109	0.00	13.29
81		tetrachloroethene	0.355	0.332	6.5	106	0.00	12.43
82		1,3-dichloropropane	0.536	0.520	3.0	108	0.00	12.45
83		butyl acetate	0.239	0.249	-4.2	112	0.00	12.52
84		3,3-Dimethyl-1-Butanol	0.041	0.044	-7.3	122	0.00	12.62
85		dibromochloromethane	0.357	0.354	0.8	108	0.00	12.71
86		1,2-dibromoethane	0.323	0.318	1.5	110	0.00	12.86
87		n-Butyl Ether	1.534	1.574	-2.6	112	0.00	13.24
88		chlorobenzene	0.888	0.855	3.7	109	0.00	13.32
89		1,1,1,2-tetrachloroethane	0.343	0.339	1.2	110	0.00	13.38
90		ethylbenzene	1.605	1.515	5.6	108	0.00	13.38
91		m,p-xylene	0.581	0.555	4.5	110	0.00	13.49
92		o-xylene	0.590	0.570	3.4	112	0.00	13.90
93		styrene	0.969	0.937	3.3	108	0.00	13.92
94		Butyl Acrylate		----------NA----------				
95		bromoform	0.254	0.257	-1.2	110	0.00	14.18

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2293-ICV2292
Lab FileID: 3D52936.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	15.61
97		isopropylbenzene	3.028	3.022	0.2	110	0.00	14.24
98	S	4-bromofluorobenzene (s)	0.902	0.873	3.2	111	0.00	14.45
99		bromobenzene	0.753	0.742	1.5	108	0.00	14.64
			True	Calc.	% Drift			
100		cyclohexanone	500.000	696.680	-39.3#	138	0.00	14.41
			AvgRF	CCRF	% Dev			
101		1,1,2,2-tetrachloroethane	0.927	0.884	4.6	108	0.00	14.56
102		trans-1,4-dichloro-2-bute	0.222	0.283	-27.5#	130	0.00	14.60
103		1,2,3-trichloropropane	0.197	0.197	0.0	108	0.00	14.63
104		n-propylbenzene	3.623	3.411	5.9	107	0.00	14.65
105		4-Ethyltoluene		----------NA----------				
106		2-chlorotoluene	0.697	0.698	-0.1	111	0.00	14.80
107		4-chlorotoluene	0.705	0.695	1.4	108	0.00	14.90
108		1,3,5-trimethylbenzene	2.567	2.526	1.6	110	0.00	14.81
109		tert-butylbenzene	2.064	2.085	-1.0	113	0.00	15.15
110		pentachloroethane	0.506	0.553	-9.3	119	0.00	15.23
111		1,2,4-trimethylbenzene	2.575	2.482	3.6	109	0.00	15.20
112		sec-butylbenzene	3.257	3.230	0.8	111	0.00	15.36
113		1,3-dichlorobenzene	1.451	1.418	2.3	110	0.00	15.56
114		p-isopropyltoluene	2.608	2.666	-2.2	113	0.00	15.48
115		1,4-dichlorobenzene	1.525	1.463	4.1	109	0.00	15.64
116		1,2-dichlorobenzene	1.470	1.437	2.2	109	0.00	16.02
117		1,4-Diethylbenzene		----------NA----------				
118		n-butylbenzene	1.447	1.477	-2.1	113	0.00	15.89
119		1,2,4,5-Tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.189	0.191	-1.1	109	0.00	16.76
121		1,3,5-trichlorobenzene	1.236	1.254	-1.5	110	0.00	16.92
122		1,2,4-trichlorobenzene	1.135	1.196	-5.4	108	0.00	17.50
123		hexachlorobutadiene	0.618	0.611	1.1	107	0.00	17.60
124		naphthalene	2.570	2.753	-7.1	109	0.00	17.75
125		1,2,3-trichlorobenzene	0.986	1.064	-7.9	110	0.00	17.97
126		hexachloroethane	0.541	0.563	-4.1	110	0.00	16.26
127		Benzyl chloride	1.625	1.981	-21.9#	134	0.00	15.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3D52929.D M3D2292.M Tue Nov 16 14:03:35 2010 VOA-05

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2360-CC2292
Lab FileID: 3D54528.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D...\v3d2360-61\3D54528.D Vial: 3
Acq On : 28 Dec 2010 10:40 am Operator: TAMIKAG
Sample : CC2292-20 Inst : MS3D
Misc : MS6495,V3D2360,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	105	0.00	6.98
2		1,4-dioxane	0.071	0.068	4.2	100	0.00	10.85
3	M	tertiary butyl alcohol	1.020	1.015	0.5	109	0.00	7.11
4	I	pentafluorobenzene	1.000	1.000	0.0	133	0.00	9.19
5		chlorodifluoromethane	0.672	0.638	5.1	127	0.00	3.72
6		dichlorodifluoromethane	0.795	0.852	-7.2	139	0.00	3.70
7		chloromethane	0.891	0.697	21.8#	103	-0.01	4.02
8		vinyl chloride	0.706	0.577	18.3	111	-0.02	4.25
9		bromomethane	0.369	0.382	-3.5	133	0.00	4.87
10		chloroethane	0.362	0.324	10.5	114	0.00	5.04
11		vinyl bromide		----------NA----------				
12		trichlorofluoromethane	0.770	0.758	1.6	128	0.00	5.49
13		pentane	1.188	0.871	26.7#	102	0.00	5.56
14		ethyl ether	0.247	0.227	8.1	116	0.00	5.89
15		acrolein	0.114	0.083	27.2#	95	0.02	6.15
16		1,1-dichloroethene	0.442	0.391	11.5	121	0.00	6.29
17		acetone	0.199	0.144	27.6#	93	0.05	6.47
18		allyl chloride	0.241	0.201	16.6	117	0.00	6.82
19		acetonitrile	0.053	0.041	22.6#	103	0.02	6.83
20		iodomethane	0.771	0.717	7.0	127	0.00	6.57
21		iso-butyl alcohol	0.129	0.102	20.9#	112	0.00	9.36
22		carbon disulfide	1.806	1.594	11.7	121	0.00	6.69
23		methylene chloride	0.509	0.440	13.6	118	0.00	7.00
24		methyl acetate	0.412	0.314	23.8#	106	0.03	6.85
25		methyl tert butyl ether	1.553	1.300	16.3	114	0.00	7.31
26		trans-1,2-dichloroethene	0.466	0.413	11.4	120	0.00	7.37
27		di-isopropyl ether	1.911	1.470	23.1#	105	0.00	7.91
28		ethyl tert-butyl ether	1.744	1.408	19.3	111	0.00	8.37
29		2-butanone	0.052	0.043	17.3	118	0.03	8.70
30	M	1,1-dichloroethane	0.929	0.780	16.0	112	0.00	7.93
31		chloroprene	0.682	0.640	6.2	127	0.00	8.04
32		acrylonitrile	0.223	0.182	18.4	110	0.02	7.36
		----------	True	Calc.	% Drift	----------		
33		vinyl acetate	20.000	17.828	10.9	124	0.03	7.97
		----------	AvgRF	CCRF	% Dev	----------		
34		ethyl acetate	0.083	0.069	16.9	106	0.02	8.69
35		2,2-dichloropropane	0.706	0.652	7.6	126	0.00	8.66
36		cis-1,2-dichloroethene	0.490	0.436	11.0	120	0.00	8.68
37		propionitrile	0.082	0.071	13.4	111	0.01	8.76

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2360-CC2292
Lab FileID: 3D54528.D

38		methyl acrylate	0.562	0.439	21.9#	109	0.03	8.79
39		bromochloromethane	0.223	0.215	3.6	129	0.00	8.99
40		tetrahydrofuran	0.207	0.161	22.2#	109	0.01	9.04
41		chloroform	0.836	0.731	12.6	119	0.00	9.04
42		Tert-Butyl Formate	0.534	0.439	17.8	111	0.00	9.07
43	S	dibromofluoromethane (s)	0.409	0.440	-7.6	151	0.00	9.24
44	S	1,2-dichloroethane-d4 (s)	0.549	0.538	2.0	142	0.00	9.66
45		freon 113	0.349	0.353	-1.1	134	0.00	6.26
46		methacrylonitrile	0.328	0.253	22.9#	113	0.01	8.95
47		1,1,1-trichloroethane	0.718	0.633	11.8	120	0.00	9.28
48		tert amyl alcohol		----------NA----------				
49		2,2,4-Trimethylpentane	1.961	1.657	15.5	113	0.00	9.71
50		tert-amyl methyl ether	1.573	1.308	16.8	115	0.00	9.75
51	I	1,4-difluorobenzene	1.000	1.000	0.0	126	0.00	10.11
52		epichlorohydrin	0.035	0.031	11.4	118	0.01	11.40
53		n-butyl alcohol	0.010	0.008#	20.0	104	0.01	10.27
54	M	cyclohexane	0.490	0.463	5.5	124	0.00	9.34
55		carbon tetrachloride	0.424	0.413	2.6	127	0.00	9.48
56		1,1-dichloropropene	0.445	0.404	9.2	116	0.00	9.46
57		hexane	0.459	0.406	11.5	112	0.00	7.66
58	M	benzene	1.308	1.207	7.7	120	0.00	9.73
59		heptane	0.241	0.224	7.1	117	0.00	9.89
60		isopropyl acetate	0.753	0.658	12.6	101	0.00	9.67
61		1,2-dichloroethane	0.445	0.412	7.4	115	0.00	9.75
62		trichloroethene	0.307	0.297	3.3	124	0.00	10.45
63		tert amyl ethyl ether		----------NA----------				
64		2-nitropropane	0.007	0.006#	14.3	107	0.00	11.26
65		2-chloroethyl vinyl ether	0.215	0.194	9.8	113	0.00	11.26
66		methyl methacrylate	0.580	0.491	15.3	109	0.01	10.74
67		1,2-dichloropropane	0.350	0.309	11.7	112	0.00	10.72
68		methylcyclohexane	0.537	0.501	6.7	117	0.00	10.65
69		dibromomethane	0.195	0.192	1.5	123	0.00	10.88
70		bromodichloromethane	0.414	0.393	5.1	122	0.00	11.02
71		cis-1,3-dichloropropene	0.512	0.472	7.8	119	0.00	11.48
72	S	toluene-d8 (s)	0.969	1.098	-13.3	154	0.00	11.77
73		4-methyl-2-pentanone	0.139	0.121	12.9	111	0.00	11.59
74		toluene	0.714	0.672	5.9	123	0.00	11.84
75		3-methyl-1-butanol	0.008	0.007#	12.5	111	0.00	11.62
76		trans-1,3-dichloropropene	0.455	0.423	7.0	118	0.00	12.05
77		ethyl methacrylate	0.377	0.316	16.2	105	0.00	12.05
78		1,1,2-trichloroethane	0.226	0.212	6.2	120	0.00	12.26
79		2-hexanone	0.101	0.084	16.8	108	0.01	12.46
80	I	chlorobenzene-d5	1.000	1.000	0.0	127	0.00	13.29
81		tetrachloroethene	0.355	0.359	-1.1	132	0.00	12.43
82		1,3-dichloropropane	0.536	0.479	10.6	115	0.00	12.45
83		butyl acetate	0.239	0.206	13.8	110	0.00	12.53
84		3,3-Dimethyl-1-Butanol	0.041	0.033	19.5	108	0.00	12.62
85		dibromochloromethane	0.357	0.356	0.3	126	0.00	12.71
86		1,2-dibromoethane	0.323	0.312	3.4	122	0.00	12.86
87		n-Butyl Ether		----------NA----------				
88		chlorobenzene	0.888	0.848	4.5	123	0.00	13.32
89		1,1,1,2-tetrachloroethane	0.343	0.330	3.8	122	0.00	13.38
90		ethylbenzene	1.605	1.476	8.0	119	0.00	13.38
91		m,p-xylene	0.581	0.562	3.3	125	0.00	13.48
92		o-xylene	0.590	0.558	5.4	123	0.00	13.90
93		styrene	0.969	0.878	9.4	116	0.00	13.92
94		Butyl Acrylate		----------NA----------				
95		bromoform	0.254	0.248	2.4	124	0.00	14.18

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2360-CC2292
Lab FileID: 3D54528.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	15.61
97		isopropylbenzene	3.028	2.791	7.8	121	0.00	14.24
98	S	4-bromofluorobenzene (s)	0.902	0.907	-0.6	141	0.00	14.45
99		bromobenzene	0.753	0.731	2.9	127	0.00	14.64
			True	Calc.	% Drift			
100		cyclohexanone	200.000	57.220	71.4#	38	0.00	14.41
			AvgRF	CCRF	% Dev			
101		1,1,2,2-tetrachloroethane	0.927	0.808	12.8	116	0.00	14.56
102		trans-1,4-dichloro-2-bute	0.222	0.213	4.1	121	0.00	14.60
103		1,2,3-trichloropropane	0.197	0.186	5.6	128	0.00	14.63
104		n-propylbenzene	3.623	3.217	11.2	116	0.00	14.65
105		4-Ethyltoluene		----------NA----------				
106		2-chlorotoluene	0.697	0.655	6.0	124	0.00	14.80
107		4-chlorotoluene	0.705	0.668	5.2	124	0.00	14.90
108		1,3,5-trimethylbenzene	2.567	2.349	8.5	121	0.00	14.80
109		tert-butylbenzene	2.064	1.912	7.4	123	0.00	15.15
110		pentachloroethane	0.506	0.495	2.2	130	0.00	15.23
111		1,2,4-trimethylbenzene	2.575	2.312	10.2	121	0.00	15.19
112		sec-butylbenzene	3.257	2.987	8.3	122	0.00	15.36
113		1,3-dichlorobenzene	1.451	1.364	6.0	126	0.00	15.56
114		p-isopropyltoluene	2.608	2.433	6.7	123	0.00	15.48
115		1,4-dichlorobenzene	1.525	1.417	7.1	126	0.00	15.64
116		1,2-dichlorobenzene	1.470	1.393	5.2	127	0.00	16.02
117		1,4-Diethylbenzene		----------NA----------				
118		n-butylbenzene	1.447	1.293	10.6	117	0.00	15.89
119		1,2,4,5-Tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.189	0.154	18.5	107	0.00	16.76
121		1,3,5-trichlorobenzene	1.236	1.209	2.2	129	0.00	16.92
122		1,2,4-trichlorobenzene	1.135	1.149	-1.2	128	0.00	17.50
123		hexachlorobutadiene	0.618	0.621	-0.5	130	0.00	17.60
124		naphthalene	2.570	2.569	0.0	125	0.00	17.75
125		1,2,3-trichlorobenzene	0.986	1.012	-2.6	128	0.00	17.97
126		hexachloroethane	0.541	0.499	7.8	121	0.00	16.26
127		Benzyl chloride	1.625	1.679	-3.3	140	0.00	15.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3D52928.D M3D2292.M Wed Dec 29 08:32:19 2010 VOA-05

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2361-CC2292
Lab FileID: 3D54551.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D...\v3d2360-61\3D54551.D Vial: 26
Acq On : 28 Dec 2010 9:56 pm Operator: TAMIKAG
Sample : CC2292-50 Inst : MS3D
Misc : MS6405,V3D2361,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	101	-0.01	6.98
2		1,4-dioxane	0.071	0.076	-7.0	100	0.00	10.85
3	M	tertiary butyl alcohol	1.020	1.034	-1.4	105	-0.01	7.10
4	I	pentafluorobenzene	1.000	1.000	0.0	112	0.00	9.19
5		chlorodifluoromethane	0.672	0.734	-9.2	123	0.00	3.72
6		dichlorodifluoromethane	0.795	0.857	-7.8	125	0.00	3.71
7		chloromethane	0.891	0.849	4.7	112	0.00	4.03
8		vinyl chloride	0.706	0.657	6.9	112	0.00	4.27
9		bromomethane	0.369	0.380	-3.0	118	0.00	4.88
10		chloroethane	0.362	0.347	4.1	111	0.00	5.04
11		vinyl bromide		----------NA----------				
12		trichlorofluoromethane	0.770	0.776	-0.8	118	0.00	5.50
13		pentane	1.188	0.977	17.8	100	0.00	5.55
14		ethyl ether	0.247	0.252	-2.0	109	0.00	5.88
15		acrolein	0.114	0.103	9.6	98	0.00	6.14
16		1,1-dichloroethene	0.442	0.402	9.0	110	0.00	6.29
17		acetone	0.199	0.159	20.1#	91	0.00	6.42
18		allyl chloride	0.241	0.221	8.3	101	0.00	6.81
19		acetonitrile	0.053	0.051	3.8	106	0.00	6.80
20		iodomethane	0.771	0.726	5.8	110	0.00	6.57
21		iso-butyl alcohol	0.129	0.115	10.9	110	0.00	9.36
22		carbon disulfide	1.806	1.656	8.3	111	0.00	6.68
23		methylene chloride	0.509	0.474	6.9	110	0.00	7.00
24		methyl acetate	0.412	0.415	-0.7	107	0.00	6.82
25		methyl tert butyl ether	1.553	1.456	6.2	109	0.00	7.31
26		trans-1,2-dichloroethene	0.466	0.422	9.4	109	0.00	7.36
27		di-isopropyl ether	1.911	1.791	6.3	108	0.00	7.90
28		ethyl tert-butyl ether	1.744	1.660	4.8	110	0.00	8.37
29		2-butanone	0.052	0.053	-1.9	110	0.00	8.67
30	M	1,1-dichloroethane	0.929	0.855	8.0	107	0.00	7.93
31		chloroprene	0.682	0.749	-9.8	127	0.00	8.04
32		acrylonitrile	0.223	0.208	6.7	104	0.00	7.34
		----------	True	Calc.	% Drift	----------		
33		vinyl acetate	50.000	48.853	2.3	112	0.00	7.94
		----------	AvgRF	CCRF	% Dev	----------		
34		ethyl acetate	0.083	0.083	0.0	107	0.00	8.67
35		2,2-dichloropropane	0.706	0.640	9.3	107	0.00	8.66
36		cis-1,2-dichloroethene	0.490	0.459	6.3	109	0.00	8.67
37		propionitrile	0.082	0.082	0.0	108	0.00	8.75

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2361-CC2292
Lab FileID: 3D54551.D

38		methyl acrylate	0.562	0.552	1.8	108	0.00	8.75
39		bromochloromethane	0.223	0.220	1.3	112	0.00	8.98
40		tetrahydrofuran	0.207	0.193	6.8	109	0.00	9.03
41		chloroform	0.836	0.786	6.0	110	0.00	9.04
42		Tert-Butyl Formate	0.534	0.515	3.6	110	0.00	9.06
43	S	dibromofluoromethane (s)	0.409	0.417	-2.0	120	0.00	9.24
44	S	1,2-dichloroethane-d4 (s)	0.549	0.562	-2.4	118	0.00	9.66
45		freon 113	0.349	0.347	0.6	113	0.00	6.26
46		methacrylonitrile	0.328	0.328	0.0	115	0.00	8.93
47		1,1,1-trichloroethane	0.718	0.683	4.9	112	0.00	9.27
48		tert amyl alcohol		----------NA----------				
49		2,2,4-Trimethylpentane	1.961	1.793	8.6	104	0.00	9.71
50		tert-amyl methyl ether	1.573	1.508	4.1	113	0.00	9.75
51	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	10.11
52		epichlorohydrin	0.035	0.035	0.0	115	0.00	11.39
53		n-butyl alcohol	0.010	0.010#	0.0	107	0.00	10.26
54	M	cyclohexane	0.490	0.449	8.4	110	0.00	9.34
55		carbon tetrachloride	0.424	0.405	4.5	113	0.00	9.48
56		1,1-dichloropropene	0.445	0.410	7.9	107	0.00	9.46
57		hexane	0.459	0.401	12.6	101	0.00	7.65
58	M	benzene	1.308	1.204	8.0	109	0.00	9.72
59		heptane	0.241	0.216	10.4	100	0.00	9.89
60		isopropyl acetate	0.753	0.795	-5.6	111	0.00	9.66
61		1,2-dichloroethane	0.445	0.437	1.8	112	0.00	9.75
62		trichloroethene	0.307	0.296	3.6	111	0.00	10.45
63		tert amyl ethyl ether		----------NA----------				
64		2-nitropropane	0.007	0.007#	0.0	117	0.00	11.25
65		2-chloroethyl vinyl ether	0.215	0.213	0.9	111	0.00	11.26
66		methyl methacrylate	0.580	0.587	-1.2	113	0.00	10.73
67		1,2-dichloropropane	0.350	0.333	4.9	109	0.00	10.71
68		methylcyclohexane	0.537	0.505	6.0	107	0.00	10.65
69		dibromomethane	0.195	0.197	-1.0	114	0.00	10.88
70		bromodichloromethane	0.414	0.420	-1.4	115	0.00	11.02
71		cis-1,3-dichloropropene	0.512	0.501	2.1	111	0.00	11.48
72	S	toluene-d8 (s)	0.969	1.009	-4.1	125	0.00	11.77
73		4-methyl-2-pentanone	0.139	0.140	-0.7	111	0.00	11.58
74		toluene	0.714	0.679	4.9	113	0.00	11.84
75		3-methyl-1-butanol	0.008	0.008#	0.0	108	0.00	11.61
76		trans-1,3-dichloropropene	0.455	0.450	1.1	112	0.00	12.05
77		ethyl methacrylate	0.377	0.363	3.7	106	0.00	12.04
78		1,1,2-trichloroethane	0.226	0.225	0.4	113	0.00	12.26
79		2-hexanone	0.101	0.106	-5.0	111	0.00	12.45
80	I	chlorobenzene-d5	1.000	1.000	0.0	112	0.00	13.29
81		tetrachloroethene	0.355	0.334	5.9	110	0.00	12.43
82		1,3-dichloropropane	0.536	0.516	3.7	111	0.00	12.44
83		butyl acetate	0.239	0.245	-2.5	114	0.00	12.52
84		3,3-Dimethyl-1-Butanol	0.041	0.039	4.9	113	0.00	12.61
85		dibromochloromethane	0.357	0.367	-2.8	116	0.00	12.71
86		1,2-dibromoethane	0.323	0.319	1.2	113	0.00	12.86
87		n-Butyl Ether		----------NA----------				
88		chlorobenzene	0.888	0.843	5.1	110	0.00	13.32
89		1,1,1,2-tetrachloroethane	0.343	0.333	2.9	111	0.00	13.38
90		ethylbenzene	1.605	1.507	6.1	111	0.00	13.37
91		m,p-xylene	0.581	0.549	5.5	112	0.00	13.48
92		o-xylene	0.590	0.554	6.1	112	0.00	13.90
93		styrene	0.969	0.912	5.9	108	0.00	13.92
94		Butyl Acrylate		----------NA----------				
95		bromoform	0.254	0.251	1.2	111	0.00	14.18

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2361-CC2292
Lab FileID: 3D54551.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	15.61
97		isopropylbenzene	3.028	2.911	3.9	111	0.00	14.24
98	S	4-bromofluorobenzene (s)	0.902	0.858	4.9	114	0.00	14.45
99		bromobenzene	0.753	0.728	3.3	111	0.00	14.64
			True	Calc.	% Drift			
100		cyclohexanone	500.000	165.104	67.0#	38	0.00	14.41
			AvgRF	CCRF	% Dev			
101		1,1,2,2-tetrachloroethane	0.927	0.883	4.7	113	0.00	14.55
102		trans-1,4-dichloro-2-bute	0.222	0.209	5.9	101	0.00	14.60
103		1,2,3-trichloropropane	0.197	0.195	1.0	113	0.00	14.63
104		n-propylbenzene	3.623	3.378	6.8	111	0.00	14.65
105		4-Ethyltoluene		----------NA----------				
106		2-chlorotoluene	0.697	0.663	4.9	110	0.00	14.80
107		4-chlorotoluene	0.705	0.667	5.4	109	0.00	14.90
108		1,3,5-trimethylbenzene	2.567	2.438	5.0	111	0.00	14.80
109		tert-butylbenzene	2.064	1.994	3.4	113	0.00	15.15
110		pentachloroethane	0.506	0.508	-0.4	115	0.00	15.23
111		1,2,4-trimethylbenzene	2.575	2.400	6.8	110	0.00	15.19
112		sec-butylbenzene	3.257	3.098	4.9	111	0.00	15.36
113		1,3-dichlorobenzene	1.451	1.364	6.0	111	0.00	15.56
114		p-isopropyltoluene	2.608	2.515	3.6	111	0.00	15.48
115		1,4-dichlorobenzene	1.525	1.424	6.6	111	0.00	15.63
116		1,2-dichlorobenzene	1.470	1.390	5.4	110	0.00	16.02
117		1,4-Diethylbenzene		----------NA----------				
118		n-butylbenzene	1.447	1.374	5.0	110	0.00	15.89
119		1,2,4,5-Tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.189	0.173	8.5	104	0.00	16.76
121		1,3,5-trichlorobenzene	1.236	1.170	5.3	108	0.00	16.92
122		1,2,4-trichlorobenzene	1.135	1.141	-0.5	107	0.00	17.50
123		hexachlorobutadiene	0.618	0.560	9.4	103	0.00	17.60
124		naphthalene	2.570	2.646	-3.0	110	0.00	17.74
125		1,2,3-trichlorobenzene	0.986	0.998	-1.2	108	0.00	17.96
126		hexachloroethane	0.541	0.531	1.8	109	0.00	16.26
127		Benzyl chloride	1.625	1.651	-1.6	117	0.00	15.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3D52929.D M3D2292.M Wed Dec 29 09:38:31 2010 VOA-05

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 29 08:36:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

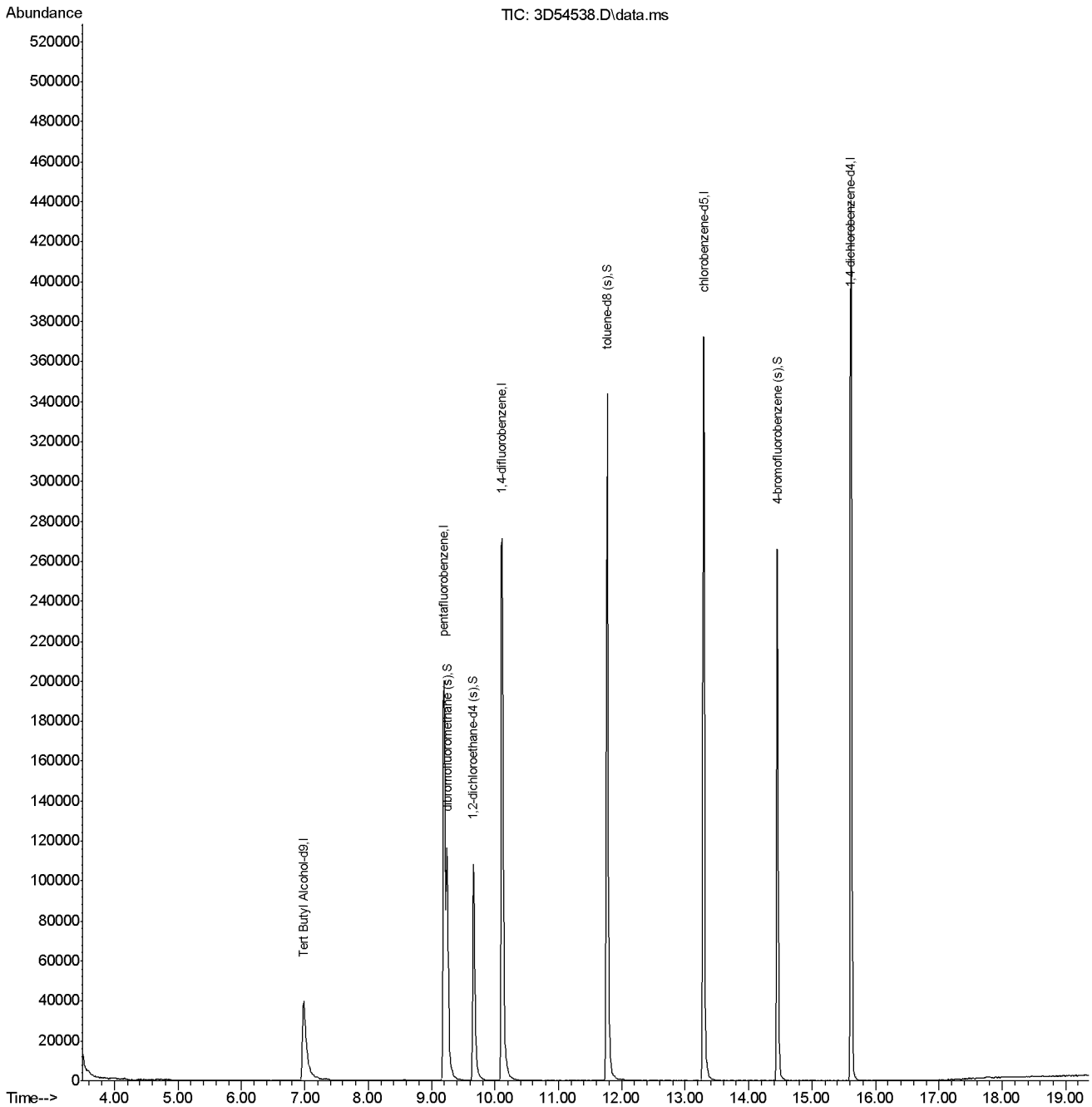
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.984	65	106633	500.00	ug/L	0.00
4) pentafluorobenzene	9.191	168	182198	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	264330	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	212688	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	108806	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	75163	50.37	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.74%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	96177	48.06	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.12%			
72) toluene-d8 (s)	11.765	98	259727	50.71	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 101.42%			
98) 4-bromofluorobenzene (s)	14.450	95	92253	47.01	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 94.02%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 29 08:36:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54538.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.147	125	126	138	rVB3	723	1386	0.20%	0.032%
2	6.979	656	666	716	rBV2	39676	184181	26.32%	4.237%
3	7.335	732	734	750	rVB6	597	1316	0.19%	0.030%
4	9.191	1075	1088	1094	rBV	199934	468400	66.92%	10.776%
5	9.238	1094	1097	1132	rVB2	116020	280249	40.04%	6.447%
6	9.658	1167	1177	1206	rBV	108174	261121	37.31%	6.007%
7	10.109	1251	1263	1309	rBV	271266	638160	91.18%	14.681%
8	11.766	1570	1579	1614	rBV	343719	699888	100.00%	16.101%
9	13.286	1859	1869	1901	rBV	372439	671252	95.91%	15.442%
10	14.450	2080	2091	2121	rBV	266127	447032	63.87%	10.284%
11	15.609	2304	2312	2338	rBV	440727	693869	99.14%	15.963%

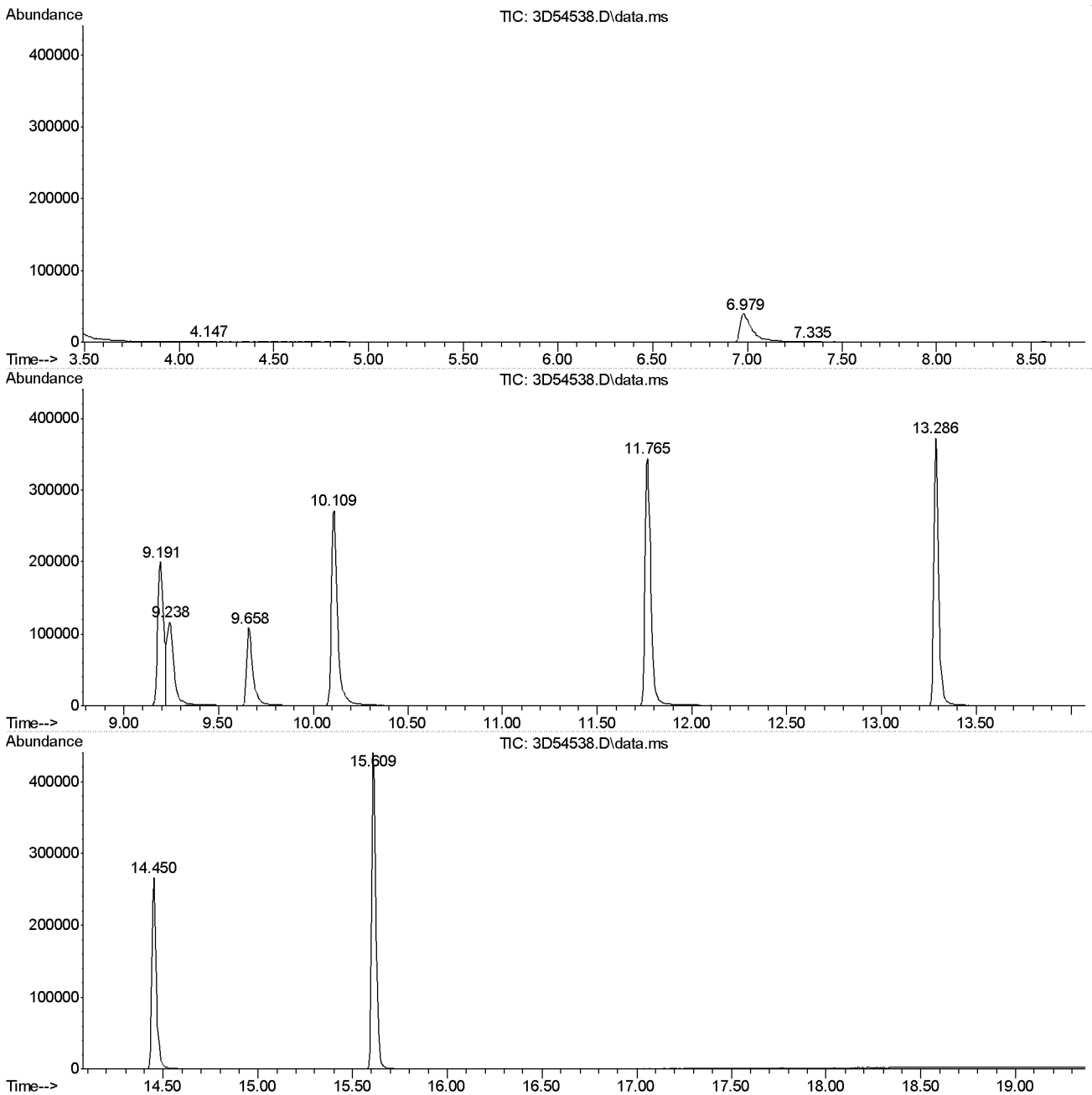
Sum of corrected areas: 4346854

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

6.1.2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 29 09:16:39 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

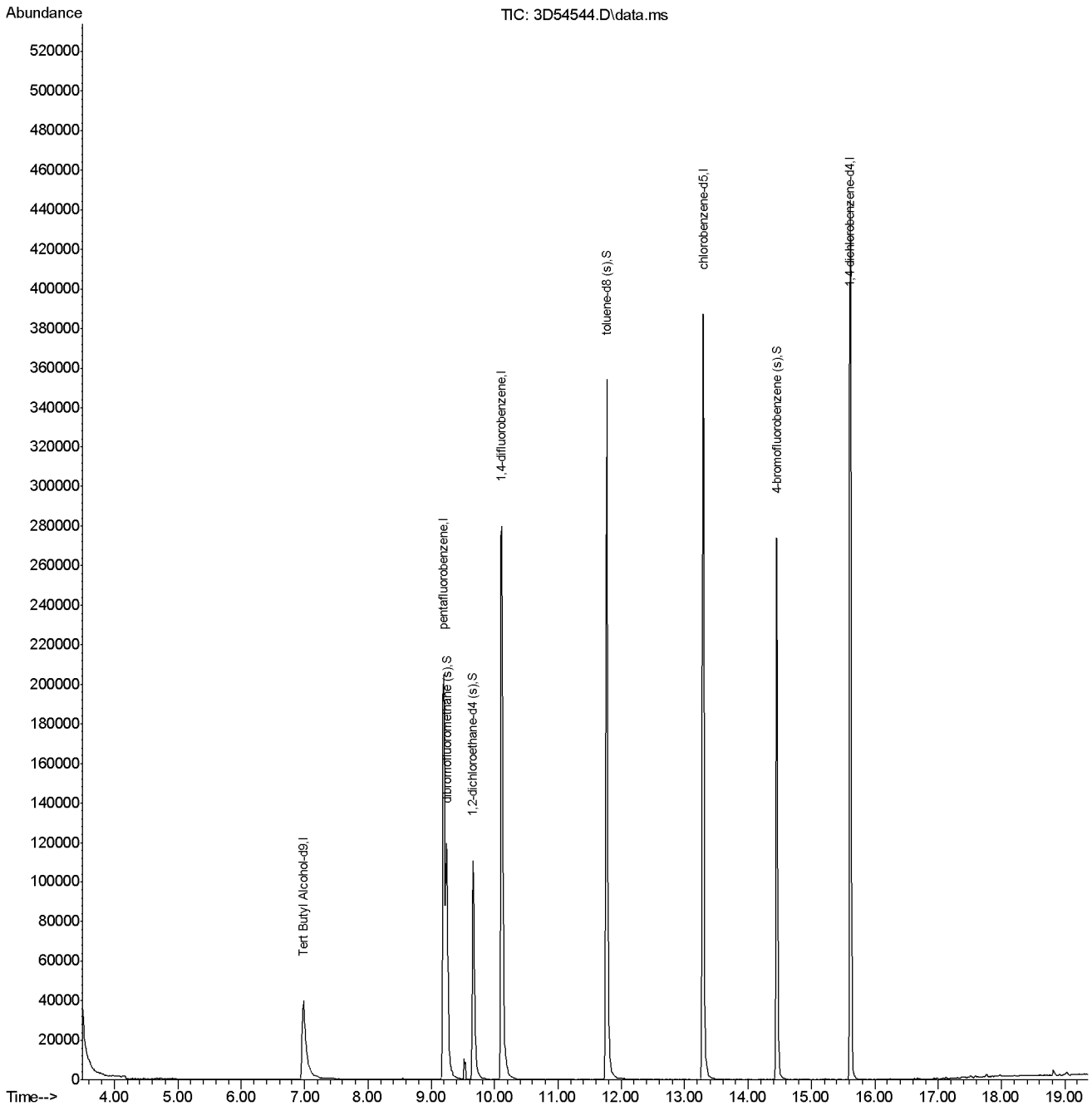
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.979	65	107909	500.00	ug/L	-0.01
4) pentafluorobenzene	9.191	168	184979	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	268737	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	219785	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	112532	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	76049	50.20	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.40%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	97404	47.94	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.88%			
72) toluene-d8 (s)	11.766	98	265959	51.08	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.16%			
98) 4-bromofluorobenzene (s)	14.450	95	95891	47.24	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 94.48%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 29 09:16:39 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54544.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.142	118	125	141	rVB2	1270	5526	0.77%	0.124%
2	6.979	655	666	707	rBV	39709	179751	25.09%	4.037%
3	8.552	962	966	978	rBV3	475	1358	0.19%	0.030%
4	9.191	1077	1088	1093	rBV	204907	451133	62.96%	10.131%
5	9.238	1094	1097	1130	rVB	119031	279107	38.95%	6.268%
6	9.511	1146	1149	1157	rVB	10255	14144	1.97%	0.318%
7	9.658	1165	1177	1216	rBV	110639	267372	37.31%	6.004%
8	10.109	1253	1263	1314	rBV	279678	647969	90.43%	14.551%
9	11.766	1568	1579	1610	rBV	353779	716546	100.00%	16.091%
10	13.286	1858	1869	1902	rBV	386961	691211	96.46%	15.522%
11	14.450	2081	2091	2123	rBV	273862	461765	64.44%	10.370%
12	15.215	2226	2237	2248	rBV4	503	1094	0.15%	0.025%
13	15.609	2302	2312	2342	rBV	444887	714764	99.75%	16.051%
14	17.113	2597	2599	2605	rVB5	819	1291	0.18%	0.029%
15	17.386	2643	2651	2652	rBV5	574	1252	0.17%	0.028%
16	17.507	2669	2674	2684	rVB5	1193	2422	0.34%	0.054%
17	17.591	2684	2690	2698	rBV9	1464	3078	0.43%	0.069%
18	17.769	2717	2724	2729	rBV4	1138	2146	0.30%	0.048%
19	17.973	2759	2763	2768	rBV5	1291	1805	0.25%	0.041%
20	18.817	2919	2924	2936	rVB3	2799	5300	0.74%	0.119%
21	19.027	2958	2964	2973	rBV5	1906	4009	0.56%	0.090%

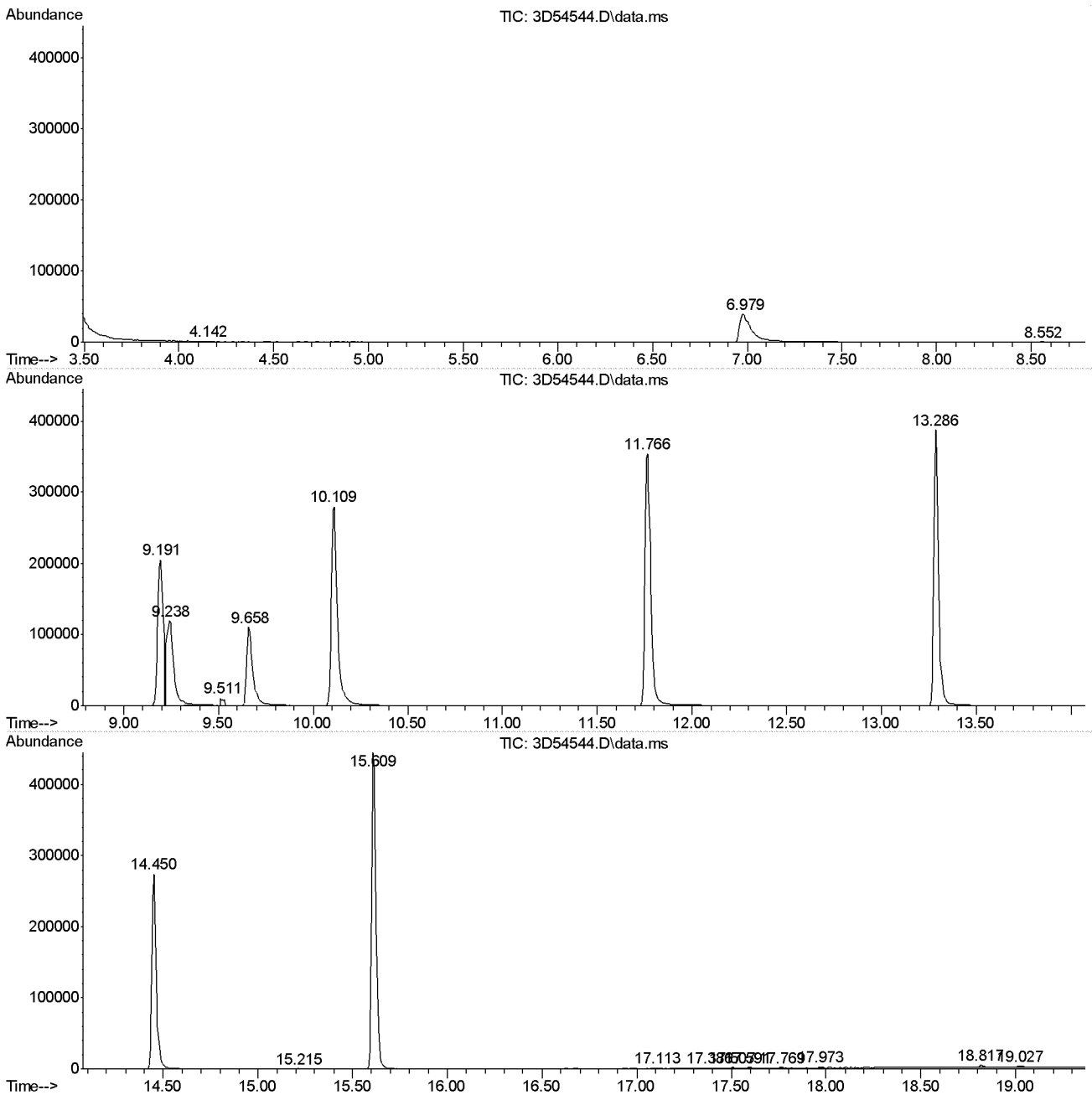
Sum of corrected areas: 4453043

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 29 09:23:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

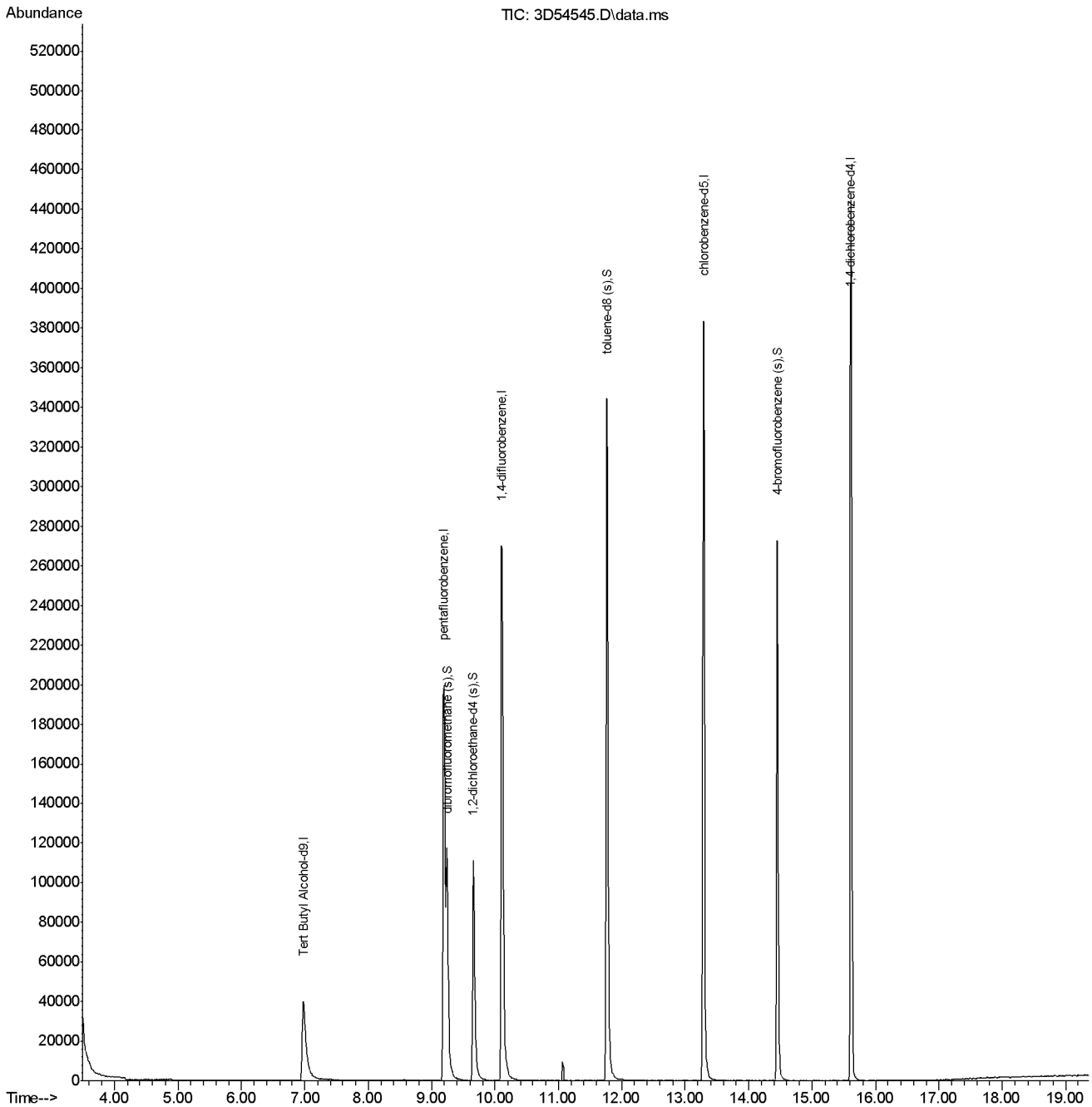
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.973	65	103944	500.00	ug/L	-0.02
4) pentafluorobenzene	9.191	168	182490	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.104	114	265251	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	217397	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	111125	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	75004	50.19	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.38%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	96139	47.97	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.94%			
72) toluene-d8 (s)	11.760	98	263488	51.27	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.54%			
98) 4-bromofluorobenzene (s)	14.450	95	93431	46.61	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 93.22%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 29 09:23:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54545.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.973	654	665	711	rBV	39872	177953	25.09%	4.055%
2	8.552	961	966	979	rVB4	512	1423	0.20%	0.032%
3	9.191	1077	1088	1094	rBV	199634	476655	67.19%	10.862%
4	9.238	1094	1097	1122	rVB	116711	266370	37.55%	6.070%
5	9.658	1167	1177	1207	rBV	111044	263793	37.19%	6.011%
6	10.104	1254	1262	1305	rBV	269747	635908	89.64%	14.491%
7	11.053	1438	1443	1451	rBV	9525	13427	1.89%	0.306%
8	11.760	1569	1578	1612	rBV	344208	709375	100.00%	16.166%
9	13.286	1858	1869	1902	rBV	383662	685567	96.64%	15.623%
10	14.450	2083	2091	2121	rBV	272903	453433	63.92%	10.333%
11	15.609	2303	2312	2338	rBV	444547	701708	98.92%	15.991%
12	17.507	2666	2674	2677	rVB5	622	1263	0.18%	0.029%
13	17.758	2715	2722	2725	rBV5	611	1319	0.19%	0.030%

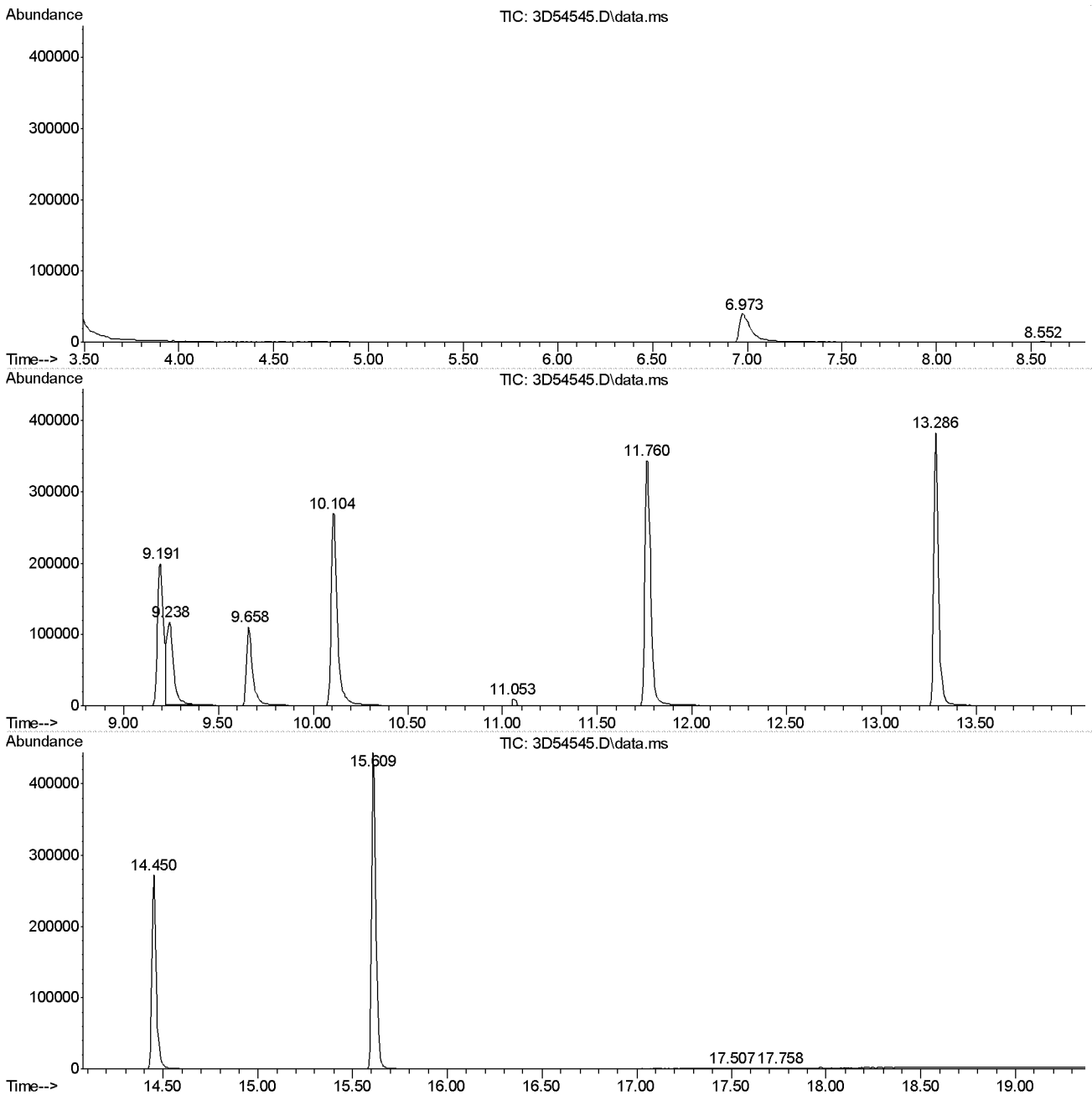
Sum of corrected areas: 4388194

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 29 09:46:08 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

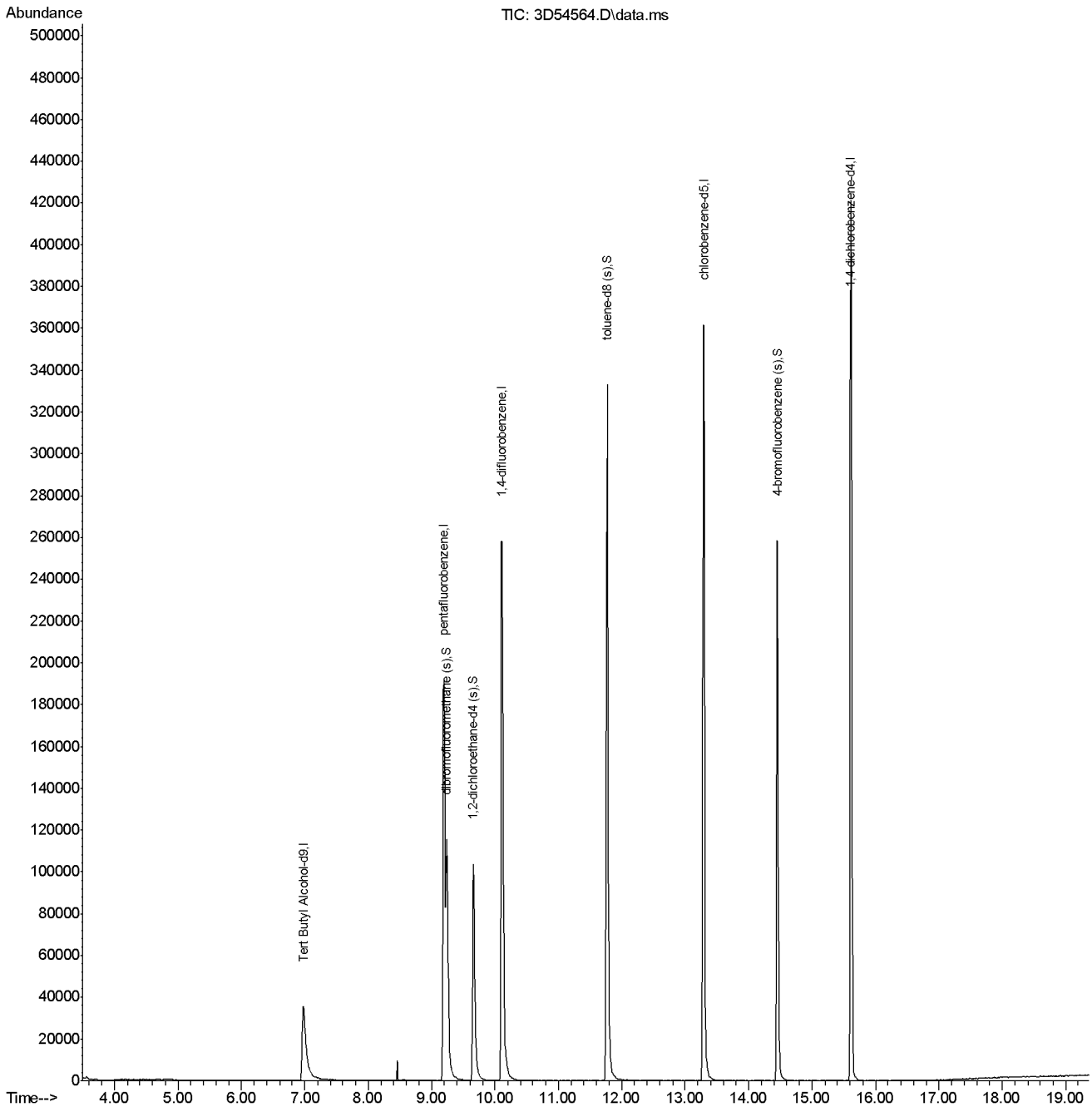
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.973	65	95050	500.00	ug/L	-0.02
4) pentafluorobenzene	9.191	168	176467	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	255399	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	207922	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	105947	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.238	113	73054	50.55	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.10%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	92741	47.85	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.70%			
72) toluene-d8 (s)	11.765	98	252401	51.01	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.02%			
98) 4-bromofluorobenzene (s)	14.450	95	89146	46.65	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 93.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 29 09:46:08 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54564.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.555	8	13	23	rVB4	1408	2936	0.43%	0.070%
2	6.973	653	665	704	rBV	35400	160148	23.59%	3.812%
3	8.452	944	947	953	rBV	9519	12189	1.80%	0.290%
4	8.546	960	965	979	rBV4	501	1813	0.27%	0.043%
5	9.191	1076	1088	1093	rBV2	191772	434170	63.95%	10.333%
6	9.238	1093	1097	1132	rVB	114881	289724	42.68%	6.896%
7	9.658	1168	1177	1217	rBV	103572	253413	37.33%	6.031%
8	10.103	1254	1262	1311	rBV	258152	610209	89.89%	14.523%
9	11.765	1569	1579	1610	rBV	332974	678877	100.00%	16.158%
10	13.286	1858	1869	1900	rBV	361793	652944	96.18%	15.540%
11	14.450	2083	2091	2114	rBV	258230	432190	63.66%	10.286%
12	15.609	2303	2312	2336	rBV	421275	672978	99.13%	16.017%

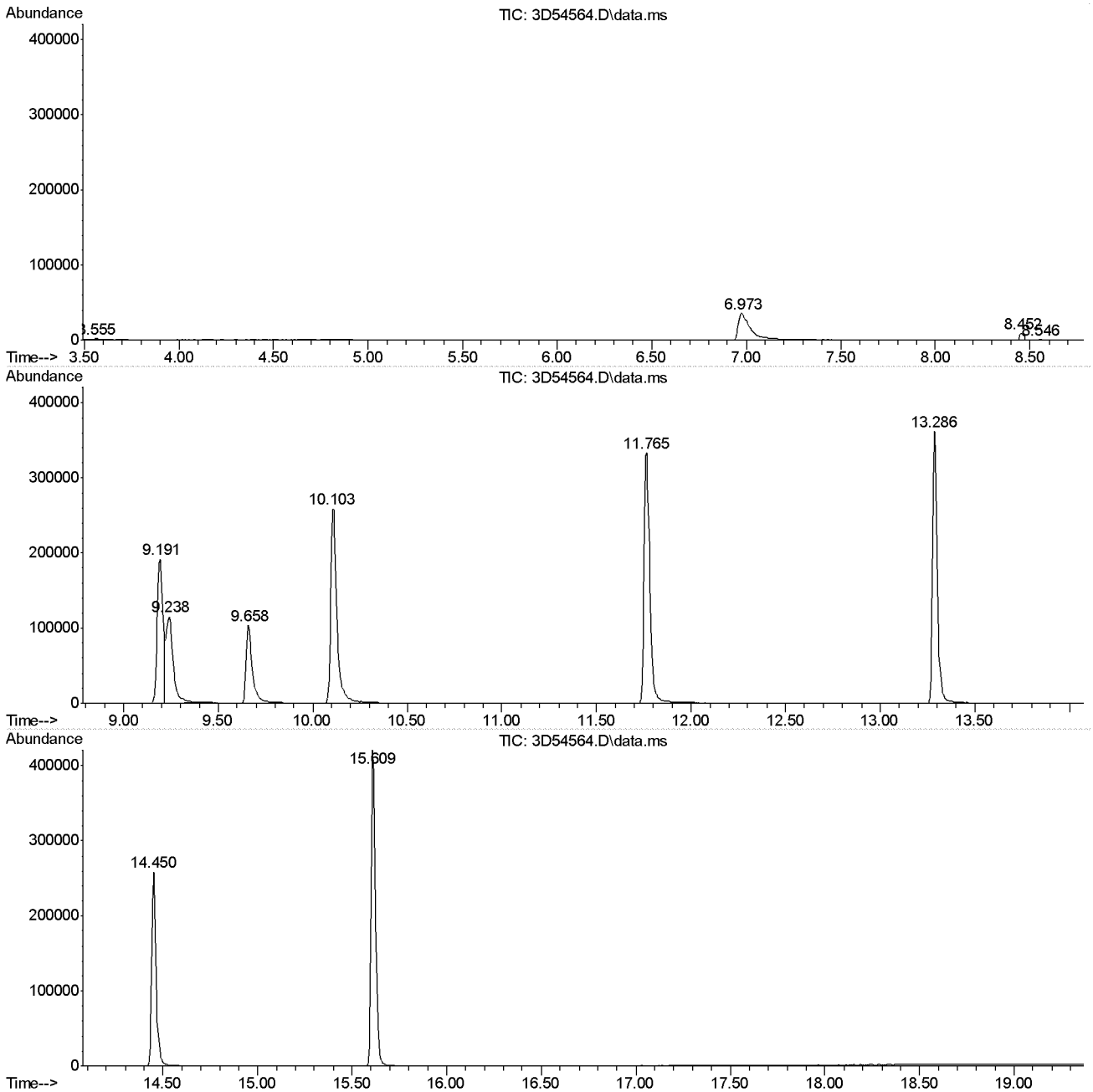
Sum of corrected areas: 4201591

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 29 09:28:55 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

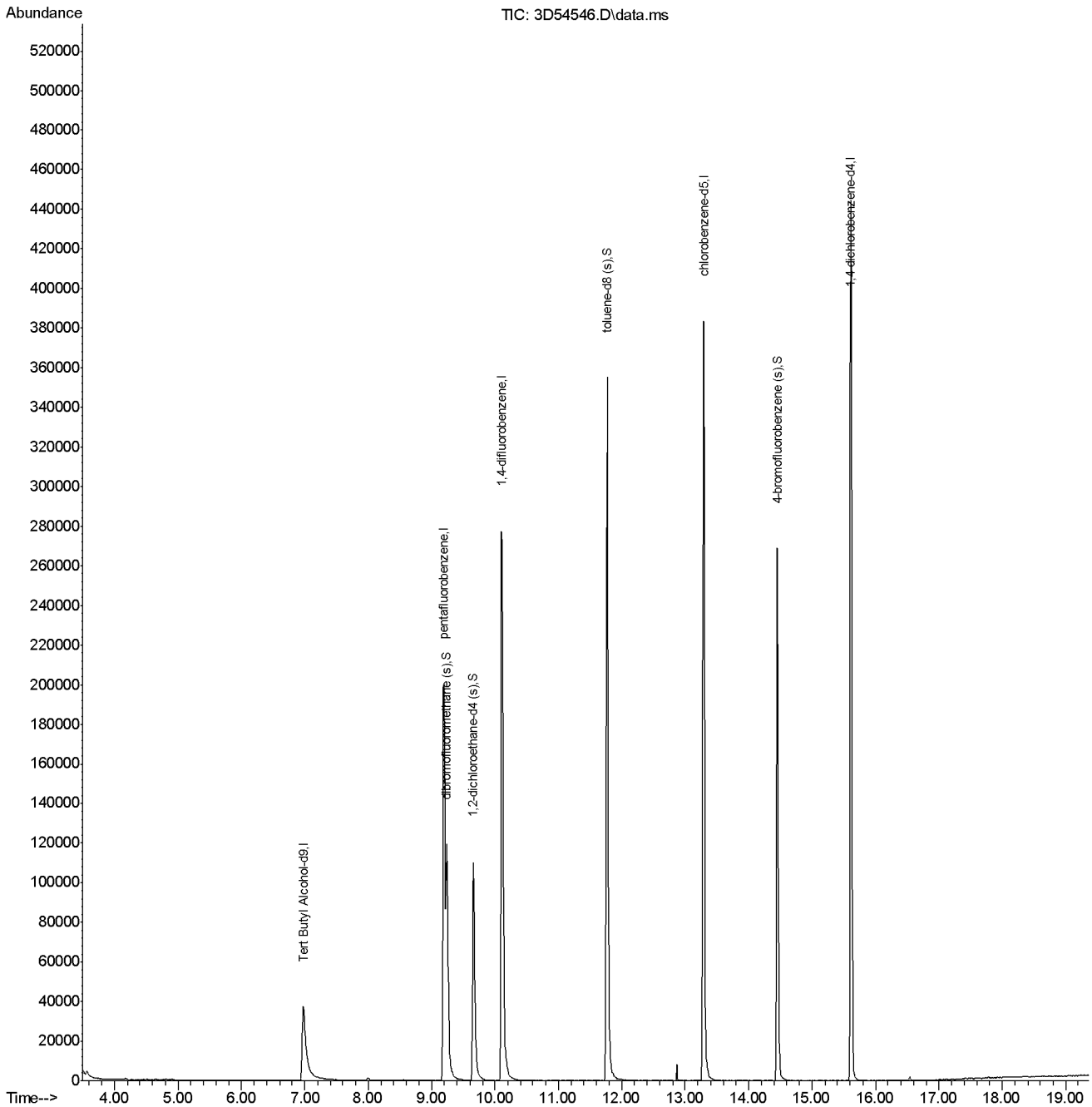
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.973	65	103802	500.00	ug/L	-0.02
4) pentafluorobenzene	9.191	168	184396	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.104	114	266953	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	218352	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	111209	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.238	113	75109	49.74	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.48%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	97296	48.04	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.08%			
72) toluene-d8 (s)	11.766	98	263926	51.03	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.06%			
98) 4-bromofluorobenzene (s)	14.450	95	94442	47.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 94.16%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 29 09:28:55 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54546.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.566	10	15	42	rVB5	3920	13787	1.93%	0.313%
2	4.163	124	129	142	rVB5	964	2337	0.33%	0.053%
3	6.973	656	665	722	rBV	37436	176516	24.71%	4.004%
4	7.991	851	859	872	rBV5	1281	3404	0.48%	0.077%
5	8.557	959	967	978	rBV5	542	1600	0.22%	0.036%
6	9.191	1077	1088	1093	rBV	200294	454905	63.68%	10.320%
7	9.238	1094	1097	1129	rVB	118843	268190	37.54%	6.084%
8	9.658	1167	1177	1221	rBV	110276	265114	37.11%	6.014%
9	10.104	1250	1262	1303	rBV	277212	644055	90.15%	14.611%
10	11.766	1568	1579	1620	rBV	355281	714392	100.00%	16.207%
11	12.867	1784	1789	1794	rBV	8095	8959	1.25%	0.203%
12	13.286	1860	1869	1906	rBV	383620	688432	96.37%	15.618%
13	14.450	2083	2091	2125	rBV	269086	456593	63.91%	10.358%
14	15.609	2300	2312	2342	rBV	444543	706316	98.87%	16.023%
15	16.542	2483	2490	2499	rBV4	1763	2406	0.34%	0.055%
16	17.774	2718	2725	2727	rBV7	538	1005	0.14%	0.023%

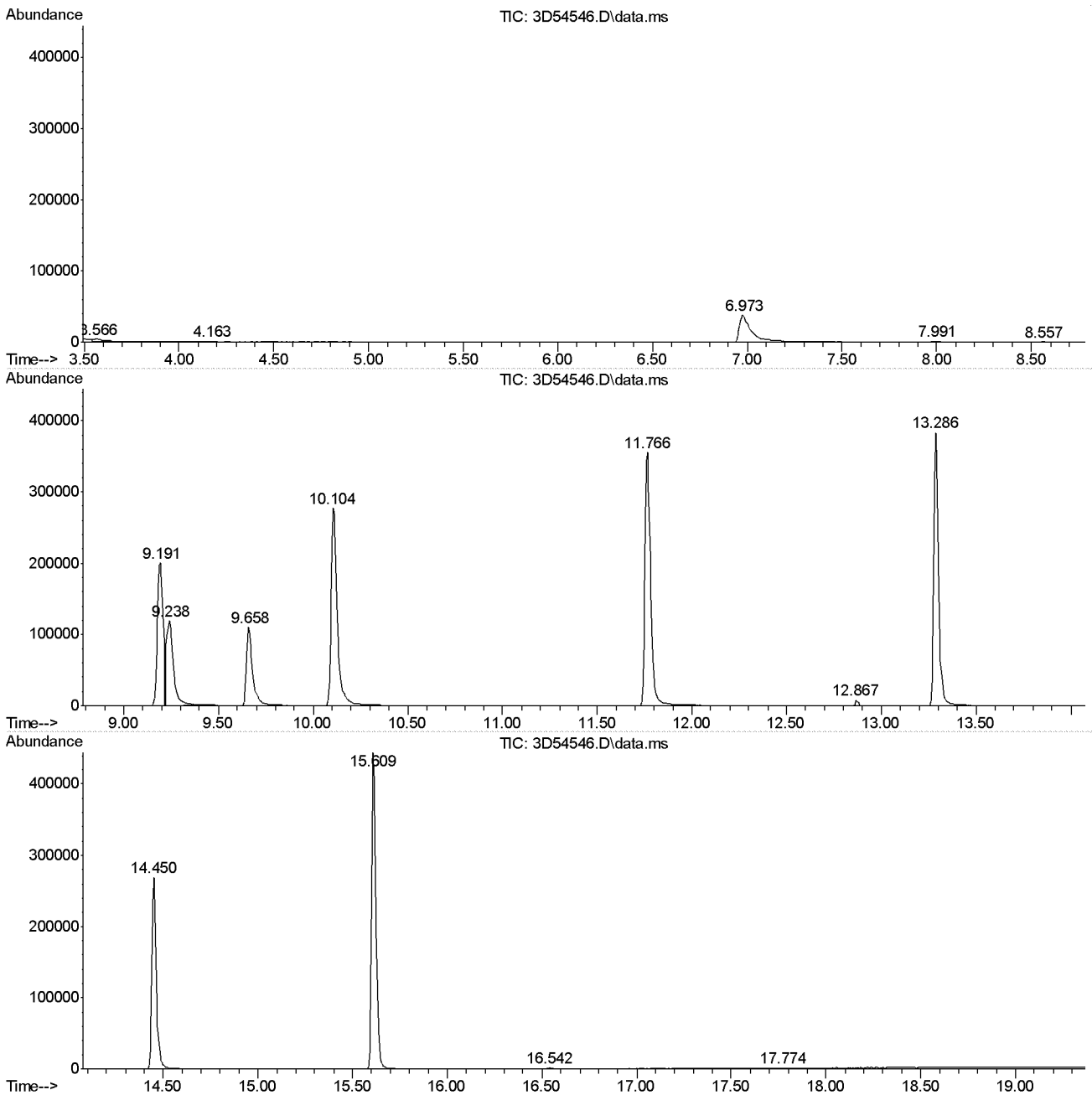
Sum of corrected areas: 4408011

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



ACCUTEST LABORATORIES
JA64438

SII-SSA-0014-003189

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 03 14:17:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	63238	500.00	ug/L	-0.02
4) pentafluorobenzene	10.67	168	204630	50.00	ug/L	0.00
47) 1,4-difluorobenzene	11.59	114	251800	50.00	ug/L	-0.01
78) chlorobenzene-d5	14.59	117	216936	50.00	ug/L	0.00
92) 1,4-dichlorobenzene-d4	16.74	152	114585	50.00	ug/L	-0.01
System Monitoring Compounds						
41) dibromofluoromethane (s)	10.73	113	68090	49.72	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.44%			
42) 1,2-dichloroethane-d4 (s)	11.16	65	67846	48.40	ug/L	-0.01
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.80%			
70) toluene-d8 (s)	13.17	98	236255	48.45	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 96.90%			
94) 4-bromofluorobenzene (s)	15.66	95	82432	47.98	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 122		Recovery = 95.96%			

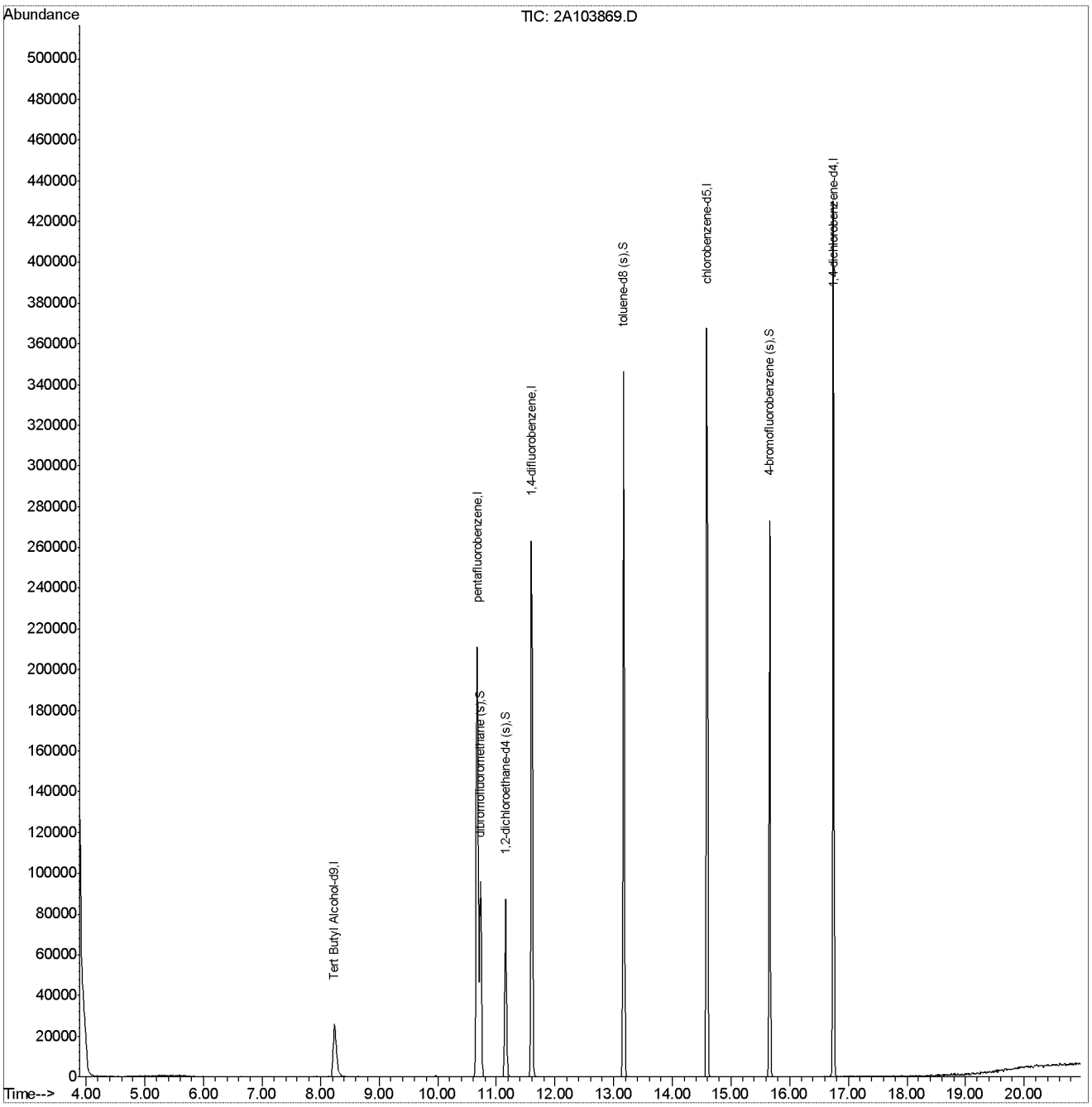
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 03 14:17:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.178	55	57	64	rVB	379	595	0.09%	0.015%
2	4.581	133	134	139	rVB	367	421	0.07%	0.011%
3	4.868	186	189	193	rVB	351	432	0.07%	0.011%
4	4.921	197	199	203	rBV	473	405	0.06%	0.010%
5	5.166	243	246	251	rBV	462	386	0.06%	0.010%
6	5.344	275	280	282	rVB	363	393	0.06%	0.010%
7	5.438	294	298	303	rBV	599	661	0.10%	0.017%
8	5.506	308	311	315	rVV	469	427	0.07%	0.011%
9	5.559	317	321	323	rVV	436	415	0.06%	0.011%
10	5.600	327	329	332	rVV	560	474	0.07%	0.012%
11	5.862	378	379	385	rVB	570	604	0.09%	0.016%
12	5.920	385	390	391	rBV	328	482	0.08%	0.012%
13	6.019	408	409	418	rBB	453	739	0.12%	0.019%
14	6.129	429	430	436	rBB	461	477	0.07%	0.012%
15	6.171	436	438	442	rBB	405	569	0.09%	0.015%
16	6.228	445	449	452	rBB	435	384	0.06%	0.010%
17	6.359	471	474	481	rBB	271	603	0.09%	0.016%
18	6.516	502	504	508	rBB	452	380	0.06%	0.010%
19	6.558	508	512	514	rBB	417	514	0.08%	0.013%
20	6.647	523	529	535	rBB	398	699	0.11%	0.018%
21	6.955	586	588	595	rBB	228	451	0.07%	0.012%
22	7.049	605	606	612	rBB	246	413	0.06%	0.011%
23	7.358	660	665	667	rBB	395	369	0.06%	0.010%
24	7.442	676	681	683	rBB	230	379	0.06%	0.010%
25	7.755	736	741	743	rBB	329	383	0.06%	0.010%
26	7.808	748	751	758	rBB	233	511	0.08%	0.013%
27	7.923	770	773	779	rBB	276	497	0.08%	0.013%
28	8.106	800	808	809	rBB	244	471	0.07%	0.012%
29	8.137	810	814	818	rBB	246	479	0.07%	0.012%
30	8.231	819	832	857	rBV2	26109	103784	16.24%	2.690%
31	8.373	857	859	863	rVV2	592	874	0.14%	0.023%
32	8.414	866	867	871	rVV	685	608	0.10%	0.016%
33	8.493	881	882	888	rBB	404	422	0.07%	0.011%
34	8.582	894	899	904	rVB	284	638	0.10%	0.017%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

35	8.665	914	915	921	rVB	322	497	0.08%	0.013%
36	8.775	929	936	938	rBB	277	570	0.09%	0.015%
37	8.916	961	963	967	rBB	305	403	0.06%	0.010%
38	9.073	992	993	999	rBB	265	447	0.07%	0.012%
39	9.173	1008	1012	1018	rBB	241	561	0.09%	0.015%
40	9.277	1027	1032	1034	rBB	270	407	0.06%	0.011%
41	9.314	1036	1039	1043	rBV	321	492	0.08%	0.013%
42	9.398	1050	1055	1057	rVB	273	436	0.07%	0.011%
43	9.497	1072	1074	1078	rVB	260	377	0.06%	0.010%
44	9.575	1085	1089	1093	rBB	292	485	0.08%	0.013%
45	9.685	1108	1110	1114	rBB	261	359	0.06%	0.009%
46	9.779	1124	1128	1132	rBB	230	372	0.06%	0.010%
47	9.963	1156	1163	1170	rBB	827	1798	0.28%	0.047%
48	10.669	1287	1298	1304	rBV	211173	498328	77.97%	12.918%
49	10.726	1304	1309	1323	rVB2	96011	211324	33.06%	5.478%
50	11.155	1381	1391	1405	rBB	87502	187637	29.36%	4.864%
51	11.594	1465	1475	1498	rBB	263393	532473	83.31%	13.803%
52	13.169	1767	1776	1792	rBB	346783	598243	93.60%	15.508%
53	14.586	2039	2047	2058	rBB	367835	598453	93.64%	15.514%
54	15.658	2244	2252	2263	rBB	273217	419206	65.59%	10.867%
55	16.343	2381	2383	2388	rBB	416	439	0.07%	0.011%
56	16.579	2427	2428	2435	rBV	284	595	0.09%	0.015%
57	16.631	2435	2438	2442	rVB	310	472	0.07%	0.012%
58	16.741	2447	2459	2473	rBB	430373	639126	100.00%	16.568%
59	16.835	2473	2477	2481	rBV	343	666	0.10%	0.017%
60	16.898	2486	2489	2491	rVB	449	387	0.06%	0.010%
61	16.914	2491	2492	2495	rBV	558	447	0.07%	0.012%
62	17.593	2619	2622	2628	rVB	313	441	0.07%	0.011%
63	17.651	2628	2633	2637	rBV	350	562	0.09%	0.015%
64	18.001	2699	2700	2707	rBV	209	374	0.06%	0.010%
65	18.148	2726	2728	2735	rVB	294	380	0.06%	0.010%
66	18.216	2735	2741	2744	rBV	331	632	0.10%	0.016%
67	18.247	2744	2747	2754	rBV	386	472	0.07%	0.012%
68	18.415	2776	2779	2783	rVV	641	564	0.09%	0.015%
69	18.519	2796	2799	2801	rVV2	600	399	0.06%	0.010%
70	18.556	2804	2806	2810	rBV	792	529	0.08%	0.014%
71	18.592	2810	2813	2815	rVV	454	504	0.08%	0.013%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

72	18.619	2815	2818	2821	rVB	549	732	0.11%	0.019%
73	18.671	2826	2828	2840	rBV2	487	853	0.13%	0.022%
74	18.755	2840	2844	2848	rBV	737	688	0.11%	0.018%
75	18.802	2849	2853	2856	rVB2	718	713	0.11%	0.018%
76	18.823	2856	2857	2862	rBV2	779	679	0.11%	0.018%
77	18.864	2862	2865	2869	rVB	662	649	0.10%	0.017%
78	18.906	2870	2873	2876	rVB2	458	448	0.07%	0.012%
79	18.932	2876	2878	2884	rVB2	748	948	0.15%	0.025%
80	18.974	2884	2886	2888	rBV	550	553	0.09%	0.014%
81	19.037	2895	2898	2900	rBV2	845	629	0.10%	0.016%
82	19.058	2900	2902	2903	rVB	741	411	0.06%	0.011%
83	19.068	2903	2904	2908	rVB	738	643	0.10%	0.017%
84	19.105	2908	2911	2912	rBV	673	722	0.11%	0.019%
85	19.157	2920	2921	2924	rBV2	545	375	0.06%	0.010%
86	19.178	2924	2925	2928	rBV2	491	368	0.06%	0.010%
87	19.199	2928	2929	2936	rVB3	743	1058	0.17%	0.027%
88	19.262	2939	2941	2949	rBV3	987	2160	0.34%	0.056%
89	19.319	2949	2952	2955	rVV4	612	464	0.07%	0.012%
90	19.377	2960	2963	2966	rBV3	654	744	0.12%	0.019%
91	19.461	2977	2979	2984	rBV2	743	746	0.12%	0.019%
92	19.502	2984	2987	2990	rBV2	534	717	0.11%	0.019%
93	19.560	2996	2998	3001	rBV2	787	719	0.11%	0.019%
94	19.618	3005	3009	3017	rVV5	857	1247	0.20%	0.032%
95	19.691	3017	3023	3028	rBV5	925	2135	0.33%	0.055%
96	19.774	3036	3039	3044	rBV3	1245	2080	0.33%	0.054%
97	20.041	3060	3090	3095	rBV6	1492	10096	1.58%	0.262%
98	20.161	3111	3113	3119	rBV3	684	1149	0.18%	0.030%
99	20.266	3131	3133	3147	rVB4	929	1990	0.31%	0.052%
100	20.501	3173	3178	3198	rBV8	771	2630	0.41%	0.068%

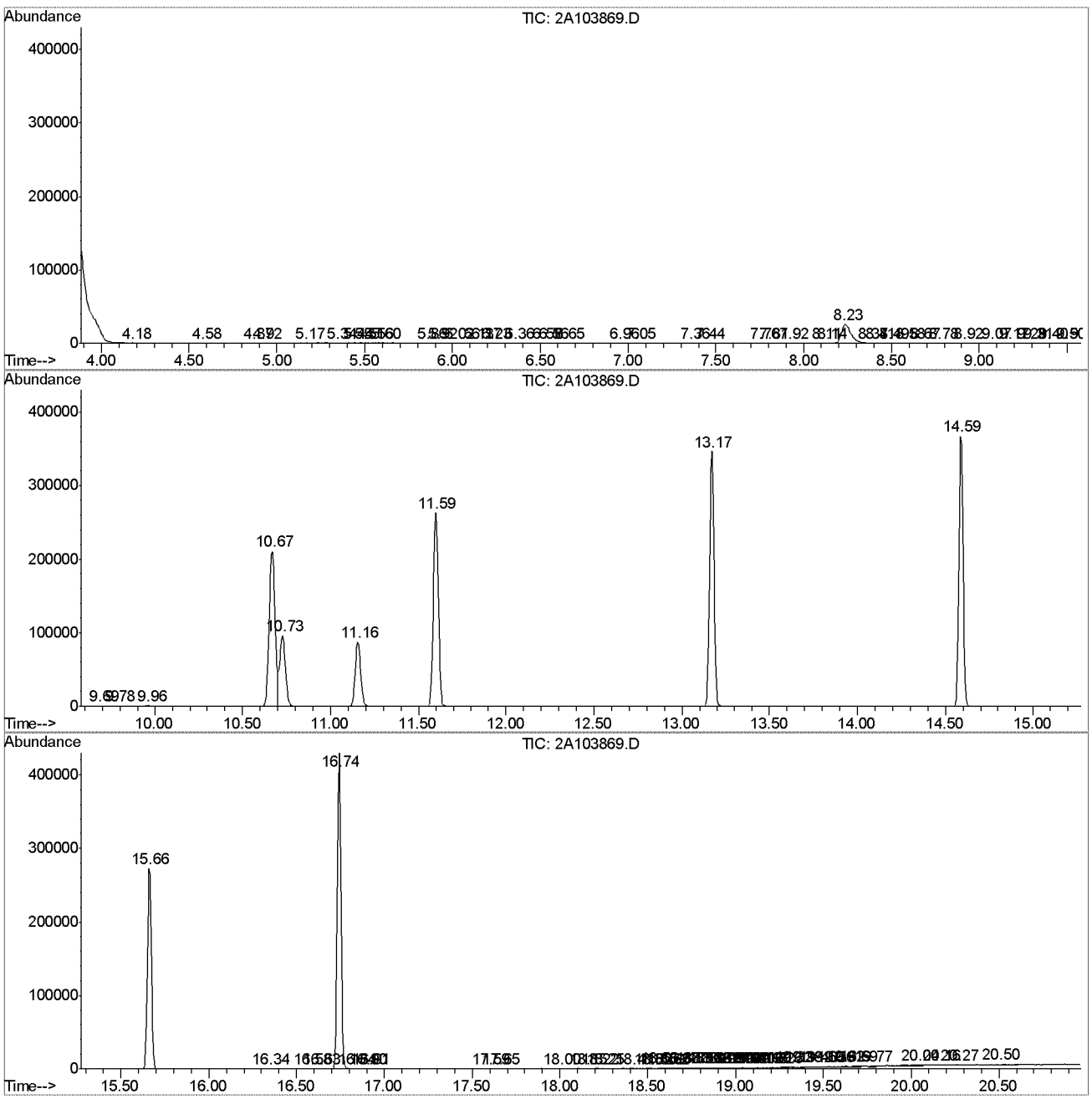
Sum of corrected areas: 3857542

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 03 14:17:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration

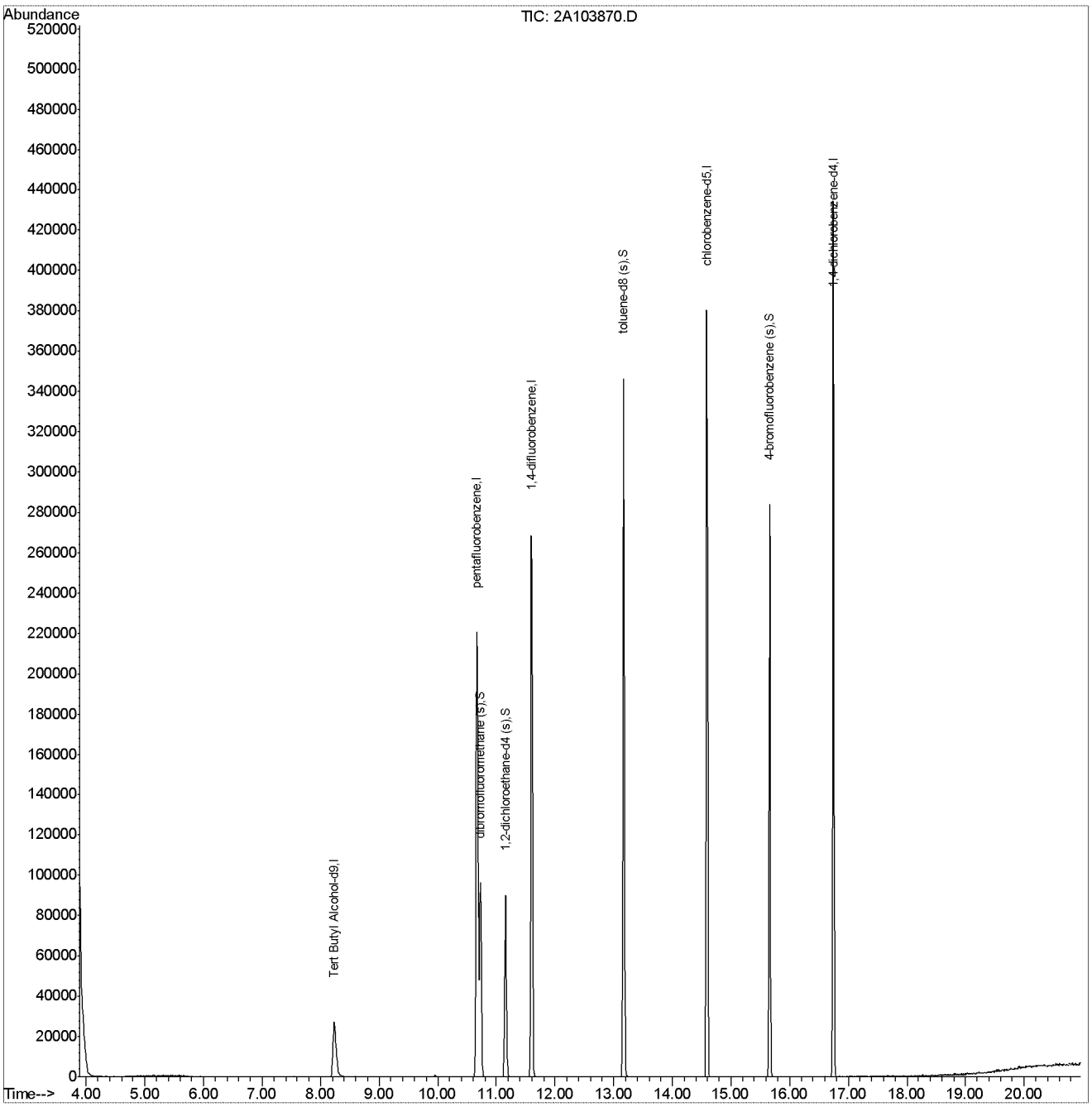
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	65884	500.00	ug/L	-0.01
4) pentafluorobenzene	10.66	168	211973	50.00	ug/L	-0.01
47) 1,4-difluorobenzene	11.59	114	259632	50.00	ug/L	-0.01
78) chlorobenzene-d5	14.59	117	222234	50.00	ug/L	-0.01
92) 1,4-dichlorobenzene-d4	16.74	152	117336	50.00	ug/L	-0.01
System Monitoring Compounds						
41) dibromofluoromethane (s)	10.73	113	70013	49.35	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.70%			
42) 1,2-dichloroethane-d4 (s)	11.16	65	70212	48.35	ug/L	-0.01
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.70%			
70) toluene-d8 (s)	13.17	98	243855	48.50	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 97.00%			
94) 4-bromofluorobenzene (s)	15.66	95	84418	47.99	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 122		Recovery = 95.98%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 03 14:17:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.345	84	89	97	rVB2	364	661	0.10%	0.017%
2	4.633	138	144	145	rBB2	250	360	0.05%	0.009%
3	4.654	145	148	150	rBV	289	404	0.06%	0.010%
4	4.685	150	154	156	rVV	274	409	0.06%	0.010%
5	4.732	159	163	172	rVV	275	782	0.12%	0.020%
6	4.795	172	175	178	rVV	373	373	0.06%	0.009%
7	4.821	178	180	185	rVV	358	444	0.07%	0.011%
8	4.879	185	191	195	rVV	539	508	0.08%	0.013%
9	4.978	204	210	213	rBV	375	530	0.08%	0.013%
10	5.119	235	237	239	rBV	475	359	0.05%	0.009%
11	5.146	239	242	251	rVV	517	749	0.11%	0.019%
12	5.318	272	275	278	rVB	456	358	0.05%	0.009%
13	5.360	281	283	287	rVB	496	348	0.05%	0.009%
14	5.470	302	304	308	rVB	352	351	0.05%	0.009%
15	5.517	308	313	317	rBV	465	757	0.12%	0.019%
16	5.585	322	326	328	rVV	383	525	0.08%	0.013%
17	5.616	328	332	336	rVV	441	734	0.11%	0.019%
18	5.648	336	338	347	rVB	460	759	0.12%	0.019%
19	5.873	375	381	385	rVB2	528	987	0.15%	0.025%
20	6.019	402	409	411	rVB	503	718	0.11%	0.018%
21	6.071	418	419	425	rBB	260	423	0.06%	0.011%
22	7.489	688	690	695	rBB	214	364	0.06%	0.009%
23	7.531	695	698	704	rBB	396	589	0.09%	0.015%
24	7.583	704	708	713	rBB	291	450	0.07%	0.011%
25	7.687	727	728	736	rBB	285	432	0.07%	0.011%
26	8.226	817	831	858	rBV2	27463	108000	16.50%	2.728%
27	8.373	858	859	868	rVB2	581	1091	0.17%	0.028%
28	8.566	891	896	898	rBV	282	493	0.08%	0.012%
29	8.624	902	907	908	rBB	264	358	0.05%	0.009%
30	8.681	914	918	921	rBB	295	432	0.07%	0.011%
31	8.713	921	924	928	rBB	301	492	0.08%	0.012%
32	8.749	928	931	933	rBV	288	361	0.06%	0.009%
33	8.781	933	937	941	rVB	283	514	0.08%	0.013%
34	8.812	941	943	947	rBB	239	343	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

35	8.890	954	958	963	rVB	385	632	0.10%	0.016%
36	9.032	983	985	991	rBB	285	434	0.07%	0.011%
37	9.126	1000	1003	1007	rBB	241	381	0.06%	0.010%
38	9.162	1007	1010	1014	rBB	435	349	0.05%	0.009%
39	9.288	1030	1034	1037	rBB	333	432	0.07%	0.011%
40	9.351	1042	1046	1050	rBB	311	542	0.08%	0.014%
41	9.419	1054	1059	1062	rBB	263	460	0.07%	0.012%
42	9.523	1073	1079	1081	rBB	301	485	0.07%	0.012%
43	9.555	1082	1085	1089	rBB	274	364	0.06%	0.009%
44	9.691	1108	1111	1115	rBB	301	347	0.05%	0.009%
45	9.952	1156	1161	1168	rBB2	915	1995	0.30%	0.050%
46	10.663	1286	1297	1304	rBV	220633	520948	79.57%	13.157%
47	10.721	1304	1308	1323	rVB2	96491	212762	32.50%	5.373%
48	11.155	1381	1391	1405	rBB2	90088	194214	29.66%	4.905%
49	11.594	1465	1475	1496	rBB	268759	547571	83.63%	13.829%
50	13.169	1766	1776	1792	rBB	346603	619038	94.55%	15.634%
51	14.586	2039	2047	2059	rBB	380596	614976	93.93%	15.531%
52	15.658	2244	2252	2264	rBB	283924	431169	65.86%	10.889%
53	16.328	2376	2380	2385	rBV	215	511	0.08%	0.013%
54	16.432	2393	2400	2402	rBB	379	516	0.08%	0.013%
55	16.464	2402	2406	2409	rBB	246	357	0.05%	0.009%
56	16.563	2423	2425	2429	rBB	454	418	0.06%	0.011%
57	16.615	2431	2435	2438	rBV	418	556	0.08%	0.014%
58	16.668	2442	2445	2447	rBB	456	357	0.05%	0.009%
59	16.741	2450	2459	2471	rVB	434528	654724	100.00%	16.535%
60	16.903	2489	2490	2500	rVB	505	901	0.14%	0.023%
61	16.982	2500	2505	2509	rBV	339	797	0.12%	0.020%
62	17.416	2586	2588	2594	rVV	383	450	0.07%	0.011%
63	17.484	2594	2601	2606	rVV	321	419	0.06%	0.011%
64	17.515	2606	2607	2613	rBV	387	354	0.05%	0.009%
65	17.635	2627	2630	2634	rBV	381	339	0.05%	0.009%
66	18.069	2707	2713	2717	rBV	477	503	0.08%	0.013%
67	18.127	2721	2724	2727	rVV2	328	371	0.06%	0.009%
68	18.185	2732	2735	2739	rVB	392	371	0.06%	0.009%
69	18.216	2739	2741	2745	rBV	435	443	0.07%	0.011%
70	18.273	2751	2752	2755	rVV	689	489	0.07%	0.012%
71	18.368	2768	2770	2773	rVB	327	344	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

72	18.441	2779	2784	2787	rVB	372	550	0.08%	0.014%
73	18.493	2792	2794	2798	rVB	440	398	0.06%	0.010%
74	18.551	2803	2805	2808	rBV	451	452	0.07%	0.011%
75	18.603	2813	2815	2817	rBV	620	399	0.06%	0.010%
76	18.640	2819	2822	2826	rVB	638	725	0.11%	0.018%
77	18.671	2826	2828	2830	rBV	396	338	0.05%	0.009%
78	18.708	2833	2835	2839	rBV	518	442	0.07%	0.011%
79	18.744	2840	2842	2847	rVB	469	636	0.10%	0.016%
80	18.807	2847	2854	2857	rBV2	856	1254	0.19%	0.032%
81	18.828	2857	2858	2862	rBV	953	753	0.12%	0.019%
82	18.864	2862	2865	2867	rVB2	499	560	0.09%	0.014%
83	18.932	2874	2878	2880	rBV3	897	1028	0.16%	0.026%
84	18.990	2886	2889	2891	rVB2	479	400	0.06%	0.010%
85	19.006	2891	2892	2896	rBV2	477	439	0.07%	0.011%
86	19.058	2900	2902	2906	rBV2	528	790	0.12%	0.020%
87	19.136	2915	2917	2924	rBV4	575	1085	0.17%	0.027%
88	19.183	2924	2926	2932	rVV4	628	1020	0.16%	0.026%
89	19.225	2932	2934	2936	rVV2	880	581	0.09%	0.015%
90	19.246	2936	2938	2943	rVB3	584	632	0.10%	0.016%
91	19.340	2953	2956	2957	rVB3	612	478	0.07%	0.012%
92	19.351	2957	2958	2961	rBV3	802	860	0.13%	0.022%
93	19.382	2961	2964	2967	rVV3	907	905	0.14%	0.023%
94	19.440	2971	2975	2982	rVB3	738	1346	0.21%	0.034%
95	19.492	2982	2985	2987	rBV3	836	811	0.12%	0.020%
96	19.565	2998	2999	3006	rBV5	810	984	0.15%	0.025%
97	19.612	3006	3008	3011	rBV	816	770	0.12%	0.019%
98	19.738	3030	3032	3034	rBV3	989	816	0.12%	0.021%
99	19.910	3061	3065	3071	rBV4	1246	1994	0.30%	0.050%
100	20.679	3210	3212	3226	rVB6	905	2371	0.36%	0.060%

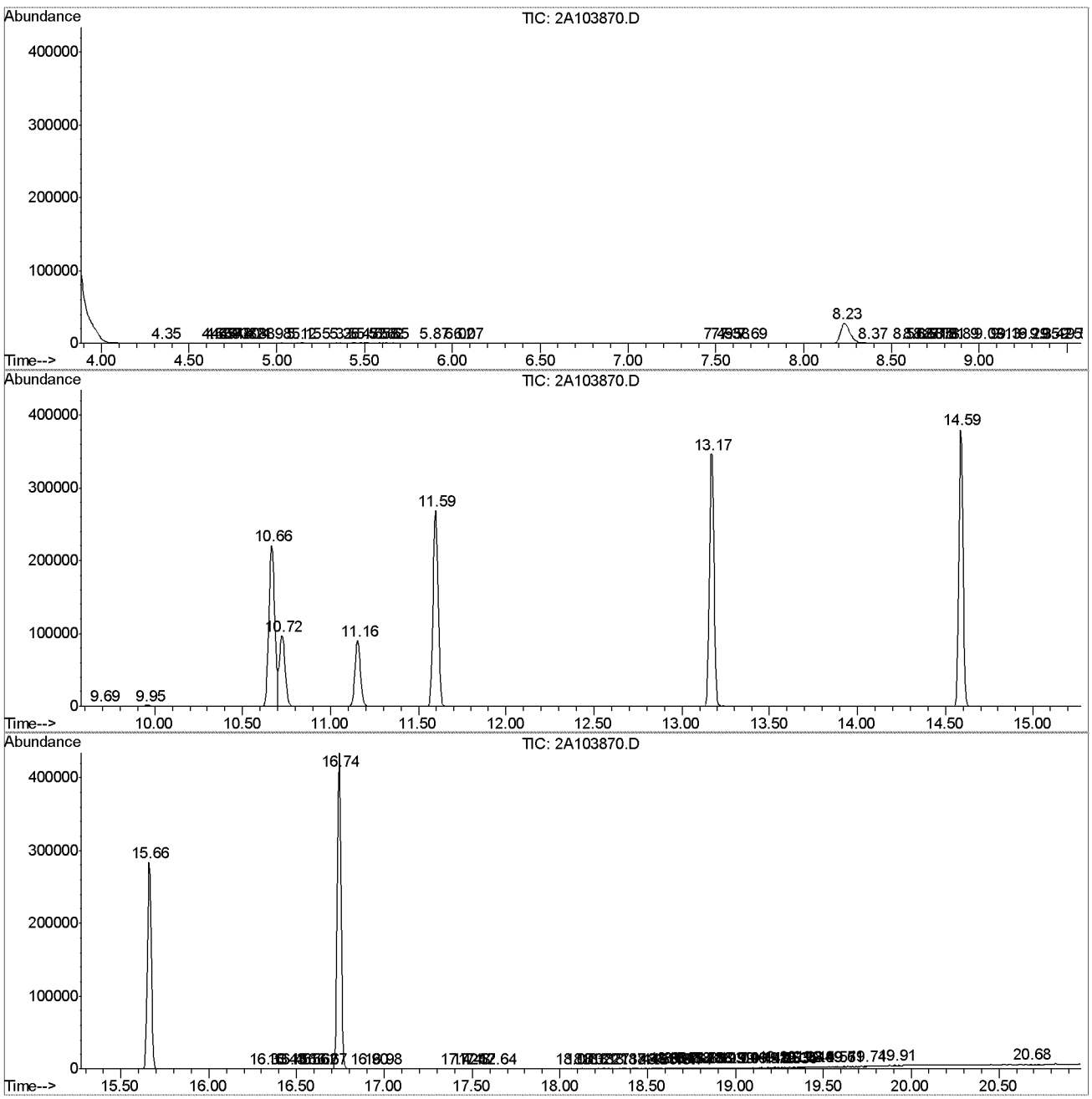
Sum of corrected areas: 3959594

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 29 14:49:24 2010
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	61001	500.00	ug/L	-0.02
4) pentafluorobenzene	10.66	168	193313	50.00	ug/L	-0.01
47) 1,4-difluorobenzene	11.59	114	232437	50.00	ug/L	-0.01
78) chlorobenzene-d5	14.59	117	195440	50.00	ug/L	-0.01
92) 1,4-dichlorobenzene-d4	16.74	152	102476	50.00	ug/L	-0.01
System Monitoring Compounds						
41) dibromofluoromethane (s)	10.72	113	60915	47.08	ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 94.16%			
42) 1,2-dichloroethane-d4 (s)	11.15	65	60556	45.72	ug/L	-0.02
Spiked Amount 50.000	Range 64 - 135		Recovery = 91.44%			
70) toluene-d8 (s)	13.16	98	214948	47.75	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 117		Recovery = 95.50%			
94) 4-bromofluorobenzene (s)	15.66	95	73748	48.00	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 122		Recovery = 96.00%			

Target Compounds	Qvalue

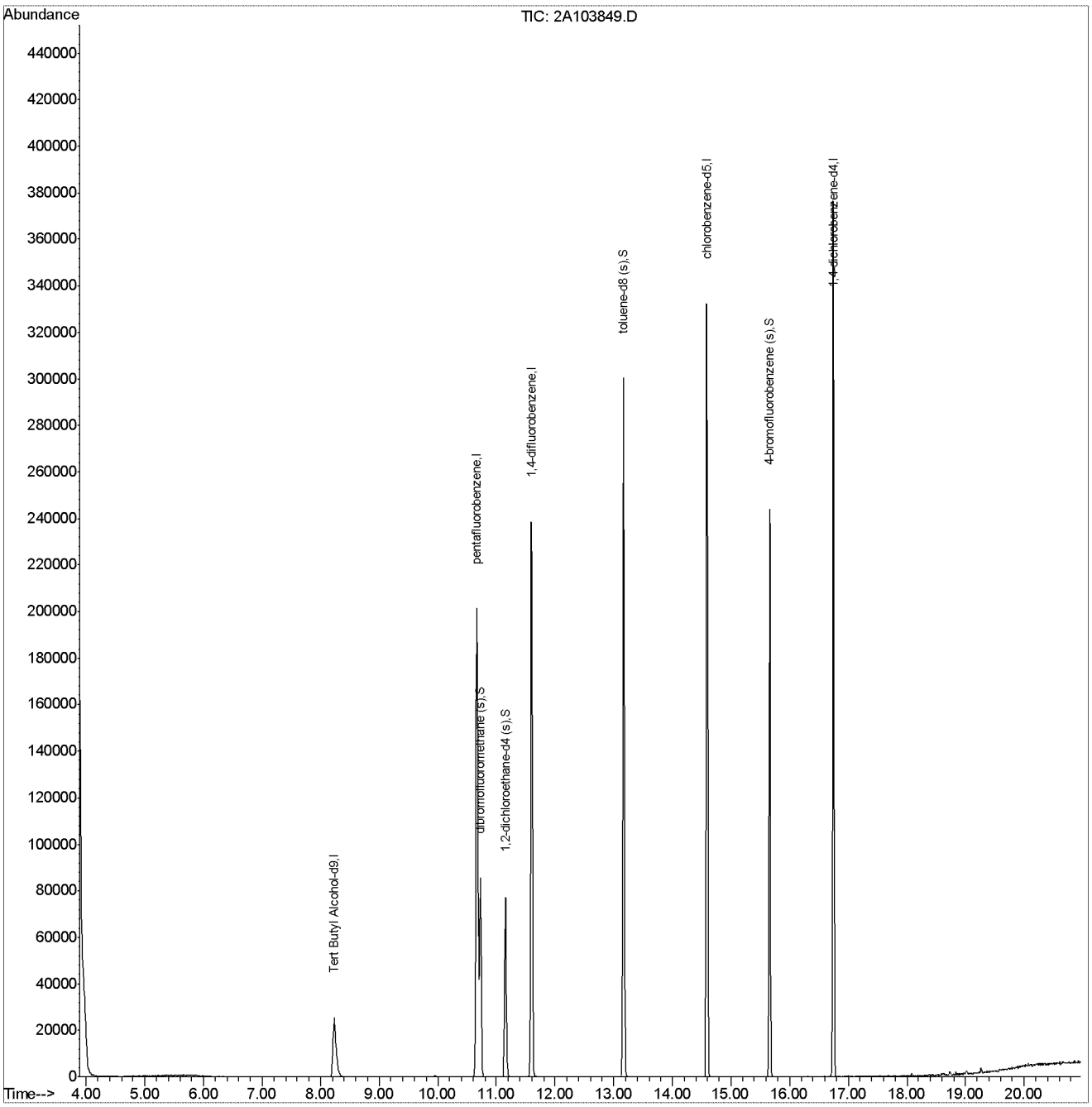
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SII-SSA-0014-003205

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 29 14:49:24 2010
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.162	52	54	64	rVB	243	455	0.08%	0.013%
2	4.513	118	121	130	rVB	356	965	0.17%	0.027%
3	4.570	130	132	136	rBV	351	484	0.08%	0.014%
4	4.659	142	149	152	rBV	309	403	0.07%	0.011%
5	4.712	153	159	167	rVV	170	507	0.09%	0.014%
6	4.827	178	181	190	rBV	170	308	0.05%	0.009%
7	4.905	194	196	198	rBV	354	265	0.05%	0.008%
8	4.984	206	211	213	rBV	282	351	0.06%	0.010%
9	5.297	269	271	274	rVB	284	261	0.05%	0.007%
10	5.318	274	275	282	rBV	314	347	0.06%	0.010%
11	5.386	283	288	291	rVB	232	262	0.05%	0.007%
12	5.538	314	317	320	rVB	398	338	0.06%	0.010%
13	5.559	320	321	326	rBV	440	451	0.08%	0.013%
14	5.700	347	348	355	rBV	231	456	0.08%	0.013%
15	5.867	378	380	394	rVB	488	1009	0.18%	0.029%
16	5.982	399	402	406	rVB	410	516	0.09%	0.015%
17	6.155	432	435	440	rVB	448	583	0.10%	0.017%
18	6.213	440	446	448	rBV	418	635	0.11%	0.018%
19	6.265	455	456	461	rVB	248	342	0.06%	0.010%
20	6.359	470	474	475	rBB	234	276	0.05%	0.008%
21	6.474	491	496	501	rBB	240	393	0.07%	0.011%
22	6.526	502	506	509	rBB	371	302	0.05%	0.009%
23	6.594	512	519	522	rBB	270	435	0.08%	0.012%
24	6.835	561	565	567	rBB	382	361	0.06%	0.010%
25	6.866	567	571	577	rBB	433	521	0.09%	0.015%
26	7.013	596	599	603	rBB	389	366	0.06%	0.010%
27	8.231	817	832	856	rBV	25476	99105	17.36%	2.822%
28	8.394	862	863	868	rVB	449	326	0.06%	0.009%
29	8.446	869	873	876	rBB	278	269	0.05%	0.008%
30	8.660	910	914	916	rBB	270	276	0.05%	0.008%
31	8.864	949	953	956	rBB	417	313	0.05%	0.009%
32	9.947	1157	1160	1166	rBB	643	979	0.17%	0.028%
33	10.664	1285	1297	1303	rBV	201430	464999	81.43%	13.241%
34	10.721	1303	1308	1321	rVB	85480	191649	33.56%	5.457%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

35	11.155	1381	1391	1404	rBB	77506	167553	29.34%	4.771%
36	11.595	1464	1475	1497	rBB	238664	489855	85.79%	13.948%
37	11.746	1502	1504	1508	rBB	396	268	0.05%	0.008%
38	13.164	1766	1775	1790	rBB	300565	542973	95.09%	15.461%
39	14.586	2039	2047	2059	rBB	332516	536413	93.94%	15.274%
40	15.658	2244	2252	2262	rBB	244231	375397	65.74%	10.689%
41	16.192	2349	2354	2356	rBB	260	298	0.05%	0.008%
42	16.234	2356	2362	2364	rBB	390	443	0.08%	0.013%
43	16.307	2371	2376	2381	rBB	255	469	0.08%	0.013%
44	16.427	2394	2399	2402	rBB	269	419	0.07%	0.012%
45	16.495	2409	2412	2413	rBB	429	275	0.05%	0.008%
46	16.548	2419	2422	2425	rVB	395	441	0.08%	0.013%
47	16.616	2428	2435	2440	rBB	411	872	0.15%	0.025%
48	16.741	2448	2459	2473	rBV	376739	571023	100.00%	16.260%
49	16.820	2473	2474	2478	rVB	490	439	0.08%	0.013%
50	16.856	2478	2481	2483	rBV	500	552	0.10%	0.016%
51	17.003	2504	2509	2514	rVB2	668	774	0.14%	0.022%
52	17.348	2572	2575	2580	rBV	332	270	0.05%	0.008%
53	17.536	2608	2611	2620	rVB	380	570	0.10%	0.016%
54	17.656	2628	2634	2637	rVB	281	470	0.08%	0.013%
55	17.892	2674	2679	2682	rBV	294	300	0.05%	0.009%
56	17.928	2682	2686	2689	rVV	511	413	0.07%	0.012%
57	17.965	2689	2693	2695	rVV	343	300	0.05%	0.009%
58	18.028	2704	2705	2711	rVV	300	406	0.07%	0.012%
59	18.080	2711	2715	2722	rVV2	1061	1616	0.28%	0.046%
60	18.206	2738	2739	2749	rVB	316	410	0.07%	0.012%
61	18.300	2755	2757	2765	rVB	348	579	0.10%	0.016%
62	18.357	2765	2768	2772	rBV	422	716	0.13%	0.020%
63	18.540	2802	2803	2807	rBV	535	445	0.08%	0.013%
64	18.582	2808	2811	2815	rVB	764	598	0.10%	0.017%
65	18.619	2815	2818	2820	rBV	1048	671	0.12%	0.019%
66	18.634	2820	2821	2823	rVB	874	303	0.05%	0.009%
67	18.676	2827	2829	2832	rBV	429	358	0.06%	0.010%
68	18.729	2832	2839	2848	rVB2	1703	3209	0.56%	0.091%
69	18.802	2848	2853	2855	rBV	682	837	0.15%	0.024%
70	18.833	2855	2859	2863	rBV3	1390	1288	0.23%	0.037%
71	18.859	2863	2864	2867	rVB	657	389	0.07%	0.011%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

72	18.886	2867	2869	2870	rBV	829	326	0.06%	0.009%
73	18.906	2871	2873	2875	rVB	597	394	0.07%	0.011%
74	18.933	2875	2878	2884	rVB3	755	1126	0.20%	0.032%
75	18.969	2884	2885	2890	rBV2	746	940	0.16%	0.027%
76	19.016	2890	2894	2900	rVB3	1901	2989	0.52%	0.085%
77	19.063	2900	2903	2905	rBV3	722	665	0.12%	0.019%
78	19.105	2908	2911	2914	rVB	527	400	0.07%	0.011%
79	19.131	2914	2916	2918	rBV	664	555	0.10%	0.016%
80	19.168	2921	2923	2927	rVB2	553	607	0.11%	0.017%
81	19.199	2927	2929	2931	rBV2	458	398	0.07%	0.011%
82	19.225	2931	2934	2937	rBV2	666	444	0.08%	0.013%
83	19.262	2937	2941	2947	rVB3	2212	3117	0.55%	0.089%
84	19.346	2950	2957	2958	rBV3	941	1812	0.32%	0.052%
85	19.403	2963	2968	2969	rBV3	582	792	0.14%	0.023%
86	19.424	2969	2972	2981	rBV5	923	1929	0.34%	0.055%
87	19.565	2998	2999	3001	rBV	807	436	0.08%	0.012%
88	19.592	3001	3004	3009	rVV4	812	1261	0.22%	0.036%
89	19.628	3009	3011	3015	rVB4	796	892	0.16%	0.025%
90	19.654	3015	3016	3019	rBV2	1103	693	0.12%	0.020%
91	19.707	3019	3026	3028	rVV3	814	775	0.14%	0.022%
92	19.728	3028	3030	3035	rBV5	943	1137	0.20%	0.032%
93	19.790	3035	3042	3044	rBV3	1018	1386	0.24%	0.039%
94	19.806	3044	3045	3052	rBV4	844	1374	0.24%	0.039%
95	19.853	3052	3054	3058	rBV3	816	1230	0.22%	0.035%
96	19.879	3058	3059	3066	rBV5	842	1064	0.19%	0.030%
97	19.963	3066	3075	3079	rBV5	1199	3447	0.60%	0.098%
98	20.193	3110	3119	3120	rBV6	682	1428	0.25%	0.041%
99	20.397	3135	3158	3160	rBV8	1324	6192	1.08%	0.176%
100	20.507	3176	3179	3189	rBV5	1011	1963	0.34%	0.056%

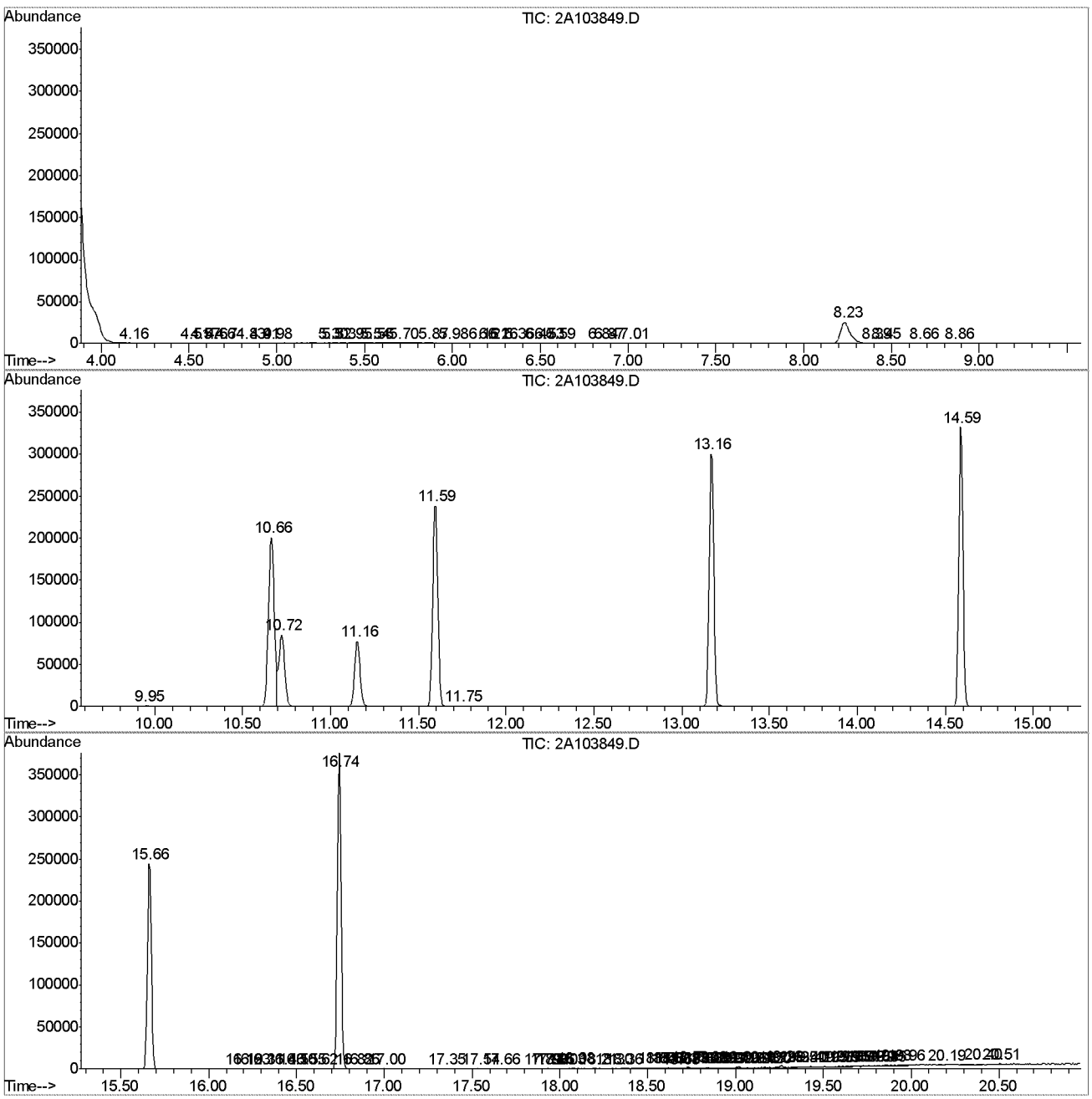
Sum of corrected areas: 3511892

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 29 08:32:58 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

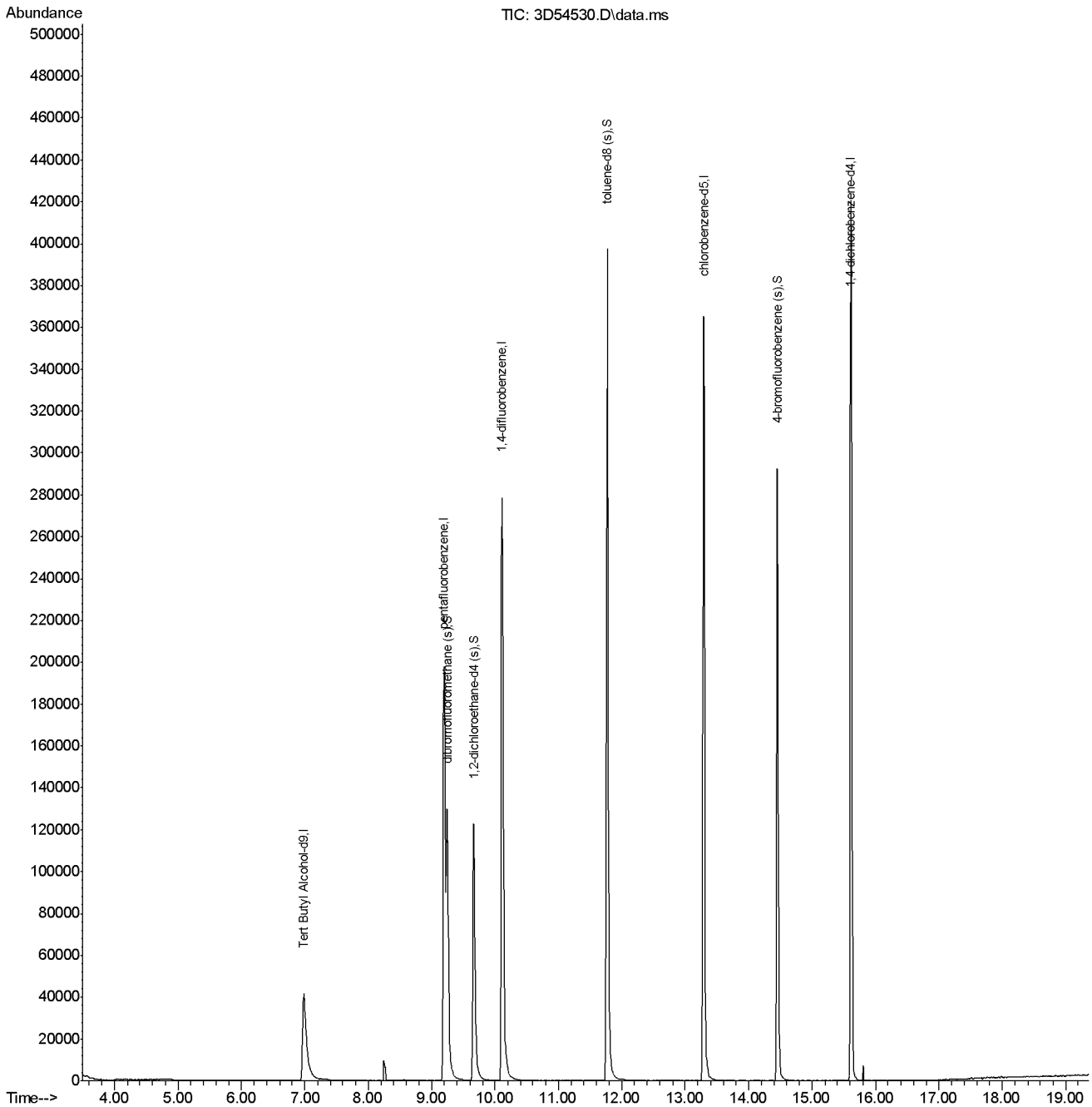
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.979	65	107276	500.00	ug/L	-0.01
4) pentafluorobenzene	9.196	168	181924	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	264897	50.00	ug/L	0.00
80) chlorobenzene-d5	13.291	117	212664	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	108316	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	84429	56.67	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 113.34%			
44) 1,2-dichloroethane-d4 (s)	9.663	65	109720	54.91	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 109.82%			
72) toluene-d8 (s)	11.766	98	290987	56.70	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 113.40%			
98) 4-bromofluorobenzene (s)	14.450	95	101725	52.07	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.14%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 29 08:32:58 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54530.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.560	11	14	27	rVB4	1509	3318	0.42%	0.072%
2	4.174	126	131	139	rVB3	491	1027	0.13%	0.022%
3	6.979	657	666	705	rBV	41579	183273	23.24%	4.002%
4	8.242	902	907	917	rBV	9592	14537	1.84%	0.317%
5	9.191	1078	1088	1094	rBV	197606	459918	58.33%	10.044%
6	9.244	1094	1098	1139	rVV2	129863	325433	41.27%	7.107%
7	9.469	1139	1141	1154	rVB3	586	1377	0.17%	0.030%
8	9.663	1166	1178	1213	rBV	122671	298476	37.85%	6.518%
9	10.109	1253	1263	1302	rBV	278432	636544	80.73%	13.901%
10	11.766	1564	1579	1615	rBV	397419	788473	100.00%	17.219%
11	13.286	1861	1869	1896	rBV	365261	666734	84.56%	14.561%
12	13.433	1896	1897	1911	rVB3	629	1459	0.19%	0.032%
13	14.450	2081	2091	2127	rBV	292680	498331	63.20%	10.883%
14	15.609	2302	2312	2344	rBV	420698	686376	87.05%	14.990%
15	15.797	2344	2348	2355	rVB	7110	10384	1.32%	0.227%
16	17.517	2669	2676	2680	rVB3	747	1258	0.16%	0.027%
17	17.973	2760	2763	2768	rVB4	660	1091	0.14%	0.024%
18	18.089	2781	2785	2788	rBV4	563	1013	0.13%	0.022%

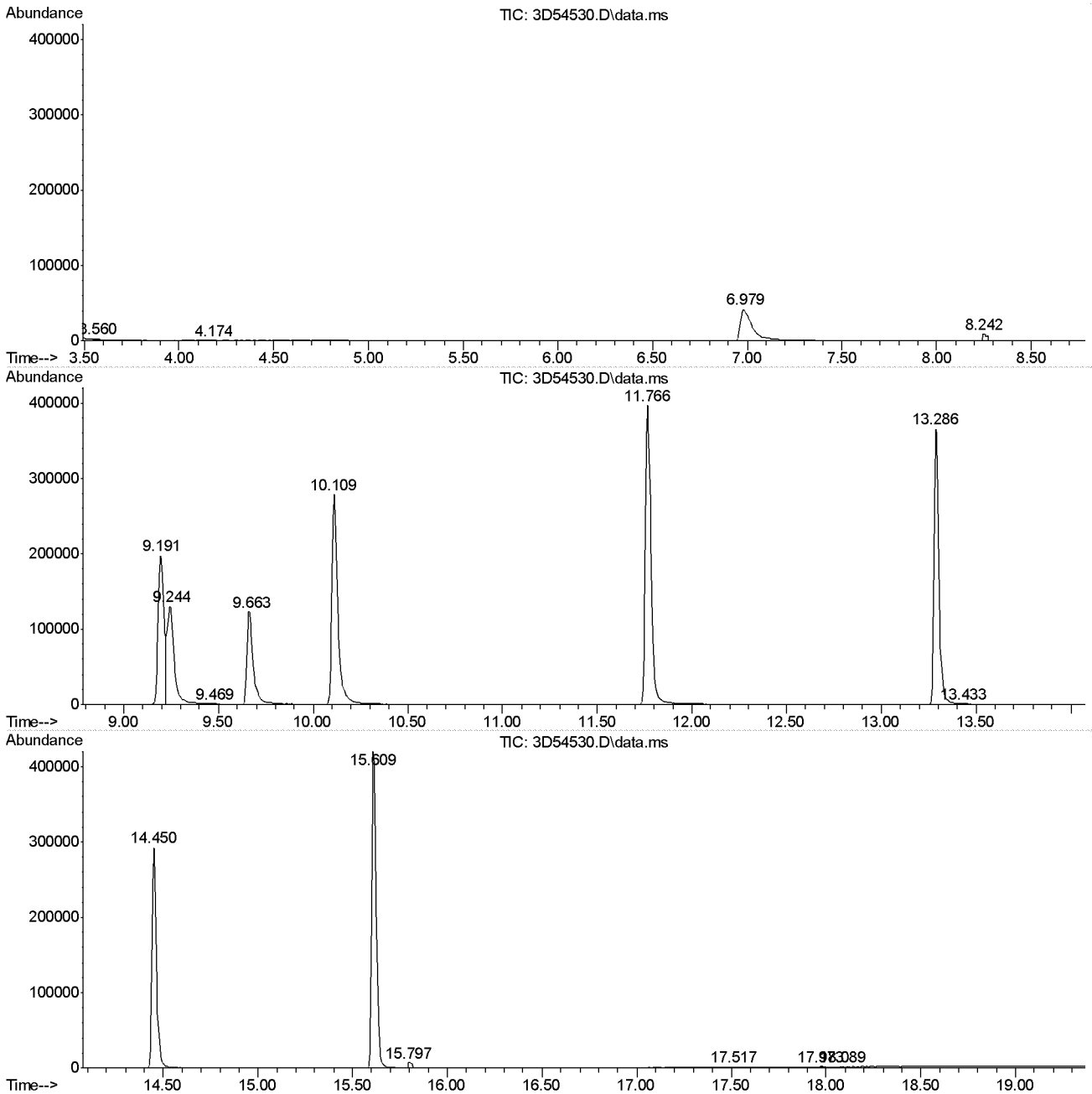
Sum of corrected areas: 4579022

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6495,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 29 09:39:15 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

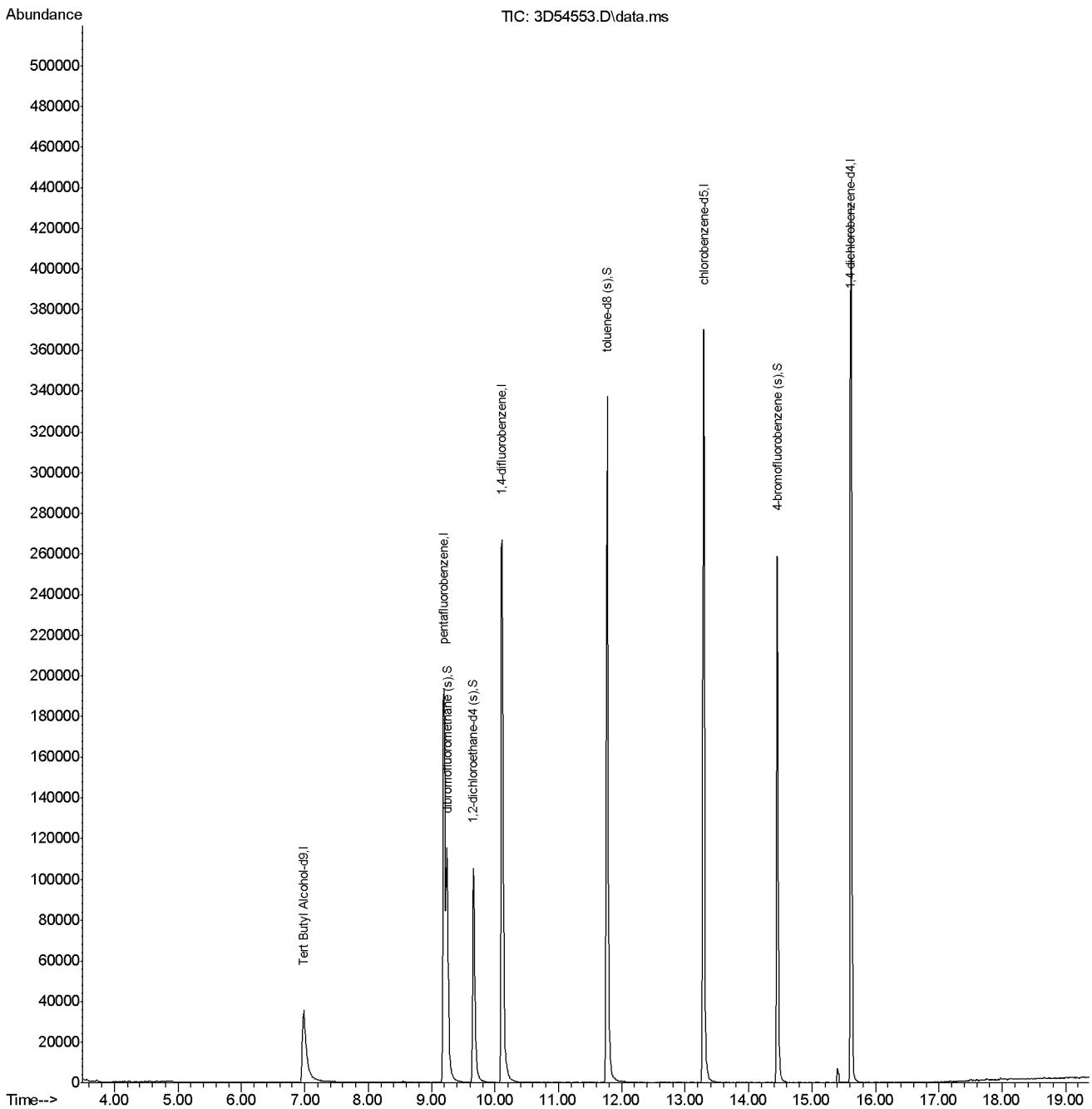
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.979	65	97766	500.00	ug/L	-0.01
4) pentafluorobenzene	9.191	168	178750	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	258408	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	207974	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	107757	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	73202	50.01	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.02%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	94473	48.12	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.24%			
72) toluene-d8 (s)	11.766	98	253830	50.70	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 101.40%			
98) 4-bromofluorobenzene (s)	14.450	95	89833	46.22	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 92.44%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6495,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 29 09:39:15 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6405,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54553.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.555	9	13	26	rVB4	1024	2336	0.34%	0.055%
2	6.979	652	666	695	rBV2	35309	158154	23.11%	3.750%
3	9.191	1078	1088	1093	rBV	193708	436766	63.82%	10.357%
4	9.238	1094	1097	1132	rVB2	115121	269258	39.35%	6.385%
5	9.658	1168	1177	1219	rBV	105415	258012	37.70%	6.118%
6	10.109	1252	1263	1295	rBV	266764	617031	90.16%	14.632%
7	11.766	1569	1579	1615	rBV	337074	684342	100.00%	16.228%
8	13.286	1857	1869	1895	rBV	370196	655785	95.83%	15.551%
9	14.450	2081	2091	2125	rBV	258932	437398	63.92%	10.372%
10	15.399	2268	2272	2279	rBV2	6944	10752	1.57%	0.255%
11	15.609	2305	2312	2341	rBV	432910	683852	99.93%	16.216%
12	17.512	2666	2675	2679	rVB6	849	1557	0.23%	0.037%
13	17.973	2758	2763	2769	rBV4	1149	1802	0.26%	0.043%

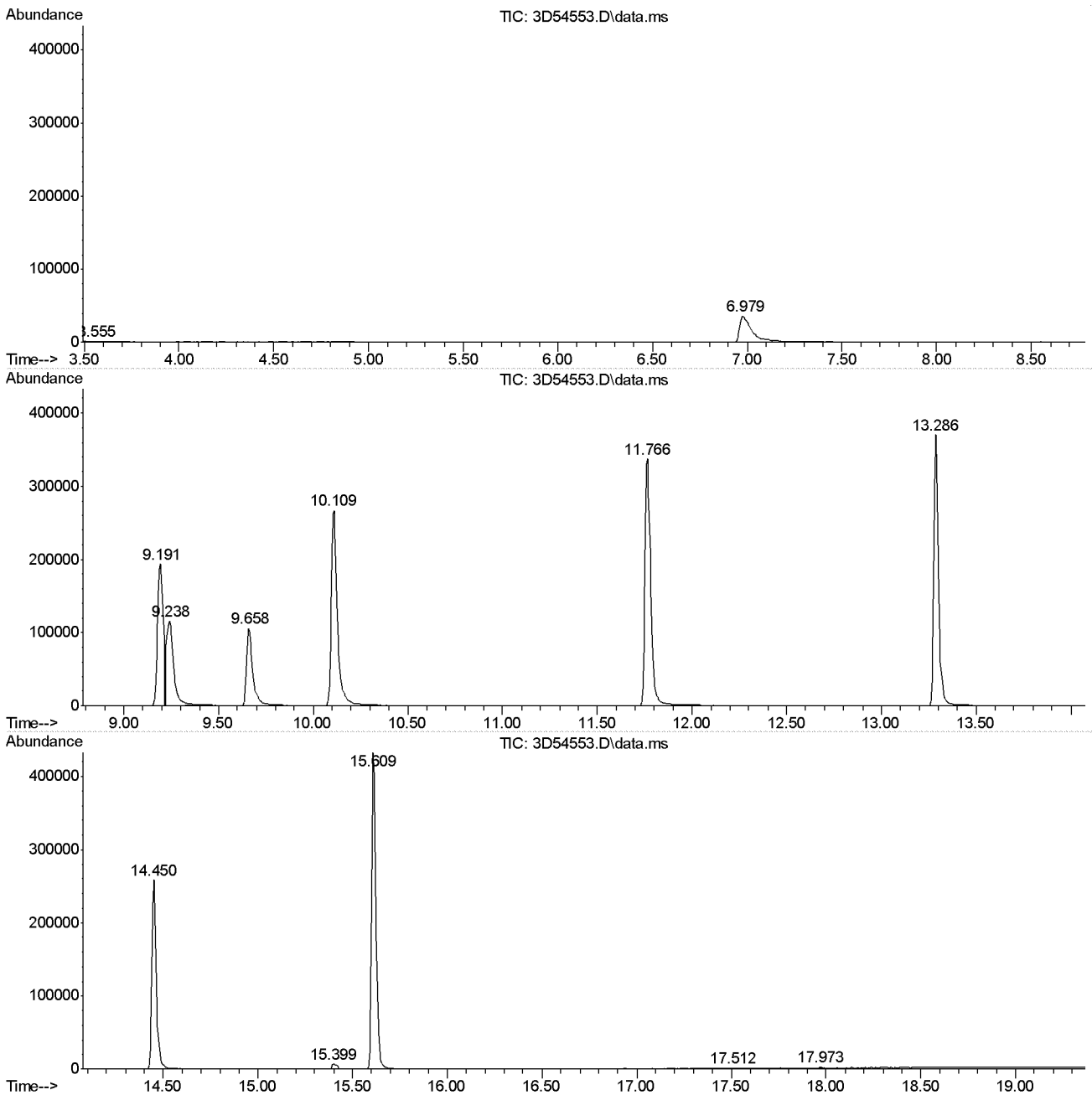
Sum of corrected areas: 4217045

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6405,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6405,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MB1	R84606.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MB1	R84606.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	87%	25-112%
321-60-8	2-Fluorobiphenyl	82%	31-106%
1718-51-0	Terphenyl-d14	76%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365A-MB1	4M22977.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	110%	18-119%
321-60-8	2-Fluorobiphenyl	99%	18-104%
1718-51-0	Terphenyl-d14	90%	13-109%

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-BS1	R84607.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	42.9	86	46-113
1912-24-9	Atrazine	50	51.2	102	55-127
100-52-7	Benzaldehyde	50	53.8	108	31-130
101-55-3	4-Bromophenyl phenyl ether	50	55.0	110	55-121
85-68-7	Butyl benzyl phthalate	50	47.2	94	55-132
92-52-4	1,1'-Biphenyl	50	41.2	82	43-107
91-58-7	2-Chloronaphthalene	50	46.3	93	39-108
106-47-8	4-Chloroaniline	50	35.7	71	34-103
86-74-8	Carbazole	50	49.8	100	63-122
105-60-2	Caprolactam	50	5.6	11	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	51.0	102	43-119
111-44-4	bis(2-Chloroethyl)ether	50	45.9	92	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	48.4	97	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	51.6	103	50-117
121-14-2	2,4-Dinitrotoluene	50	52.5	105	56-124
606-20-2	2,6-Dinitrotoluene	50	54.4	109	55-128
91-94-1	3,3'-Dichlorobenzidine	50	37.0	74	42-116
132-64-9	Dibenzofuran	50	45.9	92	53-109
84-74-2	Di-n-butyl phthalate	50	47.9	96	58-130
117-84-0	Di-n-octyl phthalate	50	46.2	92	55-133
84-66-2	Diethyl phthalate	50	46.3	93	52-123
131-11-3	Dimethyl phthalate	50	42.5	85	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	46.6	93	57-134
87-68-3	Hexachlorobutadiene	50	49.2	98	11-100
77-47-4	Hexachlorocyclopentadiene	100	130	130* [a]	5-120
67-72-1	Hexachloroethane	50	45.0	90* [b]	13-88
78-59-1	Isophorone	50	50.9	102	43-120
91-57-6	2-Methylnaphthalene	50	43.0	86	33-103
88-74-4	2-Nitroaniline	50	51.8	104	48-132
99-09-2	3-Nitroaniline	50	42.9	86	48-115
100-01-6	4-Nitroaniline	50	44.4	89	51-125
98-95-3	Nitrobenzene	50	47.5	95	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	52.3	105	41-121
86-30-6	N-Nitrosodiphenylamine	50	47.2	94	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	36.1	72	18-130

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-BS1	R84607.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	89%	25-112%
321-60-8	2-Fluorobiphenyl	83%	31-106%
1718-51-0	Terphenyl-d14	91%	14-122%

(a) High percent recoveries and no associated positive found in the QC batch.
(b) Outside of in house control limits, but within reasonable method recovery limits.

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365A-BS12	4M22978.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.916	92	42-105
208-96-8	Acenaphthylene	1	0.747	75	36-99
120-12-7	Anthracene	1	0.880	88	44-111
56-55-3	Benzo(a)anthracene	1	0.908	91	33-130
50-32-8	Benzo(a)pyrene	1	0.977	98	35-117
205-99-2	Benzo(b)fluoranthene	1	1.29	129	26-145
191-24-2	Benzo(g,h,i)perylene	1	1.10	110	29-130
207-08-9	Benzo(k)fluoranthene	1	0.752	75	33-142
218-01-9	Chrysene	1	0.929	93	41-127
53-70-3	Dibenzo(a,h)anthracene	1	1.15	115	27-135
206-44-0	Fluoranthene	1	0.917	92	40-112
86-73-7	Fluorene	1	0.892	89	45-104
118-74-1	Hexachlorobenzene	1	1.04	104	30-110
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.16	116	32-131
91-20-3	Naphthalene	1	0.810	81	21-120
85-01-8	Phenanthrene	1	0.862	86	38-114
129-00-0	Pyrene	1	0.956	96	38-124

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	98%	18-119%
321-60-8	2-Fluorobiphenyl	90%	18-104%
1718-51-0	Terphenyl-d14	108%	13-109%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MS	R84612.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
OP47365-MSD	R84613.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
JA64353-2	R84611.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	JA64353-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		112	118	105	121	108	3	25-127/35
1912-24-9	Atrazine	ND		112	151	134* [a]	175	156* [a]	15	40-133/27
100-52-7	Benzaldehyde	ND		112	105	93	112	100	6	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		112	119	106	124	110	4	47-123/28
85-68-7	Butyl benzyl phthalate	ND		112	103	92	104	93	1	47-137/27
92-52-4	1,1'-Biphenyl	ND		112	90.3	80	90.3	80	0	36-113/32
91-58-7	2-Chloronaphthalene	ND		112	99.9	89	101	90	1	35-110/32
106-47-8	4-Chloroaniline	ND		112	82.0	73	92.7	83	12	22-98/36
86-74-8	Carbazole	ND		112	113	101	115	102	2	54-127/26
105-60-2	Caprolactam	ND		112	ND	0* [a]	ND	0* [a]	nc	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		112	110	98	112	100	2	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		112	95.0	85	99.4	88	5	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		112	105	93	107	95	2	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		112	117	104	116	103	1	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		112	142	126	143	127	1	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		112	51.5	46	58.9	52	13	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		112	79.3	71	90.2	80	13	17-119/36
132-64-9	Dibenzofuran	1.9	J	112	145	127* [a]	145	127* [a]	0	44-114/30
84-74-2	Di-n-butyl phthalate	ND		112	102	91	104	93	2	49-134/26
117-84-0	Di-n-octyl phthalate	ND		112	103	92	106	94	3	46-140/25
84-66-2	Diethyl phthalate	ND		112	75.1	67	73.8	66	2	46-123/27
131-11-3	Dimethyl phthalate	ND		112	89.7	80	90.6	81	1	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		112	104	93	105	93	1	49-141/27
87-68-3	Hexachlorobutadiene	ND		112	129	115* [b]	131	117* [a]	2	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		225	310	138* [a]	290	129* [a]	7	4-124/39
67-72-1	Hexachloroethane	ND		112	106	94* [b]	110	98* [b]	4	16-86/39
78-59-1	Isophorone	ND		112	110	98	111	99	1	33-117/36
91-57-6	2-Methylnaphthalene	14.1		112	535	464* [a]	572	497* [a]	7	22-117/37
88-74-4	2-Nitroaniline	ND		112	94.3	84	93.4	83	1	37-135/29
99-09-2	3-Nitroaniline	ND		112	104	93	146	130* [a]	34* [c]	34-115/28
100-01-6	4-Nitroaniline	ND		112	177	158* [a]	173	154* [a]	2	36-128/30
98-95-3	Nitrobenzene	ND		112	113	101	122	109	8	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		112	111	99	114	101	3	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		112	158	141	159	142	1	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		112	99.1	88	95.9	85	3	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MS	R84612.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
OP47365-MSD	R84613.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
JA64353-2	R84611.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Surrogate Recoveries	MS	MSD	JA64353-2	Limits
4165-60-0	Nitrobenzene-d5	99%	98%	86%	25-112%
321-60-8	2-Fluorobiphenyl	89%	87%	80%	31-106%
1718-51-0	Terphenyl-d14	70%	64%	66%	14-122%

(a) Outside control limits due to matrix interference.
(b) Outside of in house control limits, but within reasonable method recovery limits.
(c) Outside of in house control limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365A-MS	R84612.D	1	12/23/10	LP	12/20/10	OP47365A	ER3195
OP47365A-MSD	R84613.D	1	12/23/10	LP	12/20/10	OP47365A	ER3195
JA64353-2	4M22989.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	JA64353-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	1.23		112	125	110	135	119* [a]	8	33-117/32
208-96-8	Acenaphthylene	ND		112	66.7	59	68.6	61	3	32-107/31
120-12-7	Anthracene	ND		112	76.1	68	80.4	72	5	44-126/28
56-55-3	Benzo(a)anthracene	0.215		112	113	100	116	103	3	45-127/30
50-32-8	Benzo(a)pyrene	ND		112	115	102	116	103	1	40-131/31
205-99-2	Benzo(b)fluoranthene	ND		112	114	101	118	105	3	36-134/32
191-24-2	Benzo(g,h,i)perylene	ND		112	124	110	125	111	1	37-134/32
207-08-9	Benzo(k)fluoranthene	ND		112	101	90	94.6	84	7	37-135/34
218-01-9	Chrysene	0.117		112	104	92	107	95	3	46-125/28
53-70-3	Dibenzo(a,h)anthracene	ND		112	133	118	136	121	2	36-139/31
206-44-0	Fluoranthene	0.297		112	119	106	121	107	2	41-130/29
86-73-7	Fluorene	3.41		112	158	138* [b]	157	137* [b]	1	38-124/31
118-74-1	Hexachlorobenzene	ND		112	138	123* [b]	141	125* [b]	2	42-120/28
193-39-5	Indeno(1,2,3-cd)pyrene	ND		112	130	116	132	117	2	37-137/33
91-20-3	Naphthalene	ND		112	167	149* [b]	168	150* [b]	1	16-114/35
85-01-8	Phenanthrene	5.41	E	112	196	170* [b]	195	169* [b]	1	44-125/29
129-00-0	Pyrene	0.809		112	115	102	118	104	3	39-134/29

CAS No.	Surrogate Recoveries	MS	MSD	JA64353-2	Limits
4165-60-0	Nitrobenzene-d5	99%	98%	82%	18-119%
321-60-8	2-Fluorobiphenyl	89%	87%	69%	18-104%
1718-51-0	Terphenyl-d14	70%	64%	75%	13-109%

(a) Outside of in house control limits, but within reasonable method recovery limits.
(b) Outside control limits due to matrix interference.

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M911-DFTPP	**Injection Date:**	09/07/10
Lab File ID:	4M21042.D	**Injection Time:**	08:10
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20513	39.2		Pass
68	Less than 2.0% of mass 69	332	0.64	(1.76) [a]	Pass
69	Mass 69 relative abundance	18850	36.1		Pass
70	Less than 2.0% of mass 69	56	0.11	(0.30) [a]	Pass
127	40.0 - 60.0% of mass 198	24459	46.8		Pass
197	Less than 1.0% of mass 198	244	0.47		Pass
198	Base peak, 100% relative abundance	52275	100.0		Pass
199	5.0 - 9.0% of mass 198	3533	6.76		Pass
275	10.0 - 30.0% of mass 198	13045	25.0		Pass
365	1.0 - 100.0% of mass 198	1531	2.93		Pass
441	Present, but less than mass 443	5883	11.3	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	41283	79.0		Pass
443	17.0 - 23.0% of mass 442	7922	15.2	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M911-IC911	4M21044.D	09/07/10	09:58	01:48	Initial cal .01
E4M911-IC911	4M21045.D	09/07/10	10:27	02:17	Initial cal .02
E4M911-IC911	4M21046.D	09/07/10	10:57	02:47	Initial cal .05
E4M911-IC911	4M21047.D	09/07/10	11:27	03:17	Initial cal .1
E4M911-IC911	4M21048.D	09/07/10	11:56	03:46	Initial cal .2
E4M911-IC911	4M21049.D	09/07/10	12:26	04:16	Initial cal 2.5
E4M911-IC911	4M21050.D	09/07/10	12:56	04:46	Initial cal 5
E4M911-IC911	4M21051.D	09/07/10	13:26	05:16	Initial cal .5
E4M911-ICC911	4M21043.D	09/07/10	14:55	06:45	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M999-DFTPP	**Injection Date:**	12/23/10
Lab File ID:	4M22969.D	**Injection Time:**	11:16
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	12126	43.9		Pass
68	Less than 2.0% of mass 69	139	0.50	(1.15) [a]	Pass
69	Mass 69 relative abundance	12107	43.8		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	14389	52.1		Pass
197	Less than 1.0% of mass 198	220	0.80		Pass
198	Base peak, 100% relative abundance	27641	100.0		Pass
199	5.0 - 9.0% of mass 198	1876	6.79		Pass
275	10.0 - 30.0% of mass 198	7421	26.8		Pass
365	1.0 - 100.0% of mass 198	1149	4.16		Pass
441	Present, but less than mass 443	3349	12.1	(77.8) [b]	Pass
442	40.0 - 100.0% of mass 198	22593	81.7		Pass
443	17.0 - 23.0% of mass 442	4305	15.6	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M999-CC911	4M22970.D	12/23/10	11:35	00:19	Continuing cal 1
OP47081A-MB1	4M22971.D	12/23/10	12:23	01:07	Method Blank
OP47081A-BS12	4M22972.D	12/23/10	12:53	01:37	Blank Spike
ZZZZZZ	4M22973.D	12/23/10	13:23	02:07	(unrelated sample)
ZZZZZZ	4M22974.D	12/23/10	13:54	02:38	(unrelated sample)
ZZZZZZ	4M22975.D	12/23/10	14:24	03:08	(unrelated sample)
ZZZZZZ	4M22976.D	12/23/10	14:54	03:38	(unrelated sample)
OP47365A-MB1	4M22977.D	12/23/10	15:25	04:09	Method Blank
OP47365A-BS12	4M22978.D	12/23/10	15:55	04:39	Blank Spike
JA64438-1	4M22982.D	12/23/10	17:56	06:40	AZ
JA64438-2	4M22983.D	12/23/10	18:27	07:11	AV
JA64438-3	4M22984.D	12/23/10	18:57	07:41	VV
JA64438-4	4M22985.D	12/23/10	19:28	08:12	FB-20101215
JA64438-5	4M22986.D	12/23/10	19:59	08:43	CE
JA64438-6	4M22987.D	12/23/10	20:29	09:13	FB-20101216
ZZZZZZ	4M22988.D	12/23/10	20:59	09:43	(unrelated sample)
JA64353-2	4M22989.D	12/23/10	21:30	10:14	(used for QC only; not part of job JA64438)
ZZZZZZ	4M22990.D	12/23/10	22:00	10:44	(unrelated sample)
ZZZZZZ	4M22991.D	12/23/10	22:31	11:15	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M999-DFTPP	**Injection Date:**	12/23/10
Lab File ID:	4M22969.D	**Injection Time:**	11:16
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M22992.D	12/23/10	23:01	11:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3151-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83633.D	**Injection Time:**	14:32
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28061	32.8		Pass
68	Less than 2.0% of mass 69	193	0.23	(0.58) [a]	Pass
69	Mass 69 relative abundance	33117	38.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	49981	58.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85475	100.0		Pass
199	5.0 - 9.0% of mass 198	5967	6.98		Pass
275	10.0 - 30.0% of mass 198	20633	24.1		Pass
365	1.0 - 100.0% of mass 198	2654	3.11		Pass
441	Present, but less than mass 443	13020	15.2	(77.0) [b]	Pass
442	40.0 - 100.0% of mass 198	84667	99.1		Pass
443	17.0 - 23.0% of mass 442	16907	19.8	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3151-IC3151	R83635.D	11/15/10	14:42	00:10	Initial cal 1
ER3151-IC3151	R83634.D	11/15/10	15:23	00:51	Initial cal 100
ER3151-IC3151	R83636.D	11/15/10	16:01	01:29	Initial cal 80
ER3151-IC3151	R83637.D	11/15/10	16:37	02:05	Initial cal 2
ER3151-IC3151	R83639.D	11/15/10	17:09	02:37	Initial cal 5
ER3151-IC3151	R83640.D	11/15/10	17:48	03:16	Initial cal 10
ER3151-ICC3151	R83638.D	11/15/10	18:22	03:50	Initial cal 50
ER3151-IC3151	R83641.D	11/15/10	18:58	04:26	Initial cal 25

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3152-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83642.D	**Injection Time:**	22:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22024	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25432	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37435	55.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	67512	100.0		Pass
199	5.0 - 9.0% of mass 198	4664	6.91		Pass
275	10.0 - 30.0% of mass 198	16603	24.6		Pass
365	1.0 - 100.0% of mass 198	2164	3.21		Pass
441	Present, but less than mass 443	9844	14.6	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	67437	99.9		Pass
443	17.0 - 23.0% of mass 442	13161	19.5	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3152-IC3152	R83643.D	11/15/10	23:00	00:23	Initial cal 100
ER3152-IC3152	R83644.D	11/15/10	23:36	00:59	Initial cal 80
ER3152-ICC3152	R83645.D	11/16/10	00:12	01:35	Initial cal 50
ER3152-IC3152	R83646.D	11/16/10	00:48	02:11	Initial cal 25
ER3152-IC3152	R83647.D	11/16/10	01:24	02:47	Initial cal 10
ER3152-IC3152	R83648.D	11/16/10	01:53	03:16	Initial cal 5
ER3152-IC3152	R83649.D	11/16/10	02:29	03:52	Initial cal 2
ER3152-IC3152	R83650.D	11/16/10	03:06	04:29	Initial cal 1
ER3152-ICV3151	R83651.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3152	R83651A.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3151	R83652.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3152	R83652A.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3151	R83653.D	11/16/10	04:54	06:17	Initial cal verification 50
ER3152-ICV3151	R83655.D	11/16/10	06:07	07:30	Initial cal verification 50
ER3152-ICV3152	R83655A.D	11/16/10	06:07	07:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3195-DFTPP	**Injection Date:**	12/22/10
Lab File ID:	R84603.D	**Injection Time:**	19:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18700	36.8		Pass
68	Less than 2.0% of mass 69	309	0.61	(1.39) [a]	Pass
69	Mass 69 relative abundance	22238	43.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	30317	59.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	50877	100.0		Pass
199	5.0 - 9.0% of mass 198	3430	6.74		Pass
275	10.0 - 30.0% of mass 198	12129	23.8		Pass
365	1.0 - 100.0% of mass 198	1545	3.04		Pass
441	Present, but less than mass 443	6276	12.3	(74.1) [b]	Pass
442	40.0 - 100.0% of mass 198	42277	83.1		Pass
443	17.0 - 23.0% of mass 442	8465	16.6	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3195-CC3151	R84604.D	12/22/10	19:51	00:14	Continuing cal 25
ER3195-CC3152	R84605.D	12/22/10	20:28	00:51	Continuing cal 25
OP47365-MB1	R84606.D	12/22/10	21:04	01:27	Method Blank
OP47365-BS1	R84607.D	12/22/10	21:34	01:57	Blank Spike
ZZZZZZ	R84608.D	12/22/10	22:11	02:34	(unrelated sample)
ZZZZZZ	R84609.D	12/22/10	22:47	03:10	(unrelated sample)
ZZZZZZ	R84610.D	12/22/10	23:23	03:46	(unrelated sample)
JA64353-2	R84611.D	12/22/10	23:59	04:22	(used for QC only; not part of job JA64438)
OP47365-MS	R84612.D	12/23/10	00:36	04:59	Matrix Spike
OP47365A-MS	R84612.D	12/23/10	00:36	04:59	Matrix Spike
OP47365-MSD	R84613.D	12/23/10	01:12	05:35	Matrix Spike Duplicate
OP47365A-MSD	R84613.D	12/23/10	01:12	05:35	Matrix Spike Duplicate
ZZZZZZ	R84614.D	12/23/10	01:48	06:11	(unrelated sample)
ZZZZZZ	R84615.D	12/23/10	02:24	06:47	(unrelated sample)
ZZZZZZ	R84616.D	12/23/10	03:00	07:23	(unrelated sample)
ZZZZZZ	R84617.D	12/23/10	03:36	07:59	(unrelated sample)
ZZZZZZ	R84618.D	12/23/10	04:13	08:36	(unrelated sample)
ZZZZZZ	R84619.D	12/23/10	04:42	09:05	(unrelated sample)
ZZZZZZ	R84620.D	12/23/10	05:18	09:41	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3195-DFTPP	**Injection Date:**	12/22/10
Lab File ID:	R84603.D	**Injection Time:**	19:37
Instrument ID:	GCMSR		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	R84621.D	12/23/10	05:54	10:17	(unrelated sample)
ZZZZZZ	R84622.D	12/23/10	06:30	10:53	(unrelated sample)
ZZZZZZ	R84623.D	12/23/10	07:06	11:29	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3201-DFTPP	**Injection Date:**	12/30/10
Lab File ID:	R84726.D	**Injection Time:**	07:50
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22376	37.1		Pass
68	Less than 2.0% of mass 69	350	0.58	(1.35) [a]	Pass
69	Mass 69 relative abundance	25917	42.9		Pass
70	Less than 2.0% of mass 69	10	0.02	(0.04) [a]	Pass
127	40.0 - 60.0% of mass 198	34531	57.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	60357	100.0		Pass
199	5.0 - 9.0% of mass 198	4262	7.06		Pass
275	10.0 - 30.0% of mass 198	13915	23.1		Pass
365	1.0 - 100.0% of mass 198	1683	2.79		Pass
441	Present, but less than mass 443	7372	12.2	(75.3) [b]	Pass
442	40.0 - 100.0% of mass 198	49805	82.5		Pass
443	17.0 - 23.0% of mass 442	9794	16.2	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3201-CC3151	R84727.D	12/30/10	08:03	00:13	Continuing cal 25
ER3201-CC3152	R84728.D	12/30/10	08:43	00:53	Continuing cal 25
JA64438-4	R84729.D	12/30/10	09:19	01:29	FB-20101215
JA64438-6	R84730.D	12/30/10	09:56	02:06	FB-20101216
JA64438-1	R84731.D	12/30/10	10:25	02:35	AZ
JA64438-2	R84732.D	12/30/10	11:07	03:17	AV
JA64438-3	R84733.D	12/30/10	11:40	03:50	VV
JA64438-5	R84734.D	12/30/10	12:17	04:27	CE
ZZZZZZ	R84735.D	12/30/10	12:53	05:03	(unrelated sample)
ZZZZZZ	R84736.D	12/30/10	13:29	05:39	(unrelated sample)
ZZZZZZ	R84738.D	12/30/10	14:34	06:44	(unrelated sample)
OP47435-LS3	R84739.D	12/30/10	15:10	07:20	Leachate Spike
OP47437-LS5	R84740.D	12/30/10	15:46	07:56	Leachate Spike
ZZZZZZ	R84741.D	12/30/10	16:25	08:35	(unrelated sample)
ZZZZZZ	R84742.D	12/30/10	17:01	09:11	(unrelated sample)
ZZZZZZ	R84743.D	12/30/10	17:37	09:47	(unrelated sample)
ZZZZZZ	R84744.D	12/30/10	18:06	10:16	(unrelated sample)
ZZZZZZ	R84745.D	12/30/10	18:42	10:52	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M999-CC911	**Injection Date:**	12/23/10
Lab File ID:	4M22970.D	**Injection Time:**	11:35
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	25511	8.19	21437	11.55	37772	16.45	44137	21.12
Upper Limit [a]	51022	8.69	42874	12.05	75544	16.95	88274	21.62
Lower Limit [b]	12756	7.69	10719	11.05	18886	15.95	22069	20.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP47081A-MB1	25638	8.19	20217	11.55	33106	16.45	31213	21.14
OP47081A-BS12	30601	8.19	22596	11.54	36717	16.45	36853	21.14
ZZZZZZ	27323	8.19	21732	11.55	36113	16.45	37464	21.12
ZZZZZZ	22858	8.19	17770	11.55	28292	16.45	27650	21.12
ZZZZZZ	23028	8.19	18348	11.55	30050	16.45	29413	21.12
ZZZZZZ	22484	8.19	17946	11.55	30294	16.45	31724	21.12
OP47365A-MB1	27494	8.19	23543	11.55	38749	16.45	42677	21.12
OP47365A-BS12	28382	8.19	20528	11.54	34448	16.45	37929	21.12
JA64438-1	25759	8.19	20859	11.55	38210	16.45	39644	21.12
JA64438-2	26164	8.19	22111	11.54	39645	16.46	40854	21.12
JA64438-3	26324	8.19	22061	11.54	40330	16.45	42604	21.12
JA64438-4	25790	8.19	22192	11.55	38308	16.45	38618	21.14
JA64438-5	26482	8.19	21816	11.55	39090	16.45	41542	21.12
JA64438-6	26626	8.19	21473	11.55	38491	16.45	38444	21.14
ZZZZZZ	28303	8.19	23144	11.54	40891	16.45	40704	21.12
JA64353-2	40772	8.19	35294	11.55	46520	16.45	45101	21.12
ZZZZZZ	40423	8.19	34610	11.57	43790	16.45	42443	21.12
ZZZZZZ	25261	8.19	20851	11.55	36496	16.45	36818	21.12
ZZZZZZ	25994	8.19	21002	11.55	36049	16.45	36296	21.12

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3195-CC3151	**Injection Date:**	12/22/10
Lab File ID:	R84604.D	**Injection Time:**	19:51
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	504244	7.52	1804295	10.29	1088502	14.41	1762500	17.88	1832065	22.18	1726940	23.70
Upper Limit [a]	1008488	8.02	3608590	10.79	2177004	14.91	3525000	18.38	3664130	22.68	3453880	24.20
Lower Limit [b]	252122	7.02	902148	9.79	544251	13.91	881250	17.38	916033	21.68	863470	23.20
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP47365-MB1	431531	7.51	1515448	10.28	889251	14.41	1416817	17.87	1518352	22.17	1395085	23.70
OP47365-BS1	497043	7.52	1767475	10.29	1061922	14.42	1738242	17.88	1841130	22.18	1751171	23.71
ZZZZZZ	438402	7.51	1548529	10.28	899430	14.41	1441126	17.87	1495396	22.17	1422361	23.70
ZZZZZZ	447979	7.52	1582892	10.29	980760	14.44	1524151	17.90	1579595	22.17	1502088	23.70
ZZZZZZ	440782	7.52	1550575	10.28	912281	14.41	1459483	17.87	1530314	22.17	1470279	23.70
JA64353-2	449378	7.52	1534941	10.29	962312	14.43	1519082	17.90	1575805	22.17	1508565	23.70
OP47365-MS	485889	7.52	1616315	10.31	891370	14.53	1554535	17.99	1664882	22.18	1519138	23.71
OP47365A-MS	485889	7.52	1616315	10.31	891370	14.53	1554535	17.99	1664882	22.18	1519138	23.71
OP47365-MSD	454855	7.52	1539613	10.31	898744	14.53	1509789	17.98	1589635	22.18	1457991	23.71
OP47365A-MSD	454855	7.52	1539613	10.31	898744	14.53	1509789	17.98	1589635	22.18	1457991	23.71
ZZZZZZ	436706	7.51	1543330	10.28	900303	14.41	1462105	17.87	1537373	22.17	1436367	23.70
ZZZZZZ	410497	7.51	1421297	10.28	850466	14.41	1376790	17.87	1439292	22.17	1362305	23.70
ZZZZZZ	409008	7.51	1446751	10.28	898292	14.41	1506842	17.89	1604236	22.18	1508437	23.71
ZZZZZZ	400293	7.51	1431030	10.28	832658	14.40	1373896	17.87	1448496	22.17	1391306	23.70
ZZZZZZ	413241	7.52	1504001	10.29	885367	14.41	1418828	17.87	1457234	22.17	1359859	23.70
ZZZZZZ	405010	7.52	1458250	10.28	857675	14.41	1370341	17.87	1420949	22.17	1321984	23.70
ZZZZZZ	402593	7.52	1431509	10.28	845245	14.41	1394392	17.87	1424457	22.17	1343410	23.70
ZZZZZZ	404687	7.51	1455213	10.30	876828	14.40	1384637	17.87	1417267	22.17	1312853	23.69
ZZZZZZ	404320	7.51	1441458	10.28	846377	14.40	1367018	17.87	1394768	22.17	1284010	23.69
ZZZZZZ	472082	7.51	1642151	10.29	1087073	14.44	1721043	17.95	1748857	22.18	1642864	23.72

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3201-CC3151	**Injection Date:**	12/30/10
Lab File ID:	R84727.D	**Injection Time:**	08:03
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	518533	7.51	1832725	10.28	1052617	14.40	1684333	17.87	1867682	22.17	1810300	23.70
Upper Limit [a]	1037066	8.01	3665450	10.78	2105234	14.90	3368666	18.37	3735364	22.67	3620600	24.20
Lower Limit [b]	259267	7.01	916363	9.78	526309	13.90	842167	17.37	933841	21.67	905150	23.20
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
JA64438-4	545593	7.51	1849408	10.28	1071636	14.40	1680015	17.86	1706545	22.17	1649740	23.70
JA64438-6	543682	7.51	1820450	10.28	1024472	14.40	1633288	17.86	1703995	22.17	1706758	23.70
JA64438-1	507577	7.51	1734012	10.28	985270	14.40	1523969	17.86	1551186	22.16	1502238	23.70
JA64438-2	491414	7.51	1675846	10.28	939816	14.40	1518356	17.86	1623258	22.17	1614496	23.70
JA64438-3	454197	7.51	1576957	10.27	883282	14.40	1397085	17.86	1413708	22.16	1420311	23.70
JA64438-5	472022	7.51	1635721	10.27	928386	14.40	1442971	17.86	1469864	22.17	1492756	23.70
ZZZZZZ	444924	7.51	1539438	10.28	872117	14.40	1387656	17.86	1358093	22.16	1274953	23.70
ZZZZZZ	447010	7.51	1558159	10.27	889704	14.40	1387055	17.86	1384967	22.16	1304882	23.69
ZZZZZZ	486331	7.50	1670316	10.27	944488	14.40	1497236	17.86	1503149	22.16	1434196	23.70
OP47435-LS3	502885	7.53	1288201	10.42	902077	14.41	1394806	17.86	1450415	22.16	1374396	23.70
OP47437-LS5	454387	7.51	1623586	10.28	940420	14.41	1491242	17.87	1655698	22.18	1496788	23.71
ZZZZZZ	490751	7.54	1809394	10.31	973003	14.43	1524149	17.87	1548379	22.17	1496141	23.70
ZZZZZZ	483926	7.52	1699882	10.28	942350	14.40	1473497	17.86	1461960	22.16	1349279	23.70
ZZZZZZ	435658	7.51	1504807	10.27	850301	14.40	1339137	17.86	1377737	22.17	1356201	23.69
ZZZZZZ	397816	7.51	1390686	10.27	782712	14.40	1238274	17.86	1229203	22.17	1175049	23.69
ZZZZZZ	393986	7.51	1373460	10.27	755104	14.40	1195245	17.86	1182507	22.17	1128886	23.69

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA64438-1	R84731.D	88.0	78.0	78.0
JA64438-2	R84732.D	92.0	81.0	86.0
JA64438-3	R84733.D	86.0	77.0	82.0
JA64438-4	R84729.D	93.0	81.0	87.0
JA64438-5	R84734.D	91.0	81.0	94.0
JA64438-6	R84730.D	93.0	79.0	76.0
OP47365-BS1	R84607.D	89.0	83.0	91.0
OP47365-MB1	R84606.D	87.0	82.0	76.0
OP47365-MS	R84612.D	99.0	89.0	70.0
OP47365-MSD	R84613.D	98.0	87.0	64.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA64438-1	4M22982.D	111.0	99.0	98.0
JA64438-2	4M22983.D	106.0	98.0	105.0
JA64438-3	4M22984.D	104.0	94.0	96.0
JA64438-4	4M22985.D	108.0	98.0	105.0
JA64438-5	4M22986.D	108.0	99.0	114.0* [a]
JA64438-6	4M22987.D	109.0	96.0	93.0
OP47365A-BS12	4M22978.D	98.0	90.0	108.0
OP47365A-MB1	4M22977.D	110.0	99.0	90.0
OP47365A-MS	R84612.D	99.0	89.0	70.0
OP47365A-MSD	R84613.D	98.0	87.0	64.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	18-119%
S2 = 2-Fluorobiphenyl	18-104%
S3 = Terphenyl-d14	13-109%

(a) Outside of in house control limits, but within reasonable method recovery limits.

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M911-ICC911
Lab FileID: 4M21043.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\m4m911sim.m (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Tue Sep 07 15:46:41 2010
Response via : Initial Calibration

Calibration Files
0.05=4m21046.D .2 =4m21048.D 2.5 =4m21049.D .02 =4m21045.D
.1 =4m21047.D 1 =4m21043.D .01 =4m21044.D .5 =4m21051.D
5 =4m21050.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.494	0.496	0.621	0.529	0.522	0.463				0.521	10.46
3) Phenol-d5	0.583	0.607	0.735	0.605	0.607	0.493				0.605	12.80
4) Phenol	0.674	0.596	0.853	0.761	0.747	0.725				0.726	11.91
5) bis(2-Chloroethyl)ether	0.845	0.644	0.704	0.813	0.826	0.717	0.848	0.689	0.619	0.745	11.95
6) Nitrobenzene-d5	0.654	0.686	0.818	0.730	0.693	0.650				0.705	8.87
7) Naphthalene	2.051	2.119	2.637	2.187	2.211	2.093				2.216	9.67
8) Hexachlorobutadiene	0.410	0.417	0.509	0.440	0.420	0.414				0.435	8.70
9) 1-Methylnaphthalene	1.261	1.272	1.606	1.389	1.285	1.265				1.346	10.11
10) 2-Fluorobiphenyl	1.507	1.384	1.904	1.652	1.548	1.299				1.549	13.80
11) I Fluorene-d10	ISTD										
12) Acenaphthylene	1.613	1.934	2.081	1.791	1.764	1.947				1.855	8.91
13) Acenaphthene	1.059	1.207	1.372	1.182	1.147	1.210				1.196	8.59
14) Fluorene	1.286	1.332	1.658	1.309	1.329	1.317				1.372	10.28
15) 2,6-Dinitrotoluene	0.334	0.546	0.408	0.457	0.428	0.591				0.461	20.45
----- Linear regression ----- Coefficient = 0.9980											
Response Ratio = -0.01982 + 0.59970 *A											
16) 2,4,6-Tribromophenol	0.153	0.189	0.190	0.187	0.180	0.181				0.180	7.70
17) Hexachlorobenzene	0.696	0.450	0.481	0.709	0.599	0.489	0.496	0.464		0.548	19.25
----- Linear regression ----- Coefficient = 0.9997											
Response Ratio = 0.00327 + 0.46474 *A											
18) Pentachlorophenol	1.138	0.382	0.314	0.590	0.301	0.357	0.338			0.489	61.91
----- Linear regression ----- Coefficient = 0.9973											
Response Ratio = 0.01093 + 0.33002 *A											

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M911-ICC911
Lab FileID: 4M21043.D

```
19)  Phenanthrene
            1.657 1.874       2.194 1.856       1.828 1.890        1.883    9.24
20)  Anthracene
            1.429 1.835       1.849 1.697       1.616 1.859        1.714    9.94
21)  2,4-Dinitrotoluene
            0.390 0.763       0.489 0.618       0.561 0.826        0.608   27.06
            ----- Linear regression -----  Coefficient =  0.9979
              Response Ratio = -0.03151 + 0.84075 *A


22) I   Fluoranthene-d10      ----------------ISTD---------------------
23)  Fluoranthene
            1.201 1.249       1.553 1.277       1.252 1.247        1.297    9.88
24)  Pyrene
            1.054 1.265       1.368 1.254       1.203 1.271        1.236    8.43
25)  Terphenyl-d14
            0.437 0.456       0.565 0.516       0.496 0.409        0.480   11.87
26)  Benzo[a]anthracene
            0.987 1.473       1.302 1.332       1.278 1.563        1.323   14.95
27)  Chrysene
            1.485 1.739       1.965 1.763       1.702 1.728        1.730    8.84
28)  bis(2-Ethylhexyl)phthalate
            0.427 0.751       0.632 0.591       0.567 0.919        0.648   26.12
          ----- Quadratic regression -----                Coefficient =  0.9998
              Response Ratio = -0.00566 + 0.57819 *A + 0.27711 *A^2


29) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
30)  Benzo[b]fluoranthene
            0.215 0.274       0.317 0.363       0.225 0.281        0.279   20.01
            ----- Linear regression -----  Coefficient =  0.9945
              Response Ratio = 0.00146 + 0.28024 *A

31)  Benzo[k]fluoranthene
            0.293 0.322       0.426 0.306       0.313 0.311        0.329   14.83
32)  Benzo[a]pyrene
            1.581 1.387       2.145 1.483       1.360 1.331        1.548   19.82
            ----- Linear regression -----  Coefficient =  0.9994
              Response Ratio = 0.02145 + 1.32265 *A

33)  Indeno[1,2,3-cd]pyrene
            1.154 1.343       1.635 1.344       1.139 1.373        1.331   13.55
34)  Dibenz[a,h]anthracene
            0.897 1.110       1.258 1.110       0.925 1.157        1.076   12.94
35)  Benzo[g,h,i]perylene
            1.129 1.221       1.471 1.323       1.096 1.197        1.240   11.14

36) I   1-Methylnaphthalene-d ----------------ISTD---------------------
37)  2-Methylnaphthalene
            2.876 3.766       3.616 3.597       3.315 3.868        3.506   10.30
------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          m4m911sim.m        Tue Sep 07 15:54:56 2010   RPT1
```

7.4.1

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M917-ICV911
Lab FileID: 4M21140.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m917\4m21140.D Vial: 3
Acq On : 9 Sep 2010 11:24 pm Operator: larisap
Sample : icv911-1.0 Inst : MS4M
Misc : op45262,e4m917 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Tue Sep 07 15:46:41 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	-0.02	8.52
7	t	Naphthalene	2.216	2.091	5.6	102	-0.01	6.84
8	t	Hexachlorobutadiene	0.435	0.421	3.2	102	-0.02	7.35
11	I	Fluorene-d10	1.000	1.000	0.0	80	-0.02	11.88
12	t	Acenaphthylene	1.855	1.865	-0.5	84	-0.02	10.35
13	t	Acenaphthene	1.196	1.382	-15.6	94	-0.02	10.78
14	t	Fluorene	1.372	1.489	-8.5	91	-0.03	11.92
		----------	True	Calc.	% Drift	----------		
17	t	Hexachlorobenzene	1.000	1.132	-13.2	89	-0.02	13.38
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Phenanthrene	1.883	2.026	-7.6	88	-0.03	14.06
20	t	Anthracene	1.714	1.785	-4.1	84	-0.03	14.17
		----------	True	Calc.	% Drift	----------		
		----------	AvgRF	CCRF	% Dev	----------		
22	I	Fluoranthene-d10	1.000	1.000	0.0	70	-0.03	16.76
23	t	Fluoranthene	1.297	1.446	-11.5	80	-0.03	16.79
24	t	Pyrene	1.236	1.322	-7.0	74	-0.03	17.26
26	t	Benzo[a]anthracene	1.323	1.417	-7.1	75	-0.03	19.55
27	t	Chrysene	1.730	1.842	-6.5	73	-0.03	19.60
		----------	True	Calc.	% Drift	----------		
28		bis(2-Ethylhexyl)phthalat	1.000	0.891	10.9	65	-0.02	20.03
		----------	AvgRF	CCRF	% Dev	----------		
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	72	-0.02	21.29
		----------	True	Calc.	% Drift	----------		
30	t	Benzo[b]fluoranthene	1.000	0.889	11.1	51	-0.02	20.97
		----------	AvgRF	CCRF	% Dev	----------		
31	t	Benzo[k]fluoranthene	0.329	0.365	-10.9	86	-0.03	20.99

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M917-ICV911
Lab FileID: 4M21140.D

			True	Calc.	% Drift			
32	t	Benzo[a]pyrene	1.000	1.006	-0.6	69	-0.03	21.31

			AvgRF	CCRF	% Dev			
33	t	Indeno[1,2,3-cd]pyrene	1.331	1.178	11.5	64	-0.04	22.42
34	t	Dibenz[a,h]anthracene	1.076	0.939	12.7	61	-0.03	22.47
35	t	Benzo[g,h,i]perylene	1.240	1.101	11.2	60	-0.03	22.64

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Fri Sep 10 12:43:46 2010 RPT1

7.7.2

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M917-ICV911
Lab FileID: 4M21141.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m917\4m21141.D Vial: 4
Acq On : 9 Sep 2010 11:53 pm Operator: larisap
Sample : icv911-1.0 Inst : MS4M
Misc : op45262,e4m917 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Tue Sep 07 15:46:41 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	-0.02	8.52
11	I	Fluorene-d10	1.000	1.000	0.0	96	-0.02	11.88
18	t	Pentachlorophenol	5.000	5.747	-14.9	124	-0.02	13.86
22	I	Fluoranthene-d10	1.000	1.000	0.0	97	-0.03	16.76
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	100	-0.02	21.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Fri Sep 10 12:47:47 2010 RPT1

7.7.3

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M918-ICV911
Lab FileID: 4M21164.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m918\4m21164.D Vial: 3
Acq On : 10 Sep 2010 12:43 pm Operator: ninap
Sample : icv911-.5 Inst : MS4M
Misc : op45262,e4m918 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Fri Sep 10 13:17:34 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	51	-0.04	8.50
11	I	Fluorene-d10	1.000	1.000	0.0	58	-0.03	11.86
		----------	True	Calc.	% Drift		----------	
15	t	2,6-Dinitrotoluene	0.500	0.598	-19.6	75	-0.03	10.55
		----------	AvgRF	CCRF	% Dev		----------	
		----------	True	Calc.	% Drift		----------	
21	t	2,4-Dinitrotoluene	0.500	0.572	-14.4	73	-0.03	11.40
		----------	AvgRF	CCRF	% Dev		----------	
		----------	AvgRF	CCRF	% Dev		----------	
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	49	-0.02	21.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21051.D M4M911SIM.M Fri Sep 10 13:22:43 2010 RPT1

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M918-ICV911
Lab FileID: 4M21165.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m918\4m21165.D Vial: 4
Acq On : 10 Sep 2010 1:13 pm Operator: ninap
Sample : icv911-1 Inst : MS4M
Misc : op45262,e4m918 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Fri Sep 10 13:24:37 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	-0.02	8.52
5	t	bis(2-Chloroethyl)ether	0.745	0.699	6.2	104	0.00	4.05
11	I	Fluorene-d10	1.000	1.000	0.0	106	-0.02	11.88
		----------	AvgRF	CCRF	% Dev			
22	I	Fluoranthene-d10	1.000	1.000	0.0	108	-0.03	16.76
		----------	AvgRF	CCRF	% Dev			
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	127	-0.02	21.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Fri Sep 10 13:42:18 2010 RPT1

SII-SSA-0014-003251

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M918-ICV911
Lab FileID: 4M21166.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m918\4m21166.D Vial: 5
Acq On : 10 Sep 2010 1:44 pm Operator: ninap
Sample : icv911-1 Inst : MS4M
Misc : op45262,e4m918 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Fri Sep 10 13:24:37 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	91	-0.02	8.52
4	t	Phenol	0.726	0.595	18.0	71	0.02	4.01
11	I	Fluorene-d10	1.000	1.000	0.0	89	-0.02	11.88
		----------	AvgRF	CCRF	% Dev	----------		
22	I	Fluoranthene-d10	1.000	1.000	0.0	86	-0.03	16.76
		----------	AvgRF	CCRF	% Dev	----------		
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	99	-0.02	21.29
		----------	True	Calc.	% Drift	----------		
36	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	91	-0.02	8.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Sun Sep 12 12:25:55 2010 RPT1

7.7.6

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M999-CC911
Lab FileID: 4M22970.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m999\4m22970.D Vial: 2
Acq On : 23 Dec 2010 11:35 am Operator: ninap
Sample : cc911-1 Inst : MS4M
Misc : op47215a,e4m999,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Thu Dec 23 12:01:21 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	86	0.00	8.19
2	S	2-Fluorophenol	0.521	0.528	-1.3	86	0.00	2.91
3	S	Phenol-d5	0.605	0.825	-36.4#	118	0.00	4.59
4	t	Phenol	0.726	0.979	-34.8#	111	0.00	4.61
5	t	bis(2-Chloroethyl)ether	0.745	0.709	4.8	85	0.00	3.81
6	S	Nitrobenzene-d5	0.705	0.829	-17.6	98	0.00	5.14
7	t	Naphthalene	2.216	2.233	-0.8	88	0.00	6.53
8	t	Hexachlorobutadiene	0.435	0.451	-3.7	88	0.00	6.98
9	t	1-Methylnaphthalene	1.346	1.379	-2.5	86	0.00	8.25
10	S	2-Fluorobiphenyl	1.549	1.701	-9.8	89	0.00	9.01
11	I	Fluorene-d10	1.000	1.000	0.0	85	0.00	11.55
12	t	Acenaphthylene	1.855	1.637	11.8	78	0.00	10.02
13	t	Acenaphthene	1.196	1.232	-3.0	89	0.00	10.44
14	t	Fluorene	1.372	1.617	-17.9	106	0.00	11.60
		----------	True	Calc.	% Drift	----------		
15	t	2,6-Dinitrotoluene	1.000	0.969	3.1	94	0.00	10.33
		----------	AvgRF	CCRF	% Dev	----------		
16	S	2,4,6-Tribromophenol	0.180	0.170	5.6	78	0.00	12.39
		----------	True	Calc.	% Drift	----------		
17	t	Hexachlorobenzene	1.000	1.025	-2.5	85	0.00	13.02
18	t	Pentachlorophenol	5.000	5.942	-18.8	114	0.00	13.87
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Phenanthrene	1.883	1.869	0.7	86	0.00	13.75
20	t	Anthracene	1.714	1.799	-5.0	91	0.00	13.87
		----------	True	Calc.	% Drift	----------		
21	t	2,4-Dinitrotoluene	1.000	1.644	-64.4#	174	0.00	11.60
		----------	AvgRF	CCRF	% Dev	----------		
22	I	Fluoranthene-d10	1.000	1.000	0.0	90	0.00	16.45
23	t	Fluoranthene	1.297	1.265	2.5	89	0.00	16.49
24	t	Pyrene	1.236	1.263	-2.2	91	0.00	16.96
25	S	Terphenyl-d14	0.480	0.570	-18.7	100	0.00	17.60
26	t	Benzo[a]anthracene	1.323	1.365	-3.2	92	0.00	19.35
27	t	Chrysene	1.730	1.804	-4.3	92	0.00	19.41

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M999-CC911
Lab FileID: 4M22970.D

			True	Calc.	% Drift			
28		bis(2-Ethylhexyl)phthalat	1.000	1.544	-54.4#	158	0.00	19.78
			AvgRF	CCRF	% Dev			
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	107	0.00	21.12
			True	Calc.	% Drift			
30	t	Benzo[b]fluoranthene	1.000	1.180	-18.0	99	-0.03	20.80
			AvgRF	CCRF	% Dev			
31	t	Benzo[k]fluoranthene	0.329	0.325	1.2	114	0.00	20.83
			True	Calc.	% Drift			
32	t	Benzo[a]pyrene	1.000	1.025	-2.5	104	0.00	21.16
			AvgRF	CCRF	% Dev			
33	t	Indeno[1,2,3-cd]pyrene	1.331	1.589	-19.4	127	0.00	22.30
34	t	Dibenz[a,h]anthracene	1.076	1.280	-19.0	124	0.00	22.31
35	t	Benzo[g,h,i]perylene	1.240	1.394	-12.4	113	0.00	22.52
36	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	86	0.00	8.19
37	t	2-Methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m22970.D M4M911SIM.M Thu Dec 23 12:07:06 2010 RPT1

7.2.7

SII-SSA-0014-003254

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.596	0.621	0.558	0.582	0.609	0.629	0.566	0.599	0.595	4.20
3) Pyridine	1.200	1.355	1.305	1.377	1.184	1.431	1.343	1.413	1.326	6.92
4) N-Nitrosodim	0.409	0.454	0.430	0.452	0.362	0.477	0.440	0.473	0.437	8.59
5) 2-Fluorophen	1.051	1.208	1.177	1.228	1.152	1.281	1.210	1.273	1.198	6.13
6) Indene	1.762	1.935	1.784	1.903	1.933	2.025	1.834	1.983	1.895	4.95
7) Cumene	2.610	2.815	2.485	2.648	2.889	2.905	2.544	2.797	2.712	5.93
8) Phenol-d5	1.320	1.507	1.316	1.420	1.403	1.558	1.375	1.511	1.426	6.35
9) Phenol	1.575	1.762	1.528	1.686	1.748	1.838	1.596	1.782	1.690	6.61
10) Aniline	1.895	2.053	1.667	2.001	2.063	2.093	1.697	2.107	1.947	9.06
11) bis(2-Chloro	1.139	1.288	1.119	1.208	1.251	1.333	1.159	1.286	1.223	6.42
12) 2-Chlorophen	1.295	1.442	1.337	1.417	1.394	1.498	1.385	1.472	1.405	4.79
13) Decane	1.085	1.181	0.963	1.076	1.163	1.203	1.005	1.142	1.102	7.78
14) 1,3-Dichloro	1.509	1.630	1.475	1.563	1.628	1.655	1.504	1.617	1.573	4.41
15) 1,4-Dichloro	1.507	1.663	1.481	1.586	1.704	1.697	1.515	1.623	1.597	5.54
16) Benzyl alcoh	0.723	0.859	0.814	0.888	0.712	0.927	0.847	0.926	0.837	9.93
17) 1,2-Dichloro	1.420	1.560	1.352	1.475	1.574	1.595	1.412	1.547	1.492	6.04
18) Acetophenone	1.600	1.780	1.613	1.733	1.755	1.858	1.659	1.809	1.726	5.41
19) 2-Methylphen	0.875	0.975	0.909	0.981	0.900	1.011	0.932	1.020	0.950	5.67
20) 2,2'-oxybis(	0.417	0.467	0.435	0.465	0.456	0.487	0.445	0.483	0.457	5.22
21) 3&4-Methylph	0.846	1.014	0.921	1.013	0.885	1.072	0.971	1.063	0.973	8.50
22) n-Nitroso-di	0.674	0.756	0.666	0.739	0.684	0.788	0.695	0.784	0.723	6.88
23) Hexachloroet	0.401	0.445	0.415	0.447	0.433	0.468	0.428	0.460	0.437	5.15
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.332	0.377	0.349	0.368	0.353	0.392	0.360	0.377	0.364	5.18
26) Nitrobenzene	0.183	0.206	0.192	0.202	0.197	0.216	0.197	0.208	0.200	5.13
27) Quinoline	0.604	0.700	0.666	0.698	0.658	0.733	0.682	0.714	0.682	5.84
28) Isophorone	0.591	0.654	0.585	0.627	0.625	0.684	0.601	0.653	0.628	5.55
29) 2-Nitropheno	0.172	0.206	0.201	0.213	0.184	0.222	0.208	0.220	0.203	8.61
30) 2,4-Dimethyl	0.293	0.331	0.321	0.349	0.314	0.334	0.326	0.360	0.329	6.27
31) Benzoic acid			0.215	0.195		0.115	0.216	0.167	0.182	23.33
----- Linear regression ----- Coefficient = 0.9989										
Response Ratio = -0.03508 + 0.22970 *A										
32) bis(2-Chloro	0.374	0.434	0.382	0.404	0.418	0.447	0.392	0.429	0.410	6.43
33) 2,4-Dichloro	0.245	0.293	0.287	0.299	0.260	0.313	0.293	0.311	0.288	8.28
34) 2,6-Dichloro	0.253	0.300	0.275	0.290	0.272	0.314	0.282	0.303	0.286	6.91
35) 1,3,5-Trichl	0.324	0.356	0.304	0.323	0.347	0.362	0.312	0.337	0.333	6.25
36) 1,2,4-Trichl	0.299	0.339	0.301	0.319	0.343	0.345	0.307	0.330	0.323	5.81
37) 1,2,3-Trichl	0.297	0.334	0.293	0.311	0.330	0.339	0.302	0.322	0.316	5.59
38) Naphthalene	1.107	1.222	0.949	1.068	1.265	1.242	0.996	1.150	1.125	10.32
39) 4-Chloroanil	0.437	0.512	0.424	0.481	0.492	0.537	0.442	0.518	0.481	8.74
40) 2,3-Dichloro	0.308	0.364	0.331	0.344	0.338	0.383	0.337	0.364	0.346	6.73
41) Caprolactam	0.116	0.142	0.149	0.153	0.112	0.153	0.152	0.153	0.141	12.25
42) Hexachlorobu	0.149	0.168	0.152	0.159	0.161	0.173	0.155	0.165	0.160	5.08

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

43)	4-Chloro-3-m	0.234	0.288	0.292	0.304	0.232	0.312	0.299	0.312	0.284	11.51
44)	2-Methylnaph	0.739	0.834	0.698	0.762	0.824	0.859	0.717	0.813	0.781	7.64
45)	1-Methylnaph	0.711	0.792	0.666	0.727	0.769	0.807	0.683	0.769	0.741	6.94
46)	Dimethylnaph	0.589	0.686	0.590	0.645	0.647	0.716	0.613	0.680	0.646	7.18
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.187	0.138	0.218	0.216		0.176	0.212	0.200	0.192	14.91
49)	2,4,6-Trichl	0.270	0.330	0.337	0.346	0.279	0.358	0.342	0.353	0.327	10.25
50)	2,4,5-Trichl	0.404	0.262	0.297	0.308		0.305	0.305	0.303	0.312	13.98
51)	2-Fluorobiph	1.313	1.493	1.282	1.388	1.465	1.539	1.325	1.459	1.408	6.71
52)	2-Chloronaph	1.128	1.244	1.076	1.161	1.247	1.302	1.107	1.219	1.185	6.68
53)	Biphenyl	1.520	1.740	1.437	1.567	1.764	1.778	1.490	1.661	1.620	8.26
54)	2-Nitroanili	0.252	0.319	0.307	0.330	0.244	0.349	0.317	0.336	0.307	12.55
55)	Dimethylphth	1.201	1.383	1.175	1.272	1.319	1.438	1.221	1.349	1.295	7.19
56)	Acenaphthyle	1.782	2.051	1.696	1.890	1.894	2.158	1.780	2.016	1.908	8.21
57)	2,6-Dinitrot	0.244	0.294	0.302	0.315	0.240	0.320	0.310	0.322	0.294	11.25
58)	3-Nitroanili	0.263	0.354	0.388	0.402		0.398	0.397	0.403	0.372	13.69
59)	Acenaphthene	1.190	1.338	1.163	1.247	1.361	1.382	1.203	1.301	1.273	6.60
60)	2,4-Dinitrop		0.018	0.157	0.139		0.059	0.160	0.111	0.107	53.62
	----- Linear regression ----- Coefficient = 0.9975										
	Response Ratio = -0.05587 + 0.16902 *A										
61)	4-Nitropheno		0.082	0.157	0.155		0.119	0.158	0.144	0.136	22.22
	----- Linear regression ----- Coefficient = 0.9999										
	Response Ratio = -0.00999 + 0.16197 *A										
62)	Dibenzofuran	1.604	1.809	1.524	1.662	1.800	1.882	1.578	1.748	1.701	7.50
63)	2,4-Dinitrot	0.319	0.412	0.416	0.437	0.295	0.452	0.429	0.447	0.401	14.96
64)	2,3,4,6-Tetr	0.185	0.258	0.301	0.305		0.293	0.307	0.304	0.279	16.04
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00332 + 0.30506 *A										
65)	Diethylphtha	1.345	1.511	1.299	1.432	1.599	1.553	1.359	1.473	1.446	7.37
66)	Fluorene	1.253	1.406	1.249	1.351	1.352	1.485	1.284	1.412	1.349	6.21
67)	4-Chlorophen	0.551	0.625	0.557	0.581	0.590	0.638	0.563	0.602	0.588	5.42
68)	4-Nitroanili		0.356	0.395	0.408		0.400	0.403	0.412	0.396	5.09
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-			0.143	0.141		0.100	0.147	0.130	0.132	14.60
71)	n-Nitrosodip	0.548	0.642	0.581	0.616	0.624	0.663	0.591	0.643	0.613	6.22
72)	1,2-Diphenyl	0.716	0.802	0.774	0.769	0.770	0.832	0.796	0.799	0.782	4.36
73)	2,4,6-Tribro		0.097	0.121	0.116		0.110	0.120	0.114	0.113	7.86
74)	4-Bromopheny	0.187	0.220	0.223	0.226	0.187	0.234	0.223	0.231	0.216	8.61
75)	Hexachlorobe	0.218	0.250	0.249	0.247	0.250	0.256	0.248	0.255	0.246	4.86
76)	Pentachlorop	0.108	0.100	0.164	0.154		0.128	0.163	0.144	0.137	19.12
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.01762 + 0.16671 *A										
77)	Phenanthrene	1.178	1.273	1.041	1.107	1.342	1.285	1.066	1.191	1.185	9.22
78)	Anthracene	1.122	1.272	1.090	1.180	1.266	1.305	1.121	1.250	1.201	6.91
79)	Carbazole	1.006	1.172	1.039	1.116	1.081	1.221	1.066	1.168	1.109	6.66
80)	Di-n-butylph	1.270	1.539	1.252	1.399	1.434	1.606	1.293	1.539	1.416	9.64
81)	Fluoranthene	1.048	1.221	1.032	1.119	1.206	1.272	1.069	1.206	1.147	7.94
82)	Octadecane	0.442	0.518	0.379	0.432	0.476	0.541	0.399	0.495	0.460	12.43
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.203	1.321	1.026	1.142	1.313	1.345	1.064	1.270	1.210	10.10
85)	Butyl steara	0.313	0.385		0.292		0.386		0.350	0.345	12.24
86)	Terphenyl-d1	0.705	0.798	0.690	0.745	0.760	0.834	0.706	0.793	0.754	6.87
87)	Butylbenzylp	0.570	0.673	0.567	0.644	0.653	0.719	0.594	0.702	0.640	9.07

7.7.8

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

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 88) Benzo[a]anth 1.078 1.161 0.927 1.060 1.259 1.207 0.982 1.153 1.103  10.21
 89) 3,3'-Dichlor 0.339 0.407 0.398 0.439       0.436 0.419 0.442 0.412   8.81
 90) Chrysene     1.067 1.179 0.927 1.032 1.232 1.217 0.975 1.117 1.093  10.28
 91) bis(2-Ethylh 0.807 0.986 0.782 0.902       1.039 0.812 1.006 0.905  11.79

 92) I   Perylene-d12          ----------------ISTD---------------------
 93) Di-n-octylph 1.178 1.594 1.427 1.596       1.799 1.472 1.737 1.543  13.51
 94) Benzo[b]fluo 1.037 1.137 1.635 1.264 1.124 1.253 1.723 1.252 1.303  18.88
          ----- Quadratic regression -----               Coefficient =  0.9925
               Response Ratio = -0.01149 + 1.14974 *A + 0.21778 *A^2

 95) Benzo[k]fluo 1.143 1.401       1.260 1.381 1.403 0.814 1.323 1.246  17.02
          ----- Quadratic regression -----               Coefficient =  0.9935
               Response Ratio = -0.04948 + 1.85273 *A + -0.50029 *A^2

 96) Benzo[a]pyre 0.925 1.103 1.161 1.166 1.048 1.244 1.162 1.207 1.127   8.96
 97) Indeno[1,2,3 0.953 1.197 1.188 1.390 1.046 1.329 1.346 1.354 1.226  12.99
 98) Dibenz(a,h)a 0.664 0.852 0.898 1.004 0.736 0.963 0.991 0.993 0.888  14.45
 99) Dibenz[a,h]a 0.774 0.981 0.990 1.130 0.845 1.093 1.113 1.115 1.005  13.39
100) 7,12-Dimethy       0.448 0.619 0.614       0.500 0.616 0.608 0.567  13.09
101) Benzo[g,h,i] 0.800 0.986 0.825 1.085 0.892 1.087 0.979 1.091 0.968  12.21

102) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.019 0.981       0.761 0.688 0.956 0.604 0.830 0.834  18.98
          ----- Quadratic regression -----               Coefficient =  0.9994
               Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2


104) I   Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.558 0.537 0.435 0.500 0.409 0.512 0.477 0.523 0.494  10.35
106) Atrazine     0.156 0.166 0.157 0.178       0.172 0.172 0.181 0.169   5.81

107) t   Chrysene-d12a         ----------------ISTD---------------------
108) Benzidine    0.441 0.614 0.387 0.499       0.669 0.429 0.476 0.502  20.48
          ----- Quadratic regression -----               Coefficient =  0.9973
               Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2

 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MR3151.M          Wed Nov 17 15:38:13 2010   NJMSR
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7.7.8

7

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICC3152
Lab FileID: R83645.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	1.019	0.981	0.761	0.688	0.956	0.604	0.830	0.834		18.98

----- Quadratic regression ----- Coefficient = 0.9994
Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2

104) I Acenaphthene-d10a	ISTD									
105) 1,2,4,5-Tetr	0.558	0.537	0.435	0.500	0.409	0.512	0.477	0.523	0.494	10.35
106) Atrazine	0.156	0.166	0.157	0.178		0.172	0.172	0.181	0.169	5.81
107) t Chrysene-d12a	ISTD									
108) Benzidine	0.441	0.614	0.387	0.499		0.669	0.429	0.476	0.502	20.48

----- Quadratic regression ----- Coefficient = 0.9973
Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Tue Nov 16 13:42:25 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83651.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.01	7.61
3	t	Pyridine	1.326	1.290	2.7	116	-0.05	3.22
4	t	N-Nitrosodimethylamine	0.437	0.436	0.2	120	-0.02	3.25
11	t	bis(2-Chloroethyl)ether	1.223	1.122	8.3	115	-0.02	7.20
14	t	1,3-Dichlorobenzene	1.573	1.409	10.4	112	-0.02	7.53
15	t	1,4-Dichlorobenzene	1.597	1.442	9.7	113	0.00	7.65
16	t	Benzyl alcohol	0.837	0.843	-0.7	118	0.00	8.00
17	t	1,2-Dichlorobenzene	1.492	1.352	9.4	114	-0.01	8.03
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.440	3.7	117	0.00	8.34
22	t	n-Nitroso-di-n-propylamin	0.723	0.719	0.6	121	-0.02	8.63
23	t	Hexachloroethane	0.437	0.414	5.3	115	0.00	8.67
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	10.39
26	t	Nitrobenzene	0.200	0.185	7.5	113	-0.01	8.89
28	t	Isophorone	0.628	0.582	7.3	115	-0.02	9.42
		----------	AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	118	0.00	10.00
36	t	1,2,4-Trichlorobenzene	0.323	0.294	9.0	114	0.00	10.32
38	t	Naphthalene	1.125	0.985	12.4	114	0.00	10.44
42	t	Hexachlorobutadiene	0.160	0.152	5.0	118	0.00	10.91
44	t	2-Methylnaphthalene	0.781	0.657	15.9	106	0.00	12.04
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	14.52
48	t	Hexachlorocyclopentadiene	0.192	0.192	0.0	112	0.00	12.60
52	t	2-Chloronaphthalene	1.185	1.042	12.1	113	0.00	13.16
54	t	2-Nitroaniline	0.307	0.296	3.6	113	0.00	13.54
55	t	Dimethylphthalate	1.295	1.131	12.7	112	0.00	14.13
56	t	Acenaphthylene	1.908	1.533	19.7	102	0.00	14.14
57	t	2,6-Dinitrotoluene	0.294	0.290	1.4	116	0.00	14.25
58	t	3-Nitroaniline	0.372	0.327	12.1	102	0.00	14.55
59	t	Acenaphthene	1.273	1.137	10.7	115	0.00	14.60
		----------	AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.525	10.3	115	0.00	14.98
63	t	2,4-Dinitrotoluene	0.401	0.382	4.7	110	0.00	15.16
		----------	AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.291	10.7	113	-0.01	15.83
66	t	Fluorene	1.349	1.244	7.8	116	0.00	15.79

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

67	t	4-Chlorophenyl-phenylethe	0.588	0.536	8.8	116	0.00	15.87
68	t	4-Nitroaniline	0.396	0.372	6.1	115	-0.01	16.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	17.98
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	114	0.00	16.19
72	t	1,2-Diphenylhydrazine	0.782	0.699	10.6	116	0.00	16.24
74	t	4-Bromophenyl-phenylether	0.216	0.207	4.2	117	0.00	17.01
75	t	Hexachlorobenzene	0.246	0.229	6.9	119	0.00	17.29
		----------	AvgRF	CCRF	% Dev		----------	
77	t	Phenanthrene	1.185	1.042	12.1	121	0.00	18.04
78	t	Anthracene	1.201	1.074	10.6	117	0.00	18.15
79	t	Carbazole	1.109	1.048	5.5	120	0.00	18.60
80	t	Di-n-butylphthalate	1.416	1.242	12.3	114	0.00	19.56
81	t	Fluoranthene	1.147	1.006	12.3	115	0.00	20.36
83	I	Chrysene-d12	1.000	1.000	0.0	127	0.00	22.25
84	t	Pyrene	1.210	1.044	13.7	116	0.00	20.68
87	t	Butylbenzylphthalate	0.640	0.571	10.8	112	0.00	21.67
88	t	Benzo[a]anthracene	1.103	0.958	13.1	114	0.00	22.23
90	t	Chrysene	1.093	0.938	14.2	115	0.00	22.28
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.799	11.7	112	0.00	22.37
92	I	Perylene-d12	1.000	1.000	0.0	131	0.00	23.79
93	t	Di-n-octylphthalate	1.543	1.370	11.2	113	0.00	22.98
		----------	True	Calc.	% Drift		----------	
94	t	Benzo[b]fluoranthene	50.000	40.294	19.4	114	0.00	23.37
95	t	Benzo[k]fluoranthene	50.000	40.077	19.8	109	0.00	23.40
		----------	AvgRF	CCRF	% Dev		----------	
96	t	Benzo[a]pyrene	1.127	1.030	8.6	116	0.00	23.73
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.285	-4.8	121	0.00	25.17
99	t	Dibenz[a,h]anthracene	1.005	1.041	-3.6	121	0.00	25.18
101	t	Benzo[g,h,i]perylene	0.968	1.037	-7.1	126	0.00	25.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0

R83645.D MR3151.M Tue Nov 16 13:46:13 2010 NJMSR

7.7.10

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83651A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83651A.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	0.01	14.52
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.446	9.7	122	0.00	12.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:52:58 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83652.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83652.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.01	7.61
2	t	1,4-Dioxane	0.595	0.546	8.2	111	-0.06	2.77
6	t	Indene	1.895	1.809	4.5	113	-0.01	8.19
7	t	Cumene	2.712	2.285	15.7	102	-0.02	6.13
13	t	Decane	1.102	0.975	11.5	107	-0.02	7.41
18	t	Acetophenone	1.726	1.825	-5.7	125	-0.02	8.54
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.01	10.38
27	t	Quinoline	0.682	0.724	-6.2	119	-0.03	11.21
40	t	2,3-Dichloroaniline	0.346	0.335	3.2	111	0.00	12.81
41	t	Caprolactam	0.141	0.143	-1.4	107	-0.09	11.39
45	t	1-Methylnaphthalene	0.741	0.698	5.8	110	0.00	12.29
46	t	Dimethylnaphthalene	0.646	0.655	-1.4	116	0.00	13.53
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	14.52
53	t	Biphenyl	1.620	1.527	5.7	113	0.00	13.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	17.98
82	t	Octadecane	0.460	0.455	1.1	122	0.00	18.03
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	22.24
92	I	Perylene-d12	1.000	1.000	0.0	100	0.00	23.78
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.379	33.2#	62	-0.02	23.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:50:51 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83652A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83652A.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	117	0.00	7.61
		True	Calc.	% Drift			
103	Benzaldehyde	50.000	59.481	-19.0	152	0.00	6.76
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	127	0.00	14.52
106	Atrazine	0.169	0.185	-9.5	132	0.01	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Nov 18 16:21:44 2010 NJMSR

7.7.13

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83653.D Vial: 12
Acq On : 16 Nov 2010 4:54 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	137	0.00	7.62
9	t	Phenol	1.690	1.465	13.3	119	0.00	7.10
12	t	2-Chlorophenol	1.405	1.344	4.3	130	0.00	7.26
19	t	2-Methylphenol	0.950	1.098	-15.6	154	0.00	8.31
21	t	3&4-Methylphenol	0.973	1.156	-18.8	156	0.00	8.64
24	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	10.39
29	t	2-Nitrophenol	0.203	0.201	1.0	124	0.00	9.60
30	t	2,4-Dimethylphenol	0.329	0.323	1.8	122	0.00	9.80
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	48.929	2.1	133	0.04	10.22
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.288	0.277	3.8	122	0.00	10.14
34	t	2,6-Dichlorophenol	0.286	0.283	1.0	129	0.00	10.67
43	t	4-Chloro-3-methylphenol	0.284	0.281	1.1	122	-0.03	11.87
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	14.52
49	t	2,4,6-Trichlorophenol	0.327	0.329	-0.6	121	0.00	12.81
50	t	2,4,5-Trichlorophenol	0.312	0.370	-18.6	153	-0.02	12.88
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.410	3.6	108	-0.02	14.76
61	t	4-Nitrophenol	50.000	45.760	8.5	115	-0.01	15.04
		----------	True	Calc.	% Drift	----------		
64		2,3,4,6-Tetrachlorophenol	50.000	44.407	11.2	112	0.00	15.41
69	I	Phenanthrene-d10	1.000	1.000	0.0	129	0.00	17.99
70	t	4,6-Dinitro-2-methylpheno	0.132	0.125	5.3	115	-0.02	16.09
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	93.330	6.7	118	-0.01	17.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

R83645.D MR3151.M Wed Nov 17 15:34:26 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83655.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83655.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	132	-0.01	22.24
89 t	3,3'-Dichlorobenzidine	0.412	0.409	0.7	123	0.00	22.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:01:54 2010 NJMSR

7.7.15

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83655A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83655A.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 t	Chrysene-d12a	1.000	1.000	0.0	148	0.00	22.24
		True	Calc.	% Drift			
108 t	Benzidine	50.000	101.157	-102.3#	232	0.00	20.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:26:56 2010 NJMSR

7.7.16

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3153-ICV3151
Lab FileID: R83659.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3153\R83659.D Vial: 4
Acq On : 16 Nov 2010 5:43 pm Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3153,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	7.62
10	t	Aniline	1.947	1.742	10.5	131	0.00	7.07
24	I	Naphthalene-d8	1.000	1.000	0.0	135	0.00	10.40
39	t	4-Chloroaniline	0.481	0.472	1.9	133	0.00	10.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Wed Nov 17 13:22:13 2010 NJMSR

7.7.17

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3151
Lab FileID: R84604.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3195\R84604.D Vial: 2
Acq On : 22 Dec 2010 7:51 pm Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47327,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	129	-0.10	7.52
2	t	1,4-Dioxane	0.595	0.587	1.3	127	-0.08	2.75
3	t	Pyridine	1.326	1.342	-1.2	123	-0.09	3.19
4	t	N-Nitrosodimethylamine	0.437	0.470	-7.6	129	-0.09	3.19
5	S	2-Fluorophenol	1.198	1.248	-4.2	127	-0.05	5.24
6	t	Indene	1.895	1.931	-1.9	126	-0.10	8.10
7	t	Cumene	2.712	2.759	-1.7	127	-0.10	6.05
8	S	Phenol-d5	1.426	1.496	-4.9	128	-0.05	7.02
9	t	Phenol	1.690	1.665	1.5	121	-0.06	7.04
10	t	Aniline	1.947	1.717	11.8	105	-0.10	6.96
11	t	bis(2-Chloroethyl)ether	1.223	1.223	0.0	123	-0.10	7.11
12	t	2-Chlorophenol	1.405	1.442	-2.6	127	-0.09	7.18
13	t	Decane	1.102	1.105	-0.3	125	-0.10	7.32
14	t	1,3-Dichlorobenzene	1.573	1.598	-1.6	128	-0.11	7.44
15	t	1,4-Dichlorobenzene	1.597	1.623	-1.6	129	-0.10	7.55
16	t	Benzyl alcohol	0.837	0.915	-9.3	128	-0.09	7.91
17	t	1,2-Dichlorobenzene	1.492	1.513	-1.4	126	-0.11	7.93
18	t	Acetophenone	1.726	1.822	-5.6	130	-0.11	8.45
19	t	2-Methylphenol	0.950	0.964	-1.5	122	-0.06	8.25
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.477	-4.4	128	-0.10	8.24
21	t	3&4-Methylphenol	0.973	1.058	-8.7	129	-0.07	8.57
22	t	n-Nitroso-di-n-propylamin	0.723	0.808	-11.8	133	-0.11	8.54
23	t	Hexachloroethane	0.437	0.485	-11.0	136	-0.10	8.58
24	I	Naphthalene-d8	1.000	1.000	0.0	129	-0.10	10.29
25	S	Nitrobenzene-d5	0.364	0.385	-5.8	132	-0.11	8.76
26	t	Nitrobenzene	0.200	0.206	-3.0	128	-0.11	8.79
27	t	Quinoline	0.682	0.726	-6.5	131	-0.12	11.12
28	t	Isophorone	0.628	0.662	-5.4	131	-0.11	9.33
29	t	2-Nitrophenol	0.203	0.223	-9.9	131	-0.11	9.50
30	t	2,4-Dimethylphenol	0.329	0.331	-0.6	119	-0.08	9.72
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	24.961	0.2	134	-0.10	10.08
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.423	-3.2	127	-0.10	9.91
33	t	2,4-Dichlorophenol	0.288	0.315	-9.4	131	-0.08	10.07
34	t	2,6-Dichlorophenol	0.286	0.314	-9.8	133	-0.09	10.58
35	t	1,3,5-Trichlorobenzene	0.333	0.355	-6.6	135	-0.11	9.52
36	t	1,2,4-Trichlorobenzene	0.323	0.343	-6.2	134	-0.11	10.22
37	t	1,2,3-Trichlorobenzene	0.316	0.340	-7.6	136	-0.11	10.75

7.7.18
7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3151
Lab FileID: R84604.D

38	t	Naphthalene	1.125	1.136	-1.0	127	-0.11	10.33
39	t	4-Chloroaniline	0.481	0.487	-1.2	121	-0.10	10.57
40	t	2,3-Dichloroaniline	0.346	0.382	-10.4	135	-0.10	12.70
41	t	Caprolactam	0.141	0.158	-12.1	134	-0.16	11.32
42	t	Hexachlorobutadiene	0.160	0.183	-14.4	143	-0.11	10.80
43	t	4-Chloro-3-methylphenol	0.284	0.329	-15.8	136	-0.07	11.83
44	t	2-Methylnaphthalene	0.781	0.829	-6.1	131	-0.11	11.94
45	t	1-Methylnaphthalene	0.741	0.779	-5.1	131	-0.11	12.18
46	t	Dimethylnaphthalene	0.646	0.713	-10.4	135	-0.11	13.43
47	I	Acenaphthene-d10	1.000	1.000	0.0	137	-0.11	14.41
48	t	Hexachlorocyclopentadiene	0.192	0.215	-12.0	147	-0.11	12.50
49	t	2,4,6-Trichlorophenol	0.327	0.370	-13.1	144	-0.09	12.73
50	t	2,4,5-Trichlorophenol	0.312	0.312	0.0	141	-0.07	12.83
51	S	2-Fluorobiphenyl	1.408	1.414	-0.4	133	-0.11	12.90
52	t	2-Chloronaphthalene	1.185	1.210	-2.1	136	-0.11	13.06
53	t	Biphenyl	1.620	1.604	1.0	132	-0.11	13.08
54	t	2-Nitroaniline	0.307	0.340	-10.7	139	-0.10	13.45
55	t	Dimethylphthalate	1.295	1.349	-4.2	137	-0.11	14.02
56	t	Acenaphthylene	1.908	1.936	-1.5	132	-0.11	14.03
57	t	2,6-Dinitrotoluene	0.294	0.319	-8.5	136	-0.11	14.14
58	t	3-Nitroaniline	0.372	0.377	-1.3	128	-0.10	14.45
59	t	Acenaphthene	1.273	1.260	1.0	133	-0.11	14.48
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	50.232	-0.5	155	-0.10	14.68
61	t	4-Nitrophenol	25.000	24.033	3.9	132	-0.02	15.03
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.692	0.5	133	-0.12	14.87
63	t	2,4-Dinitrotoluene	0.401	0.446	-11.2	137	-0.11	15.05
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	25.249	-1.0	137	-0.10	15.32
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.465	-1.3	136	-0.12	15.72
66	t	Fluorene	1.349	1.374	-1.9	133	-0.12	15.68
67	t	4-Chlorophenyl-phenylethe	0.588	0.623	-6.0	142	-0.12	15.76
68	t	4-Nitroaniline	0.396	0.356	10.1	118	-0.12	15.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	138	-0.11	17.88
70	t	4,6-Dinitro-2-methylpheno	0.132	0.137	-3.8	145	-0.11	16.00
71	t	n-Nitrosodiphenylamine	0.613	0.622	-1.5	133	-0.11	16.08
72	t	1,2-Diphenylhydrazine	0.782	0.778	0.5	134	-0.11	16.12
73	S	2,4,6-Tribromophenol	0.113	0.125	-10.6	152	-0.11	16.31
74	t	4-Bromophenyl-phenylether	0.216	0.233	-7.9	139	-0.11	16.89
75	t	Hexachlorobenzene	0.246	0.269	-9.3	145	-0.12	17.18
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	51.164	-2.3	149	-0.10	17.66
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.173	1.0	136	-0.12	17.92
78	t	Anthracene	1.201	1.211	-0.8	133	-0.12	18.03
79	t	Carbazole	1.109	1.098	1.0	130	-0.11	18.49
80	t	Di-n-butylphthalate	1.416	1.503	-6.1	135	-0.09	19.47
81	t	Fluoranthene	1.147	1.203	-4.9	137	-0.08	20.28
82	t	Octadecane	0.460	0.461	-0.2	128	-0.11	17.92

7.7.18
7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3151
Lab FileID: R84604.D

83	I	Chrysene-d12	1.000	1.000	0.0	141	-0.07	22.18
84	t	Pyrene	1.210	1.211	-0.1	135	-0.08	20.60
85		Butyl stearate	0.345	0.341	1.2	138	-0.07	21.66
86	S	Terphenyl-d14	0.754	0.797	-5.7	142	-0.08	20.90
87	t	Butylbenzylphthalate	0.640	0.669	-4.5	135	-0.08	21.60
88	t	Benzo[a]anthracene	1.103	1.145	-3.8	140	-0.07	22.15
89	t	3,3'-Dichlorobenzidine	0.412	0.450	-9.2	144	-0.07	22.16
90	t	Chrysene	1.093	1.087	0.5	137	-0.07	22.20
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.967	-6.9	136	-0.06	22.30
92	I	Perylene-d12	1.000	1.000	0.0	139	-0.08	23.70
93	t	Di-n-octylphthalate	1.543	1.646	-6.7	132	-0.07	22.91
			True	Calc.	% Drift			
94	t	Benzo[b]fluoranthene	25.000	25.527	-2.1	144	-0.08	23.29
95	t	Benzo[k]fluoranthene	25.000	21.987	12.1	137	-0.09	23.32
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.127	1.162	-3.1	134	-0.09	23.63
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.389	-13.3	143	-0.13	25.04
98	t	Dibenz(a,h)acridine	0.888	1.027	-15.7	144	-0.12	24.72
99	t	Dibenz[a,h]anthracene	1.005	1.158	-15.2	144	-0.13	25.05
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.538	5.1	123	-0.09	23.31
101	t	Benzo[g,h,i]perylene	0.968	1.085	-12.1	138	-0.14	25.41

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Dec 23 13:13:40 2010 NJMSR

7.7.18

7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3152
Lab FileID: R84605.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3195\R84605.D Vial: 3
Acq On : 22 Dec 2010 8:28 pm Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47327,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	123	-0.10	7.51
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	27.073	-8.3	138	-0.09	6.67
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	131	-0.10	14.41
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.525	-6.3	131	-0.11	12.43
106	Atrazine	0.169	0.188	-11.2	136	-0.11	17.50
107 t	Chrysene-d12a	1.000	1.000	0.0	139	-0.06	22.17
		True	Calc.	% Drift			
108 t	Benzidine	25.000	25.046	-0.2	156	-0.07	20.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Dec 23 13:14:08 2010 NJMSR

7.7.19

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3151
Lab FileID: R84727.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84727.D Vial: 2
Acq On : 30 Dec 2010 8:03 am Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47327,er3201,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	133	-0.11	7.51
2	t	1,4-Dioxane	0.595	0.641	-7.7	142	-0.17	2.66
3	t	Pyridine	1.326	1.466	-10.6	138	-0.09	3.19
4	t	N-Nitrosodimethylamine	0.437	0.532	-21.7#	150	-0.08	3.19
5	S	2-Fluorophenol	1.198	1.284	-7.2	134	-0.06	5.24
6	t	Indene	1.895	1.980	-4.5	133	-0.11	8.09
7	t	Cumene	2.712	2.896	-6.8	138	-0.10	6.05
8	S	Phenol-d5	1.426	1.572	-10.2	138	-0.06	7.01
9	t	Phenol	1.690	1.760	-4.1	131	-0.07	7.03
10	t	Aniline	1.947	1.794	7.9	113	-0.10	6.96
11	t	bis(2-Chloroethyl)ether	1.223	1.295	-5.9	134	-0.11	7.11
12	t	2-Chlorophenol	1.405	1.475	-5.0	133	-0.10	7.18
13	t	Decane	1.102	1.222	-10.9	142	-0.11	7.31
14	t	1,3-Dichlorobenzene	1.573	1.619	-2.9	133	-0.11	7.43
15	t	1,4-Dichlorobenzene	1.597	1.665	-4.3	136	-0.11	7.54
16	t	Benzyl alcohol	0.837	0.947	-13.1	136	-0.10	7.90
17	t	1,2-Dichlorobenzene	1.492	1.549	-3.8	133	-0.11	7.92
18	t	Acetophenone	1.726	1.848	-7.1	136	-0.11	8.44
19	t	2-Methylphenol	0.950	1.015	-6.8	132	-0.08	8.24
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.473	-3.5	130	-0.11	8.24
21	t	3&4-Methylphenol	0.973	1.087	-11.7	136	-0.08	8.56
22	t	n-Nitroso-di-n-propylamin	0.723	0.882	-22.0#	149	-0.12	8.53
23	t	Hexachloroethane	0.437	0.462	-5.7	133	-0.11	8.56
24	I	Naphthalene-d8	1.000	1.000	0.0	131	-0.11	10.28
25	S	Nitrobenzene-d5	0.364	0.410	-12.6	142	-0.11	8.75
26	t	Nitrobenzene	0.200	0.210	-5.0	132	-0.11	8.79
27	t	Quinoline	0.682	0.731	-7.2	134	-0.12	11.11
28	t	Isophorone	0.628	0.699	-11.3	140	-0.12	9.32
29	t	2-Nitrophenol	0.203	0.221	-8.9	131	-0.11	9.50
30	t	2,4-Dimethylphenol	0.329	0.339	-3.0	123	-0.09	9.71
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	20.309	18.8	103	-0.10	10.08
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.438	-6.8	134	-0.11	9.90
33	t	2,4-Dichlorophenol	0.288	0.313	-8.7	132	-0.09	10.06
34	t	2,6-Dichlorophenol	0.286	0.311	-8.7	134	-0.10	10.57
35	t	1,3,5-Trichlorobenzene	0.333	0.340	-2.1	132	-0.12	9.51
36	t	1,2,4-Trichlorobenzene	0.323	0.332	-2.8	131	-0.11	10.21
37	t	1,2,3-Trichlorobenzene	0.316	0.328	-3.8	133	-0.11	10.75

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3151
Lab FileID: R84727.D

38	t	Naphthalene	1.125	1.166	-3.6	133	-0.12	10.32
39	t	4-Chloroaniline	0.481	0.498	-3.5	126	-0.11	10.57
40	t	2,3-Dichloroaniline	0.346	0.374	-8.1	134	-0.11	12.70
41	t	Caprolactam	0.141	0.168	-19.1	144	-0.17	11.31
42	t	Hexachlorobutadiene	0.160	0.167	-4.4	133	-0.11	10.80
43	t	4-Chloro-3-methylphenol	0.284	0.340	-19.7	143	-0.08	11.82
44	t	2-Methylnaphthalene	0.781	0.823	-5.4	133	-0.12	11.93
45	t	1-Methylnaphthalene	0.741	0.775	-4.6	132	-0.12	12.17
46	t	Dimethylnaphthalene	0.646	0.692	-7.1	133	-0.11	13.42
47	I	Acenaphthene-d10	1.000	1.000	0.0	132	-0.12	14.40
48	t	Hexachlorocyclopentadiene	0.192	0.198	-3.1	131	-0.12	12.49
49	t	2,4,6-Trichlorophenol	0.327	0.355	-8.6	133	-0.10	12.72
50	t	2,4,5-Trichlorophenol	0.312	0.305	2.2	133	-0.08	12.82
51	S	2-Fluorobiphenyl	1.408	1.437	-2.1	130	-0.12	12.89
52	t	2-Chloronaphthalene	1.185	1.232	-4.0	134	-0.12	13.05
53	t	Biphenyl	1.620	1.674	-3.3	133	-0.11	13.08
54	t	2-Nitroaniline	0.307	0.388	-26.4#	153	-0.11	13.44
55	t	Dimethylphthalate	1.295	1.351	-4.3	133	-0.11	14.02
56	t	Acenaphthylene	1.908	2.021	-5.9	133	-0.12	14.03
57	t	2,6-Dinitrotoluene	0.294	0.326	-10.9	134	-0.11	14.14
58	t	3-Nitroaniline	0.372	0.401	-7.8	132	-0.11	14.44
59	t	Acenaphthene	1.273	1.311	-3.0	133	-0.12	14.48
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	54.109	-8.2	165	-0.11	14.68
61	t	4-Nitrophenol	25.000	25.430	-1.7	136	-0.04	15.01
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.729	-1.6	131	-0.12	14.86
63	t	2,4-Dinitrotoluene	0.401	0.454	-13.2	134	-0.11	15.04
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	24.138	3.4	126	-0.11	15.31
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.486	-2.8	134	-0.12	15.72
66	t	Fluorene	1.349	1.393	-3.3	131	-0.12	15.68
67	t	4-Chlorophenyl-phenylethe	0.588	0.598	-1.7	132	-0.12	15.75
68	t	4-Nitroaniline	0.396	0.382	3.5	123	-0.13	15.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	132	-0.12	17.87
70	t	4,6-Dinitro-2-methylpheno	0.132	0.141	-6.8	143	-0.12	16.00
71	t	n-Nitrosodiphenylamine	0.613	0.645	-5.2	132	-0.12	16.07
72	t	1,2-Diphenylhydrazine	0.782	0.861	-10.1	142	-0.12	16.11
73	S	2,4,6-Tribromophenol	0.113	0.111	1.8	129	-0.12	16.30
74	t	4-Bromophenyl-phenylether	0.216	0.229	-6.0	131	-0.12	16.89
75	t	Hexachlorobenzene	0.246	0.249	-1.2	129	-0.12	17.17
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	46.734	6.5	129	-0.11	17.65
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.194	-0.8	132	-0.13	17.92
78	t	Anthracene	1.201	1.241	-3.3	131	-0.12	18.03
79	t	Carbazole	1.109	1.128	-1.7	127	-0.11	18.49
80	t	Di-n-butylphthalate	1.416	1.529	-8.0	131	-0.09	19.47
81	t	Fluoranthene	1.147	1.219	-6.3	133	-0.09	20.27
82	t	Octadecane	0.460	0.511	-11.1	136	-0.12	17.91

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3151
Lab FileID: R84727.D

83	I	Chrysene-d12	1.000	1.000	0.0	144	-0.08	22.17
84	t	Pyrene	1.210	1.156	4.5	131	-0.09	20.60
85		Butyl stearate	0.345	0.368	-6.7	151	-0.07	21.66
86	S	Terphenyl-d14	0.754	0.729	3.3	132	-0.08	20.89
87	t	Butylbenzylphthalate	0.640	0.681	-6.4	140	-0.08	21.60
88	t	Benzo[a]anthracene	1.103	1.134	-2.8	142	-0.07	22.15
89	t	3,3'-Dichlorobenzidine	0.412	0.441	-7.0	144	-0.08	22.16
90	t	Chrysene	1.093	1.091	0.2	141	-0.08	22.20
91	t	bis(2-Ethylhexyl)phthalat	0.905	1.010	-11.6	145	-0.07	22.29
92	I	Perylene-d12	1.000	1.000	0.0	146	-0.08	23.70
93	t	Di-n-octylphthalate	1.543	1.738	-12.6	146	-0.07	22.91
		----------	True	Calc.	% Drift	----------		
94	t	Benzo[b]fluoranthene	25.000	25.925	-3.7	154	-0.09	23.29
95	t	Benzo[k]fluoranthene	25.000	21.245	15.0	140	-0.09	23.32
		----------	AvgRF	CCRF	% Dev	----------		
96	t	Benzo[a]pyrene	1.127	1.180	-4.7	143	-0.09	23.64
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.297	-5.8	140	-0.12	25.05
98	t	Dibenz(a,h)acridine	0.888	0.937	-5.5	138	-0.12	24.72
99	t	Dibenz[a,h]anthracene	1.005	1.057	-5.2	138	-0.13	25.05
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.517	8.8	124	-0.09	23.31
101	t	Benzo[g,h,i]perylene	0.968	1.006	-3.9	134	-0.14	25.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Mon Jan 03 13:32:08 2011 NJMSR

7.7.20

7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3152
Lab FileID: R84728.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84728.D Vial: 3
Acq On : 30 Dec 2010 8:43 am Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47327,er3201,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	136	-0.10	7.51
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	26.593	-6.4	150	-0.10	6.66
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	-0.11	14.40
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.504	-2.0	132	-0.12	12.42
106	Atrazine	0.169	0.180	-6.5	137	-0.11	17.50
107 t	Chrysene-d12a	1.000	1.000	0.0	139	-0.07	22.17
		True	Calc.	% Drift			
108 t	Benzidine	25.000	29.249	-17.0	180	-0.07	20.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Mon Jan 03 13:32:36 2011 NJMSR

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:35 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

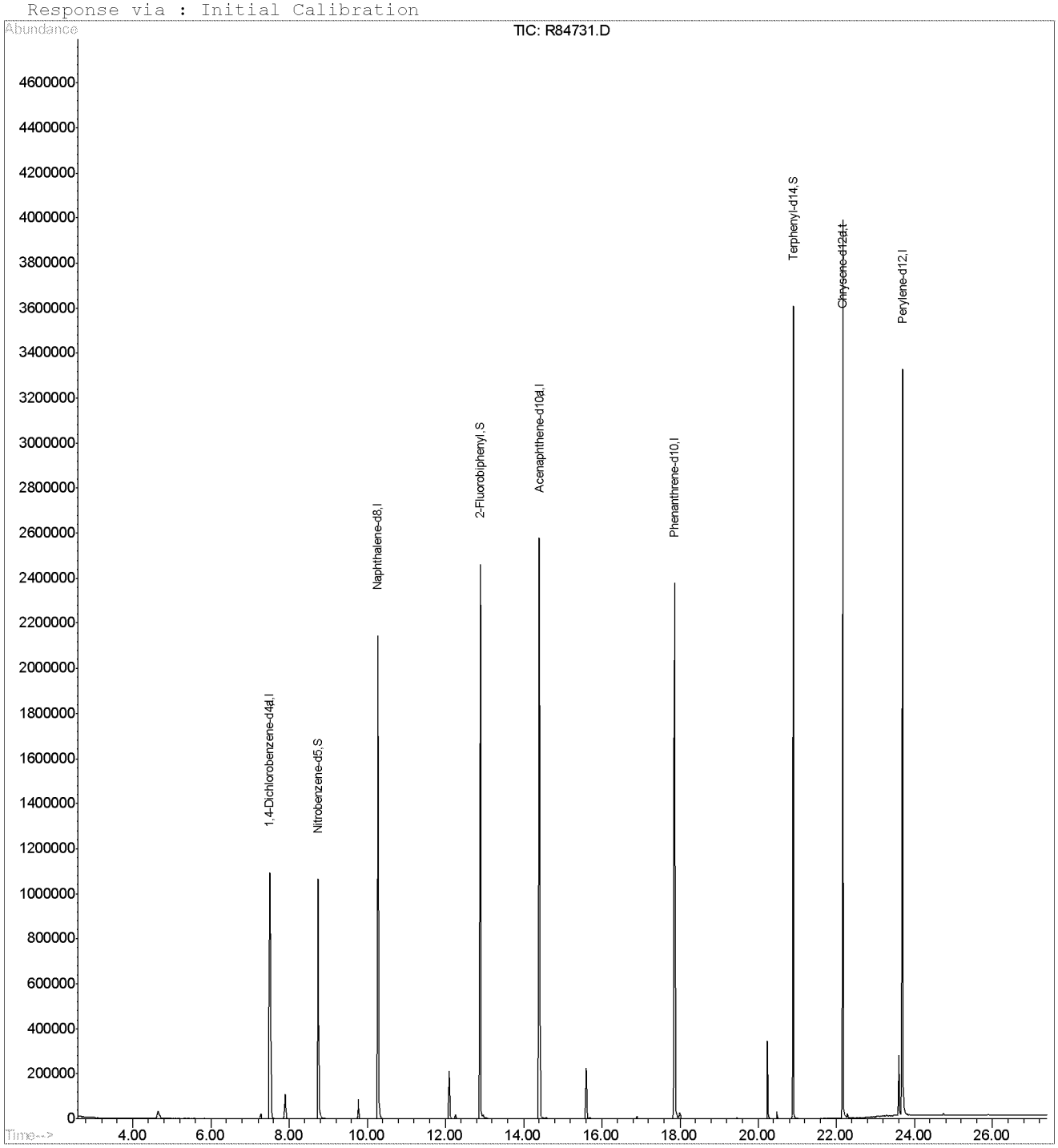
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	507577	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1734012	40.00	ppb	-0.11
47) Acenaphthene-d10	14.40	164	985270	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1523969	40.00	ppb	-0.13
83) Chrysene-d12	22.16	240	1551186	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1502238	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	507577	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	985270	40.00	ppb	-0.11
107) Chrysene-d12a	22.16	240	1551186	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.74	82	696753	44.21	ppb	-0.12
Spiked Amount 50.000			Recovery =	88.42%		
51) 2-Fluorobiphenyl	12.89	172	1346524	38.82	ppb	-0.12
Spiked Amount 50.000			Recovery =	77.64%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1142973	39.09	ppb	-0.08
Spiked Amount 50.000			Recovery =	78.18%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84731.D MR3151.M Mon Jan 03 13:35:24 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:35 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.654	11	12	18	rBB2	1475	1857	0.04%	0.005%
2	2.868	49	52	58	rBB4	1313	1607	0.04%	0.004%
3	3.397	149	151	158	rBB4	1226	1782	0.04%	0.005%
4	4.647	376	385	408	rBB2	33242	128933	2.84%	0.361%
5	5.203	482	489	495	rBB3	1058	2837	0.06%	0.008%
6	6.837	792	795	801	rBB	1318	1985	0.04%	0.006%
7	7.281	868	878	886	rBB2	24608	48262	1.06%	0.135%
8	7.505	909	920	947	rBB	1090708	2821258	62.07%	7.896%
9	7.895	982	993	1008	rBB	111393	257791	5.67%	0.721%
10	8.157	1037	1042	1045	rBB2	1104	1590	0.03%	0.004%
11	8.744	1145	1152	1192	rBB	1064853	1961292	43.15%	5.489%
12	9.770	1335	1344	1351	rBB	86547	121222	2.67%	0.339%
13	10.278	1429	1439	1467	rBB	2144889	3583845	78.84%	10.030%
14	10.726	1515	1523	1526	rBB	1123	2138	0.05%	0.006%
15	11.939	1744	1750	1755	rBB	1740	3353	0.07%	0.009%
16	12.094	1772	1779	1792	rBB2	213743	361619	7.96%	1.012%
17	12.254	1803	1809	1815	rBB2	21254	29912	0.66%	0.084%
18	12.890	1920	1928	1939	rBB	2458446	3825759	84.17%	10.707%
19	12.965	1939	1942	1945	rBB2	8572	7995	0.18%	0.022%
20	13.029	1949	1954	1958	rBB2	3702	4806	0.11%	0.013%
21	13.082	1959	1964	1970	rBB3	2357	3069	0.07%	0.009%
22	13.237	1986	1993	1997	rBB4	2729	4376	0.10%	0.012%
23	13.456	2031	2034	2040	rBB	732	1646	0.04%	0.005%
24	14.402	2196	2211	2237	rBB	2580227	4090885	90.00%	11.449%
25	14.567	2237	2242	2252	rBB	5931	11493	0.25%	0.032%
26	15.598	2429	2435	2450	rBB	225824	371047	8.16%	1.038%
27	15.700	2450	2454	2462	rBB3	5209	9079	0.20%	0.025%
28	16.256	2552	2558	2562	rBB2	2270	2745	0.06%	0.008%
29	16.827	2658	2665	2671	rBB2	5178	6603	0.15%	0.018%
30	16.897	2671	2678	2690	rBB4	10262	18192	0.40%	0.051%
31	17.580	2799	2806	2814	rBB	3871	6439	0.14%	0.018%
32	17.863	2850	2859	2876	rBB2	2375118	4075127	89.65%	11.405%
33	17.997	2876	2884	2893	rBB4	21674	45492	1.00%	0.127%
34	18.237	2924	2929	2934	rBB2	2334	3200	0.07%	0.009%
35	18.670	3005	3010	3018	rBB2	3307	3948	0.09%	0.011%
36	18.905	3050	3054	3059	rBB2	2930	2597	0.06%	0.007%
37	19.413	3145	3149	3151	rBB	1500	1820	0.04%	0.005%
38	19.461	3153	3158	3166	rBB	8419	10490	0.23%	0.029%

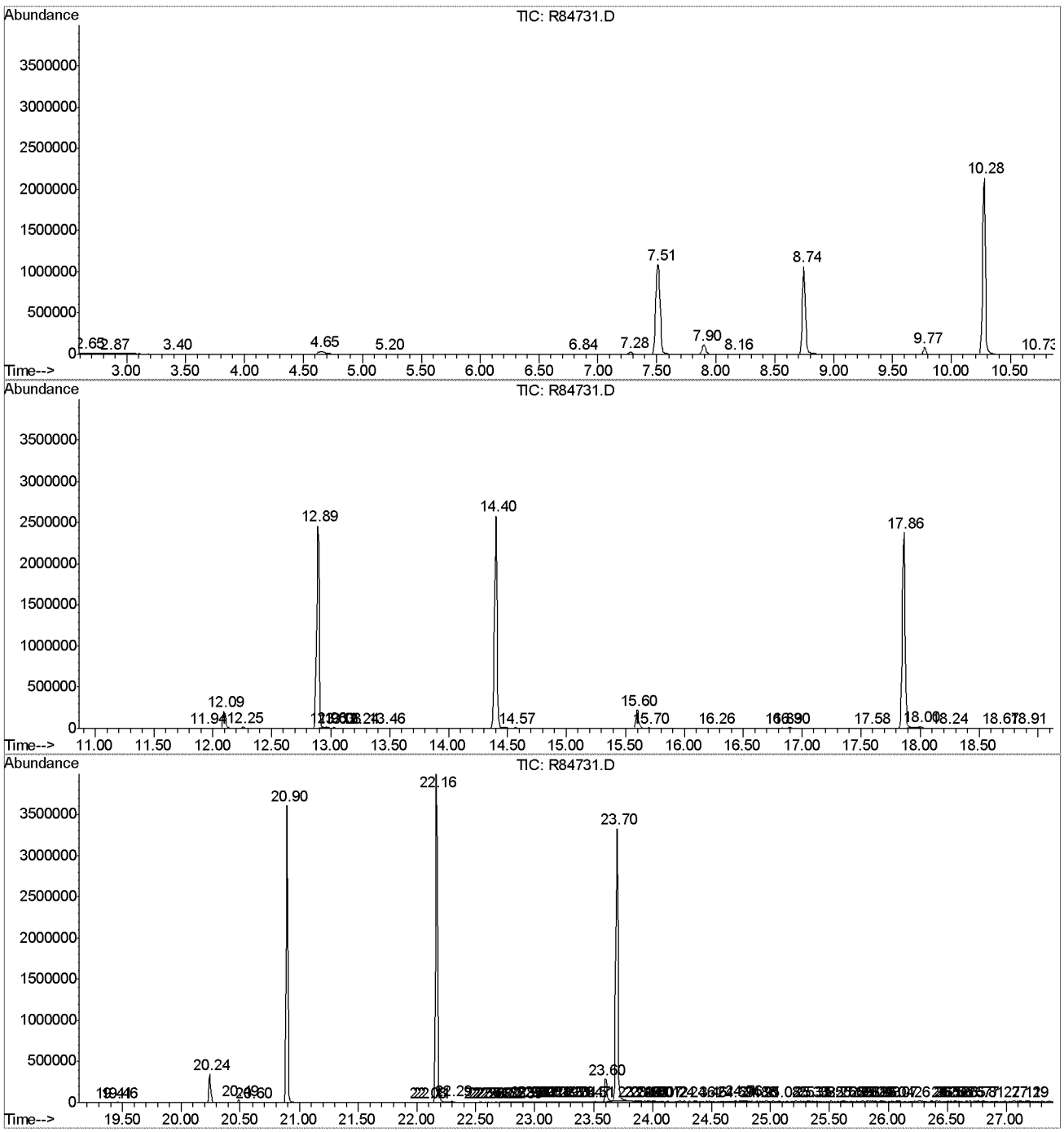
39	20.241	3295	3304	3325	rBB	346832	413916	9.11%	1.158%
40	20.486	3340	3350	3355	rBB3	30459	31359	0.69%	0.088%
41	20.599	3368	3371	3375	rBB	2355	2461	0.05%	0.007%
42	20.898	3420	3427	3445	rBB	3607724	3881398	85.39%	10.863%
43	22.078	3641	3648	3650	rBB	1070	1549	0.03%	0.004%
44	22.110	3650	3654	3655	rBB3	2106	1921	0.04%	0.005%
45	22.164	3655	3664	3684	rBB	3990498	4476214	98.48%	12.527%
46	22.292	3684	3688	3695	rBB	17392	17278	0.38%	0.048%
47	22.538	3731	3734	3737	rBB4	3153	2868	0.06%	0.008%
48	22.575	3737	3741	3743	rBB2	1584	1628	0.04%	0.005%
49	22.607	3743	3747	3749	rBB2	1943	2034	0.04%	0.006%
50	22.634	3749	3752	3756	rBB2	2906	3293	0.07%	0.009%
51	22.677	3756	3760	3763	rBB3	2376	2737	0.06%	0.008%
52	22.746	3771	3773	3779	rBB3	3701	3994	0.09%	0.011%
53	22.890	3795	3800	3803	rBB4	2872	3131	0.07%	0.009%
54	22.939	3803	3809	3813	rBB4	3094	5774	0.13%	0.016%
55	22.987	3815	3818	3820	rBB2	2192	2230	0.05%	0.006%
56	23.003	3820	3821	3824	rBB3	2501	1793	0.04%	0.005%
57	23.051	3824	3830	3832	rBB3	1790	2977	0.07%	0.008%
58	23.099	3835	3839	3842	rBB5	2305	2453	0.05%	0.007%
59	23.136	3842	3846	3850	rBB4	2161	2423	0.05%	0.007%
60	23.195	3850	3857	3859	rBB4	3314	5292	0.12%	0.015%
61	23.232	3859	3864	3866	rBB5	2583	3745	0.08%	0.010%
62	23.312	3874	3879	3882	rBB6	2044	3133	0.07%	0.009%
63	23.345	3882	3885	3889	rBB4	1690	1881	0.04%	0.005%
64	23.467	3905	3908	3909	rBB3	1988	1979	0.04%	0.006%
65	23.510	3910	3916	3918	rBB5	2732	2406	0.05%	0.007%
66	23.601	3926	3933	3943	rBB	268350	362090	7.97%	1.013%
67	23.697	3943	3951	3973	rBB	3307790	4545486	100.00%	12.721%
68	23.841	3977	3978	3986	rBB6	3965	5407	0.12%	0.015%
69	23.900	3986	3989	3992	rBB4	2457	2128	0.05%	0.006%
70	23.954	3997	3999	4002	rBB4	2067	2066	0.05%	0.006%
71	24.002	4006	4008	4013	rBB5	1682	2598	0.06%	0.007%
72	24.071	4019	4021	4028	rBB7	1953	2201	0.05%	0.006%
73	24.124	4028	4031	4037	rBB5	1654	1833	0.04%	0.005%
74	24.360	4070	4075	4080	rBB5	3998	4595	0.10%	0.013%
75	24.456	4090	4093	4095	rBB3	1726	1600	0.04%	0.004%
76	24.691	4134	4137	4142	rBB5	3441	4453	0.10%	0.012%
77	24.760	4143	4150	4159	rBB7	8893	18003	0.40%	0.050%
78	24.883	4169	4173	4176	rBB4	1971	1846	0.04%	0.005%
79	24.910	4176	4178	4180	rBB3	2620	1651	0.04%	0.005%
80	25.081	4205	4210	4212	rBB5	1959	1618	0.04%	0.005%
81	25.326	4252	4256	4259	rBB4	1728	1998	0.04%	0.006%
82	25.348	4259	4260	4263	rBB2	2020	1805	0.04%	0.005%
83	25.380	4265	4266	4270	rBB4	3017	2306	0.05%	0.006%
84	25.620	4307	4311	4316	rBB8	1617	2849	0.06%	0.008%
85	25.690	4320	4324	4330	rBB6	2581	4582	0.10%	0.013%
86	25.732	4330	4332	4335	rBB4	2259	2261	0.05%	0.006%
87	25.813	4343	4347	4349	rBB3	1851	1573	0.03%	0.004%
88	25.882	4357	4360	4364	rBB5	1649	1582	0.03%	0.004%
89	25.930	4367	4369	4378	rBB8	2598	6043	0.13%	0.017%
90	26.042	4385	4390	4393	rBB4	2488	2157	0.05%	0.006%
91	26.074	4393	4396	4404	rBB6	1979	3917	0.09%	0.011%
92	26.363	4444	4450	4455	rBB6	2226	3221	0.07%	0.009%
93	26.507	4473	4477	4479	rBB4	2050	2501	0.06%	0.007%
94	26.528	4479	4481	4484	rBB3	2093	1864	0.04%	0.005%
95	26.555	4484	4486	4492	rBB5	1681	2215	0.05%	0.006%

96	26.651	4501	4504	4508	rBB3	1387	1702	0.04%	0.005%
97	26.769	4523	4526	4528	rBB3	1890	1762	0.04%	0.005%
98	26.812	4528	4534	4538	rBB8	1292	2368	0.05%	0.007%
99	27.116	4589	4591	4596	rBB4	2114	2779	0.06%	0.008%
100	27.186	4599	4604	4612	rBB5	2597	4195	0.09%	0.012%

Sum of corrected areas: 35731213

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84731.D
Operator : larisap
Acquired : 30 Dec 2010 10:25 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-1
Misc Info : op47365,er3201,1000
Vial Number: 6
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

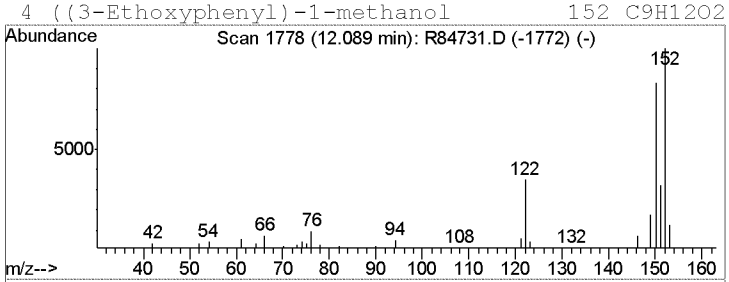
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

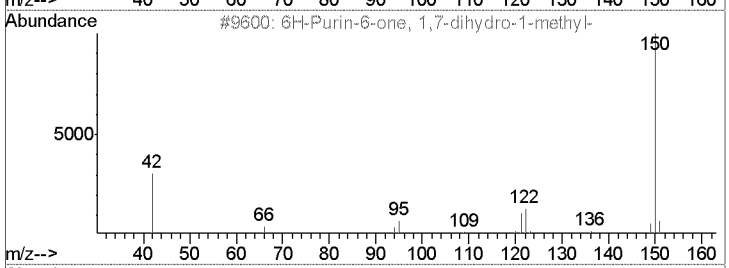
****

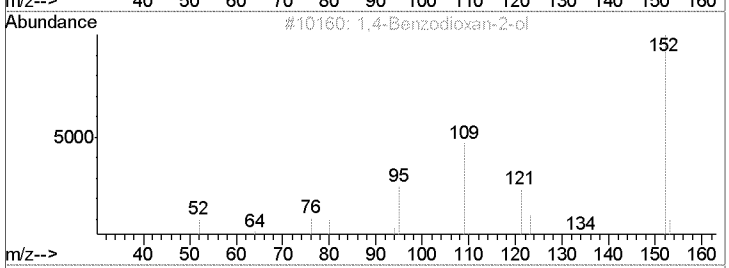
Peak Number 1 Internal standard added for... Concentration Rank 1

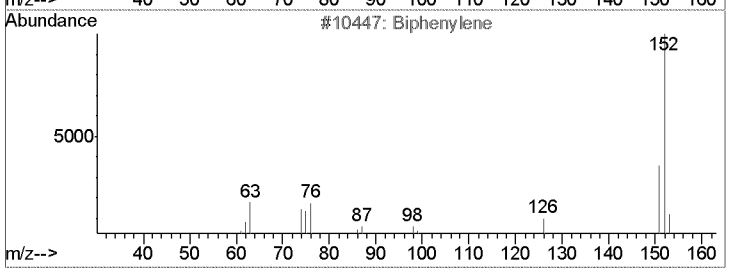
R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.04 ppb	361619	Naphthalene-d8	10.28

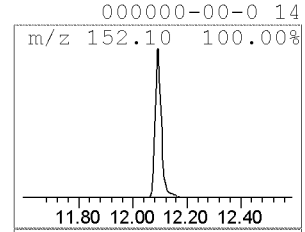
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6H-Purin-6-one, 1,7-dihydro-1-me...	150	C6H6N4O	001125-39-9	27
2	1,4-Benzodioxan-2-ol	152	C8H8O3	005770-59-2	25
3	Biphenylene	152	C12H8	000259-79-0	17
4	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14

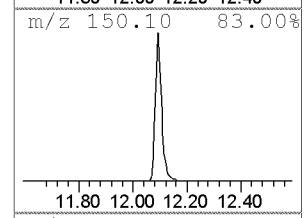


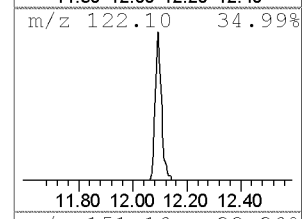


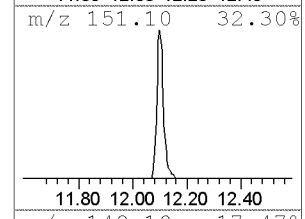


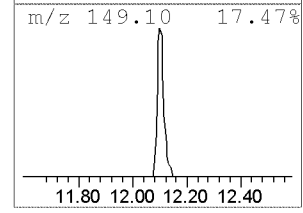












Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 10:25 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84731.D
Name: ja64438-1
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.0	ppb	361619	3	10.28	3583850	40.0

8.1.2
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

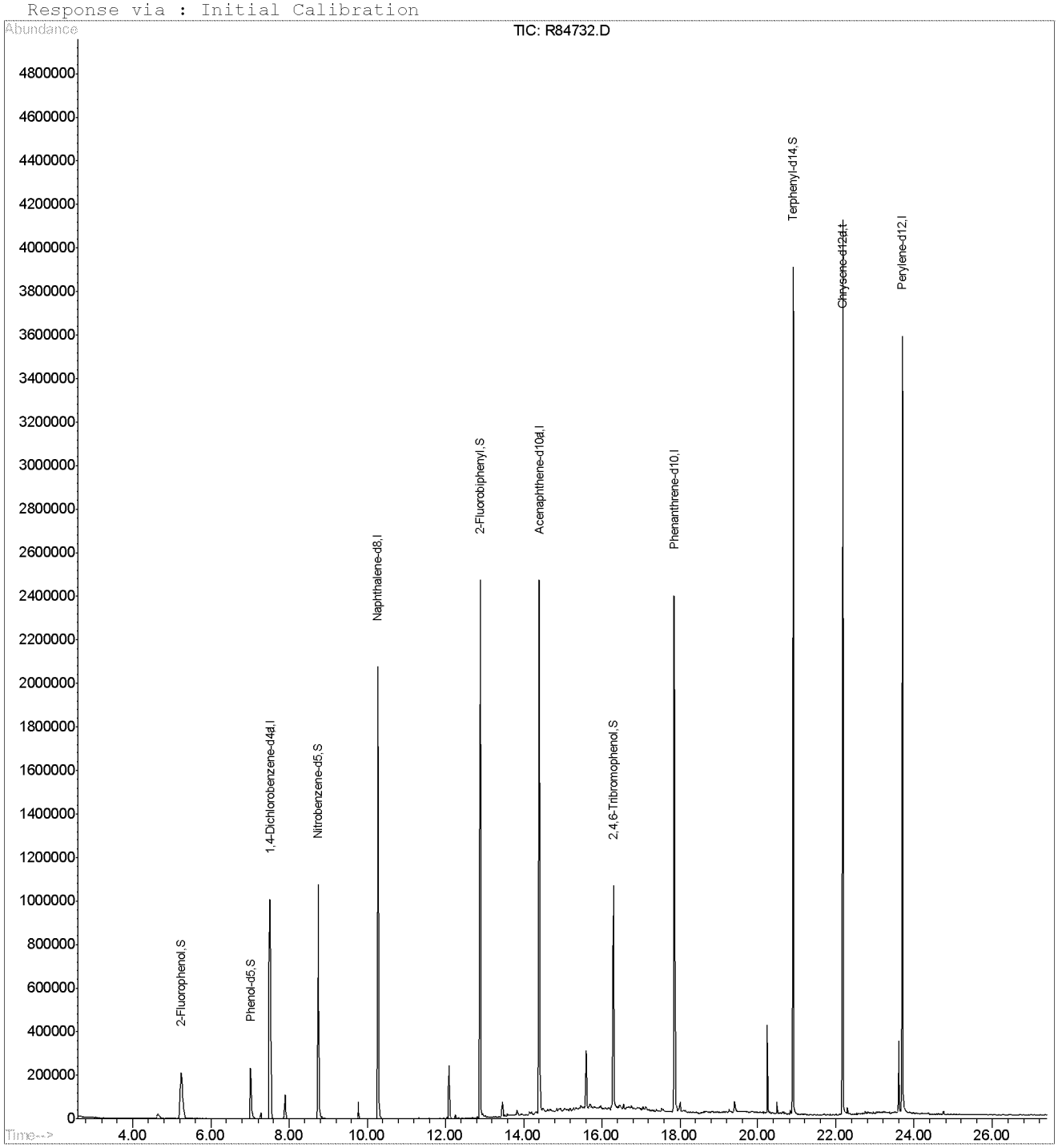
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	491414	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1675846	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	939816	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1518356	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1623258	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1614496	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	491414	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	939816	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1623258	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	5.24	112	326991	22.23	ppb	-0.06
Spiked Amount 50.000			Recovery =	44.46%		
8) Phenol-d5	7.01	99	239849	13.69	ppb	-0.06
Spiked Amount 50.000			Recovery =	27.38%		
25) Nitrobenzene-d5	8.75	82	703030	46.16	ppb	-0.12
Spiked Amount 50.000			Recovery =	92.32%		
51) 2-Fluorobiphenyl	12.89	172	1337831	40.44	ppb	-0.12
Spiked Amount 50.000			Recovery =	80.88%		
73) 2,4,6-Tribromophenol	16.30	330	206016	48.06	ppb	-0.12
Spiked Amount 50.000			Recovery =	96.12%		
86) Terphenyl-d14	20.90	244	1317459	43.06	ppb	-0.08
Spiked Amount 50.000			Recovery =	86.12%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84732.D MR3151.M Mon Jan 03 13:36:14 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.650	372	386	408	rBB2	22213	87372	1.75%	0.211%
2	5.238	486	496	522	rBB2	210996	941901	18.91%	2.274%
3	7.012	821	828	855	rBB	233145	570584	11.46%	1.377%
4	7.279	870	878	887	rBB	27510	53615	1.08%	0.129%
5	7.508	909	921	944	rBB	1007848	2749925	55.21%	6.639%
6	7.893	985	993	1007	rBB	110020	264730	5.31%	0.639%
7	8.748	1145	1153	1178	rBB	1075955	1994843	40.05%	4.816%
8	9.774	1338	1345	1351	rBB	76537	111393	2.24%	0.269%
9	10.276	1429	1439	1460	rBB	2077190	3475968	69.78%	8.392%
10	11.317	1630	1634	1640	rBB3	5577	6146	0.12%	0.015%
11	11.948	1748	1752	1763	rBB5	2955	6337	0.13%	0.015%
12	12.044	1764	1770	1773	rBB4	7646	10356	0.21%	0.025%
13	12.092	1773	1779	1792	rBB2	242197	403787	8.11%	0.975%
14	12.252	1802	1809	1818	rBB2	20183	30696	0.62%	0.074%
15	12.343	1818	1826	1831	rBB3	5637	11984	0.24%	0.029%
16	12.819	1906	1915	1920	rBB3	9161	16807	0.34%	0.041%
17	12.893	1920	1929	1938	rBB	2466698	3879699	77.89%	9.366%
18	12.963	1938	1942	1945	rBB	6381	5361	0.11%	0.013%
19	13.080	1958	1964	1973	rBB6	5494	8685	0.17%	0.021%
20	13.225	1987	1991	1997	rBB5	5075	7321	0.15%	0.018%
21	13.273	1997	2000	2006	rBB5	4228	7419	0.15%	0.018%
22	13.454	2026	2034	2041	rBB2	64759	118743	2.38%	0.287%
23	13.513	2041	2045	2050	rBB5	7674	10348	0.21%	0.025%
24	13.588	2052	2059	2063	rBB4	8001	12281	0.25%	0.030%
25	13.689	2074	2078	2086	rBB10	5629	10814	0.22%	0.026%
26	13.834	2086	2105	2118	rBB9	23299	75857	1.52%	0.183%
27	13.962	2119	2129	2133	rBB8	9837	21995	0.44%	0.053%
28	14.149	2156	2164	2169	rBB8	11298	22401	0.45%	0.054%
29	14.208	2169	2175	2181	rBB8	12300	18009	0.36%	0.043%
30	14.304	2188	2193	2202	rBB10	9180	20909	0.42%	0.050%
31	14.400	2202	2211	2223	rBB	2443037	3942571	79.15%	9.518%
32	14.496	2225	2229	2238	rBB	8225	16386	0.33%	0.040%
33	14.843	2287	2294	2301	rBB8	14856	30129	0.60%	0.073%
34	14.913	2301	2307	2310	rBB7	3359	7826	0.16%	0.019%
35	14.945	2310	2313	2320	rBB8	6103	9061	0.18%	0.022%
36	15.057	2320	2334	2345	rBB8	8245	32340	0.65%	0.078%
37	15.132	2345	2348	2353	rBB6	4736	5435	0.11%	0.013%
38	15.201	2353	2361	2367	rBB6	10146	29375	0.59%	0.071%

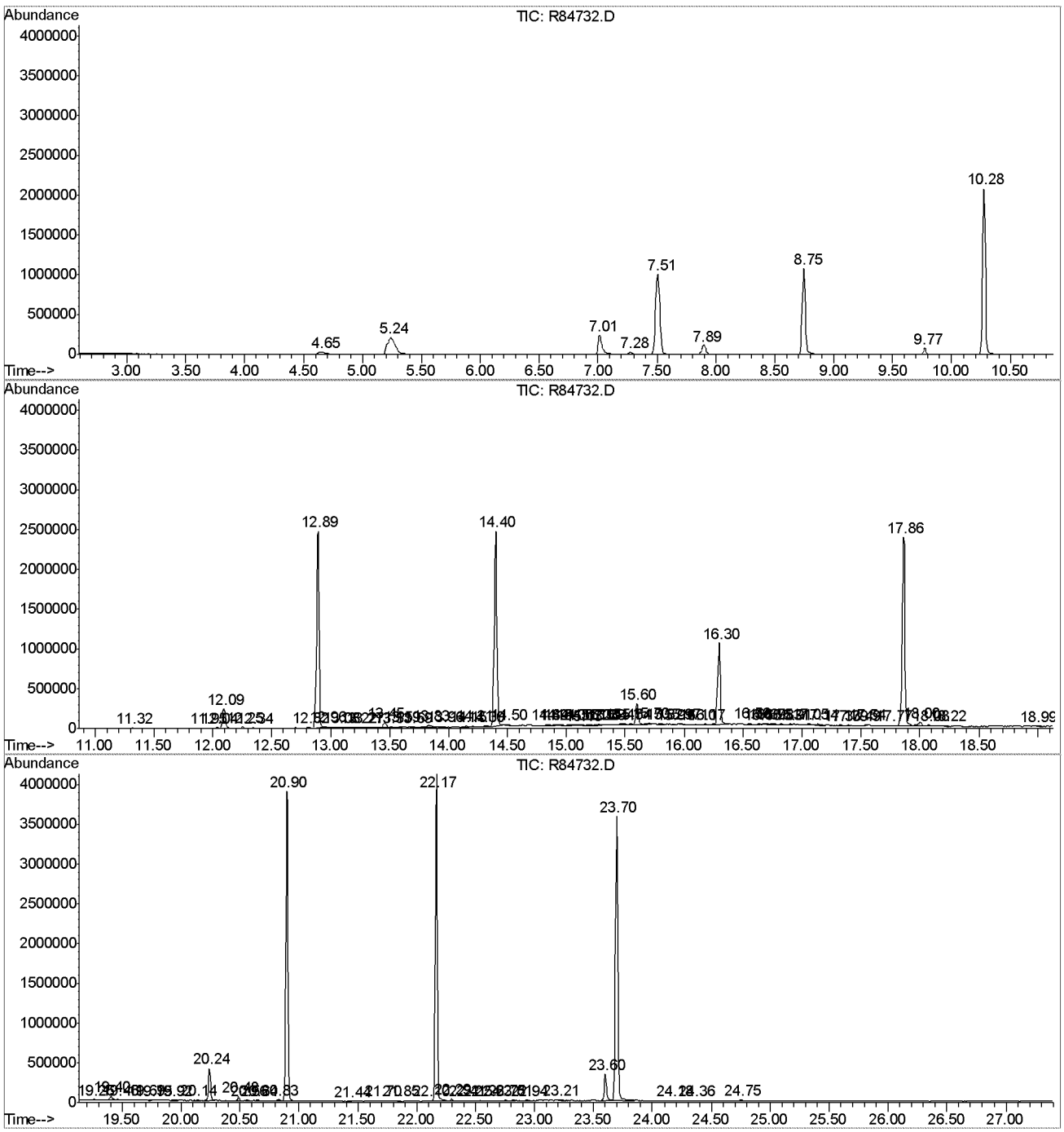
39	15.276	2367	2375	2380	rBB7	11945	24775	0.50%	0.060%
40	15.329	2380	2385	2389	rBB7	6230	10419	0.21%	0.025%
41	15.415	2396	2401	2404	rBB7	3995	6172	0.12%	0.015%
42	15.468	2405	2411	2421	rBB7	10904	21748	0.44%	0.053%
43	15.543	2421	2425	2429	rBB7	7622	9311	0.19%	0.022%
44	15.596	2429	2435	2445	rBB	262870	418995	8.41%	1.012%
45	15.698	2445	2454	2460	rBB2	17869	35025	0.70%	0.085%
46	15.816	2468	2476	2478	rBB9	6000	10013	0.20%	0.024%
47	15.906	2490	2493	2498	rBB6	6013	6309	0.13%	0.015%
48	15.970	2502	2505	2514	rBB6	8978	11509	0.23%	0.028%
49	16.099	2523	2529	2534	rBB9	6203	10954	0.22%	0.026%
50	16.173	2538	2543	2551	rBB10	9130	19374	0.39%	0.047%
51	16.296	2553	2566	2581	rBB	1026000	1719643	34.52%	4.152%
52	16.558	2609	2615	2620	rBB3	22784	33296	0.67%	0.080%
53	16.649	2627	2632	2634	rBB6	3484	8089	0.16%	0.020%
54	16.692	2636	2640	2647	rBB8	7274	12468	0.25%	0.030%
55	16.750	2647	2651	2661	rBB10	14117	30798	0.62%	0.074%
56	16.831	2661	2666	2669	rBB6	9866	12727	0.26%	0.031%
57	16.911	2676	2681	2682	rBB5	4789	8914	0.18%	0.022%
58	17.055	2702	2708	2714	rBB6	15414	25752	0.52%	0.062%
59	17.135	2718	2723	2732	rBB9	13515	21678	0.44%	0.052%
60	17.327	2754	2759	2765	rBB8	7357	15403	0.31%	0.037%
61	17.391	2766	2771	2775	rBB7	7845	12747	0.26%	0.031%
62	17.493	2786	2790	2793	rBB6	4125	5951	0.12%	0.014%
63	17.541	2795	2799	2802	rBB5	10756	12317	0.25%	0.030%
64	17.765	2837	2841	2846	rBB7	5071	9031	0.18%	0.022%
65	17.862	2848	2859	2875	rBB2	2372651	4157113	83.46%	10.036%
66	18.000	2875	2885	2891	rBB5	42578	92763	1.86%	0.224%
67	18.075	2897	2899	2904	rBB6	5787	7220	0.14%	0.017%
68	18.225	2923	2927	2931	rBB7	5247	5392	0.11%	0.013%
69	18.994	3069	3071	3080	rBB9	4005	7787	0.16%	0.019%
70	19.261	3113	3121	3126	rBB8	12451	23558	0.47%	0.057%
71	19.400	3141	3147	3156	rBB6	50425	77884	1.56%	0.188%
72	19.464	3156	3159	3161	rBB2	7165	6490	0.13%	0.016%
73	19.689	3195	3201	3203	rBB7	5761	7049	0.14%	0.017%
74	19.747	3207	3212	3214	rBB4	4315	5467	0.11%	0.013%
75	19.924	3242	3245	3254	rBB10	6102	13775	0.28%	0.033%
76	20.137	3278	3285	3289	rBB8	7194	13172	0.26%	0.032%
77	20.239	3295	3304	3314	rBB	405469	485935	9.76%	1.173%
78	20.485	3346	3350	3355	rBB2	52998	53269	1.07%	0.129%
79	20.565	3362	3365	3371	rBB7	4039	6663	0.13%	0.016%
80	20.645	3377	3380	3387	rBB6	7369	10674	0.21%	0.026%
81	20.826	3409	3414	3419	rBB3	17265	26346	0.53%	0.064%
82	20.896	3420	3427	3443	rBB	3888614	4571116	91.77%	11.036%
83	21.435	3523	3528	3531	rBB7	3220	5599	0.11%	0.014%
84	21.703	3575	3578	3583	rBB5	6558	5666	0.11%	0.014%
85	21.852	3603	3606	3609	rBB3	7427	5411	0.11%	0.013%
86	22.103	3646	3653	3656	rBB7	6005	11592	0.23%	0.028%
87	22.167	3657	3665	3683	rBB	4109749	4735361	95.07%	11.432%
88	22.290	3684	3688	3695	rBB	29094	30956	0.62%	0.075%
89	22.413	3706	3711	3719	rBB	4317	7973	0.16%	0.019%
90	22.536	3731	3734	3737	rBB4	6941	6500	0.13%	0.016%
91	22.632	3749	3752	3755	rBB4	4737	5490	0.11%	0.013%
92	22.750	3770	3774	3778	rBB4	10240	10998	0.22%	0.027%
93	22.814	3783	3786	3790	rBB5	8171	9165	0.18%	0.022%
94	22.942	3806	3810	3814	rBB7	6080	9672	0.19%	0.023%
95	23.209	3858	3860	3867	rBB7	4462	7020	0.14%	0.017%

96	23.599	3925	3933	3942	rBB	330541	427758	8.59%	1.033%
97	23.695	3942	3951	3979	rBB	3566270	4981066	100.00%	12.025%
98	24.176	4036	4041	4043	rBB4	4193	6552	0.13%	0.016%
99	24.358	4070	4075	4080	rBB6	5729	8965	0.18%	0.022%
100	24.753	4141	4149	4157	rBB5	15644	31656	0.64%	0.076%

Sum of corrected areas: 41421900

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84732.D
Operator : larisap
Acquired : 30 Dec 2010 11:07 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-2
Misc Info : op47365,er3201,1000
Vial Number: 7
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

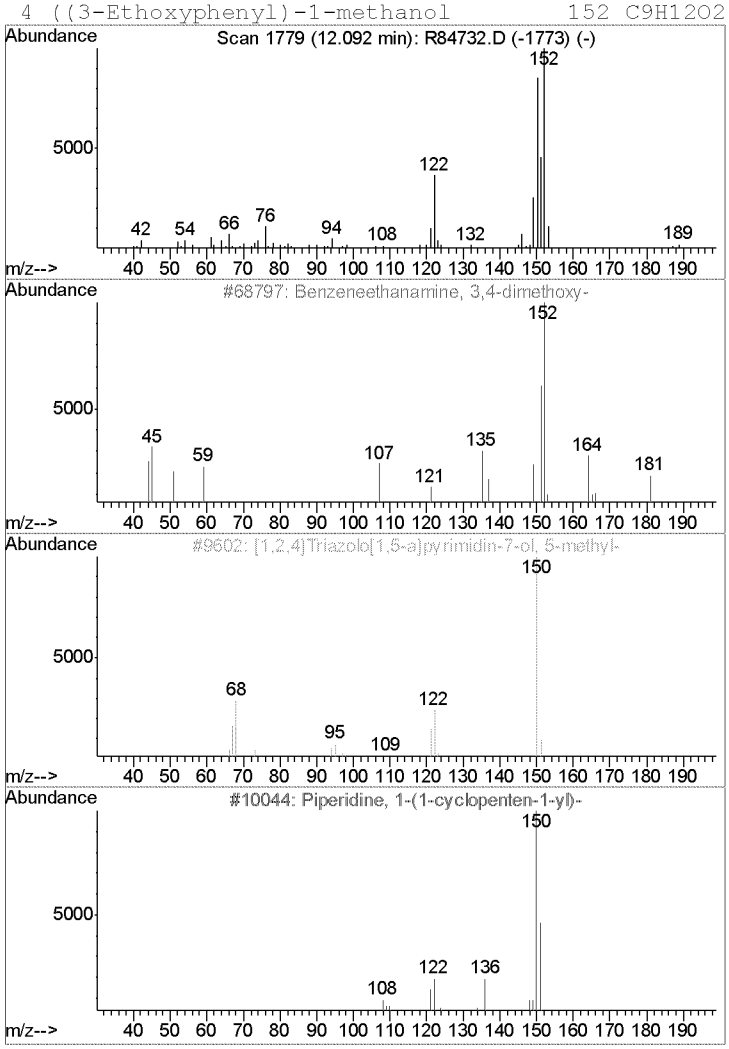
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

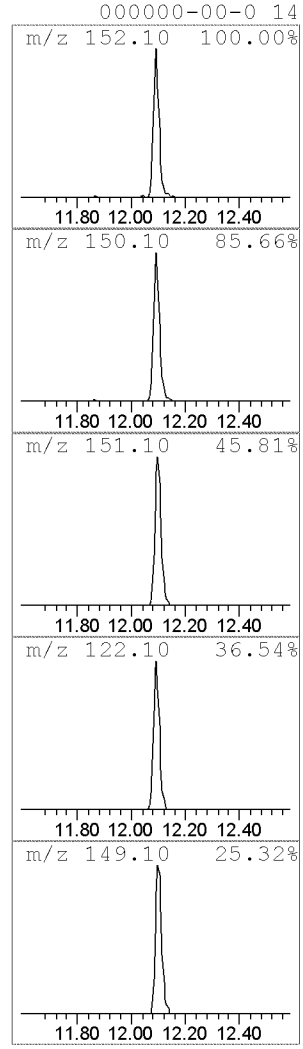
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.65 ppb	403787	Naphthalene-d8	10.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, 3,4-dimethoxy-	181	C10H15NO2	000120-20-7	37
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	Piperidine, 1-(1-cyclopenten-1-yl)-	151	C10H17N	001614-92-2	25
4	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

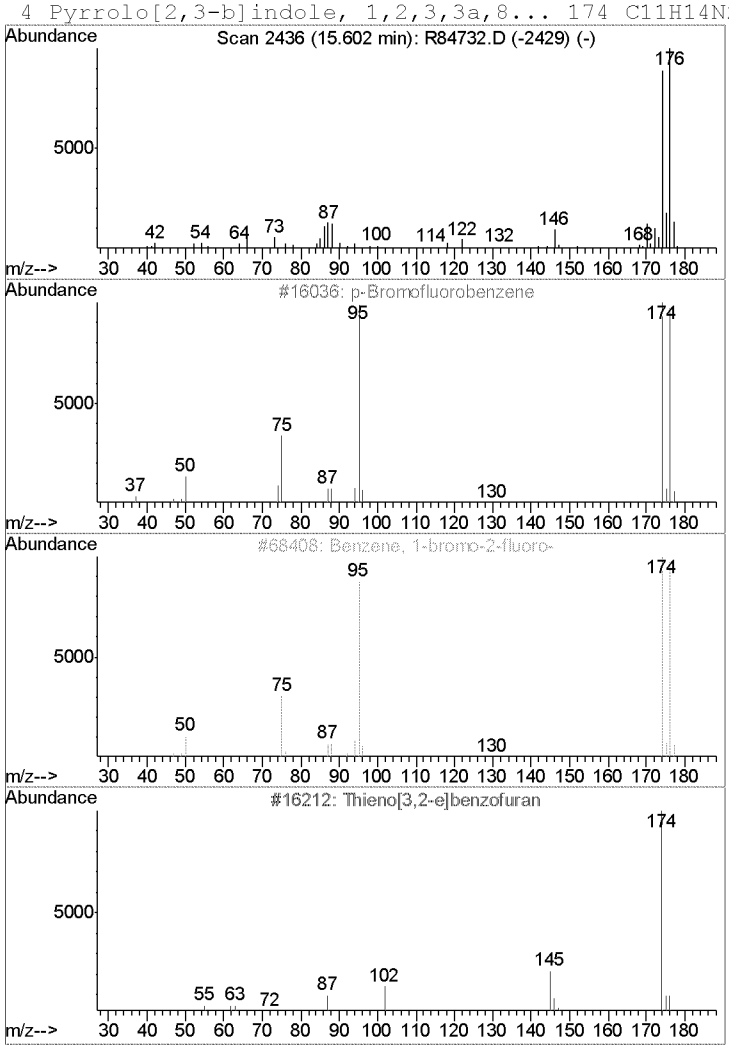
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

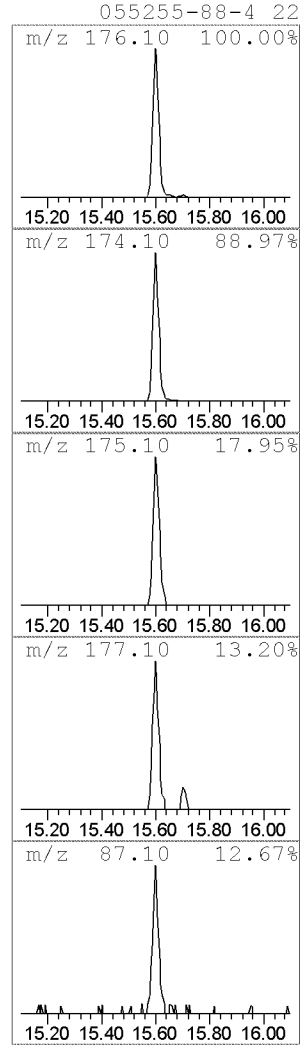
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.60	4.25 ppb	418995	Acenaphthene-d10a	14.40

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	39
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	38
3	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	35
4	Pyrrolo[2,3-b]indole, 1,2,3,3a,8...	174	C11H14N2	055255-88-4	22





8.1.4
8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

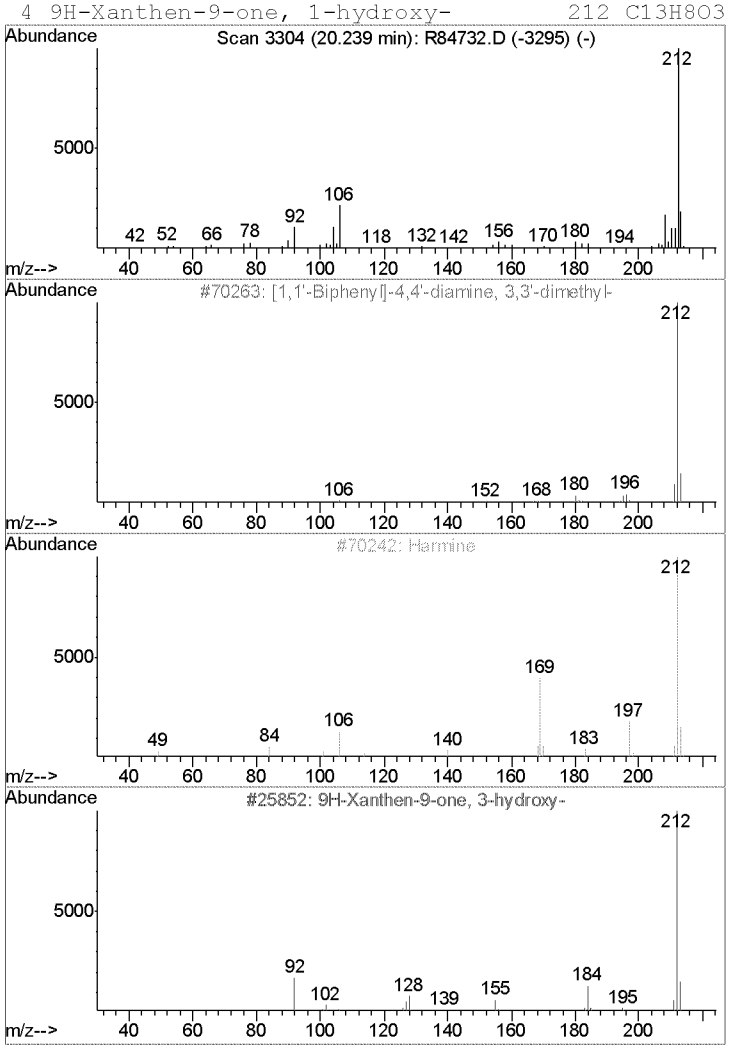
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

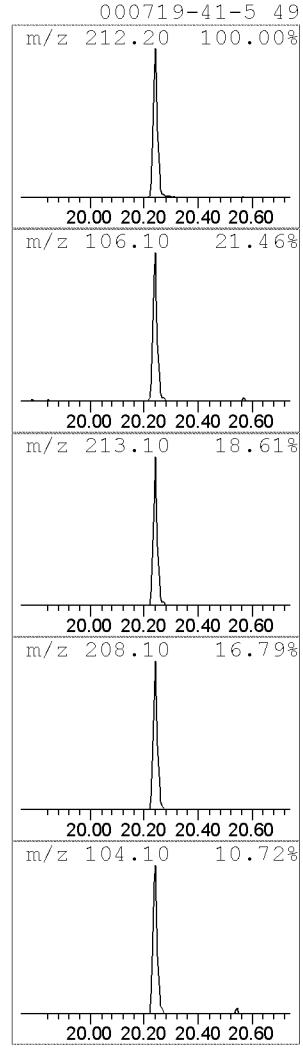
****

Peak Number 3 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.24	4.10 ppb	485935	Chrysene-d12	22.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	Harmine	212	C13H12N2O	000442-51-3	50
3	9H-Xanthen-9-one, 3-hydroxy-	212	C13H8O3	003722-51-8	50
4	9H-Xanthen-9-one, 1-hydroxy-	212	C13H8O3	000719-41-5	49





8.1.4 8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 11:07 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84732.D
Name: ja64438-2
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.7	ppb	403787	3	10.28	3475970	40.0
Internal standard...	15.60	4.3	ppb	418995	5	14.40	3942570	40.0
Internal standard...	20.24	4.1	ppb	485935	7	22.17	4735360	40.0

8.1.4
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

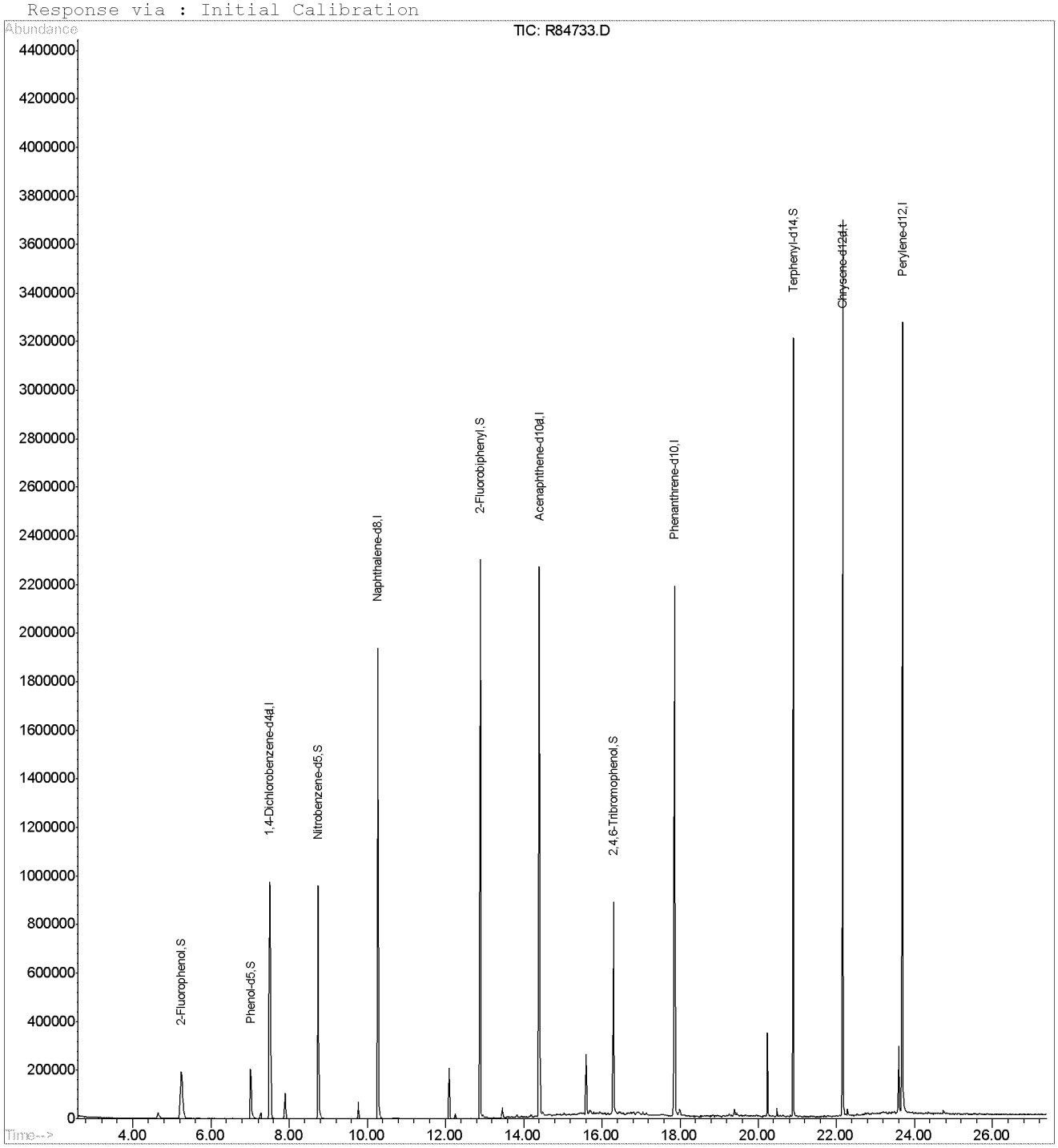
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	454197	40.00	ppb	-0.11
24) Naphthalene-d8	10.27	136	1576957	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	883282	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1397085	40.00	ppb	-0.13
83) Chrysene-d12	22.16	240	1413708	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1420311	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	454197	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	883282	40.00	ppb	-0.11
107) Chrysene-d12a	22.16	240	1413708	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	5.24	112	277958	20.44	ppb	-0.06
Spiked Amount 50.000			Recovery =	40.88%		
8) Phenol-d5	7.01	99	208313	12.86	ppb	-0.06
Spiked Amount 50.000			Recovery =	25.72%		
25) Nitrobenzene-d5	8.74	82	616395	43.01	ppb	-0.12
Spiked Amount 50.000			Recovery =	86.02%		
51) 2-Fluorobiphenyl	12.89	172	1195056	38.43	ppb	-0.12
Spiked Amount 50.000			Recovery =	76.86%		
73) 2,4,6-Tribromophenol	16.29	330	170085	43.12	ppb	-0.12
Spiked Amount 50.000			Recovery =	86.24%		
86) Terphenyl-d14	20.90	244	1089439	40.89	ppb	-0.08
Spiked Amount 50.000			Recovery =	81.78%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84733.D MR3151.M Mon Jan 03 13:36:59 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.653	375	386	410	rBB	21455	80437	1.85%	0.222%
2	5.241	485	496	530	rBB2	193011	814045	18.75%	2.246%
3	7.014	821	828	855	rBB	203852	488169	11.24%	1.347%
4	7.281	868	878	890	rBB3	26589	56232	1.30%	0.155%
5	7.506	909	920	947	rBB	974571	2533512	58.36%	6.991%
6	7.896	985	993	1007	rBB	105932	238004	5.48%	0.657%
7	8.745	1143	1152	1182	rBB	962852	1737700	40.03%	4.795%
8	9.771	1336	1344	1351	rBB	70279	100502	2.31%	0.277%
9	10.273	1428	1438	1465	rBB	1940769	3250094	74.86%	8.968%
10	10.668	1508	1512	1524	rBB2	4230	12088	0.28%	0.033%
11	12.041	1765	1769	1772	rBB	3423	4044	0.09%	0.011%
12	12.089	1772	1778	1792	rBB2	208588	352509	8.12%	0.973%
13	12.255	1799	1809	1816	rBB	21965	31355	0.72%	0.087%
14	12.816	1905	1914	1917	rBB2	4393	6528	0.15%	0.018%
15	12.890	1920	1928	1938	rBB	2297658	3437802	79.19%	9.486%
16	12.955	1938	1940	1945	rBB3	6564	7330	0.17%	0.020%
17	13.232	1983	1992	1997	rBB4	5718	11017	0.25%	0.030%
18	13.270	1997	1999	2005	rBB3	3479	4899	0.11%	0.014%
19	13.457	2024	2034	2041	rBB2	43404	72481	1.67%	0.200%
20	13.515	2041	2045	2049	rBB6	3374	4077	0.09%	0.011%
21	13.585	2052	2058	2061	rBB4	3013	5141	0.12%	0.014%
22	13.681	2069	2076	2086	rBB9	4091	10477	0.24%	0.029%
23	13.836	2097	2105	2116	rBB6	10904	25164	0.58%	0.069%
24	14.135	2156	2161	2166	rBB5	3290	5738	0.13%	0.016%
25	14.199	2169	2173	2179	rBB4	7231	9071	0.21%	0.025%
26	14.285	2186	2189	2195	rBB4	3200	5927	0.14%	0.016%
27	14.397	2201	2210	2221	rBB	2260282	3691931	85.04%	10.187%
28	14.493	2224	2228	2236	rBB10	9836	16718	0.39%	0.046%
29	14.691	2262	2265	2273	rBB6	4093	5902	0.14%	0.016%
30	14.840	2285	2293	2299	rBB7	6205	14010	0.32%	0.039%
31	14.936	2299	2311	2314	rBB8	5482	12508	0.29%	0.035%
32	15.054	2331	2333	2339	rBB6	2607	4297	0.10%	0.012%
33	15.268	2366	2373	2378	rBB7	5832	8176	0.19%	0.023%
34	15.316	2378	2382	2387	rBB8	3175	5132	0.12%	0.014%
35	15.449	2401	2407	2408	rBB7	2365	4049	0.09%	0.011%
36	15.471	2408	2411	2418	rBB6	4819	6681	0.15%	0.018%
37	15.529	2418	2422	2428	rBB7	5549	10482	0.24%	0.029%
38	15.599	2429	2435	2443	rBB	245871	382031	8.80%	1.054%

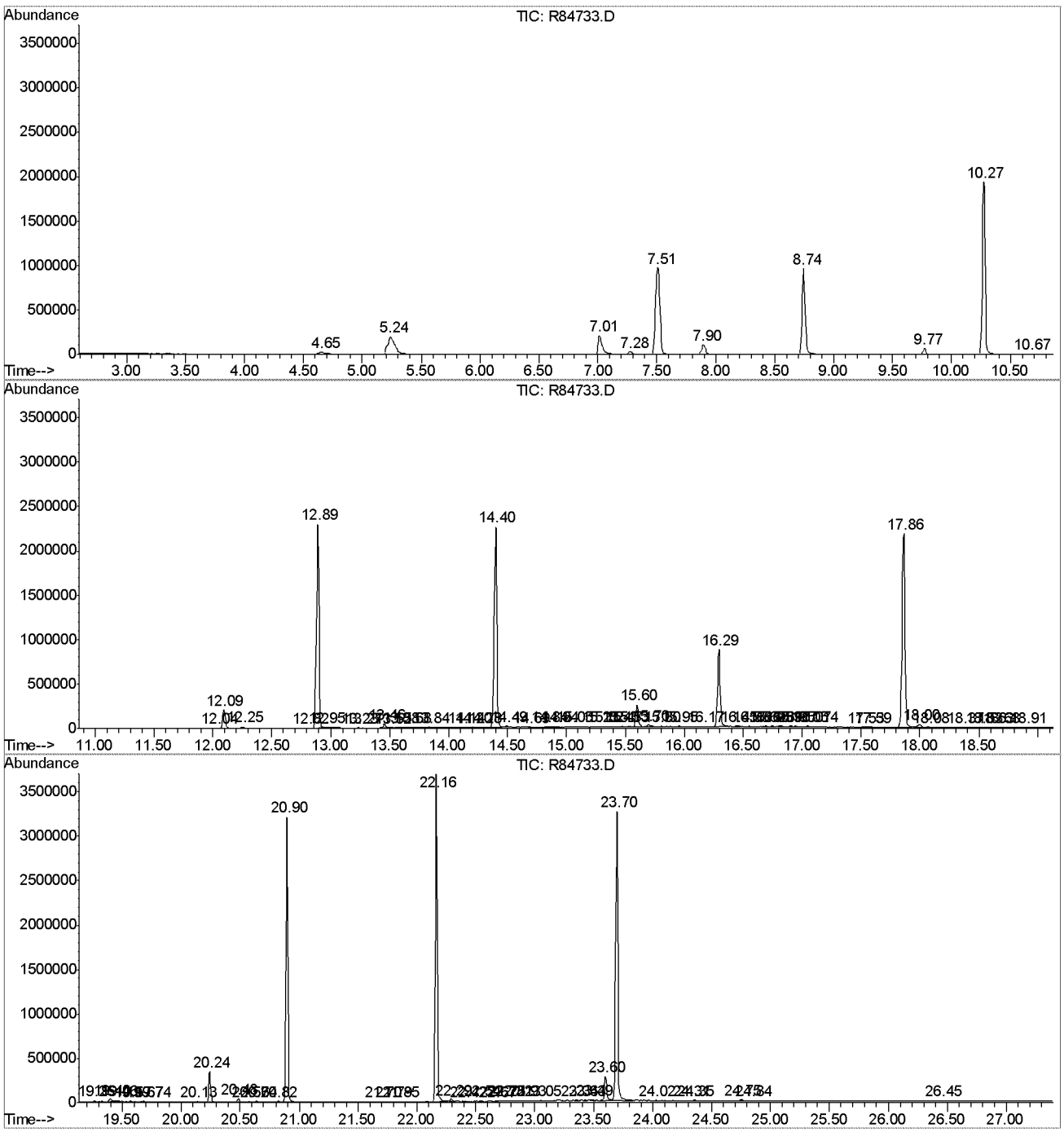
39	15.700	2444	2454	2464	rBB3	14790	35680	0.82%	0.098%
40	15.802	2471	2473	2477	rBB4	5322	4635	0.11%	0.013%
41	15.946	2496	2500	2507	rBB8	5531	9744	0.22%	0.027%
42	16.165	2537	2541	2545	rBB7	5667	9936	0.23%	0.027%
43	16.293	2551	2565	2579	rBB	871284	1422439	32.76%	3.925%
44	16.454	2590	2595	2599	rBB6	5833	9810	0.23%	0.027%
45	16.550	2608	2613	2620	rBB5	6310	11991	0.28%	0.033%
46	16.689	2633	2639	2643	rBB8	2916	4842	0.11%	0.013%
47	16.747	2645	2650	2654	rBB8	6542	6859	0.16%	0.019%
48	16.828	2659	2665	2671	rBB9	7981	14973	0.34%	0.041%
49	16.897	2672	2678	2684	rBB6	7259	14562	0.34%	0.040%
50	16.945	2684	2687	2693	rBB6	4952	7572	0.17%	0.021%
51	17.047	2701	2706	2710	rBB7	8254	12928	0.30%	0.036%
52	17.073	2710	2711	2717	rBB5	3790	4711	0.11%	0.013%
53	17.137	2719	2723	2730	rBB6	6124	9970	0.23%	0.028%
54	17.527	2789	2796	2799	rBB6	3473	5146	0.12%	0.014%
55	17.586	2799	2807	2811	rBB2	4881	9181	0.21%	0.025%
56	17.864	2848	2859	2872	rBB2	2182399	3789320	87.28%	10.456%
57	17.998	2874	2884	2894	rBB9	25512	59398	1.37%	0.164%
58	18.078	2894	2899	2902	rBB6	4187	5720	0.13%	0.016%
59	18.371	2950	2954	2958	rBB6	4978	6772	0.16%	0.019%
60	18.532	2977	2984	2986	rBB6	4207	4751	0.11%	0.013%
61	18.628	2996	3002	3005	rBB5	2866	4762	0.11%	0.013%
62	18.676	3007	3011	3014	rBB2	2991	4152	0.10%	0.011%
63	18.906	3051	3054	3059	rBB6	4956	6445	0.15%	0.018%
64	19.264	3116	3121	3127	rBB9	10271	15150	0.35%	0.042%
65	19.397	3139	3146	3153	rBB4	24476	40034	0.92%	0.110%
66	19.461	3153	3158	3163	rBB	10083	11571	0.27%	0.032%
67	19.573	3174	3179	3182	rBB4	5176	6664	0.15%	0.018%
68	19.675	3195	3198	3201	rBB4	4344	4786	0.11%	0.013%
69	19.739	3206	3210	3213	rBB6	3442	4188	0.10%	0.012%
70	20.134	3280	3284	3287	rBB5	5583	5354	0.12%	0.015%
71	20.241	3299	3304	3313	rBB	343189	411661	9.48%	1.136%
72	20.482	3344	3349	3355	rBB3	33440	37607	0.87%	0.104%
73	20.572	3356	3366	3368	rBB7	4669	6450	0.15%	0.018%
74	20.637	3376	3378	3386	rBB4	3695	4870	0.11%	0.013%
75	20.818	3408	3412	3417	rBB4	7702	10767	0.25%	0.030%
76	20.898	3417	3427	3443	rBB	3206628	3747898	86.33%	10.342%
77	21.700	3574	3577	3584	rBB5	4185	7373	0.17%	0.020%
78	21.790	3588	3594	3598	rBB7	5045	7811	0.18%	0.022%
79	21.849	3598	3605	3607	rBB5	2449	4412	0.10%	0.012%
80	22.164	3655	3664	3682	rBB	3690861	4126331	95.05%	11.386%
81	22.293	3683	3688	3693	rBB	22854	27635	0.64%	0.076%
82	22.415	3707	3711	3714	rBB6	3404	5526	0.13%	0.015%
83	22.538	3731	3734	3739	rBB6	7024	7031	0.16%	0.019%
84	22.672	3755	3759	3762	rBB6	3239	4365	0.10%	0.012%
85	22.731	3762	3770	3771	rBB6	2793	6909	0.16%	0.019%
86	22.747	3771	3773	3776	rBB4	6587	6372	0.15%	0.018%
87	22.811	3782	3785	3789	rBB5	3797	4717	0.11%	0.013%
88	22.928	3805	3807	3814	rBB6	3821	4791	0.11%	0.013%
89	23.051	3822	3830	3832	rBB6	4536	5077	0.12%	0.014%
90	23.361	3884	3888	3890	rBB5	3003	4226	0.10%	0.012%
91	23.430	3898	3901	3903	rBB4	4753	4799	0.11%	0.013%
92	23.489	3908	3912	3917	rBB5	6154	7457	0.17%	0.021%
93	23.596	3923	3932	3943	rBB	271038	360432	8.30%	0.995%
94	23.698	3943	3951	3976	rBB	3252486	4341362	100.00%	11.979%
95	24.023	4007	4012	4016	rBB7	4396	6357	0.15%	0.018%

96	24.312	4061	4066	4068	rBB6	2797	4251	0.10%	0.012%
97	24.355	4068	4074	4077	rBB5	6804	8263	0.19%	0.023%
98	24.750	4142	4148	4160	rBB5	14868	26763	0.62%	0.074%
99	24.841	4161	4165	4169	rBB7	3109	4278	0.10%	0.012%
100	26.454	4465	4467	4471	rBB4	3400	4546	0.10%	0.013%

Sum of corrected areas: 36240643

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84733.D
Operator : larisap
Acquired : 30 Dec 2010 11:40 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-3
Misc Info : op47365,er3201,1000
Vial Number: 8
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

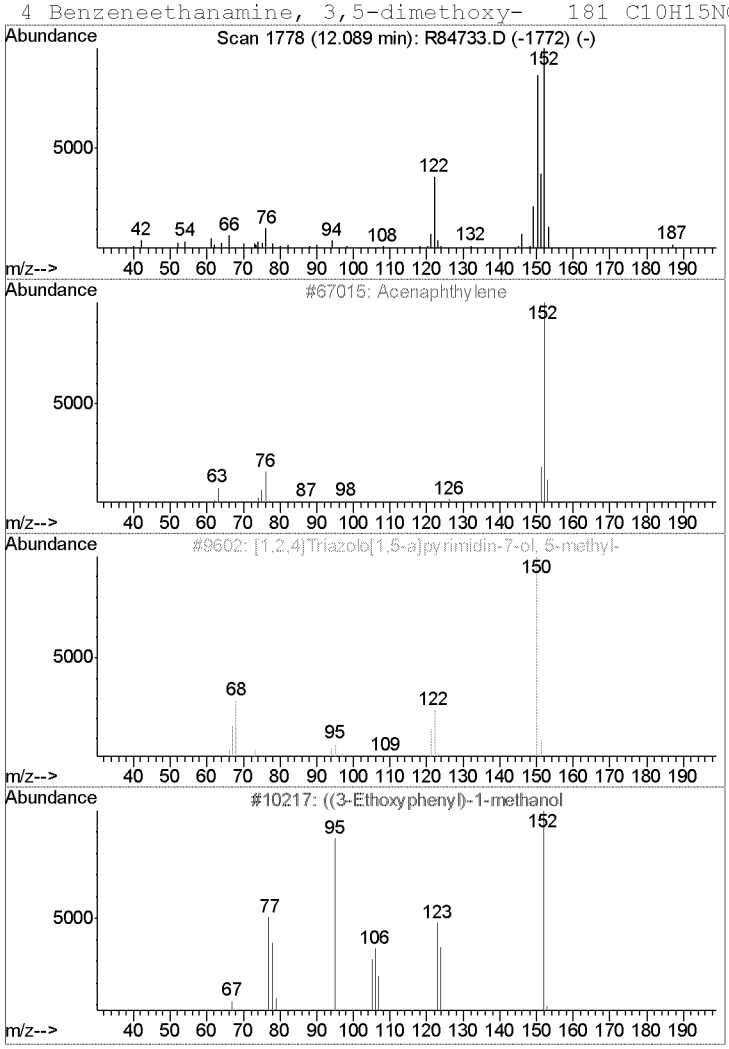
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

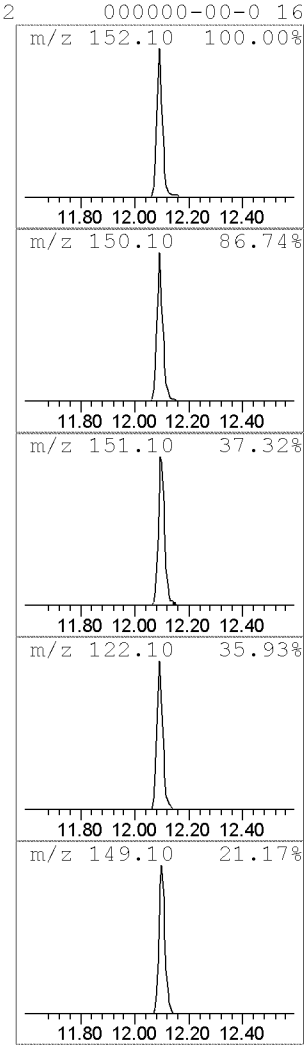
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.34 ppb	352509	Naphthalene-d8	10.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acenaphthylene	152	C12H8	000208-96-8	38
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	30
3	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	22
4	Benzeneethanamine, 3,5-dimethoxy-	181	C10H15NO2	000000-00-0	16





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

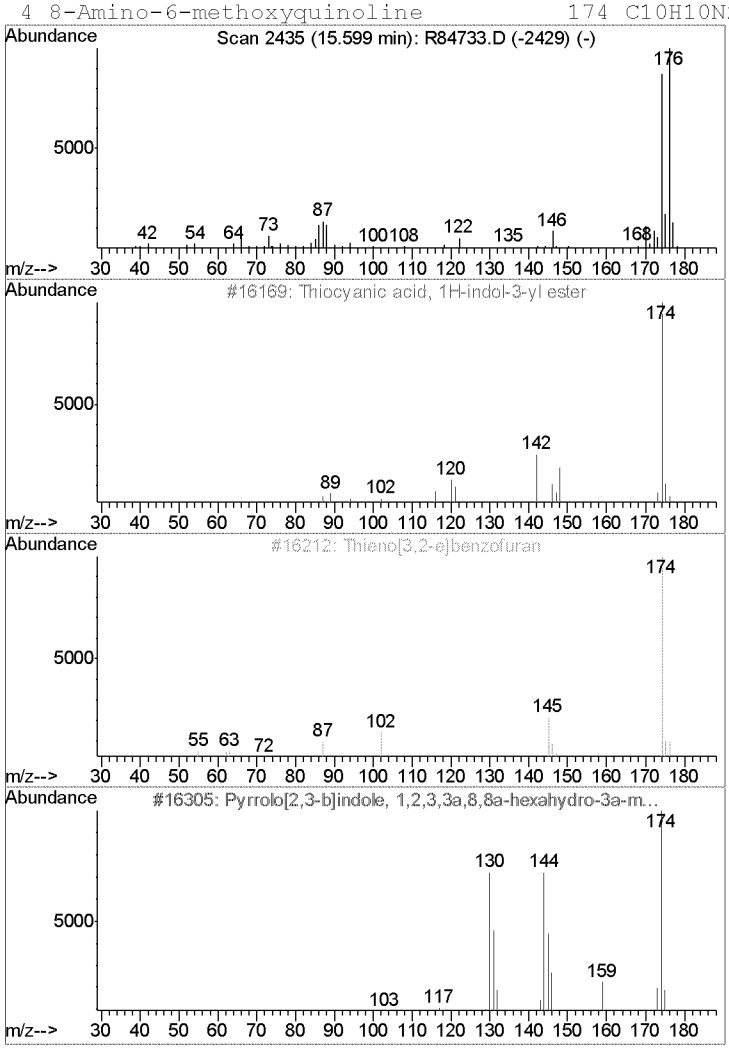
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

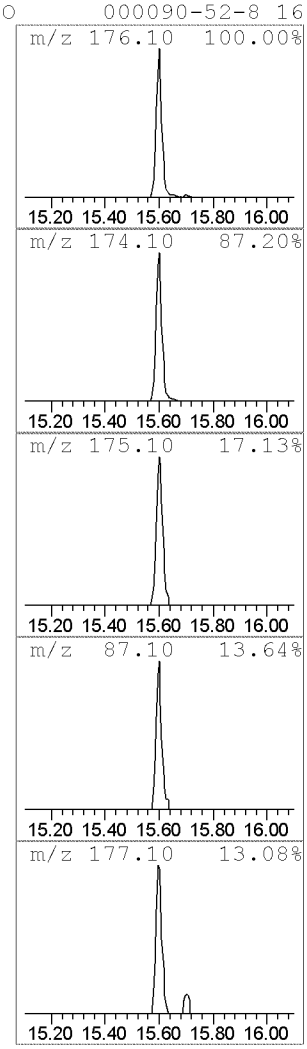
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.60	4.14 ppb	382031	Acenaphthene-d10a	14.40

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	35
2	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	35
3	Pyrrolo[2,3-b]indole, 1,2,3,3a,8...	174	C11H14N2	055255-88-4	27
4	8-Amino-6-methoxyquinoline	174	C10H10N2O	000090-52-8	16





8.1.16

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 11:40 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84733.D
Name: ja64438-3
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.3	ppb	352509	3	10.27	3250090	40.0
Internal standard...	15.60	4.1	ppb	382031	5	14.40	3691930	40.0

8.1.6
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:33 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

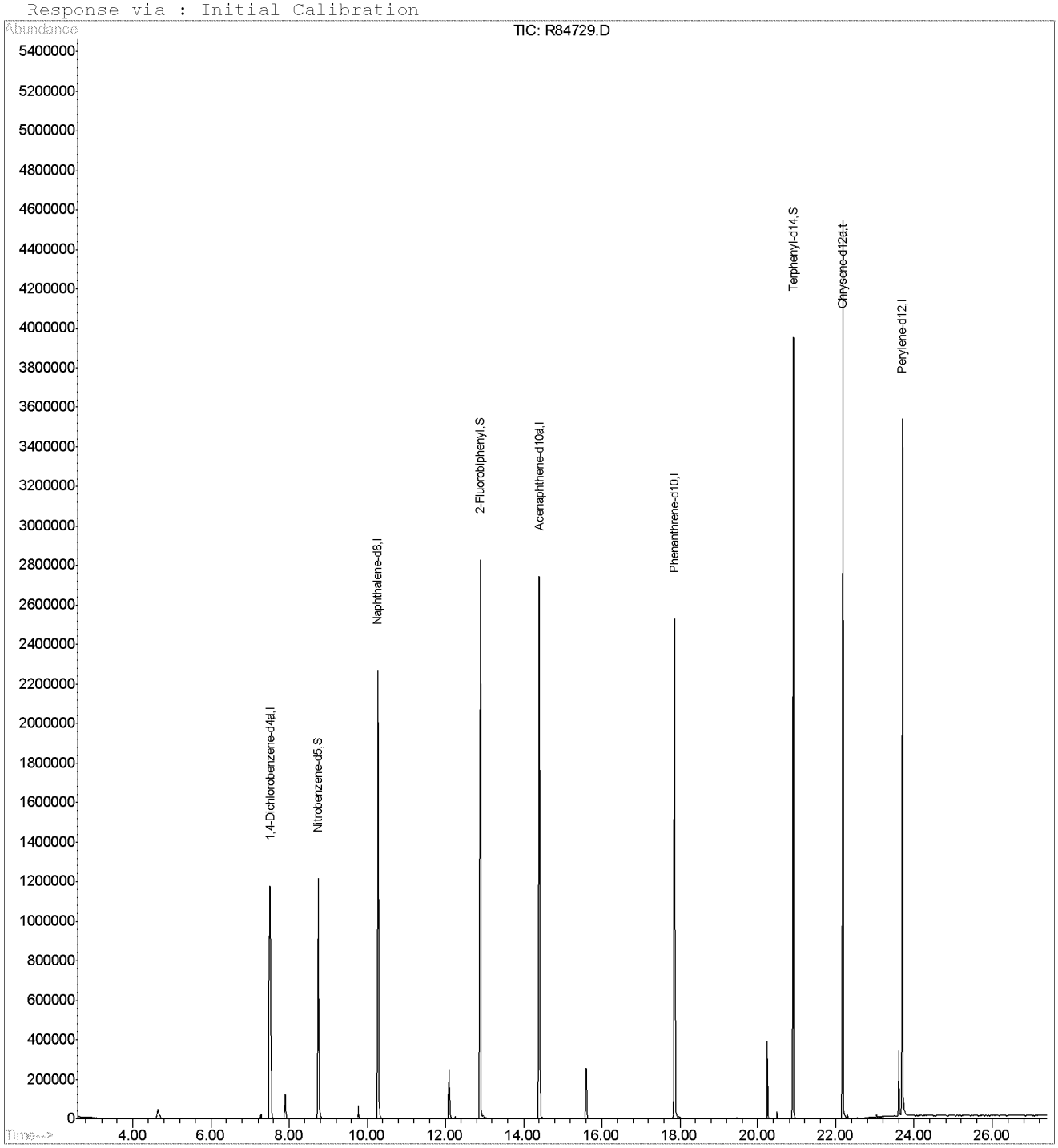
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	545593	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1849408	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	1071636	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1680015	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1706545	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1649740	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	7.51	152	545593	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	1071636	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1706545	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.75	82	778788	46.34	ppb	-0.12
Spiked Amount 50.000			Recovery =	92.68%		
51) 2-Fluorobiphenyl	12.89	172	1529207	40.54	ppb	-0.12
Spiked Amount 50.000			Recovery =	81.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1397820	43.46	ppb	-0.07
Spiked Amount 50.000			Recovery =	86.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:33 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.636	5	9	12	rBB5	1604	1882	0.04%	0.005%
2	3.411	148	154	161	rBB3	993	2716	0.05%	0.007%
3	3.790	220	225	227	rBB3	875	1382	0.03%	0.003%
4	4.506	354	359	363	rBB3	808	1720	0.03%	0.004%
5	4.640	376	384	408	rBB2	47773	174880	3.50%	0.441%
6	6.809	785	790	794	rBB	1024	1670	0.03%	0.004%
7	7.001	822	826	832	rBB	690	1537	0.03%	0.004%
8	7.279	871	878	886	rBB	26315	48983	0.98%	0.124%
9	7.396	894	900	902	rBB2	739	1727	0.03%	0.004%
10	7.508	910	921	945	rBB	1177048	3025225	60.60%	7.633%
11	7.722	957	961	964	rBB	1299	1628	0.03%	0.004%
12	7.898	983	994	1009	rBB	127616	299396	6.00%	0.755%
13	8.748	1145	1153	1184	rBB	1218336	2184961	43.77%	5.513%
14	9.768	1338	1344	1351	rBB	69362	95261	1.91%	0.240%
15	10.276	1431	1439	1474	rBB	2270860	3833682	76.79%	9.673%
16	12.092	1772	1779	1794	rBB2	247578	416492	8.34%	1.051%
17	12.252	1802	1809	1815	rBB2	15099	21564	0.43%	0.054%
18	12.893	1921	1929	1938	rBB	2822983	4343307	87.00%	10.959%
19	12.963	1938	1942	1947	rBB3	8644	8579	0.17%	0.022%
20	13.027	1949	1954	1960	rBB2	3879	4728	0.09%	0.012%
21	13.075	1960	1963	1969	rBB2	2185	2135	0.04%	0.005%
22	13.246	1987	1995	2003	rBB3	2356	4631	0.09%	0.012%
23	14.400	2202	2211	2237	rBB	2744766	4454891	89.23%	11.241%
24	14.662	2255	2260	2262	rBB2	1169	1392	0.03%	0.004%
25	15.602	2429	2436	2450	rBB	257179	424087	8.49%	1.070%
26	15.698	2450	2454	2461	rBB4	2076	3599	0.07%	0.009%
27	16.830	2660	2666	2670	rBB	3826	4553	0.09%	0.011%
28	16.895	2673	2678	2685	rBB2	3728	5832	0.12%	0.015%
29	17.578	2799	2806	2813	rBB	4991	7347	0.15%	0.019%
30	17.867	2850	2860	2876	rBB2	2526317	4475922	89.66%	11.294%
31	17.974	2876	2880	2884	rBB2	5881	7149	0.14%	0.018%
32	18.246	2928	2931	2936	rBB2	2017	2384	0.05%	0.006%
33	18.673	3006	3011	3017	rBB	2213	3389	0.07%	0.009%
34	19.464	3153	3159	3163	rBB	8857	10062	0.20%	0.025%
35	20.239	3298	3304	3326	rBB	396505	462707	9.27%	1.168%
36	20.484	3344	3350	3356	rBB2	36857	36812	0.74%	0.093%
37	20.575	3362	3367	3370	rBB2	2026	1557	0.03%	0.004%
38	20.901	3417	3428	3459	rBB	3957272	4767189	95.49%	12.029%

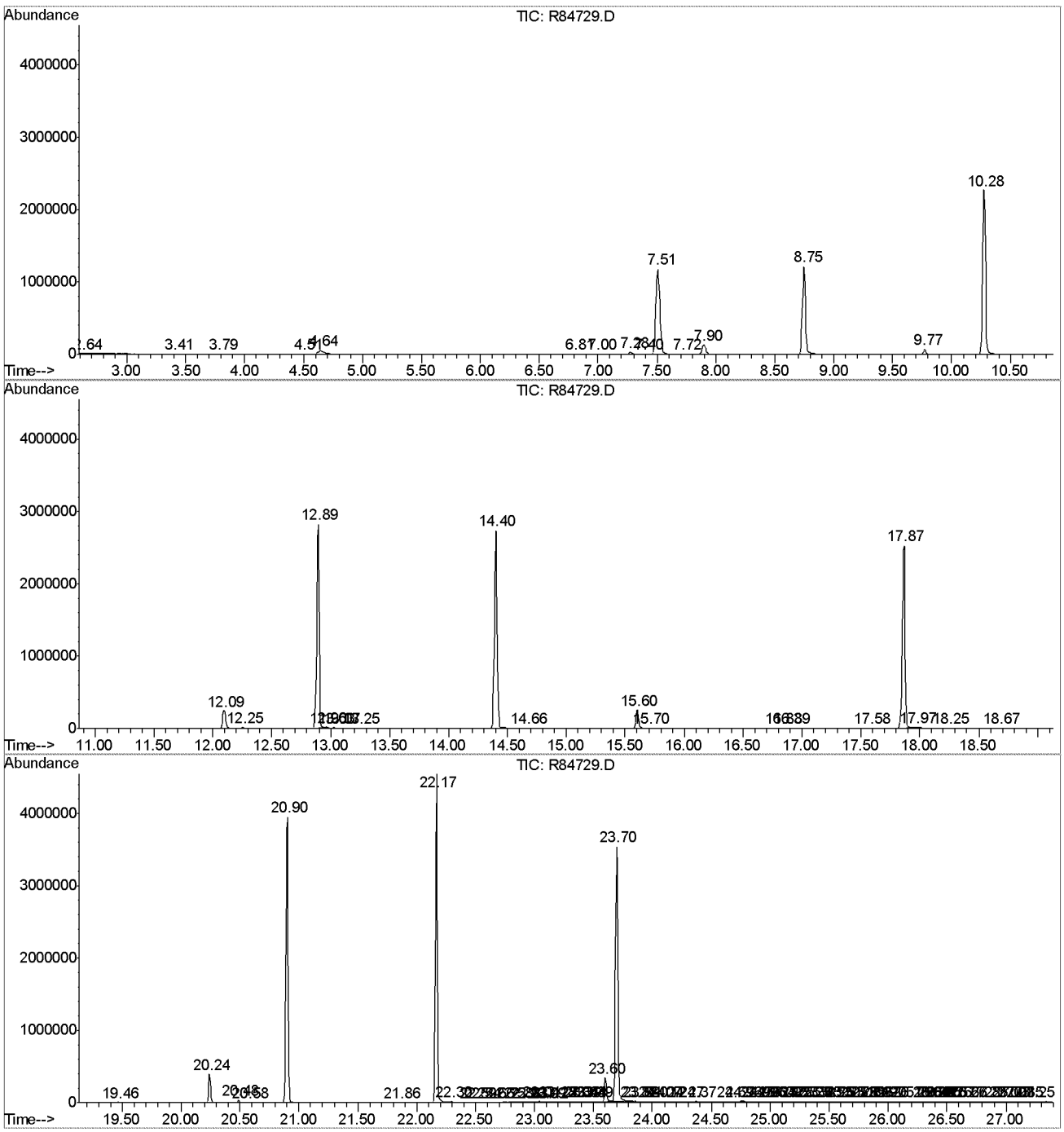
39	21.857	3603	3607	3610	rBB2	1796	1774	0.04%	0.004%
40	22.167	3656	3665	3685	rBB	4548898	4896395	98.08%	12.355%
41	22.295	3685	3689	3696	rBB	15281	16128	0.32%	0.041%
42	22.504	3723	3728	3730	rBB2	1363	1496	0.03%	0.004%
43	22.541	3730	3735	3737	rBB2	3794	3617	0.07%	0.009%
44	22.659	3754	3757	3765	rBB2	1574	2739	0.05%	0.007%
45	22.750	3765	3774	3779	rBB3	5111	6261	0.13%	0.016%
46	22.883	3790	3799	3800	rBB3	2168	2056	0.04%	0.005%
47	22.931	3806	3808	3812	rBB3	2072	1873	0.04%	0.005%
48	23.043	3825	3829	3834	rBB3	11833	12762	0.26%	0.032%
49	23.091	3834	3838	3841	rBB4	2297	2873	0.06%	0.007%
50	23.118	3841	3843	3846	rBB3	1904	1698	0.03%	0.004%
51	23.182	3849	3855	3859	rBB5	2892	3070	0.06%	0.008%
52	23.364	3885	3889	3891	rBB4	1728	1919	0.04%	0.005%
53	23.391	3891	3894	3898	rBB4	2569	3478	0.07%	0.009%
54	23.428	3898	3901	3902	rBB3	2416	1403	0.03%	0.004%
55	23.439	3902	3903	3906	rBB2	1645	1393	0.03%	0.004%
56	23.492	3906	3913	3922	rBB4	4055	8567	0.17%	0.022%
57	23.599	3928	3933	3944	rBB	329390	417559	8.36%	1.054%
58	23.695	3944	3951	3982	rBB	3523092	4992365	100.00%	12.597%
59	23.871	3982	3984	3986	rBB3	2100	1525	0.03%	0.004%
60	23.893	3986	3988	3994	rBB6	1661	2007	0.04%	0.005%
61	24.021	4011	4012	4018	rBB4	2218	2584	0.05%	0.007%
62	24.074	4018	4022	4025	rBB5	1861	2220	0.04%	0.006%
63	24.117	4025	4030	4034	rBB6	2621	4488	0.09%	0.011%
64	24.272	4058	4059	4063	rBB3	2432	2065	0.04%	0.005%
65	24.368	4071	4077	4080	rBB5	2712	3165	0.06%	0.008%
66	24.689	4133	4137	4139	rBB4	2409	2132	0.04%	0.005%
67	24.758	4143	4150	4156	rBB5	7657	13397	0.27%	0.034%
68	24.897	4169	4176	4178	rBB4	1788	2048	0.04%	0.005%
69	24.956	4186	4187	4191	rBB4	1468	1415	0.03%	0.004%
70	25.041	4200	4203	4207	rBB5	2664	2441	0.05%	0.006%
71	25.089	4209	4212	4215	rBB4	2338	1786	0.04%	0.005%
72	25.153	4220	4224	4225	rBB3	1585	1756	0.04%	0.004%
73	25.234	4234	4239	4242	rBB5	2242	3384	0.07%	0.009%
74	25.356	4257	4262	4264	rBB4	2304	2170	0.04%	0.005%
75	25.378	4264	4266	4271	rBB4	2374	1849	0.04%	0.005%
76	25.431	4271	4276	4277	rBB4	2079	2291	0.05%	0.006%
77	25.527	4290	4294	4296	rBB5	1434	2002	0.04%	0.005%
78	25.613	4306	4310	4311	rBB4	1614	1402	0.03%	0.004%
79	25.709	4323	4328	4331	rBB4	2498	2856	0.06%	0.007%
80	25.730	4331	4332	4338	rBB4	1878	2697	0.05%	0.007%
81	25.811	4342	4347	4348	rBB3	1664	2176	0.04%	0.005%
82	25.837	4348	4352	4358	rBB6	2675	2791	0.06%	0.007%
83	25.917	4361	4367	4368	rBB5	2446	2906	0.06%	0.007%
84	25.971	4374	4377	4382	rBB6	1726	2099	0.04%	0.005%
85	26.046	4389	4391	4394	rBB3	1760	1558	0.03%	0.004%
86	26.179	4414	4416	4418	rBB2	2286	1419	0.03%	0.004%
87	26.355	4446	4449	4450	rBB3	2182	1472	0.03%	0.004%
88	26.387	4450	4455	4456	rBB5	2415	2977	0.06%	0.008%
89	26.404	4456	4458	4461	rBB3	1667	1629	0.03%	0.004%
90	26.452	4464	4467	4469	rBB3	1607	1485	0.03%	0.004%
91	26.473	4469	4471	4475	rBB4	1809	1445	0.03%	0.004%
92	26.569	4486	4489	4492	rBB4	1415	1729	0.03%	0.004%
93	26.671	4506	4508	4513	rBB5	1733	1833	0.04%	0.005%
94	26.719	4513	4517	4518	rBB2	1394	1528	0.03%	0.004%
95	26.847	4539	4541	4545	rBB4	2517	2414	0.05%	0.006%

96	26.997	4563	4569	4573	rBB6	2393	4746	0.10%	0.012%
97	27.034	4573	4576	4582	rBB6	1876	3362	0.07%	0.008%
98	27.077	4582	4584	4589	rBB5	2295	2564	0.05%	0.006%
99	27.146	4593	4597	4599	rBB5	1882	1546	0.03%	0.004%
100	27.248	4613	4616	4617	rBB3	2643	1721	0.03%	0.004%

Sum of corrected areas: 39631464

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84729.D
Operator : larisap
Acquired : 30 Dec 2010 9:19 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-4
Misc Info : op47365,er3201,960
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: Rteint.p

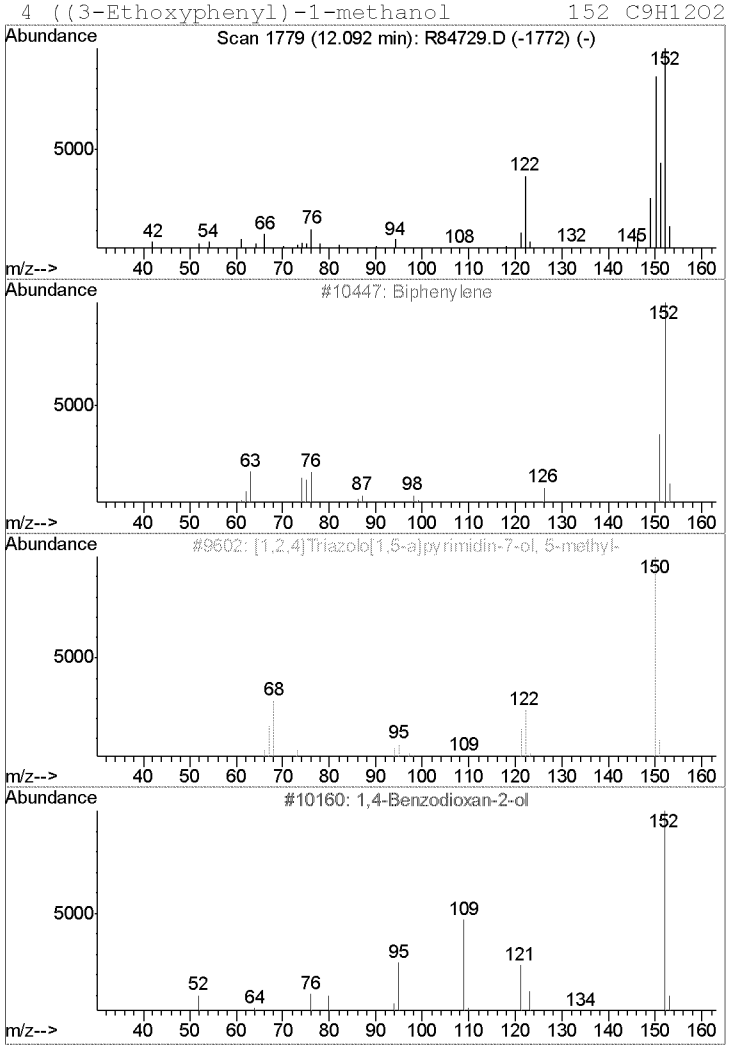
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

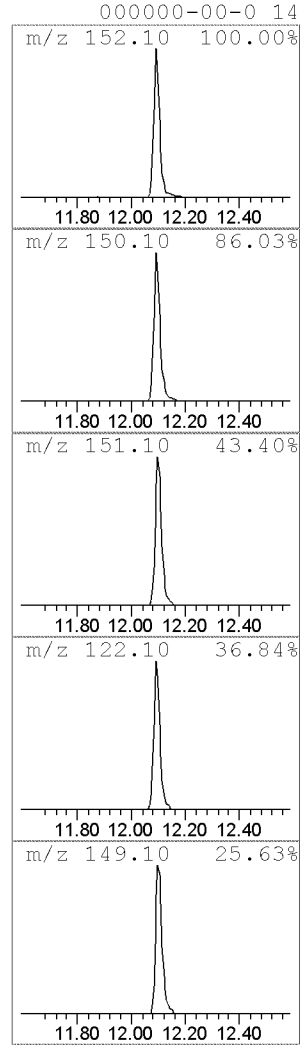
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.35 ppb	416492	Naphthalene-d8	10.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Biphenylene	152	C12H8	000259-79-0	38
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	1,4-Benzodioxan-2-ol	152	C8H8O3	005770-59-2	25
4	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 9:19 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84729.D
Name: ja64438-4
Misc: op47365,er3201,960
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.3	ppb	416492	3	10.28	3833680	40.0

8.1.8
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:37 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	472022	40.00	ppb	-0.11
24) Naphthalene-d8	10.27	136	1635721	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	928386	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1442971	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1469864	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1492756	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	472022	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	928386	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1469864	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.75	82	679976	45.74	ppb	-0.12
Spiked Amount 50.000			Recovery =	91.48%		
51) 2-Fluorobiphenyl	12.89	172	1330853	40.72	ppb	-0.12
Spiked Amount 50.000			Recovery =	81.44%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.89	244	1299448	46.90	ppb	-0.08
Spiked Amount 50.000			Recovery =	93.80%		
Target Compounds						Qvalue

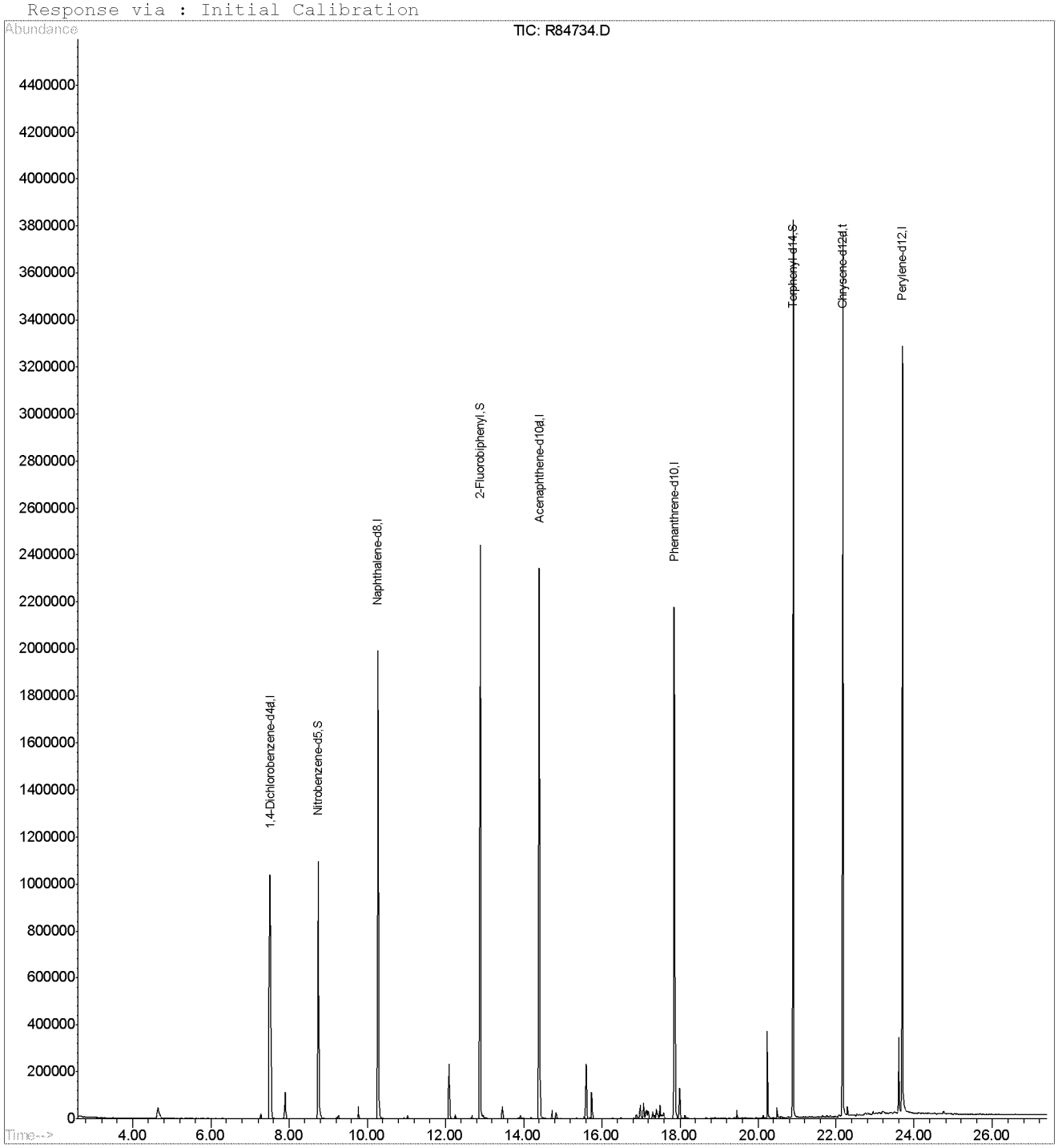
(#) = qualifier out of range (m) = manual integration
R84734.D MR3151.M Mon Jan 03 13:37:54 2011 NJMSR Page 1

8.1.9
8

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:37 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.644	372	385	415	rBB	48116	184663	4.07%	0.502%
2	7.272	871	877	884	rBB	20397	37702	0.83%	0.103%
3	7.507	910	921	948	rBB	1038222	2619908	57.75%	7.129%
4	7.801	969	976	981	rBB2	2719	5010	0.11%	0.014%
5	7.897	984	994	1013	rBB2	113024	258220	5.69%	0.703%
6	8.544	1105	1115	1119	rBB	3196	4483	0.10%	0.012%
7	8.747	1145	1153	1185	rBB	1095075	1930053	42.55%	5.252%
8	9.131	1221	1225	1232	rBB4	3873	5883	0.13%	0.016%
9	9.217	1237	1241	1246	rBB2	7526	11671	0.26%	0.032%
10	9.270	1246	1251	1259	rBB	16628	24294	0.54%	0.066%
11	9.772	1337	1345	1351	rBB	52255	75655	1.67%	0.206%
12	10.275	1431	1439	1455	rBB	1991306	3350004	73.85%	9.116%
13	10.937	1558	1563	1574	rBB2	5962	12211	0.27%	0.033%
14	11.028	1574	1580	1586	rBB2	16041	22202	0.49%	0.060%
15	11.087	1586	1591	1598	rBB	2304	4522	0.10%	0.012%
16	11.156	1601	1604	1609	rBB2	2525	3858	0.09%	0.010%
17	12.091	1771	1779	1790	rBB2	235320	376184	8.29%	1.024%
18	12.251	1803	1809	1815	rBB2	19848	26776	0.59%	0.073%
19	12.679	1884	1889	1894	rBB	15192	18901	0.42%	0.051%
20	12.887	1921	1928	1938	rBB	2440143	3842616	84.71%	10.456%
21	12.962	1938	1942	1946	rBB2	7583	8708	0.19%	0.024%
22	13.026	1950	1954	1960	rBB3	3331	5428	0.12%	0.015%
23	13.234	1989	1993	1999	rBB3	2729	4643	0.10%	0.013%
24	13.453	2024	2034	2043	rBB	53852	87658	1.93%	0.239%
25	13.629	2062	2067	2071	rBB2	2470	3706	0.08%	0.010%
26	13.913	2111	2120	2128	rBB3	10770	19521	0.43%	0.053%
27	14.201	2170	2174	2179	rBB	7313	8405	0.19%	0.023%
28	14.399	2202	2211	2221	rBB	2341224	3837627	84.60%	10.443%
29	14.725	2267	2272	2284	rBB	37199	53613	1.18%	0.146%
30	14.831	2287	2292	2299	rBB2	26842	39964	0.88%	0.109%
31	14.949	2309	2314	2322	rBB2	3407	4511	0.10%	0.012%
32	15.355	2381	2390	2400	rBB	8329	12197	0.27%	0.033%
33	15.553	2422	2427	2429	rBB	6935	8828	0.19%	0.024%
34	15.595	2429	2435	2447	rBB	230825	371413	8.19%	1.011%
35	15.697	2449	2454	2457	rBB2	4602	4710	0.10%	0.013%
36	15.745	2457	2463	2475	rBB	112448	166316	3.67%	0.453%
37	16.482	2596	2601	2610	rBB2	7309	16485	0.36%	0.045%
38	16.824	2655	2665	2670	rBB3	6028	9434	0.21%	0.026%

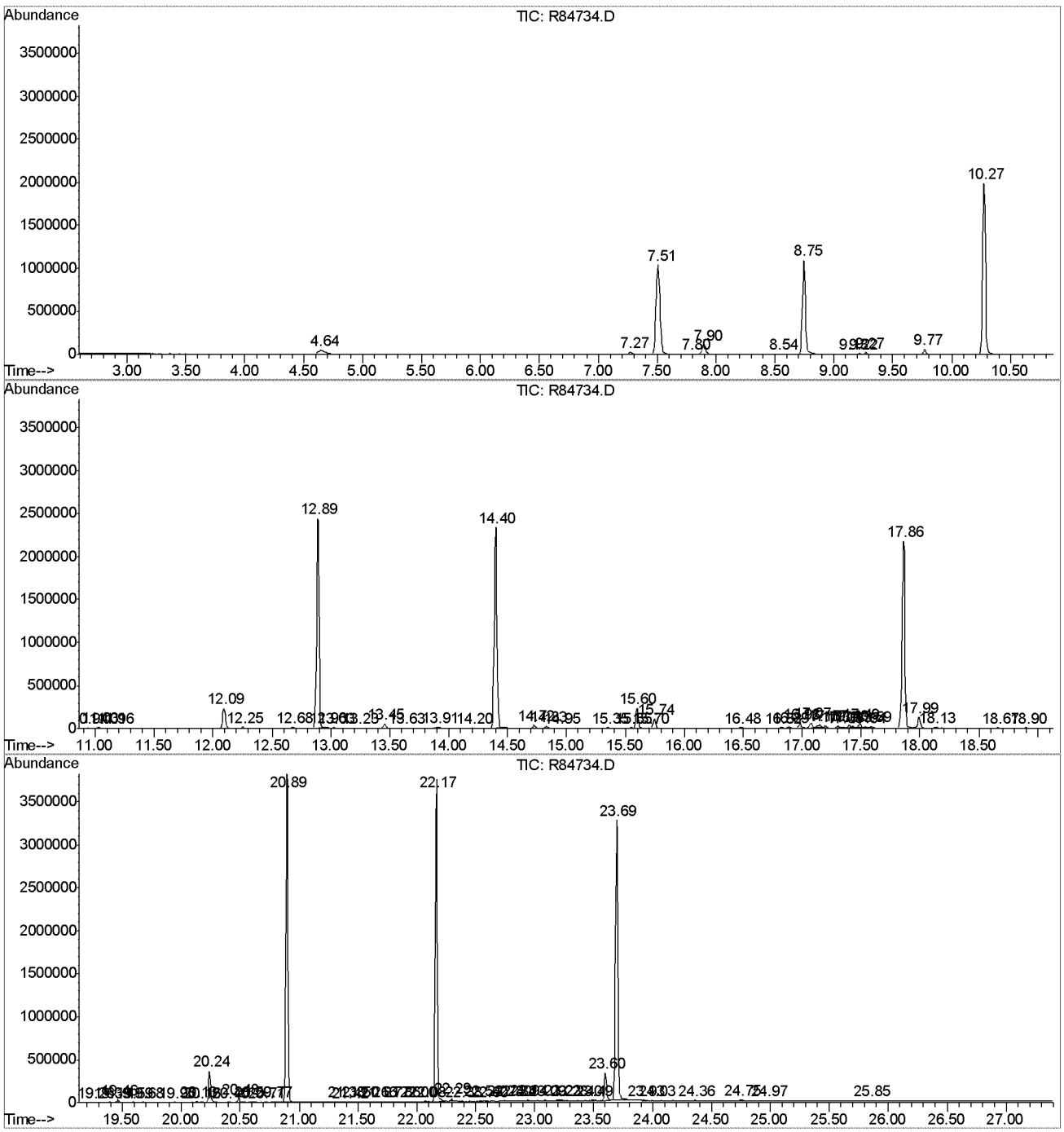
39	16.888	2670	2677	2684	rBB3	17274	32323	0.71%	0.088%
40	16.979	2686	2694	2705	rBB	58105	102829	2.27%	0.280%
41	17.070	2705	2711	2718	rBB3	63293	109218	2.41%	0.297%
42	17.150	2718	2726	2730	rBB2	27560	64968	1.43%	0.177%
43	17.193	2730	2734	2742	rBB3	22959	28929	0.64%	0.079%
44	17.305	2749	2755	2759	rBB2	24939	38416	0.85%	0.105%
45	17.348	2759	2763	2767	rBB	10412	12751	0.28%	0.035%
46	17.396	2767	2772	2776	rBB	27540	33750	0.74%	0.092%
47	17.428	2776	2778	2783	rBB3	10722	9511	0.21%	0.026%
48	17.486	2784	2789	2795	rBB	50723	76229	1.68%	0.207%
49	17.540	2795	2799	2803	rBB3	9215	11593	0.26%	0.032%
50	17.588	2803	2808	2816	rBB2	17945	28937	0.64%	0.079%
51	17.860	2843	2859	2874	rBB2	2176008	3893692	85.83%	10.595%
52	17.989	2874	2883	2893	rBB3	128789	221506	4.88%	0.603%
53	18.133	2906	2910	2916	rBB3	13029	17469	0.39%	0.048%
54	18.667	3000	3010	3015	rBB4	6068	12145	0.27%	0.033%
55	18.902	3048	3054	3060	rBB3	3836	5704	0.13%	0.016%
56	19.260	3115	3121	3131	rBB4	3023	7433	0.16%	0.020%
57	19.394	3136	3146	3154	rBB4	3323	9660	0.21%	0.026%
58	19.458	3154	3158	3165	rBB	34630	39561	0.87%	0.108%
59	19.591	3178	3183	3189	rBB4	3742	5493	0.12%	0.015%
60	19.677	3194	3199	3203	rBB2	6122	7141	0.16%	0.019%
61	19.949	3240	3250	3253	rBB4	3531	7162	0.16%	0.019%
62	20.131	3281	3284	3289	rBB2	11676	12079	0.27%	0.033%
63	20.163	3289	3290	3297	rBB3	2755	3558	0.08%	0.010%
64	20.238	3297	3304	3313	rBB	367924	433023	9.55%	1.178%
65	20.403	3330	3335	3342	rBB5	4685	8530	0.19%	0.023%
66	20.483	3342	3350	3356	rBB2	44676	48870	1.08%	0.133%
67	20.590	3368	3370	3377	rBB4	6269	6646	0.15%	0.018%
68	20.708	3388	3392	3398	rBB6	2658	4335	0.10%	0.012%
69	20.767	3400	3403	3409	rBB5	7904	10144	0.22%	0.028%
70	20.895	3421	3427	3446	rBB	3822829	4487073	98.91%	12.210%
71	21.381	3513	3518	3521	rBB3	5400	5120	0.11%	0.014%
72	21.424	3521	3526	3530	rBB5	2967	4257	0.09%	0.012%
73	21.504	3536	3541	3546	rBB6	3809	5379	0.12%	0.015%
74	21.659	3562	3570	3576	rBB5	7054	10996	0.24%	0.030%
75	21.766	3587	3590	3594	rBB3	7275	8082	0.18%	0.022%
76	21.856	3602	3607	3611	rBB5	5722	6083	0.13%	0.017%
77	21.995	3631	3633	3637	rBB4	3357	3763	0.08%	0.010%
78	22.075	3642	3648	3650	rBB5	4423	10299	0.23%	0.028%
79	22.166	3659	3665	3679	rBB	3751468	4283519	94.43%	11.656%
80	22.289	3684	3688	3695	rBB	35975	37805	0.83%	0.103%
81	22.380	3701	3705	3708	rBB5	5606	6736	0.15%	0.018%
82	22.540	3731	3735	3738	rBB4	7436	8190	0.18%	0.022%
83	22.604	3742	3747	3749	rBB5	3210	4580	0.10%	0.012%
84	22.743	3770	3773	3780	rBB6	9057	11134	0.25%	0.030%
85	22.802	3782	3784	3789	rBB4	7210	8955	0.20%	0.024%
86	22.839	3789	3791	3795	rBB5	3845	4391	0.10%	0.012%
87	22.935	3805	3809	3817	rBB7	13230	17794	0.39%	0.048%
88	23.090	3833	3838	3845	rBB8	6407	12250	0.27%	0.033%
89	23.224	3851	3863	3870	rBB8	8866	30563	0.67%	0.083%
90	23.277	3870	3873	3875	rBB4	3980	3511	0.08%	0.010%
91	23.400	3891	3896	3899	rBB5	1976	3854	0.08%	0.010%
92	23.491	3909	3913	3916	rBB3	5002	5988	0.13%	0.016%
93	23.598	3927	3933	3942	rBB	321288	399962	8.82%	1.088%
94	23.694	3942	3951	3974	rBB	3257480	4536293	100.00%	12.344%
95	23.929	3992	3995	3999	rBB5	2828	4149	0.09%	0.011%

96	24.025	4010	4013	4019	rBB7	3126	5431	0.12%	0.015%
97	24.362	4071	4076	4084	rBB7	4530	7536	0.17%	0.021%
98	24.752	4142	4149	4156	rBB4	12997	25995	0.57%	0.071%
99	24.971	4189	4190	4197	rBB7	3438	3501	0.08%	0.010%
100	25.847	4349	4354	4359	rBB4	3556	5013	0.11%	0.014%

Sum of corrected areas: 36749790

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84734.D
Operator : larisap
Acquired : 30 Dec 2010 12:17 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-5
Misc Info : op47365,er3201,1000
Vial Number: 9
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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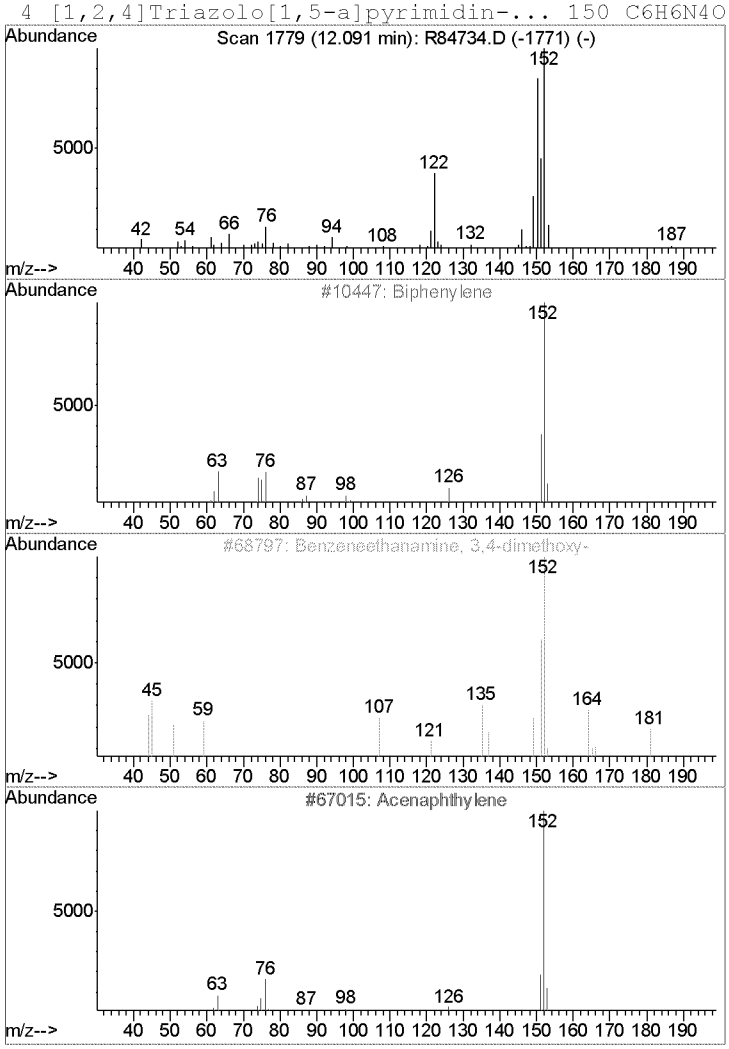
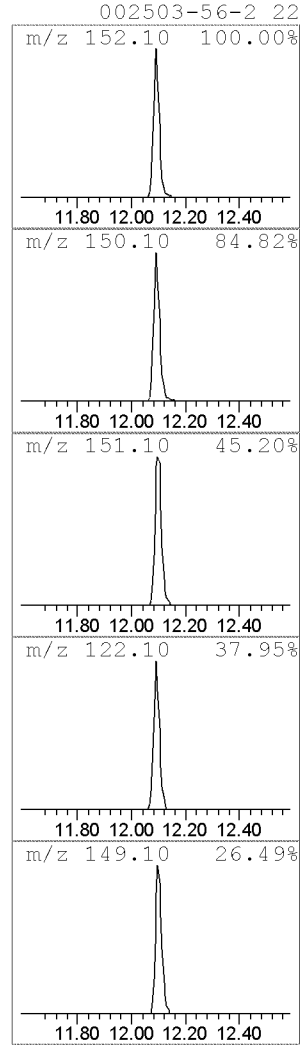
Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.49 ppb	376184	Naphthalene-d8	10.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Biphenylene	152	C12H8	000259-79-0	27
2	Benzeneethanamine, 3,4-dimethoxy-	181	C10H15NO2	000120-20-7	25
3	Acenaphthylene	152	C12H8	000208-96-8	22
4	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	22





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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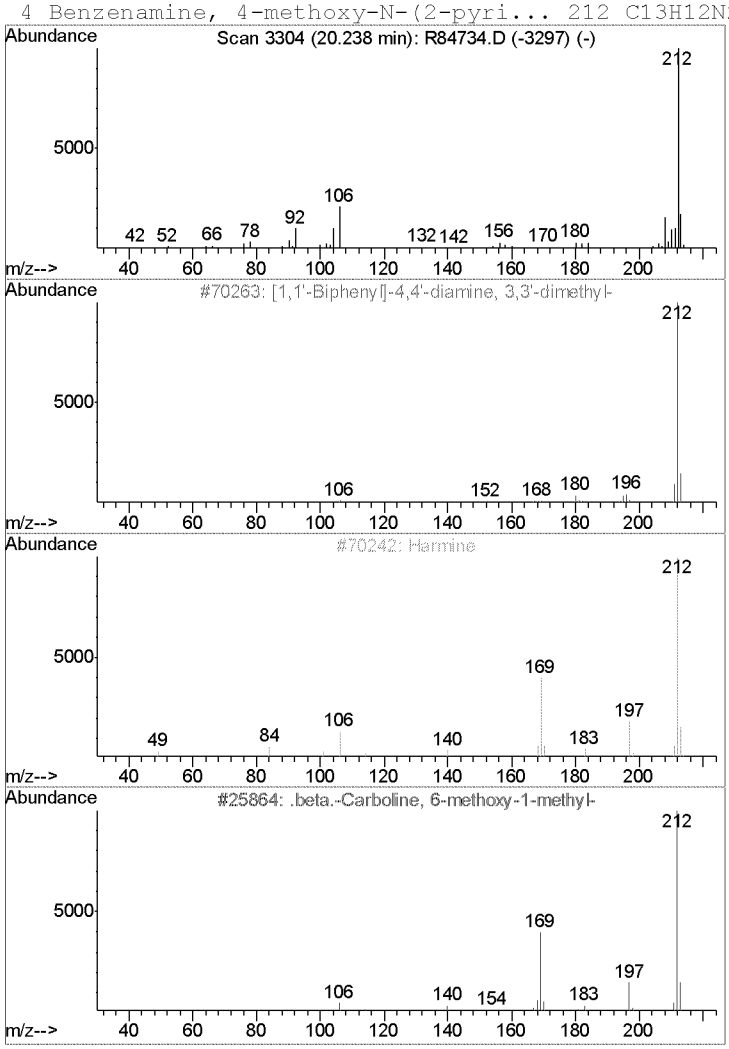
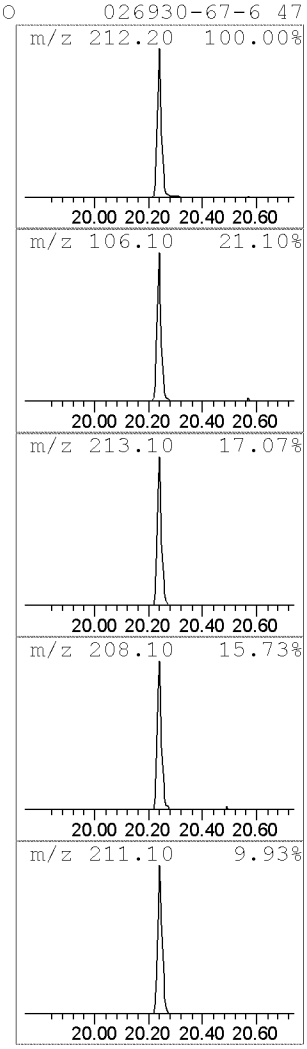
Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.24	4.04 ppb	433023	Chrysene-d12	22.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	Harmine	212	C13H12N2O	000442-51-3	50
3	.beta.-Carboline, 6-methoxy-1-me...	212	C13H12N2O	000000-00-0	50
4	Benzenamine, 4-methoxy-N-(2-pyri...	212	C13H12N2O	026930-67-6	47





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 12:17 pm
Data File: C:\MSDCHEM\1\DATA\ER3201\R84734.D
Name: ja64438-5
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.5	ppb	376184	3	10.27	3350000	40.0
Internal standard...	20.24	4.0	ppb	433023	7	22.17	4283520	40.0

8.1.10
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:34 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

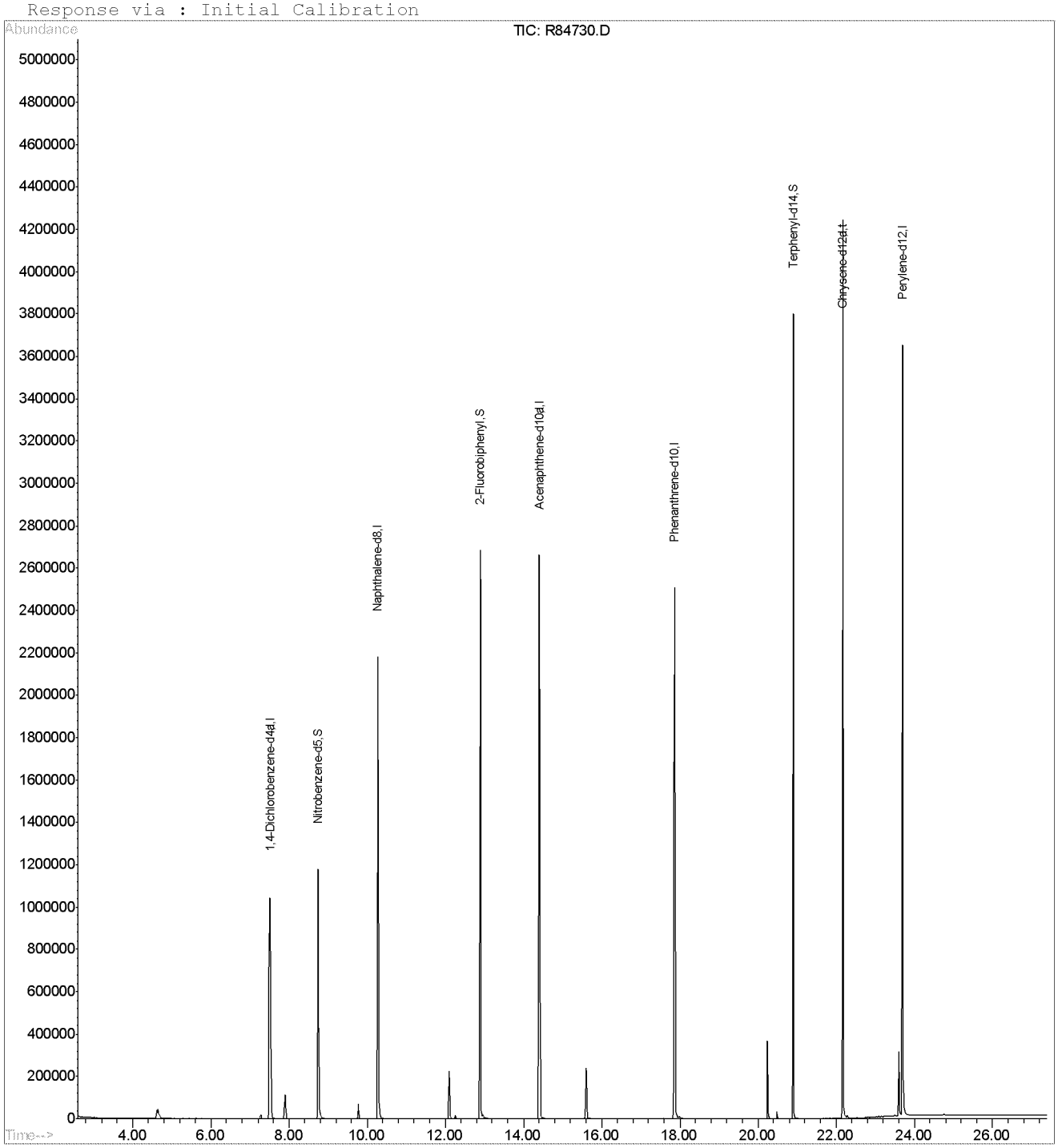
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	543682	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1820450	40.00	ppb	-0.11
47) Acenaphthene-d10	14.40	164	1024472	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1633288	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1703995	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1706758	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	543682	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	1024472	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1703995	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.74	82	772397	46.69	ppb	-0.12
Spiked Amount 50.000			Recovery =	93.38%		
51) 2-Fluorobiphenyl	12.89	172	1432468	39.72	ppb	-0.12
Spiked Amount 50.000			Recovery =	79.44%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1218605	37.94	ppb	-0.08
Spiked Amount 50.000			Recovery =	75.88%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84730.D MR3151.M Mon Jan 03 13:34:40 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:34 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA64438

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.756	28	31	35	rBB	1354	1546	0.03%	0.004%
2	2.809	35	41	44	rBB4	1217	1574	0.03%	0.004%
3	3.397	145	151	158	rBB5	1724	1994	0.04%	0.005%
4	3.514	171	173	184	rBB4	641	1929	0.04%	0.005%
5	3.749	212	217	220	rBB3	1135	1537	0.03%	0.004%
6	3.856	234	237	244	rBB4	1232	1923	0.04%	0.005%
7	4.545	361	366	370	rBB2	956	1434	0.03%	0.004%
8	4.609	375	378	380	rBB	21498	23405	0.45%	0.061%
9	4.641	380	384	399	rBB2	20151	40537	0.78%	0.106%
10	5.154	476	480	485	rBB3	895	1709	0.03%	0.004%
11	5.218	485	492	493	rBB2	1163	1649	0.03%	0.004%
12	7.275	868	877	889	rBB2	20774	45892	0.88%	0.120%
13	7.510	908	921	945	rBB	1045768	3009555	57.99%	7.847%
14	7.895	982	993	1011	rBB	112487	292137	5.63%	0.762%
15	8.744	1145	1152	1187	rBB	1178522	2174746	41.90%	5.670%
16	9.770	1337	1344	1353	rBB	73406	103706	2.00%	0.270%
17	10.277	1430	1439	1465	rBB	2182277	3761701	72.48%	9.808%
18	11.939	1745	1750	1757	rBB	4652	6736	0.13%	0.018%
19	12.094	1772	1779	1790	rBB2	227692	392502	7.56%	1.023%
20	12.249	1803	1808	1814	rBB2	15416	22079	0.43%	0.058%
21	12.622	1873	1878	1882	rBB	697	1536	0.03%	0.004%
22	12.772	1899	1906	1910	rBB	655	1804	0.03%	0.005%
23	12.890	1920	1928	1938	rBB	2679626	4097653	78.96%	10.684%
24	12.959	1938	1941	1946	rBB	8784	10567	0.20%	0.028%
25	13.028	1949	1954	1961	rBB4	4038	6012	0.12%	0.016%
26	13.077	1961	1963	1968	rBB2	2810	2999	0.06%	0.008%
27	13.237	1988	1993	1997	rBB5	3323	3417	0.07%	0.009%
28	13.434	2025	2030	2040	rBB3	2395	4612	0.09%	0.012%
29	13.632	2061	2067	2072	rBB3	2810	4618	0.09%	0.012%
30	13.675	2072	2075	2080	rBB2	1539	1659	0.03%	0.004%
31	14.401	2202	2211	2226	rBB	2661160	4242395	81.75%	11.061%
32	15.598	2429	2435	2450	rBB	237754	407132	7.84%	1.062%
33	15.694	2450	2453	2461	rBB3	2036	4623	0.09%	0.012%
34	16.827	2660	2665	2670	rBB2	2351	2827	0.05%	0.007%
35	16.896	2675	2678	2686	rBB3	2594	4045	0.08%	0.011%
36	17.580	2800	2806	2815	rBB	4465	7341	0.14%	0.019%
37	17.863	2850	2859	2875	rBB2	2503623	4368949	84.18%	11.391%
38	17.975	2875	2880	2890	rBB6	5733	13239	0.26%	0.035%

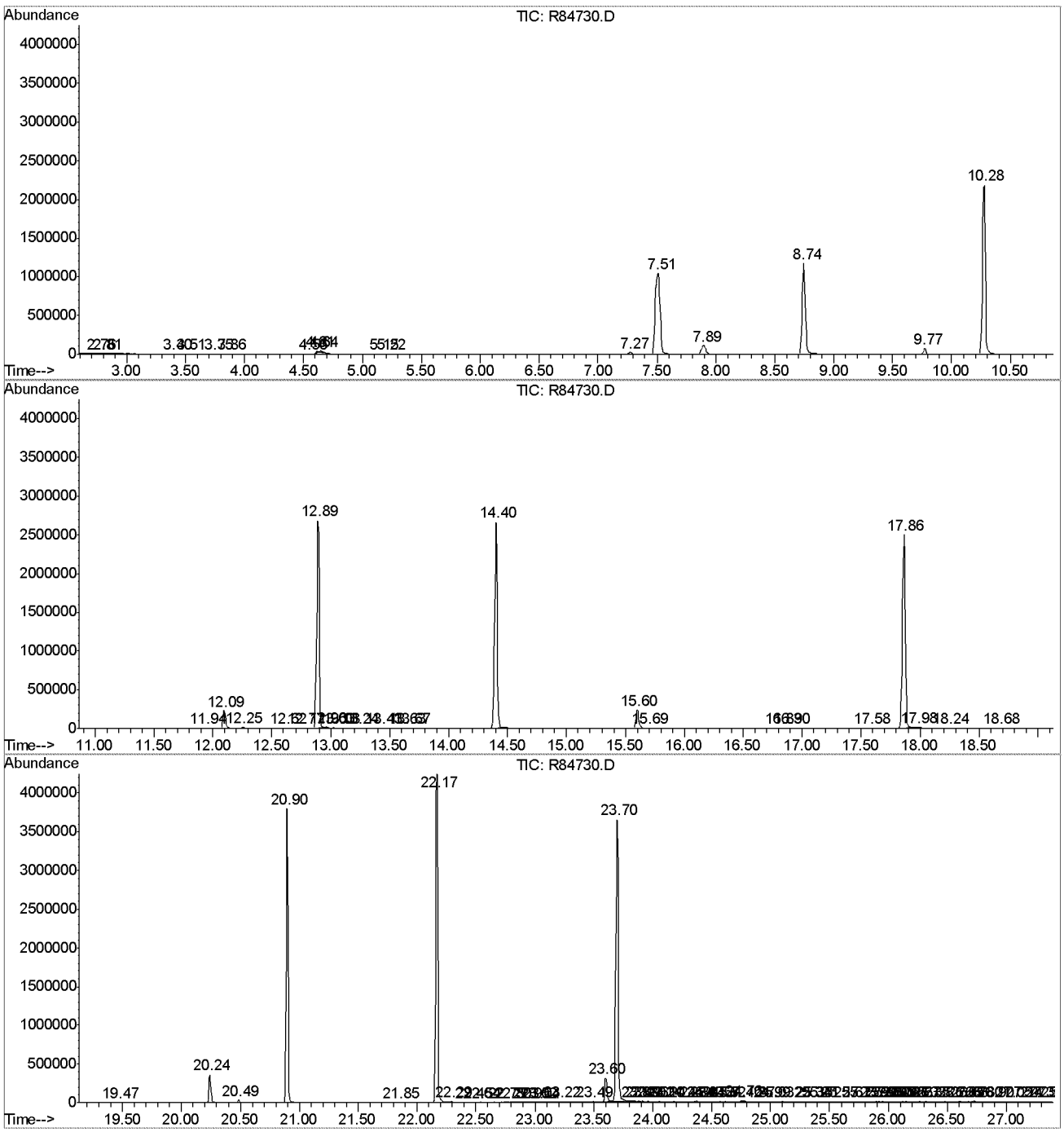
39	18.242	2927	2930	2937	rBB2	2732	3584	0.07%	0.009%
40	18.675	3004	3011	3014	rBB	3200	4010	0.08%	0.010%
41	19.466	3152	3159	3165	rBB	3596	4760	0.09%	0.012%
42	20.240	3299	3304	3325	rBB	366293	460250	8.87%	1.200%
43	20.486	3344	3350	3356	rBB2	32759	35875	0.69%	0.094%
44	20.897	3421	3427	3450	rBB	3798131	4138163	79.74%	10.790%
45	21.854	3600	3606	3612	rBB2	2486	2869	0.06%	0.007%
46	22.169	3658	3665	3685	rBB	4244643	4897761	94.37%	12.770%
47	22.292	3685	3688	3693	rBB	11830	9928	0.19%	0.026%
48	22.463	3714	3720	3721	rBB3	1257	2101	0.04%	0.005%
49	22.537	3731	3734	3738	rBB2	4331	3294	0.06%	0.009%
50	22.751	3770	3774	3778	rBB4	2585	3367	0.06%	0.009%
51	22.805	3780	3784	3786	rBB2	1684	1525	0.03%	0.004%
52	22.954	3809	3812	3815	rBB3	1493	1520	0.03%	0.004%
53	23.018	3820	3824	3826	rBB4	1495	2049	0.04%	0.005%
54	23.040	3826	3828	3832	rBB2	1874	1965	0.04%	0.005%
55	23.216	3856	3861	3864	rBB3	2485	2613	0.05%	0.007%
56	23.494	3910	3913	3915	rBB3	4603	3446	0.07%	0.009%
57	23.601	3928	3933	3943	rBB	300133	406727	7.84%	1.060%
58	23.697	3943	3951	3982	rBB2	3633708	5189723	100.00%	13.532%
59	23.878	3984	3985	3989	rBB4	2028	1643	0.03%	0.004%
60	23.916	3990	3992	3993	rBB2	2628	1511	0.03%	0.004%
61	23.958	3998	4000	4005	rBB4	1940	1944	0.04%	0.005%
62	24.007	4007	4009	4011	rBB3	1920	1809	0.03%	0.005%
63	24.097	4020	4026	4034	rBB5	1958	5661	0.11%	0.015%
64	24.258	4055	4056	4060	rBB3	2079	1623	0.03%	0.004%
65	24.284	4060	4061	4064	rBB3	1946	1492	0.03%	0.004%
66	24.375	4075	4078	4084	rBB8	2058	2348	0.05%	0.006%
67	24.429	4084	4088	4090	rBB4	1524	2010	0.04%	0.005%
68	24.530	4106	4107	4111	rBB3	2366	2172	0.04%	0.006%
69	24.567	4113	4114	4119	rBB3	2643	1783	0.03%	0.005%
70	24.616	4119	4123	4127	rBB6	2068	1996	0.04%	0.005%
71	24.760	4142	4150	4159	rBB5	7732	17477	0.34%	0.046%
72	24.867	4169	4170	4175	rBB3	1720	1723	0.03%	0.004%
73	24.995	4188	4194	4196	rBB6	1783	2046	0.04%	0.005%
74	25.027	4196	4200	4203	rBB4	1768	1712	0.03%	0.004%
75	25.337	4253	4258	4260	rBB4	1597	2391	0.05%	0.006%
76	25.353	4260	4261	4265	rBB5	1973	1943	0.04%	0.005%
77	25.406	4269	4271	4273	rBB2	1788	1602	0.03%	0.004%
78	25.566	4297	4301	4304	rBB5	1772	1720	0.03%	0.004%
79	25.673	4316	4321	4323	rBB4	1857	2537	0.05%	0.007%
80	25.748	4329	4335	4338	rBB7	1529	2024	0.04%	0.005%
81	25.898	4358	4363	4366	rBB6	1595	2650	0.05%	0.007%
82	25.951	4371	4373	4377	rBB2	2106	1744	0.03%	0.005%
83	26.004	4381	4383	4386	rBB2	1771	1620	0.03%	0.004%
84	26.053	4386	4392	4395	rBB5	2282	3990	0.08%	0.010%
85	26.090	4395	4399	4402	rBB5	1821	2647	0.05%	0.007%
86	26.149	4408	4410	4413	rBB4	2428	1961	0.04%	0.005%
87	26.266	4428	4432	4435	rBB5	1457	1433	0.03%	0.004%
88	26.320	4440	4442	4446	rBB5	1816	1585	0.03%	0.004%
89	26.352	4446	4448	4451	rBB4	1972	1738	0.03%	0.005%
90	26.384	4451	4454	4458	rBB5	1584	1810	0.03%	0.005%
91	26.646	4502	4503	4507	rBB4	2185	1715	0.03%	0.004%
92	26.678	4507	4509	4511	rBB3	2128	1552	0.03%	0.004%
93	26.726	4516	4518	4523	rBB5	1603	2282	0.04%	0.006%
94	26.795	4527	4531	4536	rBB6	1585	2473	0.05%	0.006%
95	26.897	4545	4550	4551	rBB4	1331	1754	0.03%	0.005%

96	27.046	4574	4578	4580	rBB4	1245	1717	0.03%	0.004%
97	27.137	4594	4595	4604	rBB6	1864	3175	0.06%	0.008%
98	27.255	4611	4617	4620	rBB4	1571	2349	0.05%	0.006%
99	27.303	4620	4626	4627	rBB4	1371	2049	0.04%	0.005%
100	27.340	4631	4633	4637	rBB3	2090	2213	0.04%	0.006%

Sum of corrected areas: 38352873

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84730.D
Operator : larisap
Acquired : 30 Dec 2010 9:56 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-6
Misc Info : op47365,er3201,1000
Vial Number: 5
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

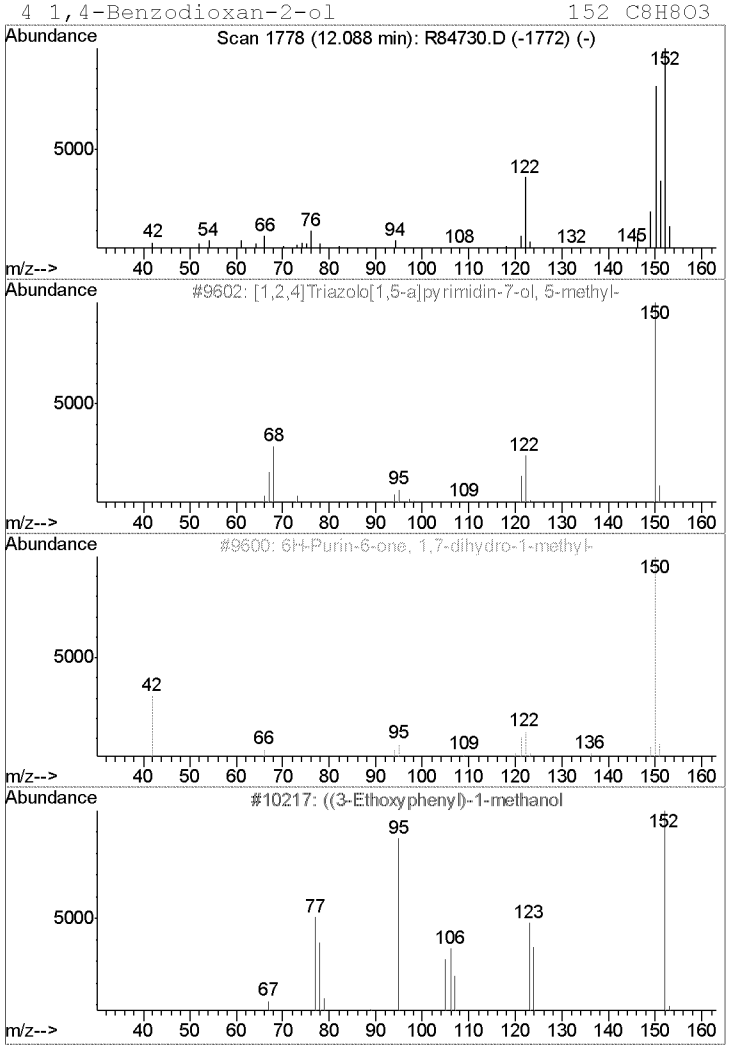
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

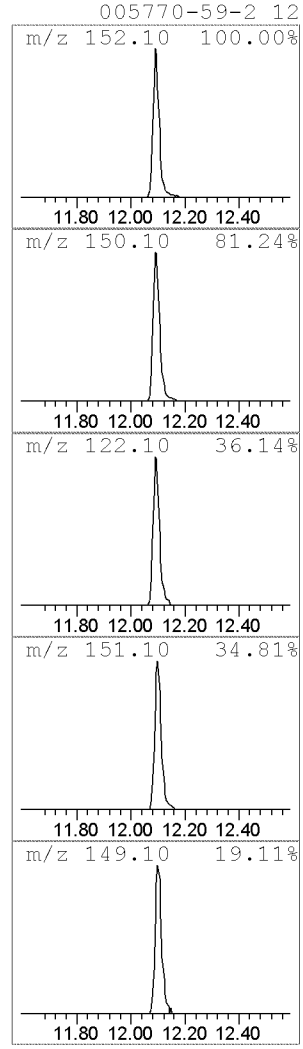
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.17 ppb	392502	Naphthalene-d8	10.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
2	6H-Purin-6-one, 1,7-dihydro-1-me...	150	C6H6N4O	001125-39-9	27
3	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14
4	1,4-Benzodioxan-2-ol	152	C8H8O3	005770-59-2	12





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 9:56 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84730.D
Name: ja64438-6
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.2	ppb	392502	3	10.28	3761700	40.0

8.1.12
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22982.D
Acq On : 23 Dec 2010 5:56 pm
Operator : ninap
Sample : ja64438-1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 28 08:35:21 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

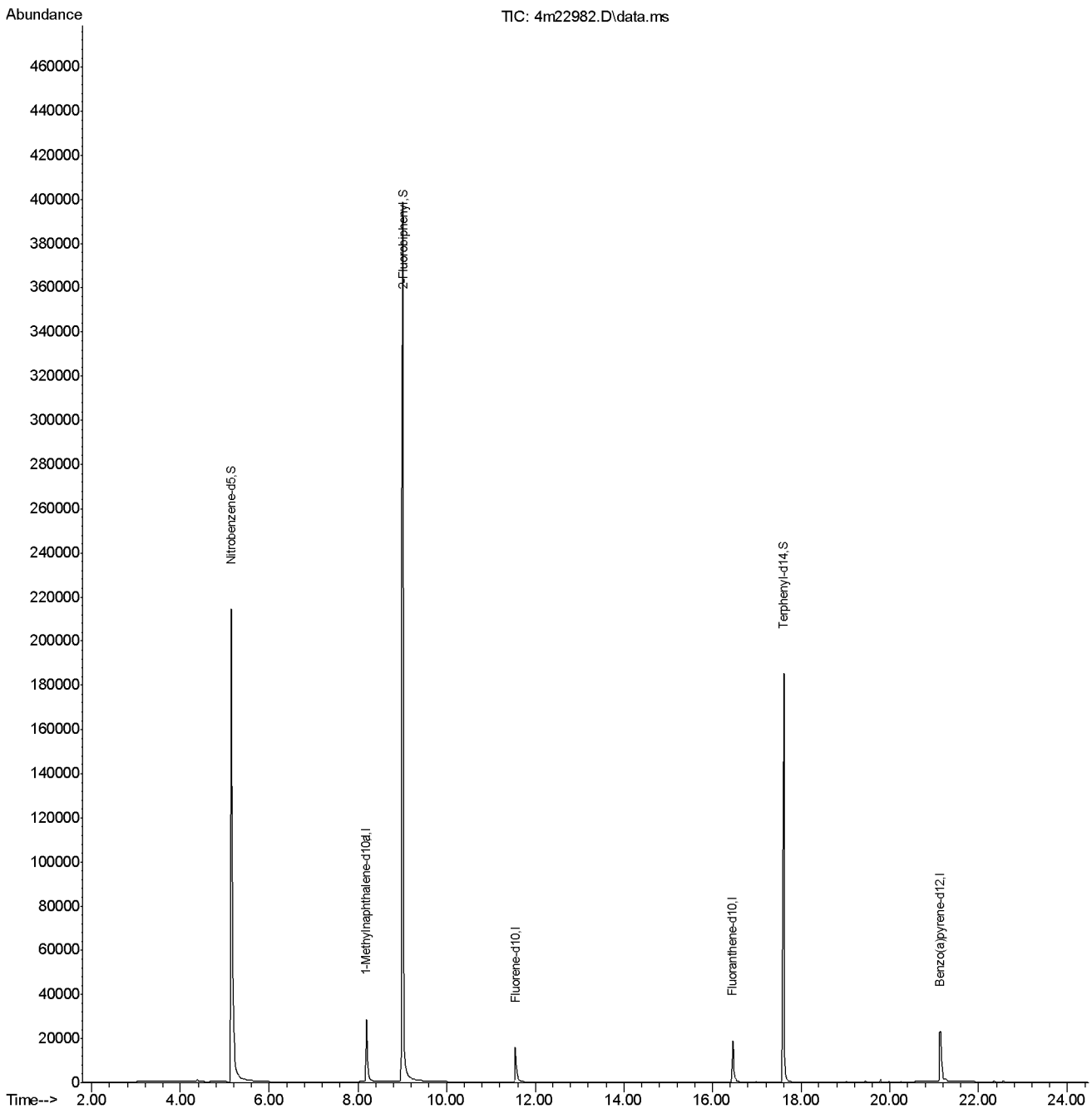
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	25759	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	20859	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38210	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.123	264	39644	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	25759	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	250985	55.27	ppb	0.00
Spiked Amount 50.000			Recovery =	110.54%		
10) 2-Fluorobiphenyl	9.011	172	494241	49.55	ppb	0.00
Spiked Amount 50.000			Recovery =	99.10%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	224731	49.03	ppb	0.00
Spiked Amount 50.000			Recovery =	98.06%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22982.D
Acq On : 23 Dec 2010 5:56 pm
Operator : ninap
Sample : ja64438-1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 28 08:35:21 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22983.D
Acq On : 23 Dec 2010 6:27 pm
Operator : ninap
Sample : ja64438-2
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 28 08:35:59 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

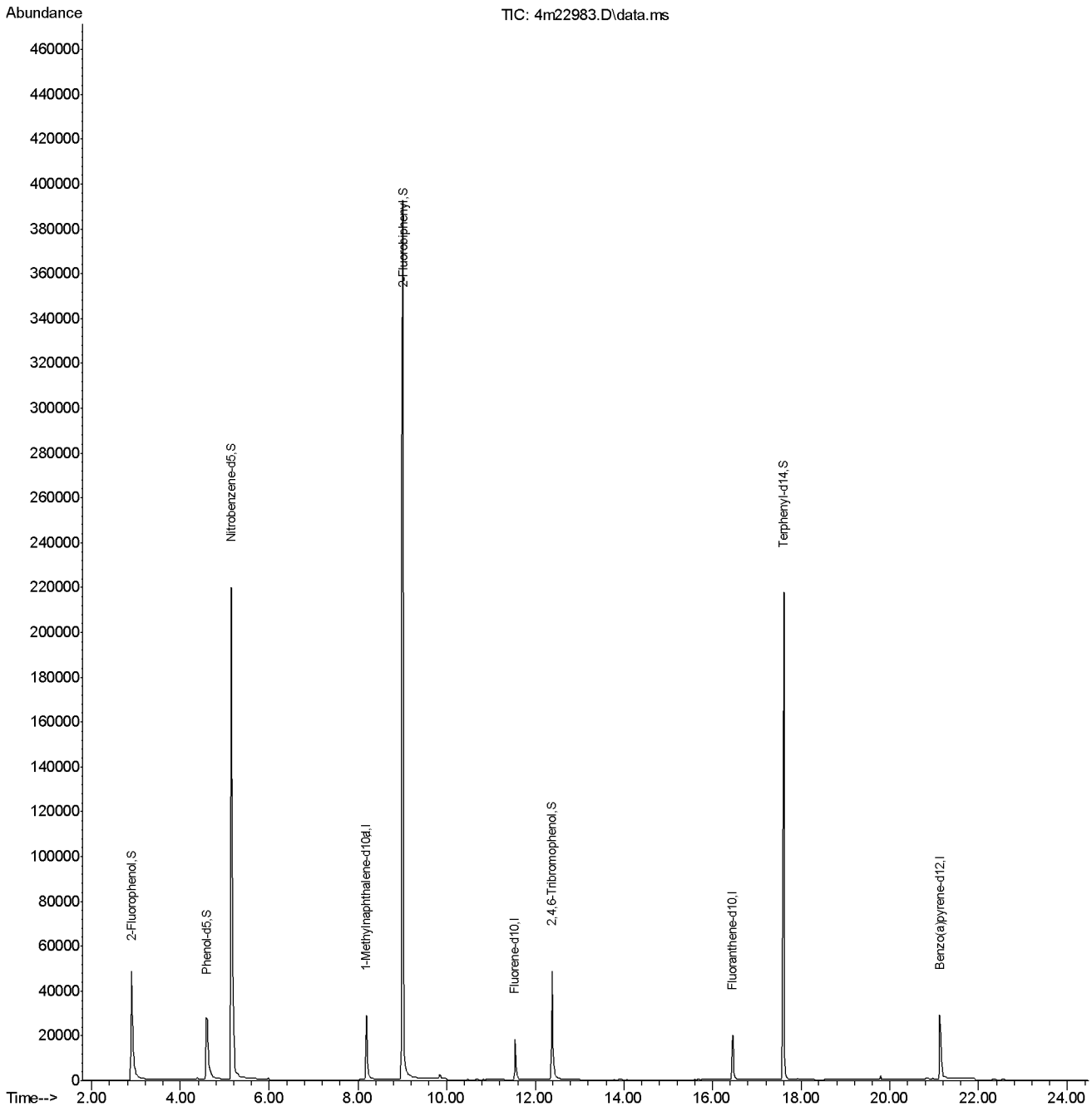
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26164	4.00	ppb	0.00
11) Fluorene-d10	11.537	174	22111	4.00	ppb	-0.02
22) Fluoranthene-d10	16.455	212	39645	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.124	264	40854	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	26164	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	2.900	112	96688	28.37	ppb	0.06
Spiked Amount 50.000			Recovery = 56.74%			
3) Phenol-d5	4.594	99	76460	19.32	ppb	0.09
Spiked Amount 50.000			Recovery = 38.64%			
6) Nitrobenzene-d5	5.142	82	244652	53.04	ppb	0.00
Spiked Amount 50.000			Recovery = 106.08%			
10) 2-Fluorobiphenyl	9.011	172	495404	48.89	ppb	0.00
Spiked Amount 50.000			Recovery = 97.78%			
16) 2,4,6-Tribromophenol	12.373	330	50182	50.42	ppb	-0.02
Spiked Amount 50.000			Recovery = 100.84%			
25) Terphenyl-d14	17.598	244	249352	52.43	ppb	0.00
Spiked Amount 50.000			Recovery = 104.86%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22983.D
Acq On : 23 Dec 2010 6:27 pm
Operator : ninap
Sample : ja64438-2
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 28 08:35:59 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22984.D
Acq On : 23 Dec 2010 6:57 pm
Operator : ninap
Sample : ja64438-3
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 28 08:36:36 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

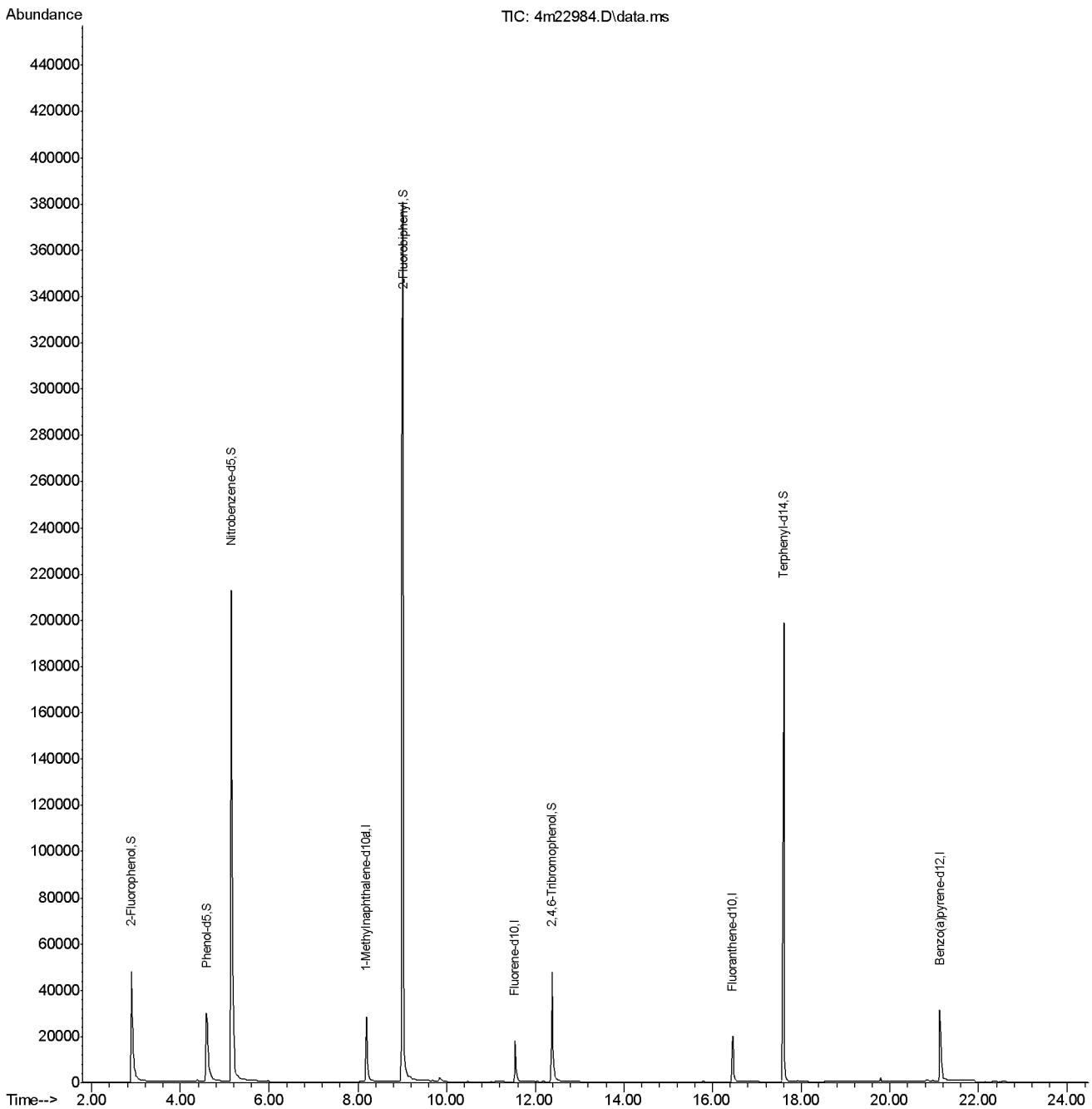
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26324	4.00	ppb	0.00
11) Fluorene-d10	11.537	174	22061	4.00	ppb	-0.02
22) Fluoranthene-d10	16.455	212	40330	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.124	264	42604	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	26324	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	2.887	112	93049	27.14	ppb	0.05
Spiked Amount 50.000			Recovery = 54.28%			
3) Phenol-d5	4.577	99	76317	19.17	ppb	0.07
Spiked Amount 50.000			Recovery = 38.34%			
6) Nitrobenzene-d5	5.142	82	240281	51.78	ppb	0.00
Spiked Amount 50.000			Recovery = 103.56%			
10) 2-Fluorobiphenyl	9.011	172	479974	47.08	ppb	0.00
Spiked Amount 50.000			Recovery = 94.16%			
16) 2,4,6-Tribromophenol	12.373	330	49534	49.88	ppb	-0.02
Spiked Amount 50.000			Recovery = 99.76%			
25) Terphenyl-d14	17.598	244	233194	48.20	ppb	0.00
Spiked Amount 50.000			Recovery = 96.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22984.D
Acq On : 23 Dec 2010 6:57 pm
Operator : ninap
Sample : ja64438-3
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 28 08:36:36 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22985.D
Acq On : 23 Dec 2010 7:28 pm
Operator : ninap
Sample : ja64438-4
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 28 08:37:07 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

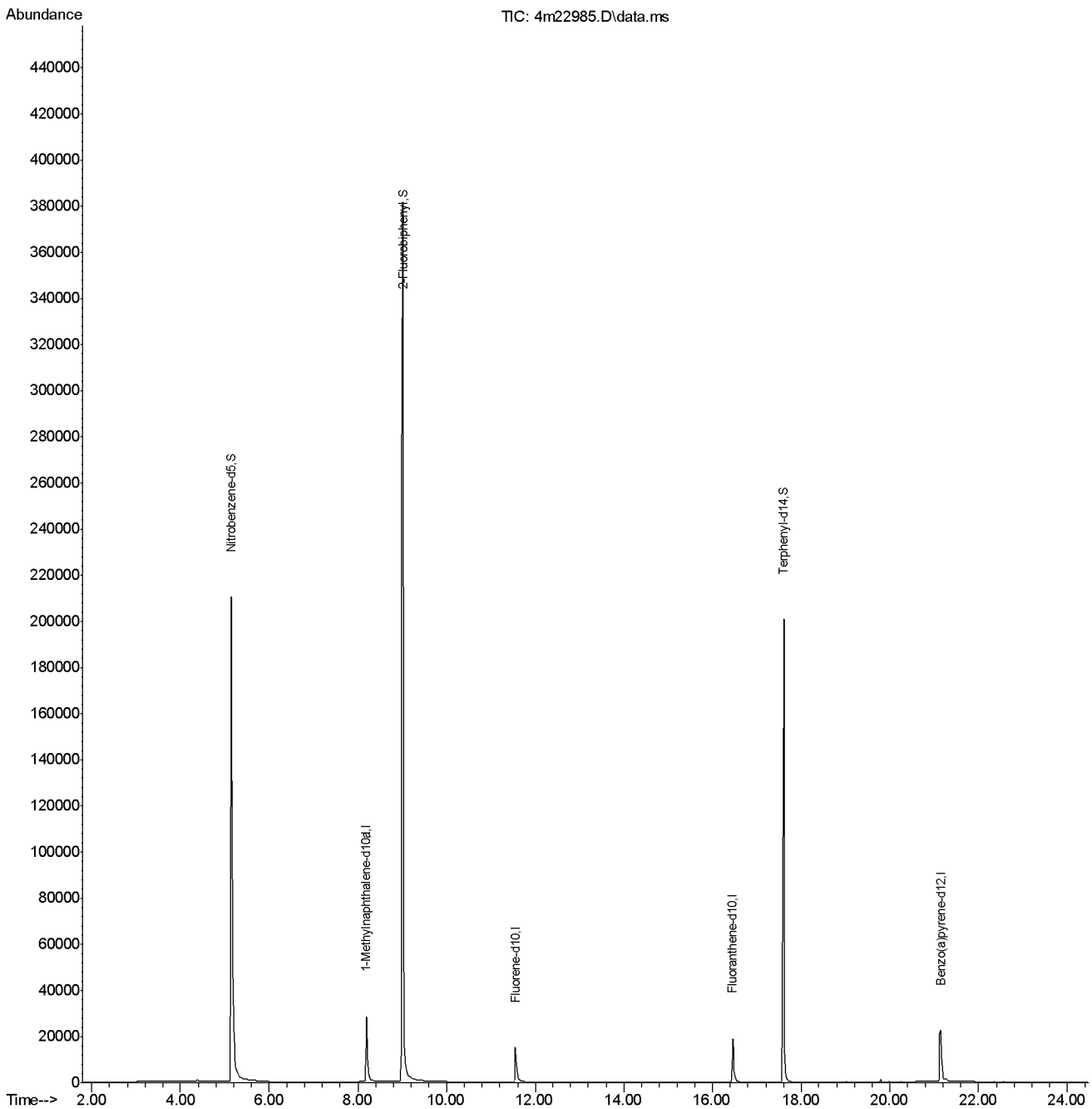
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	25790	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	22192	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38308	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.141	264	38618	4.00	ppb	0.00
36) 1-Methylnaphthalene-d10a	8.191	152	25790	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	246455	54.21	ppb	0.00
Spiked Amount 50.000			Recovery =	108.42%		
10) 2-Fluorobiphenyl	9.011	172	489102	48.97	ppb	0.00
Spiked Amount 50.000			Recovery =	97.94%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	241076	52.46	ppb	0.00
Spiked Amount 50.000			Recovery =	104.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22985.D
Acq On : 23 Dec 2010 7:28 pm
Operator : ninap
Sample : ja64438-4
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 28 08:37:07 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22986.D
Acq On : 23 Dec 2010 7:59 pm
Operator : ninap
Sample : ja64438-5
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 28 08:37:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26482	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	21816	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	39090	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.124	264	41542	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	26482	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	251361	53.84	ppb	0.00
Spiked Amount 50.000			Recovery =	107.68%		
10) 2-Fluorobiphenyl	9.011	172	505238	49.27	ppb	0.00
Spiked Amount 50.000			Recovery =	98.54%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	268186	57.19	ppb	0.00
Spiked Amount 50.000			Recovery =	114.38%		
Target Compounds						Qvalue

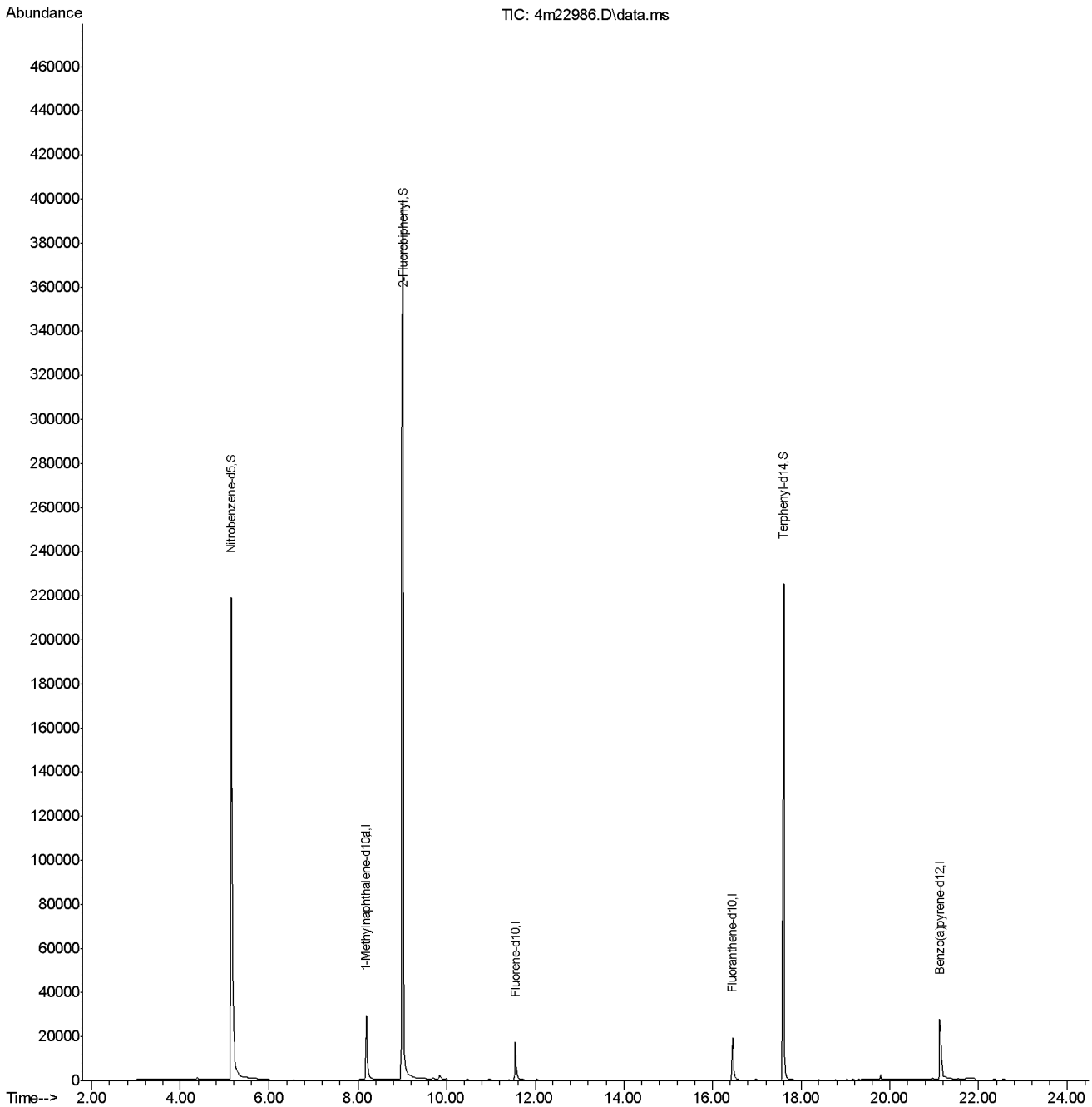
(#) = qualifier out of range (m) = manual integration (+) = signals summed

8.1.17 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22986.D
Acq On : 23 Dec 2010 7:59 pm
Operator : ninap
Sample : ja64438-5
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 28 08:37:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22987.D
Acq On : 23 Dec 2010 8:29 pm
Operator : ninap
Sample : ja64438-6
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 28 08:38:25 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

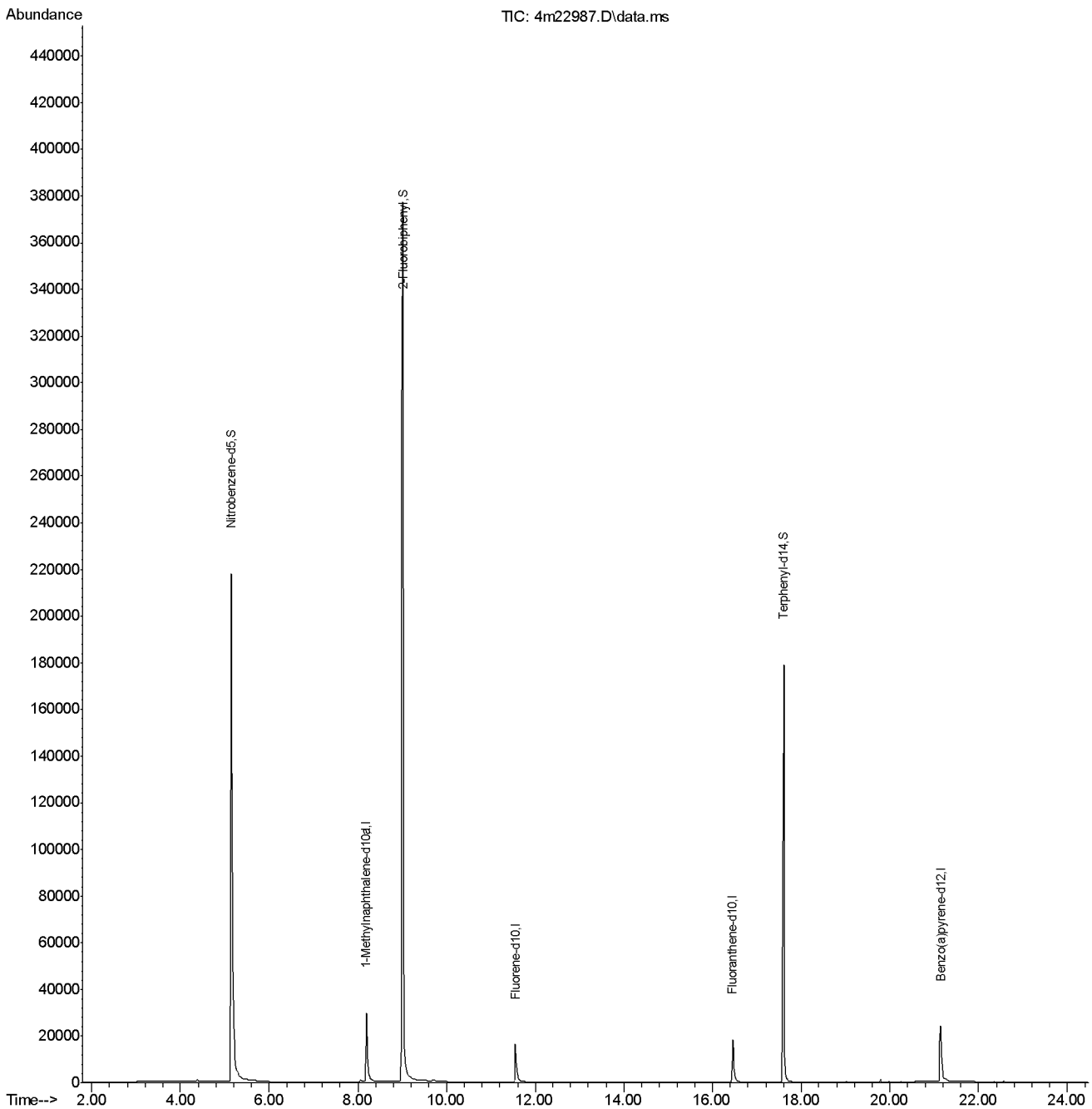
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26626	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	21473	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38491	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.141	264	38444	4.00	ppb	0.00
36) 1-Methylnaphthalene-d10a	8.191	152	26626	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	255261	54.38	ppb	0.00
Spiked Amount 50.000			Recovery =	108.76%		
10) 2-Fluorobiphenyl	9.011	172	494130	47.92	ppb	0.00
Spiked Amount 50.000			Recovery =	95.84%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	215575	46.69	ppb	0.00
Spiked Amount 50.000			Recovery =	93.38%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22987.D
Acq On : 23 Dec 2010 8:29 pm
Operator : ninap
Sample : ja64438-6
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 28 08:38:25 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22977.D
Acq On : 23 Dec 2010 3:25 pm
Operator : ninap
Sample : op47365a-mb1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 04 12:33:05 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

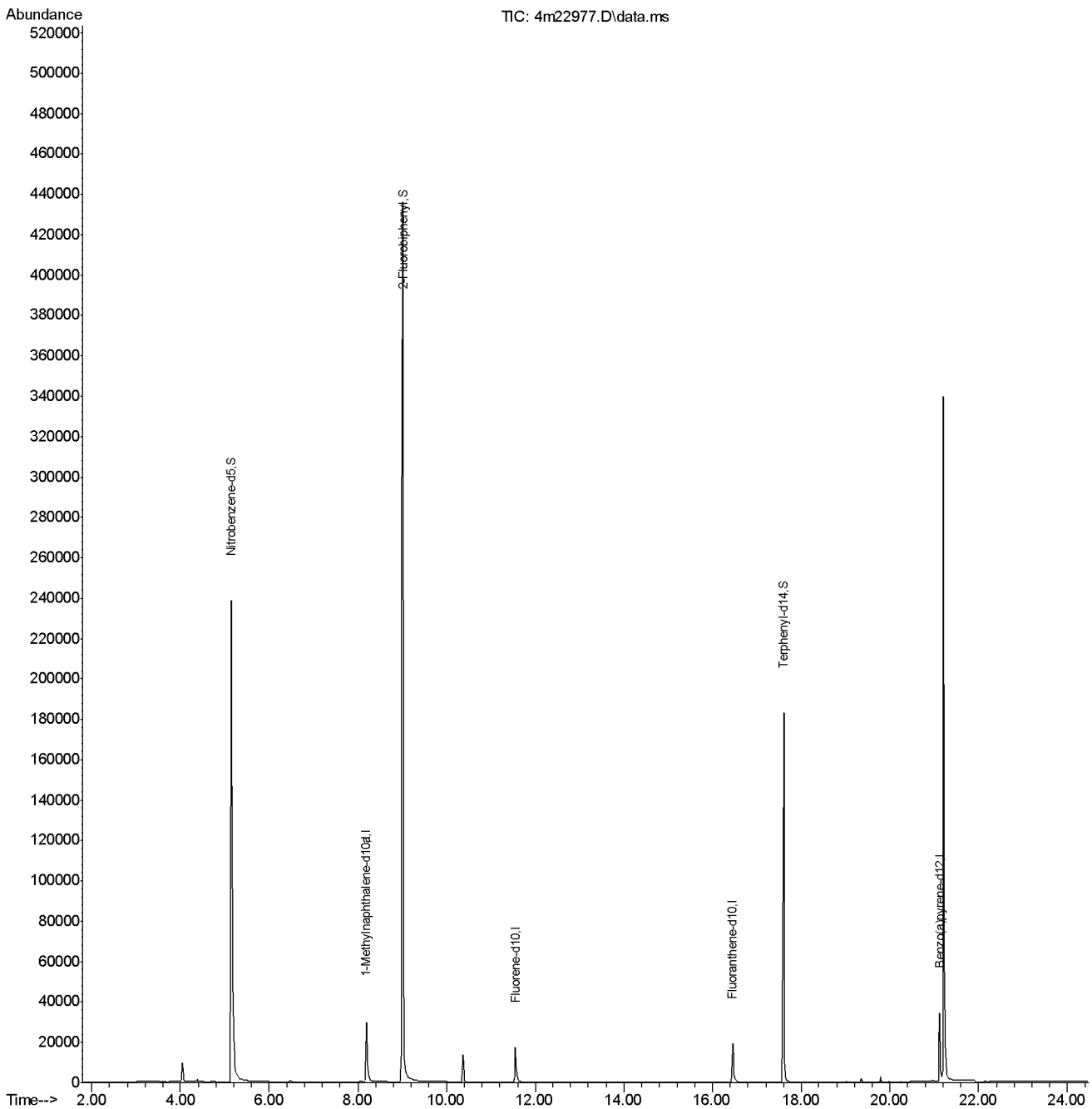
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	27494	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	23543	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38749	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.123	264	42677	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	27494	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	265597	54.80	ppb	0.00
Spiked Amount 50.000			Recovery =	109.60%		
10) 2-Fluorobiphenyl	9.011	172	527834	49.57	ppb	0.00
Spiked Amount 50.000			Recovery =	99.14%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	209672	45.11	ppb	0.00
Spiked Amount 50.000			Recovery =	90.22%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22977.D
Acq On : 23 Dec 2010 3:25 pm
Operator : ninap
Sample : op47365a-mb1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 04 12:33:05 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3195\R84606.D Vial: 4
Acq On : 22 Dec 2010 9:04 pm Operator: larisap
Sample : op47365-mb1 Inst : MSR
Misc : op47365,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 23 13:16 2010 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

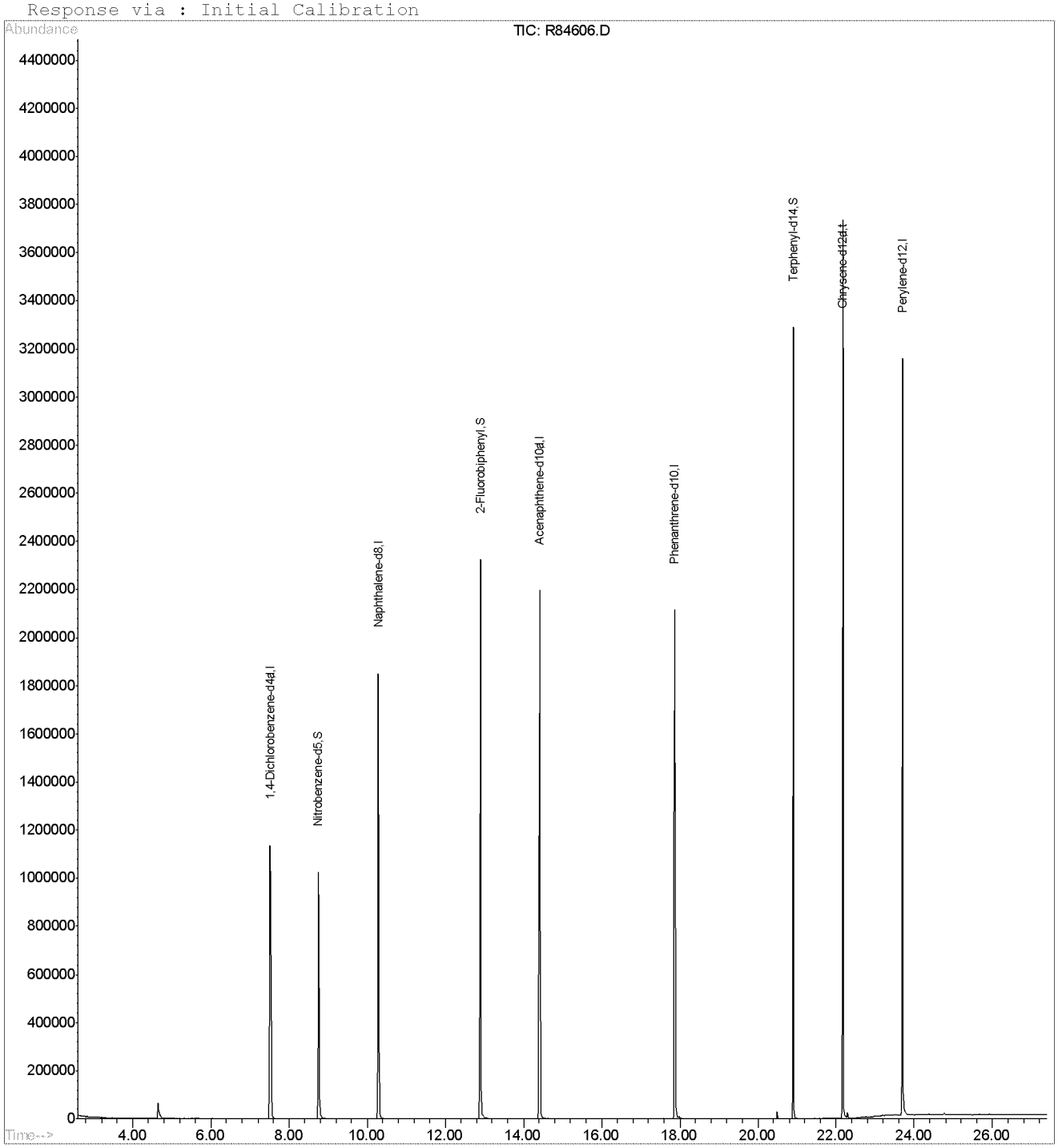
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	431531	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1515448	40.00	ppb	-0.11
47) Acenaphthene-d10	14.41	164	889251	40.00	ppb	-0.11
69) Phenanthrene-d10	17.87	188	1416817	40.00	ppb	-0.12
83) Chrysene-d12	22.17	240	1518352	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1395085	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	431531	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.41	164	889251	40.00	ppb	-0.10
107) Chrysene-d12a	22.17	240	1518352	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.75	82	598301	43.44	ppb	-0.11
Spiked Amount 50.000			Recovery =	86.88%		
51) 2-Fluorobiphenyl	12.90	172	1284682	41.04	ppb	-0.11
Spiked Amount 50.000			Recovery =	82.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1086797	37.98	ppb	-0.07
Spiked Amount 50.000			Recovery =	75.96%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84606.D MR3151.M Thu Dec 23 13:16:13 2010 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3195\R84606.D Vial: 4
Acq On : 22 Dec 2010 9:04 pm Operator: larisap
Sample : op47365-mb1 Inst : MSR
Misc : op47365,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 23 13:16 2010 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA64438

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3195\R84606.D Vial: 4
Acq On : 22 Dec 2010 9:04 pm Operator: larisap
Sample : op47365-mb1 Inst : MSR
Misc : op47365,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0.3 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

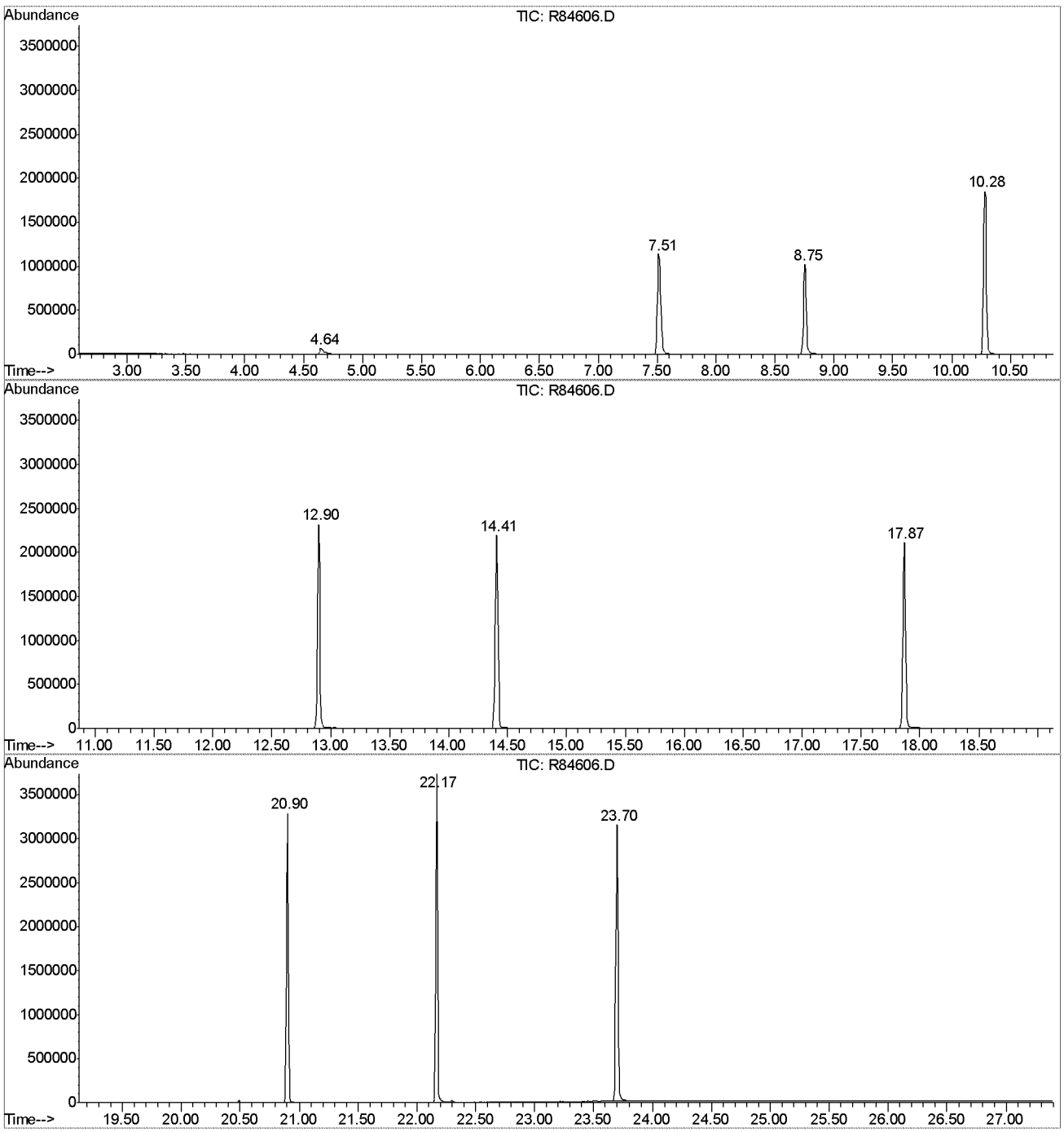
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.644	380	385	403	rBV	64712	157641	3.81%	0.531%
2	7.513	914	922	941	rBV	1137597	2331455	56.39%	7.852%
3	8.752	1147	1154	1169	rBV	1027116	1663005	40.22%	5.600%
4	10.280	1432	1440	1453	rBV	1852122	3014886	72.92%	10.153%
5	12.898	1922	1930	1940	rBV	2324821	3554764	85.98%	11.971%
6	14.410	2204	2213	2235	rBV	2196161	3599520	87.06%	12.122%
7	17.866	2851	2860	2877	rBV2	2115434	3683572	89.09%	12.405%
8	20.900	3422	3428	3441	rBV	3287966	3483805	84.26%	11.732%
9	22.166	3660	3665	3686	rBV	3734324	4134647	100.00%	13.924%
10	23.700	3945	3952	3973	rBV	3143092	4070672	98.45%	13.709%

Sum of corrected areas: 29693967

ACCUTEST LABORATORIES JA64438

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3195\R84606.D
Operator : larisap
Acquired : 22 Dec 2010 9:04 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: op47365-mb1
Misc Info : op47365,er3195,1000,,,1,1
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 22 Dec 2010 9:04 pm
Data File: C:\MSDCHEM\1\DATA\ER3195\R84606.D
Name: op47365-mb1
Misc: op47365,er3195,1000,,,1,1
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

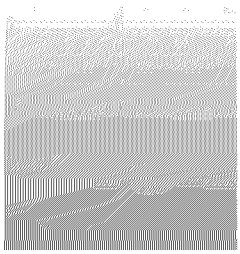
8.2.3

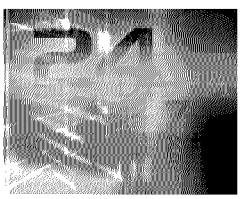
8

SII-SSA-0014-003348

New Jersey ACCUTEST LABORATORIES

02/11/11





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

Diesel Release Area, NP000603.0008.00001

Accutest Job Number: JA66701

Sampling Dates: 01/20/11 - 01/21/11

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **386**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA66701-1	01/20/11	14:30	RM	01/21/11	AQ	Ground Water	W-RM-012011-MWCD
JA66701-2	01/20/11	15:40	RM	01/21/11	AQ	Ground Water	W-RM-012011-MWCC
JA66701-3	01/20/11	15:50	RM	01/21/11	AQ	Field Blank Water	FB-012011
JA66701-4	01/21/11	10:00	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWCE
JA66701-5	01/21/11	11:15	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWBV
JA66701-6	01/21/11	12:45	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWX
JA66701-7	01/21/11	13:40	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWAY
JA66701-8	01/21/11	14:00	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWCF
JA66701-9	01/21/11	14:00	RM	01/21/11	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis **Job No** JA66701

Site: PSEG-Diesel, Salem, NJ **Report Date** 2/11/2011 10:18:54 A

On 01/21/2011, 7 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA66701 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V3B3109

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66701-2MS, JA66701-2MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V3B3111

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66594-12MS, JA66594-12MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Tert Butyl Ether are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** V3B3115

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66951-1MS, JA66951-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP47853

- All samples were extracted within the recommended method holding time.
- Sample(s) JA66701-1MS, JA66701-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorocyclopentadiene are outside control limits. Outside of in house control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP47853A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66701-1MS, JA66701-1MSD were used as the QC samples indicated.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66645.D	1	01/28/11	TLR	n/a	n/a	V3B3111
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	17.1	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	0.90	2.0	0.57	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	0.86	5.0	0.35	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	Indane	17.72	7.5	ug/l	JN
	C4 alkyl benzene	18.10	7.6	ug/l	J
	1H-indene-dihydro-methyl	18.31	6.2	ug/l	J
	C4 alkyl benzene	18.54	5.4	ug/l	J
	C4 alkyl benzene	19.10	11	ug/l	J
	1H-indene-dihydro-methyl	19.15	10	ug/l	J
	Naphthalene tetrahydro	19.37	13	ug/l	J
	1H-Indene-dihydro-dimethyl	19.64	6.5	ug/l	J
91-20-3	Naphthalene	19.94	16	ug/l	JN
	1H-Indene-dihydro-dimethyl	20.08	6.1	ug/l	J
	Naphthalene tetrahydro	20.94	6.6	ug/l	J
	Naphthalene methyl	21.25	7.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene methyl	21.52	18	ug/l	J
	Total TIC, Volatile		121.6	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		25-112%
321-60-8	2-Fluorobiphenyl	73%		31-106%
1718-51-0	Terphenyl-d14	66%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	9.73	4.3	ug/l	J
	unknown	11.63	4.5	ug/l	J
	Phenol, tert-butyl-	11.77	4.4	ug/l	J
90-12-0	Naphthalene, 1-methyl-	12.08	5.9	ug/l	JN
	unknown	13.81	5.8	ug/l	J
	unknown	15.14	4.2	ug/l	J
	unknown	16.32	4.4	ug/l	J
	unknown	17.09	5.7	ug/l	J
	unknown	19.04	7.3	ug/l	J
	Total TIC, Semi-Volatile		46.5	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23447.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.362	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	0.687	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	1.54	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		32-135%
321-60-8	2-Fluorobiphenyl	83%		31-121%
1718-51-0	Terphenyl-d14	60%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66732.D	1	01/31/11	TLR	n/a	n/a	V3B3115
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3.1	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	87%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85127.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		25-112%
321-60-8	2-Fluorobiphenyl	78%		31-106%
1718-51-0	Terphenyl-d14	78%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23448.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.844	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.131	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	0.111	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		32-135%
321-60-8	2-Fluorobiphenyl	94%		31-121%
1718-51-0	Terphenyl-d14	78%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66592.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	99%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85140.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	945 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.1	0.42	ug/l	
1912-24-9	Atrazine	ND	5.3	0.41	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.43	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.45	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.44	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.27	ug/l	
86-74-8	Carbazole	ND	1.1	0.17	ug/l	
105-60-2	Caprolactam	ND	2.1	0.21	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.33	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.23	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.31	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.42	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.26	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.22	ug/l	
78-59-1	Isophorone	ND	2.1	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.70	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.25	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	0.30	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.19	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.27	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.23	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		25-112%
321-60-8	2-Fluorobiphenyl	85%		31-106%
1718-51-0	Terphenyl-d14	81%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23449.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	945 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.012	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.012	ug/l	
120-12-7	Anthracene	ND	0.11	0.0089	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.11	0.010	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.11	0.010	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.011	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.014	ug/l	
218-01-9	Chrysene	ND	0.11	0.012	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.020	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.0086	ug/l	
86-73-7	Fluorene	ND	0.11	0.0095	ug/l	
118-74-1	Hexachlorobenzene	ND	0.021	0.011	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.017	ug/l	
91-20-3	Naphthalene	ND	0.11	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.11	0.0099	ug/l	
129-00-0	Pyrene	ND	0.11	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	94%		32-135%
321-60-8	2-Fluorobiphenyl	94%		31-121%
1718-51-0	Terphenyl-d14	81%		10-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66595.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	1.1	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	2.4	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	0.79	2.0	0.57	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.77	1.0	0.23	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	1.3	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	1.3	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85141.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	0.84	1.0	0.66	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		25-112%
321-60-8	2-Fluorobiphenyl	68%		31-106%
1718-51-0	Terphenyl-d14	51%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23450.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.330	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	0.203	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	2.13	0.10	0.012	ug/l	
85-01-8	Phenanthrene	0.110	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		32-135%
321-60-8	2-Fluorobiphenyl	75%		31-121%
1718-51-0	Terphenyl-d14	49%		10-130%

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66596.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	101%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85142.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	71%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23451.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		32-135%
321-60-8	2-Fluorobiphenyl	91%		31-121%
1718-51-0	Terphenyl-d14	75%		10-130%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66643.D	1	01/28/11	TLR	n/a	n/a	V3B3111
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	95%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-indene-dihydro-trimethyl	20.53	9	ug/l	J
	Total TIC, Volatile		9	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85143.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	76%		31-106%
1718-51-0	Terphenyl-d14	77%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	11.43	9.3	ug/l	J
	alkane	12.06	5	ug/l	J
	unknown	12.18	4.5	ug/l	J
	unknown	12.91	4.7	ug/l	J
	unknown	13.60	5.3	ug/l	J
	cycloalkane	13.80	4.7	ug/l	J
	alkane	13.95	18	ug/l	J
	unknown	14.18	6.6	ug/l	J
	unknown	15.08	5.4	ug/l	J
	unknown	15.52	4.9	ug/l	J
	alkane	16.17	15	ug/l	J
	alkane	16.82	26	ug/l	J
	alkane	17.23	5.1	ug/l	J
	alkane	17.92	18	ug/l	J
	alkane	18.77	5.9	ug/l	J
	Total TIC, Semi-Volatile		138.4	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23452.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		32-135%
321-60-8	2-Fluorobiphenyl	88%		31-121%
1718-51-0	Terphenyl-d14	75%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66604.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85144.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	1.5	2.0	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	8.7	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		25-112%
321-60-8	2-Fluorobiphenyl	67%		31-106%
1718-51-0	Terphenyl-d14	61%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23453.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		32-135%
321-60-8	2-Fluorobiphenyl	80%		31-121%
1718-51-0	Terphenyl-d14	65%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66605.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85145.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	70%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	16.80	5.4	ug/l	J
	alkane	17.92	5.3	ug/l	J
	Total TIC, Semi-Volatile		10.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23458.D	1	02/01/11	NAP	01/26/11	OP47853A	E4M1023
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	98%		32-135%
321-60-8	2-Fluorobiphenyl	91%		31-121%
1718-51-0	Terphenyl-d14	70%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA66701-9	**Date Sampled:**	01/21/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66593.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA66701-9	**Date Sampled:**	01/21/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	99%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	106%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey
ACCUTEST
LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA66701

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 Friends Ln.
City: Newtown State: PA Zip: 18940
Project Contact: Jon Shafer E-mail: jshafer@arcadis-us.com
Phone #: 2676851800 Fax #:
Sampler(s) Name(s): Robert Miller Phone #: 2012734552

Project Information

Project Name: PSEG Diesel Release Area
Street:
City: State:
Project #: NP000603.0008.00001
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs 8260B	SVOCs 8270C	LAB USE ONLY
1	W-RM-012011-MWCD		1/20/11	1430	RM	GW	5	3								X	X	EX18,
2	W-RM-012011-MWCC		1/20/11	1540	RM	GW	5	3								X	X	B11
3	FB-012011		1/20/11	1550	RM	GW	4	2								X	X	
4	W-RM-012111-MWCE		1/21/11	1000	RM	GW	5	3								X	X	
5	W-RM-012111-MWBV		1/21/11	1115	RM	GW	5	3								X	X	
6	W-RM-012111-MWX		1/21/11	1245	RM	GW	5	3								X	X	
7	W-RM-012111-MWAY		1/21/11	1340	RM	GW	5	3								X	X	
8	W-RM-012111-MWCF		1/21/11	1400	RM	GW	5	3								X	X	
9	Trip Blank		1/19/11	0900			2	2								X		

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Rec'd at Exton Service Center 1/21/11 @1610
see attached special handling note from Customer

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		1/21/11 1610	1	2	01/21/11 1815	2 W. Nunez
3	W. Miller	1/21/11 2315	3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #:	Intact / Not Intact	Preserved where applicable:	On Ice:	Cooler Temp. 2°C

4.1.4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA66701 Client: Immediate Client Services Action Required: No

Date / Time Received: 1/21/2011 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA66701: Chain of Custody
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Internal Sample Tracking Chronicle

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA66701-1	Collected: 20-JAN-11 14:30 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012011-MWCD						
JA66701-1	SW846 8270C	27-JAN-11 16:10	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-1	SW846 8260B	28-JAN-11 16:57	TLR			V8260NJPTCL11+
JA66701-1	SW846 8270C BY SIM	31-JAN-11 17:24	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-2	Collected: 20-JAN-11 15:40 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012011-MWCC						
JA66701-2	SW846 8270C	27-JAN-11 17:56	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-2	SW846 8260B	31-JAN-11 16:24	TLR			V8260NJPTCL11+
JA66701-2	SW846 8270C BY SIM	31-JAN-11 17:47	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-3	Collected: 20-JAN-11 15:50 By: RM		Received: 21-JAN-11		By:	MPC
FB-012011						
JA66701-3	SW846 8260B	27-JAN-11 01:34	TLR			V8260NJPTCL11+
JA66701-3	SW846 8270C	28-JAN-11 17:11	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-3	SW846 8270C BY SIM	31-JAN-11 18:12	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-4	Collected: 21-JAN-11 10:00 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWCE						
JA66701-4	SW846 8260B	27-JAN-11 03:10	TLR			V8260NJPTCL11+
JA66701-4	SW846 8270C	28-JAN-11 17:47	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-4	SW846 8270C BY SIM	31-JAN-11 18:36	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-5	Collected: 21-JAN-11 11:15 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWBV						
JA66701-5	SW846 8260B	27-JAN-11 03:42	TLR			V8260NJPTCL11+
JA66701-5	SW846 8270C	28-JAN-11 18:23	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-5	SW846 8270C BY SIM	31-JAN-11 18:59	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-6	Collected: 21-JAN-11 12:45 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWX						
JA66701-6	SW846 8260B	28-JAN-11 16:25	TLR			V8260NJPTCL11+
JA66701-6	SW846 8270C	28-JAN-11 18:52	LP	26-JAN-11	RSJ	B8270NJTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA66701-6	SW846 8270C BY SIM	31-JAN-11 19:24	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-7	Collected: 21-JAN-11 13:40 By: RM		Received: 21-JAN-11 By: MPC			
W-RM-012111-MWAY						
JA66701-7	SW846 8260B	27-JAN-11 07:57	TLR			V8260NJPTCL11+
JA66701-7	SW846 8270C	28-JAN-11 19:28	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-7	SW846 8270C BY SIM	31-JAN-11 19:47	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-8	Collected: 21-JAN-11 14:00 By: RM		Received: 21-JAN-11 By: MPC			
W-RM-012111-MWCF						
JA66701-8	SW846 8260B	27-JAN-11 08:28	TLR			V8260NJPTCL11+
JA66701-8	SW846 8270C	28-JAN-11 20:05	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-8	SW846 8270C BY SIM	01-FEB-11 09:28	NAP	26-JAN-11	RSJ	B8270SIMNJ
JA66701-9	Collected: 21-JAN-11 14:00 By: RM		Received: 21-JAN-11 By: MPC			
TRIP BLANK						
JA66701-9	SW846 8260B	27-JAN-11 02:06	TLR			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-1.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-1.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-1.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-1.1
JA66701-1.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-1.1
JA66701-1.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-1.1.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-1.1.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument
JA66701-1.1.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-1.1.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-1.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-1.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-1.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-1.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-1.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-1.2
JA66701-1.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-1.2
JA66701-1.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-1.2.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-1.2.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument
JA66701-1.2.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-1.2.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-1.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-1.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-1.3	Secured Storage	Tara Reddington	01/28/11 11:12	Retrieve from Storage
JA66701-1.3	Tara Reddington	GCMS3B	01/28/11 11:12	Load on Instrument
JA66701-1.3	GCMS3B	Tara Reddington	01/31/11 09:39	Unload from Instrument
JA66701-1.3	Tara Reddington	Secured Storage	01/31/11 09:39	Return to Storage
JA66701-1.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-1.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-1.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-1.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-2.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-2.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-2.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-2.2
JA66701-2.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-2.2
JA66701-2.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-2.2.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-2.2.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-2.2.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-2.2.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-2.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-2.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-2.3	Secured Storage	Tara Reddington	01/31/11 10:56	Retrieve from Storage
JA66701-2.3	Tara Reddington	GCMS3B	01/31/11 10:56	Load on Instrument
JA66701-2.3	GCMS3B	Tara Reddington	02/01/11 08:26	Unload from Instrument
JA66701-2.3	Tara Reddington	Secured Storage	02/01/11 08:26	Return to Storage
JA66701-2.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-2.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-2.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-2.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-3.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-3.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-3.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-3.2
JA66701-3.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-3.2
JA66701-3.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-3.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-3.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-3.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-3.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-3.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-3.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-3.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-3.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-4.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-4.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-4.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-4.2
JA66701-4.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-4.2
JA66701-4.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-4.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-4.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-4.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-4.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-4.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-4.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-4.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-4.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-5.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-5.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-5.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-5.1
JA66701-5.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-5.1
JA66701-5.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-5.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-5.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-5.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-5.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-5.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-5.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-5.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-5.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-6.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-6.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-6.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-6.1
JA66701-6.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-6.1
JA66701-6.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-6.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-6.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-6.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-6.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-6.3	Secured Storage	Tara Reddington	01/28/11 11:12	Retrieve from Storage
JA66701-6.3	Tara Reddington	GCMS3B	01/28/11 11:12	Load on Instrument
JA66701-6.3	GCMS3B	Tara Reddington	01/31/11 09:39	Unload from Instrument
JA66701-6.3	Tara Reddington	Secured Storage	01/31/11 09:39	Return to Storage
JA66701-6.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-6.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-6.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-6.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-7.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-7.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-7.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-7.1

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-7.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-7.1
JA66701-7.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-7.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-7.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-7.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-7.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-7.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-7.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-7.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-7.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-8.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-8.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-8.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-8.2
JA66701-8.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-8.2
JA66701-8.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-8.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-8.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-8.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-8.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-8.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-8.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-8.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-8.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-9.2	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-9.2	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-9.2	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-9.2	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-MB	3B66586.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-MB	3B66586.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	105%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-MB	3B66632.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-MB	3B66632.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	105%	76-117%
460-00-4	4-Bromofluorobenzene	104%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-MB	3B66721.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-MB	3B66721.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-BS	3B66587.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	42.8	86	51-151
71-43-2	Benzene	50	50.7	101	75-122
74-97-5	Bromochloromethane	50	55.4	111	78-124
75-27-4	Bromodichloromethane	50	52.3	105	77-128
75-25-2	Bromoform	50	51.4	103	67-141
74-83-9	Bromomethane	50	56.7	113	53-152
78-93-3	2-Butanone (MEK)	50	41.7	83	64-130
75-15-0	Carbon disulfide	50	54.2	108	59-140
56-23-5	Carbon tetrachloride	50	54.0	108	75-148
108-90-7	Chlorobenzene	50	52.6	105	76-124
75-00-3	Chloroethane	50	58.3	117	54-147
67-66-3	Chloroform	50	51.4	103	77-124
74-87-3	Chloromethane	50	50.4	101	46-144
110-82-7	Cyclohexane	50	54.2	108	62-127
124-48-1	Dibromochloromethane	50	50.1	100	76-132
95-50-1	1,2-Dichlorobenzene	50	52.1	104	74-125
541-73-1	1,3-Dichlorobenzene	50	52.2	104	73-124
106-46-7	1,4-Dichlorobenzene	50	52.3	105	71-123
75-71-8	Dichlorodifluoromethane	50	53.4	107	42-152
75-34-3	1,1-Dichloroethane	50	50.2	100	72-124
107-06-2	1,2-Dichloroethane	50	48.9	98	66-150
75-35-4	1,1-Dichloroethene	50	54.5	109	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.8	116	71-119
156-60-5	trans-1,2-Dichloroethene	50	45.9	92	71-123
78-87-5	1,2-Dichloropropane	50	50.8	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	50.3	101	77-124
10061-02-6	trans-1,3-Dichloropropene	50	48.8	98	75-132
100-41-4	Ethylbenzene	50	50.7	101	77-124
76-13-1	Freon 113	50	58.3	117	58-149
591-78-6	2-Hexanone	50	42.5	85	58-136
98-82-8	Isopropylbenzene	50	52.2	104	60-136
79-20-9	Methyl Acetate	50	49.8	100	57-139
108-87-2	Methylcyclohexane	50	55.3	111	73-130
1634-04-4	Methyl Tert Butyl Ether	100	93.0	93	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	49.9	100	63-135
75-09-2	Methylene chloride	50	52.3	105	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-BS	3B66587.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.6	101	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	48.4	97	66-125
127-18-4	Tetrachloroethene	50	57.1	114	70-136
108-88-3	Toluene	50	51.3	103	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.7	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.9	112	67-132
71-55-6	1,1,1-Trichloroethane	50	54.7	109	77-136
79-00-5	1,1,2-Trichloroethane	50	51.5	103	75-123
79-01-6	Trichloroethene	50	55.1	110	79-126
75-69-4	Trichlorofluoromethane	50	57.5	115	56-154
75-01-4	Vinyl chloride	50	54.5	109	56-146
	m,p-Xylene	100	104	104	77-125
95-47-6	o-Xylene	50	53.4	107	76-126
1330-20-7	Xylene (total)	150	157	105	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-BS	3B66633.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63	51-151
71-43-2	Benzene	50	49.8	100	75-122
74-97-5	Bromochloromethane	50	55.8	112	78-124
75-27-4	Bromodichloromethane	50	52.2	104	77-128
75-25-2	Bromoform	50	53.1	106	67-141
74-83-9	Bromomethane	50	49.8	100	53-152
78-93-3	2-Butanone (MEK)	50	39.7	79	64-130
75-15-0	Carbon disulfide	50	53.7	107	59-140
56-23-5	Carbon tetrachloride	50	52.0	104	75-148
108-90-7	Chlorobenzene	50	52.2	104	76-124
75-00-3	Chloroethane	50	50.9	102	54-147
67-66-3	Chloroform	50	50.7	101	77-124
74-87-3	Chloromethane	50	44.0	88	46-144
110-82-7	Cyclohexane	50	52.3	105	62-127
124-48-1	Dibromochloromethane	50	50.8	102	76-132
95-50-1	1,2-Dichlorobenzene	50	52.3	105	74-125
541-73-1	1,3-Dichlorobenzene	50	52.2	104	73-124
106-46-7	1,4-Dichlorobenzene	50	52.3	105	71-123
75-71-8	Dichlorodifluoromethane	50	46.1	92	42-152
75-34-3	1,1-Dichloroethane	50	49.8	100	72-124
107-06-2	1,2-Dichloroethane	50	49.5	99	66-150
75-35-4	1,1-Dichloroethene	50	52.5	105	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.3	115	71-119
156-60-5	trans-1,2-Dichloroethene	50	45.3	91	71-123
78-87-5	1,2-Dichloropropane	50	50.9	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	50.8	102	75-132
100-41-4	Ethylbenzene	50	49.6	99	77-124
76-13-1	Freon 113	50	56.2	112	58-149
591-78-6	2-Hexanone	50	42.1	84	58-136
98-82-8	Isopropylbenzene	50	50.6	101	60-136
79-20-9	Methyl Acetate	50	51.6	103	57-139
108-87-2	Methylcyclohexane	50	54.4	109	73-130
1634-04-4	Methyl Tert Butyl Ether	100	97.9	98	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.9	104	63-135
75-09-2	Methylene chloride	50	52.2	104	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-BS	3B66633.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.1	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.3	99	66-125
127-18-4	Tetrachloroethene	50	51.9	104	70-136
108-88-3	Toluene	50	50.7	101	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.7	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.7	111	67-132
71-55-6	1,1,1-Trichloroethane	50	52.7	105	77-136
79-00-5	1,1,2-Trichloroethane	50	51.9	104	75-123
79-01-6	Trichloroethene	50	53.6	107	79-126
75-69-4	Trichlorofluoromethane	50	51.6	103	56-154
75-01-4	Vinyl chloride	50	46.7	93	56-146
	m,p-Xylene	100	102	102	77-125
95-47-6	o-Xylene	50	52.6	105	76-126
1330-20-7	Xylene (total)	150	155	103	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	103%	72-122%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-BS	3B66722.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	25.9	52	51-151
71-43-2	Benzene	50	48.2	96	75-122
74-97-5	Bromochloromethane	50	53.7	107	78-124
75-27-4	Bromodichloromethane	50	49.4	99	77-128
75-25-2	Bromoform	50	52.5	105	67-141
74-83-9	Bromomethane	50	49.6	99	53-152
78-93-3	2-Butanone (MEK)	50	36.7	73	64-130
75-15-0	Carbon disulfide	50	50.3	101	59-140
56-23-5	Carbon tetrachloride	50	50.1	100	75-148
108-90-7	Chlorobenzene	50	51.6	103	76-124
75-00-3	Chloroethane	50	48.9	98	54-147
67-66-3	Chloroform	50	47.4	95	77-124
74-87-3	Chloromethane	50	40.9	82	46-144
110-82-7	Cyclohexane	50	49.8	100	62-127
124-48-1	Dibromochloromethane	50	49.2	98	76-132
95-50-1	1,2-Dichlorobenzene	50	51.7	103	74-125
541-73-1	1,3-Dichlorobenzene	50	51.5	103	73-124
106-46-7	1,4-Dichlorobenzene	50	51.7	103	71-123
75-71-8	Dichlorodifluoromethane	50	40.8	82	42-152
75-34-3	1,1-Dichloroethane	50	46.2	92	72-124
107-06-2	1,2-Dichloroethane	50	45.3	91	66-150
75-35-4	1,1-Dichloroethene	50	50.5	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	54.8	110	71-119
156-60-5	trans-1,2-Dichloroethene	50	43.1	86	71-123
78-87-5	1,2-Dichloropropane	50	48.1	96	75-120
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	77-124
10061-02-6	trans-1,3-Dichloropropene	50	48.1	96	75-132
100-41-4	Ethylbenzene	50	48.6	97	77-124
76-13-1	Freon 113	50	57.3	115	58-149
591-78-6	2-Hexanone	50	39.3	79	58-136
98-82-8	Isopropylbenzene	50	49.8	100	60-136
79-20-9	Methyl Acetate	50	49.2	98	57-139
108-87-2	Methylcyclohexane	50	53.4	107	73-130
1634-04-4	Methyl Tert Butyl Ether	100	91.4	91	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	48.9	98	63-135
75-09-2	Methylene chloride	50	49.8	100	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-BS	3B66722.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	49.6	99	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	47.8	96	66-125
127-18-4	Tetrachloroethene	50	52.1	104	70-136
108-88-3	Toluene	50	49.1	98	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.6	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	56.1	112	67-132
71-55-6	1,1,1-Trichloroethane	50	49.5	99	77-136
79-00-5	1,1,2-Trichloroethane	50	49.5	99	75-123
79-01-6	Trichloroethene	50	51.5	103	79-126
75-69-4	Trichlorofluoromethane	50	48.2	96	56-154
75-01-4	Vinyl chloride	50	45.2	90	56-146
	m,p-Xylene	100	101	101	77-125
95-47-6	o-Xylene	50	51.9	104	76-126
1330-20-7	Xylene (total)	150	153	102	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	101%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66701-2MS	3B66588.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2MSD	3B66589.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2 [a]	3B66594.D	1	01/27/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	JA66701-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	3.9	J	50	44.2	81	47.0	86	6	44-157/20
71-43-2	Benzene	ND		50	39.8	80	39.9	80	0	38-139/13
74-97-5	Bromochloromethane	ND		50	50.0	100	50.3	101	1	70-129/11
75-27-4	Bromodichloromethane	ND		50	47.6	95	46.9	94	1	70-135/13
75-25-2	Bromoform	ND		50	53.2	106	52.8	106	1	53-139/13
74-83-9	Bromomethane	ND		50	41.8	84	42.8	86	2	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	37.6	75	37.1	74	1	58-140/14
75-15-0	Carbon disulfide	ND		50	27.9	56	28.0	56	0	34-136/21
56-23-5	Carbon tetrachloride	ND		50	32.1	64	31.7	63	1	50-161/18
108-90-7	Chlorobenzene	ND		50	45.7	91	46.2	92	1	65-128/12
75-00-3	Chloroethane	ND		50	38.4	77	39.0	78	2	41-151/18
67-66-3	Chloroform	ND		50	42.0	84	42.2	84	0	66-132/14
74-87-3	Chloromethane	ND		50	34.2	68	34.7	69	1	35-149/22
110-82-7	Cyclohexane	ND		50	26.8	54	25.7	51	4	29-158/18
124-48-1	Dibromochloromethane	ND		50	50.1	100	50.2	100	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.7	99	50.2	100	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.2	94	47.2	94	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	48.4	97	48.5	97	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	24.8	50	23.7	47	5	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	38.2	76	38.4	77	1	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	45.6	91	44.4	89	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	28.1	56	28.1	56	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	42.5	85	43.0	86	1	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	35.9	72	35.9	72	0	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.6	89	44.2	88	1	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.1	94	46.7	93	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.5	93	46.2	92	1	68-134/13
100-41-4	Ethylbenzene	ND		50	40.1	80	40.7	81	1	37-143/13
76-13-1	Freon 113	ND		50	29.3	59	28.7	57	2	33-159/19
591-78-6	2-Hexanone	ND		50	44.8	90	44.2	88	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	38.5	77	39.0	78	1	48-141/15
79-20-9	Methyl Acetate	ND		50	48.0	96	48.1	96	0	46-147/18
108-87-2	Methylcyclohexane	ND		50	29.1	58	28.2	56	3	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	45.7	91	45.6	91	0	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	53.8	108	53.4	107	1	57-141/14
75-09-2	Methylene chloride	ND		50	44.7	89	44.9	90	0	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66701-2MS	3B66588.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2MSD	3B66589.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2 [a]	3B66594.D	1	01/27/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	JA66701-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.8	90	45.0	90	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.9	104	51.7	103	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	36.2	72	36.5	73	1	48-145/15
108-88-3	Toluene	ND		50	40.8	82	40.8	82	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	52.7	105	54.0	108	2	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.6	105	53.5	107	2	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	35.7	71	35.5	71	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	49.6	99	49.0	98	1	70-127/12
79-01-6	Trichloroethene	ND		50	39.1	78	39.5	79	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	29.5	59	28.7	57	3	35-169/23
75-01-4	Vinyl chloride	ND		50	30.9	62	30.6	61	1	34-151/20
	m,p-Xylene	ND		100	82.5	83	83.5	84	1	32-146/13
95-47-6	o-Xylene	ND		50	44.4	89	45.1	90	2	46-141/12
1330-20-7	Xylene (total)	ND		150	127	85	129	86	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-2	Limits
1868-53-7	Dibromofluoromethane	106%	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%	95%		64-135%
2037-26-5	Toluene-D8	103%	102%		76-117%
460-00-4	4-Bromofluorobenzene	105%	105%		72-122%

(a) Sample used for QC purposes only.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66594-12MS	3B66640.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12MSD	3B66641.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66635.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66637.D	10	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	JA66594-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	27.3	55	27.1	54	1	44-157/20
71-43-2	Benzene	ND		50	43.1	86	43.1	86	0	38-139/13
74-97-5	Bromochloromethane	ND		50	49.9	100	50.0	100	0	70-129/11
75-27-4	Bromodichloromethane	ND		50	47.0	94	47.0	94	0	70-135/13
75-25-2	Bromoform	ND		50	52.2	104	52.7	105	1	53-139/13
74-83-9	Bromomethane	ND		50	48.0	96	47.4	95	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	35.9	72	36.2	72	1	58-140/14
75-15-0	Carbon disulfide	ND		50	36.6	73	36.0	72	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	44.5	89	44.6	89	0	50-161/18
108-90-7	Chlorobenzene	ND		50	48.2	96	48.2	96	0	65-128/12
75-00-3	Chloroethane	ND		50	47.1	94	45.9	92	3	41-151/18
67-66-3	Chloroform	ND		50	43.9	88	43.5	87	1	66-132/14
74-87-3	Chloromethane	ND		50	39.2	78	39.3	79	0	35-149/22
110-82-7	Cyclohexane	ND		50	41.7	83	41.3	83	1	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.3	99	49.9	100	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	50.9	102	51.1	102	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	49.3	99	49.5	99	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.5	101	50.3	101	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	41.2	82	40.3	81	2	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	41.2	82	40.6	81	1	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	43.9	88	44.0	88	0	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	40.3	81	39.0	78	3	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	44.5	89	44.3	89	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	39.7	79	39.4	79	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.5	89	44.3	89	0	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.2	94	47.3	95	0	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.1	92	46.4	93	1	68-134/13
100-41-4	Ethylbenzene	ND		50	46.0	92	45.7	91	1	37-143/13
76-13-1	Freon 113	ND		50	47.7	95	47.3	95	1	33-159/19
591-78-6	2-Hexanone	ND		50	43.8	88	43.8	88	0	53-145/17
98-82-8	Isopropylbenzene	ND		50	46.6	93	46.4	93	0	48-141/15
79-20-9	Methyl Acetate	ND		50	49.8	100	49.5	99	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	46.3	93	46.4	93	0	36-156/18
1634-04-4	Methyl Tert Butyl Ether	364	b	50	332	-64*	a 328	-72*	a 1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	52.4	105	52.9	106	1	57-141/14
75-09-2	Methylene chloride	ND		50	45.3	91	44.6	89	2	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66594-12MS	3B66640.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12MSD	3B66641.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66635.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66637.D	10	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	JA66594-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	48.1	96	48.2	96	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.1	102	51.4	103	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	47.4	95	47.6	95	0	48-145/15
108-88-3	Toluene	ND		50	45.0	90	45.0	90	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	53.5	107	55.4	111	3	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	54.3	109	56.0	112	3	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	44.7	89	43.8	88	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.2	96	48.7	97	1	70-127/12
79-01-6	Trichloroethene	ND		50	46.3	93	46.7	93	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	47.3	95	46.4	93	2	35-169/23
75-01-4	Vinyl chloride	ND		50	44.1	88	43.8	88	1	34-151/20
	m,p-Xylene	0.29		100	94.3	94	93.4	93	1	32-146/13
95-47-6	o-Xylene	ND		50	48.2	96	47.9	96	1	46-141/12
1330-20-7	Xylene (total)	0.29		150	143	95	141	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66594-12	JA66594-12	Limits
1868-53-7	Dibromofluoromethane	105%	104%	102%	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	94%	93%	99%	97%	64-135%
2037-26-5	Toluene-D8	102%	103%	105%	104%	76-117%
460-00-4	4-Bromofluorobenzene	104%	104%	104%	103%	72-122%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66951-1MS	3B66729.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1MSD	3B66730.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1	3B66724.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	JA66951-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	24.5	49	26.9	54	9	44-157/20
71-43-2	Benzene	ND		50	44.4	89	44.2	88	0	38-139/13
74-97-5	Bromochloromethane	ND		50	51.5	103	52.9	106	3	70-129/11
75-27-4	Bromodichloromethane	ND		50	46.4	93	47.1	94	1	70-135/13
75-25-2	Bromoform	ND		50	53.0	106	54.1	108	2	53-139/13
74-83-9	Bromomethane	ND		50	48.5	97	48.5	97	0	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	34.7	69	36.0	72	4	58-140/14
75-15-0	Carbon disulfide	ND		50	42.9	86	42.2	84	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	44.6	89	43.6	87	2	50-161/18
108-90-7	Chlorobenzene	ND		50	48.9	98	49.3	99	1	65-128/12
75-00-3	Chloroethane	ND		50	45.1	90	44.5	89	1	41-151/18
67-66-3	Chloroform	ND		50	42.5	85	42.7	85	0	66-132/14
74-87-3	Chloromethane	ND		50	37.7	75	36.8	74	2	35-149/22
110-82-7	Cyclohexane	ND		50	43.9	88	42.7	85	3	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.9	100	51.2	102	3	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.6	99	50.3	101	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	48.2	96	48.7	97	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	49.3	99	50.1	100	2	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	37.4	75	36.1	72	4	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	40.8	82	40.7	81	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	42.6	85	43.1	86	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	45.2	90	44.3	89	2	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.5	91	45.7	91	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	44.1	88	43.7	87	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.9	90	45.6	91	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.1	94	47.7	95	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.7	91	46.2	92	1	68-134/13
100-41-4	Ethylbenzene	ND		50	45.1	90	44.7	89	1	37-143/13
76-13-1	Freon 113	ND		50	49.1	98	47.9	96	2	33-159/19
591-78-6	2-Hexanone	ND		50	41.5	83	42.1	84	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	44.7	89	44.4	89	1	48-141/15
79-20-9	Methyl Acetate	ND		50	47.8	96	48.2	96	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	44.5	89	42.6	85	4	36-156/18
1634-04-4	Methyl Tert Butyl Ether	13.4		50	56.2	86	56.9	87	1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.9	102	51.8	104	2	57-141/14
75-09-2	Methylene chloride	ND		50	47.2	94	47.7	95	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66951-1MS	3B66729.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1MSD	3B66730.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1	3B66724.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	JA66951-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	48.0	96	48.4	97	1	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.4	97	49.1	98	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	48.9	98	48.2	96	1	48-145/15
108-88-3	Toluene	ND		50	45.2	90	45.4	91	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	50.8	102	52.3	105	3	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.9	104	53.3	107	3	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	43.6	87	42.9	86	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.5	97	49.3	99	2	70-127/12
79-01-6	Trichloroethene	ND		50	47.3	95	47.0	94	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	44.3	89	43.2	86	3	35-169/23
75-01-4	Vinyl chloride	ND		50	41.8	84	40.7	81	3	34-151/20
	m,p-Xylene	ND		100	93.7	94	93.1	93	1	32-146/13
95-47-6	o-Xylene	ND		50	48.0	96	48.1	96	0	46-141/12
1330-20-7	Xylene (total)	ND		150	142	95	141	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66951-1	Limits
1868-53-7	Dibromofluoromethane	101%	101%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	86%	85%	91%	64-135%
2037-26-5	Toluene-D8	101%	102%	104%	76-117%
460-00-4	4-Bromofluorobenzene	101%	101%	102%	72-122%

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3095-BFB	**Injection Date:**	01/18/11
Lab File ID:	3B66291.D	**Injection Time:**	12:00
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18276	20.7		Pass
75	30.0 - 60.0% of mass 95	42594	48.4		Pass
95	Base peak, 100% relative abundance	88082	100.0		Pass
96	5.0 - 9.0% of mass 95	6101	6.93		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	77690	88.2		Pass
175	5.0 - 9.0% of mass 174	6080	6.90	(7.83) [a]	Pass
176	95.0 - 101.0% of mass 174	76661	87.0	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5035	5.72	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3095-IC3095	3B66292.D	01/18/11	12:48	00:48	Initial cal 0.5
V3B3095-IC3095	3B66293.D	01/18/11	13:20	01:20	Initial cal 1
V3B3095-IC3095	3B66294.D	01/18/11	13:52	01:52	Initial cal 2
V3B3095-IC3095	3B66296.D	01/18/11	14:55	02:55	Initial cal 10
V3B3095-IC3095	3B66297.D	01/18/11	15:27	03:27	Initial cal 20
V3B3095-ICC3095	3B66298.D	01/18/11	15:58	03:58	Initial cal 50
V3B3095-IC3095	3B66300.D	01/18/11	17:03	05:03	Initial cal 100
V3B3095-IC3095	3B66301.D	01/18/11	17:35	05:35	Initial cal 200
V3B3095-IC3095	3B66304.D	01/18/11	19:11	07:11	Initial cal 5
V3B3095-ICV3095	3B66304A.D	01/18/11	19:42	07:42	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3109-BFB	**Injection Date:**	01/26/11
Lab File ID:	3B66583.D	**Injection Time:**	20:49
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	22898	18.5		Pass
75	30.0 - 60.0% of mass 95	58208	47.1		Pass
95	Base peak, 100% relative abundance	123581	100.0		Pass
96	5.0 - 9.0% of mass 95	8287	6.71		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	111512	90.2		Pass
175	5.0 - 9.0% of mass 174	8304	6.72	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	109378	88.5	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	7227	5.85	(6.61) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3109-CC3095	3B66584.D	01/26/11	21:20	00:31	Continuing cal 50
V3B3109-MB	3B66586.D	01/26/11	22:24	01:35	Method Blank
V3B3109-BS	3B66587.D	01/26/11	22:55	02:06	Blank Spike
JA66701-2MS	3B66588.D	01/26/11	23:27	02:38	Matrix Spike
JA66701-2MSD	3B66589.D	01/26/11	23:59	03:10	Matrix Spike Duplicate
ZZZZZZ	3B66591.D	01/27/11	01:02	04:13	(unrelated sample)
JA66701-3	3B66592.D	01/27/11	01:34	04:45	FB-012011
JA66701-9	3B66593.D	01/27/11	02:06	05:17	TRIP BLANK
JA66701-2	3B66594.D	01/27/11	02:38	05:49	W-RM-012011-MWCC
JA66701-4	3B66595.D	01/27/11	03:10	06:21	W-RM-012111-MWCE
JA66701-5	3B66596.D	01/27/11	03:42	06:53	W-RM-012111-MWBV
ZZZZZZ	3B66597.D	01/27/11	04:14	07:25	(unrelated sample)
ZZZZZZ	3B66598.D	01/27/11	04:46	07:57	(unrelated sample)
ZZZZZZ	3B66599.D	01/27/11	05:18	08:29	(unrelated sample)
ZZZZZZ	3B66600.D	01/27/11	05:49	09:00	(unrelated sample)
ZZZZZZ	3B66601.D	01/27/11	06:21	09:32	(unrelated sample)
ZZZZZZ	3B66602.D	01/27/11	06:53	10:04	(unrelated sample)
JA66701-7	3B66604.D	01/27/11	07:57	11:08	W-RM-012111-MWAY
JA66701-8	3B66605.D	01/27/11	08:28	11:39	W-RM-012111-MWCF

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3111-BFB	**Injection Date:**	01/28/11
Lab File ID:	3B66629.D	**Injection Time:**	08:08
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	21029	20.8		Pass
75	30.0 - 60.0% of mass 95	49200	48.7		Pass
95	Base peak, 100% relative abundance	100968	100.0		Pass
96	5.0 - 9.0% of mass 95	6836	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	90992	90.1		Pass
175	5.0 - 9.0% of mass 174	6978	6.91	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	88285	87.4	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	6109	6.05	(6.92) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3111-CC3095	3B66631.D	01/28/11	09:28	01:20	Continuing cal 20
V3B3111-MB	3B66632.D	01/28/11	10:17	02:09	Method Blank
V3B3111-BS	3B66633.D	01/28/11	10:55	02:47	Blank Spike
JA66594-12	3B66635.D	01/28/11	12:10	04:02	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66636.D	01/28/11	12:42	04:34	(unrelated sample)
JA66594-12	3B66637.D	01/28/11	13:14	05:06	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66638.D	01/28/11	13:46	05:38	(unrelated sample)
JA66594-12MS	3B66640.D	01/28/11	14:51	06:43	Matrix Spike
JA66594-12MSD	3B66641.D	01/28/11	15:22	07:14	Matrix Spike Duplicate
JA66701-6	3B66643.D	01/28/11	16:25	08:17	W-RM-012111-MWX
JA66701-1	3B66645.D	01/28/11	16:57	08:49	W-RM-012011-MWCD
ZZZZZZ	3B66646.D	01/28/11	17:29	09:21	(unrelated sample)
ZZZZZZ	3B66647.D	01/28/11	18:01	09:53	(unrelated sample)
ZZZZZZ	3B66648.D	01/28/11	18:33	10:25	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3115-BFB	**Injection Date:**	01/31/11
Lab File ID:	3B66718.D	**Injection Time:**	08:23
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20874	18.7		Pass
75	30.0 - 60.0% of mass 95	51306	46.0		Pass
95	Base peak, 100% relative abundance	111610	100.0		Pass
96	5.0 - 9.0% of mass 95	7435	6.66		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	105629	94.6		Pass
175	5.0 - 9.0% of mass 174	8284	7.42	(7.84) [a]	Pass
176	95.0 - 101.0% of mass 174	104181	93.3	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	6928	6.21	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3115-CC3095	3B66720.D	01/31/11	09:36	01:13	Continuing cal 20
V3B3115-MB	3B66721.D	01/31/11	10:16	01:53	Method Blank
V3B3115-BS	3B66722.D	01/31/11	10:54	02:31	Blank Spike
JA66951-1	3B66724.D	01/31/11	12:08	03:45	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66725.D	01/31/11	12:40	04:17	(unrelated sample)
ZZZZZZ	3B66726.D	01/31/11	13:12	04:49	(unrelated sample)
ZZZZZZ	3B66727.D	01/31/11	13:43	05:20	(unrelated sample)
ZZZZZZ	3B66728.D	01/31/11	14:15	05:52	(unrelated sample)
JA66951-1MS	3B66729.D	01/31/11	14:48	06:25	Matrix Spike
JA66951-1MSD	3B66730.D	01/31/11	15:20	06:57	Matrix Spike Duplicate
JA66701-2	3B66732.D	01/31/11	16:24	08:01	W-RM-012011-MWCC
ZZZZZZ	3B66735.D	01/31/11	16:56	08:33	(unrelated sample)
ZZZZZZ	3B66736.D	01/31/11	17:27	09:04	(unrelated sample)
ZZZZZZ	3B66737.D	01/31/11	17:59	09:36	(unrelated sample)
ZZZZZZ	3B66738.D	01/31/11	18:31	10:08	(unrelated sample)
ZZZZZZ	3B66739.D	01/31/11	19:02	10:39	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3109-CC3095	**Injection Date:**	01/26/11
Lab File ID:	3B66584.D	**Injection Time:**	21:20
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	146914	8.23	361642	10.67	515334	11.63	498634	14.96	261376	17.43
Upper Limit [a]	293828	8.73	723284	11.17	1030668	12.13	997268	15.46	522752	17.93
Lower Limit [b]	73457	7.73	180821	10.17	257667	11.13	249317	14.46	130688	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3109-MB	151529	8.24	394908	10.67	532853	11.63	506368	14.96	268779	17.43
V3B3109-BS	127107	8.23	345302	10.67	495687	11.63	483048	14.96	252912	17.43
JA66701-2MS	155669	8.23	364519	10.68	514539	11.63	495584	14.96	258861	17.44
JA66701-2MSD	157143	8.24	370907	10.67	524949	11.63	502316	14.96	262215	17.43
ZZZZZZ	147807	8.23	394142	10.67	531088	11.63	506407	14.96	269845	17.43
JA66701-3	146338	8.23	391374	10.68	529061	11.63	507250	14.96	270459	17.43
JA66701-9	143632	8.23	377791	10.67	511393	11.63	489410	14.96	259464	17.43
JA66701-2 [c]	148631	8.23	372820	10.68	509196	11.63	487645	14.96	260879	17.43
JA66701-4	145865	8.24	380302	10.68	512827	11.63	493434	14.96	265065	17.43
JA66701-5	144422	8.23	362875	10.67	495844	11.63	477919	14.96	253738	17.43
ZZZZZZ	157109	8.23	354351	10.68	485343	11.63	476180	14.96	256325	17.43
ZZZZZZ	153116	8.23	364140	10.68	495233	11.63	482656	14.96	256620	17.44
ZZZZZZ	147044	8.23	363901	10.68	499336	11.63	478187	14.96	255009	17.43
ZZZZZZ	146722	8.23	335213	10.68	471968	11.63	463413	14.96	253503	17.43
ZZZZZZ	163581	8.23	413201	10.67	553726	11.63	535303	14.96	285000	17.43
ZZZZZZ	162325	8.23	421610	10.67	566401	11.63	542997	14.96	288472	17.43
JA66701-7	143468	8.23	413764	10.68	552799	11.63	525165	14.96	283519	17.43
JA66701-8	155421	8.23	402654	10.67	541327	11.63	516673	14.96	276807	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample used for QC purposes only.

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3111-CC3095	**Injection Date:**	01/28/11
Lab File ID:	3B66631.D	**Injection Time:**	09:28
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	145948	8.23	336200	10.67	474902	11.63	460201	14.96	244857	17.43
Upper Limit [a]	291896	8.73	672400	11.17	949804	12.13	920402	15.46	489714	17.93
Lower Limit [b]	72974	7.73	168100	10.17	237451	11.13	230101	14.46	122429	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3111-MB	152359	8.23	372948	10.67	501706	11.63	481698	14.96	257846	17.43
V3B3111-BS	140019	8.24	338795	10.67	485588	11.63	472596	14.96	250577	17.43
JA66594-12	147077	8.23	366053	10.67	494697	11.63	480564	14.96	257053	17.43
ZZZZZZ	135328	8.22	357410	10.67	487121	11.63	467529	14.96	251854	17.43
JA66594-12	131351	8.23	384987	10.67	514978	11.63	492878	14.96	266672	17.43
ZZZZZZ	130822	8.23	373966	10.67	506042	11.63	499493	14.96	265524	17.43
JA66594-12MS	149193	8.23	368866	10.67	523752	11.63	501427	14.96	262274	17.43
JA66594-12MSD	156486	8.24	377809	10.68	527151	11.63	504798	14.96	264925	17.43
JA66701-6	140503	8.23	397385	10.67	532346	11.63	500495	14.96	269011	17.43
JA66701-1	189578	8.23	388490	10.67	520262	11.63	496524	14.96	268340	17.43
ZZZZZZ	150488	8.23	398495	10.68	528466	11.63	505310	14.96	273117	17.43
ZZZZZZ	158383	8.22	387275	10.67	535008	11.63	516483	14.96	275680	17.43
ZZZZZZ	149442	8.23	399262	10.67	537154	11.63	522192	14.96	279744	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3115-CC3095	**Injection Date:**	01/31/11
Lab File ID:	3B66720.D	**Injection Time:**	09:36
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	147537	8.23	352174	10.67	485760	11.63	468034	14.95	248574	17.43
Upper Limit [a]	295074	8.73	704348	11.17	971520	12.13	936068	15.45	497148	17.93
Lower Limit [b]	73769	7.73	176087	10.17	242880	11.13	234017	14.45	124287	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3115-MB	141802	8.23	381051	10.67	509120	11.63	479604	14.95	259275	17.43
V3B3115-BS	132451	8.23	350231	10.66	492433	11.63	473898	14.96	250563	17.43
JA66951-1	139728	8.23	379840	10.67	507034	11.63	489356	14.96	262955	17.43
ZZZZZZ	132386	8.23	372988	10.67	500598	11.63	489418	14.96	263360	17.43
ZZZZZZ	137245	8.23	363326	10.67	491531	11.63	474810	14.96	254410	17.43
ZZZZZZ	153089	8.23	344058	10.67	475796	11.63	462699	14.96	255600	17.43
ZZZZZZ	137568	8.23	404404	10.67	535693	11.63	517288	14.96	279704	17.43
JA66951-1MS	137705	8.23	390541	10.67	539206	11.63	518842	14.96	275936	17.43
JA66951-1MSD	140614	8.23	385782	10.67	533266	11.63	511731	14.96	272204	17.43
JA66701-2	142921	8.23	412037	10.67	545967	11.63	520095	14.96	282519	17.43
ZZZZZZ	234462	8.21	394710	10.67	536460	11.63	521393	14.96	283808	17.43
ZZZZZZ	139189	8.23	397324	10.67	524329	11.63	508594	14.96	279088	17.43
ZZZZZZ	129326	8.23	379835	10.67	505105	11.63	488464	14.96	267649	17.43
ZZZZZZ	147782	8.22	375984	10.67	507701	11.63	495842	14.96	276209	17.43
ZZZZZZ	131316	8.23	420062	10.67	546649	11.63	531099	14.95	289751	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA66701-1	3B66645.D	101.0	96.0	104.0	103.0
JA66701-2	3B66732.D	99.0	87.0	103.0	100.0
JA66701-2	3B66594.D				
JA66701-3	3B66592.D	104.0	99.0	104.0	103.0
JA66701-4	3B66595.D	103.0	100.0	105.0	104.0
JA66701-5	3B66596.D	103.0	101.0	104.0	104.0
JA66701-6	3B66643.D	102.0	95.0	102.0	103.0
JA66701-7	3B66604.D	101.0	94.0	103.0	103.0
JA66701-8	3B66605.D	102.0	96.0	104.0	103.0
JA66701-9	3B66593.D	103.0	99.0	105.0	106.0
JA66594-12MS	3B66640.D	105.0	94.0	102.0	104.0
JA66594-12MSD	3B66641.D	104.0	93.0	103.0	104.0
JA66701-2MS	3B66588.D	106.0	96.0	103.0	105.0
JA66701-2MSD	3B66589.D	105.0	95.0	102.0	105.0
JA66951-1MS	3B66729.D	101.0	86.0	101.0	101.0
JA66951-1MSD	3B66730.D	101.0	85.0	102.0	101.0
V3B3109-BS	3B66587.D	107.0	99.0	104.0	102.0
V3B3109-MB	3B66586.D	103.0	99.0	104.0	105.0
V3B3111-BS	3B66633.D	107.0	99.0	103.0	103.0
V3B3111-MB	3B66632.D	103.0	99.0	105.0	104.0
V3B3115-BS	3B66722.D	102.0	91.0	102.0	101.0
V3B3115-MB	3B66721.D	99.0	91.0	103.0	102.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

Response Factor Report MS3B

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Wed Jan 19 12:43:35 2011
Response via : Initial Calibration

Calibration Files
1 =3b66293.D 2 =3b66294.D 100 =3b66300.D 50 =3b66298.D
20 =3b66297.D 200 =3b66301.D 5 =3b66304.D 10 =3b66296.D
0.5 =3b66292.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) ethanol										0.000#	-1.00
3) tertiary butyl alcohol			1.065	1.003	0.896	1.122	0.968	0.999		1.009	7.74
4) 1,4-dioxane			0.087	0.087	0.080	0.087	0.069	0.082		0.082	8.39
5) I pentafluorobenzene	----------ISTD----------										
6) freon 115										0.000#	-1.00
7) freon 23										0.000#	-1.00
8) freon 143a										0.000#	-1.00
9) freon 152a				0.001						0.001#	0.00
10) chlorotrifluoroethene										0.000#	-1.00
11) chlorodifluoromethane	0.375	0.359	0.440	0.470	0.432	0.460	0.403	0.424	0.362	0.414	10.01
12) dichlorodifluoromethane	0.428	0.527	0.630	0.658	0.679	0.636	0.645	0.586		0.599	13.98
13) freon 114										0.000#	-1.00
14) freon 142b										0.000#	-1.00
15) chloromethane	0.709	0.789	0.835	0.891	0.912	0.821	0.913	0.823	1.034	0.859	10.76
16) vinyl chloride	0.510	0.626	0.689	0.716	0.727	0.688	0.746	0.661	0.633	0.666	10.70
17) acetaldehyde										0.000#	-1.00
18) bromomethane	0.314	0.362	0.349	0.350	0.377	0.354	0.422	0.348	0.438	0.368	10.54
19) chloroethane	0.225	0.298	0.339	0.342	0.355	0.338	0.370	0.330		0.325	13.89
20) vinyl bromide	0.283	0.348	0.366	0.371	0.378	0.375	0.360	0.373		0.357	8.80
21) trichlorofluoromethane	0.443	0.566	0.655	0.666	0.700	0.663	0.714	0.626		0.629	14.00
22) PENTANE	0.708	0.582	0.617	0.675	0.643	0.620	0.625	0.677	0.399	0.616	14.57
23) ethyl ether											

	0.254	0.230	0.256	0.266	0.271	0.263	0.251	0.227	0.181	0.244	11.52
24)	freon 123											
										0.000#	-1.00
25)	freon 141b											
										0.000#	-1.00
26)	freon 123a											
										0.000#	-1.00
27)	acrolein											
	0.114	0.109		0.119	0.121		0.106	0.108		0.113	5.38
28)	1,1-dichloroethene											
	0.450	0.389	0.384	0.403	0.426	0.397	0.409	0.342	0.355	0.395	8.41
29)	acetone											
			0.209	0.224	0.318	0.191	0.308	0.234		0.247	21.42
	----- Linear regression ----- Coefficient = 0.9960											
	Response Ratio = 0.02886 + 0.18683 *A											
30)	allyl chloride											
	0.296	0.240	0.277	0.276	0.282	0.285	0.276	0.239		0.271	7.64
31)	acetonitrile											
			0.047	0.048	0.041	0.048	0.035	0.036		0.042	13.78
32)	iodomethane											
	0.774	0.649	0.706	0.726	0.741	0.737	0.685	0.602	0.604	0.691	8.89
33)	iso-butyl alcohol											
	0.012	0.012	0.014	0.015	0.015	0.014	0.015	0.014		0.014	8.07
34)	carbon disulfide											
	1.670	1.444	1.367	1.479	1.532	1.388	1.437	1.253	1.399	1.441	8.04
35)	methylene chloride											
	0.504	0.430	0.460	0.482	0.497	0.480	0.470	0.418	0.390	0.459	8.37
36)	methyl acetate											
			0.075	0.079	0.073	0.079	0.060	0.072		0.073	9.67
37)	methyl tert butyl ether											
	1.560	1.315	1.346	1.438	1.464	1.360	1.395	1.268	1.423	1.397	6.24
38)	trans-1,2-dichloroethene											
	0.495	0.426	0.398	0.430	0.443	0.410	0.426	0.364	0.416	0.423	8.36
39)	di-isopropyl ether											
	1.481	1.379	1.618	1.736	1.684	1.642	1.653	1.766		1.620	8.01
40)	2-butanone											
			0.070	0.073	0.085	0.070	0.080	0.067		0.074	9.38
41)	1,1-dichloroethane											
	0.971	0.834	0.776	0.846	0.886	0.793	0.844	0.731	0.822	0.834	8.22
42)	chloroprene											
	0.600	0.526	0.667	0.708	0.664	0.697	0.638	0.682		0.648	9.23
43)	acrylonitrile											
	0.205	0.180	0.196	0.215	0.219	0.197	0.197	0.196		0.200	6.12
44)	vinyl acetate											
			0.078	0.083	0.076	0.083	0.058	0.071		0.075	12.65
45)	ethyl tert-butyl ether											
	1.381	1.257	1.534	1.616	1.552	1.591	1.514	1.624		1.509	8.45
46)	ethyl acetate											
		0.069	0.074	0.080	0.078	0.076	0.069	0.081		0.075	6.53
47)	2,2-dichloropropane											
	0.787	0.652	0.585	0.652	0.673	0.583	0.638	0.566	0.645	0.643	10.26
48)	cis-1,2-dichloroethene											
	0.571	0.467	0.459	0.488	0.509	0.469	0.482	0.421	0.444	0.479	8.98
49)	propionitrile											
	0.074	0.069	0.075	0.082	0.085	0.077	0.075	0.075	0.075	0.076	6.18
50)	methylacrylate											
	0.498	0.462	0.561	0.610	0.627	0.575	0.537	0.527		0.550	10.08
51)	bromochloromethane											
	0.230	0.208	0.225	0.235	0.238	0.231	0.227	0.204	0.177	0.219	9.01

52)	tetrahydrofuran											
	0.231	0.186	0.178	0.199	0.209	0.181	0.191	0.190	0.222	0.199	9.37	
53)	chloroform											
	0.898	0.745	0.745	0.801	0.825	0.763	0.783	0.694	0.797	0.784	7.37	
54)	t-butyl formate											
	0.404	0.397	0.483	0.516	0.501	0.498	0.470	0.517		0.473	10.03	
55)	dibromofluoromethane (s)											
	0.344	0.406	0.384	0.395	0.409	0.414	0.384	0.397	0.426	0.395	6.03	
56)	1,2-dichloroethane-d4 (s)											
	0.508	0.552	0.479	0.514	0.537	0.497	0.502	0.541	0.538	0.518	4.69	
57)	freon 113											
	0.195	0.291	0.298	0.278	0.305	0.278	0.288			0.276	13.53	
58)	methacrylonitrile											
	0.342	0.312	0.339	0.369	0.368	0.350	0.329	0.319	0.354	0.342	5.82	
59)	1,1,1-trichloroethane											
	0.697	0.590	0.617	0.656	0.660	0.633	0.605	0.536	0.552	0.616	8.46	
60)	Cyclohexane											
	0.755	0.642	0.617	0.665	0.680	0.635	0.626	0.550	0.487	0.629	12.17	
61)	tert amyl alcohol											
	0.043	0.059	0.060	0.057	0.061	0.051	0.059			0.056	11.32	
62)	iso-octane											
	1.555	1.308	1.554	1.694	1.533	1.590	1.556	1.587		1.547	7.01	
63)	I 1,4-difluorobenzene	----------ISTD----------										
64)	tert-amyl ethyl ether											
	0.698	0.800	0.804	0.858	0.878	0.796	0.838	0.848	0.626	0.794	10.29	
65)	epichlorohydrin											
	0.028	0.029	0.038	0.040	0.038	0.040	0.037	0.040		0.036	13.20	
66)	n-butyl alcohol											
	0.008	0.007	0.009	0.010	0.009	0.010	0.009	0.009		0.009#	12.71	
67)	carbon tetrachloride											
	0.455	0.387	0.374	0.398	0.408	0.380	0.389	0.338	0.354	0.387	8.64	
68)	1,1-dichloropropene											
	0.491	0.412	0.396	0.426	0.439	0.404	0.418	0.355	0.367	0.412	9.71	
69)	hexane											
	0.350	0.299	0.350	0.383	0.352	0.356	0.354	0.360		0.351	6.66	
70)	benzene											
	1.483	1.246	1.124	1.210	1.270	1.133	1.245	1.065	1.260	1.226	9.77	
71)	tert-amyl methyl ether											
	0.891	0.843	0.894	0.949	0.928	0.916	0.968	0.992	0.736	0.902	8.48	
72)	heptane											
	0.212	0.178	0.211	0.230	0.207	0.214	0.214	0.215		0.210	6.92	
73)	isopropyl acetate											
	0.533	0.544	0.685	0.719	0.684	0.687	0.653	0.696		0.650	10.97	
74)	1,2-dichloroethane											
	0.477	0.417	0.383	0.422	0.442	0.385	0.422	0.392	0.420	0.418	7.12	
75)	ethyl acrylate											
	0.388	0.454	0.475	0.475	0.455	0.429	0.458			0.448	6.86	
76)	trichloroethene											
	0.348	0.306	0.301	0.319	0.324	0.307	0.313	0.266	0.281	0.307	7.75	
77)	2-nitropropane											
	0.007	0.008	0.007	0.007		0.005				0.007#	13.69	
78)	2-chloroethyl vinyl ether											
	0.189	0.183	0.220	0.236	0.228	0.222	0.228	0.243	0.172	0.214	11.93	
79)	methyl methacrylate											
	0.222	0.201	0.229	0.242	0.249	0.237	0.223	0.217	0.210	0.226	6.87	
80)	1,2-dichloropropane											
	0.391	0.330	0.318	0.345	0.359	0.323	0.341	0.302	0.351	0.340	7.69	
81)	dibromomethane											
	0.217	0.191	0.197	0.209	0.215	0.202	0.199	0.183	0.206	0.202	5.51	

82)	methylcyclohexane											
	0.461	0.387	0.459	0.493	0.459	0.470	0.470	0.475			0.459	6.80
83)	bromodichloromethane											
	0.482	0.405	0.425	0.454	0.455	0.434	0.433	0.383	0.464		0.437	6.98
84)	cis-1,3-dichloropropene											
	0.608	0.531	0.537	0.576	0.580	0.549	0.547	0.494	0.598		0.558	6.46
85)	toluene-d8 (s)											
	1.121	1.195	1.005	1.062	1.091	1.036	1.093	1.106	1.367		1.119	9.58
86)	4-methyl-2-pentanone											
	0.134	0.130	0.142	0.149	0.153	0.146	0.150	0.133	0.135		0.141	6.04
87)	toluene											
	0.887	0.756	0.720	0.771	0.777	0.730	0.781	0.659	0.813		0.766	8.27
88)	3-methyl-1-butanol											
	0.013	0.010	0.014	0.015	0.014	0.015	0.014	0.015	0.012		0.014	11.47
89)	trans-1,3-dichloropropene											
	0.563	0.506	0.491	0.527	0.531	0.494	0.520	0.471	0.581		0.520	6.69
90)	ethyl methacrylate											
	0.415	0.382	0.435	0.459	0.449	0.445	0.419	0.390			0.424	6.53
91)	1,1,2-trichloroethane											
	0.267	0.251	0.249	0.265	0.264	0.253	0.258	0.233	0.285		0.259	5.64
92)	2-hexanone											
	0.159	0.180	0.138	0.147	0.176	0.138	0.181	0.141	0.137		0.155	12.39
93)	I chlorobenzene-d5	----------ISTD----------										
94)	tetrachloroethene											
	0.325	0.276	0.263	0.278	0.296	0.269	0.317	0.236	0.253		0.279	10.39
95)	3,3-dimethyl-1-butanol											
	0.030	0.024	0.034	0.033	0.032	0.037	0.030	0.033	0.034		0.032	11.16
96)	1,3-dichloropropane											
	0.568	0.512	0.477	0.514	0.541	0.479	0.535	0.474	0.614		0.524	8.90
97)	butyl acetate											
	0.209	0.187	0.229	0.238	0.233	0.239	0.235	0.253			0.228	9.04
98)	dibromochloromethane											
	0.381	0.334	0.347	0.364	0.364	0.357	0.349	0.314	0.447		0.362	10.34
99)	1,2-dibromoethane											
	0.323	0.306	0.317	0.332	0.337	0.323	0.326	0.292	0.352		0.323	5.39
100)	n-butyl ether											
											0.000#	-1.00
101)	chlorobenzene											
	0.949	0.814	0.819	0.854	0.872	0.844	0.832	0.729	0.968		0.853	8.42
102)	1,1,1,2-tetrachloroethane											
	0.355	0.310	0.305	0.320	0.333	0.317	0.323	0.277	0.365		0.323	8.19
103)	ethylbenzene											
	1.752	1.501	1.388	1.491	1.554	1.393	1.514	1.292	1.665		1.505	9.41
104)	m,p-xylene											
	0.660	0.568	0.535	0.566	0.592	0.550	0.580	0.500	0.610		0.573	7.97
105)	o-xylene											
	0.672	0.576	0.567	0.603	0.620	0.582	0.596	0.513	0.656		0.598	8.01
106)	butyl acrylate											
											0.000#	-1.00
107)	styrene											
	1.052	0.907	0.943	0.999	1.026	0.951	0.980	0.869	1.151		0.986	8.51
108)	bromoform											
	0.276	0.246	0.273	0.282	0.281	0.283	0.268	0.239	0.337		0.276	10.06
109)	I 1,4-dichlorobenzene-d	----------ISTD----------										
110)	isopropylbenzene											
	3.417	2.923	2.794	2.991	3.070	2.815	2.992	2.572	3.378		2.995	9.05
111)	4-bromofluorobenzene (s)											
	0.904	0.987	0.779	0.818	0.846	0.834	0.861	0.887			0.865	7.29

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

112)	cyclohexanone										
		0.061	0.054	0.055	0.061	0.049	0.058	0.057		0.056	7.63
113)	bromobenzene										
		0.847	0.747	0.715	0.752	0.772	0.747	0.801	0.669	0.781	11.58
114)	1,1,2,2-tetrachloroethane										
		0.971	0.873	0.818	0.876	0.883	0.839	0.884	0.792	0.867	6.18
115)	trans-1,4-dichloro-2-butene										
		0.233	0.245	0.239	0.262	0.260	0.245	0.259	0.237	0.247	4.56
116)	1,2,3-trichloropropane										
		0.218	0.219	0.206	0.220	0.226	0.210	0.220	0.201	0.215	3.90
117)	n-propylbenzene										
		4.079	3.494	3.206	3.489	3.599	3.194	3.540	3.041	3.992	3.515	9.95
118)	4-ETHYLTOLUENE										
		2.434	2.846	2.768	2.914	2.988	2.763	2.934	2.892	2.225	2.752	9.29
119)	2-chlorotoluene										
		0.804	0.658	0.649	0.682	0.704	0.685	0.697	0.599	0.796	0.697	9.50
120)	4-chlorotoluene										
		2.568	2.166	2.087	2.216	2.244	2.147	2.223	1.889	2.707	2.250	10.96
121)	1,3,5-trimethylbenzene										
		2.774	2.424	2.269	2.407	2.467	2.356	2.429	2.078	2.703	2.434	8.60
122)	tert-butylbenzene										
		2.381	2.097	2.138	2.268	2.302	2.162	2.147	1.857	2.390	2.194	7.56
123)	pentachloroethane										
		0.503	0.448	0.490	0.512	0.500	0.507	0.426	0.426	0.607	0.491	11.30
124)	1,2,4-trimethylbenzene										
		2.819	2.470	2.407	2.570	2.633	2.432	2.570	2.208	2.824	2.548	7.76
125)	sec-butylbenzene										
		3.698	3.169	3.178	3.385	3.425	3.182	3.272	2.795	3.485	3.288	7.72
126)	1,3-dichlorobenzene										
		1.669	1.455	1.427	1.496	1.511	1.465	1.505	1.299	1.803	1.515	9.56
127)	p-isopropyltoluene										
		2.956	2.570	2.616	2.795	2.811	2.616	2.665	2.310	2.836	2.686	7.07
128)	1,4-dichlorobenzene										
		1.628	1.418	1.439	1.497	1.503	1.484	1.451	1.253	1.754	1.492	9.31
129)	benzyl chloride										
		1.825	1.462	1.753	1.854	1.752	1.783	1.750	1.821	1.941	1.771	7.42
130)	1,2-dichlorobenzene										
		1.588	1.419	1.438	1.507	1.536	1.461	1.498	1.285	1.886	1.513	10.83
131)	1,4-DIETHYLBENZENE										
		1.324	1.575	1.640	1.705	1.732	1.628	1.624	1.632	1.197	1.562	11.51
132)	n-butylbenzene										
		1.591	1.405	1.429	1.525	1.553	1.435	1.462	1.259	1.556	1.468	6.95
133)	1,2,4,5-TETRAMETHYLBENZENE										
		2.024	2.334	2.624	2.788	2.808	2.507	2.557	2.617		2.532	10.08
134)	1,2-dibromo-3-chloropropane										
		0.160	0.168	0.174	0.181	0.177	0.173	0.172	0.154		0.170	5.29
135)	1,3,5-trichlorobenzene										
		1.284	1.179	1.257	1.357	1.351	1.234	1.266	1.083	1.375	1.265	7.38
136)	1,2,4-trichlorobenzene										
		1.117	0.964	1.152	1.247	1.225	1.130	1.119	0.972	1.193	1.124	8.88
137)	hexachlorobutadiene										
		0.643	0.571	0.587	0.647	0.638	0.585	0.628	0.508	0.683	0.610	8.62
138)	naphthalene										
		2.288	2.025	2.558	2.741	2.686	2.486	2.463	2.200		2.431	10.07
139)	1,2,3-trichlorobenzene										
		0.982	0.841	1.016	1.112	1.090	1.013	1.008	0.885	1.180	1.014	10.49
140)	hexachloroethane										
		0.495	0.437	0.532	0.553	0.539	0.544	0.479	0.416	0.461	0.495	10.10

(#) = Out of Range ### Number of calibration levels exceeded format ###

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

M3B3095.M Thu Jan 20 12:01:52 2011 MS3B

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\2095initial\3b66304a.D Vial: 15
Acq On : 18 Jan 2011 7:42 pm Operator: tarar1
Sample : icv3095-50 Inst : MS3B
Misc : ms5942,v3b3095,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Wed Jan 19 12:43:35 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	86	0.00	8.25
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.148	-13.8	98	0.00	8.37
4		1,4-dioxane	0.082	0.091	-11.0	89	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.68
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.408	1.4	91	0.00	4.30
12		dichlorodifluoromethane	0.599	0.650	-8.5	103	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.884	-2.9	104	0.00	4.69
16		vinyl chloride	0.666	0.722	-8.4	105	0.00	4.99
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.386	-4.9	115	0.00	5.74
19		chloroethane	0.325	0.357	-9.8	109	0.01	5.95
20		vinyl bromide	0.357	0.367	-2.8	104	0.00	6.36
21		trichlorofluoromethane	0.629	0.690	-9.7	108	0.00	6.51
22		PENTANE	0.616	0.513	16.7	80	0.00	6.57
23		ethyl ether	0.244	0.275	-12.7	108	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.119	-5.3	105	0.00	7.25
28		1,1-dichloroethene	0.395	0.406	-2.8	105	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	50.000	51.772	-3.5	104	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.284	-4.8	107	0.00	8.05
31		acetonitrile	0.042	0.041	2.4	91	0.00	8.04
32		iodomethane	0.691	0.744	-7.7	107	0.00	7.77
33		iso-butyl alcohol	0.014	0.015	-7.1	106	0.00	11.25
34		carbon disulfide	1.441	1.544	-7.1	109	-0.02	7.91
35		methylene chloride	0.459	0.478	-4.1	104	0.00	8.28
36		methyl acetate	0.073	0.080	-9.6	105	0.00	8.04
37		methyl tert butyl ether	1.397	1.391	0.5	101	0.00	8.64

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

38		trans-1,2-dichloroethene	0.423	0.378	10.6	92	0.00	8.69
39		di-isopropyl ether	1.620	1.739	-7.3	105	0.00	9.29
40		2-butanone	0.074	0.070	5.4	100	0.00	10.08
41		1,1-dichloroethane	0.834	0.861	-3.2	106	0.00	9.33
42		chloroprene	0.648	0.664	-2.5	98	0.00	9.44
43		acrylonitrile	0.200	0.211	-5.5	103	0.00	8.65
44		vinyl acetate	0.075	0.087	-16.0	110	0.00	9.31
45		ethyl tert-butyl ether	1.509	1.587	-5.2	103	0.00	9.80
46		ethyl acetate	0.075	0.077	-2.7	101	0.00	10.11
47		2,2-dichloropropane	0.643	0.641	0.3	103	0.00	10.13
48		cis-1,2-dichloroethene	0.479	0.549	-14.6	118	0.00	10.13
49		propionitrile	0.076	0.081	-6.6	103	0.00	10.20
50		methylacrylate	0.550	0.604	-9.8	103	0.00	10.19
51		bromochloromethane	0.219	0.240	-9.6	107	0.00	10.46
52		tetrahydrofuran	0.199	0.194	2.5	102	0.00	10.50
53		chloroform	0.784	0.817	-4.2	107	0.00	10.52
54		t-butyl formate	0.473	0.519	-9.7	105	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.407	-3.0	108	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.518	0.0	105	0.00	11.17
57		freon 113	0.276	0.290	-5.1	101	0.00	7.43
58		methacrylonitrile	0.342	0.368	-7.6	104	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.663	-7.6	106	0.00	10.78
60		Cyclohexane	0.629	0.659	-4.8	104	0.00	10.86
61		tert amyl alcohol	0.056	0.048	14.3	83	0.00	11.12
62		iso-octane	1.547	1.567	-1.3	97	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.821	-3.4	99	0.00	12.14
65		epichlorohydrin	0.036	0.038	-5.6	98	0.00	12.95
66		n-butyl alcohol	0.009	0.009#	0.0	94	0.00	11.77
67		carbon tetrachloride	0.387	0.398	-2.8	104	0.00	10.99
68		1,1-dichloropropene	0.412	0.428	-3.9	104	0.00	10.97
69		hexane	0.351	0.339	3.4	92	0.00	9.02
70		benzene	1.226	1.223	0.2	105	0.00	11.25
71		tert-amyl methyl ether	0.902	0.942	-4.4	103	0.00	11.27
72		heptane	0.210	0.218	-3.8	99	0.00	11.41
73		isopropyl acetate	0.650	0.756	-16.3	109	0.00	11.16
74		1,2-dichloroethane	0.418	0.427	-2.2	105	0.00	11.27
75		ethyl acrylate	0.448	0.460	-2.7	101	0.00	11.98
76		trichloroethene	0.307	0.325	-5.9	106	0.00	11.99
77		2-nitropropane	0.007	0.008#	-14.3	102	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.225	-5.1	99	0.00	12.81
79		methyl methacrylate	0.226	0.238	-5.3	102	0.00	12.26
80		1,2-dichloropropane	0.340	0.348	-2.4	105	0.00	12.27
81		dibromomethane	0.202	0.211	-4.5	104	0.00	12.43
82		methylcyclohexane	0.459	0.471	-2.6	99	0.00	12.21
83		bromodichloromethane	0.437	0.463	-5.9	106	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.569	-2.0	103	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.068	4.6	104	0.00	13.35
86		4-methyl-2-pentanone	0.141	0.154	-9.2	107	0.00	13.14
87		toluene	0.766	0.771	-0.7	104	0.00	13.43
88		3-methyl-1-butanol	0.014	0.014	0.0	99	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.517	0.6	102	0.00	13.64
90		ethyl methacrylate	0.424	0.460	-8.5	104	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.265	-2.3	104	0.00	13.87
92		2-hexanone	0.155	0.145	6.5	102	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.96
94		tetrachloroethene	0.279	0.287	-2.9	106	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.032	0.0	99	0.00	14.23

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

96	1,3-dichloropropane	0.524	0.516	1.5	103	0.00	14.06
97	butyl acetate	0.228	0.238	-4.4	103	0.00	14.11
98	dibromochloromethane	0.362	0.361	0.3	102	0.00	14.35
99	1,2-dibromoethane	0.323	0.335	-3.7	103	0.00	14.51
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.880	-3.2	106	0.00	15.00
102	1,1,1,2-tetrachloroethane	0.323	0.335	-3.7	107	0.00	15.06
103	ethylbenzene	1.505	1.502	0.2	103	0.00	15.04
104	m,p-xylene	0.573	0.579	-1.0	105	0.00	15.15
105	o-xylene	0.598	0.628	-5.0	107	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	0.983	0.3	101	0.00	15.61
108	bromoform	0.276	0.286	-3.6	104	0.00	15.92
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	17.44
110	isopropylbenzene	2.995	3.083	-2.9	106	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.831	3.9	104	0.00	16.19
112	cyclohexanone	0.056	0.045	19.6	84	0.00	16.16
113	bromobenzene	0.781	0.762	2.4	104	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.886	-2.2	104	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.271	-9.7	106	0.00	16.34
116	1,2,3-trichloropropane	0.215	0.224	-4.2	104	0.00	16.38
117	n-propylbenzene	3.515	3.395	3.4	100	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.908	-5.7	102	0.00	16.50
119	2-chlorotoluene	0.697	0.708	-1.6	106	0.00	16.56
120	4-chlorotoluene	2.250	2.188	2.8	101	0.00	16.67
121	1,3,5-trimethylbenzene	2.434	2.463	-1.2	105	0.00	16.55
122	tert-butylbenzene	2.194	2.306	-5.1	104	0.00	16.93
123	pentachloroethane	0.491	0.526	-7.1	105	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.591	-1.7	103	0.00	16.97
125	sec-butylbenzene	3.288	3.377	-2.7	102	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.554	-2.6	106	0.00	17.38
127	p-isopropyltoluene	2.686	2.889	-7.6	106	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.537	-3.0	105	0.00	17.46
129	benzyl chloride	1.771	1.791	-1.1	99	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.561	-3.2	106	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.708	-9.3	103	0.00	17.69
132	n-butylbenzene	1.468	1.545	-5.2	104	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.771	-9.4	102	0.00	18.55
134	1,2-dibromo-3-chloropropa	0.170	0.187	-10.0	106	0.00	18.74
135	1,3,5-trichlorobenzene	1.265	1.324	-4.7	100	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.228	-9.3	101	0.00	19.63
137	hexachlorobutadiene	0.610	0.616	-1.0	98	0.00	19.73
138	naphthalene	2.431	2.668	-9.7	100	0.00	19.94
139	1,2,3-trichlorobenzene	1.014	1.094	-7.9	101	0.00	20.21
140	hexachloroethane	0.495	0.578	-16.8	107	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66298.D M3B3095.M Wed Jan 19 12:55:48 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\3b66584.D Vial: 22
Acq On : 26 Jan 2011 9:20 pm Operator: tarar1
Sample : cc3095-50 Inst : MS3B
Misc : ms7552,v3b3109,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	105	-0.01	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.049	-4.0	110	0.00	8.37
4		1,4-dioxane	0.082	0.095	-15.9	114	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	121	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a	0.001	0.001#	0.0	144	-0.01	4.11
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.425	-2.7	110	0.02	4.32
12		dichlorodifluoromethane	0.599	0.569	5.0	105	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.770	10.4	105	0.00	4.69
16		vinyl chloride	0.666	0.654	1.8	111	0.00	5.00
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.377	-2.4	130	0.01	5.75
19		chloroethane	0.325	0.338	-4.0	120	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.649	-3.2	118	0.00	6.51
22		PENTANE	0.616	0.729	-18.3	131	0.00	6.57
23		ethyl ether	0.244	0.268	-9.8	122	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.096	15.0	98	0.00	7.25
28		1,1-dichloroethene	0.395	0.420	-6.3	126	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	50.000	60.664	-21.3#	138	0.00	7.51
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.273	-0.7	120	0.00	8.05
31		acetonitrile	0.042	0.040	4.8	101	-0.01	8.03
32		iodomethane	0.691	0.783	-13.3	131	0.00	7.77
33		iso-butyl alcohol	0.014	0.014	0.0	114	0.00	11.25
34		carbon disulfide	1.441	1.556	-8.0	127	-0.02	7.91
35		methylene chloride	0.459	0.490	-6.8	123	0.00	8.28
36		methyl acetate	0.073	0.072	1.4	110	0.00	8.04
37		methyl tert butyl ether	1.397	1.378	1.4	116	0.00	8.64

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

38		trans-1,2-dichloroethene	0.423	0.433	-2.4	122	0.00	8.69
39		di-isopropyl ether	1.620	1.508	6.9	105	0.00	9.29
40		2-butanone	0.074	0.080	-8.1	133	0.00	10.08
41		1,1-dichloroethane	0.834	0.822	1.4	118	0.00	9.32
42		chloroprene	0.648	0.633	2.3	108	0.00	9.44
43		acrylonitrile	0.200	0.192	4.0	109	0.00	8.65
44		vinyl acetate	0.075	0.071	5.3	104	0.00	9.30
45		ethyl tert-butyl ether	1.509	1.435	4.9	108	0.00	9.80
46		ethyl acetate	0.075	0.067	10.7	101	0.00	10.11
47		2,2-dichloropropane	0.643	0.597	7.2	111	0.00	10.13
48		cis-1,2-dichloroethene	0.479	0.494	-3.1	123	0.00	10.12
49		propionitrile	0.076	0.073	3.9	108	0.00	10.20
50		methylacrylate	0.550	0.549	0.2	109	0.00	10.19
51		bromochloromethane	0.219	0.243	-11.0	125	0.00	10.46
52		tetrahydrofuran	0.199	0.172	13.6	105	0.00	10.50
53		chloroform	0.784	0.780	0.5	118	0.00	10.52
54		t-butyl formate	0.473	0.431	8.9	101	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.419	-6.1	128	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.505	2.5	119	0.00	11.17
57		freon 113	0.276	0.296	-7.2	120	0.00	7.43
58		methacrylonitrile	0.342	0.324	5.3	107	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.652	-5.8	120	0.00	10.78
60		Cyclohexane	0.629	0.662	-5.2	121	0.00	10.85
61		tert amyl alcohol	0.056	0.053	5.4	106	0.00	11.12
62		iso-octane	1.547	1.472	4.8	105	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	117	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.794	0.0	109	0.00	12.15
65		epichlorohydrin	0.036	0.034	5.6	101	0.00	12.95
66		n-butyl alcohol	0.009	0.009#	0.0	110	0.00	11.77
67		carbon tetrachloride	0.387	0.408	-5.4	120	0.00	10.99
68		1,1-dichloropropene	0.412	0.428	-3.9	118	0.00	10.96
69		hexane	0.351	0.379	-8.0	116	0.00	9.02
70		benzene	1.226	1.223	0.2	119	0.00	11.24
71		tert-amyl methyl ether	0.902	0.870	3.5	108	0.00	11.27
72		heptane	0.210	0.206	1.9	106	0.00	11.41
73		isopropyl acetate	0.650	0.630	3.1	103	0.00	11.16
74		1,2-dichloroethane	0.418	0.403	3.6	112	0.00	11.27
75		ethyl acrylate	0.448	0.435	2.9	107	0.00	11.98
76		trichloroethene	0.307	0.328	-6.8	121	0.00	11.99
77		2-nitropropane	0.007	0.007#	0.0	100	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.211	1.4	105	0.00	12.81
79		methyl methacrylate	0.226	0.236	-4.4	115	0.00	12.26
80		1,2-dichloropropane	0.340	0.335	1.5	114	0.00	12.27
81		dibromomethane	0.202	0.208	-3.0	117	0.00	12.43
82		methylcyclohexane	0.459	0.469	-2.2	112	0.00	12.21
83		bromodichloromethane	0.437	0.446	-2.1	115	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.558	0.0	114	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.155	-3.2	128	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.140	0.7	110	0.00	13.14
87		toluene	0.766	0.777	-1.4	118	0.00	13.42
88		3-methyl-1-butanol	0.014	0.014	0.0	109	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.505	2.9	112	0.00	13.64
90		ethyl methacrylate	0.424	0.441	-4.0	113	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.262	-1.2	116	0.00	13.87
92		2-hexanone	0.155	0.157	-1.3	126	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	14.96
94		tetrachloroethene	0.279	0.309	-10.8	129	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.031	3.1	108	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

96	1,3-dichloropropane	0.524	0.510	2.7	115	0.00	14.06
97	butyl acetate	0.228	0.220	3.5	107	0.00	14.11
98	dibromochloromethane	0.362	0.376	-3.9	119	0.00	14.35
99	1,2-dibromoethane	0.323	0.337	-4.3	118	0.00	14.50
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.878	-2.9	119	0.00	14.99
102	1,1,1,2-tetrachloroethane	0.323	0.331	-2.5	120	0.00	15.05
103	ethylbenzene	1.505	1.506	-0.1	117	0.00	15.04
104	m,p-xylene	0.573	0.583	-1.7	119	0.00	15.15
105	o-xylene	0.598	0.614	-2.7	118	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	1.016	-3.0	118	0.00	15.61
108	bromoform	0.276	0.292	-5.8	120	0.00	15.91
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	117	0.00	17.43
110	isopropylbenzene	2.995	2.994	0.0	117	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.869	-0.5	124	0.00	16.19
112	cyclohexanone	0.056	0.066	-17.9	138	0.00	16.16
113	bromobenzene	0.781	0.785	-0.5	122	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.850	2.0	113	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.212	14.2	95	0.00	16.34
116	1,2,3-trichloropropane	0.215	0.216	-0.5	114	0.00	16.38
117	n-propylbenzene	3.515	3.432	2.4	115	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.776	-0.9	111	0.00	16.50
119	2-chlorotoluene	0.697	0.691	0.9	118	0.00	16.56
120	4-chlorotoluene	2.250	2.194	2.5	115	0.00	16.66
121	1,3,5-trimethylbenzene	2.434	2.371	2.6	115	0.00	16.55
122	tert-butylbenzene	2.194	2.279	-3.9	117	0.00	16.93
123	pentachloroethane	0.491	0.503	-2.4	115	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.562	-0.5	116	0.00	16.97
125	sec-butylbenzene	3.288	3.358	-2.1	116	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.539	-1.6	120	0.00	17.38
127	p-isopropyltoluene	2.686	2.771	-3.2	116	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.524	-2.1	119	0.00	17.46
129	benzyl chloride	1.771	1.614	8.9	101	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.551	-2.5	120	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.609	-3.0	110	0.00	17.69
132	n-butylbenzene	1.468	1.484	-1.1	113	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.605	-2.9	109	0.00	18.54
134	1,2-dibromo-3-chloropropa	0.170	0.165	2.9	106	0.00	18.74
135	1,3,5-trichlorobenzene	1.265	1.367	-8.1	117	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.236	-10.0	115	0.00	19.62
137	hexachlorobutadiene	0.610	0.636	-4.3	115	0.00	19.73
138	naphthalene	2.431	2.582	-6.2	110	0.00	19.93
139	1,2,3-trichlorobenzene	1.014	1.079	-6.4	113	0.00	20.20
140	hexachloroethane	0.495	0.555	-12.1	117	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66298.D M3B3095.M Thu Jan 27 17:45:03 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\3b66631.D Vial: 3
Acq On : 28 Jan 2011 9:28 am Operator: tarar1
Sample : cc3095-20 Inst : MS3B
Misc : ms7528,v3b3111,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	-0.01	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.165	-15.5	129	-0.01	8.36
4		1,4-dioxane	0.082	0.096	-17.1	119	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	114	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.505	-22.0#	133	0.01	4.31
12		dichlorodifluoromethane	0.599	0.581	3.0	98	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.814	5.2	102	-0.01	4.68
16		vinyl chloride	0.666	0.681	-2.3	107	0.00	4.98
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.375	-1.9	113	0.00	5.74
19		chloroethane	0.325	0.339	-4.3	109	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.652	-3.7	106	0.00	6.51
22		PENTANE	0.616	0.868	-40.9#	154	0.01	6.57
23		ethyl ether	0.244	0.261	-7.0	110	0.00	6.96
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.107	5.3	101	0.00	7.25
28		1,1-dichloroethene	0.395	0.417	-5.6	112	-0.02	7.44
		----------	True	Calc.	% Drift	----------		
29		acetone	20.000	24.315	-21.6#	107	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.273	-0.7	110	0.00	8.05
31		acetonitrile	0.042	0.041	2.4	114	-0.02	8.02
32		iodomethane	0.691	0.745	-7.8	115	0.00	7.77
33		iso-butyl alcohol	0.014	0.014	0.0	110	0.00	11.25
34		carbon disulfide	1.441	1.541	-6.9	115	0.00	7.92
35		methylene chloride	0.459	0.467	-1.7	107	0.00	8.28
36		methyl acetate	0.073	0.075	-2.7	117	0.00	8.04
37		methyl tert butyl ether	1.397	1.378	1.4	107	0.00	8.63

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

38		trans-1,2-dichloroethene	0.423	0.421	0.5	109	0.00	8.69
39		di-isopropyl ether	1.620	1.718	-6.0	116	0.00	9.29
40		2-butanone	0.074	0.084	-13.5	112	0.00	10.08
41		1,1-dichloroethane	0.834	0.818	1.9	105	0.00	9.32
42		chloroprene	0.648	0.691	-6.6	119	0.00	9.44
43		acrylonitrile	0.200	0.194	3.0	101	0.00	8.65
44		vinyl acetate	0.075	0.073	2.7	110	0.00	9.32
45		ethyl tert-butyl ether	1.509	1.593	-5.6	117	0.00	9.80
46		ethyl acetate	0.075	0.075	0.0	109	0.00	10.11
47		2,2-dichloropropane	0.643	0.671	-4.4	114	0.00	10.12
48		cis-1,2-dichloroethene	0.479	0.476	0.6	107	0.00	10.12
49		propionitrile	0.076	0.073	3.9	97	0.00	10.19
50		methylacrylate	0.550	0.534	2.9	97	0.00	10.19
51		bromochloromethane	0.219	0.231	-5.5	111	0.00	10.46
52		tetrahydrofuran	0.199	0.182	8.5	99	0.00	10.50
53		chloroform	0.784	0.767	2.2	106	0.00	10.52
54		t-butyl formate	0.473	0.492	-4.0	112	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.415	-5.1	116	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.520	-0.4	111	0.00	11.17
57		freon 113	0.276	0.326	-18.1	134	0.00	7.43
58		methacrylonitrile	0.342	0.315	7.9	98	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.622	-1.0	108	0.00	10.78
60		Cyclohexane	0.629	0.650	-3.3	109	0.00	10.85
61		tert amyl alcohol	0.056	0.056	0.0	110	0.00	11.11
62		iso-octane	1.547	1.710	-10.5	127	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.804	-1.3	101	0.00	12.14
65		epichlorohydrin	0.036	0.038	-5.6	110	0.00	12.95
66		n-butyl alcohol	0.009	0.010#	-11.1	123	0.00	11.77
67		carbon tetrachloride	0.387	0.397	-2.6	108	0.00	10.99
68		1,1-dichloropropene	0.412	0.415	-0.7	105	0.00	10.96
69		hexane	0.351	0.444	-26.5#	140	0.00	9.02
70		benzene	1.226	1.208	1.5	105	0.00	11.24
71		tert-amyl methyl ether	0.902	0.984	-9.1	117	0.00	11.27
72		heptane	0.210	0.245	-16.7	131	0.00	11.41
73		isopropyl acetate	0.650	0.710	-9.2	115	0.00	11.16
74		1,2-dichloroethane	0.418	0.405	3.1	101	0.00	11.26
75		ethyl acrylate	0.448	0.427	4.7	99	0.00	11.98
76		trichloroethene	0.307	0.315	-2.6	108	0.00	11.98
77		2-nitropropane	0.007	0.007#	0.0	102	0.00	12.81
78		2-chloroethyl vinyl ether	0.214	0.237	-10.7	115	0.00	12.81
79		methyl methacrylate	0.226	0.228	-0.9	101	0.00	12.26
80		1,2-dichloropropane	0.340	0.335	1.5	103	0.00	12.26
81		dibromomethane	0.202	0.202	0.0	104	0.00	12.43
82		methylcyclohexane	0.459	0.530	-15.5	128	0.00	12.21
83		bromodichloromethane	0.437	0.428	2.1	104	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.552	1.1	105	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.170	-4.6	119	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.140	0.7	101	0.00	13.14
87		toluene	0.766	0.748	2.3	107	0.00	13.42
88		3-methyl-1-butanol	0.014	0.016	-14.3	124	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.508	2.3	106	0.00	13.64
90		ethyl methacrylate	0.424	0.418	1.4	103	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.254	1.9	106	0.00	13.87
92		2-hexanone	0.155	0.179	-15.5	112	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	112	0.00	14.96
94		tetrachloroethene	0.279	0.287	-2.9	109	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.034	-6.3	117	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

96	1,3-dichloropropane	0.524	0.504	3.8	104	0.00	14.06
97	butyl acetate	0.228	0.250	-9.6	120	0.00	14.11
98	dibromochloromethane	0.362	0.351	3.0	108	0.00	14.35
99	1,2-dibromoethane	0.323	0.322	0.3	107	0.00	14.50
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.846	0.8	108	0.00	14.99
102	1,1,1,2-tetrachloroethane	0.323	0.319	1.2	107	0.00	15.05
103	ethylbenzene	1.505	1.483	1.5	107	0.00	15.04
104	m,p-xylene	0.573	0.572	0.2	108	0.00	15.15
105	o-xylene	0.598	0.603	-0.8	109	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	0.980	0.6	107	0.00	15.61
108	bromoform	0.276	0.272	1.4	108	0.00	15.91
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	17.43
110	isopropylbenzene	2.995	2.927	2.3	108	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.884	-2.2	118	0.00	16.19
112	cyclohexanone	0.056	0.067	-19.6	123	0.00	16.16
113	bromobenzene	0.781	0.757	3.1	111	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.816	5.9	105	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.219	11.3	96	0.00	16.33
116	1,2,3-trichloropropane	0.215	0.212	1.4	106	0.00	16.38
117	n-propylbenzene	3.515	3.412	2.9	107	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.773	-0.8	105	0.00	16.50
119	2-chlorotoluene	0.697	0.679	2.6	109	0.00	16.56
120	4-chlorotoluene	2.250	2.139	4.9	108	0.00	16.67
121	1,3,5-trimethylbenzene	2.434	2.284	6.2	105	0.00	16.55
122	tert-butylbenzene	2.194	2.183	0.5	107	0.00	16.93
123	pentachloroethane	0.491	0.505	-2.9	114	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.492	2.2	107	0.00	16.97
125	sec-butylbenzene	3.288	3.244	1.3	107	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.489	1.7	112	0.00	17.38
127	p-isopropyltoluene	2.686	2.682	0.1	108	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.464	1.9	110	0.00	17.46
129	benzyl chloride	1.771	2.072	-17.0	134	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.492	1.4	110	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.572	-0.6	103	0.00	17.68
132	n-butylbenzene	1.468	1.466	0.1	107	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.567	-1.4	103	0.00	18.54
134	1,2-dibromo-3-chloropropa	0.170	0.157	7.6	101	0.00	18.73
135	1,3,5-trichlorobenzene	1.265	1.314	-3.9	110	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.174	-4.4	108	0.00	19.62
137	hexachlorobutadiene	0.610	0.624	-2.3	111	0.00	19.73
138	naphthalene	2.431	2.455	-1.0	103	0.00	19.93
139	1,2,3-trichlorobenzene	1.014	1.027	-1.3	107	0.00	20.20
140	hexachloroethane	0.495	0.516	-4.2	108	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66297.D M3B3095.M Mon Jan 31 10:24:27 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\v3b3115-v3b3116\3b66720.D Vial: 3
Acq On : 31 Jan 2011 9:36 am Operator: tarar1
Sample : cc3095-20 Inst : MS3B
Misc : ms7750,v3b3115,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	-0.02	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	0.913	9.5	102	-0.01	8.36
4		1,4-dioxane	0.082	0.089	-8.5	111	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	120	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.415	-0.2	115	0.01	4.31
12		dichlorodifluoromethane	0.599	0.514	14.2	91	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.723	15.8	95	-0.01	4.68
16		vinyl chloride	0.666	0.619	7.1	102	-0.01	4.98
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.364	1.1	115	0.00	5.74
19		chloroethane	0.325	0.314	3.4	106	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.609	3.2	104	0.00	6.50
22		PENTANE	0.616	0.733	-19.0	136	0.00	6.57
23		ethyl ether	0.244	0.259	-6.1	115	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.095	15.9	94	0.00	7.25
28		1,1-dichloroethene	0.395	0.412	-4.3	116	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	20.000	19.461	2.7	95	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.258	4.8	109	0.00	8.05
31		acetonitrile	0.042	0.033	21.4#	96	-0.01	8.03
32		iodomethane	0.691	0.763	-10.4	123	0.00	7.77
33		iso-butyl alcohol	0.014	0.013	7.1	108	0.00	11.25
34		carbon disulfide	1.441	1.516	-5.2	118	-0.02	7.91
35		methylene chloride	0.459	0.465	-1.3	112	0.00	8.27
36		methyl acetate	0.073	0.066	9.6	109	0.00	8.04
37		methyl tert butyl ether	1.397	1.323	5.3	108	0.00	8.63

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

38		trans-1,2-dichloroethene	0.423	0.428	-1.2	115	0.00	8.69
39		di-isopropyl ether	1.620	1.427	11.9	101	0.00	9.29
40		2-butanone	0.074	0.078	-5.4	109	0.00	10.09
41		1,1-dichloroethane	0.834	0.796	4.6	107	0.00	9.32
42		chloroprene	0.648	0.578	10.8	104	0.00	9.43
43		acrylonitrile	0.200	0.190	5.0	104	0.00	8.65
44		vinyl acetate	0.075	0.063	16.0	99	0.00	9.31
45		ethyl tert-butyl ether	1.509	1.348	10.7	104	0.00	9.80
46		ethyl acetate	0.075	0.063	16.0	97	0.00	10.10
47		2,2-dichloropropane	0.643	0.646	-0.5	115	0.00	10.12
48		cis-1,2-dichloroethene	0.479	0.479	0.0	113	0.00	10.12
49		propionitrile	0.076	0.070	7.9	99	0.00	10.19
50		methylacrylate	0.550	0.520	5.5	99	0.00	10.19
51		bromochloromethane	0.219	0.238	-8.7	119	0.00	10.46
52		tetrahydrofuran	0.199	0.172	13.6	99	0.00	10.50
53		chloroform	0.784	0.747	4.7	108	0.00	10.52
54		t-butyl formate	0.473	0.428	9.5	102	0.00	10.54
55	S	dibromofluoromethane (s)	0.395	0.402	-1.8	118	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.479	7.5	107	0.00	11.17
57		freon 113	0.276	0.296	-7.2	127	-0.01	7.42
58		methacrylonitrile	0.342	0.302	11.7	98	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.600	2.6	109	0.00	10.77
60		Cyclohexane	0.629	0.650	-3.3	114	-0.01	10.85
61		tert amyl alcohol		----------NA----------				
62		iso-octane	1.547	1.474	4.7	115	-0.01	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	113	0.00	11.63
64		tert-amyl ethyl ether		----------NA----------				
65		epichlorohydrin	0.036	0.034	5.6	102	0.00	12.94
66		n-butyl alcohol	0.009	0.009#	0.0	109	0.00	11.77
67		carbon tetrachloride	0.387	0.397	-2.6	110	0.00	10.99
68		1,1-dichloropropene	0.412	0.417	-1.2	107	0.00	10.96
69		hexane	0.351	0.392	-11.7	126	0.00	9.02
70		benzene	1.226	1.226	0.0	109	0.00	11.24
71		tert-amyl methyl ether	0.902	0.873	3.2	106	0.00	11.27
72		heptane	0.210	0.217	-3.3	118	0.00	11.41
73		isopropyl acetate	0.650	0.566	12.9	94	0.00	11.16
74		1,2-dichloroethane	0.418	0.393	6.0	100	0.00	11.26
75		ethyl acrylate		----------NA----------				
76		trichloroethene	0.307	0.318	-3.6	111	0.00	11.98
77		2-nitropropane	0.007	0.006#	14.3	88	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.207	3.3	103	0.00	12.80
79		methyl methacrylate	0.226	0.222	1.8	101	0.00	12.25
80		1,2-dichloropropane	0.340	0.339	0.3	107	0.00	12.26
81		dibromomethane	0.202	0.205	-1.5	108	0.00	12.43
82		methylcyclohexane	0.459	0.485	-5.7	119	0.00	12.20
83		bromodichloromethane	0.437	0.429	1.8	107	0.00	12.56
84		cis-1,3-dichloropropene	0.558	0.552	1.1	108	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.160	-3.7	120	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.135	4.3	100	0.00	13.13
87		toluene	0.766	0.753	1.7	110	0.00	13.42
88		3-methyl-1-butanol	0.014	0.014	0.0	108	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.499	4.0	106	0.00	13.64
90		ethyl methacrylate	0.424	0.412	2.8	104	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.254	1.9	109	0.00	13.87
92		2-hexanone	0.155	0.165	-6.5	106	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	114	0.00	14.95
94		tetrachloroethene	0.279	0.296	-6.1	114	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.028	12.5	100	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701 **Sample:** V3B3115-CC3095
Account: AGMPAL Arcadis **Lab FileID:** 3B66720.D
Project: PSEG-Diesel, Salem, NJ

96	1,3-dichloropropane	0.524	0.505	3.6	106	0.00	14.05
97	butyl acetate	0.228	0.213	6.6	104	0.00	14.11
98	dibromochloromethane	0.362	0.359	0.8	112	0.00	14.34
99	1,2-dibromoethane	0.323	0.327	-1.2	111	0.00	14.50
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.873	-2.3	114	0.00	14.99
102	1,1,1,2-tetrachloroethane	0.323	0.327	-1.2	112	0.00	15.05
103	ethylbenzene	1.505	1.496	0.6	109	0.00	15.04
104	m,p-xylene	0.573	0.588	-2.6	113	0.00	15.15
105	o-xylene	0.598	0.611	-2.2	112	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	1.003	-1.7	111	0.00	15.61
108	bromoform	0.276	0.278	-0.7	113	0.00	15.91
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.00	17.43
110	isopropylbenzene	2.995	2.971	0.8	111	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.873	-0.9	119	0.00	16.19
112	cyclohexanone	0.056	0.053	5.4	100	0.00	16.16
113	bromobenzene	0.781	0.785	-0.5	117	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.819	5.5	107	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.213	13.8	94	0.00	16.33
116	1,2,3-trichloropropane	0.215	0.211	1.9	107	0.00	16.38
117	n-propylbenzene	3.515	3.434	2.3	110	0.00	16.39
118	4-ETHYLTOLUENE		----------NA----------				
119	2-chlorotoluene	0.697	0.701	-0.6	114	0.00	16.56
120	4-chlorotoluene	2.250	2.156	4.2	110	0.00	16.66
121	1,3,5-trimethylbenzene	2.434	2.491	-2.3	116	0.00	16.55
122	tert-butylbenzene	2.194	2.191	0.1	109	0.00	16.93
123	pentachloroethane	0.491	0.512	-4.3	118	0.00	17.02
124	1,2,4-trimethylbenzene	2.548	2.515	1.3	110	0.00	16.97
125	sec-butylbenzene	3.288	3.283	0.2	110	0.00	17.15
126	1,3-dichlorobenzene	1.515	1.531	-1.1	116	0.00	17.37
127	p-isopropyltoluene	2.686	2.722	-1.3	111	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.520	-1.9	116	0.00	17.46
129	benzyl chloride	1.771	1.840	-3.9	121	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.531	-1.2	115	0.00	17.89
131	1,4-DIETHYLBENZENE		----------NA----------				
132	n-butylbenzene	1.468	1.455	0.9	108	0.00	17.72
133	1,2,4,5-TETRAMETHYLBENZEN		----------NA----------				
134	1,2-dibromo-3-chloropropa	0.170	0.153	10.0	99	-0.01	18.73
135	1,3,5-trichlorobenzene	1.265	1.373	-8.5	117	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.226	-9.1	115	0.00	19.62
137	hexachlorobutadiene	0.610	0.647	-6.1	116	0.00	19.73
138	naphthalene	2.431	2.478	-1.9	106	0.00	19.93
139	1,2,3-trichlorobenzene	1.014	1.057	-4.2	111	0.00	20.20
140	hexachloroethane	0.495	0.530	-7.1	113	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3b66297.D M3B3095.M Tue Feb 01 12:17:07 2011 MS3B

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-1
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 11:53:19 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

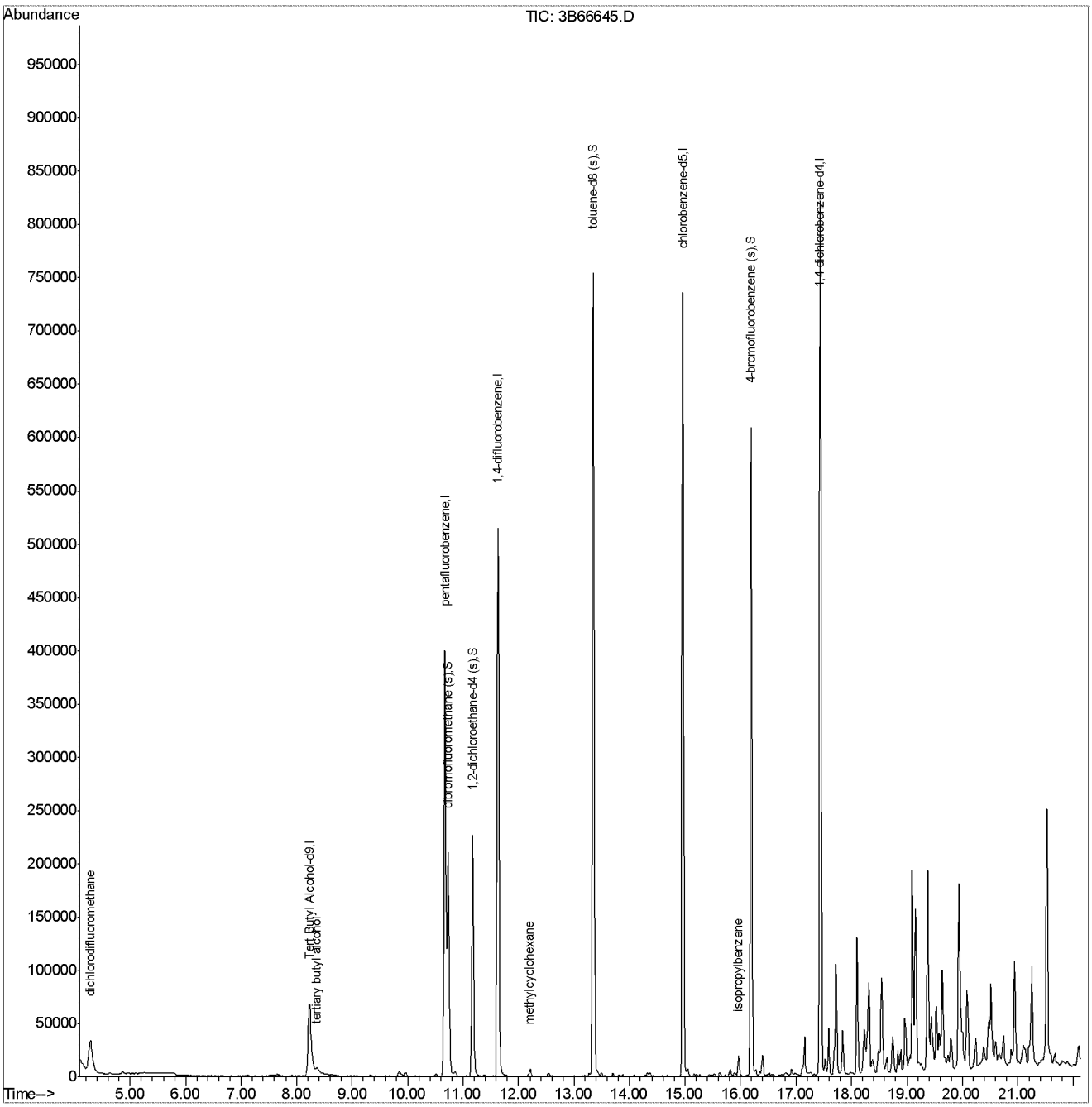
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	189578	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	388490	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	520262	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	496524	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	268340	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	154911	50.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.84%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	194118	48.20	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.40%			
85) toluene-d8 (s)	13.34	98	604281	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.76%			
111) 4-bromofluorobenzene (s)	16.19	95	239358	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.16%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	8.36	59	11215	29.32	ug/L	85
12) dichlorodifluoromethane	4.28	85	79709	17.14	ug/L	100
82) methylcyclohexane	12.21	83	4110	0.86	ug/L	90
110) isopropylbenzene	15.96	105	14510	0.90	ug/L	99

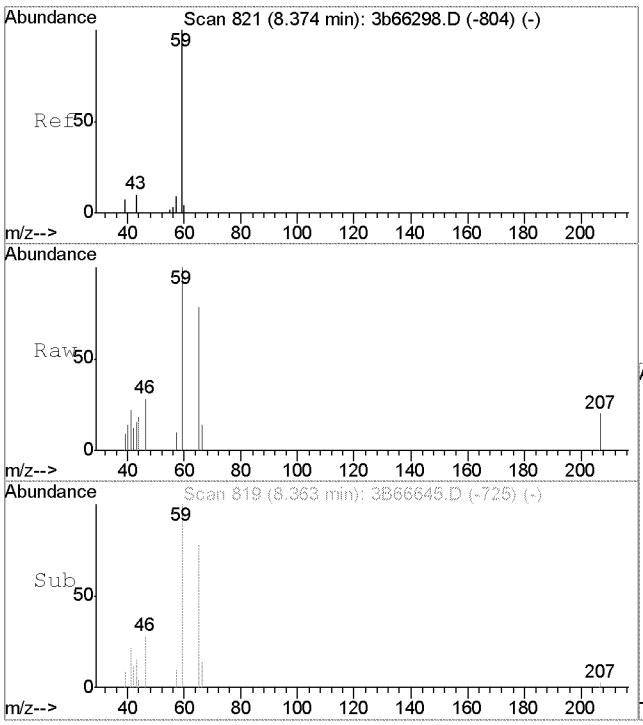
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-1
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 11:53:19 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

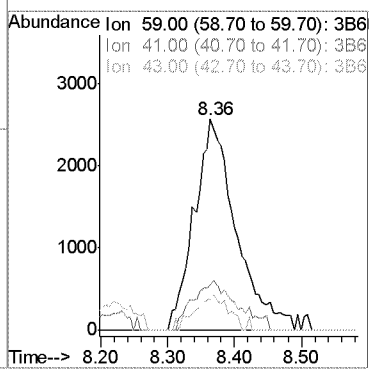


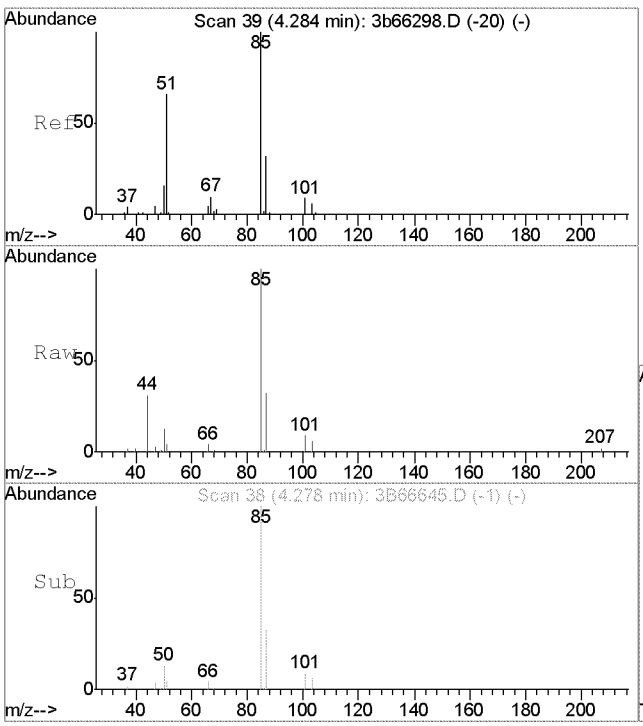


#3
tertiary butyl alcohol
Concen: 29.32 ug/L
RT: 8.36 min Scan# 819
Delta R.T. -0.01 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 59 Resp: 11215

Ion	Ratio	Lower	Upper
59	100		
41	21.6	2.9	62.9
43	14.8	0.0	43.4

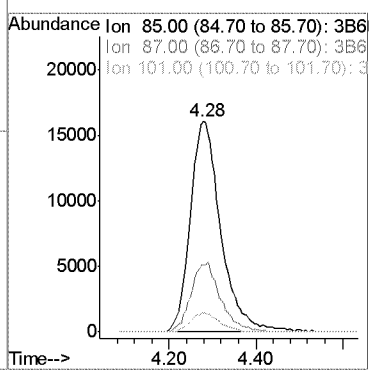


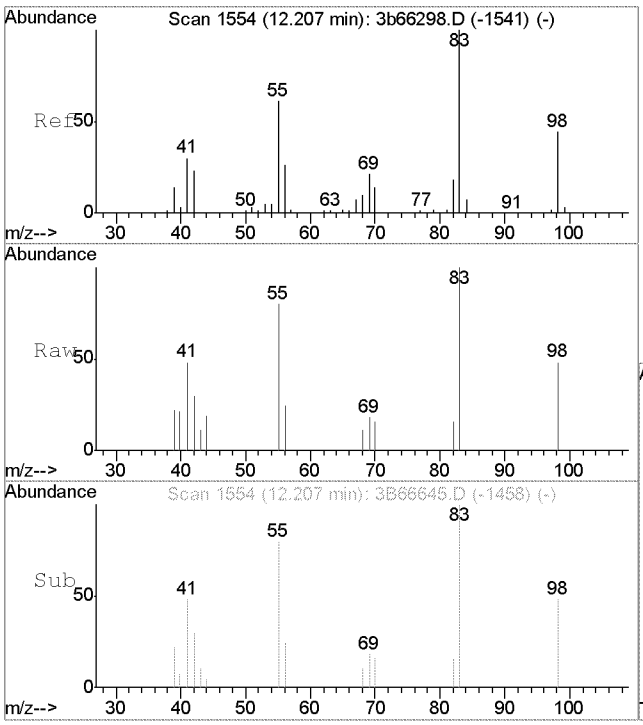


#12
dichlorodifluoromethane
Concen: 17.14 ug/L
RT: 4.28 min Scan# 38
Delta R.T. -0.01 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 85 Resp: 79709

Ion	Ratio	Lower	Upper
85	100		
87	31.8	1.9	61.9
101	9.2	0.0	38.9

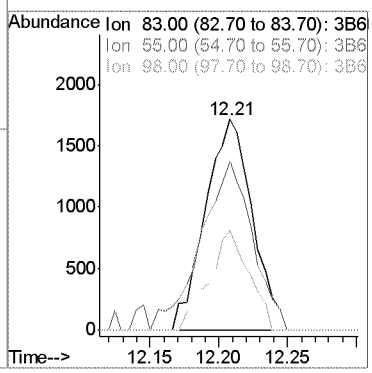


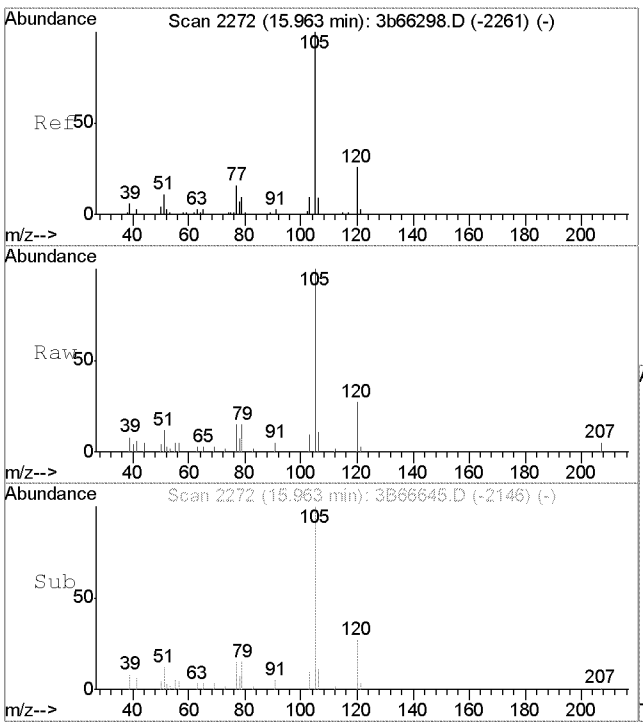


#82
methylcyclohexane
Concen: 0.86 ug/L
RT: 12.21 min Scan# 1554
Delta R.T. -0.00 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 83 Resp: 4110

Ion	Ratio	Lower	Upper
83	100		
55	80.3	61.4	121.4
98	47.6	13.9	73.9

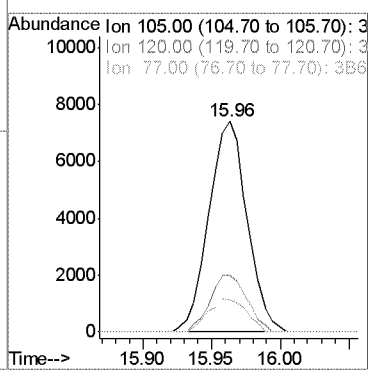




#110
isopropylbenzene
Concen: 0.90 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion:105 Resp: 14510

Ion	Ratio	Lower	Upper
105	100		
120	26.9	0.0	56.1
77	15.5	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.284	26	39	116	rVB2	32353	186666	11.86%	1.203%
2	4.848	142	147	259	rBV8	2431	23215	1.47%	0.150%
3	6.182	399	402	453	rVV3	258	1889	0.12%	0.012%
4	6.642	477	490	521	rVB3	245	1500	0.10%	0.010%
5	7.547	654	663	675	rVV4	1069	4772	0.30%	0.031%
6	7.647	675	682	717	rVB5	1914	7462	0.47%	0.048%
7	8.227	779	793	893	rVV	67583	351170	22.30%	2.264%
8	9.326	997	1003	1011	rVB2	839	1806	0.11%	0.012%
9	9.849	1092	1103	1116	rBV3	3936	13944	0.89%	0.090%
10	9.958	1116	1124	1140	rVB4	3625	9446	0.60%	0.061%
11	10.508	1224	1229	1247	rVV4	1797	4473	0.28%	0.029%
12	10.670	1247	1260	1267	rVV	399304	1027104	65.23%	6.620%
13	10.727	1267	1271	1288	rVV	209971	471118	29.92%	3.037%
14	10.848	1288	1294	1310	rVB5	4376	13650	0.87%	0.088%
15	11.052	1326	1333	1340	rVB4	1071	1596	0.10%	0.010%
16	11.167	1340	1355	1390	rBV	226765	538593	34.21%	3.472%
17	11.381	1390	1396	1406	rVB4	1188	2908	0.18%	0.019%
18	11.538	1417	1426	1432	rVB2	800	1986	0.13%	0.013%
19	11.627	1432	1443	1485	rBV	514523	1169635	74.28%	7.539%
20	12.207	1534	1554	1564	rBV4	7394	19837	1.26%	0.128%
21	12.542	1610	1618	1626	rVB	2982	7625	0.48%	0.049%
22	13.191	1738	1742	1749	rVB5	1441	2837	0.18%	0.018%
23	13.274	1752	1758	1760	rVV2	2532	3740	0.24%	0.024%
24	13.342	1760	1771	1796	rVV	753610	1573008	99.90%	10.139%
25	13.505	1796	1802	1807	rVV4	2726	6420	0.41%	0.041%
26	13.541	1807	1809	1826	rVV4	756	2497	0.16%	0.016%
27	13.703	1833	1840	1847	rVB4	2981	5334	0.34%	0.034%
28	13.813	1854	1861	1866	rVV3	1087	2122	0.13%	0.014%
29	13.871	1866	1872	1883	rVB3	1474	2933	0.19%	0.019%
30	14.080	1905	1912	1920	rBV3	834	2025	0.13%	0.013%
31	14.320	1948	1958	1963	rBV5	3276	7703	0.49%	0.050%
32	14.368	1963	1967	1975	rVB4	2916	5053	0.32%	0.033%
33	14.681	2020	2027	2032	rVV3	1150	2011	0.13%	0.013%
34	14.959	2068	2080	2092	rVV	735674	1459730	92.71%	9.409%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	15.047	2093	2097	2114	rVV4	6724	14759	0.94%	0.095%
36	15.157	2114	2118	2124	rVV6	2187	4024	0.26%	0.026%
37	15.210	2124	2128	2134	rVV4	1352	2767	0.18%	0.018%
38	15.262	2134	2138	2145	rVB4	1448	2494	0.16%	0.016%
39	15.434	2165	2171	2176	rBV3	1329	2190	0.14%	0.014%
40	15.523	2181	2188	2197	rVB4	1909	4779	0.30%	0.031%
41	15.628	2200	2208	2219	rVB8	3419	6895	0.44%	0.044%
42	15.727	2219	2227	2231	rBV4	1540	2288	0.15%	0.015%
43	15.811	2235	2243	2252	rVB4	6221	14199	0.90%	0.092%
44	15.895	2252	2259	2265	rBV7	2781	6754	0.43%	0.044%
45	15.963	2265	2272	2293	rVB	18878	38967	2.47%	0.251%
46	16.188	2300	2315	2328	rBV	608211	1158712	73.59%	7.469%
47	16.350	2340	2346	2349	rBV5	3817	6830	0.43%	0.044%
48	16.397	2349	2355	2367	rVB	19530	37142	2.36%	0.239%
49	16.507	2367	2376	2384	rBV8	2124	5304	0.34%	0.034%
50	16.559	2384	2386	2405	rVB7	1342	3572	0.23%	0.023%
51	16.695	2405	2412	2419	rBV6	1094	2708	0.17%	0.017%
52	16.815	2428	2435	2447	rBV5	2837	8416	0.53%	0.054%
53	16.915	2447	2454	2461	rBV6	5325	11115	0.71%	0.072%
54	16.977	2461	2466	2482	rVB8	2178	6749	0.43%	0.044%
55	17.155	2482	2500	2517	rBV	36120	92084	5.85%	0.594%
56	17.270	2517	2522	2530	rVB6	2397	4588	0.29%	0.030%
57	17.432	2540	2553	2565	rBV	820771	1574564	100.00%	10.149%
58	17.527	2565	2571	2576	rVB2	12249	21198	1.35%	0.137%
59	17.589	2576	2583	2592	rVB2	43593	82900	5.26%	0.534%
60	17.720	2594	2608	2623	rBV3	103739	236805	15.04%	1.526%
61	17.840	2623	2631	2653	rVB2	40625	78685	5.00%	0.507%
62	17.987	2653	2659	2672	rVB2	2100	6978	0.44%	0.045%
63	18.102	2672	2681	2694	rBV	128009	239177	15.19%	1.542%
64	18.233	2694	2706	2711	rBV3	41758	104483	6.64%	0.673%
65	18.311	2711	2721	2729	rVV2	80393	196179	12.46%	1.265%
66	18.374	2729	2733	2746	rVB8	12203	31124	1.98%	0.201%
67	18.489	2746	2755	2759	rBV	21655	54127	3.44%	0.349%
68	18.541	2759	2765	2777	rVB2	84880	170492	10.83%	1.099%
69	18.635	2777	2783	2795	rVB3	14467	29564	1.88%	0.191%
70	18.740	2795	2803	2815	rVB2	33273	69702	4.43%	0.449%
71	18.834	2815	2821	2826	rBV	20256	38821	2.47%	0.250%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	18.886	2826	2831	2838	rVB	18298	30082	1.91%	0.194%
73	18.965	2838	2846	2855	rBV5	47771	107801	6.85%	0.695%
74	19.049	2855	2862	2864	rVV5	10031	17268	1.10%	0.111%
75	19.096	2864	2871	2877	rVV	184284	359591	22.84%	2.318%
76	19.153	2877	2882	2913	rVB	150871	328587	20.87%	2.118%
77	19.373	2913	2924	2932	rBV2	186414	397193	25.23%	2.560%
78	19.436	2932	2936	2948	rVV4	44796	123418	7.84%	0.796%
79	19.530	2948	2954	2959	rVV2	54379	105046	6.67%	0.677%
80	19.577	2959	2963	2968	rVV4	29367	65638	4.17%	0.423%
81	19.640	2968	2975	2990	rVV	88470	203727	12.94%	1.313%
82	19.739	2990	2994	2999	rVV2	8352	12480	0.79%	0.080%
83	19.791	2999	3004	3022	rVB2	26202	53369	3.39%	0.344%
84	19.938	3022	3032	3052	rBV2	171804	513686	32.62%	3.311%
85	20.079	3052	3059	3079	rVB4	70987	190396	12.09%	1.227%
86	20.236	3079	3089	3111	rBV	27478	77600	4.93%	0.500%
87	20.382	3111	3117	3127	rVV9	13240	30526	1.94%	0.197%
88	20.471	3127	3134	3138	rVV2	41974	92396	5.87%	0.596%
89	20.513	3138	3142	3152	rVV2	72635	148363	9.42%	0.956%
90	20.597	3152	3158	3165	rVV	18394	33367	2.12%	0.215%
91	20.660	3165	3170	3178	rVV2	6977	16331	1.04%	0.105%
92	20.738	3178	3185	3207	rVB2	25595	54798	3.48%	0.353%
93	20.884	3207	3213	3217	rBV3	12471	25078	1.59%	0.162%
94	20.942	3217	3224	3243	rVB	95300	207464	13.18%	1.337%
95	21.099	3243	3254	3268	rVB6	17935	73733	4.68%	0.475%
96	21.251	3268	3283	3311	rBV2	91738	241042	15.31%	1.554%
97	21.434	3311	3318	3322	rBV7	6079	12868	0.82%	0.083%
98	21.522	3322	3335	3356	rVB	238534	582099	36.97%	3.752%
99	21.664	3356	3362	3436	rVB6	12085	59675	3.79%	0.385%
100	22.093	3436	3444	3448	rBV3	18693	42625	2.71%	0.275%

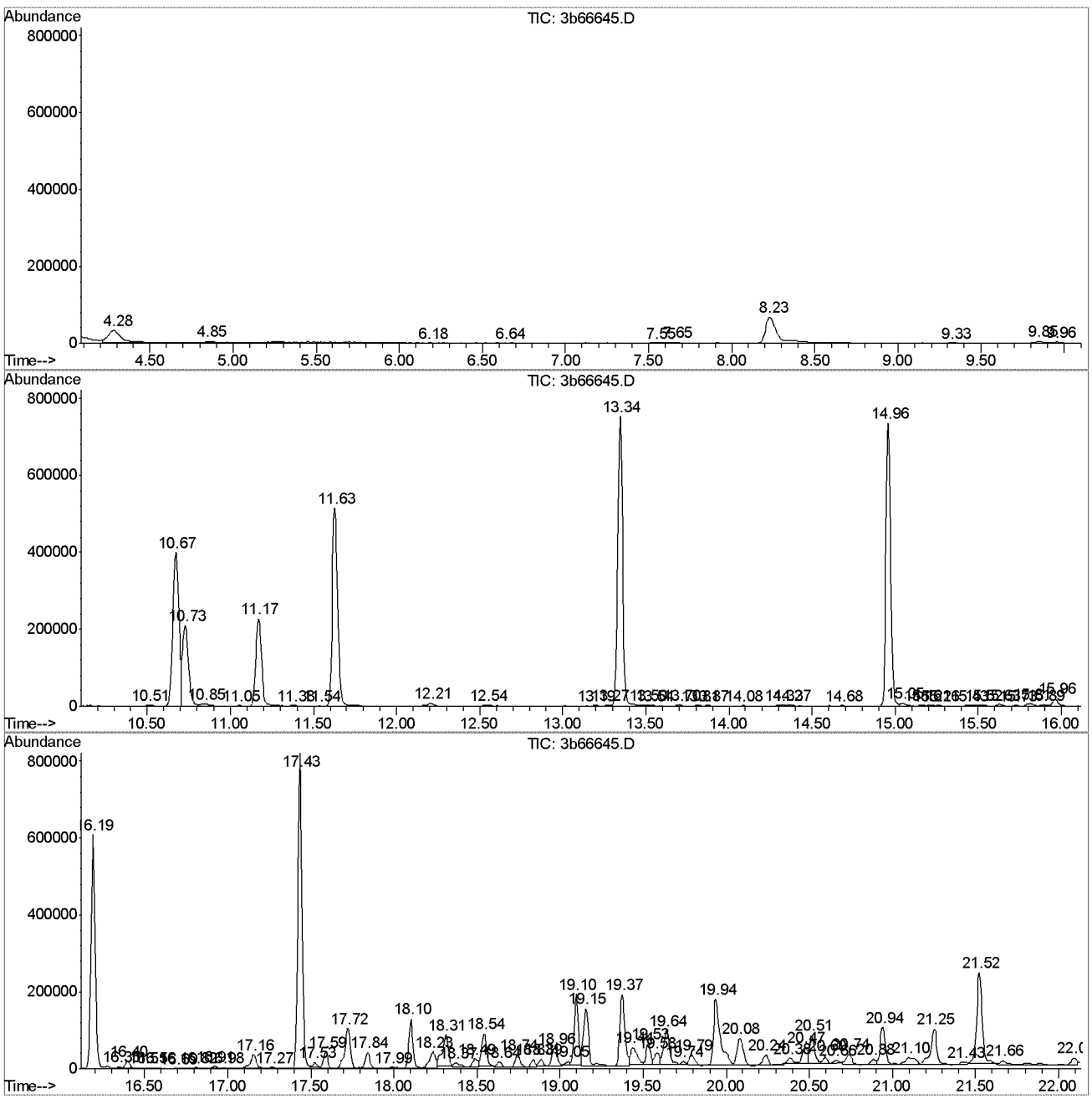
Sum of corrected areas: 15514190

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

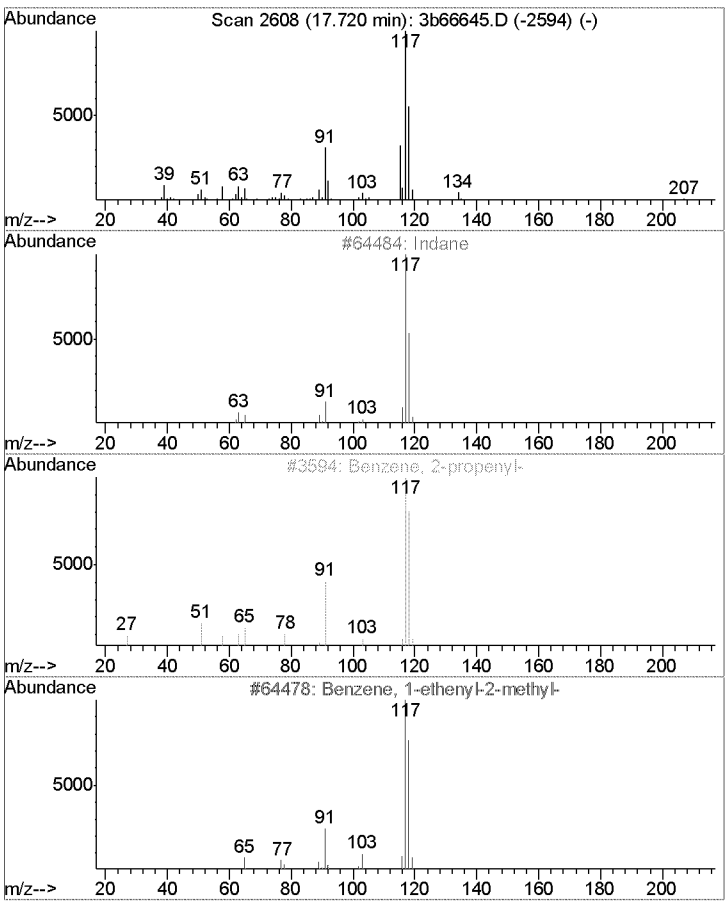
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

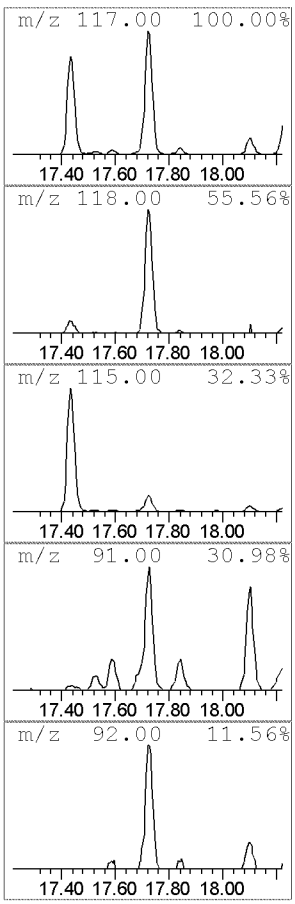
****

Peak Number 1 Indane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.72	7.52 ug/L	236805	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	81
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	68
3	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	68
4	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	68
5	Indane	118	C9H10	000496-11-7	53





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

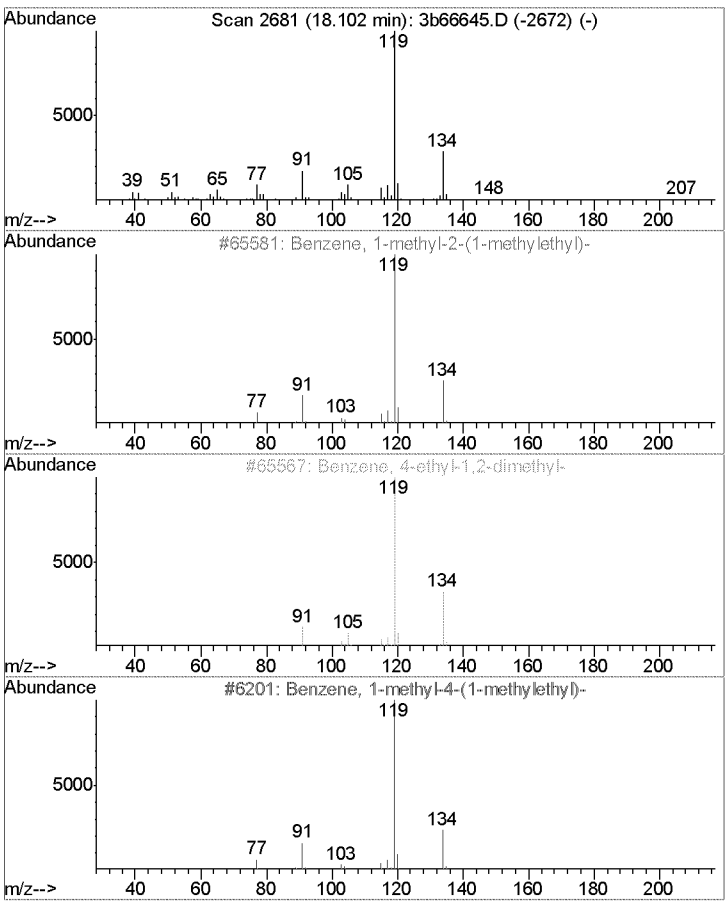
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

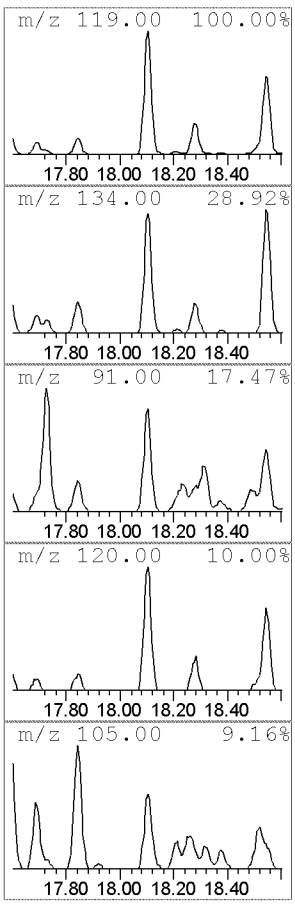
****

Peak Number 2 Benzene, 1-methyl-2-(1-meth... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.10	7.60 ug/L	239177	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	93





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

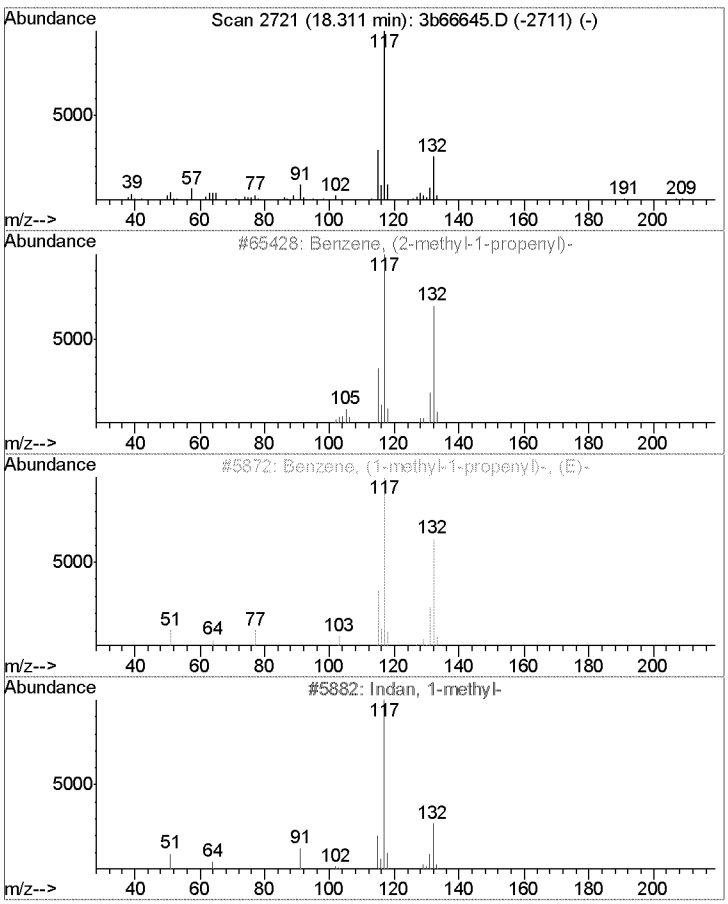
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

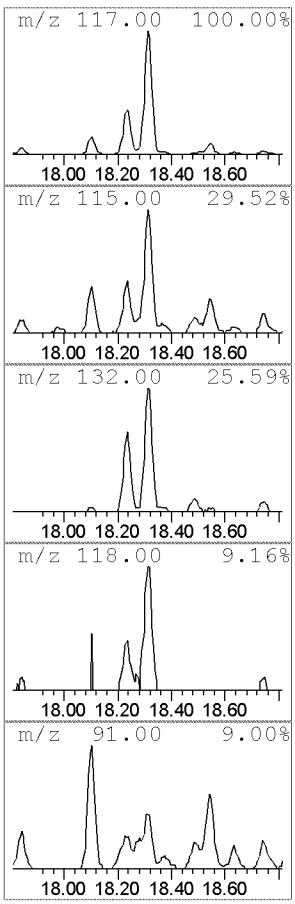
****

Peak Number 3 Benzene, (2-methyl-1-propen... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.31	6.23 ug/L	196179	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	91
2	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	91
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	86





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

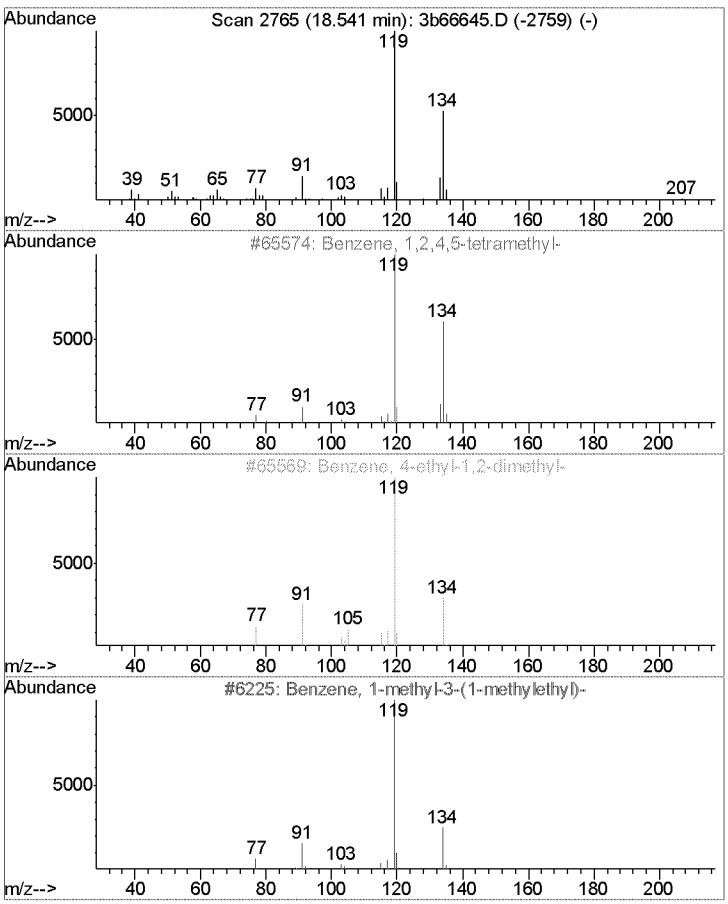
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

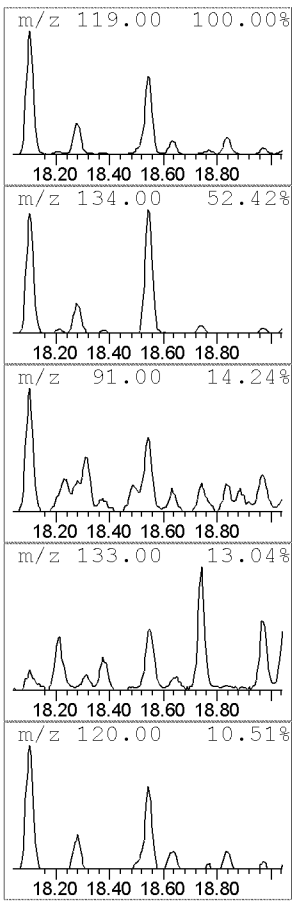
****

Peak Number 4 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.54	5.41 ug/L	170492	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	91
5	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	91





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

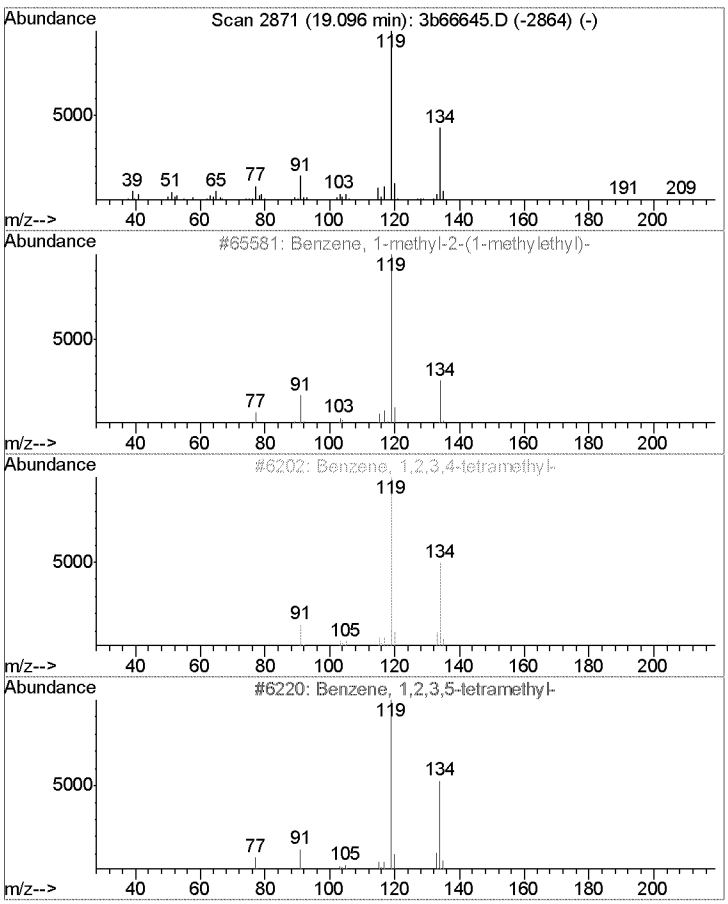
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

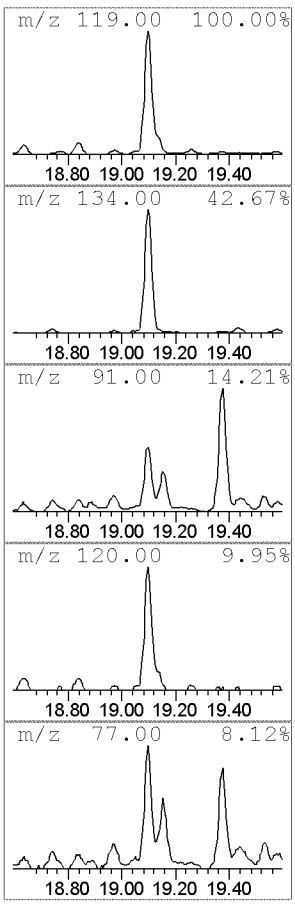
****

Peak Number 5 Benzene, 1-methyl-2-(1-meth... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.10	11.42 ug/L	359591	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	94





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

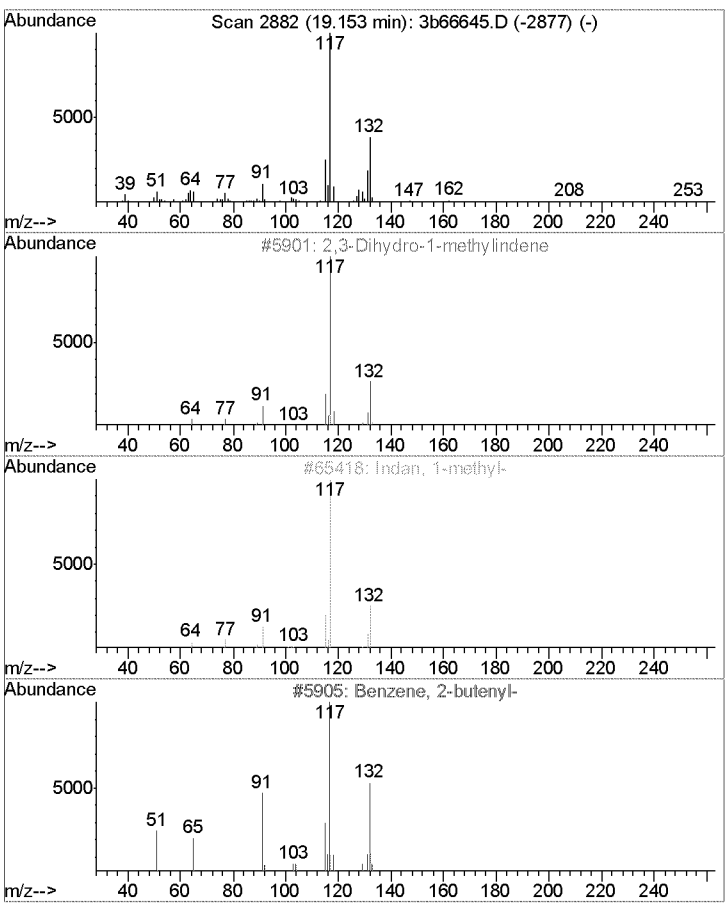
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

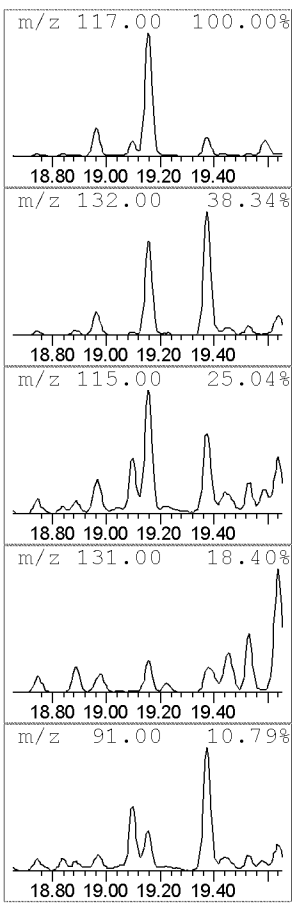
****

Peak Number 6 2,3-Dihydro-1-methylindene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.15	10.43 ug/L	328587	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	91
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	Benzene, 2-butenyl-	132	C10H12	001560-06-1	86
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	86
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	81





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

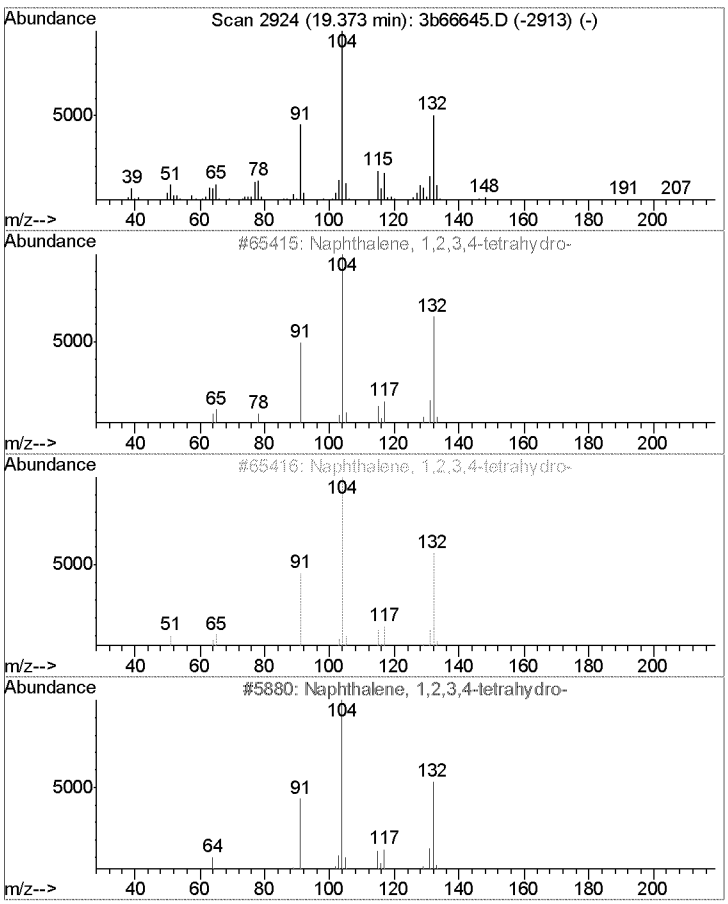
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

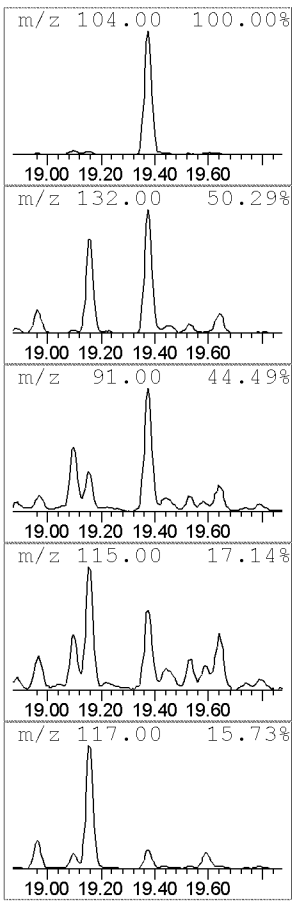
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.37	12.61 ug/L	397193	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
3	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	95
4	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	94
5	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	93





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

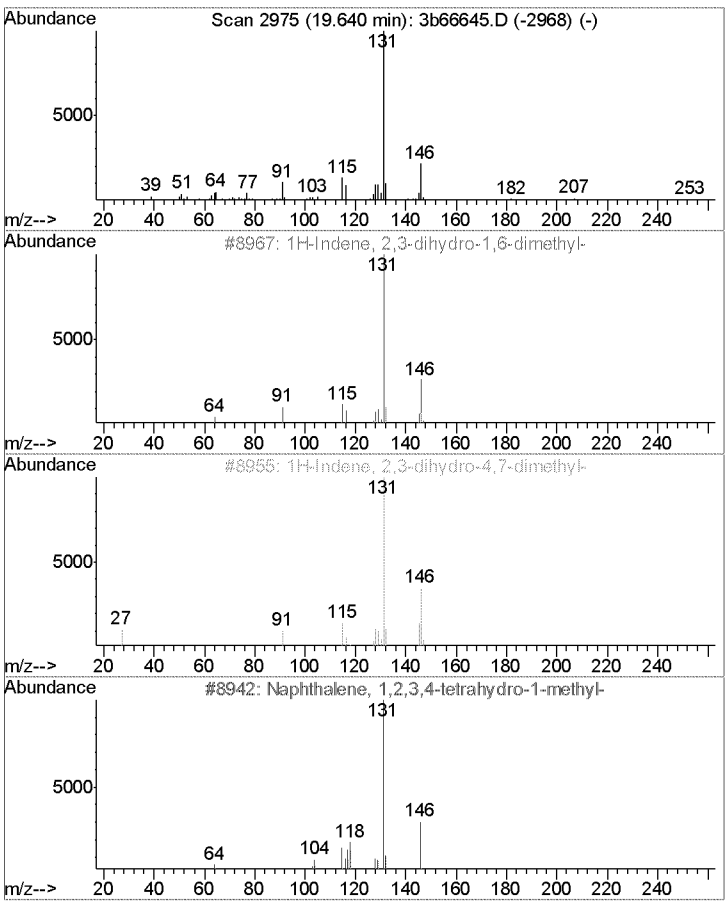
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

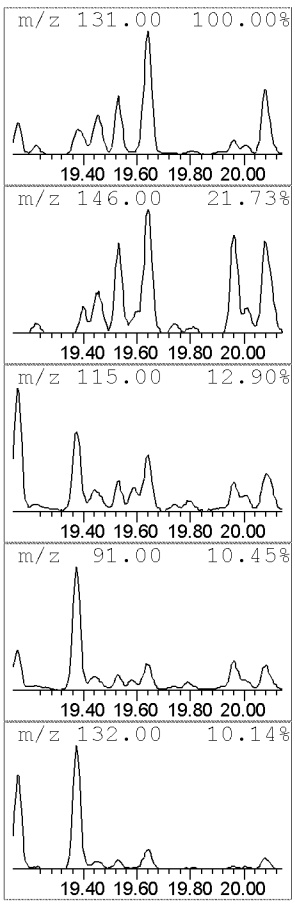
****

Peak Number 8 1H-Indene, 2,3-dihydro-1,6-... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.64	6.47 ug/L	203727	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-1,6-dimet...	146	C11H14	017059-48-2	91
2	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	87
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	87
4	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	86
5	1H-Indene, 2,3-dihydro-1,1-dimet...	146	C11H14	004912-92-9	83





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

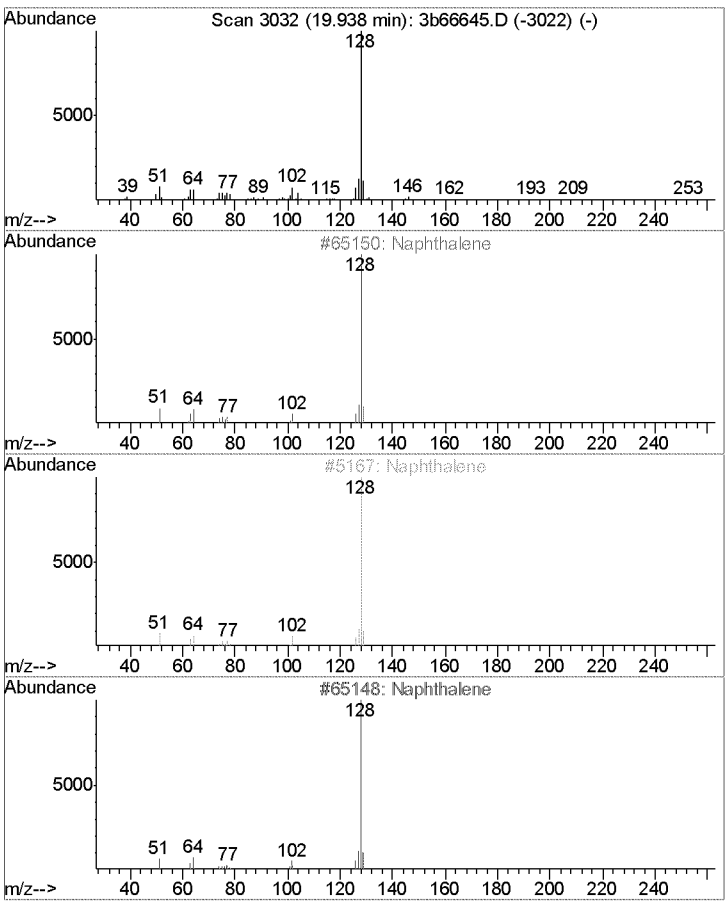
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

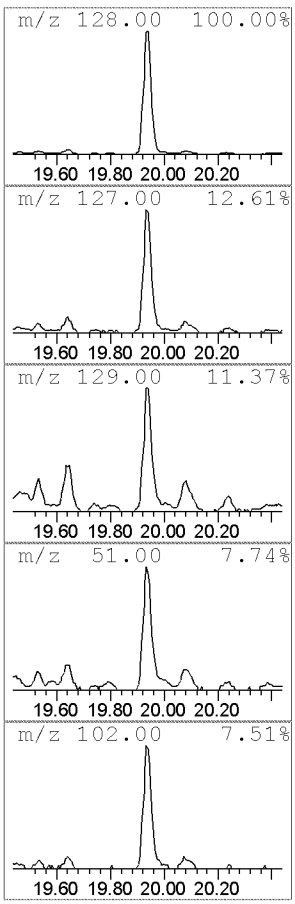
****

Peak Number 9 Naphthalene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.94	16.31 ug/L	513686	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	94
2	Naphthalene	128	C10H8	000091-20-3	94
3	Naphthalene	128	C10H8	000091-20-3	94
4	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	90
5	Azulene	128	C10H8	000275-51-4	90





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

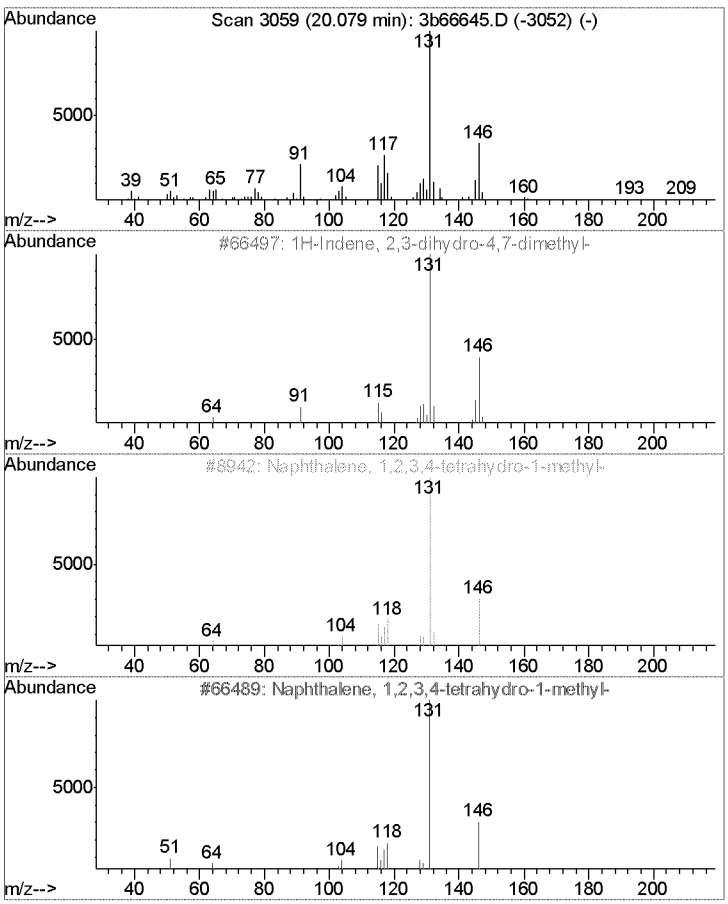
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

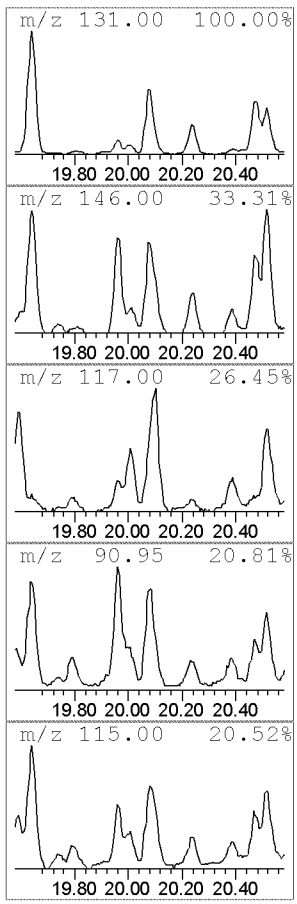
****

Peak Number 10 1H-Indene, 2,3-dihydro-4,7-... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.08	6.05 ug/L	190396	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	94
2	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	93
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	91
4	1H-Indene, 2,3-dihydro-1,2-dimet...	146	C11H14	017057-82-8	91
5	Benzene, (2-methyl-1-butenyl)-	146	C11H14	056253-64-6	87





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

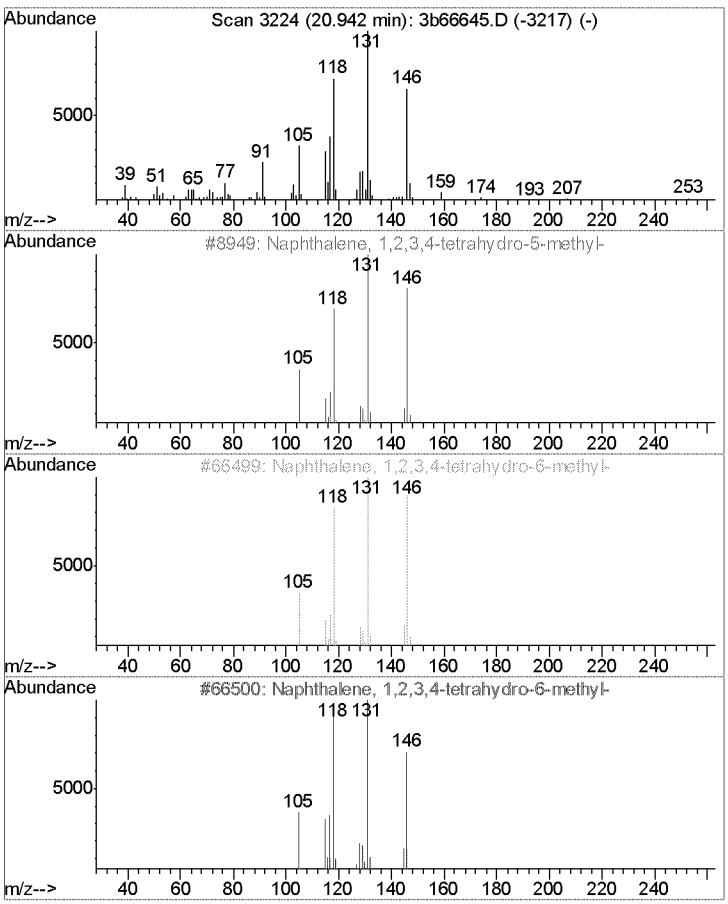
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

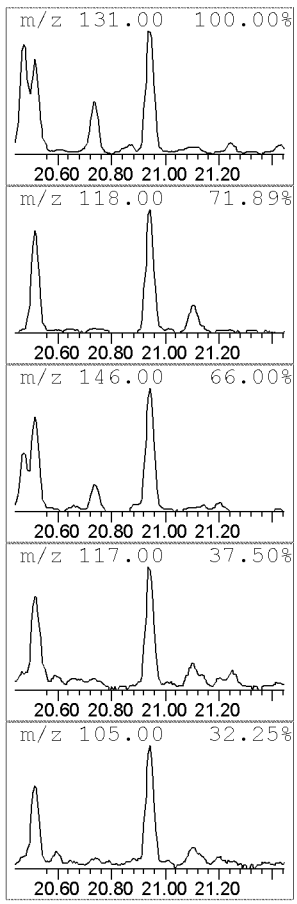
****

Peak Number 11 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.94	6.59 ug/L	207464	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	002809-64-5	94
2	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	94
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	91
4	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	002809-64-5	87
5	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	87





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

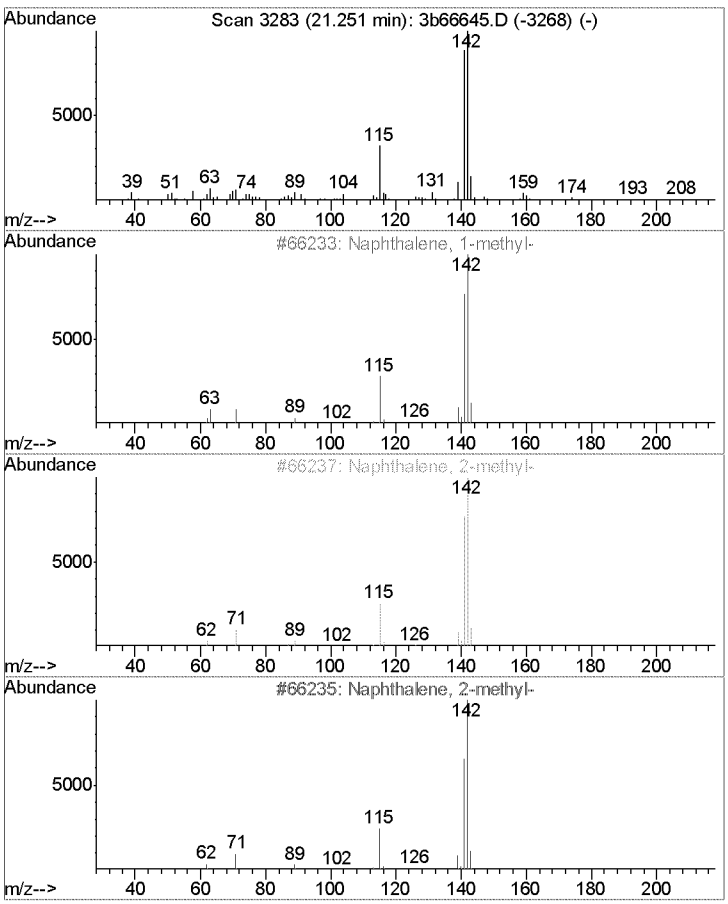
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

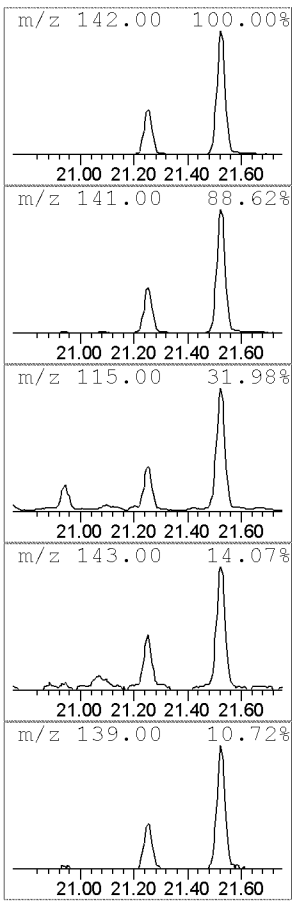
****

Peak Number 12 Naphthalene, 1-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.25	7.65 ug/L	241042	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	93
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	93
3	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	90
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	90
5	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	90





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

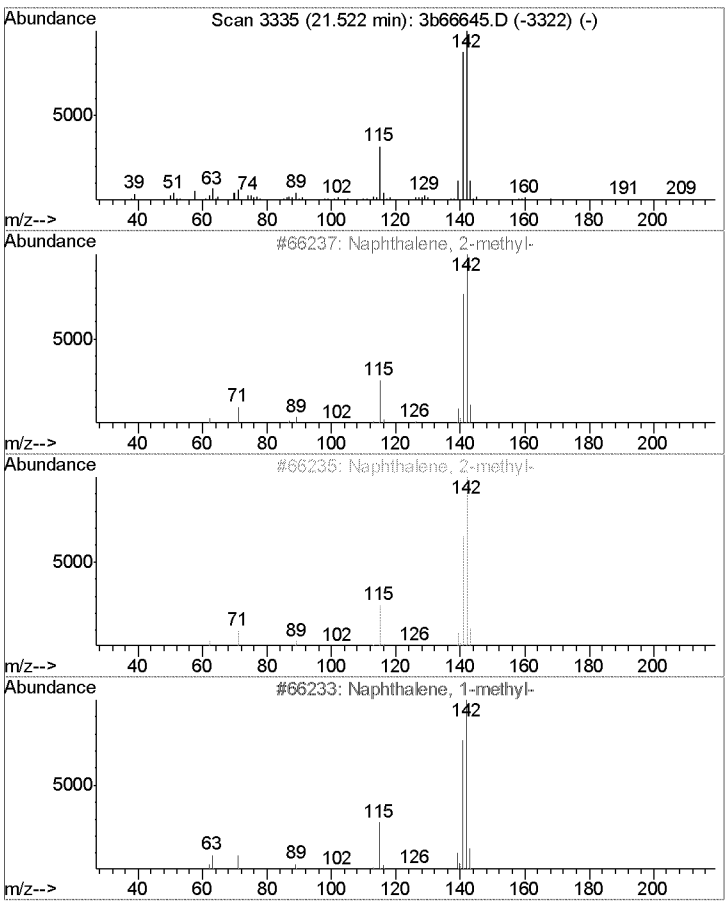
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

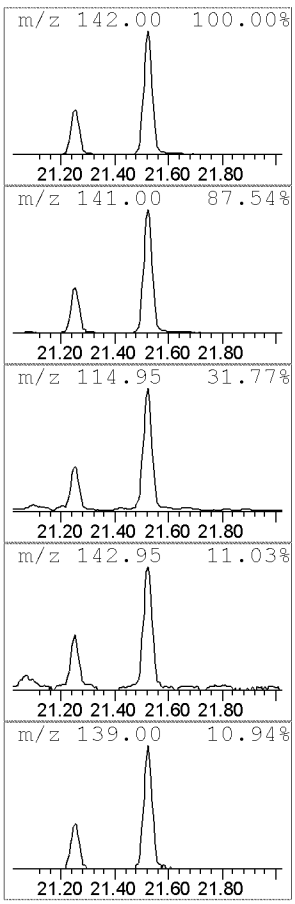
****

Peak Number 13 Naphthalene, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.52	18.48 ug/L	582099	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
5	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Indane	17.72	7.5	ug/L	236805	5	17.43	1574560	50.0
Benzene, 1-methyl...	18.10	7.6	ug/L	239177	5	17.43	1574560	50.0
Benzene, (2-methy...	18.31	6.2	ug/L	196179	5	17.43	1574560	50.0
Benzene, 1,2,4,5-...	18.54	5.4	ug/L	170492	5	17.43	1574560	50.0
Benzene, 1-methyl...	19.10	11.4	ug/L	359591	5	17.43	1574560	50.0
2,3-Dihydro-1-met...	19.15	10.4	ug/L	328587	5	17.43	1574560	50.0
Naphthalene, 1,2,...	19.37	12.6	ug/L	397193	5	17.43	1574560	50.0
1H-Indene, 2,3-di...	19.64	6.5	ug/L	203727	5	17.43	1574560	50.0
Naphthalene	19.94	16.3	ug/L	513686	5	17.43	1574560	50.0
1H-Indene, 2,3-di...	20.08	6.0	ug/L	190396	5	17.43	1574560	50.0
Naphthalene, 1,2,...	20.94	6.6	ug/L	207464	5	17.43	1574560	50.0
Naphthalene, 1-me...	21.25	7.7	ug/L	241042	5	17.43	1574560	50.0
Naphthalene, 2-me...	21.52	18.5	ug/L	582099	5	17.43	1574560	50.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 12:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

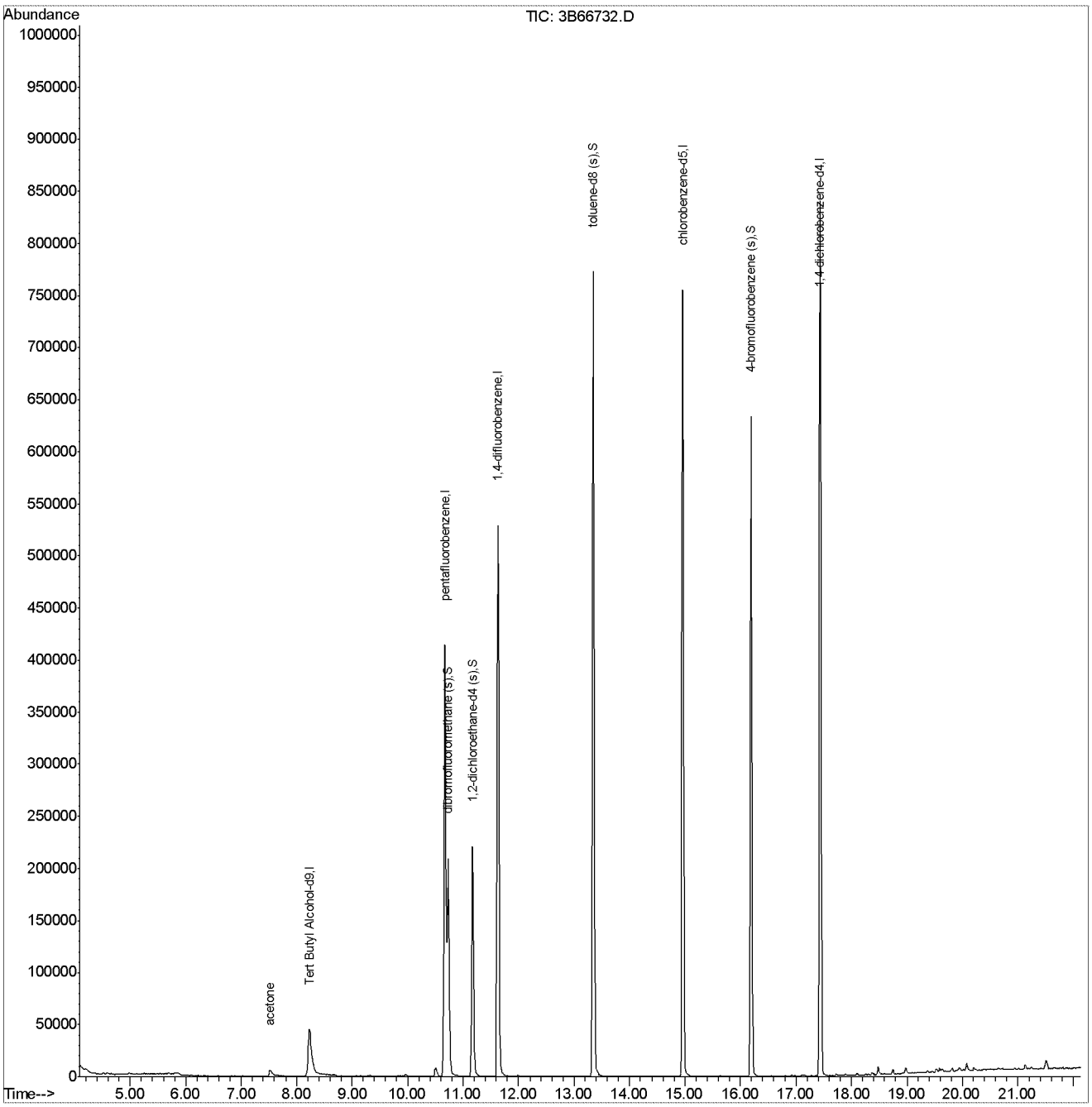
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	142921	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	412037	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	545967	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	520095	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	282519	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	160696	49.31	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.62%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	185136	43.34	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 86.68%			
85) toluene-d8 (s)	13.34	98	631439	51.66	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.32%			
111) 4-bromofluorobenzene (s)	16.19	95	244383	50.02	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.04%			
Target Compounds						Qvalue
29) acetone	7.52	43	16696	3.12	ug/L	98

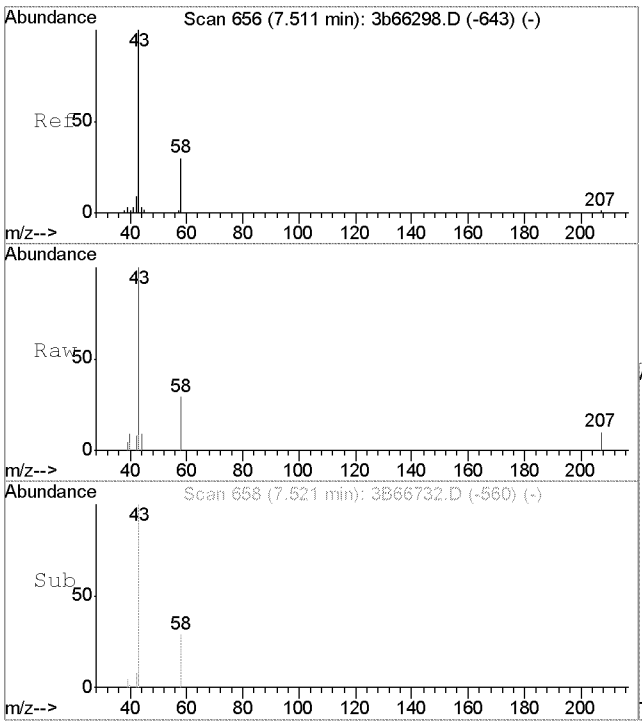
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 12:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

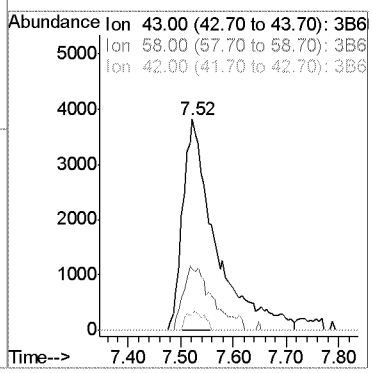




#29
acetone
Concen: 3.12 ug/L
RT: 7.52 min Scan# 658
Delta R.T. 0.01 min
Lab File: 3B66732.D
Acq: 31 Jan 2011 4:24 pm

Tgt Ion: 43 Resp: 16696

Ion	Ratio	Lower	Upper
43	100		
58	29.0	0.2	60.2
42	8.4	0.0	39.0



6.1.3

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.985	78	173	226	rVB7	1279	14830	0.92%	0.153%
2	6.324	427	429	442	rVV2	364	992	0.06%	0.010%
3	6.591	442	480	525	rVB3	418	6336	0.39%	0.065%
4	6.983	540	555	560	rBV3	280	908	0.06%	0.009%
5	7.025	560	563	569	rVV2	432	425	0.03%	0.004%
6	7.072	569	572	581	rVB3	232	455	0.03%	0.005%
7	7.349	622	625	635	rVB3	279	614	0.04%	0.006%
8	7.464	635	647	649	rBV3	239	583	0.04%	0.006%
9	7.521	649	658	681	rBV2	5380	22090	1.37%	0.227%
10	7.762	701	704	707	rVB3	425	429	0.03%	0.004%
11	7.867	718	724	727	rVB3	282	486	0.03%	0.005%
12	7.914	727	733	749	rBV3	294	1219	0.08%	0.013%
13	8.228	778	793	900	rVB2	44394	245192	15.18%	2.524%
14	8.798	900	902	930	rBV3	330	1175	0.07%	0.012%
15	9.315	994	1001	1014	rVB2	604	1847	0.11%	0.019%
16	9.394	1014	1016	1026	rBV2	209	378	0.02%	0.004%
17	9.525	1035	1041	1069	rBV3	320	1350	0.08%	0.014%
18	9.713	1076	1077	1091	rBV3	343	530	0.03%	0.005%
19	9.833	1096	1100	1102	rBV2	410	456	0.03%	0.005%
20	9.964	1118	1125	1134	rVB4	1539	4049	0.25%	0.042%
21	10.084	1146	1148	1154	rVB2	362	303	0.02%	0.003%
22	10.152	1154	1161	1170	rVB3	331	885	0.05%	0.009%
23	10.508	1220	1229	1247	rBV2	7553	20720	1.28%	0.213%
24	10.670	1247	1260	1267	rVV	414248	1065096	65.94%	10.964%
25	10.728	1267	1271	1313	rVB	209448	489604	30.31%	5.040%
26	10.958	1313	1315	1318	rBV2	359	316	0.02%	0.003%
27	11.005	1321	1324	1326	rBV	247	279	0.02%	0.003%
28	11.094	1334	1341	1344	rBV3	331	657	0.04%	0.007%
29	11.167	1344	1355	1392	rBV	220309	523085	32.38%	5.384%
30	11.392	1392	1398	1403	rVB3	291	613	0.04%	0.006%
31	11.538	1421	1426	1431	rVB2	488	519	0.03%	0.005%
32	11.627	1431	1443	1487	rBV	528588	1184354	73.32%	12.191%
33	11.925	1499	1500	1504	rVB2	445	367	0.02%	0.004%
34	11.978	1504	1510	1519	rBV2	1360	2982	0.18%	0.031%

M3B3095.M Tue Feb 01 14:21:26 2011 MS3B

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	12.203	1550	1553	1555	rBV2	404	280	0.02%	0.003%
36	12.407	1590	1592	1597	rBV2	307	291	0.02%	0.003%
37	12.443	1597	1599	1604	rVB2	291	316	0.02%	0.003%
38	12.679	1639	1644	1646	rBV2	322	381	0.02%	0.004%
39	12.757	1653	1659	1662	rBV2	385	402	0.02%	0.004%
40	12.919	1684	1690	1691	rVV2	301	317	0.02%	0.003%
41	13.024	1707	1710	1713	rVB2	341	355	0.02%	0.004%
42	13.118	1725	1728	1731	rVV2	287	310	0.02%	0.003%
43	13.154	1731	1735	1739	rVV2	391	611	0.04%	0.006%
44	13.343	1759	1771	1810	rVV	772973	1613222	99.87%	16.606%
45	13.557	1810	1812	1821	rVV4	684	1652	0.10%	0.017%
46	13.620	1821	1824	1828	rVV2	400	524	0.03%	0.005%
47	13.693	1833	1838	1840	rVV2	210	346	0.02%	0.004%
48	13.730	1843	1845	1852	rVB3	243	410	0.03%	0.004%
49	13.881	1866	1874	1878	rVB4	361	982	0.06%	0.010%
50	13.939	1878	1885	1889	rBV2	257	581	0.04%	0.006%
51	14.007	1896	1898	1903	rVB3	283	393	0.02%	0.004%
52	14.101	1912	1916	1920	rBV2	259	423	0.03%	0.004%
53	14.164	1927	1928	1941	rVB3	401	1250	0.08%	0.013%
54	14.269	1944	1948	1958	rVB2	290	816	0.05%	0.008%
55	14.336	1958	1961	1966	rBV2	254	429	0.03%	0.004%
56	14.488	1987	1990	1996	rVB3	320	577	0.04%	0.006%
57	14.540	1996	2000	2001	rBV2	269	333	0.02%	0.003%
58	14.582	2005	2008	2011	rVB2	287	329	0.02%	0.003%
59	14.645	2011	2020	2022	rVB2	370	772	0.05%	0.008%
60	14.676	2022	2026	2028	rBV3	311	394	0.02%	0.004%
61	14.734	2033	2037	2041	rVB2	252	350	0.02%	0.004%
62	14.781	2041	2046	2054	rVB3	306	792	0.05%	0.008%
63	14.860	2054	2061	2067	rBV3	305	901	0.06%	0.009%
64	14.959	2069	2080	2106	rBV	755036	1488365	92.14%	15.320%
65	15.267	2136	2139	2144	rBV3	301	335	0.02%	0.003%
66	15.398	2159	2164	2168	rVB3	207	374	0.02%	0.004%
67	15.435	2168	2171	2175	rBV3	387	402	0.02%	0.004%
68	15.634	2206	2209	2222	rBV4	504	699	0.04%	0.007%
69	15.906	2254	2261	2264	rBV3	239	373	0.02%	0.004%
70	15.958	2269	2271	2278	rVV3	425	640	0.04%	0.007%
71	16.021	2278	2283	2303	rVV3	234	867	0.05%	0.009%

SII-SSA-0014-003479

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	16.188	2305	2315	2344	rVB	633563	1187585	73.52%	12.224%
73	16.402	2352	2356	2362	rVB3	403	378	0.02%	0.004%
74	16.554	2380	2385	2394	rVB3	499	731	0.05%	0.008%
75	16.633	2398	2400	2407	rVV3	211	280	0.02%	0.003%
76	16.674	2407	2408	2431	rVB3	328	1178	0.07%	0.012%
77	16.810	2431	2434	2436	rBV3	430	297	0.02%	0.003%
78	16.931	2450	2457	2463	rBV5	906	2055	0.13%	0.021%
79	16.983	2463	2467	2475	rVB4	676	1361	0.08%	0.014%
80	17.156	2486	2500	2519	rVB4	1031	3834	0.24%	0.039%
81	17.276	2519	2523	2535	rBV4	568	1244	0.08%	0.013%
82	17.433	2543	2553	2582	rBV	840092	1615342	100.00%	16.627%
83	17.731	2604	2610	2619	rVB4	1464	2478	0.15%	0.026%
84	17.841	2628	2631	2635	rBV2	502	492	0.03%	0.005%
85	17.893	2637	2641	2653	rVB5	1059	1907	0.12%	0.020%
86	18.055	2653	2672	2674	rBV4	356	1300	0.08%	0.013%
87	18.097	2676	2680	2704	rVB6	1715	4560	0.28%	0.047%
88	18.301	2708	2719	2728	rVB7	744	2002	0.12%	0.021%
89	18.369	2728	2732	2747	rBV7	2056	5198	0.32%	0.054%
90	18.484	2747	2754	2774	rBV	7982	17404	1.08%	0.179%
91	18.599	2774	2776	2798	rVB6	922	3105	0.19%	0.032%
92	18.740	2798	2803	2827	rBV4	4476	11397	0.71%	0.117%
93	18.923	2836	2838	2843	rBV3	431	478	0.03%	0.005%
94	18.981	2843	2849	2867	rVV4	5271	11279	0.70%	0.116%
95	19.541	2950	2956	2960	rBV2	2458	3972	0.25%	0.041%
96	19.588	2960	2965	3002	rVV4	3405	11584	0.72%	0.119%
97	19.954	3002	3035	3053	rVV4	3228	14542	0.90%	0.150%
98	20.079	3053	3059	3079	rVB3	7187	13358	0.83%	0.138%
99	20.210	3079	3084	3257	rBV3	2814	59199	3.66%	0.609%
100	21.502	3325	3331	3448	rBV3	7505	21431	1.33%	0.221%

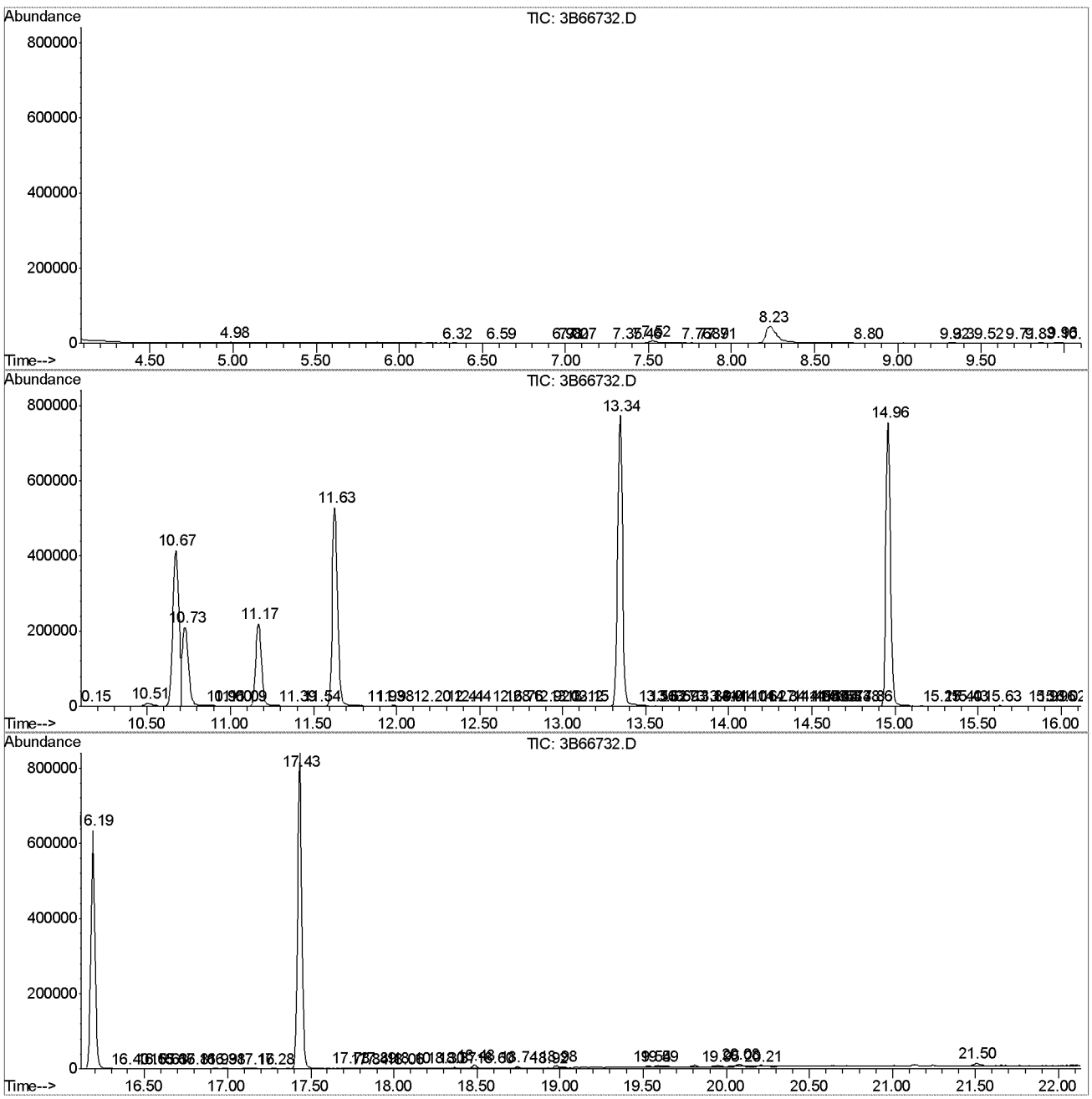
Sum of corrected areas: 9714889

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



ACCUTEST LABORATORIES
JA66701

SII-SSA-0014-003481

Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66594.D
Acq On : 27 Jan 2011 2:38 am
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 28 09:15:15 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Fri Jan 28 08:45:50 2011
Response via : Initial Calibration

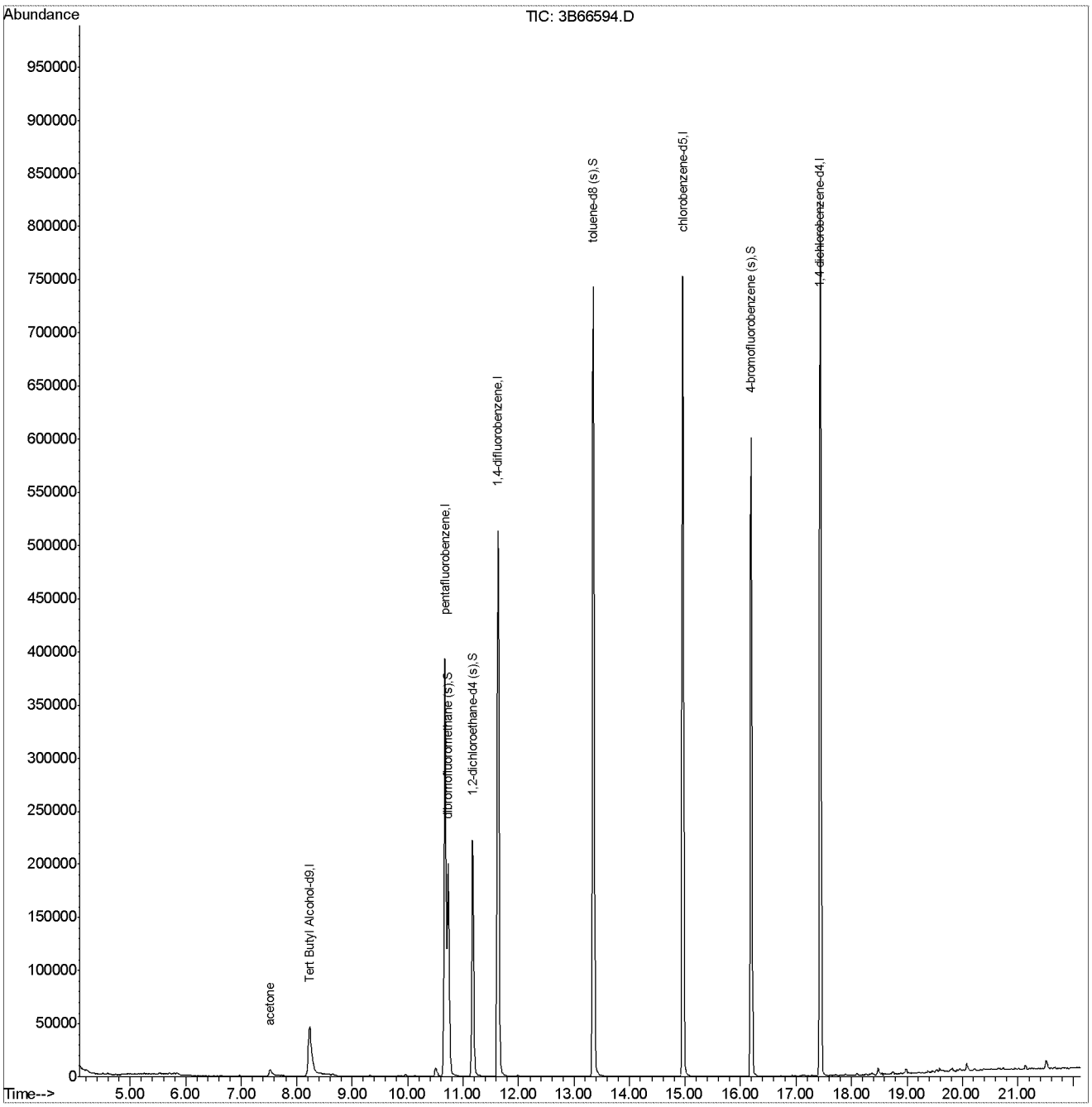
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	148631	500.00	ug/L	-0.01
5) pentafluorobenzene	10.68	168	372820	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	509196	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	487645	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	260879	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	151580	51.41	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.82%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	193889	50.16	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.32%			
85) toluene-d8 (s)	13.34	98	596673	52.34	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.68%			
111) 4-bromofluorobenzene (s)	16.19	95	235279	52.15	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.30%			
Target Compounds						Qvalue
29) acetone	7.52	43	16160	3.88	ug/L	99

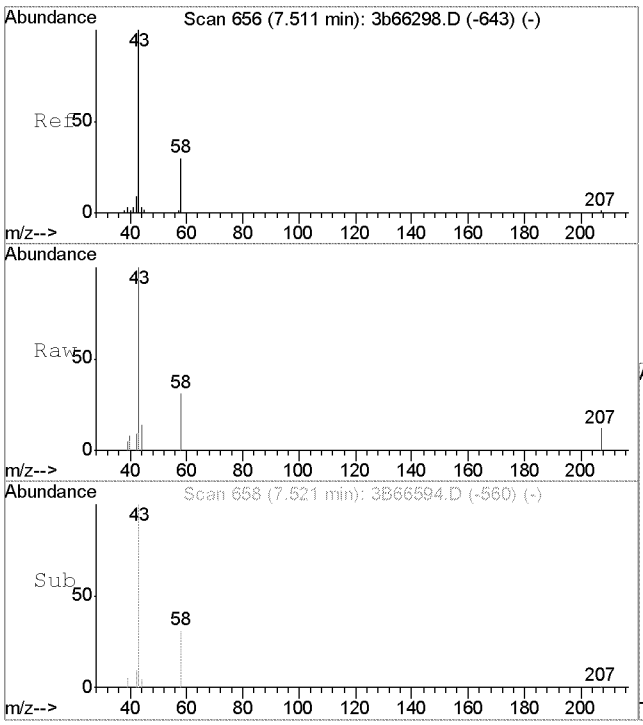
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66594.D
Acq On : 27 Jan 2011 2:38 am
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 28 09:15:15 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Fri Jan 28 08:45:50 2011
Response via : Initial Calibration

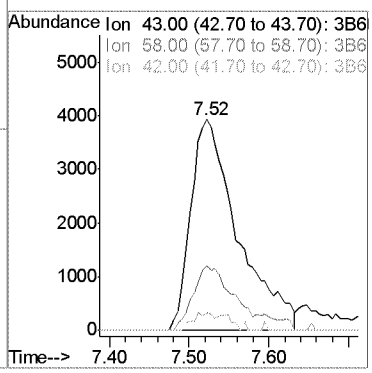




#29
acetone
Concen: 3.88 ug/L
RT: 7.52 min Scan# 658
Delta R.T. 0.01 min
Lab File: 3B66594.D
Acq: 27 Jan 2011 2:38 am

Tgt Ion: 43 Resp: 16160

Ion	Ratio	Lower	Upper
43	100		
58	30.9	0.2	60.2
42	8.5	0.0	39.0



6.1.3
6

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 28 08:27:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	146338	500.00	ug/L	-0.01
5) pentafluorobenzene	10.68	168	391374	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	529061	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	507250	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	270459	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	161249	52.10	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.20%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	201100	49.56	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.12%			
85) toluene-d8 (s)	13.34	98	614511	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.76%			
111) 4-bromofluorobenzene (s)	16.19	95	241225	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.16%			

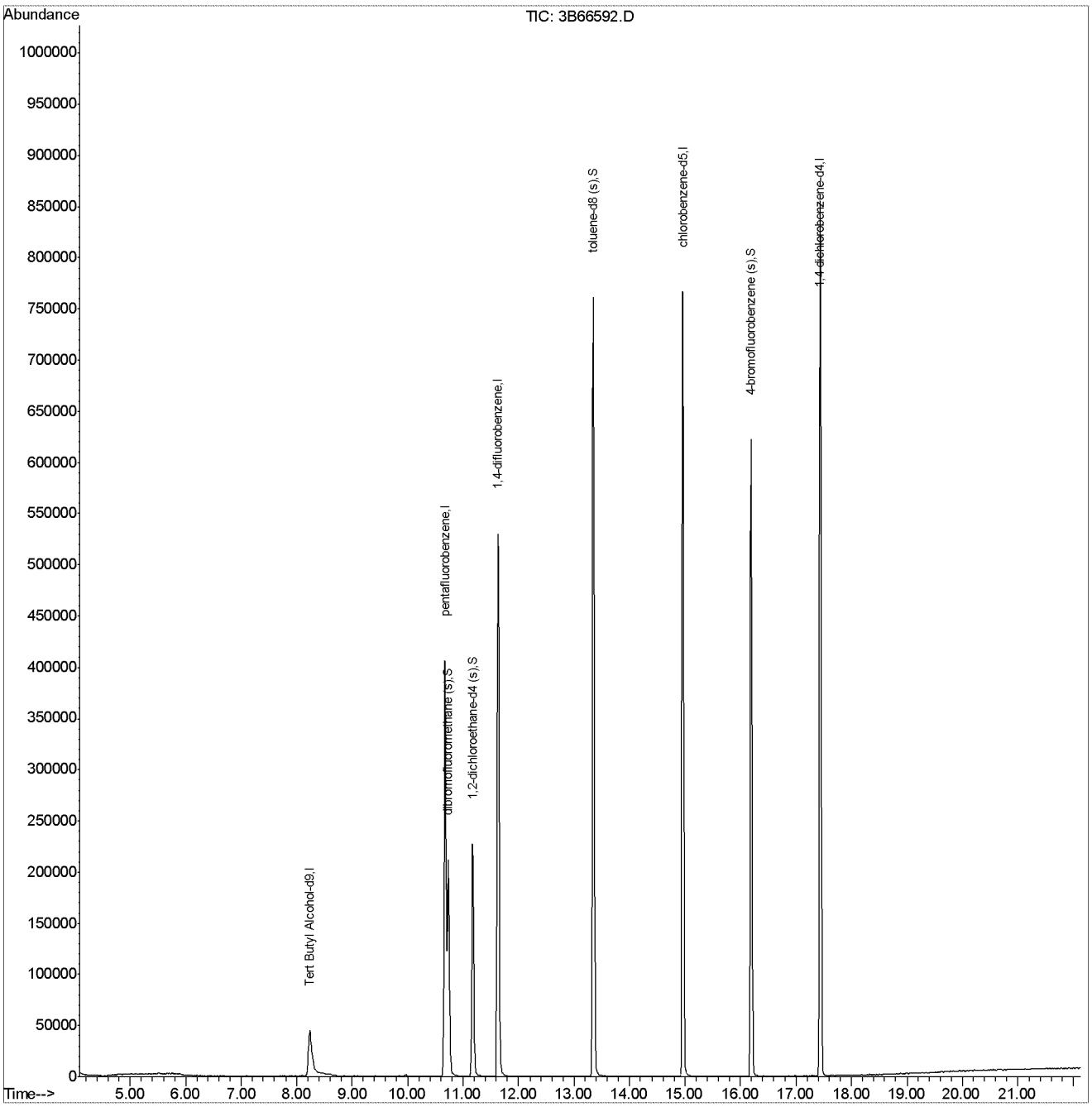
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 28 08:27:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.655	93	110	113	rBV4	1001	3863	0.24%	0.037%
2	4.687	113	116	125	rBV3	696	1897	0.12%	0.018%
3	5.173	192	209	241	rBV6	879	4687	0.29%	0.045%
4	5.414	252	255	263	rBV5	753	1509	0.09%	0.015%
5	6.470	448	457	474	rBV3	269	1024	0.06%	0.010%
6	6.569	474	476	497	rVV3	237	642	0.04%	0.006%
7	6.690	497	499	511	rVB3	251	296	0.02%	0.003%
8	6.773	511	515	518	rVB3	270	374	0.02%	0.004%
9	6.800	518	520	524	rBV2	193	286	0.02%	0.003%
10	6.857	530	531	540	rBV2	278	475	0.03%	0.005%
11	7.134	582	584	601	rVB3	315	1090	0.07%	0.011%
12	7.229	601	602	608	rBV3	269	448	0.03%	0.004%
13	7.621	675	677	680	rBV2	287	270	0.02%	0.003%
14	7.647	680	682	691	rVV3	232	370	0.02%	0.004%
15	7.704	691	693	700	rVB2	280	385	0.02%	0.004%
16	7.908	730	732	742	rVB3	304	439	0.03%	0.004%
17	7.976	742	745	757	rVB3	301	418	0.03%	0.004%
18	8.050	757	759	767	rBV2	285	341	0.02%	0.003%
19	8.233	779	794	914	rVV	44796	260565	16.17%	2.527%
20	8.871	914	916	929	rVV3	302	735	0.05%	0.007%
21	8.949	929	931	938	rVV3	305	445	0.03%	0.004%
22	9.033	938	947	960	rVV3	387	1375	0.09%	0.013%
23	9.111	960	962	974	rVV3	314	804	0.05%	0.008%
24	9.232	978	985	989	rVB3	281	493	0.03%	0.005%
25	9.404	993	1018	1086	rVV3	383	4607	0.29%	0.045%
26	9.765	1086	1087	1102	rVV3	330	854	0.05%	0.008%
27	9.849	1102	1103	1109	rVB2	393	595	0.04%	0.006%
28	9.974	1119	1127	1138	rVB3	1332	3410	0.21%	0.033%
29	10.288	1184	1187	1194	rVB3	257	423	0.03%	0.004%
30	10.388	1194	1206	1220	rVV3	270	1102	0.07%	0.011%
31	10.513	1220	1230	1238	rVB3	253	603	0.04%	0.006%
32	10.670	1248	1260	1267	rBV	405742	1027394	63.75%	9.963%
33	10.733	1267	1272	1313	rVV	211535	516459	32.05%	5.008%
34	10.979	1313	1319	1323	rVB	297	508	0.03%	0.005%

M3B3095.M Fri Jan 28 09:38:03 2011 MS3B

SII-SSA-0014-003488

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.172	1342	1356	1392	rVV	227004	554056	34.38%	5.373%
36	11.371	1392	1394	1400	rVB3	442	419	0.03%	0.004%
37	11.465	1407	1412	1416	rBV	280	345	0.02%	0.003%
38	11.627	1429	1443	1484	rBV	530161	1197056	74.28%	11.608%
39	11.852	1484	1486	1490	rVV2	554	656	0.04%	0.006%
40	11.889	1490	1493	1496	rVV2	351	466	0.03%	0.005%
41	12.333	1577	1578	1585	rVV2	250	342	0.02%	0.003%
42	12.412	1592	1593	1597	rBV2	326	283	0.02%	0.003%
43	12.490	1604	1608	1611	rBV2	309	381	0.02%	0.004%
44	12.548	1616	1619	1624	rVB2	387	349	0.02%	0.003%
45	12.909	1685	1688	1690	rVB2	327	322	0.02%	0.003%
46	12.961	1693	1698	1703	rVB3	331	582	0.04%	0.006%
47	13.055	1713	1716	1725	rVB3	326	687	0.04%	0.007%
48	13.139	1729	1732	1738	rVB3	381	601	0.04%	0.006%
49	13.175	1738	1739	1746	rBV2	334	453	0.03%	0.004%
50	13.343	1755	1771	1826	rBV	761182	1611543	100.00%	15.627%
51	13.646	1826	1829	1835	rVV3	348	549	0.03%	0.005%
52	13.683	1835	1836	1846	rVV3	288	538	0.03%	0.005%
53	13.798	1846	1858	1859	rVB3	250	617	0.04%	0.006%
54	13.840	1863	1866	1868	rBV3	383	407	0.03%	0.004%
55	13.944	1871	1886	1888	rVB3	210	712	0.04%	0.007%
56	14.012	1888	1899	1900	rVB3	310	817	0.05%	0.008%
57	14.033	1900	1903	1905	rBV2	256	277	0.02%	0.003%
58	14.070	1905	1910	1913	rVB3	272	506	0.03%	0.005%
59	14.106	1913	1917	1923	rBV	267	588	0.04%	0.006%
60	14.153	1923	1926	1928	rVB2	307	319	0.02%	0.003%
61	14.174	1928	1930	1933	rBV2	320	365	0.02%	0.004%
62	14.200	1933	1935	1938	rBV2	223	269	0.02%	0.003%
63	14.242	1938	1943	1946	rVB3	335	499	0.03%	0.005%
64	14.347	1957	1963	1965	rBV	333	411	0.03%	0.004%
65	14.399	1970	1973	1980	rVB3	219	295	0.02%	0.003%
66	14.478	1985	1988	1996	rVB2	387	770	0.05%	0.007%
67	14.556	1996	2003	2006	rBV3	420	872	0.05%	0.008%
68	14.598	2006	2011	2013	rBV3	252	371	0.02%	0.004%
69	14.624	2013	2016	2023	rVB	366	549	0.03%	0.005%
70	14.697	2023	2030	2034	rBV3	336	723	0.04%	0.007%
71	14.729	2034	2036	2044	rVV2	240	419	0.03%	0.004%

SII-SSA-0014-003489

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.797	2044	2049	2052	rVV2	237	441	0.03%	0.004%
73	14.959	2068	2080	2115	rVB	766549	1508202	93.59%	14.625%
74	15.147	2115	2116	2122	rBV2	597	940	0.06%	0.009%
75	15.351	2151	2155	2163	rVB2	170	393	0.02%	0.004%
76	15.424	2163	2169	2184	rVB2	361	1530	0.09%	0.015%
77	15.524	2184	2188	2191	rBV2	268	473	0.03%	0.005%
78	15.566	2191	2196	2205	rBV3	215	556	0.03%	0.005%
79	15.628	2205	2208	2211	rBV2	263	265	0.02%	0.003%
80	15.790	2237	2239	2248	rVB2	203	301	0.02%	0.003%
81	15.848	2248	2250	2256	rVB2	321	355	0.02%	0.003%
82	15.953	2256	2270	2275	rVB3	279	1123	0.07%	0.011%
83	16.094	2275	2297	2300	rBV2	426	1620	0.10%	0.016%
84	16.188	2306	2315	2347	rVB	621942	1178156	73.11%	11.424%
85	16.402	2354	2356	2368	rBV2	389	436	0.03%	0.004%
86	16.580	2387	2390	2421	rVB3	271	803	0.05%	0.008%
87	16.868	2442	2445	2465	rBV3	368	1071	0.07%	0.010%
88	16.988	2465	2468	2470	rVB3	482	452	0.03%	0.004%
89	17.077	2470	2485	2489	rVB3	320	1175	0.07%	0.011%
90	17.156	2489	2500	2508	rBV3	357	1496	0.09%	0.015%
91	17.375	2537	2542	2543	rBV	531	506	0.03%	0.005%
92	17.433	2543	2553	2581	rVV	854727	1603575	99.51%	15.550%
93	17.731	2607	2610	2629	rBV4	551	2253	0.14%	0.022%
94	17.835	2629	2630	2640	rVV4	500	1131	0.07%	0.011%
95	17.940	2640	2650	2673	rVV5	627	3638	0.23%	0.035%
96	18.134	2674	2687	2690	rVB4	604	2119	0.13%	0.021%
97	18.306	2718	2720	2725	rVB3	417	442	0.03%	0.004%
98	18.510	2725	2759	2765	rBV4	755	4723	0.29%	0.046%
99	18.662	2775	2788	2795	rBV5	610	2144	0.13%	0.021%
100	22.103	2795	3446	3448	rVV7	6725	773649	48.01%	7.502%

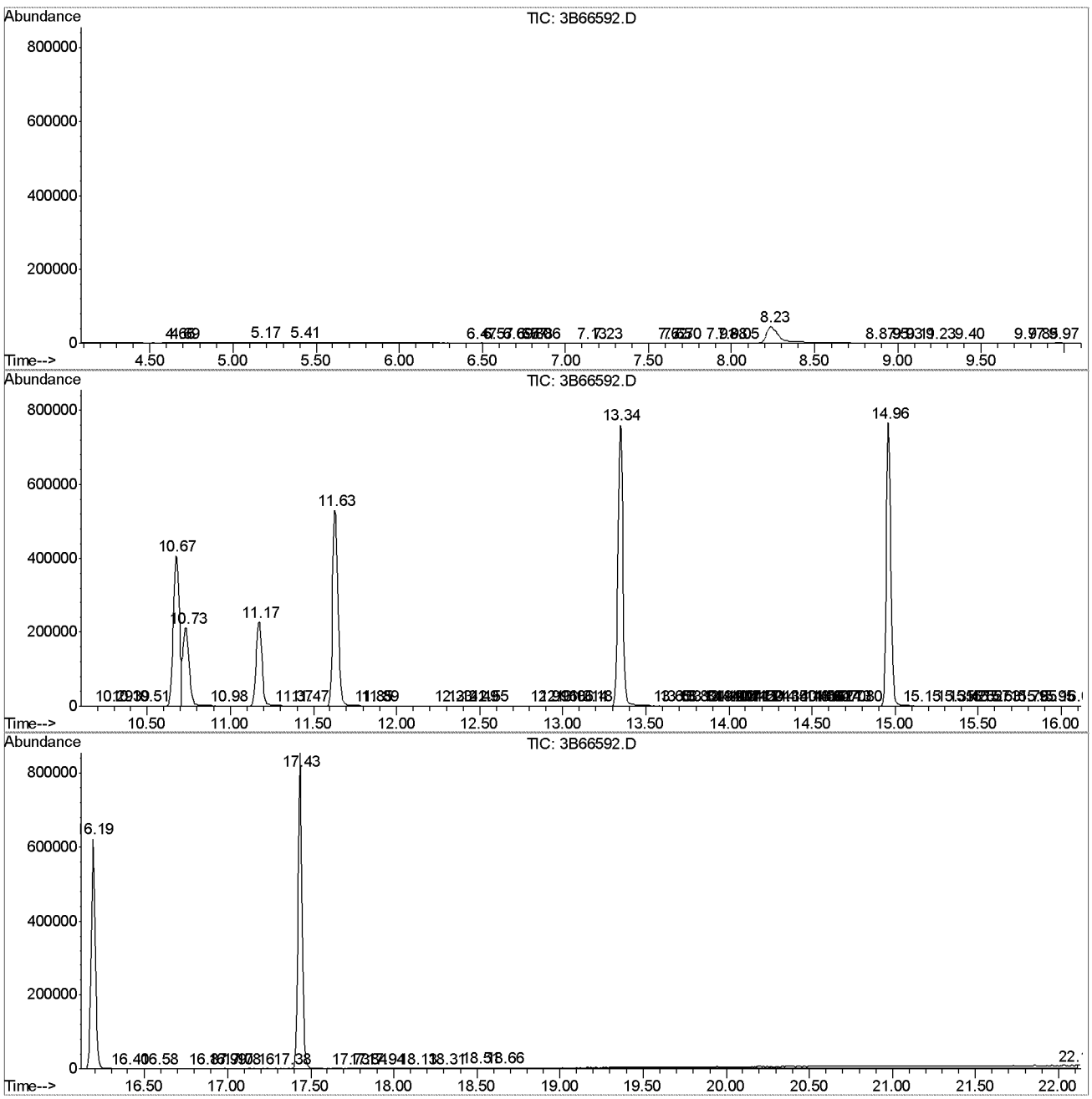
Sum of corrected areas: 10312568

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 28 09:16:32 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

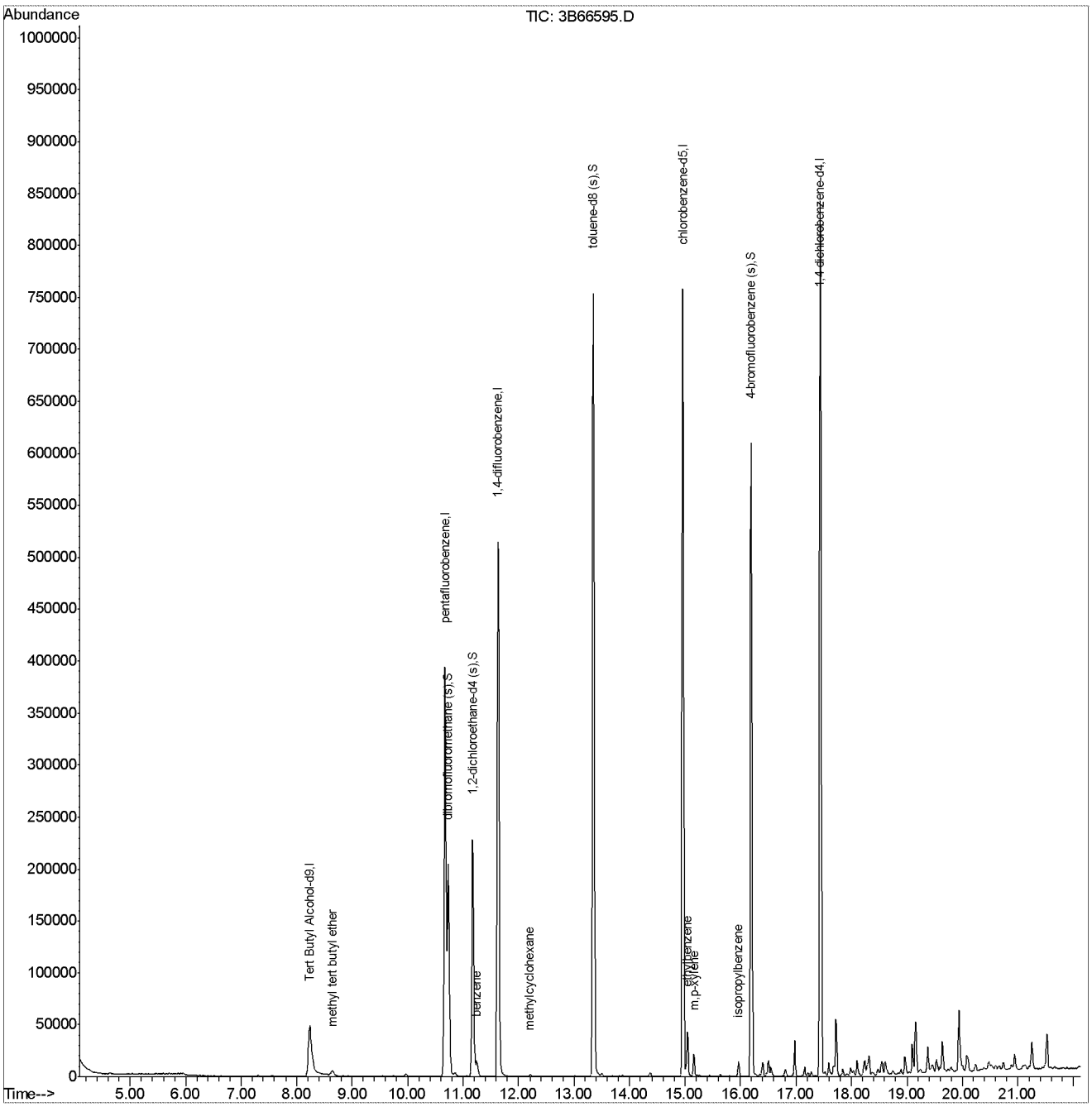
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	145865	500.00	ug/L	0.00
5) pentafluorobenzene	10.68	168	380302	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	512827	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	493434	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	265065	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	155095	51.57	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.14%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	198050	50.23	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.46%			
85) toluene-d8 (s)	13.35	98	604317	52.63	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 105.26%			
111) 4-bromofluorobenzene (s)	16.19	95	237929	51.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.82%			
Target Compounds						Qvalue
37) methyl tert butyl ether	8.64	73	8160	0.77	ug/L	98
70) benzene	11.24	78	14142	1.12	ug/L	98
82) methylcyclohexane	12.21	83	1242	0.26	ug/L	96
103) ethylbenzene	15.04	91	35567	2.39	ug/L	99
104) m,p-xylene	15.16	106	7524	1.33	ug/L	93
110) isopropylbenzene	15.96	105	12536	0.79	ug/L	97

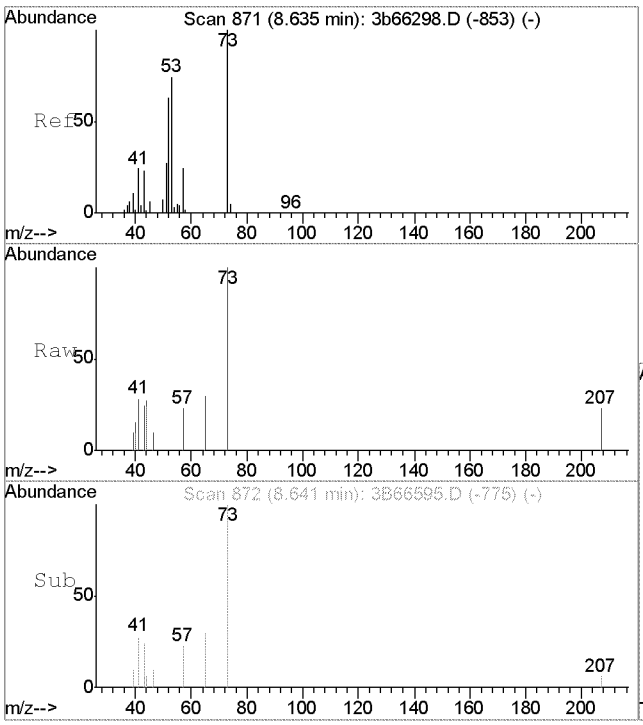
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 28 09:16:32 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

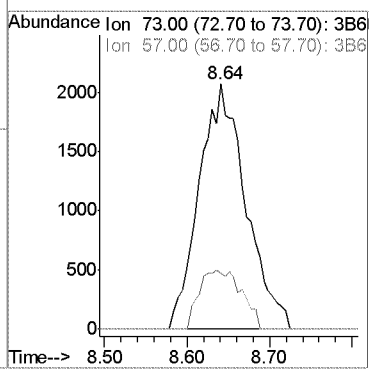


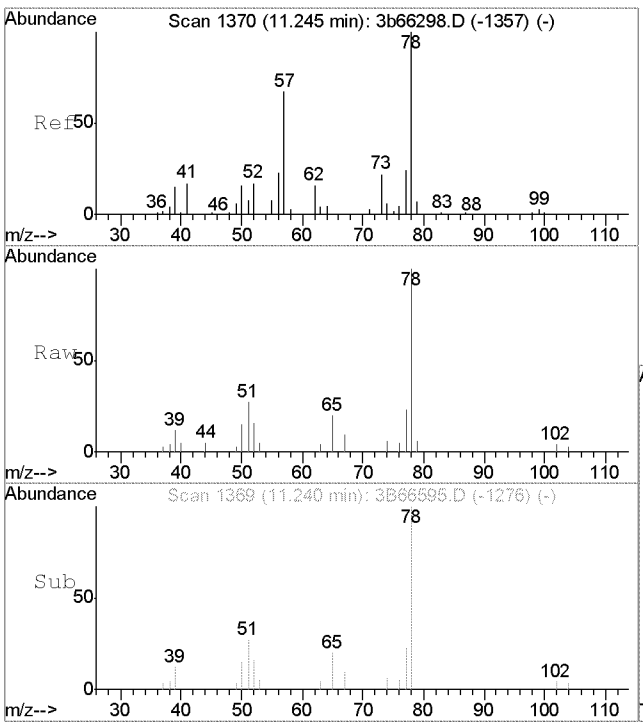


#37
methyl tert butyl ether
Concen: 0.77 ug/L
RT: 8.64 min Scan# 872
Delta R.T. 0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 73 Resp: 8160

Ion	Ratio	Lower	Upper
73	100		
57	22.6	0.0	53.8

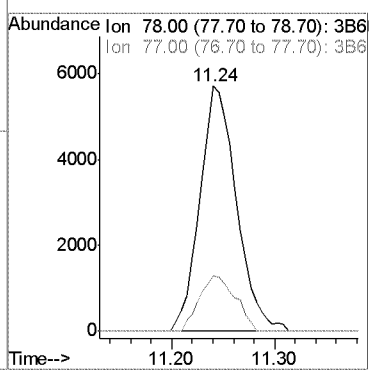


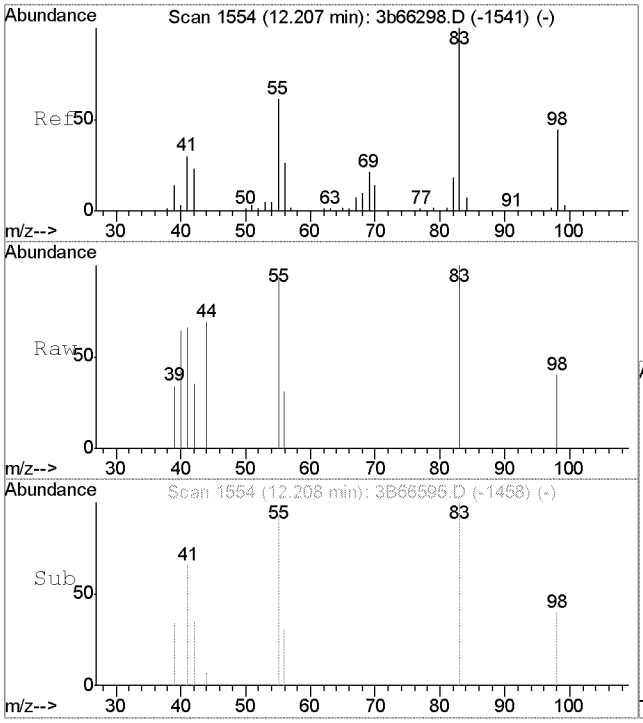


#70
benzene
Concen: 1.12 ug/L
RT: 11.24 min Scan# 1369
Delta R.T. -0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 78 Resp: 14142

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	53.9

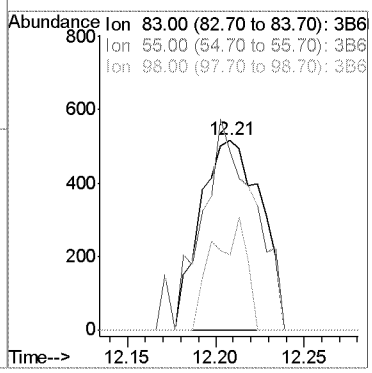


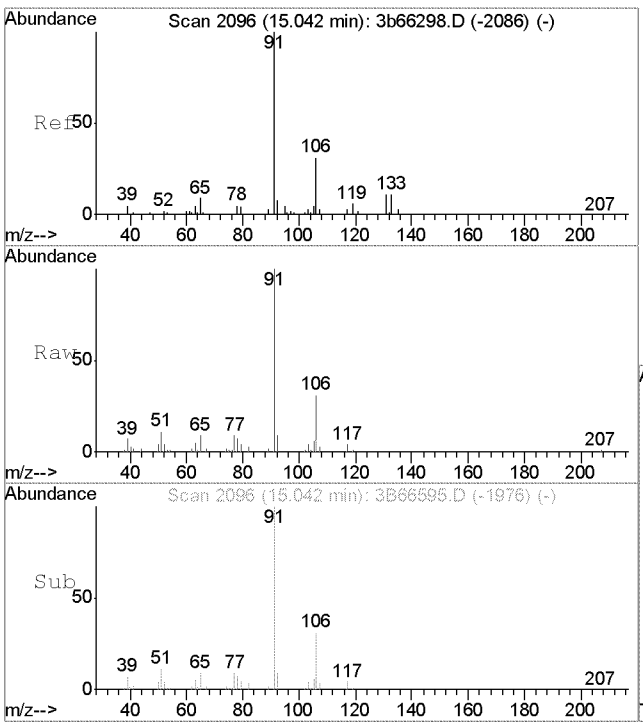


#82
methylcyclohexane
Concen: 0.26 ug/L
RT: 12.21 min Scan# 1554
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 83 Resp: 1242

Ion	Ratio	Lower	Upper
83	100		
55	93.8	61.4	121.4
98	39.8	13.9	73.9

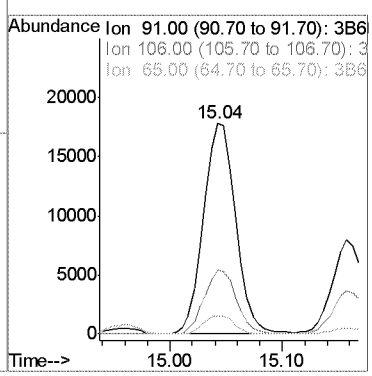


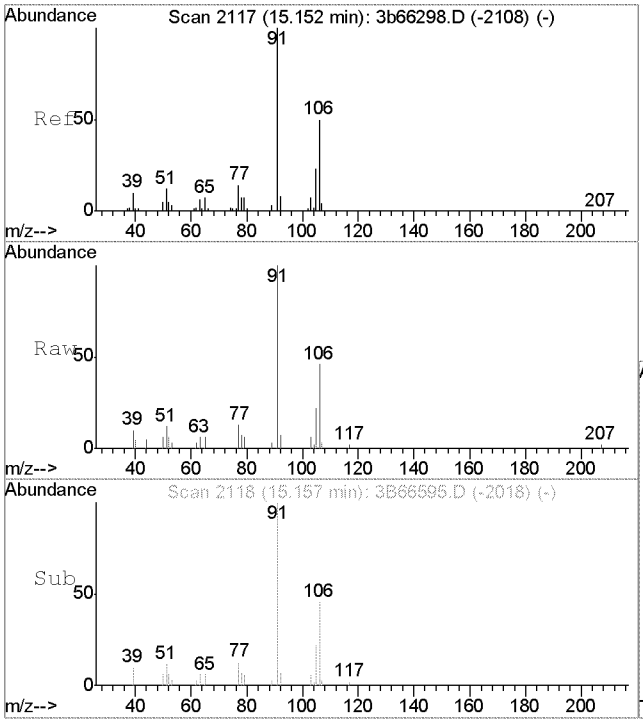


#103
ethylbenzene
Concen: 2.39 ug/L
RT: 15.04 min Scan# 2096
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 91 Resp: 35567

Ion	Ratio	Lower	Upper
91	100		
106	30.8	0.9	60.9
65	8.8	0.0	39.4

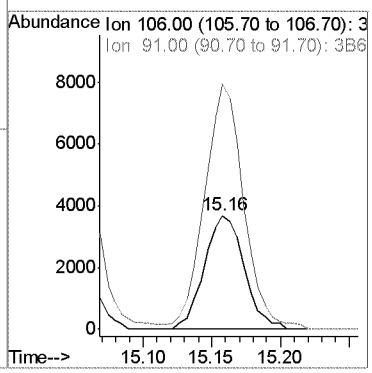


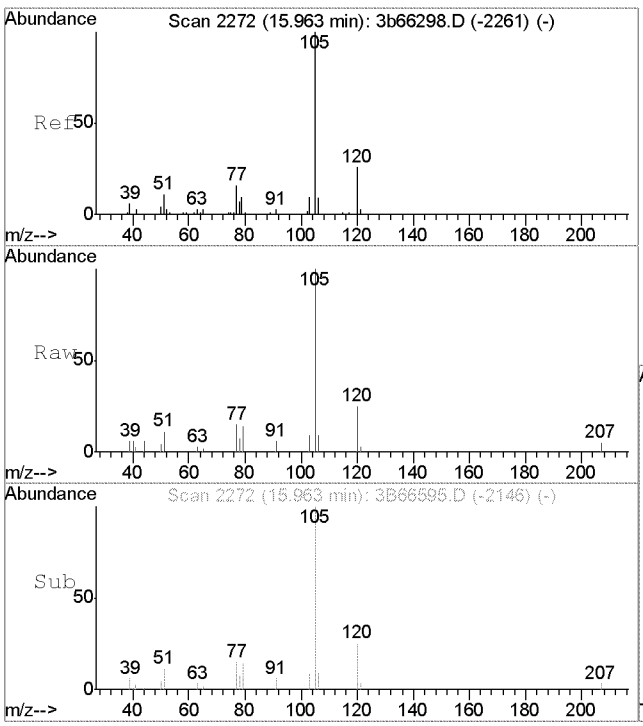


#104
m,p-xylene
Concen: 1.33 ug/L
RT: 15.16 min Scan# 2118
Delta R.T. 0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion:106 Resp: 7524

Ion	Ratio	Lower	Upper
106	100		
91	211.1	171.1	231.1

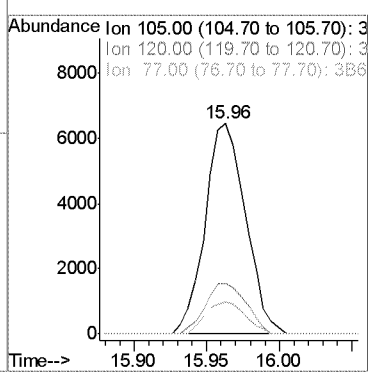




#110
isopropylbenzene
Concen: 0.79 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion:105 Resp: 12536

Ion	Ratio	Lower	Upper
105	100		
120	24.5	0.0	56.1
77	15.2	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.215	139	217	242	rBV7	1220	19509	1.22%	0.178%
2	7.260	567	608	615	rBV3	320	2726	0.17%	0.025%
3	7.317	615	619	625	rVV2	369	636	0.04%	0.006%
4	7.537	660	661	696	rVB3	408	1591	0.10%	0.015%
5	7.856	719	722	731	rVB2	390	801	0.05%	0.007%
6	7.955	731	741	745	rBV2	390	805	0.05%	0.007%
7	8.233	779	794	861	rBV2	48431	260522	16.25%	2.377%
8	8.651	861	874	896	rVB4	4988	22804	1.42%	0.208%
9	8.777	896	898	909	rBV2	278	608	0.04%	0.006%
10	8.928	925	927	952	rBV3	257	544	0.03%	0.005%
11	9.075	952	955	979	rVV3	265	1284	0.08%	0.012%
12	9.341	1004	1006	1022	rBV3	260	731	0.05%	0.007%
13	9.430	1022	1023	1036	rBV3	237	567	0.04%	0.005%
14	9.551	1044	1046	1083	rBV3	396	1178	0.07%	0.011%
15	9.969	1117	1126	1138	rBV4	2114	5330	0.33%	0.049%
16	10.157	1160	1162	1179	rVV2	314	728	0.05%	0.007%
17	10.283	1183	1186	1203	rVB3	247	833	0.05%	0.008%
18	10.675	1247	1261	1267	rBV	394039	1005379	62.72%	9.174%
19	10.727	1267	1271	1292	rVB	201876	478564	29.85%	4.367%
20	11.046	1325	1332	1334	rBV	795	777	0.05%	0.007%
21	11.167	1342	1355	1366	rBV	227728	541979	33.81%	4.945%
22	11.240	1366	1369	1394	rVB2	15220	36521	2.28%	0.333%
23	11.627	1433	1443	1489	rVB	514450	1175771	73.35%	10.729%
24	12.208	1545	1554	1568	rVB5	2187	5032	0.31%	0.046%
25	12.961	1694	1698	1703	rBV3	522	662	0.04%	0.006%
26	13.013	1703	1708	1716	rVB2	1104	1627	0.10%	0.015%
27	13.102	1723	1725	1730	rBV2	370	614	0.04%	0.006%
28	13.212	1741	1746	1749	rVB2	350	548	0.03%	0.005%
29	13.342	1758	1771	1796	rBV	753970	1591686	99.29%	14.524%
30	13.499	1796	1801	1813	rVB5	2179	5416	0.34%	0.049%
31	13.693	1835	1838	1855	rBV4	748	1668	0.10%	0.015%
32	13.818	1855	1862	1866	rVV5	829	1480	0.09%	0.014%
33	13.866	1866	1871	1883	rVB3	1575	3707	0.23%	0.034%
34	14.368	1959	1967	1976	rBV3	3102	6879	0.43%	0.063%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	14.477	1985	1988	1997	rVB2	312	758	0.05%	0.007%
36	14.749	2034	2040	2043	rBV2	359	806	0.05%	0.007%
37	14.959	2070	2080	2090	rBV	758052	1472876	91.88%	13.440%
38	15.042	2090	2096	2111	rVV	42922	87748	5.47%	0.801%
39	15.157	2111	2118	2127	rVV	21460	41742	2.60%	0.381%
40	15.210	2127	2128	2134	rVV3	1173	1864	0.12%	0.017%
41	15.267	2134	2139	2146	rVV4	906	1506	0.09%	0.014%
42	15.445	2162	2173	2180	rVV4	750	1698	0.11%	0.015%
43	15.518	2184	2187	2194	rBV3	284	483	0.03%	0.004%
44	15.633	2200	2209	2221	rVB4	1578	2823	0.18%	0.026%
45	15.743	2227	2230	2240	rVB3	255	520	0.03%	0.005%
46	15.806	2240	2242	2251	rBV3	535	482	0.03%	0.004%
47	15.958	2264	2271	2287	rBV	14286	26727	1.67%	0.244%
48	16.188	2306	2315	2339	rVV	609063	1161911	72.48%	10.602%
49	16.355	2339	2347	2349	rVV6	1731	3449	0.22%	0.031%
50	16.397	2349	2355	2364	rVV	13583	24069	1.50%	0.220%
51	16.507	2364	2376	2380	rVV	15125	30423	1.90%	0.278%
52	16.549	2380	2384	2395	rVB2	9248	16790	1.05%	0.153%
53	16.753	2420	2423	2427	rBV4	477	482	0.03%	0.004%
54	16.810	2427	2434	2452	rVB	6199	11726	0.73%	0.107%
55	16.925	2452	2456	2458	rBV2	690	917	0.06%	0.008%
56	16.978	2458	2466	2487	rVB	34280	61395	3.83%	0.560%
57	17.155	2487	2500	2507	rBV	8245	16958	1.06%	0.155%
58	17.213	2507	2511	2517	rVB	2488	4341	0.27%	0.040%
59	17.276	2517	2523	2531	rBV3	4421	7472	0.47%	0.068%
60	17.344	2531	2536	2544	rVB2	337	591	0.04%	0.005%
61	17.433	2544	2553	2567	rBV	842167	1603050	100.00%	14.627%
62	17.527	2567	2571	2577	rVB3	3230	5226	0.33%	0.048%
63	17.589	2577	2583	2593	rBV2	11963	24564	1.53%	0.224%
64	17.720	2593	2608	2624	rVB3	53933	124262	7.75%	1.134%
65	17.840	2624	2631	2638	rBV2	6254	10676	0.67%	0.097%
66	17.924	2638	2647	2653	rVB4	1649	4184	0.26%	0.038%
67	17.987	2653	2659	2663	rBV3	7131	12910	0.81%	0.118%
68	18.034	2663	2668	2675	rVB5	4254	9498	0.59%	0.087%
69	18.102	2675	2681	2692	rVB	13932	25665	1.60%	0.234%
70	18.238	2696	2707	2711	rBV2	14627	31889	1.99%	0.291%
71	18.316	2711	2722	2730	rVB2	17281	44048	2.75%	0.402%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	18.369	2730	2732	2745	rVB7	2264	3891	0.24%	0.036%
73	18.479	2747	2753	2760	rBV4	5430	13153	0.82%	0.120%
74	18.547	2760	2766	2772	rVV2	10927	19899	1.24%	0.182%
75	18.604	2772	2777	2797	rVB2	12572	32281	2.01%	0.295%
76	18.740	2797	2803	2813	rBV4	3470	7853	0.49%	0.072%
77	18.839	2817	2822	2825	rVB5	1693	2094	0.13%	0.019%
78	18.892	2826	2832	2839	rVB4	4798	8379	0.52%	0.076%
79	18.965	2839	2846	2855	rBV3	16522	35576	2.22%	0.325%
80	19.038	2855	2860	2864	rBV5	1509	2664	0.17%	0.024%
81	19.096	2864	2871	2877	rBV	28225	51935	3.24%	0.474%
82	19.159	2877	2883	2894	rVV	48217	92352	5.76%	0.843%
83	19.237	2894	2898	2917	rVB	3552	5778	0.36%	0.053%
84	19.378	2917	2925	2933	rBV2	24361	53213	3.32%	0.486%
85	19.462	2933	2941	2948	rVB7	6557	18388	1.15%	0.168%
86	19.530	2948	2954	2961	rBV2	11266	21553	1.34%	0.197%
87	19.587	2961	2965	2968	rVV4	4169	6884	0.43%	0.063%
88	19.640	2968	2975	2990	rVB	29165	60816	3.79%	0.555%
89	19.739	2991	2994	3000	rVV3	2071	2852	0.18%	0.026%
90	19.797	3000	3005	3024	rVB6	3677	6470	0.40%	0.059%
91	19.938	3024	3032	3052	rBV	58435	143560	8.96%	1.310%
92	20.084	3052	3060	3083	rVV6	14402	40687	2.54%	0.371%
93	20.236	3083	3089	3130	rVV9	5478	22663	1.41%	0.207%
94	20.471	3130	3134	3154	rVV3	7986	30755	1.92%	0.281%
95	20.597	3154	3158	3179	rVV6	4236	18649	1.16%	0.170%
96	20.733	3179	3184	3211	rVV4	7185	15704	0.98%	0.143%
97	20.885	3211	3213	3218	rVV5	3704	6398	0.40%	0.058%
98	20.942	3218	3224	3276	rVV3	13783	48729	3.04%	0.445%
99	21.256	3276	3284	3326	rVV	25204	58406	3.64%	0.533%
100	21.523	3326	3335	3448	rVB	32624	71543	4.46%	0.653%

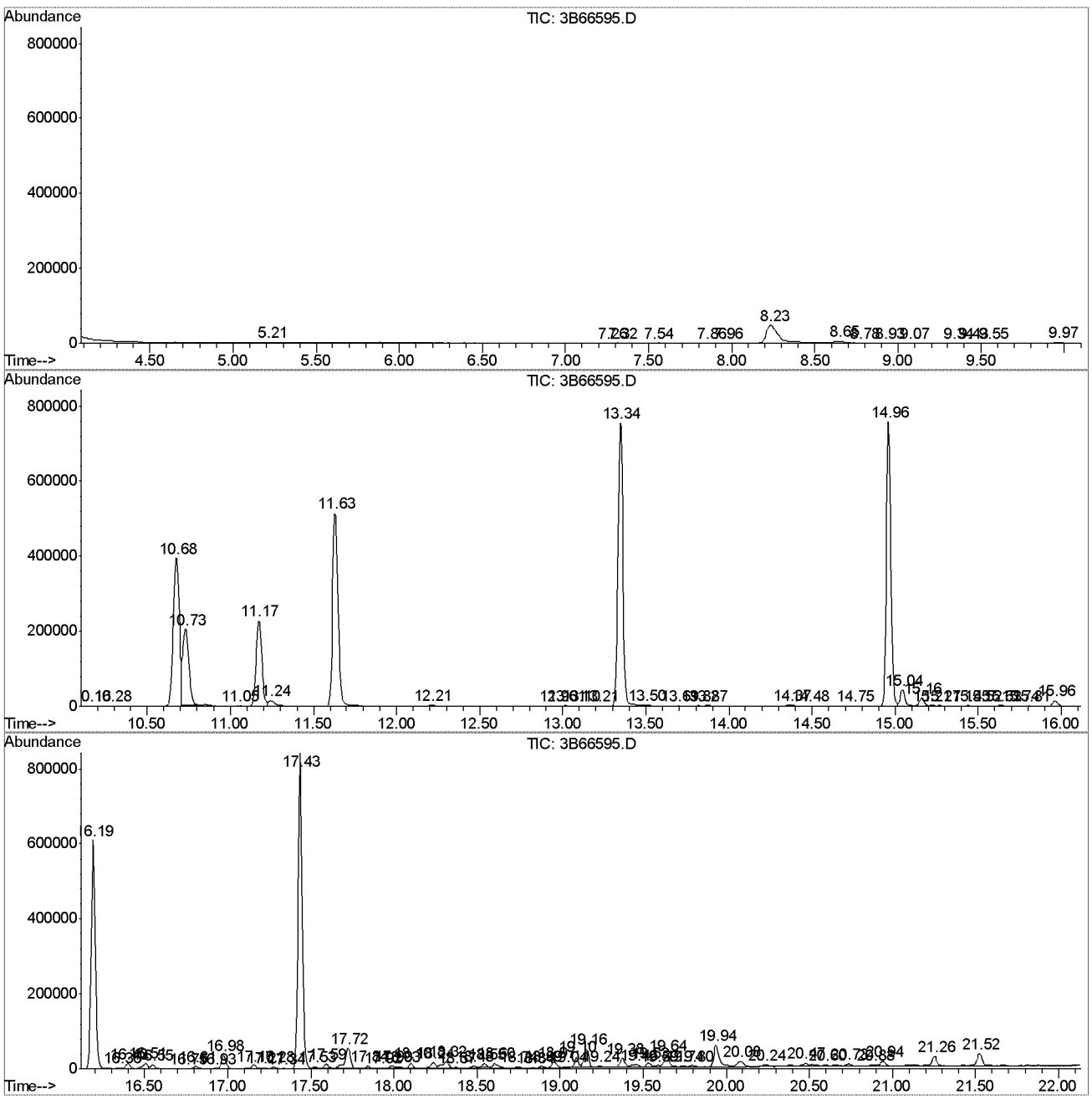
Sum of corrected areas: 10959161

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 28 09:17:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	144422	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	362875	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	495844	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	477919	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	253738	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	147817	51.51	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.02%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	189861	50.47	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.94%			
85) toluene-d8 (s)	13.34	98	576506	51.93	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.86%			
111) 4-bromofluorobenzene (s)	16.19	95	228545	52.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.16%			

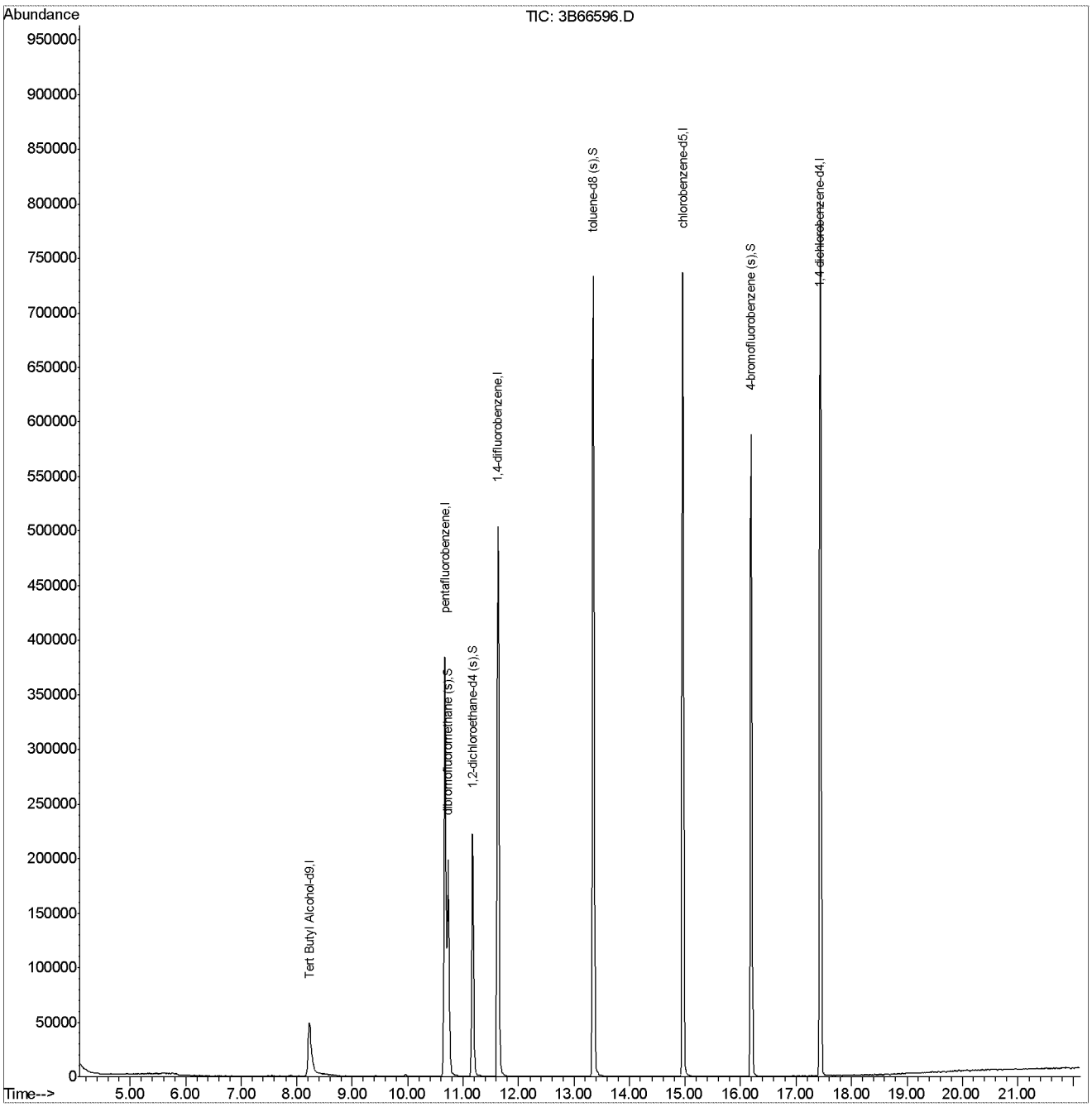
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 28 09:17:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.932	160	163	212	rBV6	707	6574	0.43%	0.073%
2	5.502	270	272	365	rVB5	2310	41212	2.70%	0.455%
3	6.208	405	407	410	rVB2	393	284	0.02%	0.003%
4	6.418	445	447	467	rVB3	188	345	0.02%	0.004%
5	6.596	474	481	485	rBV3	398	547	0.04%	0.006%
6	6.632	485	488	514	rVB3	280	1041	0.07%	0.012%
7	6.920	541	543	549	rBV3	285	364	0.02%	0.004%
8	6.972	549	553	565	rVB3	253	827	0.05%	0.009%
9	7.087	569	575	584	rVB3	196	433	0.03%	0.005%
10	7.479	649	650	658	rBV2	278	334	0.02%	0.004%
11	7.553	659	664	669	rVV2	328	452	0.03%	0.005%
12	7.589	669	671	691	rVB3	351	774	0.05%	0.009%
13	7.908	728	732	755	rVB3	423	1338	0.09%	0.015%
14	8.227	779	793	890	rVB2	48221	257933	16.93%	2.851%
15	8.960	931	933	938	rBB3	213	232	0.02%	0.003%
16	8.996	938	940	943	rBV2	269	244	0.02%	0.003%
17	9.022	943	945	956	rVV3	222	504	0.03%	0.006%
18	9.085	956	957	990	rVV2	227	897	0.06%	0.010%
19	9.320	990	1002	1019	rVV2	150	327	0.02%	0.004%
20	9.493	1033	1035	1077	rBV3	246	1372	0.09%	0.015%
21	9.744	1077	1083	1096	rVB3	412	1298	0.09%	0.014%
22	9.823	1096	1098	1102	rBV3	310	352	0.02%	0.004%
23	9.864	1102	1106	1118	rBV3	396	946	0.06%	0.010%
24	9.959	1118	1124	1137	rVB	1544	3425	0.22%	0.038%
25	10.330	1194	1195	1202	rVB2	275	320	0.02%	0.004%
26	10.403	1202	1209	1218	rBB3	189	561	0.04%	0.006%
27	10.508	1223	1229	1242	rBV2	257	539	0.04%	0.006%
28	10.670	1248	1260	1267	rBV	384343	978980	64.25%	10.820%
29	10.727	1267	1271	1306	rVV	198249	456238	29.94%	5.042%
30	10.926	1306	1309	1315	rVB3	477	610	0.04%	0.007%
31	10.984	1315	1320	1325	rVB	361	409	0.03%	0.005%
32	11.041	1325	1331	1333	rBV2	283	325	0.02%	0.004%
33	11.167	1341	1355	1388	rBV	222617	524725	34.44%	5.799%
34	11.350	1388	1390	1399	rVV2	587	1007	0.07%	0.011%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.434	1399	1406	1412	rVB2	260	510	0.03%	0.006%
36	11.627	1428	1443	1488	rBV	503728	1134989	74.49%	12.544%
37	11.868	1488	1489	1493	rVB2	383	392	0.03%	0.004%
38	11.909	1496	1497	1501	rBV2	266	260	0.02%	0.003%
39	12.009	1509	1516	1521	rVB2	204	374	0.02%	0.004%
40	12.098	1526	1533	1541	rVB2	200	340	0.02%	0.004%
41	12.370	1583	1585	1593	rVV3	321	478	0.03%	0.005%
42	12.432	1596	1597	1601	rVB2	281	218	0.01%	0.002%
43	12.579	1622	1625	1630	rBV2	195	217	0.01%	0.002%
44	12.856	1673	1678	1679	rBV2	268	325	0.02%	0.004%
45	12.940	1690	1694	1701	rBV2	314	489	0.03%	0.005%
46	13.044	1712	1714	1721	rVB3	343	598	0.04%	0.007%
47	13.092	1721	1723	1729	rBV2	361	523	0.03%	0.006%
48	13.180	1736	1740	1745	rVB3	317	628	0.04%	0.007%
49	13.248	1747	1753	1754	rVB	252	319	0.02%	0.004%
50	13.343	1756	1771	1804	rBV	733486	1523660	100.00%	16.839%
51	13.625	1823	1825	1830	rBV2	172	261	0.02%	0.003%
52	13.672	1833	1834	1847	rVB3	267	821	0.05%	0.009%
53	13.761	1847	1851	1858	rBV3	311	700	0.05%	0.008%
54	13.866	1865	1871	1877	rVB2	229	554	0.04%	0.006%
55	13.996	1894	1896	1899	rBV2	269	314	0.02%	0.003%
56	14.028	1899	1902	1903	rVB2	305	232	0.02%	0.003%
57	14.070	1908	1910	1914	rVB2	254	282	0.02%	0.003%
58	14.101	1914	1916	1919	rBV	233	226	0.01%	0.002%
59	14.158	1924	1927	1929	rVV	386	341	0.02%	0.004%
60	14.190	1930	1933	1937	rVB3	319	473	0.03%	0.005%
61	14.253	1942	1945	1950	rVV2	375	504	0.03%	0.006%
62	14.373	1964	1968	1970	rBV2	390	427	0.03%	0.005%
63	14.399	1971	1973	1980	rVB2	222	383	0.03%	0.004%
64	14.566	2002	2005	2008	rBV2	204	225	0.01%	0.002%
65	14.593	2008	2010	2013	rVB2	270	236	0.02%	0.003%
66	14.640	2014	2019	2022	rVB2	327	475	0.03%	0.005%
67	14.676	2022	2026	2029	rBV3	332	499	0.03%	0.006%
68	14.749	2033	2040	2042	rBV2	275	511	0.03%	0.006%
69	14.770	2042	2044	2049	rVB2	362	398	0.03%	0.004%
70	14.833	2049	2056	2064	rVB2	592	1463	0.10%	0.016%
71	14.901	2064	2069	2070	rBV2	384	476	0.03%	0.005%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.959	2070	2080	2105	rBV	736673	1433324	94.07%	15.841%
73	15.157	2114	2118	2130	rVV2	411	900	0.06%	0.010%
74	15.262	2130	2138	2140	rBV3	180	357	0.02%	0.004%
75	15.351	2153	2155	2160	rBV2	231	319	0.02%	0.004%
76	15.445	2160	2173	2180	rVV3	218	682	0.04%	0.008%
77	15.612	2183	2205	2216	rVB3	205	1226	0.08%	0.014%
78	15.696	2216	2221	2225	rBV3	165	308	0.02%	0.003%
79	15.743	2225	2230	2231	rBV2	249	225	0.01%	0.002%
80	15.827	2243	2246	2253	rVB3	240	390	0.03%	0.004%
81	15.916	2255	2263	2271	rBV3	235	675	0.04%	0.007%
82	15.968	2271	2273	2279	rVB2	356	484	0.03%	0.005%
83	16.031	2279	2285	2294	rBV3	286	924	0.06%	0.010%
84	16.109	2299	2300	2305	rBV2	257	308	0.02%	0.003%
85	16.188	2305	2315	2341	rVV	587872	1117074	73.32%	12.346%
86	16.653	2393	2404	2407	rBV3	228	487	0.03%	0.005%
87	16.946	2457	2460	2472	rBV4	324	749	0.05%	0.008%
88	17.056	2472	2481	2492	rVV3	308	961	0.06%	0.011%
89	17.119	2492	2493	2502	rVB2	429	637	0.04%	0.007%
90	17.349	2514	2537	2539	rVB3	288	1119	0.07%	0.012%
91	17.375	2539	2542	2544	rBV3	340	344	0.02%	0.004%
92	17.433	2544	2553	2610	rVV	801792	1515698	99.48%	16.751%
93	17.757	2610	2615	2618	rVB2	514	409	0.03%	0.005%
94	17.846	2629	2632	2634	rBV	411	390	0.03%	0.004%
95	18.050	2669	2671	2676	rBV2	718	665	0.04%	0.007%
96	18.092	2676	2679	2684	rVB4	561	768	0.05%	0.008%
97	18.181	2684	2696	2700	rBV4	671	1752	0.11%	0.019%
98	18.254	2703	2710	2715	rBV4	518	992	0.07%	0.011%
99	18.311	2718	2721	2762	rVV5	871	3786	0.25%	0.042%
100	18.866	2816	2827	2830	rBV4	790	2419	0.16%	0.027%

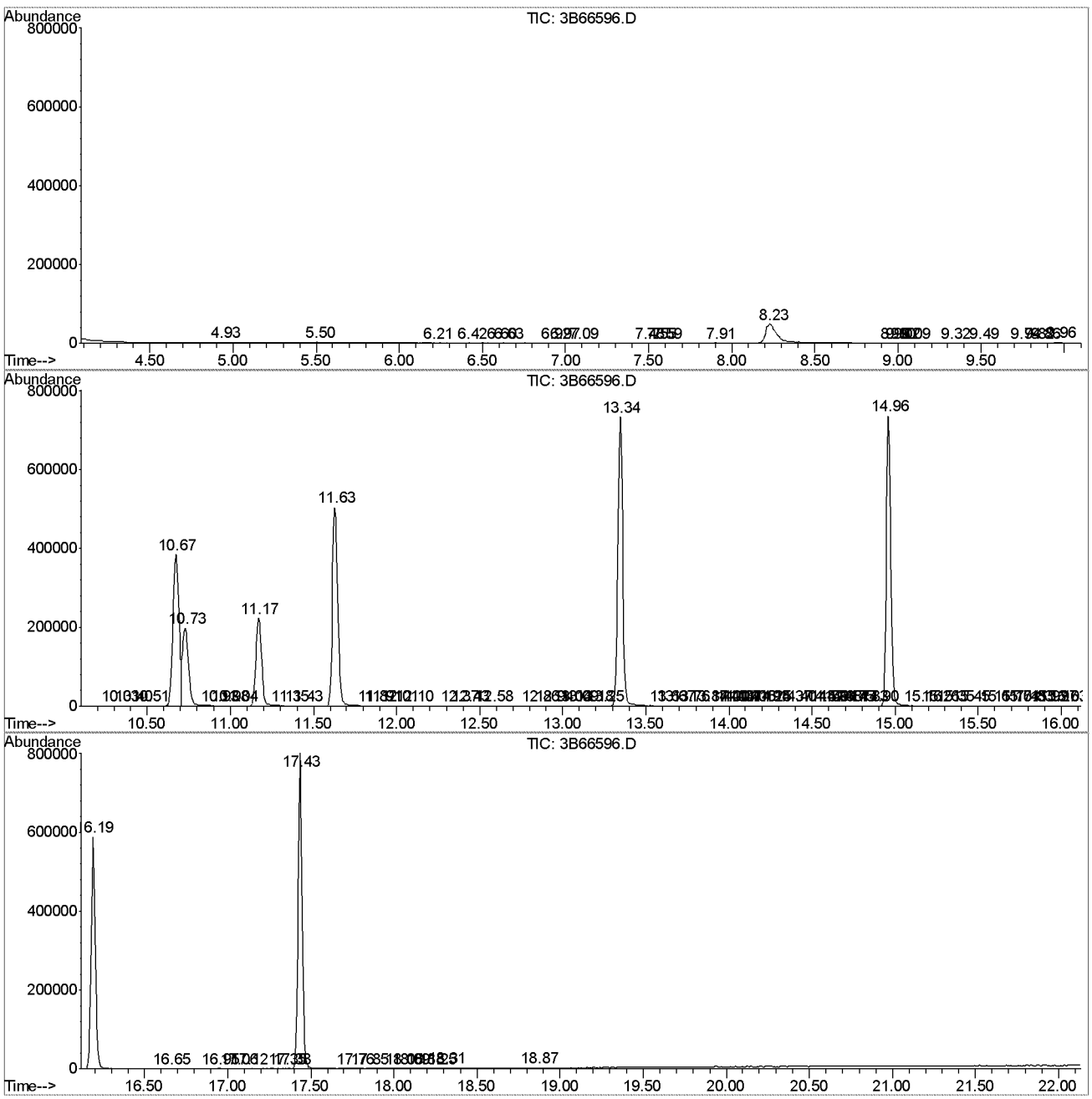
Sum of corrected areas: 9048262

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 31 10:30:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

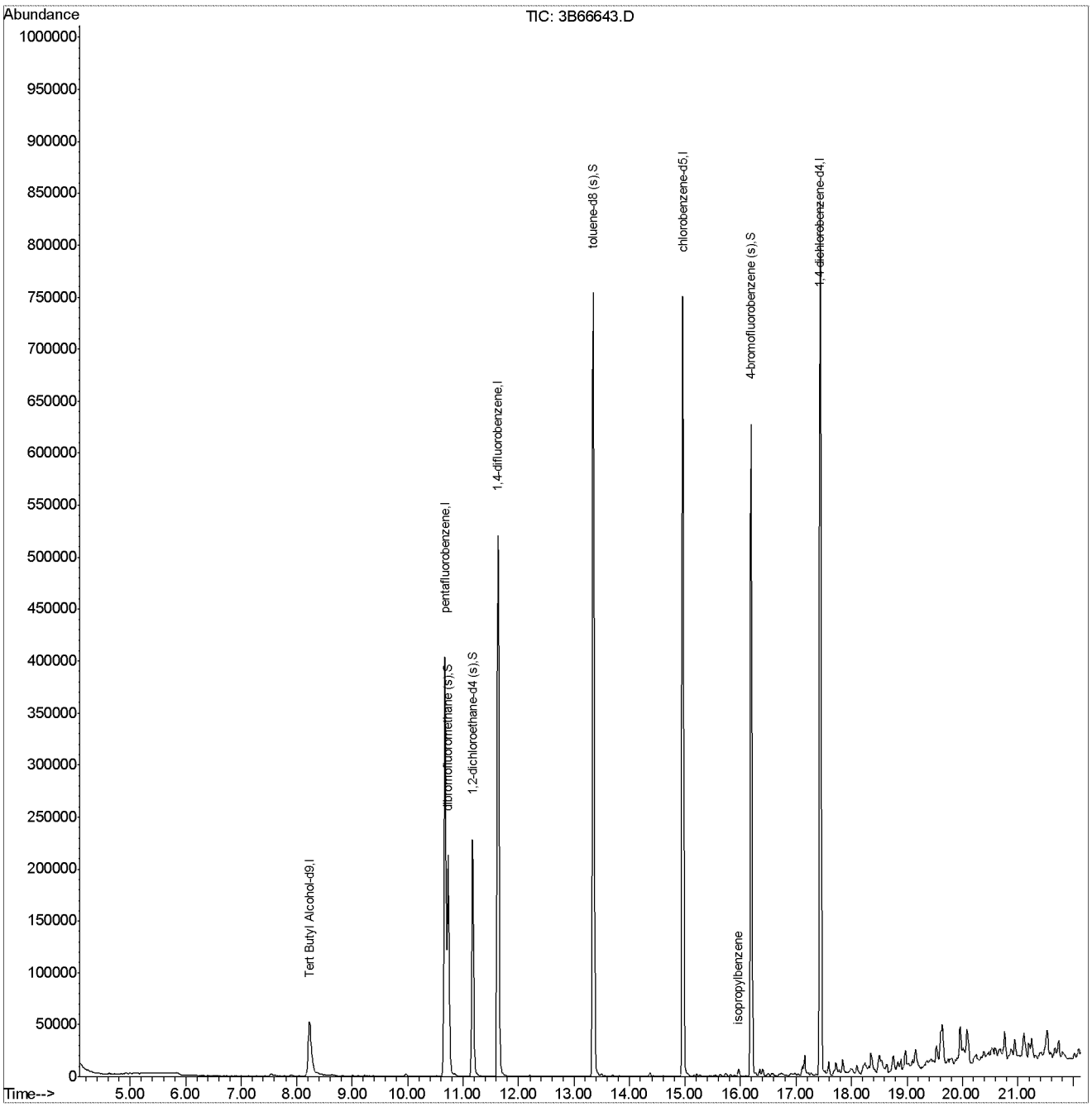
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	140503	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	397385	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	532346	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	500495	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	269011	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	159921	50.89	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.78%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	196046	47.58	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.16%			
85) toluene-d8 (s)	13.34	98	609884	51.17	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.34%			
111) 4-bromofluorobenzene (s)	16.19	95	240499	51.70	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.40%			
Target Compounds						Qvalue
110) isopropylbenzene	15.96	105	6481	0.40	ug/L	97

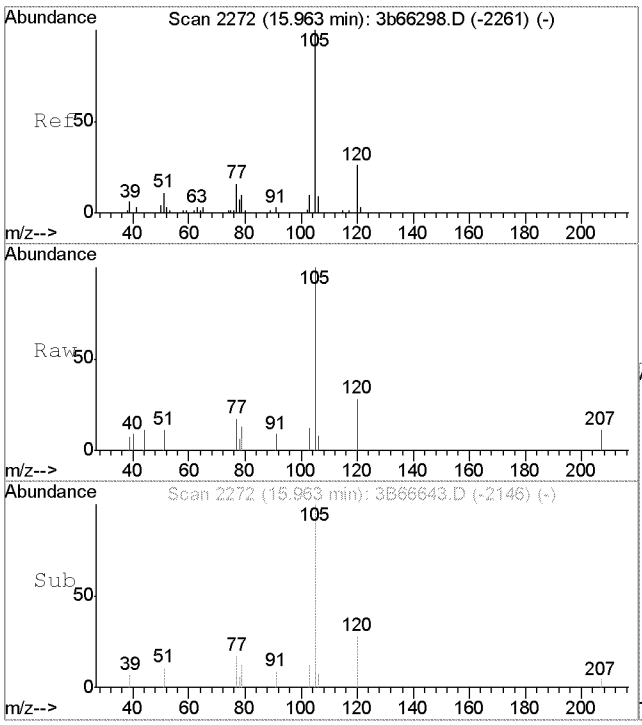
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 31 10:30:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

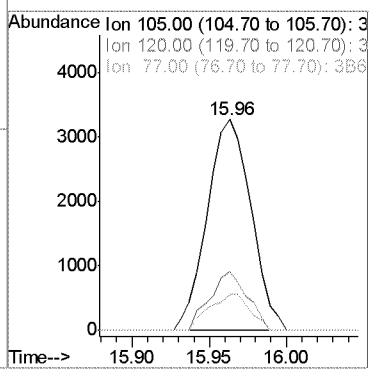




#110
isopropylbenzene
Concen: 0.40 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66643.D
Acq: 28 Jan 2011 4:25 pm

Tgt Ion:105 Resp: 6481

Ion	Ratio	Lower	Upper
105	100		
120	27.9	0.0	56.1
77	17.1	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.093	382	385	441	rVB3	958	4677	0.29%	0.043%
2	6.527	467	468	497	rBV3	289	1023	0.06%	0.009%
3	6.690	497	499	519	rVV3	314	851	0.05%	0.008%
4	6.826	519	525	535	rVB3	276	640	0.04%	0.006%
5	7.124	578	582	606	rVB3	336	1351	0.09%	0.012%
6	7.542	653	662	692	rVB4	1398	6512	0.41%	0.059%
7	7.903	724	731	748	rVB3	626	2423	0.15%	0.022%
8	8.227	776	793	851	rBV	51655	251514	15.83%	2.296%
9	8.640	866	872	904	rVB4	1277	5645	0.36%	0.052%
10	8.834	908	909	936	rBV3	248	923	0.06%	0.008%
11	9.106	955	961	969	rVB2	318	722	0.05%	0.007%
12	9.833	1092	1100	1105	rBV3	283	695	0.04%	0.006%
13	9.875	1105	1108	1116	rVB2	380	625	0.04%	0.006%
14	9.959	1116	1124	1153	rVB4	2118	6696	0.42%	0.061%
15	10.523	1228	1232	1245	rVV3	589	1418	0.09%	0.013%
16	10.670	1248	1260	1267	rVV	403658	1042953	65.65%	9.523%
17	10.727	1267	1271	1305	rVV	212898	494618	31.13%	4.516%
18	11.167	1341	1355	1395	rBV	227890	545417	34.33%	4.980%
19	11.627	1432	1443	1474	rVV	520382	1190543	74.94%	10.870%
20	12.202	1546	1553	1560	rBV5	1263	2233	0.14%	0.020%
21	12.610	1626	1631	1637	rVB2	512	756	0.05%	0.007%
22	12.924	1688	1691	1699	rVB3	387	630	0.04%	0.006%
23	13.018	1702	1709	1716	rVB5	695	1530	0.10%	0.014%
24	13.154	1730	1735	1738	rBV3	589	899	0.06%	0.008%
25	13.280	1753	1759	1761	rVV3	683	1101	0.07%	0.010%
26	13.342	1761	1771	1796	rVV	753915	1587286	99.91%	14.493%
27	13.499	1796	1801	1809	rVV6	2214	5263	0.33%	0.048%
28	13.552	1809	1811	1825	rVV3	690	1929	0.12%	0.018%
29	13.703	1833	1840	1845	rVV4	944	1875	0.12%	0.017%
30	13.818	1854	1862	1869	rBV4	830	1972	0.12%	0.018%
31	13.996	1894	1896	1906	rVB3	527	998	0.06%	0.009%
32	14.085	1909	1913	1918	rVV3	520	887	0.06%	0.008%
33	14.127	1918	1921	1927	rVV2	281	666	0.04%	0.006%
34	14.200	1933	1935	1941	rVV2	476	675	0.04%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	14.268	1941	1948	1951	rVV2	307	715	0.05%	0.007%
36	14.315	1956	1957	1960	rVV2	680	753	0.05%	0.007%
37	14.368	1960	1967	1974	rVB5	3290	7345	0.46%	0.067%
38	14.430	1974	1979	1983	rBV4	798	1282	0.08%	0.012%
39	14.608	2009	2013	2018	rVB4	1093	1321	0.08%	0.012%
40	14.833	2052	2056	2064	rVV2	490	762	0.05%	0.007%
41	14.959	2068	2080	2114	rVV	750335	1472951	92.71%	13.449%
42	15.157	2114	2118	2124	rVV2	1189	1958	0.12%	0.018%
43	15.220	2124	2130	2134	rVV3	1730	3037	0.19%	0.028%
44	15.257	2134	2137	2144	rVV5	960	1681	0.11%	0.015%
45	15.435	2166	2171	2175	rVV2	817	1259	0.08%	0.011%
46	15.466	2175	2177	2181	rVV2	785	837	0.05%	0.008%
47	15.518	2181	2187	2189	rVV4	643	1232	0.08%	0.011%
48	15.539	2189	2191	2199	rVV4	1102	2177	0.14%	0.020%
49	15.639	2199	2210	2220	rVV5	1765	3365	0.21%	0.031%
50	15.733	2220	2228	2238	rVV5	2727	6282	0.40%	0.057%
51	15.811	2238	2243	2253	rVV5	1598	3088	0.19%	0.028%
52	15.890	2253	2258	2266	rVV4	1064	2314	0.15%	0.021%
53	15.963	2266	2272	2284	rVB2	6969	13703	0.86%	0.125%
54	16.104	2296	2299	2303	rVB3	838	686	0.04%	0.006%
55	16.188	2305	2315	2338	rBV	627145	1172145	73.78%	10.702%
56	16.345	2338	2345	2351	rVV4	6422	13102	0.82%	0.120%
57	16.397	2351	2355	2365	rVB	6684	12735	0.80%	0.116%
58	16.491	2365	2373	2381	rBV5	1996	4895	0.31%	0.045%
59	16.575	2381	2389	2405	rVB7	2624	7464	0.47%	0.068%
60	16.700	2405	2413	2415	rBV5	1525	2655	0.17%	0.024%
61	16.732	2415	2419	2443	rVB9	2355	10521	0.66%	0.096%
62	16.915	2443	2454	2462	rBV7	2367	8628	0.54%	0.079%
63	16.983	2462	2467	2471	rVB5	1571	2371	0.15%	0.022%
64	17.019	2471	2474	2484	rVB5	1025	2401	0.15%	0.022%
65	17.113	2484	2492	2495	rBV5	8956	16777	1.06%	0.153%
66	17.155	2495	2500	2509	rVB	17587	32866	2.07%	0.300%
67	17.270	2518	2522	2535	rVB5	2181	3300	0.21%	0.030%
68	17.365	2535	2540	2545	rBV6	1036	1855	0.12%	0.017%
69	17.433	2545	2553	2576	rBV	841076	1588730	100.00%	14.506%
70	17.589	2576	2583	2594	rVB3	13247	26877	1.69%	0.245%
71	17.725	2594	2609	2616	rBV4	12252	34149	2.15%	0.312%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	17.778	2616	2619	2625	rVB6	1859	2637	0.17%	0.024%
73	17.840	2625	2631	2649	rVB6	13043	27122	1.71%	0.248%
74	17.956	2650	2653	2655	rBV4	1055	1175	0.07%	0.011%
75	17.997	2655	2661	2673	rVB4	4290	14131	0.89%	0.129%
76	18.097	2673	2680	2694	rVB4	8807	20643	1.30%	0.188%
77	18.238	2694	2707	2718	rBV10	11057	48324	3.04%	0.441%
78	18.311	2718	2721	2724	rBV3	2786	2718	0.17%	0.025%
79	18.353	2724	2729	2748	rVB7	18663	47990	3.02%	0.438%
80	18.500	2748	2757	2778	rBV9	16076	78043	4.91%	0.713%
81	18.630	2778	2782	2798	rVB2	6820	9668	0.61%	0.088%
82	18.751	2798	2805	2815	rBV10	14795	36872	2.32%	0.337%
83	18.834	2815	2821	2826	rBV2	7847	16614	1.05%	0.152%
84	18.887	2827	2831	2837	rVB	9354	12945	0.81%	0.118%
85	18.970	2837	2847	2866	rBV7	17681	56460	3.55%	0.516%
86	19.101	2866	2872	2876	rBV2	5610	11231	0.71%	0.103%
87	19.159	2876	2883	2916	rVB2	15254	23811	1.50%	0.217%
88	19.430	2916	2935	2948	rBV2	5797	39098	2.46%	0.357%
89	19.535	2948	2955	2962	rBV3	15735	35058	2.21%	0.320%
90	19.640	2962	2975	3029	rBV3	33579	101809	6.41%	0.930%
91	19.959	3029	3036	3053	rBV4	29678	87719	5.52%	0.801%
92	20.079	3053	3059	3078	rVB4	32912	105153	6.62%	0.960%
93	20.534	3078	3146	3183	rBV4	14489	285855	17.99%	2.610%
94	20.759	3183	3189	3219	rVB4	21776	41694	2.62%	0.381%
95	20.942	3219	3224	3248	rVB8	14909	28791	1.81%	0.263%
96	21.104	3248	3255	3268	rVB4	23795	74192	4.67%	0.677%
97	21.198	3268	3273	3278	rBV2	14230	31174	1.96%	0.285%
98	21.664	3358	3362	3370	rBV4	7048	16770	1.06%	0.153%
99	21.732	3370	3375	3439	rVB4	16101	42736	2.69%	0.390%
100	22.093	3439	3444	3448	rBV5	7653	15775	0.99%	0.144%

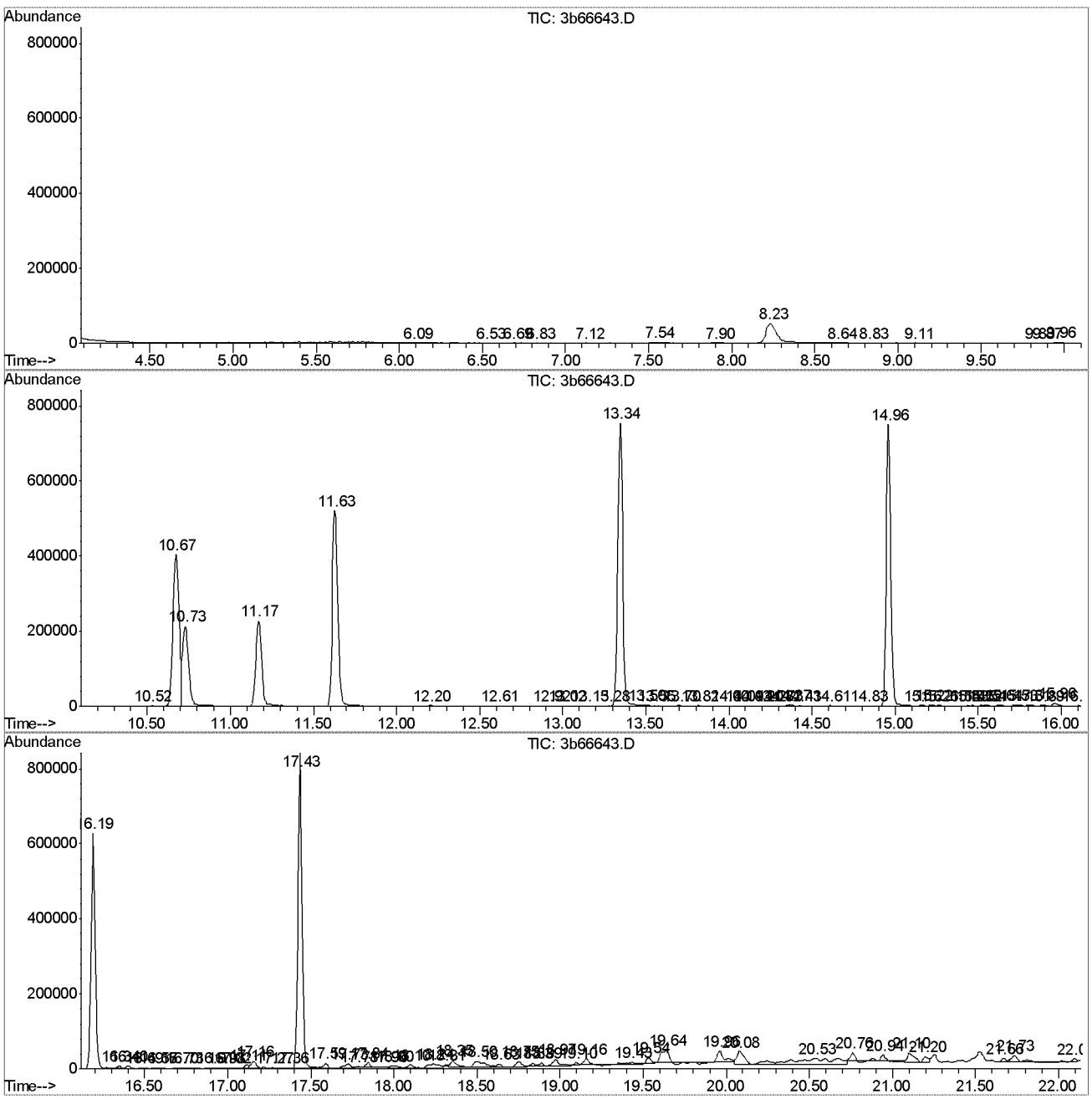
Sum of corrected areas: 10952373

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

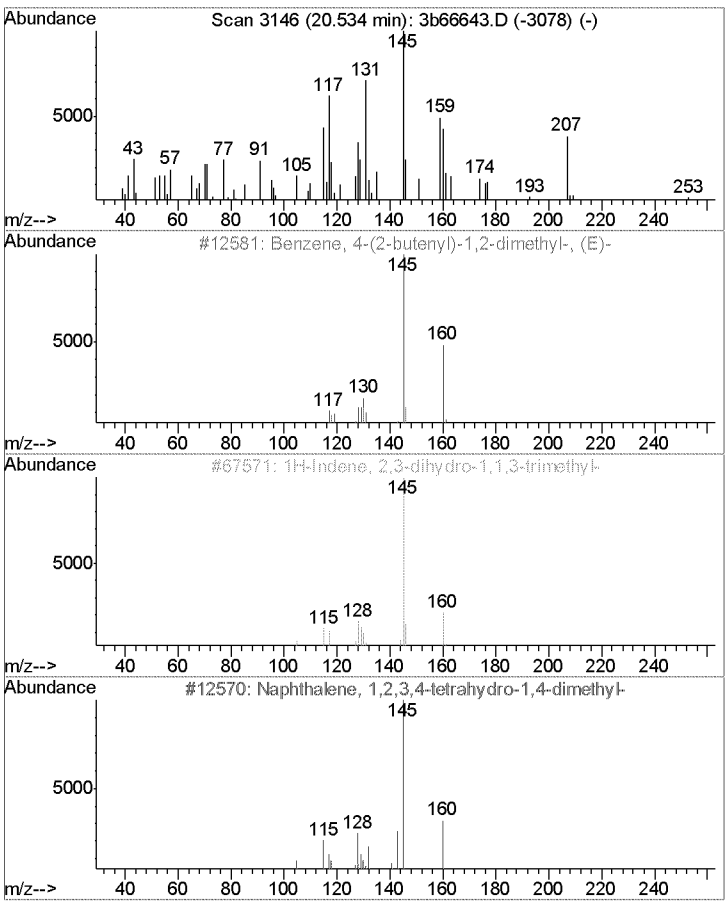
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

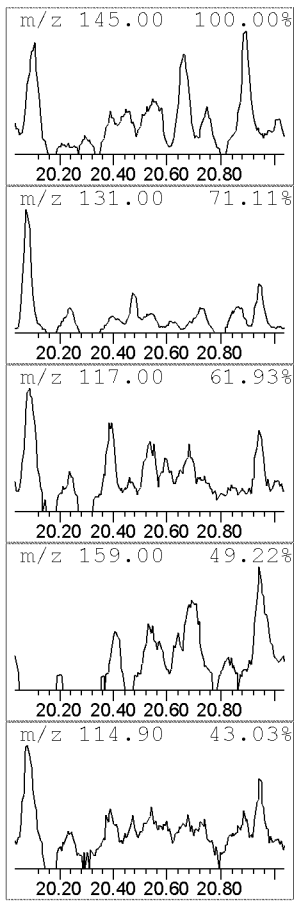
****

Peak Number 1 Benzene, 4-(2-butenyl)-1,2-... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.53	9.00 ug/L	285855	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-(2-butenyl)-1,2-dimet...	160	C12H16	054340-86-2	47
2	1H-Indene, 2,3-dihydro-1,1,3-tri...	160	C12H16	002613-76-5	46
3	Naphthalene, 1,2,3,4-tetrahydro-...	160	C12H16	004175-54-6	43
4	1H-Indene, 2,3-dihydro-1,5,7-tri...	160	C12H16	054340-88-4	35
5	1H-Inden-1-one, 2,3-dihydro-3,3-...	160	C11H12O	026465-81-6	35





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Benzene, 4-(2-but...	20.53	9.0	ug/L	285855	5	17.43	1588730	50.0

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 28 09:35:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	143468	500.00	ug/L	-0.02
5) pentafluorobenzene	10.68	168	413764	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	552799	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	525165	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	283519	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	165334	50.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.06%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	202658	47.24	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.48%			
85) toluene-d8 (s)	13.34	98	638678	51.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.20%			
111) 4-bromofluorobenzene (s)	16.19	95	253323	51.67	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.34%			

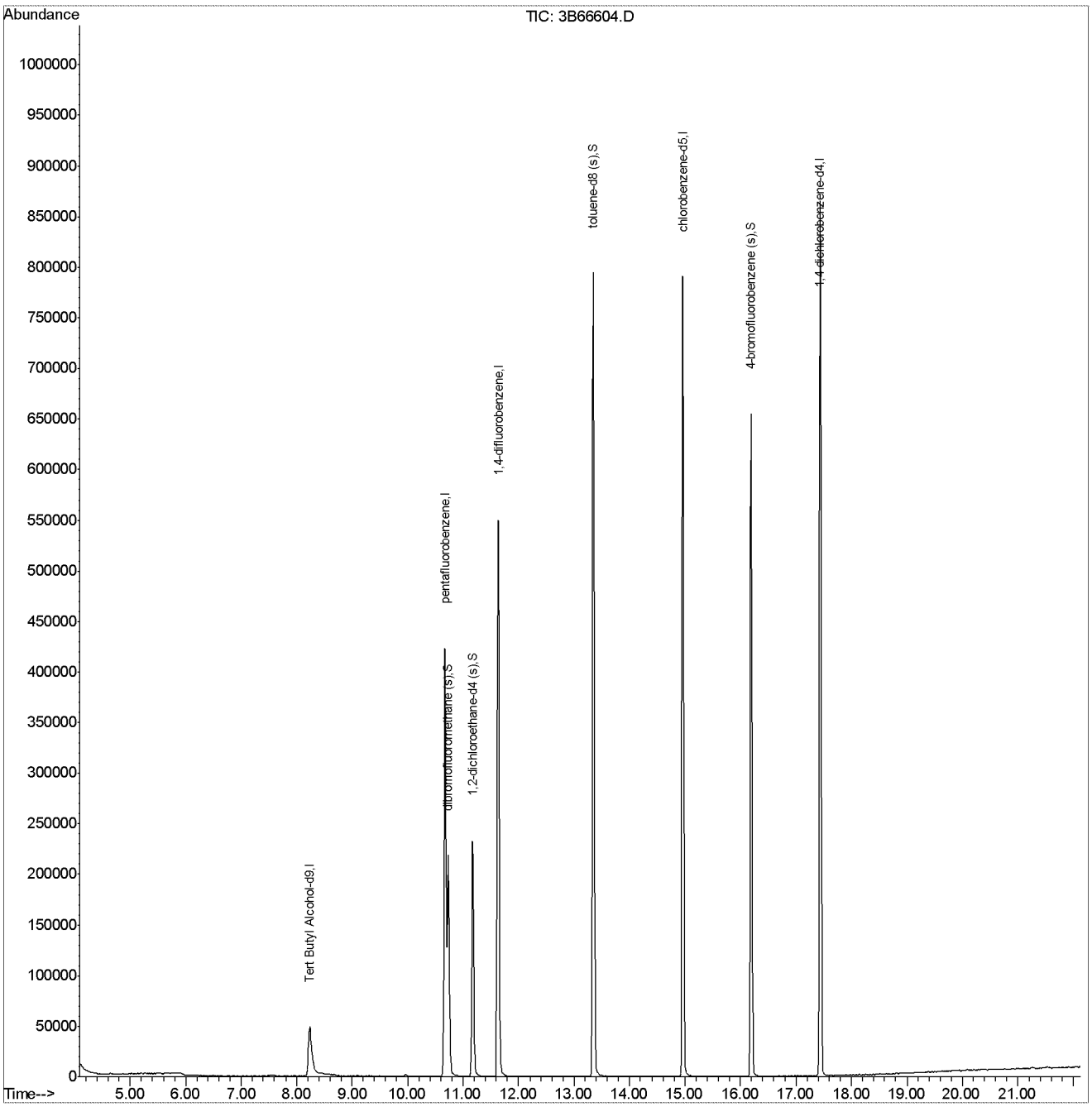
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 28 09:35:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.676	100	114	190	rBV7	1031	10002	0.60%	0.093%
2	7.286	609	613	620	rBV3	258	539	0.03%	0.005%
3	7.542	654	662	683	rVB3	796	3328	0.20%	0.031%
4	7.778	693	707	721	rBV2	434	1460	0.09%	0.014%
5	7.976	744	745	754	rBV2	337	288	0.02%	0.003%
6	8.118	769	772	775	rVB2	414	344	0.02%	0.003%
7	8.233	780	794	897	rVV2	48778	272759	16.45%	2.523%
8	8.792	897	901	913	rVV3	354	629	0.04%	0.006%
9	8.860	913	914	926	rVB3	221	432	0.03%	0.004%
10	9.169	971	973	977	rVB3	394	319	0.02%	0.003%
11	9.211	977	981	986	rVB2	309	544	0.03%	0.005%
12	9.253	986	989	997	rBV3	501	825	0.05%	0.008%
13	9.300	997	998	1006	rBV	363	379	0.02%	0.004%
14	9.488	1018	1034	1037	rBV3	325	977	0.06%	0.009%
15	9.509	1037	1038	1044	rVV2	246	296	0.02%	0.003%
16	9.582	1044	1052	1057	rVB3	188	304	0.02%	0.003%
17	9.807	1092	1095	1106	rBV3	337	702	0.04%	0.006%
18	9.906	1106	1114	1117	rVV3	300	614	0.04%	0.006%
19	9.959	1117	1124	1142	rVV4	1399	4346	0.26%	0.040%
20	10.063	1143	1144	1156	rVV3	304	833	0.05%	0.008%
21	10.157	1156	1162	1201	rVV4	433	2771	0.17%	0.026%
22	10.408	1204	1210	1215	rVV2	376	648	0.04%	0.006%
23	10.503	1215	1228	1248	rVV3	288	1703	0.10%	0.016%
24	10.670	1248	1260	1267	rVV	422886	1075767	64.88%	9.952%
25	10.728	1267	1271	1313	rVB	218820	528843	31.89%	4.892%
26	10.952	1313	1314	1324	rVB2	363	791	0.05%	0.007%
27	11.010	1324	1325	1334	rVB3	407	878	0.05%	0.008%
28	11.078	1334	1338	1340	rBV2	386	404	0.02%	0.004%
29	11.172	1340	1356	1391	rBV	232952	562203	33.91%	5.201%
30	11.360	1391	1392	1396	rVV	443	422	0.03%	0.004%
31	11.392	1396	1398	1402	rVB2	435	357	0.02%	0.003%
32	11.444	1405	1408	1411	rBV2	237	267	0.02%	0.002%
33	11.528	1419	1424	1430	rVB2	435	549	0.03%	0.005%
34	11.632	1430	1444	1484	rBV	549460	1241100	74.85%	11.482%

M3B3095.M Fri Jan 28 09:38:51 2011 MS3B

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.852	1484	1486	1503	rVB2	431	1204	0.07%	0.011%
36	12.035	1515	1521	1525	rVB2	210	294	0.02%	0.003%
37	12.082	1525	1530	1534	rBV2	269	445	0.03%	0.004%
38	12.182	1544	1549	1553	rVB	359	344	0.02%	0.003%
39	12.281	1562	1568	1570	rBV2	245	268	0.02%	0.002%
40	12.338	1578	1579	1588	rVB2	228	347	0.02%	0.003%
41	12.401	1588	1591	1599	rBV2	218	416	0.03%	0.004%
42	12.511	1610	1612	1615	rVB2	382	358	0.02%	0.003%
43	12.542	1615	1618	1620	rBV	438	456	0.03%	0.004%
44	12.589	1624	1627	1630	rBV	218	307	0.02%	0.003%
45	12.710	1645	1650	1652	rBV	317	396	0.02%	0.004%
46	12.820	1668	1671	1673	rVV2	276	300	0.02%	0.003%
47	12.893	1677	1685	1687	rBV2	279	465	0.03%	0.004%
48	12.945	1689	1695	1697	rVV2	246	423	0.03%	0.004%
49	12.977	1697	1701	1706	rVV2	413	559	0.03%	0.005%
50	13.045	1710	1714	1716	rBV2	381	491	0.03%	0.005%
51	13.065	1716	1718	1724	rVB2	292	446	0.03%	0.004%
52	13.128	1728	1730	1733	rBV2	349	334	0.02%	0.003%
53	13.165	1733	1737	1746	rBV2	309	793	0.05%	0.007%
54	13.238	1746	1751	1755	rVB3	300	495	0.03%	0.005%
55	13.269	1755	1757	1760	rBV2	311	399	0.02%	0.004%
56	13.343	1760	1771	1810	rVV	794708	1658090	100.00%	15.339%
57	13.573	1810	1815	1828	rVB4	702	1729	0.10%	0.016%
58	13.714	1833	1842	1847	rVV3	188	447	0.03%	0.004%
59	13.792	1855	1857	1864	rBV3	224	279	0.02%	0.003%
60	13.897	1874	1877	1884	rVB3	342	745	0.04%	0.007%
61	13.955	1884	1888	1889	rBV3	378	392	0.02%	0.004%
62	13.970	1889	1891	1898	rVV3	400	634	0.04%	0.006%
63	14.049	1898	1906	1907	rVB3	338	605	0.04%	0.006%
64	14.064	1907	1909	1914	rBV2	488	639	0.04%	0.006%
65	14.106	1914	1917	1921	rBV3	274	479	0.03%	0.004%
66	14.143	1921	1924	1928	rVB3	313	414	0.02%	0.004%
67	14.185	1928	1932	1943	rBV2	319	850	0.05%	0.008%
68	14.321	1956	1958	1961	rVB2	392	355	0.02%	0.003%
69	14.352	1961	1964	1967	rBV2	333	415	0.03%	0.004%
70	14.389	1967	1971	1973	rVB3	423	516	0.03%	0.005%
71	14.404	1973	1974	1986	rBV3	369	1247	0.08%	0.012%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.525	1990	1997	1999	rVB3	307	634	0.04%	0.006%
73	14.556	1999	2003	2012	rBV	330	887	0.05%	0.008%
74	14.661	2022	2023	2028	rVB2	334	375	0.02%	0.003%
75	14.713	2031	2033	2041	rBV2	353	692	0.04%	0.006%
76	14.776	2041	2045	2066	rVV3	347	1904	0.11%	0.018%
77	14.959	2066	2080	2114	rVV	790987	1546832	93.29%	14.310%
78	15.158	2114	2118	2121	rVB3	626	842	0.05%	0.008%
79	15.341	2151	2153	2162	rVB3	235	417	0.03%	0.004%
80	15.398	2162	2164	2172	rVB2	221	415	0.03%	0.004%
81	15.456	2172	2175	2178	rBV3	194	260	0.02%	0.002%
82	15.905	2238	2261	2263	rBV3	310	1166	0.07%	0.011%
83	16.188	2304	2315	2342	rVB	654661	1226646	73.98%	11.348%
84	16.366	2342	2349	2353	rBV2	308	810	0.05%	0.007%
85	16.397	2353	2355	2358	rVB3	269	255	0.02%	0.002%
86	16.418	2358	2359	2362	rBV	360	294	0.02%	0.003%
87	16.721	2413	2417	2426	rBV3	295	740	0.04%	0.007%
88	16.868	2441	2445	2453	rVB2	265	521	0.03%	0.005%
89	16.967	2461	2464	2488	rVB4	492	1779	0.11%	0.016%
90	17.223	2511	2513	2522	rBV3	387	571	0.03%	0.005%
91	17.276	2522	2523	2528	rVB2	428	400	0.02%	0.004%
92	17.339	2529	2535	2540	rVV3	346	585	0.04%	0.005%
93	17.433	2544	2553	2578	rVV	864791	1656237	99.89%	15.322%
94	17.569	2578	2579	2584	rVB3	609	775	0.05%	0.007%
95	17.851	2630	2633	2636	rBV3	498	553	0.03%	0.005%
96	17.898	2637	2642	2660	rVV4	821	3152	0.19%	0.029%
97	18.034	2660	2668	2675	rVB4	549	1350	0.08%	0.012%
98	18.154	2690	2691	2702	rBV4	402	743	0.04%	0.007%
99	18.348	2725	2728	2749	rBV5	962	2798	0.17%	0.026%
100	22.014	2749	3429	3447	rBV8	7856	962853	58.07%	8.907%

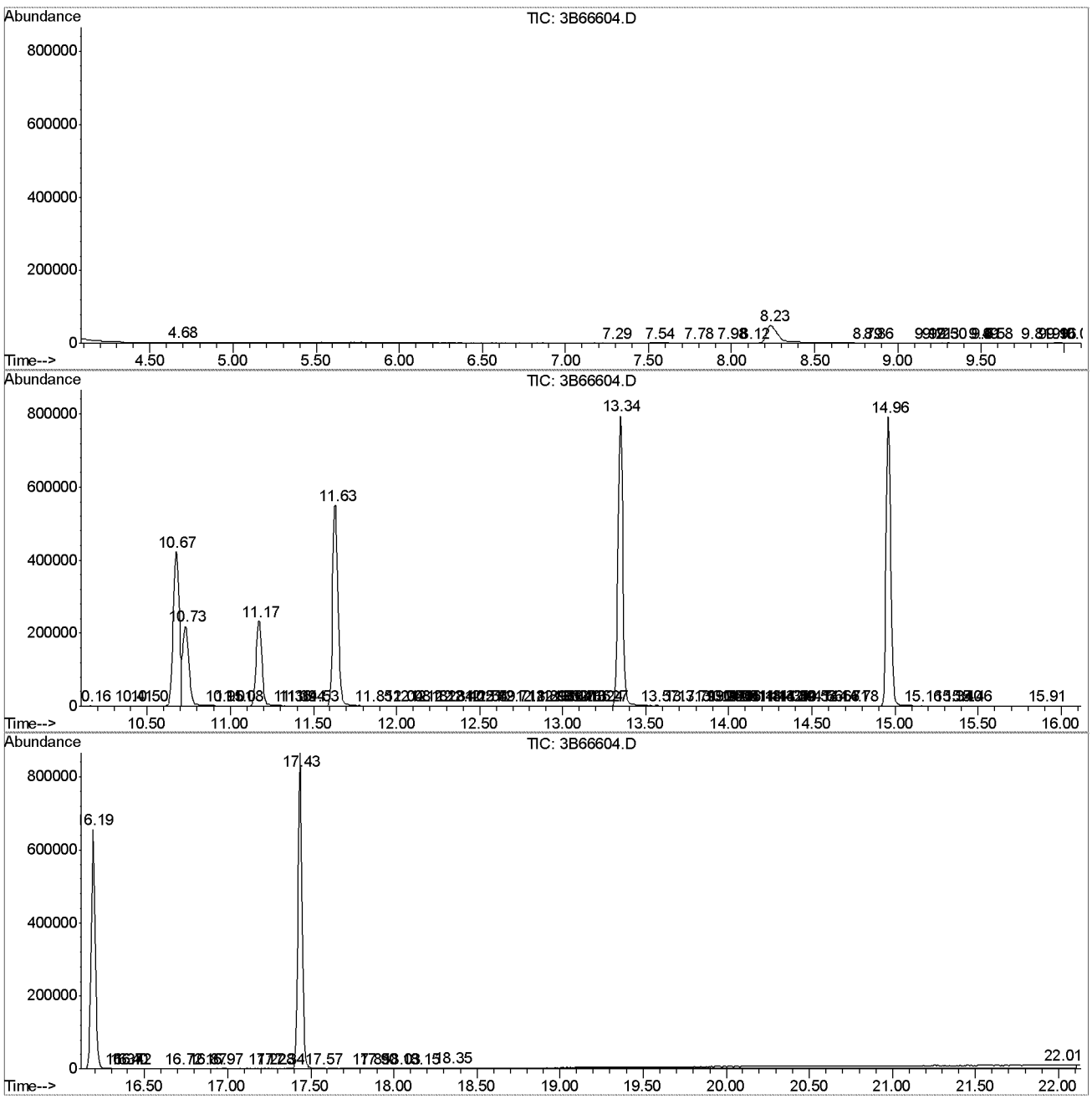
Sum of corrected areas: 10809485

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 28 09:35:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Wed Jan 26 10:59:35 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	155421	500.00	ug/L	-0.01
5) pentafluorobenzene	10.67	168	402654	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	541327	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	516673	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	276807	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	163105	51.22	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.44%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	200404	48.01	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.02%			
85) toluene-d8 (s)	13.34	98	629918	51.97	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.94%			
111) 4-bromofluorobenzene (s)	16.19	95	246669	51.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.06%			

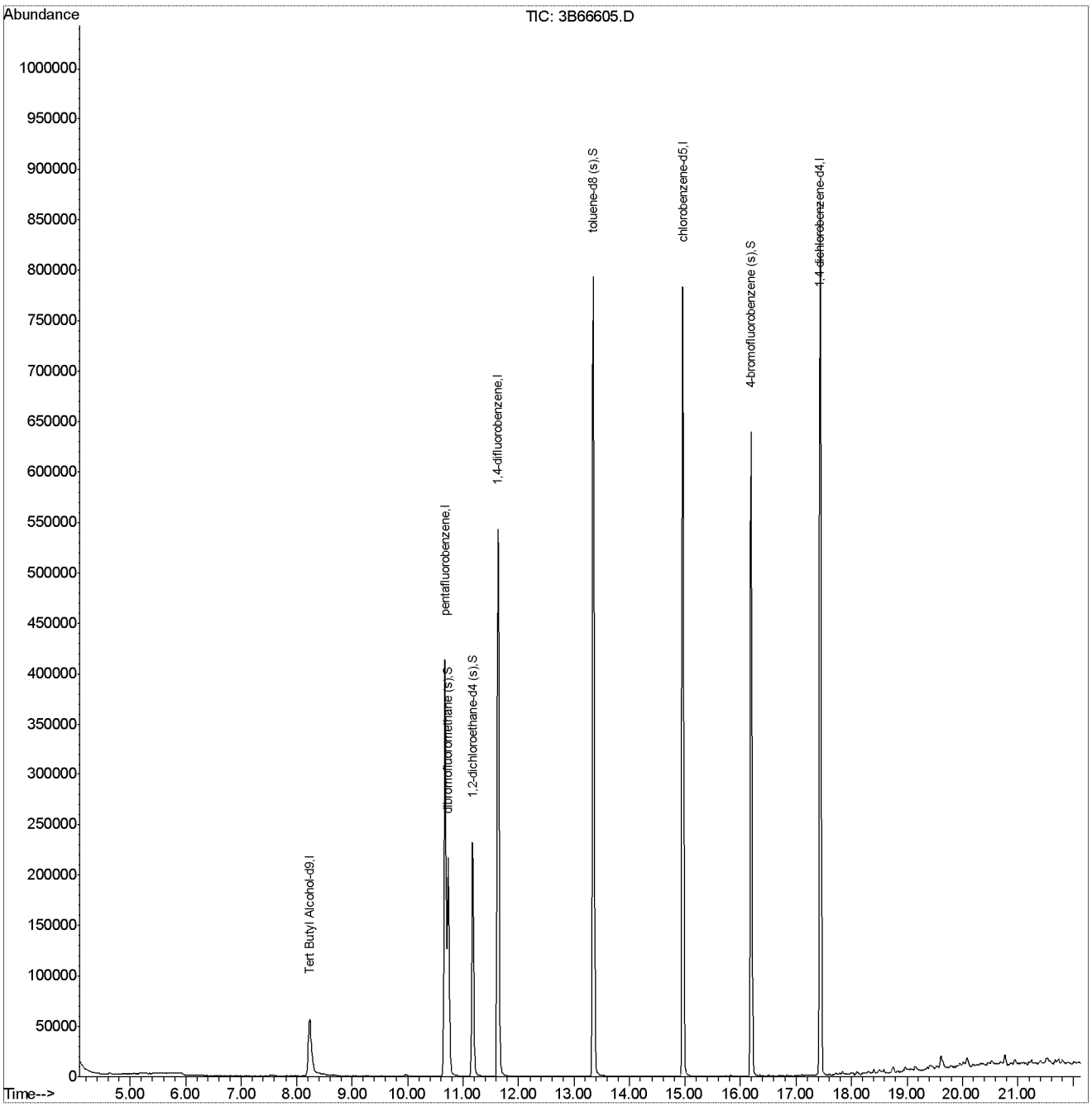
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 28 09:35:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Wed Jan 26 10:59:35 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.177	399	401	461	rVB3	617	5300	0.32%	0.053%
2	6.496	461	462	485	rBV2	466	1581	0.10%	0.016%
3	7.349	617	625	645	rVB3	277	1179	0.07%	0.012%
4	7.542	652	662	709	rBV4	795	3929	0.24%	0.040%
5	7.825	715	716	722	rVB2	389	419	0.03%	0.004%
6	8.018	722	753	766	rBV3	390	3054	0.19%	0.031%
7	8.112	766	771	774	rVV3	335	336	0.02%	0.003%
8	8.233	778	794	892	rVV2	56420	285813	17.47%	2.885%
9	8.756	892	894	901	rVV3	278	417	0.03%	0.004%
10	8.850	901	912	916	rVB3	242	546	0.03%	0.006%
11	8.923	925	926	938	rVB3	391	821	0.05%	0.008%
12	9.253	987	989	994	rVB3	468	404	0.02%	0.004%
13	9.284	994	995	1001	rBV3	348	457	0.03%	0.005%
14	9.457	1018	1028	1031	rBV2	308	732	0.04%	0.007%
15	9.525	1039	1041	1053	rVB3	427	1023	0.06%	0.010%
16	9.603	1053	1056	1064	rBV	341	621	0.04%	0.006%
17	9.749	1076	1084	1110	rVB3	316	1527	0.09%	0.015%
18	9.912	1110	1115	1118	rBV2	298	371	0.02%	0.004%
19	9.959	1118	1124	1137	rVB2	1454	3920	0.24%	0.040%
20	10.063	1137	1144	1154	rVB3	259	769	0.05%	0.008%
21	10.147	1158	1160	1164	rVB3	299	349	0.02%	0.004%
22	10.173	1164	1165	1173	rBV3	322	419	0.03%	0.004%
23	10.231	1173	1176	1183	rBV3	231	429	0.03%	0.004%
24	10.466	1218	1221	1230	rBV2	309	515	0.03%	0.005%
25	10.670	1245	1260	1267	rBV	412891	1056498	64.59%	10.663%
26	10.727	1267	1271	1307	rVB	216514	510484	31.21%	5.152%
27	11.167	1342	1355	1388	rBV	232428	555141	33.94%	5.603%
28	11.345	1388	1389	1393	rVB3	495	458	0.03%	0.005%
29	11.371	1393	1394	1403	rBV2	357	463	0.03%	0.005%
30	11.538	1418	1426	1431	rVB3	504	934	0.06%	0.009%
31	11.627	1431	1443	1475	rBV	542588	1224412	74.86%	12.357%
32	11.978	1506	1510	1514	rBV2	299	421	0.03%	0.004%
33	12.103	1530	1534	1538	rBV2	384	442	0.03%	0.004%
34	12.323	1572	1576	1583	rVB2	306	484	0.03%	0.005%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	12.453	1596	1601	1605	rBV2	313	570	0.03%	0.006%
36	12.532	1609	1616	1619	rBV	463	706	0.04%	0.007%
37	12.705	1644	1649	1657	rVB2	267	479	0.03%	0.005%
38	12.762	1657	1660	1664	rBV2	447	382	0.02%	0.004%
39	12.814	1667	1670	1673	rBV	278	394	0.02%	0.004%
40	12.982	1692	1702	1704	rVB2	306	693	0.04%	0.007%
41	13.029	1707	1711	1715	rBV3	350	467	0.03%	0.005%
42	13.118	1723	1728	1734	rBV3	297	674	0.04%	0.007%
43	13.222	1744	1748	1751	rBV2	223	346	0.02%	0.003%
44	13.343	1760	1771	1806	rVV	792870	1635696	100.00%	16.508%
45	13.531	1806	1807	1836	rVB4	612	2350	0.14%	0.024%
46	14.033	1899	1903	1912	rBV3	320	828	0.05%	0.008%
47	14.106	1916	1917	1926	rVV2	233	500	0.03%	0.005%
48	14.195	1931	1934	1939	rBV2	310	554	0.03%	0.006%
49	14.227	1939	1940	1949	rVB2	313	570	0.03%	0.006%
50	14.310	1949	1956	1958	rVB3	332	619	0.04%	0.006%
51	14.363	1962	1966	1972	rBV2	489	914	0.06%	0.009%
52	14.446	1972	1982	1986	rBV3	273	900	0.06%	0.009%
53	14.499	1986	1992	1998	rVB2	342	806	0.05%	0.008%
54	14.556	1998	2003	2005	rBV2	232	369	0.02%	0.004%
55	14.682	2020	2027	2035	rVB4	708	2265	0.14%	0.023%
56	14.760	2035	2042	2050	rBV3	448	1529	0.09%	0.015%
57	14.865	2055	2062	2063	rVB3	327	519	0.03%	0.005%
58	14.959	2069	2080	2126	rVB	783210	1521941	93.05%	15.360%
59	15.388	2159	2162	2177	rBV3	185	576	0.04%	0.006%
60	15.518	2186	2187	2194	rVB2	341	584	0.04%	0.006%
61	15.592	2194	2201	2203	rBV3	316	629	0.04%	0.006%
62	15.618	2203	2206	2212	rVV3	247	376	0.02%	0.004%
63	15.733	2223	2228	2235	rBV3	484	568	0.03%	0.006%
64	15.822	2239	2245	2253	rBV3	850	1779	0.11%	0.018%
65	15.900	2258	2260	2271	rVB2	401	457	0.03%	0.005%
66	15.963	2271	2272	2278	rBV2	370	518	0.03%	0.005%
67	16.188	2304	2315	2340	rBV	639240	1202549	73.52%	12.137%
68	16.350	2340	2346	2353	rVV4	1344	2932	0.18%	0.030%
69	16.413	2353	2358	2368	rVB2	656	1235	0.08%	0.012%
70	16.517	2372	2378	2384	rVB3	636	1257	0.08%	0.013%
71	16.591	2384	2392	2402	rBV3	532	1434	0.09%	0.014%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	16.685	2407	2410	2422	rBV3	490	1362	0.08%	0.014%
73	16.826	2434	2437	2445	rVV2	505	1024	0.06%	0.010%
74	16.884	2445	2448	2461	rVB3	412	721	0.04%	0.007%
75	16.983	2461	2467	2475	rVB3	949	1418	0.09%	0.014%
76	17.035	2475	2477	2487	rVB3	451	751	0.05%	0.008%
77	17.108	2487	2491	2496	rBV4	1249	1864	0.11%	0.019%
78	17.155	2496	2500	2509	rBV4	979	2658	0.16%	0.027%
79	17.213	2509	2511	2520	rVB4	830	1665	0.10%	0.017%
80	17.433	2537	2553	2579	rBV	867773	1633960	99.89%	16.491%
81	17.584	2579	2582	2592	rVB7	1481	3719	0.23%	0.038%
82	17.663	2594	2597	2599	rBV3	874	922	0.06%	0.009%
83	17.726	2604	2609	2618	rVV5	1523	2577	0.16%	0.026%
84	17.788	2618	2621	2625	rVV3	1117	1376	0.08%	0.014%
85	17.835	2625	2630	2640	rVV9	2899	5374	0.33%	0.054%
86	18.008	2657	2663	2675	rVB8	1791	5200	0.32%	0.052%
87	18.102	2675	2681	2693	rVB6	3041	6582	0.40%	0.066%
88	18.202	2693	2700	2711	rBV7	1998	6769	0.41%	0.068%
89	18.317	2711	2722	2727	rBV6	1877	5713	0.35%	0.058%
90	18.358	2727	2730	2733	rBV4	1309	1633	0.10%	0.016%
91	18.400	2733	2738	2748	rVB8	3941	8449	0.52%	0.085%
92	18.494	2748	2756	2769	rBV10	3618	14002	0.86%	0.141%
93	18.578	2769	2772	2798	rVB7	3027	1974	0.12%	0.020%
94	18.745	2798	2804	2815	rVB9	5539	13337	0.82%	0.135%
95	18.834	2815	2821	2836	rBV8	1994	7860	0.48%	0.079%
96	18.970	2836	2847	2877	rBV8	4941	26321	1.61%	0.266%
97	19.159	2877	2883	2929	rBV8	3036	11475	0.70%	0.116%
98	19.614	2964	2970	3055	rBV8	10446	47362	2.90%	0.478%
99	20.770	3185	3191	3220	rVB5	7969	10933	0.67%	0.110%
100	20.937	3220	3223	3330	rBV5	3999	26625	1.63%	0.269%

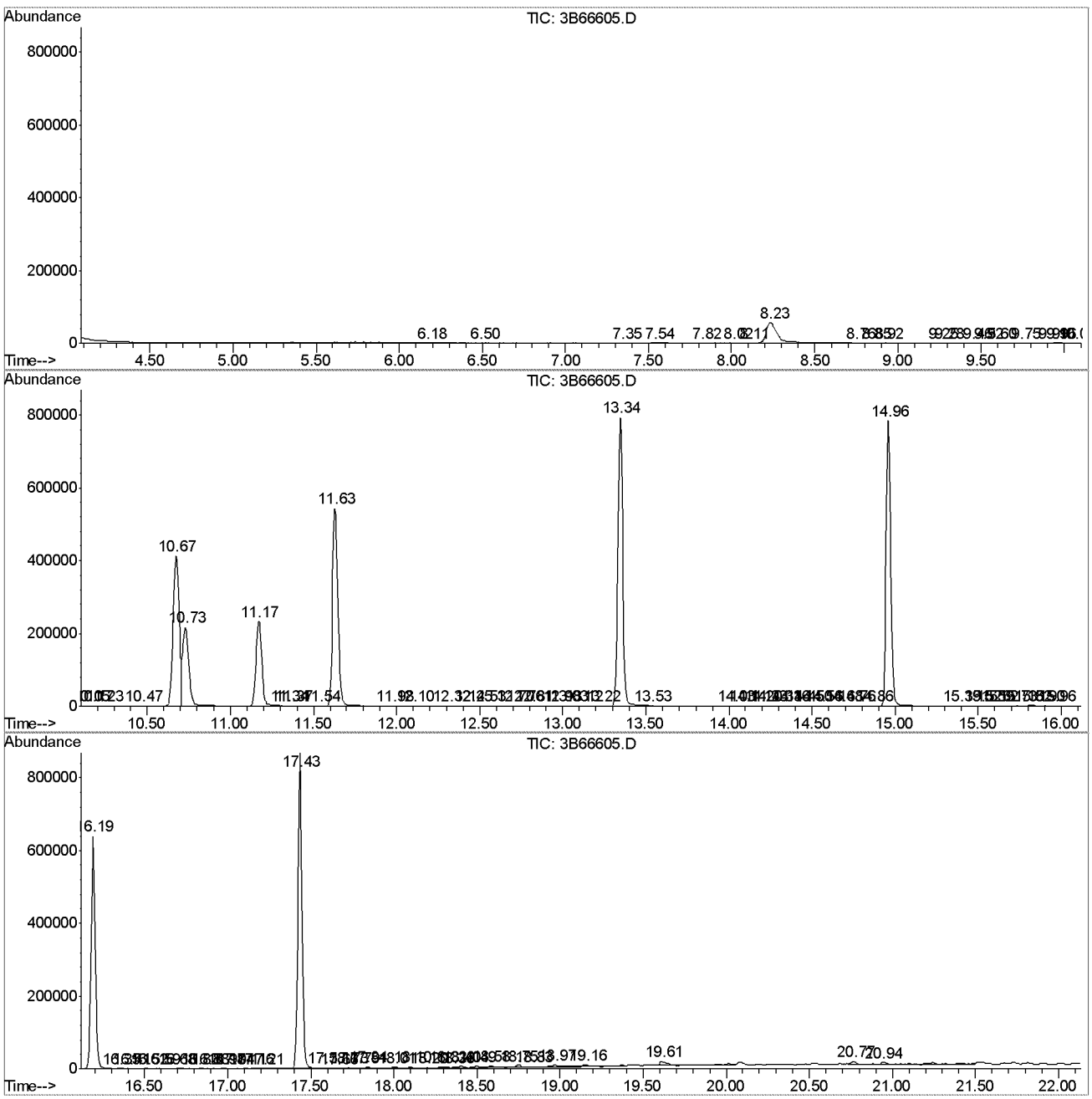
Sum of corrected areas: 9908259

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 28 08:44:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	143632	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	377791	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	511393	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	489410	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	259464	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	154451	51.69	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.38%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	194265	49.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.20%			
85) toluene-d8 (s)	13.34	98	600747	52.47	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.94%			
111) 4-bromofluorobenzene (s)	16.19	95	236695	52.75	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 105.50%			

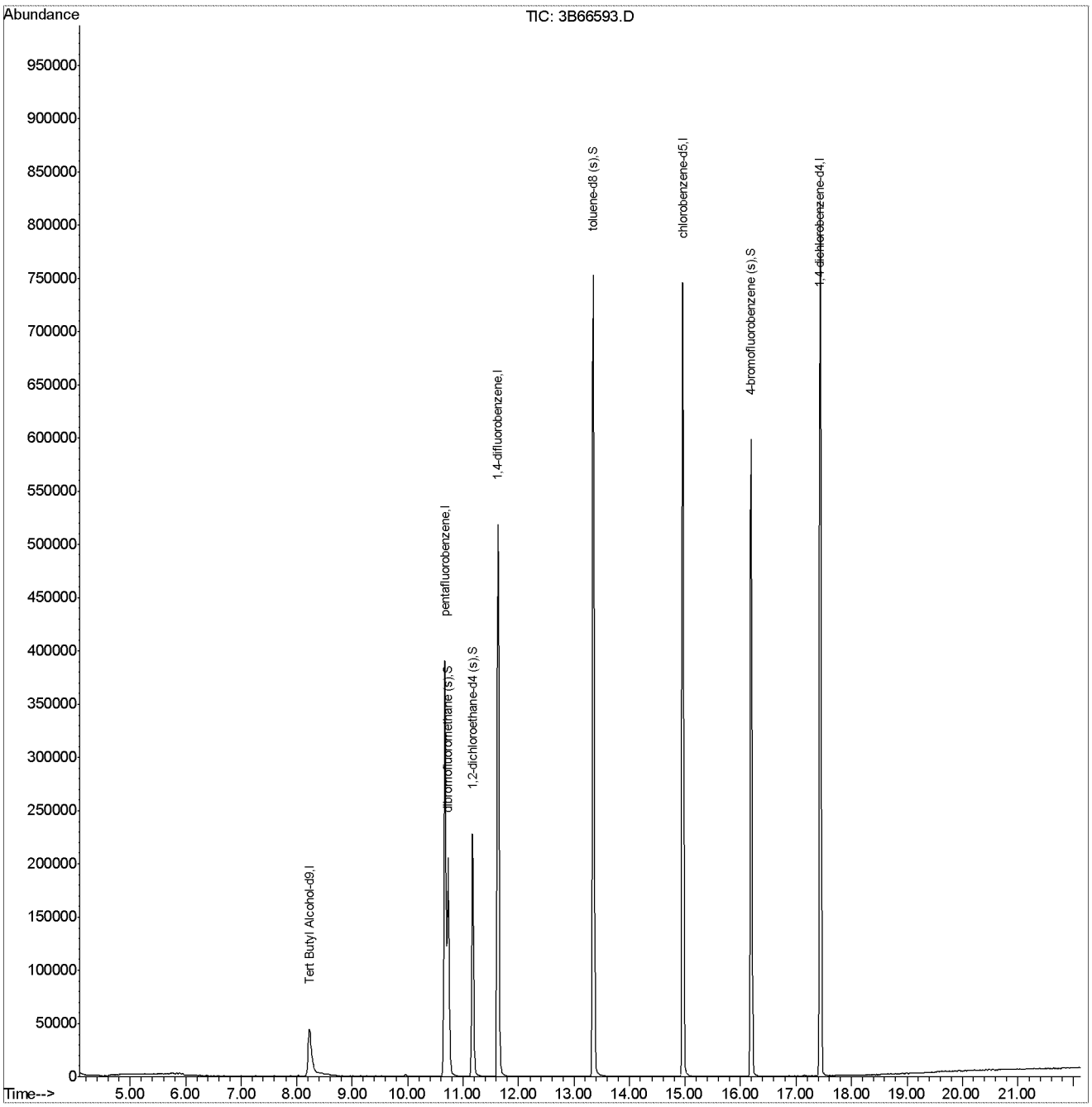
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 28 08:44:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.624	95	104	105	rBV2	785	1268	0.08%	0.013%
2	5.105	105	196	221	rVV5	1379	35176	2.23%	0.353%
3	6.601	478	482	488	rVB3	249	478	0.03%	0.005%
4	6.690	497	499	516	rVB3	245	709	0.04%	0.007%
5	6.899	534	539	546	rBV3	298	608	0.04%	0.006%
6	7.365	627	628	637	rVB2	275	400	0.03%	0.004%
7	7.506	637	655	659	rBV3	309	1116	0.07%	0.011%
8	7.595	670	672	687	rVB2	356	717	0.05%	0.007%
9	7.804	709	712	723	rBV2	235	453	0.03%	0.005%
10	8.029	754	755	777	rBV3	352	1112	0.07%	0.011%
11	8.228	777	793	893	rVV2	44236	248863	15.79%	2.495%
12	8.766	893	896	904	rVV2	325	624	0.04%	0.006%
13	8.819	904	906	913	rVV3	322	489	0.03%	0.005%
14	8.871	913	916	925	rVV2	271	587	0.04%	0.006%
15	8.960	925	933	941	rVV3	313	674	0.04%	0.007%
16	9.012	941	943	947	rVV	362	259	0.02%	0.003%
17	9.049	947	950	968	rVV3	312	1174	0.07%	0.012%
18	9.153	968	970	985	rVV2	516	728	0.05%	0.007%
19	9.258	985	990	1010	rVV3	399	1255	0.08%	0.013%
20	9.425	1010	1022	1029	rVB3	378	1011	0.06%	0.010%
21	9.478	1029	1032	1036	rBV3	278	344	0.02%	0.003%
22	9.624	1048	1060	1062	rBV3	152	406	0.03%	0.004%
23	9.964	1118	1125	1141	rVB3	1431	4172	0.26%	0.042%
24	10.152	1153	1161	1171	rVV3	203	447	0.03%	0.004%
25	10.293	1171	1188	1191	rVV3	205	516	0.03%	0.005%
26	10.456	1214	1219	1223	rVV2	193	296	0.02%	0.003%
27	10.497	1223	1227	1233	rVV2	246	426	0.03%	0.004%
28	10.539	1233	1235	1240	rVV2	231	360	0.02%	0.004%
29	10.576	1240	1242	1248	rVV3	286	463	0.03%	0.005%
30	10.670	1248	1260	1267	rVV	390470	1015414	64.42%	10.182%
31	10.728	1267	1271	1313	rVB2	205603	474842	30.12%	4.761%
32	11.083	1333	1339	1343	rBV2	351	386	0.02%	0.004%
33	11.167	1343	1355	1395	rVB	227418	537968	34.13%	5.394%
34	11.627	1429	1443	1483	rBV	518414	1167506	74.06%	11.707%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.868	1487	1489	1495	rVV2	487	648	0.04%	0.006%
36	12.124	1536	1538	1542	rBV2	272	274	0.02%	0.003%
37	12.234	1554	1559	1563	rBV	304	369	0.02%	0.004%
38	12.480	1602	1606	1614	rBV2	300	558	0.04%	0.006%
39	12.542	1614	1618	1622	rVB2	330	290	0.02%	0.003%
40	12.699	1643	1648	1649	rVB2	242	294	0.02%	0.003%
41	12.767	1658	1661	1668	rVB3	236	435	0.03%	0.004%
42	12.841	1672	1675	1678	rVV2	300	339	0.02%	0.003%
43	12.898	1682	1686	1690	rVV3	364	515	0.03%	0.005%
44	12.935	1690	1693	1697	rVB2	397	335	0.02%	0.003%
45	13.034	1709	1712	1713	rVB2	330	263	0.02%	0.003%
46	13.076	1717	1720	1724	rVB2	296	306	0.02%	0.003%
47	13.191	1740	1742	1746	rVB2	315	339	0.02%	0.003%
48	13.243	1750	1752	1754	rBV2	394	364	0.02%	0.004%
49	13.343	1758	1771	1820	rBV	752708	1576360	100.00%	15.806%
50	13.609	1820	1822	1824	rVV	398	322	0.02%	0.003%
51	13.630	1824	1826	1829	rVB	286	281	0.02%	0.003%
52	13.735	1840	1846	1850	rBV2	311	584	0.04%	0.006%
53	13.777	1850	1854	1857	rVV3	182	299	0.02%	0.003%
54	13.902	1872	1878	1882	rVV	245	495	0.03%	0.005%
55	13.939	1882	1885	1887	rVB2	249	258	0.02%	0.003%
56	14.033	1897	1903	1905	rVB2	320	358	0.02%	0.004%
57	14.080	1905	1912	1916	rBV2	263	539	0.03%	0.005%
58	14.122	1916	1920	1925	rVV2	204	395	0.03%	0.004%
59	14.153	1925	1926	1933	rVB2	309	364	0.02%	0.004%
60	14.232	1940	1941	1945	rBV3	258	288	0.02%	0.003%
61	14.258	1945	1946	1954	rVB3	239	470	0.03%	0.005%
62	14.336	1954	1961	1963	rBV3	328	562	0.04%	0.006%
63	14.394	1965	1972	1976	rVB2	284	599	0.04%	0.006%
64	14.420	1976	1977	1983	rBV	308	453	0.03%	0.005%
65	14.499	1991	1992	2001	rVB3	337	626	0.04%	0.006%
66	14.567	2001	2005	2007	rBV2	289	345	0.02%	0.003%
67	14.603	2007	2012	2016	rVV2	249	472	0.03%	0.005%
68	14.666	2019	2024	2026	rVV2	250	382	0.02%	0.004%
69	14.708	2030	2032	2034	rVV	293	257	0.02%	0.003%
70	14.755	2034	2041	2043	rVV3	351	561	0.04%	0.006%
71	14.797	2047	2049	2058	rVB3	297	632	0.04%	0.006%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.880	2061	2065	2069	rBV2	401	724	0.05%	0.007%
73	14.959	2069	2080	2113	rBV	745393	1459215	92.57%	14.632%
74	15.257	2123	2137	2143	rBV3	162	611	0.04%	0.006%
75	15.372	2157	2159	2165	rVB3	295	489	0.03%	0.005%
76	15.430	2165	2170	2180	rBV3	316	985	0.06%	0.010%
77	15.492	2180	2182	2197	rVV3	305	859	0.05%	0.009%
78	15.602	2197	2203	2205	rVB3	250	300	0.02%	0.003%
79	15.675	2205	2217	2222	rBV3	236	715	0.05%	0.007%
80	15.743	2228	2230	2238	rVB3	297	394	0.02%	0.004%
81	15.811	2238	2243	2249	rVV2	214	309	0.02%	0.003%
82	15.858	2249	2252	2258	rVB2	190	373	0.02%	0.004%
83	16.188	2305	2315	2342	rVB	597832	1152055	73.08%	11.552%
84	16.376	2347	2351	2354	rBV2	270	353	0.02%	0.004%
85	16.549	2381	2384	2396	rBV2	227	533	0.03%	0.005%
86	16.643	2396	2402	2412	rVB3	283	713	0.05%	0.007%
87	16.721	2412	2417	2427	rBV3	259	618	0.04%	0.006%
88	17.041	2473	2478	2497	rBV3	421	1340	0.09%	0.013%
89	17.271	2497	2522	2531	rBV3	379	2081	0.13%	0.021%
90	17.433	2542	2553	2593	rBV	821772	1548078	98.21%	15.523%
91	17.652	2593	2595	2600	rVB3	326	291	0.02%	0.003%
92	17.747	2607	2613	2628	rBV4	408	1325	0.08%	0.013%
93	17.841	2628	2631	2634	rBV2	383	350	0.02%	0.004%
94	18.113	2656	2683	2685	rBV3	645	2340	0.15%	0.023%
95	18.301	2718	2719	2723	rBV3	434	371	0.02%	0.004%
96	18.379	2728	2734	2745	rBV3	491	1447	0.09%	0.015%
97	18.693	2791	2794	2796	rBV3	615	512	0.03%	0.005%
98	18.709	2796	2797	2811	rVV5	923	2046	0.13%	0.021%
99	18.923	2811	2838	2840	rVV4	1008	4218	0.27%	0.042%
100	22.103	2840	3446	3448	rVV8	6277	696749	44.20%	6.986%

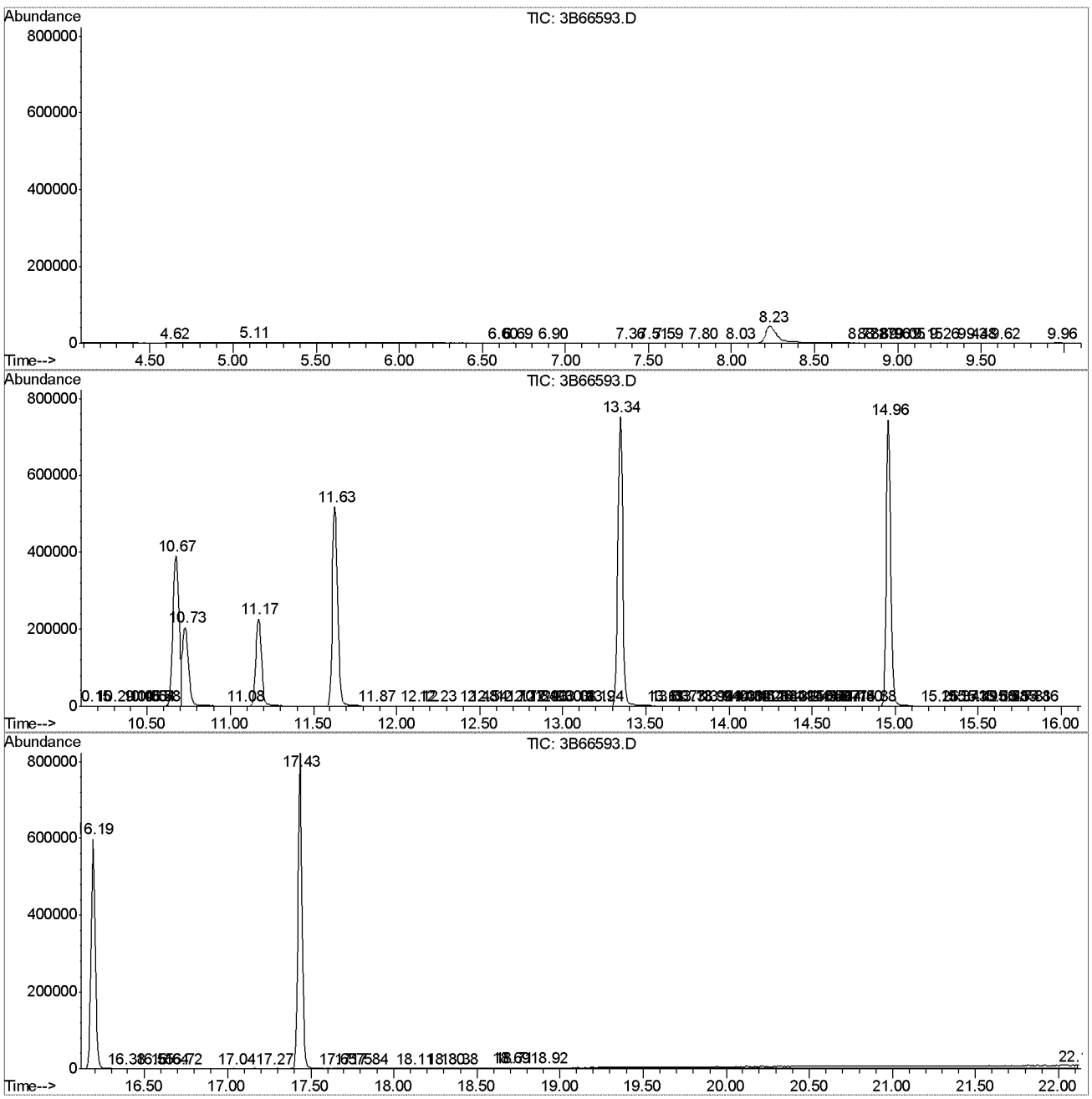
Sum of corrected areas: 9972872

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 17:46:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	151529	500.00	ug/L	0.00
5) pentafluorobenzene	10.67	168	394908	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	532853	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	506368	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	268779	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	161168	51.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.20%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	202165	49.38	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 98.76%			
85) toluene-d8 (s)	13.34	98	620774	52.03	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.06%			
111) 4-bromofluorobenzene (s)	16.19	95	243118	52.31	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.62%			

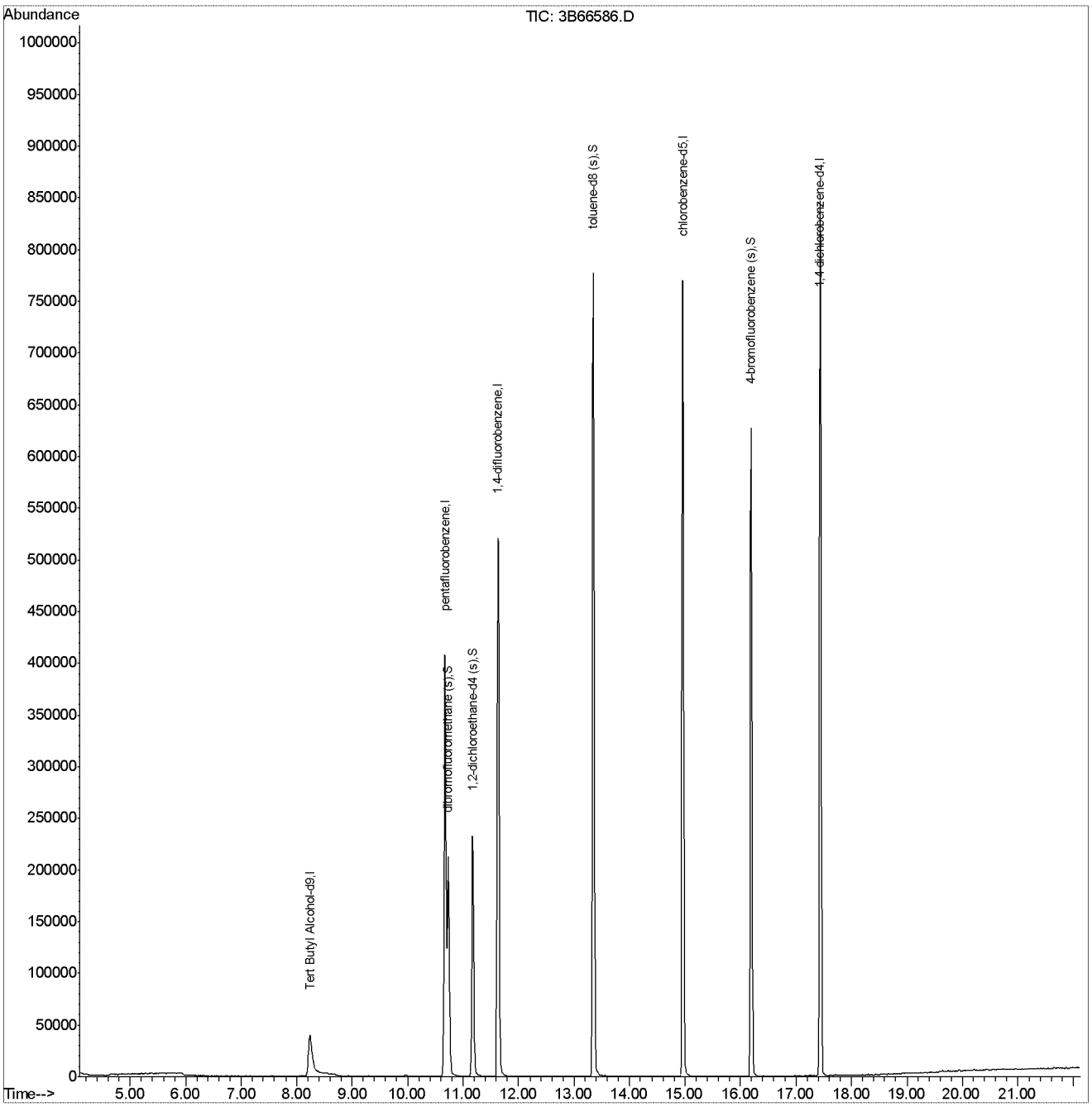
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 17:46:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.692	96	117	125	rBV5	1418	7620	0.47%	0.079%
2	5.529	273	277	335	rVV5	1080	16769	1.03%	0.175%
3	5.848	335	338	415	rVB4	2593	19592	1.21%	0.204%
4	6.402	442	444	465	rBV2	301	1008	0.06%	0.011%
5	6.517	465	466	476	rVB2	299	460	0.03%	0.005%
6	6.638	487	489	493	rVB3	241	239	0.01%	0.002%
7	6.716	493	504	521	rVB2	298	1367	0.08%	0.014%
8	7.223	599	601	613	rVB3	253	474	0.03%	0.005%
9	7.333	613	622	624	rBV3	182	362	0.02%	0.004%
10	8.055	757	760	762	rVB	365	277	0.02%	0.003%
11	8.112	762	771	775	rBV3	379	801	0.05%	0.008%
12	8.149	775	778	780	rVV	392	369	0.02%	0.004%
13	8.238	780	795	897	rVV2	40104	261068	16.06%	2.723%
14	8.787	897	900	906	rVB3	304	409	0.03%	0.004%
15	8.902	912	922	926	rVB3	148	353	0.02%	0.004%
16	8.939	926	929	934	rBV3	306	340	0.02%	0.004%
17	9.729	1078	1080	1084	rBV2	201	259	0.02%	0.003%
18	9.765	1084	1087	1116	rVV3	304	1484	0.09%	0.015%
19	9.964	1116	1125	1134	rVV5	1239	3550	0.22%	0.037%
20	10.016	1134	1135	1158	rVB2	225	818	0.05%	0.009%
21	10.215	1169	1173	1187	rVB2	356	807	0.05%	0.008%
22	10.320	1191	1193	1196	rVB2	261	259	0.02%	0.003%
23	10.341	1196	1197	1214	rBV3	236	868	0.05%	0.009%
24	10.545	1233	1236	1244	rVB2	311	580	0.04%	0.006%
25	10.592	1244	1245	1248	rVV2	259	250	0.02%	0.003%
26	10.670	1248	1260	1267	rVV	407269	1033536	63.59%	10.778%
27	10.733	1267	1272	1316	rVB	212597	516115	31.76%	5.382%
28	10.984	1316	1320	1322	rBV2	231	249	0.02%	0.003%
29	11.005	1322	1324	1329	rVB2	255	275	0.02%	0.003%
30	11.172	1345	1356	1398	rBV	232586	558014	34.33%	5.819%
31	11.408	1398	1401	1404	rVB2	269	250	0.02%	0.003%
32	11.476	1411	1414	1420	rVB2	322	293	0.02%	0.003%
33	11.538	1420	1426	1431	rBV2	245	389	0.02%	0.004%
34	11.627	1431	1443	1487	rVV	520603	1208464	74.35%	12.603%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.863	1487	1488	1495	rVV2	473	749	0.05%	0.008%
36	11.915	1495	1498	1501	rVB2	521	360	0.02%	0.004%
37	12.046	1520	1523	1530	rVB2	292	336	0.02%	0.004%
38	12.103	1530	1534	1537	rVB	315	298	0.02%	0.003%
39	12.135	1537	1540	1549	rBV2	155	277	0.02%	0.003%
40	12.271	1564	1566	1572	rVB2	372	391	0.02%	0.004%
41	12.328	1572	1577	1579	rBV2	197	265	0.02%	0.003%
42	12.401	1589	1591	1599	rVB2	214	266	0.02%	0.003%
43	12.574	1620	1624	1630	rVB2	333	272	0.02%	0.003%
44	12.684	1641	1645	1648	rBV	302	341	0.02%	0.004%
45	12.715	1648	1651	1655	rVB2	382	414	0.03%	0.004%
46	12.752	1655	1658	1664	rBV2	396	510	0.03%	0.005%
47	12.867	1675	1680	1682	rBV	414	323	0.02%	0.003%
48	12.909	1682	1688	1692	rVV3	343	685	0.04%	0.007%
49	12.987	1699	1703	1709	rBV	314	401	0.02%	0.004%
50	13.081	1719	1721	1725	rBV2	263	260	0.02%	0.003%
51	13.139	1727	1732	1736	rBV3	326	626	0.04%	0.007%
52	13.259	1751	1755	1757	rVB2	292	277	0.02%	0.003%
53	13.343	1759	1771	1808	rVV	776801	1625282	100.00%	16.949%
54	13.547	1808	1810	1825	rVB4	795	1922	0.12%	0.020%
55	13.803	1838	1859	1862	rBV3	282	1185	0.07%	0.012%
56	13.861	1866	1870	1871	rBV2	336	330	0.02%	0.003%
57	13.918	1877	1881	1885	rVB2	315	413	0.03%	0.004%
58	13.960	1888	1889	1893	rBV3	300	322	0.02%	0.003%
59	14.038	1902	1904	1908	rBV2	280	328	0.02%	0.003%
60	14.096	1908	1915	1916	rVV2	317	557	0.03%	0.006%
61	14.148	1916	1925	1927	rVB3	305	749	0.05%	0.008%
62	14.185	1931	1932	1936	rBV2	406	409	0.03%	0.004%
63	14.211	1936	1937	1941	rVB3	297	239	0.01%	0.002%
64	14.274	1947	1949	1957	rVB2	293	428	0.03%	0.004%
65	14.394	1971	1972	1976	rBV2	248	263	0.02%	0.003%
66	14.457	1982	1984	1991	rVB3	383	874	0.05%	0.009%
67	14.509	1991	1994	1997	rBV2	344	451	0.03%	0.005%
68	14.567	1997	2005	2007	rBV3	401	884	0.05%	0.009%
69	14.635	2013	2018	2021	rBV3	440	589	0.04%	0.006%
70	14.666	2022	2024	2028	rVV2	294	375	0.02%	0.004%
71	14.718	2031	2034	2037	rVB2	331	413	0.03%	0.004%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.760	2040	2042	2046	rBV	375	411	0.03%	0.004%
73	14.875	2057	2064	2065	rBV2	312	483	0.03%	0.005%
74	14.959	2070	2080	2117	rVV	769320	1505888	92.65%	15.704%
75	15.168	2117	2120	2123	rVB3	330	308	0.02%	0.003%
76	15.335	2150	2152	2164	rVB3	319	762	0.05%	0.008%
77	15.466	2170	2177	2180	rVB3	270	461	0.03%	0.005%
78	15.513	2182	2186	2193	rVB3	225	428	0.03%	0.004%
79	16.031	2282	2285	2298	rBV3	181	428	0.03%	0.004%
80	16.130	2298	2304	2305	rVV3	184	244	0.02%	0.003%
81	16.188	2305	2315	2352	rVB	626468	1184668	72.89%	12.354%
82	16.408	2352	2357	2368	rBV3	469	1043	0.06%	0.011%
83	16.633	2383	2400	2402	rVB2	197	788	0.05%	0.008%
84	16.795	2402	2431	2433	rBV3	257	1604	0.10%	0.017%
85	16.946	2452	2460	2461	rBV3	185	375	0.02%	0.004%
86	16.973	2461	2465	2478	rVB4	805	1582	0.10%	0.016%
87	17.061	2478	2482	2485	rBV3	338	529	0.03%	0.006%
88	17.281	2521	2524	2526	rVB3	555	432	0.03%	0.005%
89	17.323	2530	2532	2540	rVB4	462	661	0.04%	0.007%
90	17.375	2540	2542	2544	rBV2	477	420	0.03%	0.004%
91	17.433	2544	2553	2581	rVV	846336	1589875	97.82%	16.580%
92	17.590	2581	2583	2585	rVB2	539	397	0.02%	0.004%
93	17.689	2598	2602	2605	rBV2	632	613	0.04%	0.006%
94	17.726	2605	2609	2640	rVV4	973	4139	0.25%	0.043%
95	17.904	2640	2643	2655	rVB4	600	1774	0.11%	0.019%
96	18.071	2674	2675	2680	rVB	448	275	0.02%	0.003%
97	18.291	2715	2717	2727	rBV4	750	1616	0.10%	0.017%
98	18.468	2727	2751	2753	rVV3	612	2770	0.17%	0.029%
99	18.667	2786	2789	2794	rVB3	848	916	0.06%	0.010%
100	18.814	2794	2817	2820	rBV5	921	4152	0.26%	0.043%

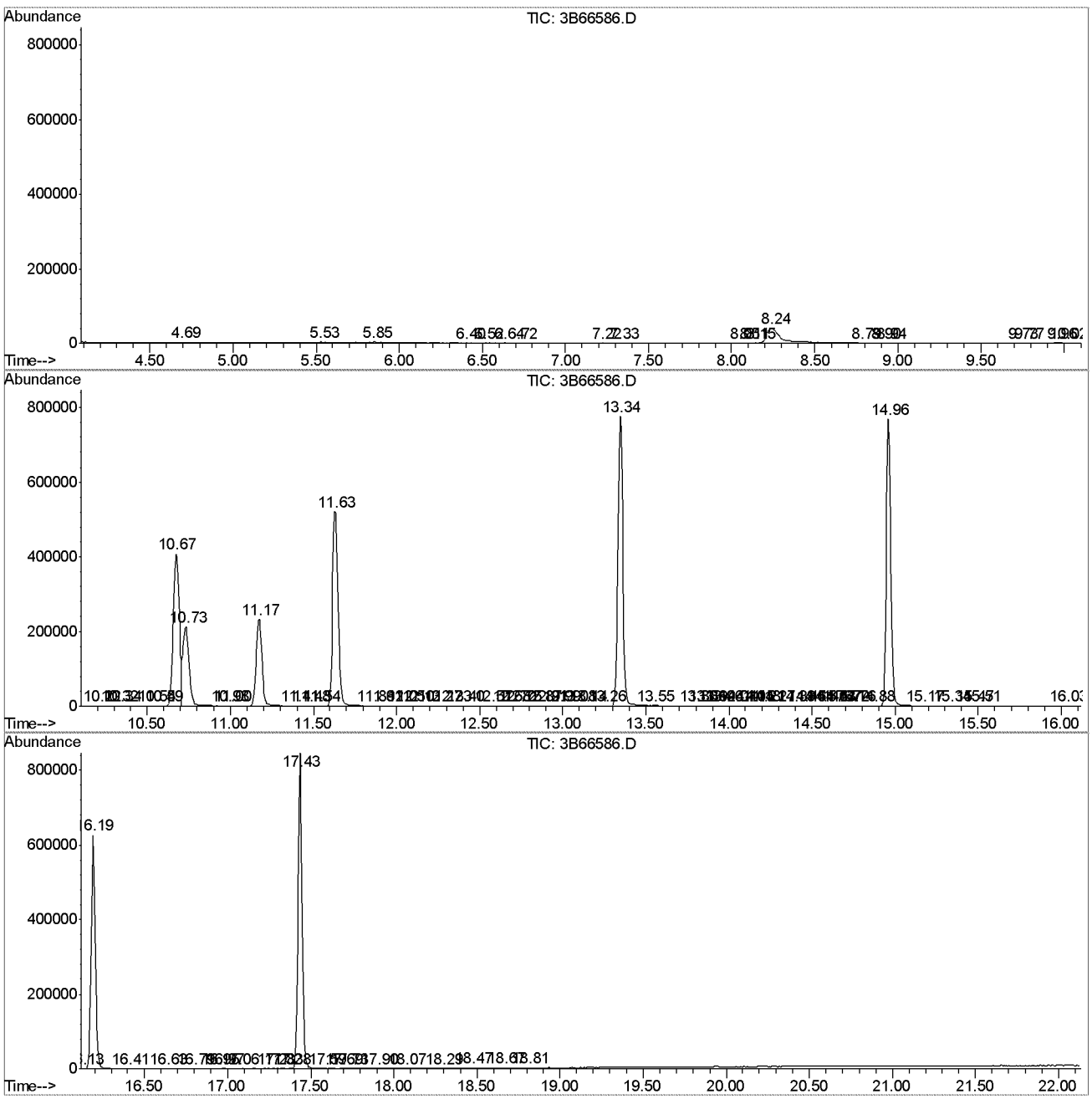
Sum of corrected areas: 9589074

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 10:25:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	152359	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	372948	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	501706	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	481698	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	257846	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	151266	51.29	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.58%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	191317	49.48	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 98.96%			
85) toluene-d8 (s)	13.34	98	588918	52.43	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.86%			
111) 4-bromofluorobenzene (s)	16.19	95	231122	51.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.66%			

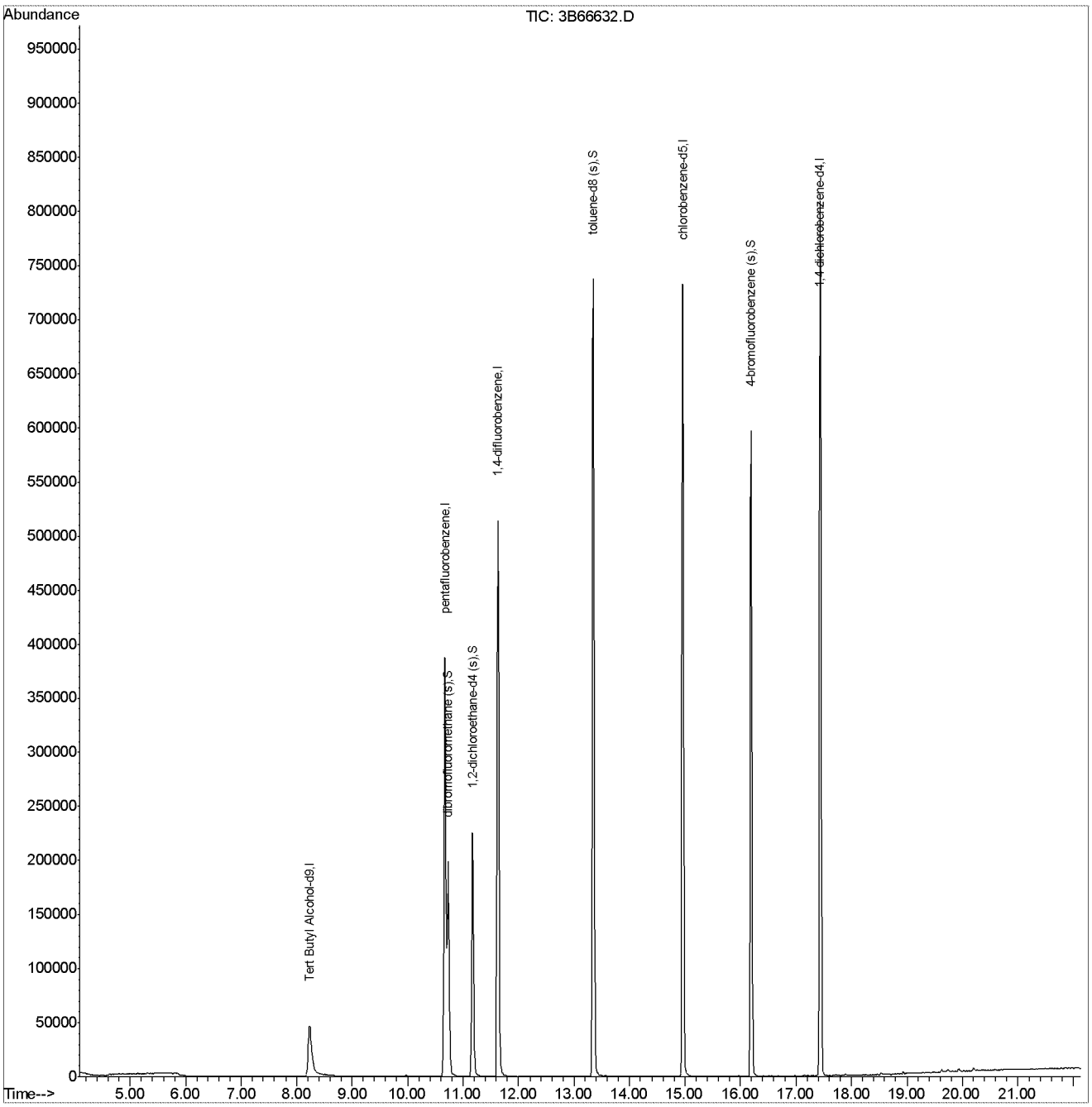
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 10:25:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.629	92	105	118	rBV4	1617	7821	0.51%	0.084%
2	4.864	148	150	173	rBV5	961	2987	0.19%	0.032%
3	5.769	321	323	394	rVB6	2822	23731	1.53%	0.255%
4	6.402	443	444	483	rBV3	351	2366	0.15%	0.025%
5	6.685	494	498	502	rBV2	341	520	0.03%	0.006%
6	6.716	502	504	514	rVV2	338	822	0.05%	0.009%
7	6.779	514	516	524	rVV	470	625	0.04%	0.007%
8	6.841	524	528	533	rVV2	309	527	0.03%	0.006%
9	6.899	533	539	544	rVV3	212	440	0.03%	0.005%
10	6.930	544	545	571	rVV3	251	915	0.06%	0.010%
11	7.119	579	581	586	rBV	357	317	0.02%	0.003%
12	7.150	586	587	593	rVV3	246	357	0.02%	0.004%
13	7.218	593	600	608	rVV3	223	691	0.04%	0.007%
14	7.276	608	611	627	rVB3	354	1153	0.07%	0.012%
15	7.370	627	629	637	rBV2	306	640	0.04%	0.007%
16	7.417	637	638	648	rBV2	271	399	0.03%	0.004%
17	7.600	665	673	680	rVB3	240	683	0.04%	0.007%
18	7.987	745	747	755	rBV2	276	481	0.03%	0.005%
19	8.227	778	793	892	rVB2	46357	260294	16.82%	2.796%
20	8.751	892	893	911	rVB3	218	693	0.04%	0.007%
21	8.860	911	914	930	rVB3	393	1634	0.11%	0.018%
22	8.954	930	932	943	rBV3	456	1274	0.08%	0.014%
23	9.336	997	1005	1007	rVB3	338	784	0.05%	0.008%
24	9.352	1007	1008	1012	rBV	320	375	0.02%	0.004%
25	9.478	1029	1032	1037	rVB2	208	323	0.02%	0.003%
26	9.556	1045	1047	1057	rVB3	342	662	0.04%	0.007%
27	9.645	1062	1064	1068	rVB2	310	341	0.02%	0.004%
28	9.734	1078	1081	1084	rBV	275	362	0.02%	0.004%
29	9.791	1089	1092	1100	rBV2	311	583	0.04%	0.006%
30	9.844	1100	1102	1108	rVB2	492	474	0.03%	0.005%
31	9.912	1109	1115	1116	rVB2	339	331	0.02%	0.004%
32	9.969	1116	1126	1134	rBV4	1210	3534	0.23%	0.038%
33	10.377	1201	1204	1213	rBV2	324	533	0.03%	0.006%
34	10.670	1244	1260	1267	rBV	387021	1001996	64.74%	10.764%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	10.728	1267	1271	1309	rVV	198464	460354	29.74%	4.945%
36	10.937	1309	1311	1314	rVB2	316	329	0.02%	0.004%
37	10.963	1314	1316	1326	rBV	234	308	0.02%	0.003%
38	11.094	1335	1341	1344	rBV2	219	355	0.02%	0.004%
39	11.167	1344	1355	1396	rVV	225145	529351	34.20%	5.687%
40	11.423	1400	1404	1411	rBV2	242	472	0.03%	0.005%
41	11.627	1428	1443	1488	rBV	513255	1138184	73.54%	12.227%
42	12.176	1544	1548	1554	rBV2	336	386	0.02%	0.004%
43	12.694	1645	1647	1650	rVB	411	320	0.02%	0.003%
44	12.814	1667	1670	1673	rVB2	375	439	0.03%	0.005%
45	12.846	1673	1676	1678	rBV2	358	377	0.02%	0.004%
46	12.872	1678	1681	1686	rVB3	331	436	0.03%	0.005%
47	12.945	1692	1695	1699	rBV2	351	545	0.04%	0.006%
48	13.081	1717	1721	1723	rVB2	331	471	0.03%	0.005%
49	13.102	1723	1725	1729	rBV	302	366	0.02%	0.004%
50	13.191	1739	1742	1746	rVB2	327	348	0.02%	0.004%
51	13.233	1749	1750	1753	rVB2	350	312	0.02%	0.003%
52	13.343	1759	1771	1808	rBV	737580	1547704	100.00%	16.626%
53	13.552	1808	1811	1825	rVB3	1123	2717	0.18%	0.029%
54	13.834	1860	1865	1868	rVB3	278	459	0.03%	0.005%
55	13.871	1868	1872	1876	rVB2	297	490	0.03%	0.005%
56	14.200	1928	1935	1937	rVB2	261	499	0.03%	0.005%
57	14.268	1946	1948	1955	rVB2	258	323	0.02%	0.003%
58	14.347	1959	1963	1970	rBV3	309	683	0.04%	0.007%
59	14.394	1970	1972	1975	rBV2	292	308	0.02%	0.003%
60	14.436	1979	1980	1986	rVV2	262	389	0.03%	0.004%
61	14.478	1986	1988	1991	rVV	388	354	0.02%	0.004%
62	14.640	2012	2019	2021	rBB2	245	408	0.03%	0.004%
63	14.666	2021	2024	2026	rBV3	313	353	0.02%	0.004%
64	14.828	2050	2055	2057	rVB3	302	470	0.03%	0.005%
65	14.865	2057	2062	2069	rBV3	313	748	0.05%	0.008%
66	14.959	2069	2080	2103	rBV	732265	1433547	92.62%	15.400%
67	15.158	2115	2118	2131	rVB3	349	618	0.04%	0.007%
68	15.388	2160	2162	2177	rVB3	211	563	0.04%	0.006%
69	15.513	2177	2186	2189	rVV2	182	400	0.03%	0.004%
70	15.566	2190	2196	2208	rVB2	208	681	0.04%	0.007%
71	15.848	2230	2250	2251	rVB3	198	753	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	15.963	2270	2272	2286	rVV2	652	967	0.06%	0.010%
73	16.041	2286	2287	2293	rVB2	259	321	0.02%	0.003%
74	16.078	2293	2294	2306	rBV3	214	555	0.04%	0.006%
75	16.188	2306	2315	2341	rVB	596534	1128626	72.92%	12.124%
76	16.402	2353	2356	2369	rBV3	505	1106	0.07%	0.012%
77	16.512	2372	2377	2381	rVV4	413	754	0.05%	0.008%
78	16.559	2381	2386	2404	rVV3	594	1534	0.10%	0.016%
79	16.674	2404	2408	2426	rVV4	494	1164	0.08%	0.013%
80	16.847	2426	2441	2451	rVB3	208	983	0.06%	0.011%
81	17.114	2462	2492	2496	rBV3	420	1588	0.10%	0.017%
82	17.150	2496	2499	2508	rVB3	459	833	0.05%	0.009%
83	17.213	2508	2511	2518	rBV2	407	424	0.03%	0.005%
84	17.276	2518	2523	2538	rVB4	752	1882	0.12%	0.020%
85	17.433	2540	2553	2580	rVB	809084	1528986	98.79%	16.425%
86	17.584	2580	2582	2599	rBV4	660	1746	0.11%	0.019%
87	17.689	2599	2602	2605	rBV3	817	1066	0.07%	0.011%
88	17.726	2605	2609	2624	rVB5	1415	3266	0.21%	0.035%
89	17.835	2624	2630	2631	rBV3	472	717	0.05%	0.008%
90	17.856	2632	2634	2639	rBV3	461	705	0.05%	0.008%
91	17.898	2639	2642	2656	rVV5	1034	2555	0.17%	0.027%
92	17.982	2656	2658	2662	rVB3	385	383	0.02%	0.004%
93	18.249	2692	2709	2711	rBV2	746	2724	0.18%	0.029%
94	18.463	2748	2750	2758	rBV4	813	1280	0.08%	0.014%
95	18.547	2758	2766	2777	rVV4	1354	4192	0.27%	0.045%
96	18.845	2799	2823	2832	rBV5	958	5225	0.34%	0.056%
97	18.923	2835	2838	2846	rBV7	2084	3890	0.25%	0.042%
98	19.624	2968	2972	2989	rBV7	2232	4121	0.27%	0.044%
99	19.734	2989	2993	3028	rBV8	1460	5424	0.35%	0.058%
100	22.072	3078	3440	3447	rBV9	2912	156249	10.10%	1.679%

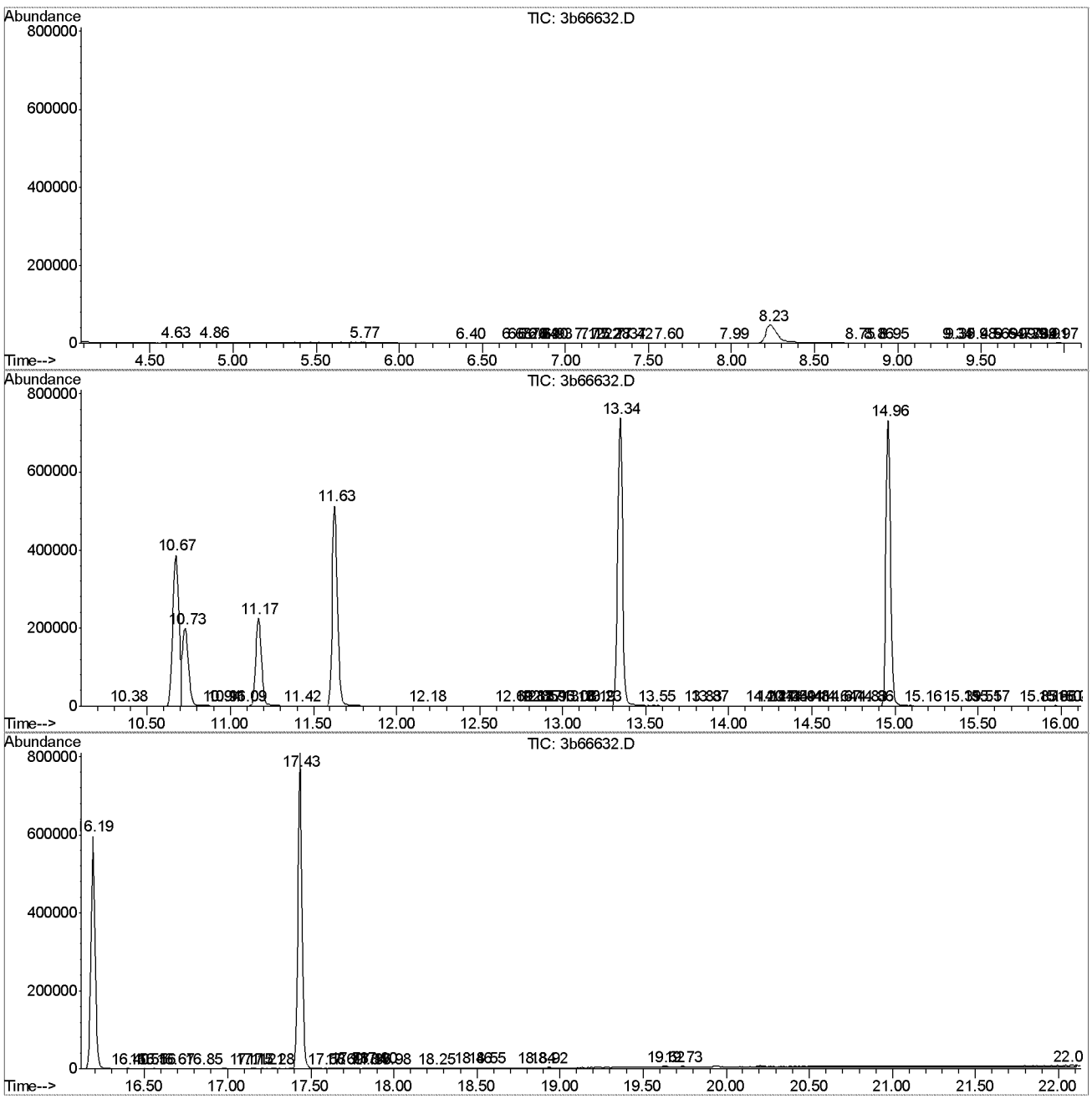
Sum of corrected areas: 9308754

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 12:17:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	141802	500.00	ug/L	-0.01
5) pentafluorobenzene	10.67	168	381051	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	509120	50.00	ug/L	0.00
93) chlorobenzene-d5	14.95	117	479604	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	259275	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.72	113	149122	49.48	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.96%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	180390	45.66	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 91.32%			
85) toluene-d8 (s)	13.34	98	587347	51.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.06%			
111) 4-bromofluorobenzene (s)	16.19	95	227669	50.78	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 101.56%			

Target Compounds	Qvalue

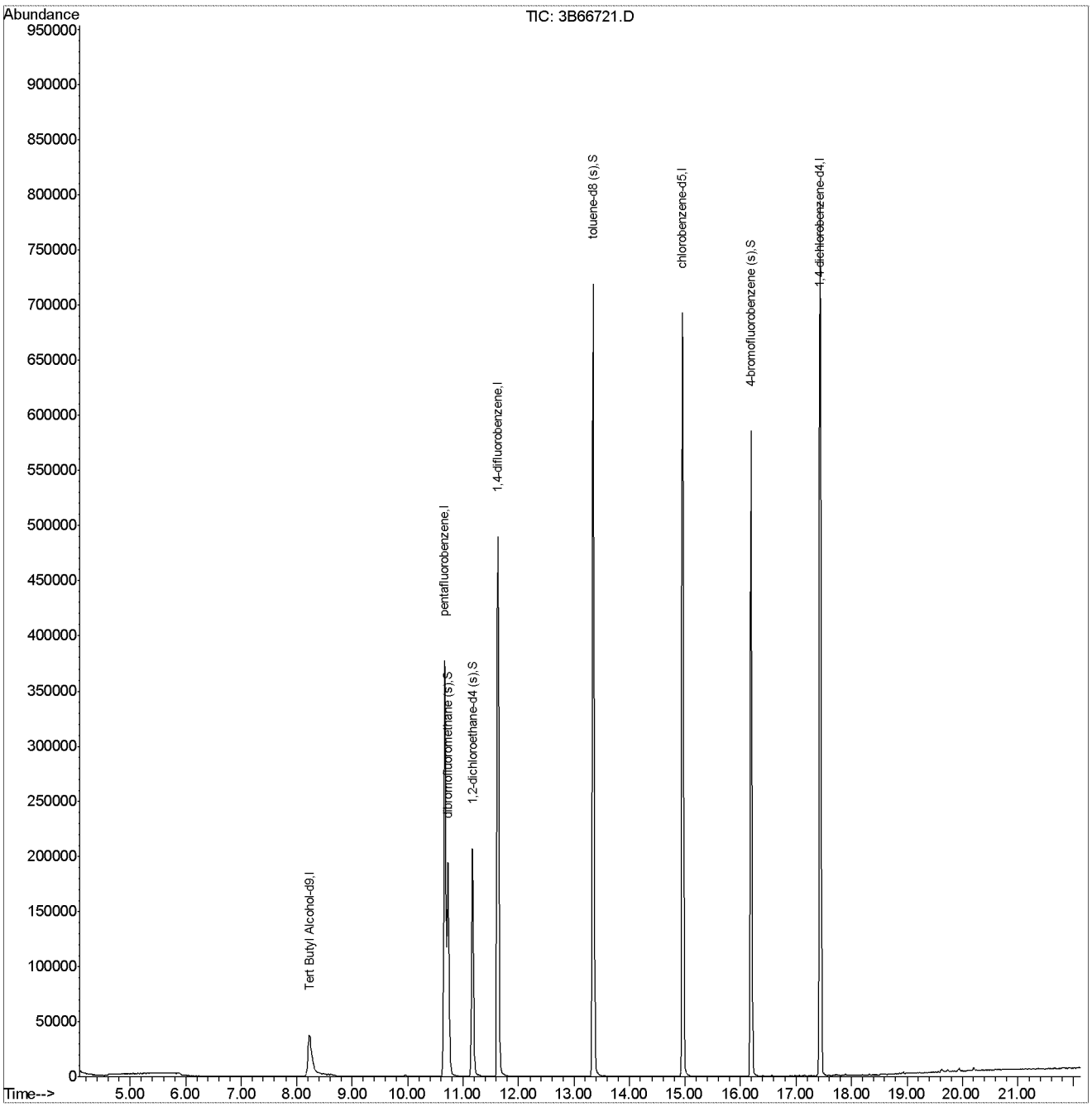
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 12:17:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

6.2.5 6



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.603	94	100	104	rBV3	813	1890	0.12%	0.021%
2	4.634	104	106	115	rVV4	842	2001	0.13%	0.022%
3	5.126	157	200	230	rBV8	970	13189	0.87%	0.144%
4	6.407	443	445	458	rBV2	302	815	0.05%	0.009%
5	6.528	466	468	482	rBV3	302	598	0.04%	0.007%
6	6.909	540	541	549	rBV2	246	557	0.04%	0.006%
7	7.014	554	561	584	rVV3	318	1766	0.12%	0.019%
8	7.145	584	586	600	rVV	277	726	0.05%	0.008%
9	7.229	600	602	609	rVV3	260	364	0.02%	0.004%
10	7.286	609	613	622	rVV2	143	360	0.02%	0.004%
11	7.406	633	636	652	rBV3	433	1892	0.12%	0.021%
12	7.720	694	696	700	rVB2	346	416	0.03%	0.005%
13	7.752	700	702	709	rBV2	333	618	0.04%	0.007%
14	7.799	709	711	721	rVV2	328	770	0.05%	0.008%
15	7.882	721	727	728	rVV2	307	450	0.03%	0.005%
16	7.914	728	733	749	rVB4	487	1698	0.11%	0.019%
17	8.024	749	754	756	rBV	341	448	0.03%	0.005%
18	8.065	759	762	776	rVV3	301	1001	0.07%	0.011%
19	8.227	776	793	871	rVV2	37597	237368	15.60%	2.593%
20	8.641	871	872	890	rVB4	1439	4718	0.31%	0.052%
21	8.928	920	927	928	rBV2	293	575	0.04%	0.006%
22	9.059	945	952	960	rVB3	244	826	0.05%	0.009%
23	9.226	982	984	1002	rVB3	173	543	0.04%	0.006%
24	9.362	1002	1010	1013	rVB3	182	402	0.03%	0.004%
25	9.593	1051	1054	1063	rVB3	179	381	0.03%	0.004%
26	9.854	1097	1104	1109	rVV	451	527	0.03%	0.006%
27	9.953	1117	1123	1144	rVB4	1282	3346	0.22%	0.037%
28	10.126	1151	1156	1165	rVB3	207	414	0.03%	0.005%
29	10.267	1181	1183	1189	rVB3	305	582	0.04%	0.006%
30	10.346	1194	1198	1201	rVV2	359	513	0.03%	0.006%
31	10.414	1210	1211	1217	rVV	287	461	0.03%	0.005%
32	10.456	1217	1219	1225	rVV3	340	661	0.04%	0.007%
33	10.492	1225	1226	1232	rVV	427	570	0.04%	0.006%
34	10.586	1239	1244	1247	rVV3	327	506	0.03%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	10.665	1247	1259	1266	rVV	377152	973099	63.94%	10.630%
36	10.722	1266	1270	1301	rVV	193984	475593	31.25%	5.195%
37	10.895	1301	1303	1309	rVV4	868	1253	0.08%	0.014%
38	10.932	1309	1310	1319	rVB2	459	491	0.03%	0.005%
39	11.167	1342	1355	1389	rBV	206921	506772	33.30%	5.536%
40	11.350	1389	1390	1393	rVV	539	376	0.02%	0.004%
41	11.376	1393	1395	1400	rVB2	317	507	0.03%	0.006%
42	11.627	1432	1443	1474	rBV	489932	1121890	73.72%	12.255%
43	12.276	1564	1567	1572	rBV2	336	473	0.03%	0.005%
44	12.307	1572	1573	1581	rVB2	303	389	0.03%	0.004%
45	12.427	1591	1596	1599	rVV2	296	338	0.02%	0.004%
46	12.522	1609	1614	1615	rBV2	300	364	0.02%	0.004%
47	12.542	1615	1618	1621	rVB2	349	361	0.02%	0.004%
48	12.888	1680	1684	1687	rBV2	339	421	0.03%	0.005%
49	12.914	1687	1689	1692	rVB2	328	379	0.02%	0.004%
50	12.966	1692	1699	1702	rBV	355	951	0.06%	0.010%
51	13.055	1715	1716	1723	rVB2	315	589	0.04%	0.006%
52	13.154	1731	1735	1742	rBV3	323	834	0.05%	0.009%
53	13.343	1760	1771	1809	rBV	718972	1521929	100.00%	16.625%
54	13.829	1862	1864	1870	rVB3	333	594	0.04%	0.006%
55	13.876	1870	1873	1875	rBV2	375	420	0.03%	0.005%
56	13.991	1888	1895	1898	rBV	324	524	0.03%	0.006%
57	14.106	1911	1917	1922	rBV3	294	658	0.04%	0.007%
58	14.248	1937	1944	1947	rVB2	285	570	0.04%	0.006%
59	14.289	1947	1952	1955	rVB2	263	444	0.03%	0.005%
60	14.326	1955	1959	1961	rBV	301	410	0.03%	0.004%
61	14.399	1969	1973	1979	rVB2	244	601	0.04%	0.007%
62	14.462	1979	1985	1986	rBV2	276	388	0.03%	0.004%
63	14.525	1989	1997	1998	rBV2	354	528	0.03%	0.006%
64	14.561	2003	2004	2009	rBV2	280	413	0.03%	0.005%
65	14.812	2046	2052	2055	rVB2	346	663	0.04%	0.007%
66	14.844	2055	2058	2062	rBV2	294	452	0.03%	0.005%
67	14.870	2062	2063	2068	rVB2	292	397	0.03%	0.004%
68	14.954	2068	2079	2111	rBV	692757	1392717	91.51%	15.214%
69	15.137	2111	2114	2130	rVB3	455	1735	0.11%	0.019%
70	15.252	2135	2136	2147	rBV3	375	990	0.07%	0.011%
71	15.372	2147	2159	2161	rBV3	201	526	0.03%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	15.430	2161	2170	2175	rBV3	217	466	0.03%	0.005%
73	15.592	2187	2201	2202	rVB2	198	515	0.03%	0.006%
74	16.188	2304	2315	2344	rVB	584733	1109923	72.93%	12.124%
75	16.392	2351	2354	2361	rVB2	370	674	0.04%	0.007%
76	16.502	2374	2375	2381	rBV2	219	342	0.02%	0.004%
77	16.554	2381	2385	2396	rVB5	551	925	0.06%	0.010%
78	16.748	2418	2422	2440	rBV3	303	1095	0.07%	0.012%
79	16.920	2453	2455	2462	rVB4	500	505	0.03%	0.006%
80	16.988	2462	2468	2473	rBV3	424	795	0.05%	0.009%
81	17.051	2478	2480	2485	rVB2	422	468	0.03%	0.005%
82	17.150	2496	2499	2507	rVB2	501	930	0.06%	0.010%
83	17.265	2519	2521	2529	rBV4	677	1223	0.08%	0.013%
84	17.318	2529	2531	2538	rVV	252	376	0.02%	0.004%
85	17.365	2538	2540	2543	rVV2	535	698	0.05%	0.008%
86	17.433	2543	2553	2578	rVB	793684	1504093	98.83%	16.430%
87	17.574	2578	2580	2583	rBV2	491	408	0.03%	0.004%
88	17.652	2594	2595	2603	rVV3	509	795	0.05%	0.009%
89	17.731	2603	2610	2616	rVB3	1207	2435	0.16%	0.027%
90	17.820	2624	2627	2633	rBV2	476	791	0.05%	0.009%
91	17.893	2636	2641	2644	rVV4	1104	1324	0.09%	0.014%
92	17.977	2653	2657	2660	rBV2	580	1012	0.07%	0.011%
93	18.374	2730	2733	2755	rBV6	707	2698	0.18%	0.029%
94	18.604	2755	2777	2783	rBV4	804	4174	0.27%	0.046%
95	18.766	2784	2808	2810	rVV5	561	1904	0.13%	0.021%
96	18.934	2835	2840	2847	rVB4	2124	3623	0.24%	0.040%
97	19.588	2888	2965	2967	rBV10	1903	23864	1.57%	0.261%
98	19.629	2967	2973	3027	rVV10	3623	23919	1.57%	0.261%
99	19.943	3027	3033	3078	rVV9	3359	19326	1.27%	0.211%
100	22.093	3080	3444	3448	rVV9	1923	153109	10.06%	1.673%

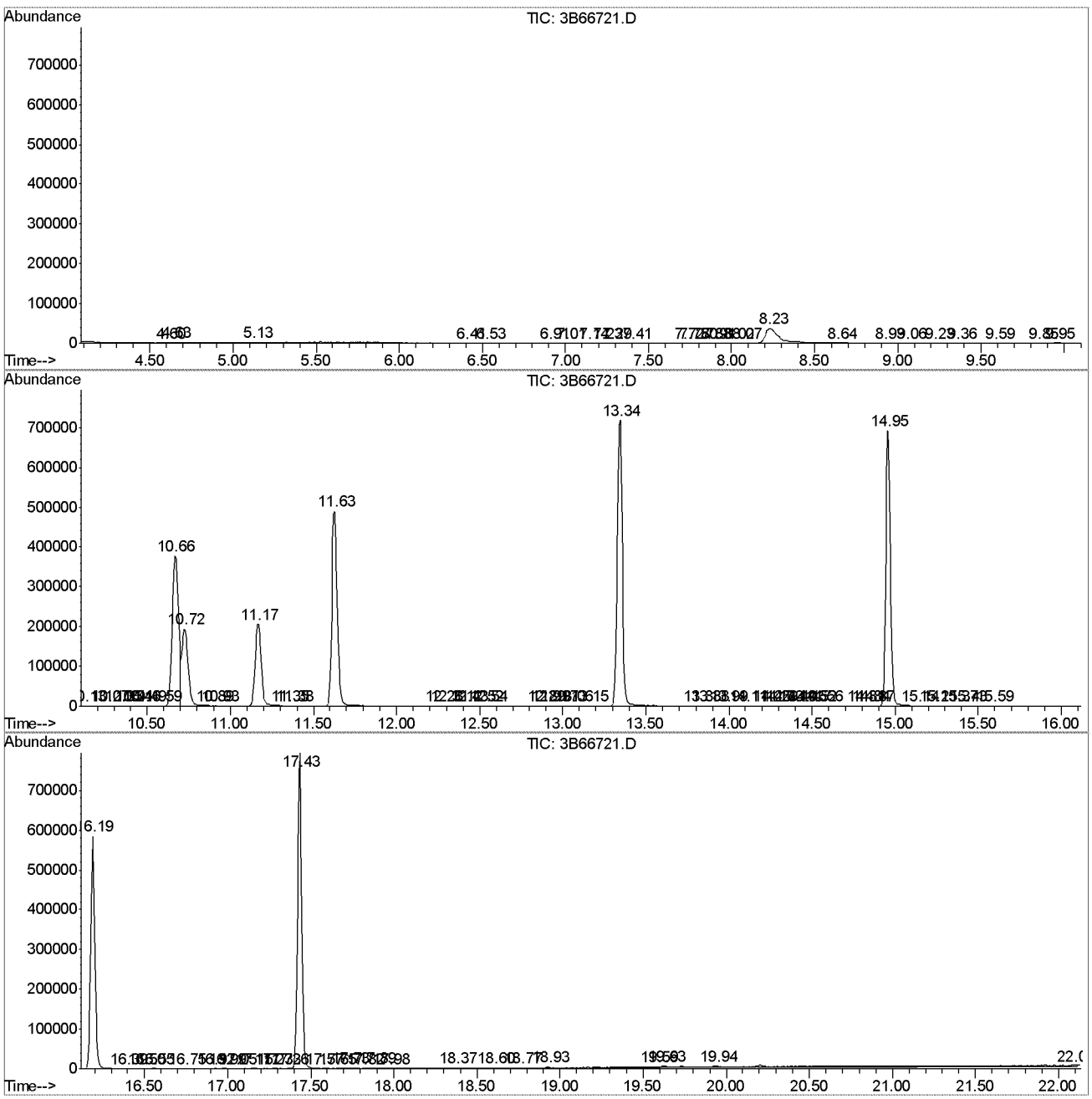
Sum of corrected areas: 9154401

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MB1	R85118.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MB1	R85118.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	88%	25-112%
321-60-8	2-Fluorobiphenyl	82%	31-106%
1718-51-0	Terphenyl-d14	92%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-MB1	4M23430.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	102%	32-135%
321-60-8	2-Fluorobiphenyl	96%	31-121%
1718-51-0	Terphenyl-d14	109%	10-130%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-BS1	R85119.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	46.8	94	46-113
1912-24-9	Atrazine	50	56.9	114	55-127
100-52-7	Benzaldehyde	50	56.3	113	31-130
101-55-3	4-Bromophenyl phenyl ether	50	47.3	95	55-121
85-68-7	Butyl benzyl phthalate	50	42.2	84	55-132
92-52-4	1,1'-Biphenyl	50	44.9	90	43-107
91-58-7	2-Chloronaphthalene	50	41.0	82	39-108
106-47-8	4-Chloroaniline	50	35.9	72	34-103
86-74-8	Carbazole	50	45.4	91	63-122
105-60-2	Caprolactam	50	3.8	8	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	42.5	85	43-119
111-44-4	bis(2-Chloroethyl)ether	50	39.3	79	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	42.1	84	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	46.1	92	50-117
121-14-2	2,4-Dinitrotoluene	50	46.3	93	56-124
606-20-2	2,6-Dinitrotoluene	50	48.3	97	55-128
91-94-1	3,3'-Dichlorobenzidine	50	39.1	78	42-116
132-64-9	Dibenzofuran	50	43.5	87	53-109
84-74-2	Di-n-butyl phthalate	50	45.2	90	58-130
117-84-0	Di-n-octyl phthalate	50	46.4	93	55-133
84-66-2	Diethyl phthalate	50	42.5	85	52-123
131-11-3	Dimethyl phthalate	50	39.4	79	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.6	89	57-134
87-68-3	Hexachlorobutadiene	50	42.4	85	11-100
77-47-4	Hexachlorocyclopentadiene	100	126	126* [a]	5-120
67-72-1	Hexachloroethane	50	39.7	79	13-88
78-59-1	Isophorone	50	46.1	92	43-120
91-57-6	2-Methylnaphthalene	50	39.7	79	33-103
88-74-4	2-Nitroaniline	50	48.5	97	48-132
99-09-2	3-Nitroaniline	50	39.5	79	48-115
100-01-6	4-Nitroaniline	50	37.1	74	51-125
98-95-3	Nitrobenzene	50	40.6	81	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	48.7	97	41-121
86-30-6	N-Nitrosodiphenylamine	50	42.7	85	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	43.8	88	18-130

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-BS1	R85119.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	87%	25-112%
321-60-8	2-Fluorobiphenyl	81%	31-106%
1718-51-0	Terphenyl-d14	87%	14-122%

(a) Outside of in house control limits.

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-BS12	4M23431.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.976	98	53-125
208-96-8	Acenaphthylene	1	1.04	104	51-111
120-12-7	Anthracene	1	1.12	112	62-134
56-55-3	Benzo(a)anthracene	1	1.03	103	46-142
50-32-8	Benzo(a)pyrene	1	0.842	84	49-132
205-99-2	Benzo(b)fluoranthene	1	1.01	101	36-167
191-24-2	Benzo(g,h,i)perylene	1	1.02	102	43-149
207-08-9	Benzo(k)fluoranthene	1	0.936	94	27-173
218-01-9	Chrysene	1	1.14	114	59-137
53-70-3	Dibenzo(a,h)anthracene	1	0.845	85	47-149
206-44-0	Fluoranthene	1	1.02	102	57-126
86-73-7	Fluorene	1	1.00	100	58-126
118-74-1	Hexachlorobenzene	1	0.954	95	36-140
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.888	89	51-151
91-20-3	Naphthalene	1	0.944	94	40-130
85-01-8	Phenanthrene	1	1.00	100	52-130
129-00-0	Pyrene	1	1.07	107	60-134

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	100%	32-135%
321-60-8	2-Fluorobiphenyl	98%	31-121%
1718-51-0	Terphenyl-d14	110%	10-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
OP47853-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
JA66701-1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	JA66701-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		100	94.5	95	92.5	93	2	25-127/35
1912-24-9	Atrazine	ND		100	128	128	123	123	4	40-133/27
100-52-7	Benzaldehyde	ND		100	108	108	109	109	1	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		100	92.0	92	95.9	96	4	47-123/28
85-68-7	Butyl benzyl phthalate	ND		100	89.3	89	86.5	87	3	47-137/27
92-52-4	1,1'-Biphenyl	ND		100	87.2	87	90.9	91	4	36-113/32
91-58-7	2-Chloronaphthalene	ND		100	82.6	83	85.5	86	3	35-110/32
106-47-8	4-Chloroaniline	ND		100	75.0	75	72.9	73	3	22-98/36
86-74-8	Carbazole	ND		100	92.5	93	99.1	99	7	54-127/26
105-60-2	Caprolactam	ND		100	22.7	23	21.2	21	7	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		100	85.3	85	85.4	85	0	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		100	79.8	80	77.5	78	3	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	84.7	85	82.5	83	3	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	97.0	97	97.0	97	0	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		100	102	102	96.1	96	6	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		100	102	102	99.4	99	3	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		100	69.0	69	70.5	71	2	17-119/36
132-64-9	Dibenzofuran	ND		100	89.5	90	88.8	89	1	44-114/30
84-74-2	Di-n-butyl phthalate	ND		100	90.6	91	93.8	94	3	49-134/26
117-84-0	Di-n-octyl phthalate	ND		100	95.9	96	92.1	92	4	46-140/25
84-66-2	Diethyl phthalate	ND		100	90.0	90	86.3	86	4	46-123/27
131-11-3	Dimethyl phthalate	ND		100	74.9	75	71.7	72	4	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	89.4	89	89.9	90	1	49-141/27
87-68-3	Hexachlorobutadiene	ND		100	89.3	89	90.4	90	1	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		200	227	114	239	120	5	4-124/39
67-72-1	Hexachloroethane	ND		100	85.0	85	82.8	83	3	16-86/39
78-59-1	Isophorone	ND		100	92.7	93	93.4	93	1	33-117/36
91-57-6	2-Methylnaphthalene	ND		100	85.6	86	85.1	85	1	22-117/37
88-74-4	2-Nitroaniline	ND		100	104	104	102	102	2	37-135/29
99-09-2	3-Nitroaniline	ND		100	85.6	86	82.8	83	3	34-115/28
100-01-6	4-Nitroaniline	ND		100	85.4	85	86.2	86	1	36-128/30
98-95-3	Nitrobenzene	ND		100	80.1	80	81.0	81	1	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		100	101	101	96.9	97	4	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		100	87.2	87	88.6	89	2	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	86.4	86	92.1	92	6	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
OP47853-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
JA66701-1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-1	Limits
4165-60-0	Nitrobenzene-d5	86%	86%	81%	25-112%
321-60-8	2-Fluorobiphenyl	78%	83%	73%	31-106%
1718-51-0	Terphenyl-d14	67%	69%	66%	14-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853A	ER3223
OP47853A-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853A	ER3223
JA66701-1	4M23447.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	JA66701-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.362		100	88.1	88	89.4	89	1	51-125/22
208-96-8	Acenaphthylene	ND		100	84.8	85	86.6	87	2	46-113/22
120-12-7	Anthracene	ND		100	89.7	90	93.0	93	4	59-131/23
56-55-3	Benzo(a)anthracene	ND		100	84.7	85	88.3	88	4	53-127/23
50-32-8	Benzo(a)pyrene	ND		100	92.1	92	92.7	93	1	49-135/23
205-99-2	Benzo(b)fluoranthene	ND		100	84.4	84	93.5	94	10	42-140/30
191-24-2	Benzo(g,h,i)perylene	ND		100	98.0	98	99.4	99	1	37-146/25
207-08-9	Benzo(k)fluoranthene	ND		100	94.1	94	72.0	72	27	41-141/34
218-01-9	Chrysene	ND		100	85.1	85	86.8	87	2	54-129/21
53-70-3	Dibenzo(a,h)anthracene	ND		100	97.9	98	98.3	98	0	38-146/25
206-44-0	Fluoranthene	ND		100	89.6	90	102	102	13	56-129/22
86-73-7	Fluorene	0.687		100	96.6	96	94.3	94	2	58-126/25
118-74-1	Hexachlorobenzene	ND		100	88.7	89	91.7	92	3	52-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	97.0	97	98.1	98	1	36-150/25
91-20-3	Naphthalene	1.54		100	87.7	86	87.0	85	1	38-121/25
85-01-8	Phenanthrene	ND		100	89.3	89	91.1	91	2	57-127/23
129-00-0	Pyrene	ND		100	93.6	94	85.6	86	9	51-128/23

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-1	Limits
4165-60-0	Nitrobenzene-d5	86%	86%	80%	32-135%
321-60-8	2-Fluorobiphenyl	78%	83%	83%	31-121%
1718-51-0	Terphenyl-d14	67%	69%	60%	10-130%

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1016-DFTPP	**Injection Date:**	01/21/11
Lab File ID:	4M23284.D	**Injection Time:**	09:44
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33290	33.3		Pass
68	Less than 2.0% of mass 69	510	0.51	(1.63) [a]	Pass
69	Mass 69 relative abundance	31340	31.4		Pass
70	Less than 2.0% of mass 69	102	0.10	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47020	47.1		Pass
197	Less than 1.0% of mass 198	366	0.37		Pass
198	Base peak, 100% relative abundance	99900	100.0		Pass
199	5.0 - 9.0% of mass 198	6849	6.86		Pass
275	10.0 - 30.0% of mass 198	19792	19.8		Pass
365	1.0 - 100.0% of mass 198	2508	2.51		Pass
441	Present, but less than mass 443	11432	11.4	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	77293	77.4		Pass
443	17.0 - 23.0% of mass 442	15327	15.3	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1016-IC1016	4M23287.D	01/21/11	13:00	03:16	Initial cal 5
E4M1016-ICC1016	4M23288.D	01/21/11	13:27	03:43	Initial cal 1
E4M1016-IC1016	4M23289.D	01/21/11	13:51	04:07	Initial cal .01
E4M1016-IC1016	4M23290.D	01/21/11	14:15	04:31	Initial cal .02
E4M1016-IC1016	4M23291.D	01/21/11	14:39	04:55	Initial cal .05
E4M1016-IC1016	4M23293.D	01/21/11	15:58	06:14	Initial cal .2
E4M1016-IC1016	4M23294.D	01/21/11	16:22	06:38	Initial cal .5
E4M1016-IC1016	4M23295.D	01/21/11	16:46	07:02	Initial cal 2.5
E4M1016-IC1016	4M23292.D	01/21/11	17:10	07:26	Initial cal .1
E4M1016-ICV1016	4M23296.D	01/21/11	17:34	07:50	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1022-DFTPP	**Injection Date:**	01/31/11
Lab File ID:	4M23424.D	**Injection Time:**	07:54
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20231	56.9		Pass
68	Less than 2.0% of mass 69	258	0.73	(1.58) [a]	Pass
69	Mass 69 relative abundance	16315	45.9		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	18709	52.6		Pass
197	Less than 1.0% of mass 198	111	0.31		Pass
198	Base peak, 100% relative abundance	35568	100.0		Pass
199	5.0 - 9.0% of mass 198	2548	7.16		Pass
275	10.0 - 30.0% of mass 198	6478	18.2		Pass
365	1.0 - 100.0% of mass 198	787	2.21		Pass
441	Present, but less than mass 443	3512	9.87	(74.1) [b]	Pass
442	40.0 - 100.0% of mass 198	24128	67.8		Pass
443	17.0 - 23.0% of mass 442	4742	13.3	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1022-CC1016	4M23425.D	01/31/11	08:05	00:11	Continuing cal 1
OP47887A-MB1	4M23426.D	01/31/11	08:40	00:46	Method Blank
ZZZZZZ	4M23428.D	01/31/11	09:27	01:33	(unrelated sample)
ZZZZZZ	4M23429.D	01/31/11	09:51	01:57	(unrelated sample)
OP47853A-MB1	4M23430.D	01/31/11	10:15	02:21	Method Blank
OP47853A-BS12	4M23431.D	01/31/11	10:38	02:44	Blank Spike
OP47900A-MB1	4M23432.D	01/31/11	11:02	03:08	Method Blank
OP47900A-BS12	4M23433.D	01/31/11	11:26	03:32	Blank Spike
ZZZZZZ	4M23434.D	01/31/11	11:50	03:56	(unrelated sample)
ZZZZZZ	4M23435.D	01/31/11	12:13	04:19	(unrelated sample)
ZZZZZZ	4M23436.D	01/31/11	12:37	04:43	(unrelated sample)
ZZZZZZ	4M23437.D	01/31/11	13:01	05:07	(unrelated sample)
ZZZZZZ	4M23438.D	01/31/11	13:25	05:31	(unrelated sample)
JA66969-5A	4M23441.D	01/31/11	15:00	07:06	(used for QC only; not part of job JA66701)
ZZZZZZ	4M23442.D	01/31/11	15:24	07:30	(unrelated sample)
ZZZZZZ	4M23443.D	01/31/11	15:48	07:54	(unrelated sample)
ZZZZZZ	4M23444.D	01/31/11	16:12	08:18	(unrelated sample)
ZZZZZZ	4M23446.D	01/31/11	16:59	09:05	(unrelated sample)
JA66701-1	4M23447.D	01/31/11	17:24	09:30	W-RM-012011-MWCD

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1022-DFTPP	**Injection Date:**	01/31/11
Lab File ID:	4M23424.D	**Injection Time:**	07:54
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JA66701-2	4M23448.D	01/31/11	17:47	09:53	W-RM-012011-MWCC
JA66701-3	4M23449.D	01/31/11	18:12	10:18	FB-012011
JA66701-4	4M23450.D	01/31/11	18:36	10:42	W-RM-012111-MWCE
JA66701-5	4M23451.D	01/31/11	18:59	11:05	W-RM-012111-MWBV
JA66701-6	4M23452.D	01/31/11	19:24	11:30	W-RM-012111-MWX
JA66701-7	4M23453.D	01/31/11	19:47	11:53	W-RM-012111-MWAY

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1023-DFTPP	**Injection Date:**	02/01/11
Lab File ID:	4M23456.D	**Injection Time:**	08:51
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18173	50.9		Pass
68	Less than 2.0% of mass 69	242	0.68	(1.60) [a]	Pass
69	Mass 69 relative abundance	15102	42.3		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	18400	51.6		Pass
197	Less than 1.0% of mass 198	77	0.22		Pass
198	Base peak, 100% relative abundance	35669	100.0		Pass
199	5.0 - 9.0% of mass 198	2399	6.73		Pass
275	10.0 - 30.0% of mass 198	6596	18.5		Pass
365	1.0 - 100.0% of mass 198	857	2.40		Pass
441	Present, but less than mass 443	3621	10.2	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	24907	69.8		Pass
443	17.0 - 23.0% of mass 442	4876	13.7	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1023-CC1016	4M23457.D	02/01/11	09:03	00:12	Continuing cal .5
JA66701-8	4M23458.D	02/01/11	09:28	00:37	W-RM-012111-MWCF
ZZZZZZ	4M23459.D	02/01/11	09:59	01:08	(unrelated sample)
OP47923-MB1	4M23460.D	02/01/11	13:36	04:45	Method Blank
OP47923-BS1	4M23461.D	02/01/11	13:59	05:08	Blank Spike
OP47923-MS	4M23462.D	02/01/11	14:23	05:32	Matrix Spike
OP47923-MSD	4M23463.D	02/01/11	14:47	05:56	Matrix Spike Duplicate
JA67088-1	4M23464.D	02/01/11	15:11	06:20	(used for QC only; not part of job JA66701)
ZZZZZZ	4M23465.D	02/01/11	15:35	06:44	(unrelated sample)
ZZZZZZ	4M23466.D	02/01/11	16:00	07:09	(unrelated sample)
ZZZZZZ	4M23467.D	02/01/11	16:23	07:32	(unrelated sample)
ZZZZZZ	4M23468.D	02/01/11	16:47	07:56	(unrelated sample)
ZZZZZZ	4M23469.D	02/01/11	17:12	08:21	(unrelated sample)
ZZZZZZ	4M23470.D	02/01/11	17:36	08:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3151-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83633.D	**Injection Time:**	14:32
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28061	32.8		Pass
68	Less than 2.0% of mass 69	193	0.23	(0.58) [a]	Pass
69	Mass 69 relative abundance	33117	38.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	49981	58.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85475	100.0		Pass
199	5.0 - 9.0% of mass 198	5967	6.98		Pass
275	10.0 - 30.0% of mass 198	20633	24.1		Pass
365	1.0 - 100.0% of mass 198	2654	3.11		Pass
441	Present, but less than mass 443	13020	15.2	(77.0) [b]	Pass
442	40.0 - 100.0% of mass 198	84667	99.1		Pass
443	17.0 - 23.0% of mass 442	16907	19.8	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3151-IC3151	R83635.D	11/15/10	14:42	00:10	Initial cal 1
ER3151-IC3151	R83634.D	11/15/10	15:23	00:51	Initial cal 100
ER3151-IC3151	R83636.D	11/15/10	16:01	01:29	Initial cal 80
ER3151-IC3151	R83637.D	11/15/10	16:37	02:05	Initial cal 2
ER3151-IC3151	R83639.D	11/15/10	17:09	02:37	Initial cal 5
ER3151-IC3151	R83640.D	11/15/10	17:48	03:16	Initial cal 10
ER3151-ICC3151	R83638.D	11/15/10	18:22	03:50	Initial cal 50
ER3151-IC3151	R83641.D	11/15/10	18:58	04:26	Initial cal 25

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3152-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83642.D	**Injection Time:**	22:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22024	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25432	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37435	55.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	67512	100.0		Pass
199	5.0 - 9.0% of mass 198	4664	6.91		Pass
275	10.0 - 30.0% of mass 198	16603	24.6		Pass
365	1.0 - 100.0% of mass 198	2164	3.21		Pass
441	Present, but less than mass 443	9844	14.6	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	67437	99.9		Pass
443	17.0 - 23.0% of mass 442	13161	19.5	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3152-IC3152	R83643.D	11/15/10	23:00	00:23	Initial cal 100
ER3152-IC3152	R83644.D	11/15/10	23:36	00:59	Initial cal 80
ER3152-ICC3152	R83645.D	11/16/10	00:12	01:35	Initial cal 50
ER3152-IC3152	R83646.D	11/16/10	00:48	02:11	Initial cal 25
ER3152-IC3152	R83647.D	11/16/10	01:24	02:47	Initial cal 10
ER3152-IC3152	R83648.D	11/16/10	01:53	03:16	Initial cal 5
ER3152-IC3152	R83649.D	11/16/10	02:29	03:52	Initial cal 2
ER3152-IC3152	R83650.D	11/16/10	03:06	04:29	Initial cal 1
ER3152-ICV3151	R83651.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3152	R83651A.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3151	R83652.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3152	R83652A.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3151	R83653.D	11/16/10	04:54	06:17	Initial cal verification 50
ER3152-ICV3151	R83655.D	11/16/10	06:07	07:30	Initial cal verification 50
ER3152-ICV3152	R83655A.D	11/16/10	06:07	07:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3223-DFTPP	**Injection Date:**	01/27/11
Lab File ID:	R85115.D	**Injection Time:**	11:13
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57144	37.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	63325	41.2		Pass
70	Less than 2.0% of mass 69	220	0.14	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	86253	56.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	153885	100.0		Pass
199	5.0 - 9.0% of mass 198	10498	6.82		Pass
275	10.0 - 30.0% of mass 198	42064	27.3		Pass
365	1.0 - 100.0% of mass 198	5479	3.56		Pass
441	Present, but less than mass 443	22618	14.7	(74.5) [b]	Pass
442	40.0 - 100.0% of mass 198	151213	98.3		Pass
443	17.0 - 23.0% of mass 442	30376	19.7	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3223-CC3151	R85116.D	01/27/11	11:32	00:19	Continuing cal 50
ER3223-CC3152	R85117.D	01/27/11	12:03	00:50	Continuing cal 25
OP47853-MB1	R85118.D	01/27/11	12:39	01:26	Method Blank
OP47853-BS1	R85119.D	01/27/11	13:15	02:02	Blank Spike
ZZZZZZ	R85120.D	01/27/11	13:51	02:38	(unrelated sample)
ZZZZZZ	R85121.D	01/27/11	14:27	03:14	(unrelated sample)
ZZZZZZ	R85122.D	01/27/11	15:03	03:50	(unrelated sample)
ZZZZZZ	R85123.D	01/27/11	15:33	04:20	(unrelated sample)
JA66701-1	R85124.D	01/27/11	16:10	04:57	W-RM-012011-MWCD
OP47853-MS	R85125.D	01/27/11	16:46	05:33	Matrix Spike
OP47853A-MS	R85125.D	01/27/11	16:46	05:33	Matrix Spike
OP47853-MSD	R85126.D	01/27/11	17:27	06:14	Matrix Spike Duplicate
OP47853A-MSD	R85126.D	01/27/11	17:27	06:14	Matrix Spike Duplicate
JA66701-2	R85127.D	01/27/11	17:56	06:43	W-RM-012011-MWCC
ZZZZZZ	R85128.D	01/27/11	18:32	07:19	(unrelated sample)
ZZZZZZ	R85129.D	01/27/11	19:09	07:56	(unrelated sample)
ZZZZZZ	R85130.D	01/27/11	19:45	08:32	(unrelated sample)
ZZZZZZ	R85131.D	01/27/11	20:21	09:08	(unrelated sample)
ZZZZZZ	R85132.D	01/27/11	20:57	09:44	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3223-DFTPP	**Injection Date:**	01/27/11
Lab File ID:	R85115.D	**Injection Time:**	11:13
Instrument ID:	GCMSR		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	R85133.D	01/27/11	21:35	10:22	(unrelated sample)
ZZZZZZ	R85134.D	01/27/11	22:11	10:58	(unrelated sample)
ZZZZZZ	R85135.D	01/27/11	22:47	11:34	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3224-DFTPP	**Injection Date:**	01/28/11
Lab File ID:	R85137.D	**Injection Time:**	15:39
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	43475	42.6		Pass
68	Less than 2.0% of mass 69	624	0.61	(1.34) [a]	Pass
69	Mass 69 relative abundance	46719	45.8		Pass
70	Less than 2.0% of mass 69	142	0.14	(0.30) [a]	Pass
127	40.0 - 60.0% of mass 198	60779	59.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	101965	100.0		Pass
199	5.0 - 9.0% of mass 198	6986	6.85		Pass
275	10.0 - 30.0% of mass 198	26181	25.7		Pass
365	1.0 - 100.0% of mass 198	3051	2.99		Pass
441	Present, but less than mass 443	11365	11.1	(73.8) [b]	Pass
442	40.0 - 100.0% of mass 198	78883	77.4		Pass
443	17.0 - 23.0% of mass 442	15406	15.1	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3224-CC3151	R85138.D	01/28/11	15:59	00:20	Continuing cal 25
ER3224-CC3152	R85139.D	01/28/11	16:35	00:56	Continuing cal 25
JA66701-3	R85140.D	01/28/11	17:11	01:32	FB-012011
JA66701-4	R85141.D	01/28/11	17:47	02:08	W-RM-012111-MWCE
JA66701-5	R85142.D	01/28/11	18:23	02:44	W-RM-012111-MWBV
JA66701-6	R85143.D	01/28/11	18:52	03:13	W-RM-012111-MWX
JA66701-7	R85144.D	01/28/11	19:28	03:49	W-RM-012111-MWAY
JA66701-8	R85145.D	01/28/11	20:05	04:26	W-RM-012111-MWCF
ZZZZZZ	R85146.D	01/28/11	20:41	05:02	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1022-CC1016	**Injection Date:**	01/31/11
Lab File ID:	4M23425.D	**Injection Time:**	08:05
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	28088	6.79	20362	9.07	32939	12.38	31370	15.47
Upper Limit [a]	56176	7.29	40724	9.57	65878	12.88	62740	15.97
Lower Limit [b]	14044	6.29	10181	8.57	16470	11.88	15685	14.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP47887A-MB1	24593	6.77	17021	9.06	26576	12.37	25149	15.46
ZZZZZZ	34371	6.79	24104	9.07	38413	12.39	36728	15.48
ZZZZZZ	23767	6.79	16530	9.07	25751	12.39	23177	15.48
OP47853A-MB1	26558	6.79	18655	9.09	30014	12.40	28495	15.49
OP47853A-BS12	24689	6.79	17577	9.09	27883	12.40	27392	15.49
OP47900A-MB1	25983	6.79	17723	9.09	28645	12.39	26099	15.49
OP47900A-BS12	27138	6.79	18477	9.07	29843	12.39	29231	15.49
ZZZZZZ	25282	6.79	19687	9.09	31282	12.40	33849	15.48
ZZZZZZ	27327	6.79	20235	9.07	32705	12.38	33705	15.47
ZZZZZZ	24464	6.79	18485	9.07	28801	12.39	30040	15.48
ZZZZZZ	26664	6.79	19264	9.07	31114	12.39	32359	15.47
ZZZZZZ	25909	6.79	19479	9.07	30308	12.39	31060	15.48
JA66969-5A	23965	6.79	17255	9.07	28050	12.39	29658	15.48
ZZZZZZ	25154	6.79	19008	9.07	29751	12.38	32202	15.47
ZZZZZZ	26825	6.79	19175	9.07	30543	12.39	33542	15.47
ZZZZZZ	24085	6.79	18281	9.07	30124	12.38	31496	15.47
ZZZZZZ	29896	6.79	24766	9.07	36749	12.39	39493	15.48
JA66701-1	33724	6.79	26029	9.07	42614	12.39	45538	15.48
JA66701-2	28531	6.79	23017	9.07	36185	12.39	38525	15.48
JA66701-3	30951	6.79	23309	9.07	37487	12.39	38407	15.48
JA66701-4	28425	6.79	22466	9.07	35277	12.39	36614	15.48
JA66701-5	27548	6.79	20087	9.07	33237	12.40	33846	15.49
JA66701-6	31496	6.79	24176	9.07	40150	12.39	42477	15.48
JA66701-7	28797	6.79	20783	9.07	33919	12.39	35715	15.48

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1023-CC1016	**Injection Date:**	02/01/11
Lab File ID:	4M23457.D	**Injection Time:**	09:03
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21899	6.79	16200	9.07	24938	12.38	24754	15.47
Upper Limit [a]	43798	7.29	32400	9.57	49876	12.88	49508	15.97
Lower Limit [b]	10950	6.29	8100	8.57	12469	11.88	12377	14.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
JA66701-8	28614	6.79	22516	9.07	35856	12.38	36758	15.46
ZZZZZZ	43174[c]	6.82	32168[c]	9.13	38744[c]	12.44	44781[c]	15.46
OP47923-MB1	21799	6.79	16188	9.07	23954	12.38	22192	15.46
OP47923-BS1	25881	6.79	17024	9.07	25526	12.38	24444	15.46
OP47923-MS	23107	6.79	16879	9.07	24610	12.37	25523	15.46
OP47923-MSD	22259	6.79	16031	9.07	24338	12.37	24263	15.46
JA67088-1	22093	6.79	16487	9.07	24651	12.37	24629	15.46
ZZZZZZ	22770	6.79	16487	9.06	24950	12.37	26399	15.46
ZZZZZZ	23470	6.79	16684	9.07	24872	12.37	25360	15.46
ZZZZZZ	21983	6.79	15811	9.07	24138	12.37	25732	15.46
ZZZZZZ	25367	6.79	18039	9.07	28238	12.37	30848	15.46
ZZZZZZ	24608	6.79	17269	9.05	26127	12.37	28802	15.46
ZZZZZZ	23032	6.79	16529	9.07	25872	12.38	30134	15.46

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard added twice.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3223-CC3151	**Injection Date:**	01/27/11
Lab File ID:	R85116.D	**Injection Time:**	11:32
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	355326	7.43	1300377	10.20	775048	14.31	1315798	17.77	1638871	22.12	1340332	23.63
Upper Limit [a]	710652	7.93	2600754	10.70	1550096	14.81	2631596	18.27	3277742	22.62	2680664	24.13
Lower Limit [b]	177663	6.93	650189	9.70	387524	13.81	657899	17.27	819436	21.62	670166	23.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP47853-MB1	265301	7.43	949334	10.19	544343	14.31	888779	17.76	1004996	22.11	996067	23.62
OP47853-BS1	290982	7.43	1055993	10.19	639369	14.31	1055845	17.77	1217790	22.11	1111772	23.63
ZZZZZZ	260859	7.43	931492	10.19	536187	14.31	892324	17.76	973601	22.11	964965	23.63
ZZZZZZ	301552	7.42	1143205	10.19	708681	14.31	1167766	17.76	1044985	22.11	830411	23.62
ZZZZZZ	258072	7.43	944165	10.19	558530	14.30	912165	17.76	1083076	22.11	1017954	23.62
ZZZZZZ	314244	7.43	1146605	10.19	691506	14.31	1154896	17.77	1383048	22.11	1207995	23.63
JA66701-1	269928	7.42	956703	10.19	572271	14.31	1026273	17.77	1263634	22.11	1015205	23.63
OP47853-MS	284277	7.42	1071637	10.19	687755	14.31	1252288	17.77	1179882	22.12	993967	23.63
OP47853A-MS	284277	7.42	1071637	10.19	687755	14.31	1252288	17.77	1179882	22.12	993967	23.63
OP47853-MSD	275233	7.43	992342	10.19	595381	14.31	1011622	17.77	1202944	22.11	1064539	23.63
OP47853A-MSD	275233	7.43	992342	10.19	595381	14.31	1011622	17.77	1202944	22.11	1064539	23.63
JA66701-2	303533	7.43	1103967	10.19	642128	14.31	1057882	17.77	1132845	22.11	1084564	23.63
ZZZZZZ	355461	7.44	1266098	10.22	905760	14.43	1201902	17.92	1333248	22.13	1145803	23.64
ZZZZZZ	252595	7.43	912943	10.19	551195	14.31	906445	17.77	1024011	22.11	994582	23.63
ZZZZZZ	291320	7.43	1068952	10.19	628437	14.31	1001538	17.76	1077796	22.11	1016047	23.63
ZZZZZZ	266012	7.42	948798	10.19	548529	14.31	896229	17.77	1069507	22.11	1018394	23.63
ZZZZZZ	304380	7.43	1164455	10.19	714017	14.31	1213013	17.77	1097506	22.11	939875	23.63
ZZZZZZ	280047	7.43	1004608	10.19	585291	14.31	968009	17.76	1070829	22.11	1075871	23.63
ZZZZZZ	263786	7.43	949921	10.19	564281	14.31	972258	17.77	1115324	22.11	956544	23.63
ZZZZZZ	327297	7.43	1153866	10.19	685533	14.31	1151902	17.77	1233458	22.11	1195315	23.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3224-CC3151	**Injection Date:**	01/28/11
Lab File ID:	R85138.D	**Injection Time:**	15:59
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	375445	7.43	1309344	10.20	783066	14.31	1272584	17.78	1415220	22.11	1200884	23.63
Upper Limit [a]	750890	7.93	2618688	10.70	1566132	14.81	2545168	18.28	2830440	22.61	2401768	24.13
Lower Limit [b]	187723	6.93	654672	9.70	391533	13.81	636292	17.28	707610	21.61	600442	23.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
JA66701-3	298758	7.43	1044118	10.19	584532	14.31	887909	17.76	861655	22.10	775629	23.62
JA66701-4	298967	7.42	1042679	10.19	576651	14.31	856818	17.76	897218	22.10	763285	23.62
JA66701-5	302488	7.42	1035374	10.19	578517	14.31	846574	17.76	881025	22.10	788822	23.62
JA66701-6	316195	7.42	1084094	10.19	668964	14.31	1086595	17.77	1160109	22.10	932103	23.62
JA66701-7	313571	7.42	1099645	10.18	627129	14.30	982814	17.76	987860	22.10	833059	23.62
JA66701-8	313837	7.42	1092112	10.19	641229	14.30	1063552	17.77	1104835	22.10	927406	23.62
ZZZZZZ	336657	7.42	1265829	10.20	836106	14.34	1324437	17.81	1227978	22.11	876879	23.62

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA66701-1	R85124.D	81.0	73.0	66.0
JA66701-2	R85127.D	82.0	78.0	78.0
JA66701-3	R85140.D	91.0	85.0	81.0
JA66701-4	R85141.D	74.0	68.0	51.0
JA66701-5	R85142.D	85.0	80.0	71.0
JA66701-6	R85143.D	83.0	76.0	77.0
JA66701-7	R85144.D	75.0	67.0	61.0
JA66701-8	R85145.D	90.0	80.0	70.0
OP47853-BS1	R85119.D	87.0	81.0	87.0
OP47853-MB1	R85118.D	88.0	82.0	92.0
OP47853-MS	R85125.D	86.0	78.0	67.0
OP47853-MSD	R85126.D	86.0	83.0	69.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA66701-1	4M23447.D	80.0	83.0	60.0
JA66701-2	4M23448.D	91.0	94.0	78.0
JA66701-3	4M23449.D	94.0	94.0	81.0
JA66701-4	4M23450.D	78.0	75.0	49.0
JA66701-5	4M23451.D	90.0	91.0	75.0
JA66701-6	4M23452.D	81.0	88.0	75.0
JA66701-7	4M23453.D	79.0	80.0	65.0
JA66701-8	4M23458.D	98.0	91.0	70.0
OP47853A-BS12	4M23431.D	100.0	98.0	110.0
OP47853A-MB1	4M23430.D	102.0	96.0	109.0
OP47853A-MS	R85125.D	86.0	78.0	67.0
OP47853A-MSD	R85126.D	86.0	83.0	69.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-135%
S2 = 2-Fluorobiphenyl	31-121%
S3 = Terphenyl-d14	10-130%

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Initial Calibration

Calibration Files
0.05=4m23291.D .2 =4m23293.D 2.5 =4m23295.D .02 =4m23290.D
.1 =4m23292.D 1 =4m23288.D .01 =4m23289.D .5 =4m23294.D
5 =4m23287.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.614	0.610	0.578	0.604	0.604	0.590		0.575	0.558	0.592	3.34
3) Phenol-d5	0.771	0.763	0.694	0.761	0.795	0.746		0.740	0.615	0.736	7.71
4) Phenol	0.761	0.825	0.795	0.721	0.793	0.840		0.759	0.929	0.803	7.92
5) bis(2-Chloroethyl)ether	0.822	0.802	0.779	0.912	0.783	0.757	1.004	0.744	0.758	0.818	10.56
6) Nitrobenzene-d5	0.590	0.611	0.600	0.551	0.589	0.596		0.590	0.570	0.587	3.17
7) Naphthalene	1.926	1.856	1.675	1.901	1.851	1.691		1.687	1.661	1.781	6.32
8) Hexachlorobutadiene	0.316	0.283		0.328	0.287			0.298	0.277	0.298	6.71
9) 2-Methylnaphthalene	1.520	1.346	1.397	1.509	1.343	1.372	1.868	1.322	1.352	1.448	11.97
10) 1-Methylnaphthalene	1.450	1.431	1.269	1.475	1.365	1.351		1.296	1.255	1.362	6.19
11) 2-Fluorobiphenyl	1.430	1.397	1.287	1.374	1.383	1.280		1.298	1.313	1.345	4.26
12) I Fluorene-d10	ISTD										
13) Acenaphthylene	2.355	2.183	2.225	2.585	2.243	2.203		1.993	2.333	2.265	7.49
14) Acenaphthene	1.777	1.681	1.594	2.043	1.698	1.624		1.517	1.598	1.691	9.60
15) Fluorene	1.377	1.277	1.184	1.569	1.326	1.191		1.139	1.190	1.282	11.03
16) 2,6-Dinitrotoluene	0.388	0.582		0.384	0.568			0.418	0.682	0.504	24.67
----- Linear regression ----- Coefficient = 0.9953											
Response Ratio = -0.02627 + 0.68713 *A											
17) 2,4,6-Tribromophenol	0.135	0.172		0.129	0.168			0.146	0.181	0.155	13.83
18) Hexachlorobenzene	0.536	0.461	0.413	0.587	0.499	0.416		0.423	0.420	0.469	13.91
19) Pentachlorophenol	0.155	0.140	0.220	0.282	0.155	0.214		0.151	0.262	0.197	27.88
----- Linear regression ----- Coefficient = 0.9936											
Response Ratio = -0.03525 + 0.25937 *A											
20) Phenanthrene											

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

```
      2.032 1.826 1.725 2.438 1.942 1.701       1.654 1.757        1.884   13.66
21)  Anthracene
      1.687 1.389 1.590 1.987 1.356 1.562       1.277 1.673        1.565   14.55
22)  2,4-Dinitrotoluene
            0.342 0.679       0.301 0.596       0.391 0.735        0.507   36.65
            ----- Linear regression -----  Coefficient =  0.9983
              Response Ratio = -0.03017 + 0.75147 *A


23) I   Fluoranthene-d10      ----------------ISTD---------------------
24)  Fluoranthene
      1.482 1.176 1.099       1.282 1.141       1.073 1.118        1.196   11.99
25)  Pyrene
      1.137 1.026 1.115 1.371 1.030 1.092       0.974 1.137        1.110   10.88
26)  Terphenyl-d14
      0.432 0.441 0.377 0.536 0.405 0.419       0.420 0.416        0.431   10.79
27)  Benzo[a]anthracene
      0.629 0.531 0.797       0.540 0.709       0.542 0.813        0.652   18.81
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.01678 + 0.82341 *A

28)  Chrysene
      0.888 0.774 0.772       0.742 0.884       0.710 0.881        0.807    9.32
29)  bis(2-Ethylhexyl)phthalate
      0.327 0.247 0.348       0.357 0.290       0.220 0.497        0.327   27.83
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = 0.00237 + 0.20009 *A + 0.23586 *A^2


30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
      0.319 0.258 0.327       0.280 0.306       0.271 0.329        0.298    9.62
32)  Benzo[k]fluoranthene
      0.302 0.207 0.255       0.271 0.281       0.231 0.286        0.262   12.66
33)  Benzo[a]pyrene
            1.506 1.258       1.889 1.394       1.293 1.289        1.438   16.62
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.01149 + 1.27359 *A

34)  Indeno[1,2,3-cd]pyrene
      1.027 0.746 1.097       0.762 1.036       0.778 1.252        0.957   20.56
            ----- Linear regression -----  Coefficient =  0.9961
              Response Ratio = -0.03593 + 1.25236 *A

35)  Dibenz[a,h]anthracene
      0.736 0.555 0.856       0.602 0.796       0.573 0.973        0.727   21.78
            ----- Linear regression -----  Coefficient =  0.9962
              Response Ratio = -0.02925 + 0.97470 *A

36)  Benzo[g,h,i]perylene
      1.308 0.968 1.096       1.019 1.091       0.962 1.160        1.086   11.20
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M1016SIM.M        Mon Jan 24 15:30:58 2011   RPT1
```

7.1.1

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICV1016
Lab FileID: 4M23296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1016\4m23296.D Vial: 11
Acq On : 21 Jan 2011 5:34 pm Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1016,acid Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 08:13:52 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	68	0.00	6.77
4	t	Phenol	0.803	0.921	-14.7	75	0.00	3.57
12	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	9.07
19	t	Pentachlorophenol	5.000	5.009	-0.2	73	0.00	10.40
23	I	Fluoranthene-d10	1.000	1.000	0.0	64	0.00	12.38
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 08:29:16 2011 RPT1

7.7.2

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1017\4m23300.D Vial: 3
Acq On : 24 Jan 2011 10:50 am Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1017 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.02	6.79
5	t	bis(2-Chloroethyl)ether	0.818	0.702	14.2	75	0.00	3.62
7	t	Naphthalene	1.781	1.785	-0.2	86	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.321	-7.7	91	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.236	14.6	73	0.00	6.67
12	I	Fluorene-d10	1.000	1.000	0.0	70	0.00	9.07
13	t	Acenaphthylene	2.265	2.256	0.4	71	0.00	8.03
14	t	Acenaphthene	1.691	1.774	-4.9	76	0.00	8.33
15	t	Fluorene	1.282	1.315	-2.6	77	0.01	9.12
18	t	Hexachlorobenzene	0.469	0.447	4.7	75	0.02	10.11
20	t	Phenanthrene	1.884	1.826	3.1	75	0.02	10.57
21	t	Anthracene	1.565	1.469	6.1	65	0.00	10.63
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	61	0.01	12.39
24	t	Fluoranthene	1.196	1.223	-2.3	65	0.01	12.41
25	t	Pyrene	1.110	1.137	-2.4	63	0.00	12.70
		----------	True	Calc.	% Drift		----------	
27	t	Benzo[a]anthracene	1.000	0.943	5.7	61	0.02	14.16
		----------	AvgRF	CCRF	% Dev		----------	
28	t	Chrysene	0.807	0.947	-17.3	65	0.00	14.19
		----------	True	Calc.	% Drift		----------	
29		bis(2-Ethylhexyl)phthalat	1.000	1.148	-14.8	66	0.00	14.43
		----------	AvgRF	CCRF	% Dev		----------	
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	61	0.01	15.48
31	t	Benzo[b]fluoranthene	0.298	0.280	6.0	56	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.256	2.3	56	0.01	15.24

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	1.000	0.934	6.6	54	0.00	15.49
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	56	0.01	16.38
35	t	Dibenz[a,h]anthracene	1.000	0.893	10.7	58	0.01	16.41

			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.066	1.8	59	0.01	16.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 15:33:12 2011 RPT1

7.7.3

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1022-CC1016
Lab FileID: 4M23425.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1022\4m23425.D Vial: 2
Acq On : 31 Jan 2011 8:05 am Operator: ninap
Sample : cc1016-1 Inst : MS4M
Misc : op47830a,e4m1022 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	0.02	6.79
2	S	2-Fluorophenol	0.592	0.576	2.7	105	0.00	2.47
3	S	Phenol-d5	0.736	0.716	2.7	103	0.02	3.57
4	t	Phenol	0.803	0.759	5.5	97	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.965	-18.0	137	0.00	3.62
6	S	Nitrobenzene-d5	0.587	0.586	0.2	105	0.01	4.63
7	t	Naphthalene	1.781	1.610	9.6	102	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.284	4.7	106	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.358	6.2	106	0.00	6.67
10	t	1-Methylnaphthalene	1.362	1.206	11.5	96	0.00	6.82
11	S	2-Fluorobiphenyl	1.345	1.308	2.8	109	0.02	7.34
12	I	Fluorene-d10	1.000	1.000	0.0	100	0.00	9.07
13	t	Acenaphthylene	2.265	2.553	-12.7	116	0.00	8.03
14	t	Acenaphthene	1.691	1.741	-3.0	107	0.00	8.33
15	t	Fluorene	1.282	1.258	1.9	106	0.01	9.12
		----------	True	Calc.	% Drift	----------		
16	t	2,6-Dinitrotoluene	1.000	1.089	-8.9	113	0.00	8.14
		----------	AvgRF	CCRF	% Dev	----------		
17	S	2,4,6-Tribromophenol	0.155	0.182	-17.4	108	0.00	9.52
18	t	Hexachlorobenzene	0.469	0.458	2.3	110	0.00	10.09
		----------	True	Calc.	% Drift	----------		
19	t	Pentachlorophenol	5.000	8.860	-77.2#	202	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
20	t	Phenanthrene	1.884	1.755	6.8	103	0.00	10.56
21	t	Anthracene	1.565	1.634	-4.4	104	0.00	10.63
		----------	True	Calc.	% Drift	----------		
22	t	2,4-Dinitrotoluene	1.000	0.987	1.3	104	0.02	8.73
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	102	0.00	12.38
24	t	Fluoranthene	1.196	1.135	5.1	102	0.00	12.40
25	t	Pyrene	1.110	1.084	2.3	102	0.00	12.69
26	S	Terphenyl-d14	0.431	0.394	8.6	96	0.00	13.03
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1022-CC1016
Lab FileID: 4M23425.D

27	t	Benzo[a]anthracene	1.000	1.191	-19.1	132	0.00	14.14
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.737	8.7	85	0.00	14.19
		----------	True	Calc.	% Drift	----------		
29		bis(2-Ethylhexyl)phthalat	1.000	1.680	-68.0#	180	-0.02	14.42
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	105	0.00	15.47
31	t	Benzo[b]fluoranthene	0.298	0.256	14.1	87	0.00	15.21
32	t	Benzo[k]fluoranthene	0.262	0.281	-7.3	105	0.00	15.23
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	1.000	0.916	8.4	91	0.00	15.48
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.952	4.8	106	0.00	16.37
35	t	Dibenz[a,h]anthracene	1.000	0.907	9.3	101	-0.01	16.39
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	1.094	-0.7	105	0.00	16.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 31 15:29:05 2011 RPT1

7.7.4

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1023-CC1016
Lab FileID: 4M23457.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1023\4m23457.D Vial: 2
Acq On : 1 Feb 2011 9:03 am Operator: ninap
Sample : cc1016-.5 Inst : MS4M
Misc : op47830a,e4m1023 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	93	0.02	6.79
2	S	2-Fluorophenol	0.592	0.634	-7.1	102	0.00	2.47
3	S	Phenol-d5	0.736	0.737	-0.1	92	0.02	3.57
4	t	Phenol	0.803	0.893	-11.2	109	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.798	2.4	100	0.00	3.62
6	S	Nitrobenzene-d5	0.587	0.614	-4.6	96	0.01	4.63
7	t	Naphthalene	1.781	1.774	0.4	98	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.309	-3.7	96	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.419	2.0	100	0.00	6.67
10	t	1-Methylnaphthalene	1.362	1.356	0.4	97	0.00	6.82
11	S	2-Fluorobiphenyl	1.345	1.406	-4.5	101	0.00	7.32
12	I	Fluorene-d10	1.000	1.000	0.0	88	0.00	9.07
13	t	Acenaphthylene	2.265	2.516	-11.1	110	0.00	8.03
14	t	Acenaphthene	1.691	1.798	-6.3	104	0.00	8.33
15	t	Fluorene	1.282	1.302	-1.6	100	0.00	9.10
		----------	True	Calc.	% Drift	----------		
16	t	2,6-Dinitrotoluene	0.500	0.523	-4.6	107	0.00	8.14
		----------	AvgRF	CCRF	% Dev	----------		
17	S	2,4,6-Tribromophenol	0.155	0.183	-18.1	110	0.00	9.52
18	t	Hexachlorobenzene	0.469	0.475	-1.3	98	0.00	10.09
		----------	True	Calc.	% Drift	----------		
19	t	Pentachlorophenol	2.500	4.878	-95.1#	261	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
20	t	Phenanthrene	1.884	1.848	1.9	98	0.00	10.56
21	t	Anthracene	1.565	1.616	-3.3	111	-0.02	10.62
		----------	True	Calc.	% Drift	----------		
22	t	2,4-Dinitrotoluene	0.500	0.525	-5.0	123	0.00	8.71
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	86	0.00	12.38
24	t	Fluoranthene	1.196	1.187	0.8	95	-0.01	12.39
25	t	Pyrene	1.110	1.182	-6.5	105	-0.01	12.68
26	S	Terphenyl-d14	0.431	0.415	3.7	85	0.00	13.03
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1023-CC1016
Lab FileID: 4M23457.D

27	t	Benzo[a]anthracene	0.500	0.566	-13.2	127	0.00	14.14
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.943	-16.9	115	-0.02	14.18
		----------	True	Calc.	% Drift	----------		
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	97	0.00	15.47
31	t	Benzo[b]fluoranthene	0.298	0.277	7.0	99	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.216	17.6	90	-0.01	15.22
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	0.500	0.445	11.0	92	0.00	15.48
34	t	Indeno[1,2,3-cd]pyrene	0.500	0.440	12.0	101	-0.01	16.36
35	t	Dibenz[a,h]anthracene	0.500	0.403	19.4	93	-0.01	16.39
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	0.948	12.7	95	0.00	16.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23294.D M4M1016SIM.M Tue Feb 01 10:30:22 2011 RPT1

7.7.5

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Feb 01 19:17:15 2011
Response via : Initial Calibration

Calibration Files
2 =R83637.D 5 =R83639.D 100 =R83634.D 50 =R83638.D
1 =R83635.D 10 =R83640.D 80 =R83636.D 25 =R83641.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.596	0.621	0.558	0.582	0.609	0.629	0.566	0.599	0.595	4.20
3) Pyridine	1.200	1.355	1.305	1.377	1.184	1.431	1.343	1.413	1.326	6.92
4) N-Nitrosodim	0.409	0.454	0.430	0.452	0.362	0.477	0.440	0.473	0.437	8.59
5) 2-Fluorophen	1.051	1.208	1.177	1.228	1.152	1.281	1.210	1.273	1.198	6.13
6) Indene	1.762	1.935	1.784	1.903	1.933	2.025	1.834	1.983	1.895	4.95
7) Cumene	2.610	2.815	2.485	2.648	2.889	2.905	2.544	2.797	2.712	5.93
8) Phenol-d5	1.320	1.507	1.316	1.420	1.403	1.558	1.375	1.511	1.426	6.35
9) Phenol	1.575	1.762	1.528	1.686	1.748	1.838	1.596	1.782	1.690	6.61
10) Aniline	1.895	2.053	1.667	2.001	2.063	2.093	1.697	2.107	1.947	9.06
11) bis(2-Chloro	1.139	1.288	1.119	1.208	1.251	1.333	1.159	1.286	1.223	6.42
12) 2-Chlorophen	1.295	1.442	1.337	1.417	1.394	1.498	1.385	1.472	1.405	4.79
13) Decane	1.085	1.181	0.963	1.076	1.163	1.203	1.005	1.142	1.102	7.78
14) 1,3-Dichloro	1.509	1.630	1.475	1.563	1.628	1.655	1.504	1.617	1.573	4.41
15) 1,4-Dichloro	1.507	1.663	1.481	1.586	1.704	1.697	1.515	1.623	1.597	5.54
16) Benzyl alcoh	0.723	0.859	0.814	0.888	0.712	0.927	0.847	0.926	0.837	9.93
17) 1,2-Dichloro	1.420	1.560	1.352	1.475	1.574	1.595	1.412	1.547	1.492	6.04
18) Acetophenone	1.600	1.780	1.613	1.733	1.755	1.858	1.659	1.809	1.726	5.41
19) 2-Methylphen	0.875	0.975	0.909	0.981	0.900	1.011	0.932	1.020	0.950	5.67
20) 2,2'-oxybis(	0.417	0.467	0.435	0.465	0.456	0.487	0.445	0.483	0.457	5.22
21) 3&4-Methylph	0.846	1.014	0.921	1.013	0.885	1.072	0.971	1.063	0.973	8.50
22) n-Nitroso-di	0.674	0.756	0.666	0.739	0.684	0.788	0.695	0.784	0.723	6.88
23) Hexachloroet	0.401	0.445	0.415	0.447	0.433	0.468	0.428	0.460	0.437	5.15
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.332	0.377	0.349	0.368	0.353	0.392	0.360	0.377	0.364	5.18
26) Nitrobenzene	0.183	0.206	0.192	0.202	0.197	0.216	0.197	0.208	0.200	5.13
27) Quinoline	0.604	0.700	0.666	0.698	0.658	0.733	0.682	0.714	0.682	5.84
28) Isophorone	0.591	0.654	0.585	0.627	0.625	0.684	0.601	0.653	0.628	5.55
29) 2-Nitropheno	0.172	0.206	0.201	0.213	0.184	0.222	0.208	0.220	0.203	8.61
30) 2,4-Dimethyl	0.293	0.331	0.321	0.349	0.314	0.334	0.326	0.360	0.329	6.27
31) Benzoic acid			0.215	0.195		0.115	0.216	0.167	0.182	23.33
----- Linear regression ----- Coefficient = 0.9989										
Response Ratio = -0.03508 + 0.22970 *A										
32) bis(2-Chloro	0.374	0.434	0.382	0.404	0.418	0.447	0.392	0.429	0.410	6.43
33) 2,4-Dichloro	0.245	0.293	0.287	0.299	0.260	0.313	0.293	0.311	0.288	8.28
34) 2,6-Dichloro	0.253	0.300	0.275	0.290	0.272	0.314	0.282	0.303	0.286	6.91
35) 1,3,5-Trichl	0.324	0.356	0.304	0.323	0.347	0.362	0.312	0.337	0.333	6.25
36) 1,2,4-Trichl	0.299	0.339	0.301	0.319	0.343	0.345	0.307	0.330	0.323	5.81
37) 1,2,3-Trichl	0.297	0.334	0.293	0.311	0.330	0.339	0.302	0.322	0.316	5.59
38) Naphthalene	1.107	1.222	0.949	1.068	1.265	1.242	0.996	1.150	1.125	10.32
39) 4-Chloroanil	0.437	0.512	0.424	0.481	0.492	0.537	0.442	0.518	0.481	8.74
40) 2,3-Dichloro	0.308	0.364	0.331	0.344	0.338	0.383	0.337	0.364	0.346	6.73
41) Caprolactam	0.116	0.142	0.149	0.153	0.112	0.153	0.152	0.153	0.141	12.25
42) Hexachlorobu	0.149	0.168	0.152	0.159	0.161	0.173	0.155	0.165	0.160	5.08

7.7.6

7

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

43)	4-Chloro-3-m	0.234	0.288	0.292	0.304	0.232	0.312	0.299	0.312	0.284	11.51
44)	2-Methylnaph	0.739	0.834	0.698	0.762	0.824	0.859	0.717	0.813	0.781	7.64
45)	1-Methylnaph	0.711	0.792	0.666	0.727	0.769	0.807	0.683	0.769	0.741	6.94
46)	Dimethylnaph	0.589	0.686	0.590	0.645	0.647	0.716	0.613	0.680	0.646	7.18
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.187	0.138	0.218	0.216		0.176	0.212	0.200	0.192	14.91
49)	2,4,6-Trichl	0.270	0.330	0.337	0.346	0.279	0.358	0.342	0.353	0.327	10.25
50)	2,4,5-Trichl		0.262	0.297	0.308		0.305	0.305	0.303	0.297	5.86
51)	2-Fluorobiph	1.313	1.493	1.282	1.388	1.465	1.539	1.325	1.459	1.408	6.71
52)	2-Chloronaph	1.128	1.244	1.076	1.161	1.247	1.302	1.107	1.219	1.185	6.68
53)	Biphenyl	1.520	1.740	1.437	1.567	1.764	1.778	1.490	1.661	1.620	8.26
54)	2-Nitroanili	0.252	0.319	0.307	0.330	0.244	0.349	0.317	0.336	0.307	12.55
55)	Dimethylphth	1.201	1.383	1.175	1.272	1.319	1.438	1.221	1.349	1.295	7.19
56)	Acenaphthyle	1.782	2.051	1.696	1.890	1.894	2.158	1.780	2.016	1.908	8.21
57)	2,6-Dinitrot	0.244	0.294	0.302	0.315	0.240	0.320	0.310	0.322	0.294	11.25
58)	3-Nitroanili	0.263	0.354	0.388	0.402		0.398	0.397	0.403	0.372	13.69
59)	Acenaphthene	1.190	1.338	1.163	1.247	1.361	1.382	1.203	1.301	1.273	6.60
60)	2,4-Dinitrop		0.018	0.157	0.139		0.059	0.160	0.111	0.107	53.62
	----- Linear regression ----- Coefficient = 0.9975										
	Response Ratio = -0.05587 + 0.16902 *A										
61)	4-Nitropheno		0.082	0.157	0.155		0.119	0.158	0.144	0.136	22.22
	----- Linear regression ----- Coefficient = 0.9999										
	Response Ratio = -0.00999 + 0.16197 *A										
62)	Dibenzofuran	1.604	1.809	1.524	1.662	1.800	1.882	1.578	1.748	1.701	7.50
63)	2,4-Dinitrot	0.319	0.412	0.416	0.437	0.295	0.452	0.429	0.447	0.401	14.96
64)	2,3,4,6-Tetr	0.185	0.258	0.301	0.305		0.293	0.307	0.304	0.279	16.04
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00332 + 0.30506 *A										
65)	Diethylphtha	1.345	1.511	1.299	1.432	1.599	1.553	1.359	1.473	1.446	7.37
66)	Fluorene	1.253	1.406	1.249	1.351	1.352	1.485	1.284	1.412	1.349	6.21
67)	4-Chlorophen	0.551	0.625	0.557	0.581	0.590	0.638	0.563	0.602	0.588	5.42
68)	4-Nitroanili		0.356	0.395	0.408		0.400	0.403	0.412	0.396	5.09
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-			0.143	0.141		0.100	0.147	0.130	0.132	14.60
71)	n-Nitrosodip	0.548	0.642	0.581	0.616	0.624	0.663	0.591	0.643	0.613	6.22
72)	1,2-Diphenyl	0.716	0.802	0.774	0.769	0.770	0.832	0.796	0.799	0.782	4.36
73)	2,4,6-Tribro		0.097	0.121	0.116		0.110	0.120	0.114	0.113	7.86
74)	4-Bromopheny	0.187	0.220	0.223	0.226	0.187	0.234	0.223	0.231	0.216	8.61
75)	Hexachlorobe	0.218	0.250	0.249	0.247	0.250	0.256	0.248	0.255	0.246	4.86
76)	Pentachlorop	0.108	0.100	0.164	0.154		0.128	0.163	0.144	0.137	19.12
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.01762 + 0.16671 *A										
77)	Phenanthrene	1.178	1.273	1.041	1.107	1.342	1.285	1.066	1.191	1.185	9.22
78)	Anthracene	1.122	1.272	1.090	1.180	1.266	1.305	1.121	1.250	1.201	6.91
79)	Carbazole	1.006	1.172	1.039	1.116	1.081	1.221	1.066	1.168	1.109	6.66
80)	Di-n-butylph	1.270	1.539	1.252	1.399	1.434	1.606	1.293	1.539	1.416	9.64
81)	Fluoranthene	1.048	1.221	1.032	1.119	1.206	1.272	1.069	1.206	1.147	7.94
82)	Octadecane	0.442	0.518	0.379	0.432	0.476	0.541	0.399	0.495	0.460	12.43
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.203	1.321	1.026	1.142	1.313	1.345	1.064	1.270	1.210	10.10
85)	Butyl steara	0.313	0.385		0.292		0.386		0.350	0.345	12.24
86)	Terphenyl-d1	0.705	0.798	0.690	0.745	0.760	0.834	0.706	0.793	0.754	6.87
87)	Butylbenzylp	0.570	0.673	0.567	0.644	0.653	0.719	0.594	0.702	0.640	9.07

7.7.6

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

88)	Benzo[a]anth	1.078	1.161	0.927	1.060	1.259	1.207	0.982	1.153	1.103	10.21
89)	3,3'-Dichlor	0.339	0.407	0.398	0.439		0.436	0.419	0.442	0.412	8.81
90)	Chrysene	1.067	1.179	0.927	1.032	1.232	1.217	0.975	1.117	1.093	10.28
91)	bis(2-Ethylh	0.807	0.986	0.782	0.902		1.039	0.812	1.006	0.905	11.79
92)	I Perylene-d12	----------ISTD----------									
93)	Di-n-octylph	1.178	1.594	1.427	1.596		1.799	1.472	1.737	1.543	13.51
94)	Benzo[b]fluo	1.037	1.137	1.635	1.264	1.124	1.253	1.723	1.252	1.303	18.88
	----- Quadratic regression ----- Coefficient = 0.9925										
	Response Ratio = -0.01149 + 1.14974 *A + 0.21778 *A^2										
95)	Benzo[k]fluo	1.143	1.401		1.260	1.381	1.403	0.814	1.323	1.246	17.02
	----- Quadratic regression ----- Coefficient = 0.9935										
	Response Ratio = -0.04948 + 1.85273 *A + -0.50029 *A^2										
96)	Benzo[a]pyre	0.925	1.103	1.161	1.166	1.048	1.244	1.162	1.207	1.127	8.96
97)	Indeno[1,2,3	0.953	1.197	1.188	1.390	1.046	1.329	1.346	1.354	1.226	12.99
98)	Dibenz(a,h)a	0.664	0.852	0.898	1.004	0.736	0.963	0.991	0.993	0.888	14.45
99)	Dibenz[a,h]a	0.774	0.981	0.990	1.130	0.845	1.093	1.113	1.115	1.005	13.39
100)	7,12-Dimethy		0.448	0.619	0.614		0.500	0.616	0.608	0.567	13.09
101)	Benzo[g,h,i]	0.800	0.986	0.825	1.085	0.892	1.087	0.979	1.091	0.968	12.21

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Thu Feb 03 12:41:02 2011 NJMSR

7.7.6

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICC3152
Lab FileID: R83645.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	1.019	0.981	0.761	0.688	0.956	0.604	0.830	0.834		18.98

----- Quadratic regression ----- Coefficient = 0.9994
Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2

104) I Acenaphthene-d10a	ISTD									
105) 1,2,4,5-Tetr	0.558	0.537	0.435	0.500	0.409	0.512	0.477	0.523	0.494	10.35
106) Atrazine	0.156	0.166	0.157	0.178		0.172	0.172	0.181	0.169	5.81
107) t Chrysene-d12a	ISTD									
108) Benzidine	0.441	0.614	0.387	0.499		0.669	0.429	0.476	0.502	20.48

----- Quadratic regression ----- Coefficient = 0.9973
Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Tue Nov 16 13:42:25 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83651.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.01	7.61
3	t	Pyridine	1.326	1.290	2.7	116	-0.05	3.22
4	t	N-Nitrosodimethylamine	0.437	0.436	0.2	120	-0.02	3.25
11	t	bis(2-Chloroethyl)ether	1.223	1.122	8.3	115	-0.02	7.20
14	t	1,3-Dichlorobenzene	1.573	1.409	10.4	112	-0.02	7.53
15	t	1,4-Dichlorobenzene	1.597	1.442	9.7	113	0.00	7.65
16	t	Benzyl alcohol	0.837	0.843	-0.7	118	0.00	8.00
17	t	1,2-Dichlorobenzene	1.492	1.352	9.4	114	-0.01	8.03
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.440	3.7	117	0.00	8.34
22	t	n-Nitroso-di-n-propylamin	0.723	0.719	0.6	121	-0.02	8.63
23	t	Hexachloroethane	0.437	0.414	5.3	115	0.00	8.67
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	10.39
26	t	Nitrobenzene	0.200	0.185	7.5	113	-0.01	8.89
28	t	Isophorone	0.628	0.582	7.3	115	-0.02	9.42
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	118	0.00	10.00
36	t	1,2,4-Trichlorobenzene	0.323	0.294	9.0	114	0.00	10.32
38	t	Naphthalene	1.125	0.985	12.4	114	0.00	10.44
42	t	Hexachlorobutadiene	0.160	0.152	5.0	118	0.00	10.91
44	t	2-Methylnaphthalene	0.781	0.657	15.9	106	0.00	12.04
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	14.52
48	t	Hexachlorocyclopentadiene	0.192	0.192	0.0	112	0.00	12.60
52	t	2-Chloronaphthalene	1.185	1.042	12.1	113	0.00	13.16
54	t	2-Nitroaniline	0.307	0.296	3.6	113	0.00	13.54
55	t	Dimethylphthalate	1.295	1.131	12.7	112	0.00	14.13
56	t	Acenaphthylene	1.908	1.533	19.7	102	0.00	14.14
57	t	2,6-Dinitrotoluene	0.294	0.290	1.4	116	0.00	14.25
58	t	3-Nitroaniline	0.372	0.327	12.1	102	0.00	14.55
59	t	Acenaphthene	1.273	1.137	10.7	115	0.00	14.60
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.701	1.525	10.3	115	0.00	14.98
63	t	2,4-Dinitrotoluene	0.401	0.382	4.7	110	0.00	15.16
		----------	AvgRF	CCRF	% Dev	----------		
65	t	Diethylphthalate	1.446	1.291	10.7	113	-0.01	15.83
66	t	Fluorene	1.349	1.244	7.8	116	0.00	15.79

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

67	t	4-Chlorophenyl-phenylethe	0.588	0.536	8.8	116	0.00	15.87
68	t	4-Nitroaniline	0.396	0.372	6.1	115	-0.01	16.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	17.98
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	114	0.00	16.19
72	t	1,2-Diphenylhydrazine	0.782	0.699	10.6	116	0.00	16.24
74	t	4-Bromophenyl-phenylether	0.216	0.207	4.2	117	0.00	17.01
75	t	Hexachlorobenzene	0.246	0.229	6.9	119	0.00	17.29
		----------	AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.042	12.1	121	0.00	18.04
78	t	Anthracene	1.201	1.074	10.6	117	0.00	18.15
79	t	Carbazole	1.109	1.048	5.5	120	0.00	18.60
80	t	Di-n-butylphthalate	1.416	1.242	12.3	114	0.00	19.56
81	t	Fluoranthene	1.147	1.006	12.3	115	0.00	20.36
83	I	Chrysene-d12	1.000	1.000	0.0	127	0.00	22.25
84	t	Pyrene	1.210	1.044	13.7	116	0.00	20.68
87	t	Butylbenzylphthalate	0.640	0.571	10.8	112	0.00	21.67
88	t	Benzo[a]anthracene	1.103	0.958	13.1	114	0.00	22.23
90	t	Chrysene	1.093	0.938	14.2	115	0.00	22.28
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.799	11.7	112	0.00	22.37
92	I	Perylene-d12	1.000	1.000	0.0	131	0.00	23.79
93	t	Di-n-octylphthalate	1.543	1.370	11.2	113	0.00	22.98
		----------	True	Calc.	% Drift			
94	t	Benzo[b]fluoranthene	50.000	40.294	19.4	114	0.00	23.37
95	t	Benzo[k]fluoranthene	50.000	40.077	19.8	109	0.00	23.40
		----------	AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.127	1.030	8.6	116	0.00	23.73
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.285	-4.8	121	0.00	25.17
99	t	Dibenz[a,h]anthracene	1.005	1.041	-3.6	121	0.00	25.18
101	t	Benzo[g,h,i]perylene	0.968	1.037	-7.1	126	0.00	25.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:46:13 2010 NJMSR

7.7.8

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83651A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83651A.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	0.01	14.52
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.446	9.7	122	0.00	12.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:52:58 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83652.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83652.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.01	7.61
2	t	1,4-Dioxane	0.595	0.546	8.2	111	-0.06	2.77
6	t	Indene	1.895	1.809	4.5	113	-0.01	8.19
7	t	Cumene	2.712	2.285	15.7	102	-0.02	6.13
13	t	Decane	1.102	0.975	11.5	107	-0.02	7.41
18	t	Acetophenone	1.726	1.825	-5.7	125	-0.02	8.54
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.01	10.38
27	t	Quinoline	0.682	0.724	-6.2	119	-0.03	11.21
40	t	2,3-Dichloroaniline	0.346	0.335	3.2	111	0.00	12.81
41	t	Caprolactam	0.141	0.143	-1.4	107	-0.09	11.39
45	t	1-Methylnaphthalene	0.741	0.698	5.8	110	0.00	12.29
46	t	Dimethylnaphthalene	0.646	0.655	-1.4	116	0.00	13.53
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	14.52
53	t	Biphenyl	1.620	1.527	5.7	113	0.00	13.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	17.98
82	t	Octadecane	0.460	0.455	1.1	122	0.00	18.03
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	22.24
92	I	Perylene-d12	1.000	1.000	0.0	100	0.00	23.78
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.379	33.2#	62	-0.02	23.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:50:51 2010 NJMSR

7.7.10

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83652A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83652A.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	117	0.00	7.61
		True	Calc.	% Drift			
103	Benzaldehyde	50.000	59.481	-19.0	152	0.00	6.76
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	127	0.00	14.52
106	Atrazine	0.169	0.185	-9.5	132	0.01	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Nov 18 16:21:44 2010 NJMSR

7.7.11

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83653.D Vial: 12
Acq On : 16 Nov 2010 4:54 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	137	0.00	7.62
9	t	Phenol	1.690	1.465	13.3	119	0.00	7.10
12	t	2-Chlorophenol	1.405	1.344	4.3	130	0.00	7.26
19	t	2-Methylphenol	0.950	1.098	-15.6	154	0.00	8.31
21	t	3&4-Methylphenol	0.973	1.156	-18.8	156	0.00	8.64
24	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	10.39
29	t	2-Nitrophenol	0.203	0.201	1.0	124	0.00	9.60
30	t	2,4-Dimethylphenol	0.329	0.323	1.8	122	0.00	9.80
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	48.929	2.1	133	0.04	10.22
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.288	0.277	3.8	122	0.00	10.14
34	t	2,6-Dichlorophenol	0.286	0.283	1.0	129	0.00	10.67
43	t	4-Chloro-3-methylphenol	0.284	0.281	1.1	122	-0.03	11.87
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	14.52
49	t	2,4,6-Trichlorophenol	0.327	0.329	-0.6	121	0.00	12.81
50	t	2,4,5-Trichlorophenol	0.312	0.370	-18.6	153	-0.02	12.88
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.410	3.6	108	-0.02	14.76
61	t	4-Nitrophenol	50.000	45.760	8.5	115	-0.01	15.04
		----------	True	Calc.	% Drift	----------		
64		2,3,4,6-Tetrachlorophenol	50.000	44.407	11.2	112	0.00	15.41
69	I	Phenanthrene-d10	1.000	1.000	0.0	129	0.00	17.99
70	t	4,6-Dinitro-2-methylpheno	0.132	0.125	5.3	115	-0.02	16.09
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	93.330	6.7	118	-0.01	17.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

R83645.D MR3151.M Wed Nov 17 15:34:26 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83655.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83655.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	132	-0.01	22.24
89 t	3,3'-Dichlorobenzidine	0.412	0.409	0.7	123	0.00	22.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:01:54 2010 NJMSR

7.7.13

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83655A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83655A.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 t	Chrysene-d12a	1.000	1.000	0.0	148	0.00	22.24
		True	Calc.	% Drift			
108 t	Benzidine	50.000	101.157	-102.3#	232	0.00	20.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:26:56 2010 NJMSR

7.7.14

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3153-ICV3151
Lab FileID: R83659.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3153\R83659.D Vial: 4
Acq On : 16 Nov 2010 5:43 pm Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3153,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	7.62
10	t	Aniline	1.947	1.742	10.5	131	0.00	7.07
24	I	Naphthalene-d8	1.000	1.000	0.0	135	0.00	10.40
39	t	4-Chloroaniline	0.481	0.472	1.9	133	0.00	10.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Wed Nov 17 13:22:13 2010 NJMSR

7.7.15

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85116.D Vial: 2
Acq On : 27 Jan 2011 11:32 am Operator: ninap
Sample : cc3151-50 Inst : MSR
Misc : op47575,er3223 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.19	7.43
2	t	1,4-Dioxane	0.595	0.498	16.3	78	-0.15	2.68
3	t	Pyridine	1.326	1.196	9.8	79	-0.16	3.11
4	t	N-Nitrosodimethylamine	0.437	0.528	-20.8#	107	-0.16	3.11
5	S	2-Fluorophenol	1.198	1.059	11.6	79	-0.13	5.16
6	t	Indene	1.895	1.745	7.9	84	-0.20	8.01
7	t	Cumene	2.712	2.478	8.6	85	-0.19	5.97
8	S	Phenol-d5	1.426	1.302	8.7	84	-0.13	6.94
9	t	Phenol	1.690	1.428	15.5	77	-0.14	6.96
10	t	Aniline	1.947	1.342	31.1#	61	-0.18	6.88
11	t	bis(2-Chloroethyl)ether	1.223	1.032	15.6	78	-0.18	7.03
12	t	2-Chlorophenol	1.405	1.287	8.4	83	-0.17	7.10
13	t	Decane	1.102	1.071	2.8	91	-0.19	7.23
14	t	1,3-Dichlorobenzene	1.573	1.430	9.1	84	-0.20	7.35
15	t	1,4-Dichlorobenzene	1.597	1.469	8.0	85	-0.19	7.46
16	t	Benzyl alcohol	0.837	0.811	3.1	83	-0.17	7.83
17	t	1,2-Dichlorobenzene	1.492	1.359	8.9	84	-0.20	7.84
18	t	Acetophenone	1.726	1.584	8.2	83	-0.19	8.36
19	t	2-Methylphenol	0.950	0.860	9.5	80	-0.15	8.17
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.408	10.7	80	-0.19	8.16
21	t	3&4-Methylphenol	0.973	0.944	3.0	85	-0.15	8.49
22	t	n-Nitroso-di-n-propylamin	0.723	0.728	-0.7	90	-0.19	8.46
23	t	Hexachloroethane	0.437	0.445	-1.8	91	-0.20	8.48
24	I	Naphthalene-d8	1.000	1.000	0.0	92	-0.20	10.20
25	S	Nitrobenzene-d5	0.364	0.342	6.0	86	-0.20	8.67
26	t	Nitrobenzene	0.200	0.176	12.0	80	-0.20	8.71
27	t	Quinoline	0.682	0.656	3.8	87	-0.20	11.04
28	t	Isophorone	0.628	0.563	10.4	83	-0.20	9.24
29	t	2-Nitrophenol	0.203	0.193	4.9	83	-0.20	9.42
30	t	2,4-Dimethylphenol	0.329	0.308	6.4	81	-0.16	9.64
			True	Calc.	% Drift			
31	t	Benzoic acid	50.000	38.100	23.8#	69	-0.11	10.07
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.347	15.4	79	-0.19	9.82
33	t	2,4-Dichlorophenol	0.288	0.280	2.8	86	-0.16	9.98
34	t	2,6-Dichlorophenol	0.286	0.273	4.5	87	-0.18	10.50
35	t	1,3,5-Trichlorobenzene	0.333	0.301	9.6	86	-0.20	9.42
36	t	1,2,4-Trichlorobenzene	0.323	0.295	8.7	85	-0.20	10.12
37	t	1,2,3-Trichlorobenzene	0.316	0.297	6.0	88	-0.20	10.67

7.7.16
7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

38	t	Naphthalene	1.125	0.993	11.7	86	-0.20	10.24
39	t	4-Chloroaniline	0.481	0.410	14.8	79	-0.18	10.49
40	t	2,3-Dichloroaniline	0.346	0.337	2.6	90	-0.20	12.61
41	t	Caprolactam	0.141	0.136	3.5	82	-0.18	11.29
42	t	Hexachlorobutadiene	0.160	0.164	-2.5	95	-0.20	10.71
43	t	4-Chloro-3-methylphenol	0.284	0.296	-4.2	90	-0.14	11.76
44	t	2-Methylnaphthalene	0.781	0.714	8.6	86	-0.21	11.84
45	t	1-Methylnaphthalene	0.741	0.677	8.6	86	-0.20	12.09
46	t	Dimethylnaphthalene	0.646	0.632	2.2	90	-0.20	13.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	-0.21	14.31
48	t	Hexachlorocyclopentadiene	0.192	0.196	-2.1	88	-0.21	12.40
49	t	2,4,6-Trichlorophenol	0.327	0.330	-0.9	93	-0.18	12.64
50	t	2,4,5-Trichlorophenol	0.312	0.288	7.7	91	-0.16	12.75
51	S	2-Fluorobiphenyl	1.408	1.270	9.8	89	-0.20	12.81
52	t	2-Chloronaphthalene	1.185	1.060	10.5	89	-0.21	12.96
53	t	Biphenyl	1.620	1.454	10.2	91	-0.20	12.99
54	t	2-Nitroaniline	0.307	0.325	-5.9	96	-0.19	13.36
55	t	Dimethylphthalate	1.295	1.190	8.1	91	-0.20	13.93
56	t	Acenaphthylene	1.908	1.733	9.2	90	-0.21	13.94
57	t	2,6-Dinitrotoluene	0.294	0.292	0.7	90	-0.20	14.05
58	t	3-Nitroaniline	0.372	0.353	5.1	86	-0.19	14.36
59	t	Acenaphthene	1.273	1.120	12.0	88	-0.21	14.39
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	97.173	2.8	99	-0.18	14.60
61	t	4-Nitrophenol	50.000	49.885	0.2	96	-0.11	14.94
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.535	9.8	90	-0.21	14.78
63	t	2,4-Dinitrotoluene	0.401	0.414	-3.2	93	-0.20	14.96
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	50.000	46.819	6.4	91	-0.19	15.23
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.335	7.7	91	-0.21	15.64
66	t	Fluorene	1.349	1.248	7.5	90	-0.21	15.59
67	t	4-Chlorophenyl-phenylethe	0.588	0.572	2.7	96	-0.21	15.66
68	t	4-Nitroaniline	0.396	0.357	9.8	85	-0.19	15.84
69	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.22	17.77
70	t	4,6-Dinitro-2-methylpheno	0.132	0.133	-0.8	97	-0.19	15.92
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	91	-0.20	15.99
72	t	1,2-Diphenylhydrazine	0.782	0.751	4.0	100	-0.21	16.03
73	S	2,4,6-Tribromophenol	0.113	0.114	-0.9	100	-0.21	16.21
74	t	4-Bromophenyl-phenylether	0.216	0.208	3.7	95	-0.21	16.79
75	t	Hexachlorobenzene	0.246	0.227	7.7	94	-0.22	17.08
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	88.323	11.7	93	-0.19	17.56
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.040	12.2	96	-0.22	17.83
78	t	Anthracene	1.201	1.057	12.0	92	-0.22	17.93
79	t	Carbazole	1.109	1.019	8.1	94	-0.20	18.40
80	t	Di-n-butylphthalate	1.416	1.281	9.5	94	-0.16	19.40
81	t	Fluoranthene	1.147	1.121	2.3	103	-0.15	20.21
82	t	Octadecane	0.460	0.393	14.6	93	-0.21	17.83

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

83	I	Chrysene-d12	1.000	1.000	0.0	123	-0.13	22.12
84	t	Pyrene	1.210	0.968	20.0	104	-0.15	20.53
85		Butyl stearate	0.345	0.262	24.1#	110	-0.13	21.61
86	S	Terphenyl-d14	0.754	0.666	11.7	110	-0.14	20.84
87	t	Butylbenzylphthalate	0.640	0.554	13.4	106	-0.13	21.54
88	t	Benzo[a]anthracene	1.103	0.968	12.2	112	-0.13	22.09
89	t	3,3'-Dichlorobenzidine	0.412	0.397	3.6	111	-0.13	22.10
90	t	Chrysene	1.093	0.929	15.0	111	-0.13	22.15
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.827	8.6	113	-0.12	22.24
92	I	Perylene-d12	1.000	1.000	0.0	108	-0.15	23.63
93	t	Di-n-octylphthalate	1.543	1.528	1.0	103	-0.12	22.86
			True	Calc.	% Drift			
94	t	Benzo[b]fluoranthene	50.000	42.989	14.0	101	-0.14	23.23
95	t	Benzo[k]fluoranthene	50.000	46.254	7.5	97	-0.14	23.27
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.127	1.041	7.6	96	-0.15	23.57
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.203	1.9	93	-0.21	24.96
98	t	Dibenz(a,h)acridine	0.888	0.853	3.9	92	-0.20	24.64
99	t	Dibenz[a,h]anthracene	1.005	0.982	2.3	94	-0.22	24.96
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.510	10.1	89	-0.15	23.25
101	t	Benzo[g,h,i]perylene	0.968	0.950	1.9	94	-0.24	25.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Jan 27 19:45:51 2011 NJMSR

7.7.16

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3152
Lab FileID: R85117.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85117.D Vial: 3
Acq On : 27 Jan 2011 12:03 pm Operator: ninap
Sample : cc3152-25 Inst : MSR
Misc : op47575,er3223 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	-0.18	7.43
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	20.690	17.2	53	-0.17	6.59
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	63	-0.21	14.30
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.517	-4.7	62	-0.20	12.33
106	Atrazine	0.169	0.185	-9.5	65	-0.21	17.40
107 t	Chrysene-d12a	1.000	1.000	0.0	71	-0.13	22.10
		True	Calc.	% Drift			
108 t	Benzidine	25.000	24.172	3.3	77	-0.14	20.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Jan 27 19:46:44 2011 NJMSR

7.7.17

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85138.D Vial: 2
Acq On : 28 Jan 2011 3:59 pm Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47575,er3224 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	-0.19	7.43
2	t	1,4-Dioxane	0.595	0.570	4.2	92	-0.18	2.65
3	t	Pyridine	1.326	1.200	9.5	82	-0.18	3.10
4	t	N-Nitrosodimethylamine	0.437	0.600	-37.3#	122	-0.16	3.11
5	S	2-Fluorophenol	1.198	1.177	1.8	89	-0.12	5.17
6	t	Indene	1.895	1.915	-1.1	93	-0.19	8.01
7	t	Cumene	2.712	2.781	-2.5	96	-0.20	5.96
8	S	Phenol-d5	1.426	1.436	-0.7	91	-0.13	6.94
9	t	Phenol	1.690	1.572	7.0	85	-0.13	6.97
10	t	Aniline	1.947	1.484	23.8#	68	-0.18	6.88
11	t	bis(2-Chloroethyl)ether	1.223	1.171	4.3	88	-0.18	7.03
12	t	2-Chlorophenol	1.405	1.431	-1.9	93	-0.18	7.10
13	t	Decane	1.102	1.172	-6.4	99	-0.19	7.23
14	t	1,3-Dichlorobenzene	1.573	1.586	-0.8	94	-0.20	7.35
15	t	1,4-Dichlorobenzene	1.597	1.641	-2.8	97	-0.19	7.46
16	t	Benzyl alcohol	0.837	0.881	-5.3	91	-0.18	7.83
17	t	1,2-Dichlorobenzene	1.492	1.528	-2.4	95	-0.19	7.84
18	t	Acetophenone	1.726	1.717	0.5	91	-0.19	8.36
19	t	2-Methylphenol	0.950	0.932	1.9	88	-0.14	8.18
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.448	2.0	89	-0.19	8.16
21	t	3&4-Methylphenol	0.973	0.996	-2.4	90	-0.14	8.50
22	t	n-Nitroso-di-n-propylamin	0.723	0.789	-9.1	97	-0.19	8.46
23	t	Hexachloroethane	0.437	0.490	-12.1	102	-0.20	8.48
24	I	Naphthalene-d8	1.000	1.000	0.0	94	-0.19	10.20
25	S	Nitrobenzene-d5	0.364	0.388	-6.6	96	-0.19	8.67
26	t	Nitrobenzene	0.200	0.197	1.5	89	-0.19	8.71
27	t	Quinoline	0.682	0.702	-2.9	92	-0.21	11.02
28	t	Isophorone	0.628	0.641	-2.1	92	-0.19	9.24
29	t	2-Nitrophenol	0.203	0.205	-1.0	87	-0.19	9.42
30	t	2,4-Dimethylphenol	0.329	0.326	0.9	85	-0.16	9.64
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	17.032	31.9#	56	-0.16	10.01
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	85	-0.19	9.82
33	t	2,4-Dichlorophenol	0.288	0.309	-7.3	93	-0.16	9.99
34	t	2,6-Dichlorophenol	0.286	0.308	-7.7	95	-0.18	10.49
35	t	1,3,5-Trichlorobenzene	0.333	0.353	-6.0	98	-0.20	9.43
36	t	1,2,4-Trichlorobenzene	0.323	0.337	-4.3	95	-0.20	10.13
37	t	1,2,3-Trichlorobenzene	0.316	0.337	-6.6	98	-0.20	10.67

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

38	t	Naphthalene	1.125	1.158	-2.9	94	-0.20	10.24
39	t	4-Chloroaniline	0.481	0.461	4.2	83	-0.19	10.49
40	t	2,3-Dichloroaniline	0.346	0.373	-7.8	96	-0.19	12.62
41	t	Caprolactam	0.141	0.137	2.8	84	-0.23	11.24
42	t	Hexachlorobutadiene	0.160	0.189	-18.1	108	-0.20	10.71
43	t	4-Chloro-3-methylphenol	0.284	0.323	-13.7	97	-0.15	11.75
44	t	2-Methylnaphthalene	0.781	0.812	-4.0	93	-0.20	11.85
45	t	1-Methylnaphthalene	0.741	0.766	-3.4	93	-0.20	12.09
46	t	Dimethylnaphthalene	0.646	0.706	-9.3	97	-0.20	13.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	-0.21	14.31
48	t	Hexachlorocyclopentadiene	0.192	0.175	8.9	86	-0.21	12.40
49	t	2,4,6-Trichlorophenol	0.327	0.341	-4.3	95	-0.18	12.64
50	t	2,4,5-Trichlorophenol	0.312	0.286	8.3	93	-0.15	12.75
51	S	2-Fluorobiphenyl	1.408	1.439	-2.2	97	-0.20	12.81
52	t	2-Chloronaphthalene	1.185	1.194	-0.8	97	-0.21	12.96
53	t	Biphenyl	1.620	1.638	-1.1	97	-0.20	12.99
54	t	2-Nitroaniline	0.307	0.334	-8.8	98	-0.19	13.36
55	t	Dimethylphthalate	1.295	1.337	-3.2	98	-0.20	13.93
56	t	Acenaphthylene	1.908	1.962	-2.8	96	-0.21	13.93
57	t	2,6-Dinitrotoluene	0.294	0.317	-7.8	97	-0.20	14.05
58	t	3-Nitroaniline	0.372	0.339	8.9	83	-0.20	14.35
59	t	Acenaphthene	1.273	1.284	-0.9	97	-0.21	14.39
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	37.196	25.6#	72	-0.19	14.59
61	t	4-Nitrophenol	25.000	21.966	12.1	86	-0.10	14.95
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.716	-0.9	97	-0.22	14.77
63	t	2,4-Dinitrotoluene	0.401	0.432	-7.7	95	-0.20	14.96
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	21.644	13.4	84	-0.19	15.23
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.485	-2.7	99	-0.21	15.63
66	t	Fluorene	1.349	1.383	-2.5	97	-0.22	15.58
67	t	4-Chlorophenyl-phenylethe	0.588	0.624	-6.1	102	-0.21	15.66
68	t	4-Nitroaniline	0.396	0.289	27.0#	69	-0.21	15.82
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	-0.21	17.78
70	t	4,6-Dinitro-2-methylpheno	0.132	0.095	28.0#	72	-0.20	15.91
71	t	n-Nitrosodiphenylamine	0.613	0.619	-1.0	96	-0.21	15.98
72	t	1,2-Diphenylhydrazine	0.782	0.772	1.3	96	-0.21	16.02
73	S	2,4,6-Tribromophenol	0.113	0.112	0.9	98	-0.21	16.21
74	t	4-Bromophenyl-phenylether	0.216	0.233	-7.9	101	-0.21	16.79
75	t	Hexachlorobenzene	0.246	0.260	-5.7	102	-0.22	17.08
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	37.055	25.9#	75	-0.20	17.56
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.208	-1.9	101	-0.22	17.82
78	t	Anthracene	1.201	1.197	0.3	95	-0.22	17.93
79	t	Carbazole	1.109	1.048	5.5	89	-0.21	18.39
80	t	Di-n-butylphthalate	1.416	1.518	-7.2	98	-0.16	19.39
81	t	Fluoranthene	1.147	1.237	-7.8	102	-0.15	20.21
82	t	Octadecane	0.460	0.453	1.5	91	-0.21	17.82

7.7.18
7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.13	22.11
84	t	Pyrene	1.210	1.167	3.6	100	-0.15	20.53
85		Butyl stearate	0.345	0.347	-0.6	108	-0.13	21.60
86	S	Terphenyl-d14	0.754	0.783	-3.8	108	-0.14	20.83
87	t	Butylbenzylphthalate	0.640	0.660	-3.1	103	-0.13	21.54
88	t	Benzo[a]anthracene	1.103	1.140	-3.4	108	-0.13	22.09
89	t	3,3'-Dichlorobenzidine	0.412	0.407	1.2	101	-0.13	22.10
90	t	Chrysene	1.093	1.084	0.8	106	-0.13	22.14
91	t	bis(2-Ethylhexyl)phthalat	0.905	1.012	-11.8	110	-0.13	22.24
92	I	Perylene-d12	1.000	1.000	0.0	97	-0.15	23.63
93	t	Di-n-octylphthalate	1.543	1.840	-19.2	102	-0.13	22.86
		----------	True	Calc.	% Drift	----------		
94	t	Benzo[b]fluoranthene	25.000	29.060	-16.2	116	-0.15	23.22
95	t	Benzo[k]fluoranthene	25.000	20.526	17.9	90	-0.15	23.26
		----------	AvgRF	CCRF	% Dev	----------		
96	t	Benzo[a]pyrene	1.127	1.161	-3.0	93	-0.16	23.56
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.156	5.7	83	-0.23	24.93
98	t	Dibenz(a,h)acridine	0.888	0.864	2.7	84	-0.22	24.62
99	t	Dibenz[a,h]anthracene	1.005	0.956	4.9	83	-0.25	24.94
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.531	6.3	84	-0.15	23.24
101	t	Benzo[g,h,i]perylene	0.968	0.883	8.8	78	-0.26	25.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Fri Jan 28 20:49:09 2011 NJMSR

7.7.18

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3152
Lab FileID: R85139.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85139.D Vial: 3
Acq On : 28 Jan 2011 4:35 pm Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47575,er3224 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	84	-0.19	7.42
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	22.599	9.6	80	-0.18	6.58
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	82	-0.20	14.31
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.533	-7.9	83	-0.20	12.33
106	Atrazine	0.169	0.182	-7.7	82	-0.20	17.41
107 t	Chrysene-d12a	1.000	1.000	0.0	86	-0.13	22.11
		True	Calc.	% Drift			
108 t	Benzidine	25.000	17.362	30.6#	69	-0.14	20.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Fri Jan 28 20:50:02 2011 NJMSR

7.7.19

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:54 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

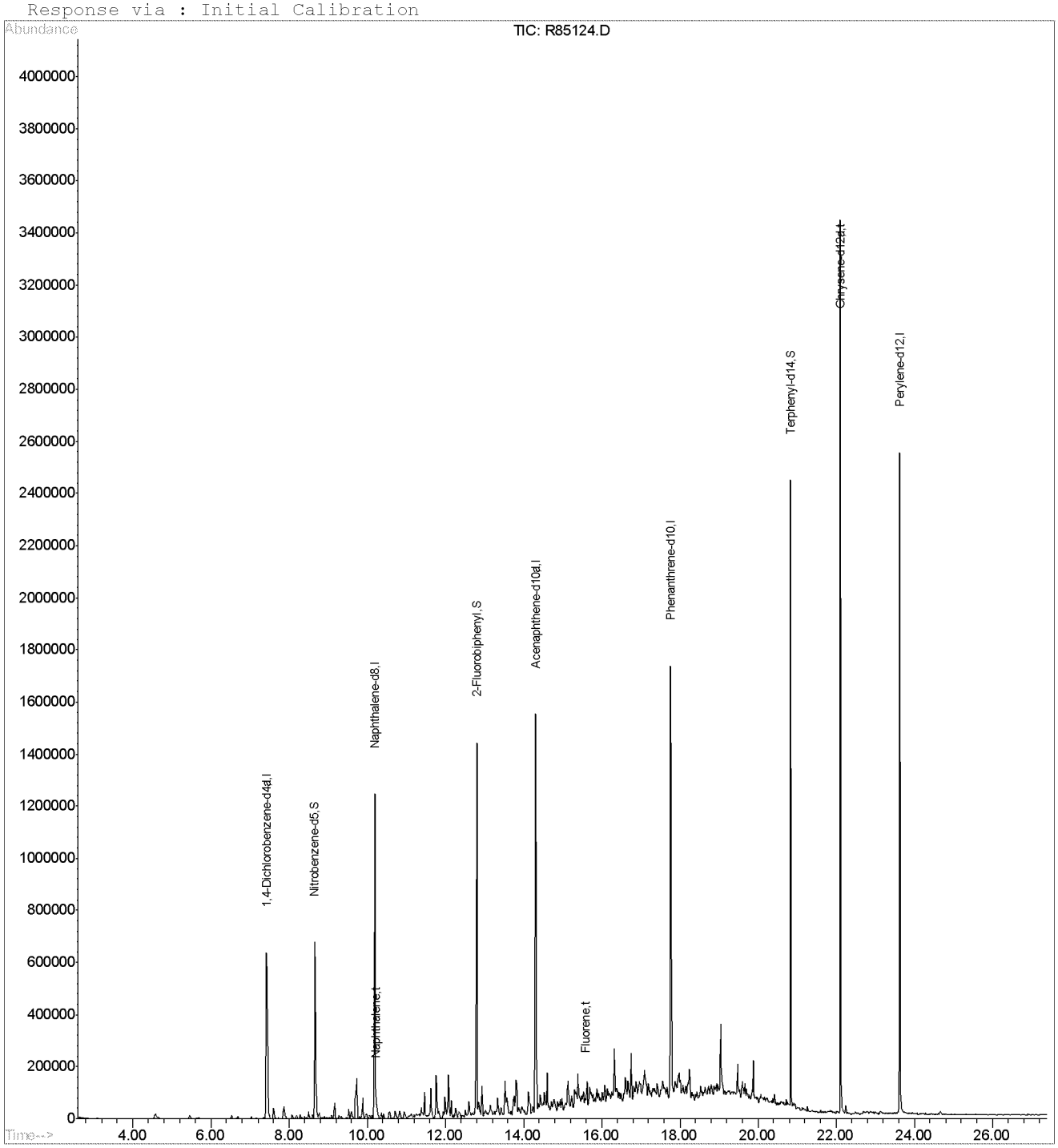
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	269928	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	956703	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	572271	40.00	ppb	-0.21
69) Phenanthrene-d10	17.77	188	1026273	40.00	ppb	-0.22
83) Chrysene-d12	22.11	240	1263634	40.00	ppb	-0.14
92) Perylene-d12	23.63	264	1015205	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	269928	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	572271	40.00	ppb	-0.20
107) Chrysene-d12a	22.11	240	1263634	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	353916	40.71	ppb	-0.20
Spiked Amount 50.000			Recovery =	81.42%		
51) 2-Fluorobiphenyl	12.80	172	734648	36.47	ppb	-0.21
Spiked Amount 50.000			Recovery =	72.94%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	783161	32.88	ppb	-0.14
Spiked Amount 50.000			Recovery =	65.76%		
Target Compounds						Qvalue
38) Naphthalene	10.23	128	43318	1.61	ppb	99
66) Fluorene	15.57	166	12451	0.65	ppb	98

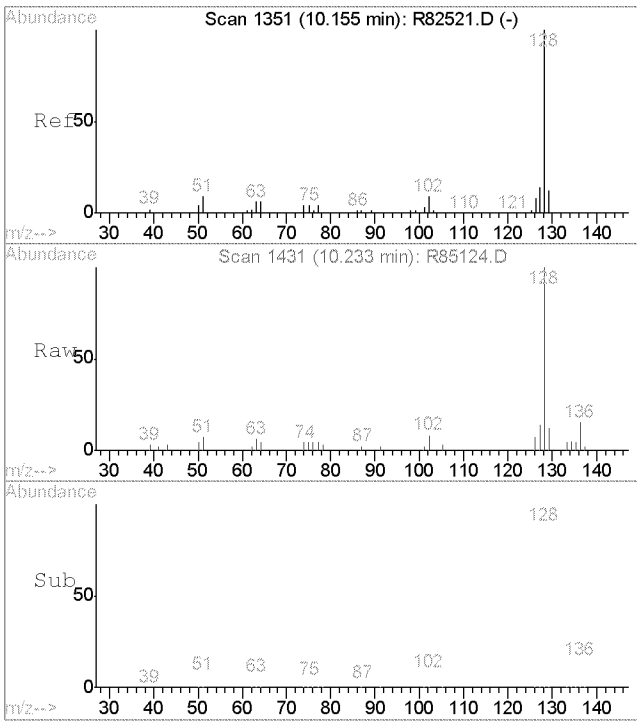
(#) = qualifier out of range (m) = manual integration
R85124.D MR3151.M Thu Jan 27 19:54:27 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:54 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

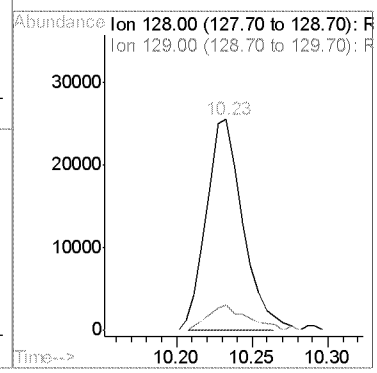


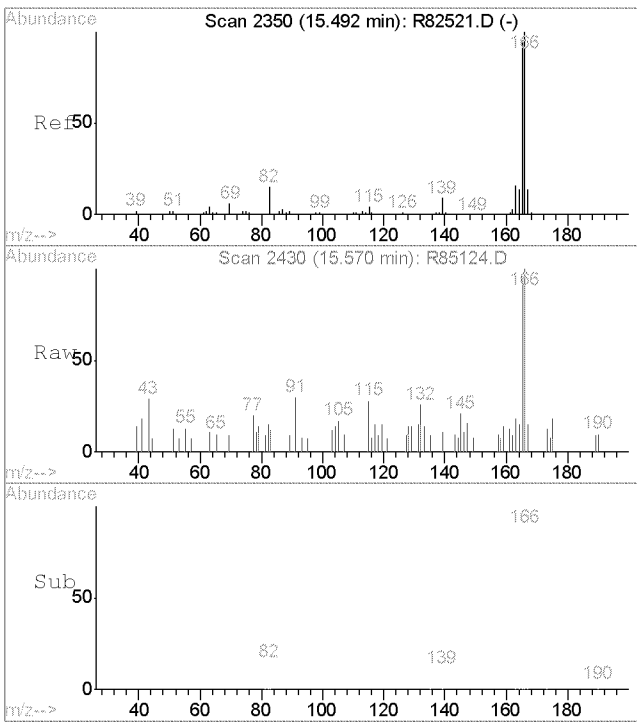


#38
Naphthalene
Concen: 1.61 ppb
RT: 10.23 min Scan# 1431
Delta R.T. -0.21 min
Lab File: R85124.D
Acq: 27 Jan 2011 4:10 pm

Tgt Ion:128 Resp: 43318

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	41.9
127	13.6	0.0	44.0

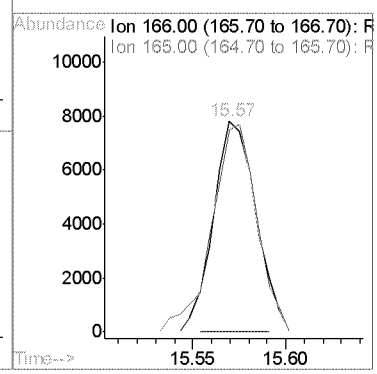




#66
Fluorene
Concen: 0.65 ppb
RT: 15.57 min Scan# 2430
Delta R.T. -0.23 min
Lab File: R85124.D
Acq: 27 Jan 2011 4:10 pm

Tgt Ion:166 Resp: 12451

Ion	Ratio	Lower	Upper
166	100		
165	92.5	64.6	124.6
167	15.4	0.0	43.7



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.570	361	371	381	rBV2	21133	73003	2.00%	0.218%
2	7.423	897	905	926	rBV	637095	1547847	42.40%	4.630%
3	7.599	930	938	952	rBV	40926	82438	2.26%	0.247%
4	7.861	976	987	994	rBV	48104	107310	2.94%	0.321%
5	8.662	1130	1137	1152	rBV	677984	1290996	35.36%	3.861%
6	9.154	1222	1229	1239	rVB	59751	104641	2.87%	0.313%
7	9.522	1291	1298	1304	rVV4	37032	63276	1.73%	0.189%
8	9.597	1304	1312	1324	rVB7	27282	76066	2.08%	0.228%
9	9.699	1324	1331	1333	rBV2	97402	159022	4.36%	0.476%
10	9.725	1333	1336	1345	rVB	154535	227057	6.22%	0.679%
11	9.880	1354	1365	1373	rVB2	81262	154854	4.24%	0.463%
12	10.190	1415	1423	1446	rVV	1245064	2129616	58.33%	6.370%
13	10.564	1482	1493	1504	rBV5	27154	71963	1.97%	0.215%
14	10.719	1509	1522	1532	rVV6	28821	66878	1.83%	0.200%
15	10.831	1532	1543	1555	rVB5	29082	69123	1.89%	0.207%
16	10.938	1555	1563	1575	rBV8	23418	75097	2.06%	0.225%
17	11.120	1580	1597	1600	rBV10	16630	58800	1.61%	0.176%
18	11.381	1639	1646	1650	rBV3	34748	67473	1.85%	0.202%
19	11.456	1655	1660	1668	rVV	94005	126072	3.45%	0.377%
20	11.627	1682	1692	1705	rVB2	114828	240389	6.58%	0.719%
21	11.766	1713	1718	1727	rVV	156224	232609	6.37%	0.696%
22	11.985	1754	1759	1767	rVV2	72088	129555	3.55%	0.387%
23	12.076	1767	1776	1783	rVB	160671	313665	8.59%	0.938%
24	12.145	1783	1789	1797	rVB	65893	106589	2.92%	0.319%
25	12.263	1804	1811	1820	rVB7	35255	75249	2.06%	0.225%
26	12.354	1820	1828	1836	rVB7	21811	61968	1.70%	0.185%
27	12.503	1851	1856	1862	rBV4	27946	53327	1.46%	0.159%
28	12.599	1869	1874	1884	rVB8	52996	90506	2.48%	0.271%
29	12.802	1902	1912	1918	rVV	1423790	2358854	64.61%	7.055%
30	12.850	1918	1921	1931	rVB6	47638	86545	2.37%	0.259%
31	12.936	1931	1937	1943	rVB	113155	167507	4.59%	0.501%
32	13.150	1973	1977	1990	rVV8	37033	88356	2.42%	0.264%
33	13.331	2000	2011	2022	rVB7	67328	170160	4.66%	0.509%
34	13.417	2022	2027	2036	rBV7	29708	59588	1.63%	0.178%
35	13.524	2040	2047	2052	rVV	129913	239796	6.57%	0.717%
36	13.572	2052	2056	2066	rVV3	64349	158006	4.33%	0.473%
37	13.748	2081	2089	2093	rBV5	74861	171277	4.69%	0.512%
38	13.812	2093	2101	2109	rVV4	132900	353490	9.68%	1.057%

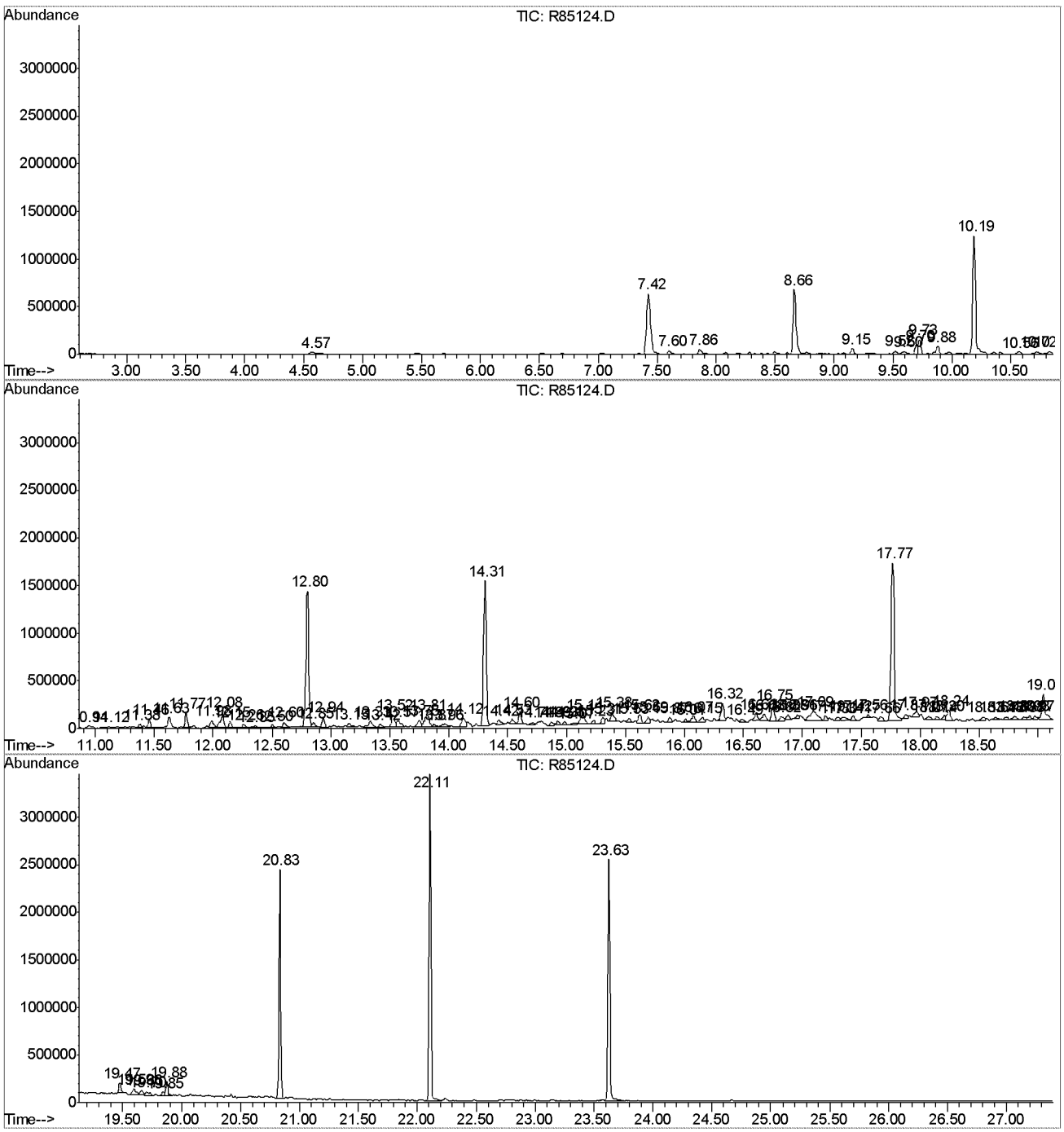
39	13.871	2109	2112	2121	rVV8	24527	53916	1.48%	0.161%
40	13.956	2121	2128	2138	rVV8	28121	94836	2.60%	0.284%
41	14.122	2151	2159	2164	rBV6	89816	205288	5.62%	0.614%
42	14.309	2185	2194	2201	rBV	1528379	2428714	66.53%	7.264%
43	14.421	2211	2215	2225	rVV7	50344	116434	3.19%	0.348%
44	14.533	2232	2236	2243	rVV6	52952	94317	2.58%	0.282%
45	14.603	2243	2249	2256	rVB2	133280	215433	5.90%	0.644%
46	14.715	2262	2270	2273	rBV7	32581	63267	1.73%	0.189%
47	14.864	2293	2298	2304	rBV5	36549	74701	2.05%	0.223%
48	14.928	2305	2310	2314	rVB5	36914	57819	1.58%	0.173%
49	14.982	2314	2320	2326	rVB10	42288	69764	1.91%	0.209%
50	15.067	2326	2336	2340	rBV10	24815	71540	1.96%	0.214%
51	15.137	2340	2349	2357	rVB7	99115	254163	6.96%	0.760%
52	15.233	2358	2367	2372	rBV8	41619	77854	2.13%	0.233%
53	15.308	2374	2381	2384	rBV6	67891	136997	3.75%	0.410%
54	15.383	2391	2395	2404	rBV5	98800	184655	5.06%	0.552%
55	15.527	2417	2422	2427	rVB8	42356	80250	2.20%	0.240%
56	15.618	2434	2439	2445	rVB5	87409	157928	4.33%	0.472%
57	15.687	2446	2452	2456	rBV3	64944	116023	3.18%	0.347%
58	15.869	2480	2486	2492	rBV5	52799	110267	3.02%	0.330%
59	16.008	2507	2512	2517	rBV6	37071	64054	1.75%	0.192%
60	16.072	2517	2524	2531	rVB10	62501	142428	3.90%	0.426%
61	16.152	2531	2539	2543	rBV7	49051	118237	3.24%	0.354%
62	16.323	2562	2571	2577	rVV3	182837	323517	8.86%	0.968%
63	16.494	2597	2603	2609	rVB3	29226	65456	1.79%	0.196%
64	16.606	2618	2624	2629	rVB6	69923	112706	3.09%	0.337%
65	16.675	2630	2637	2644	rVB3	65263	142050	3.89%	0.425%
66	16.750	2644	2651	2657	rVB3	174156	288135	7.89%	0.862%
67	16.820	2658	2664	2670	rBV3	48324	123531	3.38%	0.369%
68	16.878	2670	2675	2681	rVB8	47430	86065	2.36%	0.257%
69	16.958	2684	2690	2693	rBV7	40125	77191	2.11%	0.231%
70	17.092	2702	2715	2730	rVB7	98496	425265	11.65%	1.272%
71	17.194	2730	2734	2739	rBV4	48646	78276	2.14%	0.234%
72	17.295	2749	2753	2758	rBV7	35954	73599	2.02%	0.220%
73	17.343	2759	2762	2773	rVB10	29752	73461	2.01%	0.220%
74	17.423	2773	2777	2786	rVB10	51161	97232	2.66%	0.291%
75	17.557	2797	2802	2807	rVV6	37021	60759	1.66%	0.182%
76	17.664	2818	2822	2831	rVB9	42334	93413	2.56%	0.279%
77	17.765	2833	2841	2855	rBV2	1658515	2962739	81.15%	8.861%
78	17.872	2856	2861	2866	rBV7	39957	78878	2.16%	0.236%
79	17.974	2871	2880	2884	rBV7	57289	148642	4.07%	0.445%
80	18.070	2894	2898	2906	rVB9	35282	70199	1.92%	0.210%
81	18.144	2906	2912	2916	rVV8	33562	61748	1.69%	0.185%
82	18.203	2918	2923	2925	rVV5	49889	81740	2.24%	0.244%
83	18.241	2925	2930	2938	rVB4	107152	220219	6.03%	0.659%
84	18.534	2978	2985	2988	rBV4	34773	54649	1.50%	0.163%
85	18.641	3002	3005	3011	rVV7	33615	52268	1.43%	0.156%
86	18.727	3015	3021	3027	rVV10	33122	68665	1.88%	0.205%
87	18.802	3027	3035	3044	rVB10	41322	97538	2.67%	0.292%
88	18.882	3044	3050	3054	rBV8	34648	69125	1.89%	0.207%
89	18.930	3055	3059	3062	rVV5	42609	64742	1.77%	0.194%
90	18.967	3063	3066	3072	rVV8	39490	76219	2.09%	0.228%
91	19.042	3073	3080	3096	rVB3	267909	543798	14.90%	1.626%
92	19.475	3156	3161	3167	rBV3	112237	157704	4.32%	0.472%
93	19.592	3176	3183	3191	rBV10	61324	149528	4.10%	0.447%
94	19.662	3191	3196	3200	rVV5	52679	86312	2.36%	0.258%
95	19.699	3200	3203	3214	rVB10	38358	85580	2.34%	0.256%

96	19.849	3225	3231	3232	rBV4	38583	56721	1.55%	0.170%
97	19.875	3232	3236	3244	rVB	144916	176157	4.83%	0.527%
98	20.832	3409	3415	3422	rVB	2403618	2565047	70.26%	7.672%
99	22.108	3646	3654	3672	rVB	3433479	3650801	100.00%	10.919%
100	23.625	3931	3938	3959	rVB	2534869	3036397	83.17%	9.082%

Sum of corrected areas: 33433925

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85124.D
Operator : ninap
Acquired : 27 Jan 2011 4:10 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-1
Misc Info : op47853,er3223,1000
Vial Number: 10
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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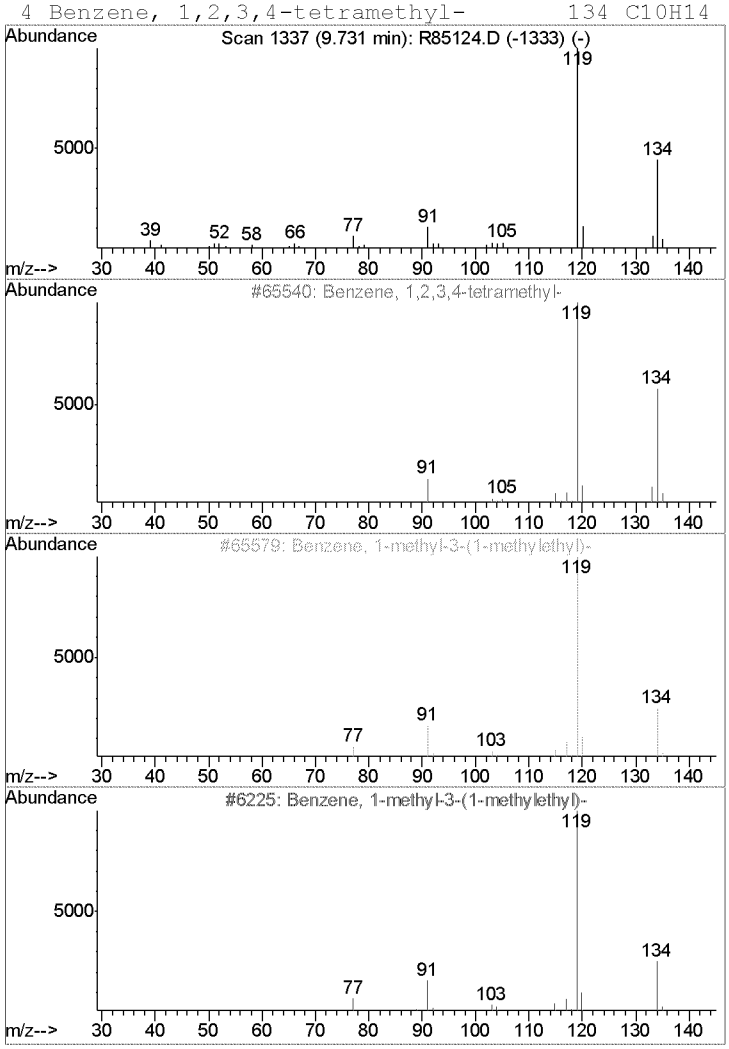
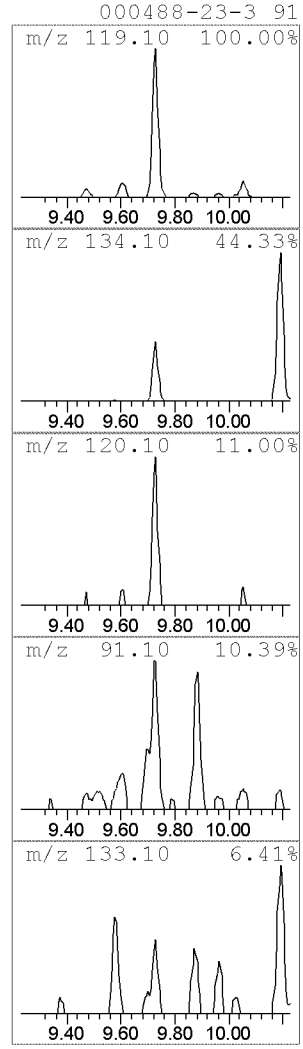
Peak Number 1 C4 alkyl benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.73	4.26 ppb	227057	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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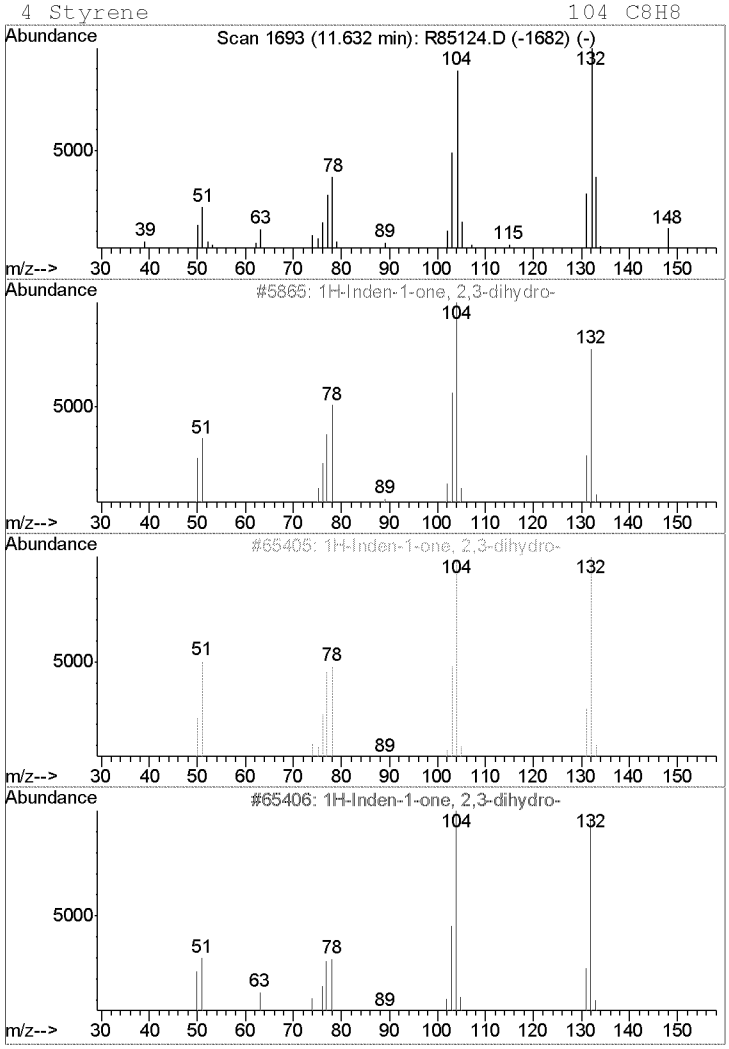
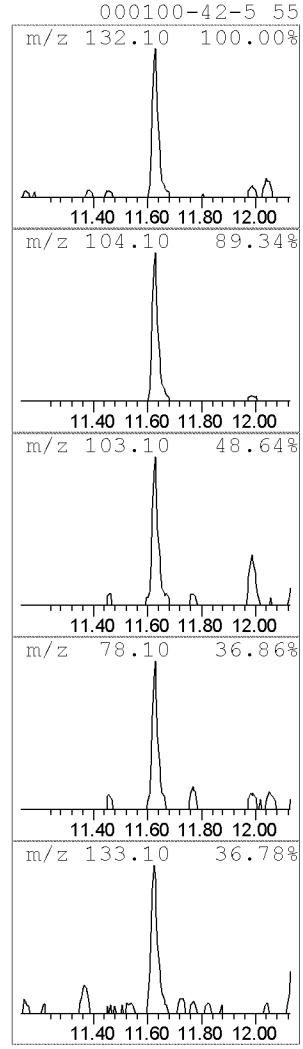
Peak Number 2 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.63	4.52 ppb	240389	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	95
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	93
4	Styrene	104	C8H8	000100-42-5	55





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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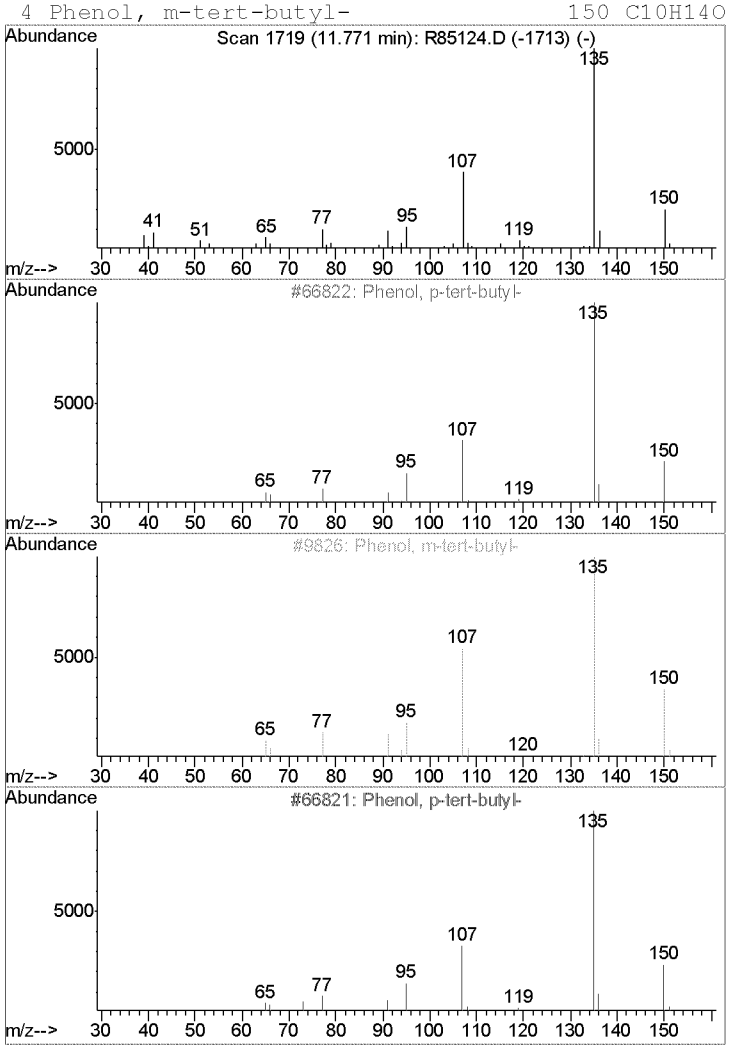
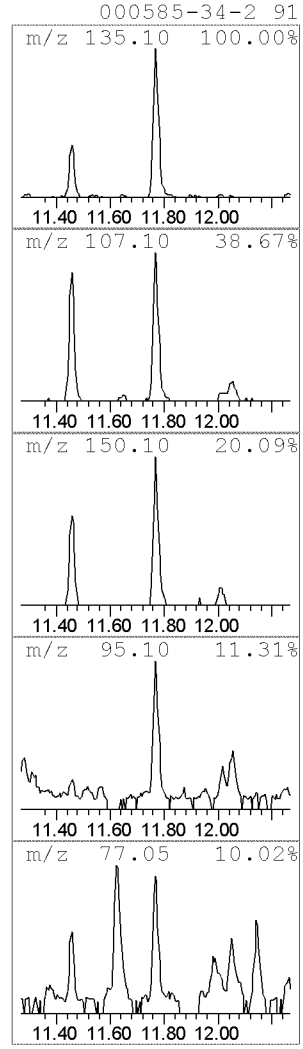
Peak Number 3 Phenol, tert-butyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.77	4.37 ppb	232609	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	93
2	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	92
3	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	91
4	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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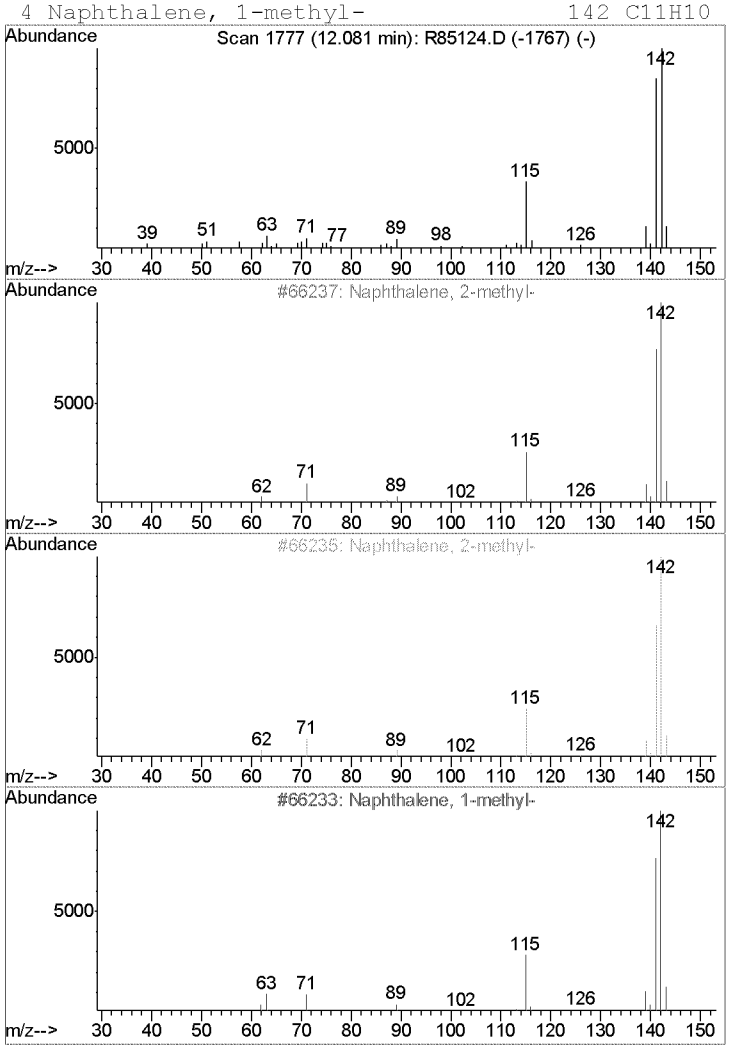
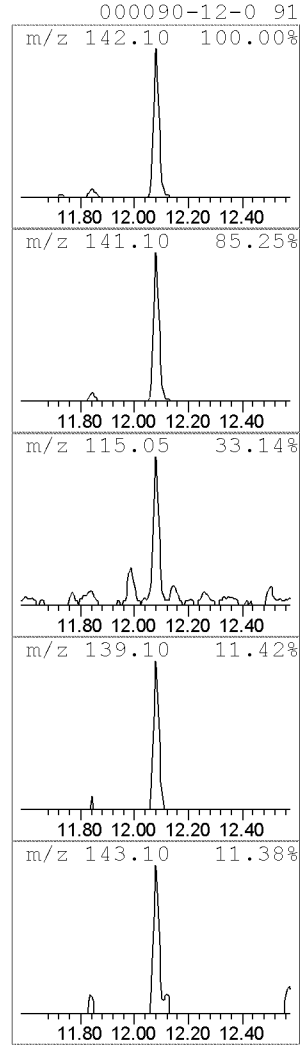
Peak Number 4 Naphthalene, 1-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.08	5.89 ppb	313665	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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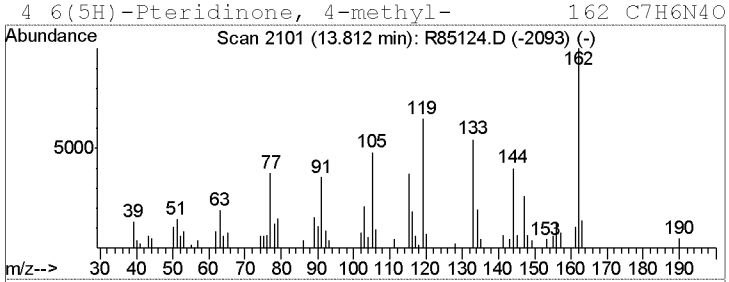
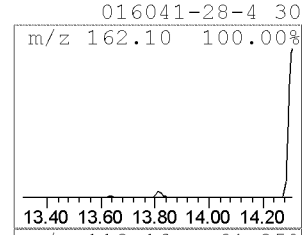
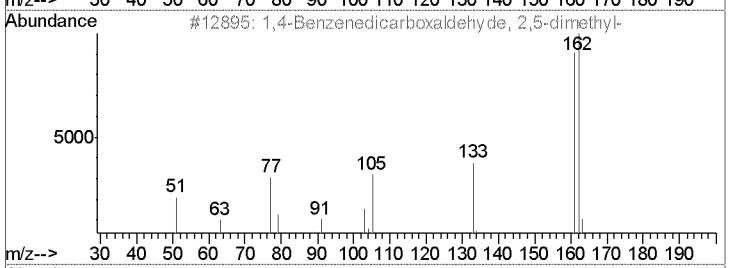
Peak Number 5 unknown Concentration Rank 3

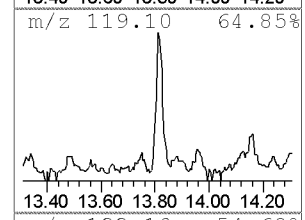
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.81	5.82 ppb	353490	Acenaphthene-d10	14.31

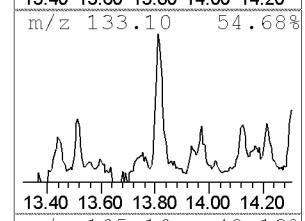
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Benzenedicarboxaldehyde, 2,5...	162	C10H10O2	007044-92-0	50
2	Tricyclo[4.4.0.02,7]dec-4-en-3-o...	162	C11H14O	006518-50-9	46
3	3(2H)-Benzofuranone, 4,5-dimethyl-	162	C10H10O2	020895-42-5	46
4	6(5H)-Pteridinone, 4-methyl-	162	C7H6N4O	016041-28-4	30

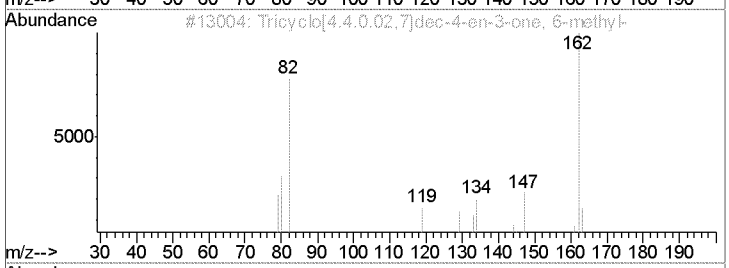


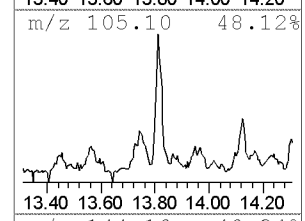


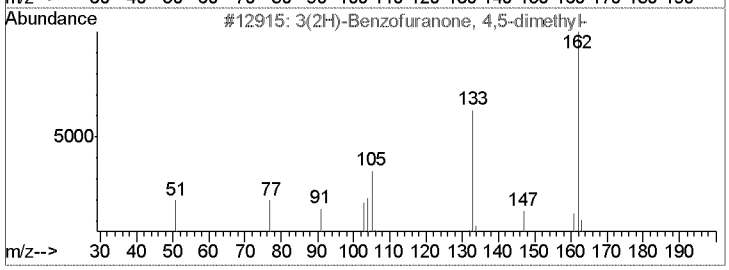


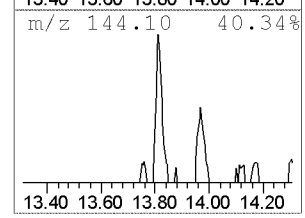












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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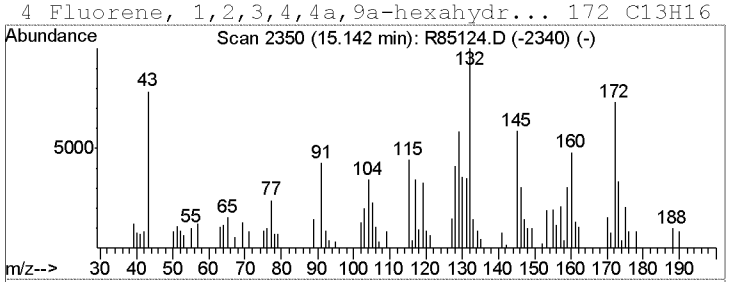
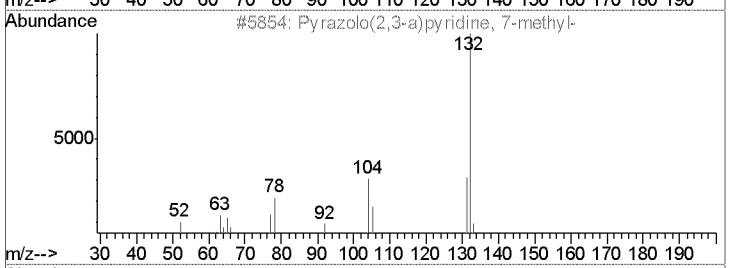
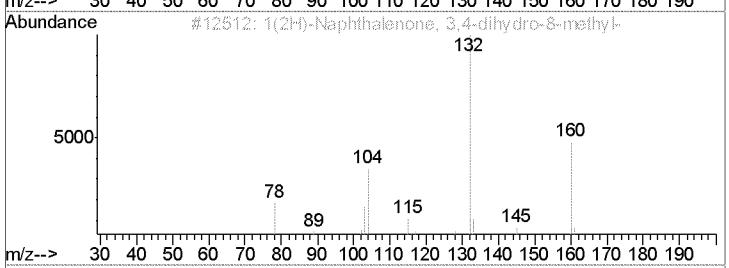
Peak Number 6 unknown Concentration Rank 9

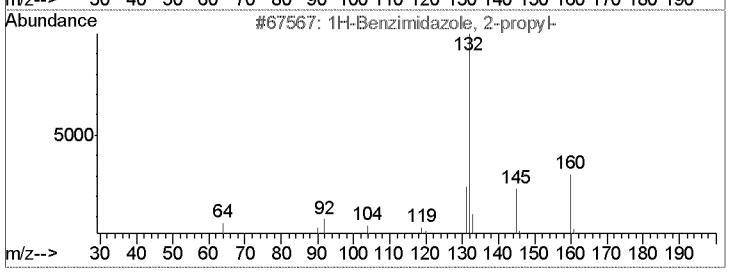
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.14	4.19 ppb	254163	Acenaphthene-d10a	14.31

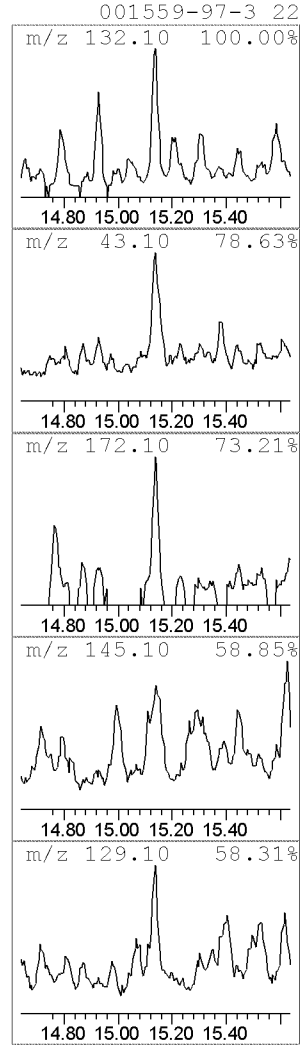
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	47
2	1(2H)-Naphthalenone, 3,4-dihydro...	160	C11H12O	051015-28-2	35
3	1H-Benzimidazole, 2-propyl-	160	C10H12N2	005465-29-2	30
4	Fluorene, 1,2,3,4,4a,9a-hexahydr...	172	C13H16	001559-97-3	22











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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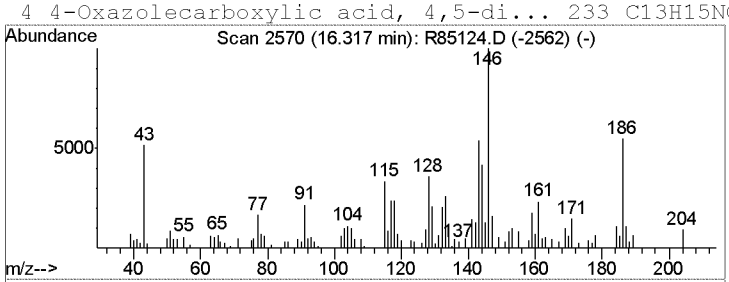
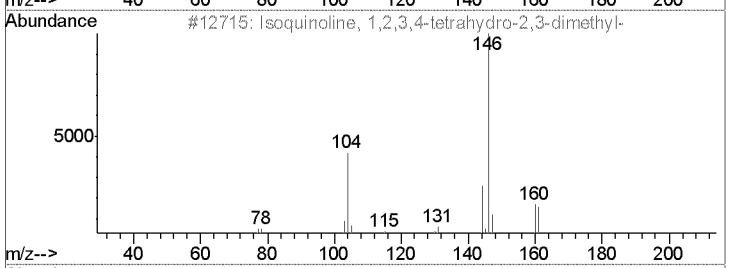
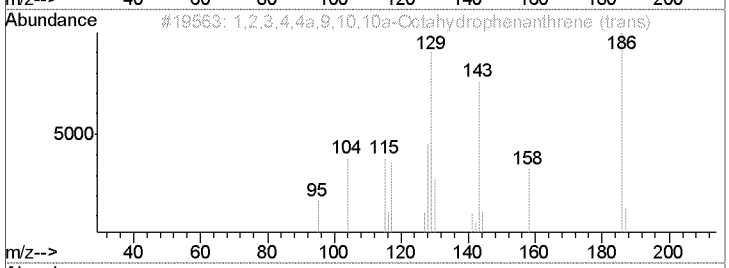
Peak Number 7 unknown Concentration Rank 7

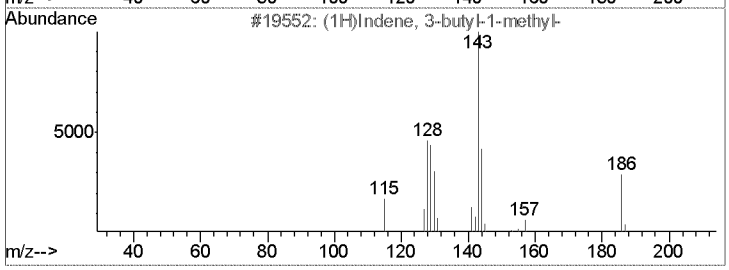
R.T.	EstConc	Area	Relative to ISTD	R.T.
16.32	4.37 ppb	323517	Phenanthrene-d10	17.77

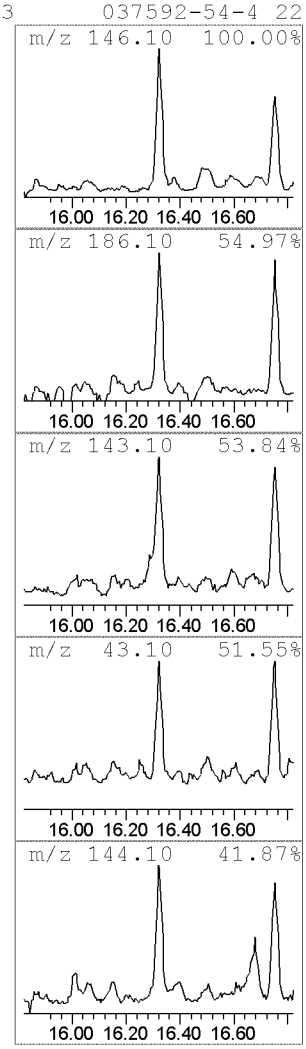
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isoquinoline, 1,2,3,4-tetrahydro...	161	C11H15N	054365-72-9	35
2	1,2,3,4,4a,9,10,10a-Octahydrophe...	186	C14H18	020480-67-5	35
3	(1H)Indene, 3-butyl-1-methyl-	186	C14H18	000000-00-0	27
4	4-Oxazolecarboxylic acid, 4,5-di...	233	C13H15NO3	037592-54-4	22











8.1.2 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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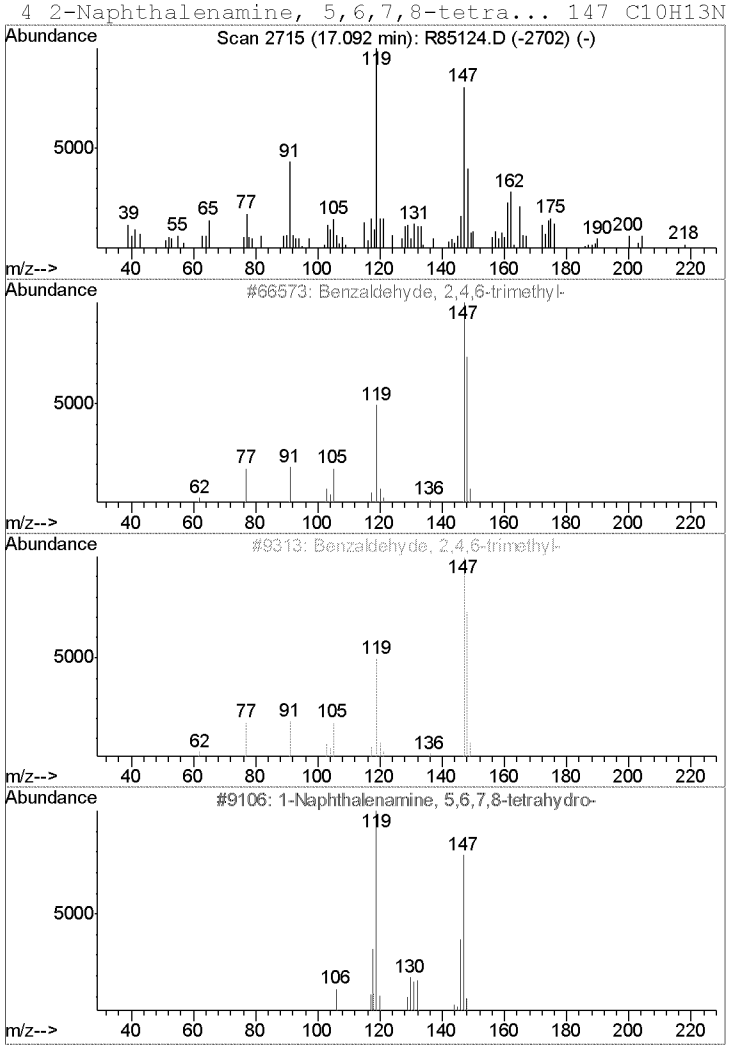
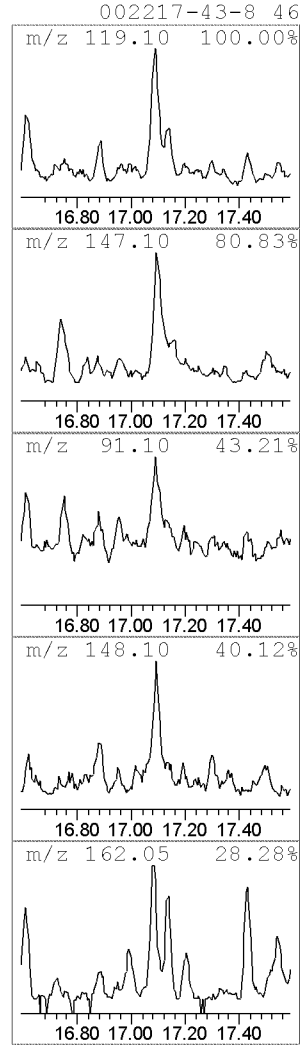
Peak Number 8 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.09	5.74 ppb	425265	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde, 2,4,6-trimethyl-	148	C10H12O	000487-68-3	58
2	Benzaldehyde, 2,4,6-trimethyl-	148	C10H12O	000487-68-3	58
3	1-Naphthalenamine, 5,6,7,8-tetra...	147	C10H13N	002217-41-6	55
4	2-Naphthalenamine, 5,6,7,8-tetra...	147	C10H13N	002217-43-8	46





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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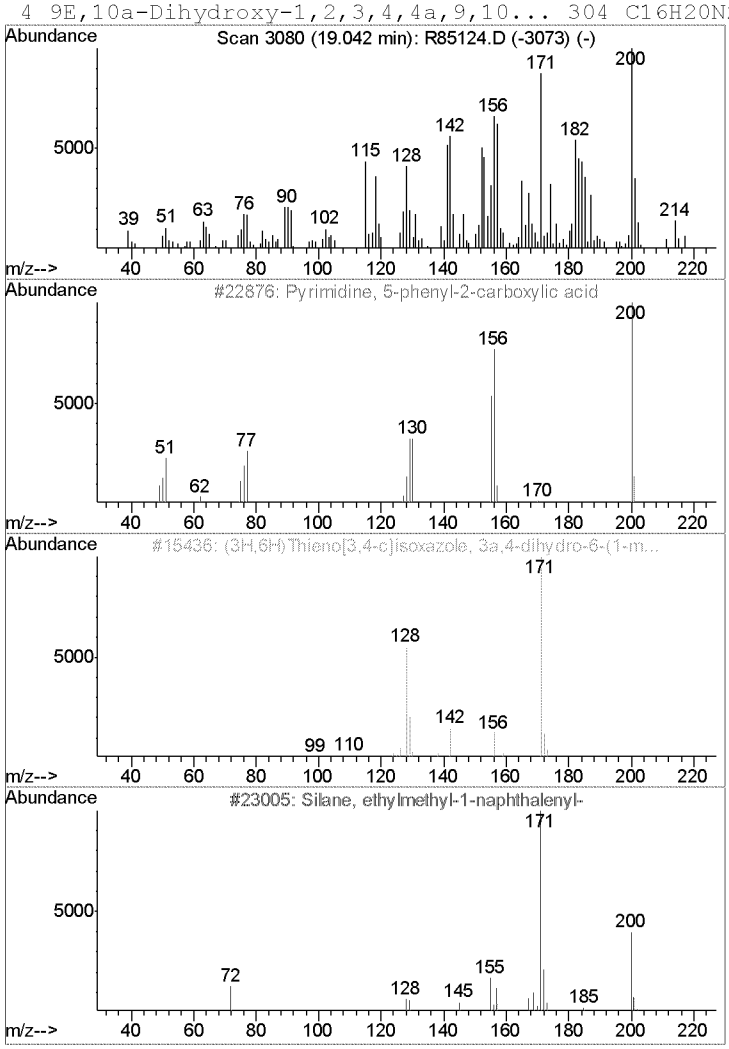
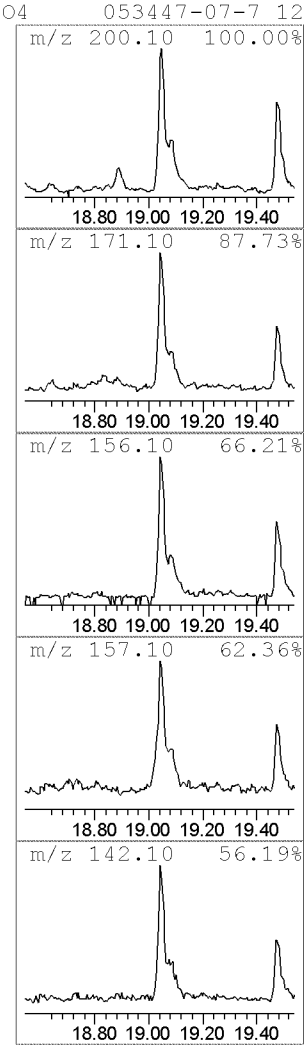
Peak Number 9 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.04	7.34 ppb	543798	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrimidine, 5-phenyl-2-carboxyli...	200	C11H8N2O2	085386-20-5	15
2	(3H,6H)Thieno[3,4-c]isoxazole, 3...	171	C8H13NOS	000000-00-0	14
3	Silane, ethylmethyl-1-naphthalenyl-	200	C13H16Si	074685-82-8	12
4	9E,10a-Dihydroxy-1,2,3,4,4a,9,10...	304	C16H20N2O4	053447-07-7	12





Tentatively Identified Compound (LSC) summary

Operator ID: ninap Date Acquired: 27 Jan 2011 4:10 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85124.D
Name: ja66701-1
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
C4 alkyl benzene	9.73	4.3	ppb	227057	3	10.19	2129620	40.0
unknown	11.63	4.5	ppb	240389	3	10.19	2129620	40.0
Phenol, tert-butyl-	11.77	4.4	ppb	232609	3	10.19	2129620	40.0
Naphthalene, 1-me...	12.08	5.9	ppb	313665	3	10.19	2129620	40.0
unknown	13.81	5.8	ppb	353490	4	14.31	2428710	40.0
unknown	15.14	4.2	ppb	254163	5	14.31	2428710	40.0
unknown	16.32	4.4	ppb	323517	6	17.77	2962740	40.0
unknown	17.09	5.7	ppb	425265	6	17.77	2962740	40.0
unknown	19.04	7.3	ppb	543798	6	17.77	2962740	40.0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:59 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

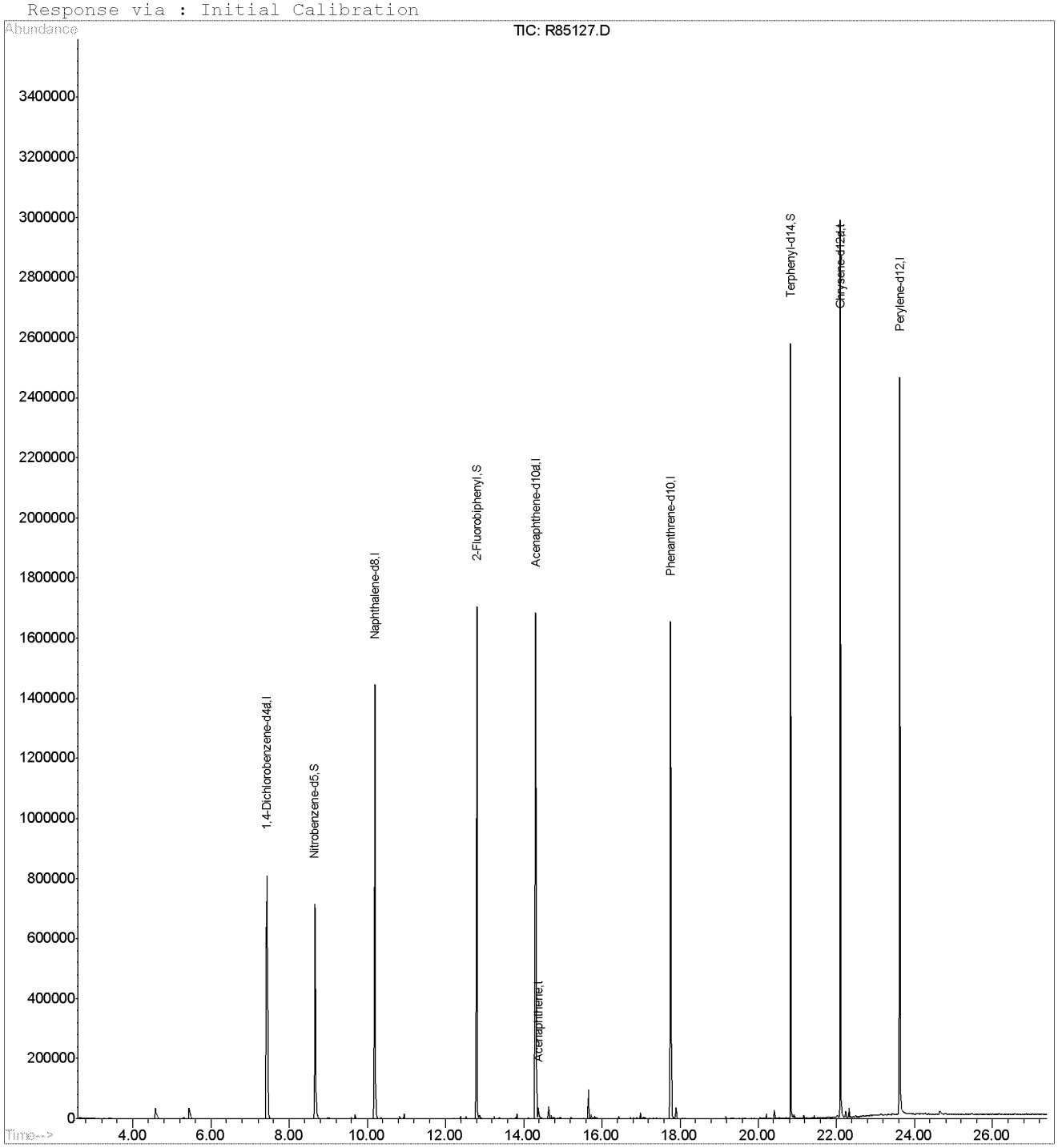
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	303533	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	1103967	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	642128	40.00	ppb	-0.22
69) Phenanthrene-d10	17.77	188	1057882	40.00	ppb	-0.22
83) Chrysene-d12	22.11	240	1132845	40.00	ppb	-0.14
92) Perylene-d12	23.63	264	1084564	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.43	152	303533	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	642128	40.00	ppb	-0.21
107) Chrysene-d12a	22.11	240	1132845	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	412600	41.12	ppb	-0.20
Spiked Amount 50.000			Recovery =	82.24%		
51) 2-Fluorobiphenyl	12.80	172	880407	38.95	ppb	-0.21
Spiked Amount 50.000			Recovery =	77.90%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	830878	38.91	ppb	-0.14
Spiked Amount 50.000			Recovery =	77.82%		
Target Compounds						Qvalue
59) Acenaphthene	14.38	153	15971	0.78	ppb	94

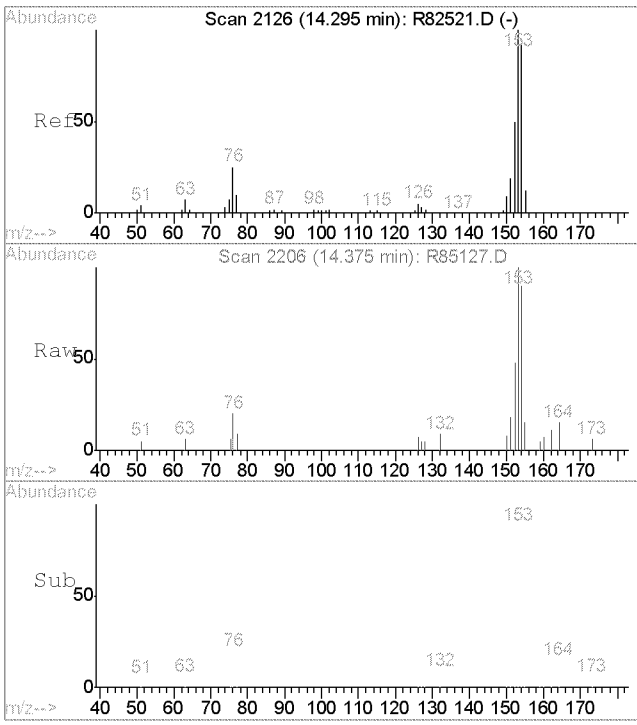
(#) = qualifier out of range (m) = manual integration
R85127.D MR3151.M Thu Jan 27 20:00:05 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:59 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

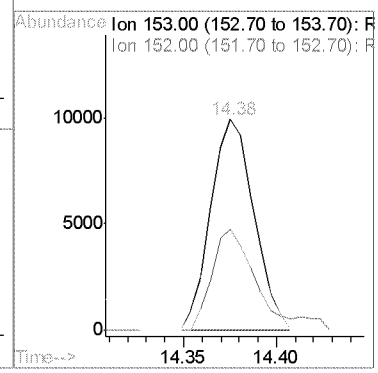




#59
Acenaphthene
Concen: 0.78 ppb
RT: 14.38 min Scan# 2206
Delta R.T. -0.22 min
Lab File: R85127.D
Acq: 27 Jan 2011 5:56 pm

Tgt Ion:153 Resp: 15971

Ion	Ratio	Lower	Upper
153	100		
152	44.9	19.9	79.9
154	90.2	65.1	125.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.578	363	372	400	rBB2	35090	102652	3.20%	0.434%
2	5.299	500	507	517	rBB	6366	15469	0.48%	0.065%
3	5.443	526	534	551	rBB2	35930	93233	2.91%	0.394%
4	7.430	897	906	928	rBV	810774	1704787	53.18%	7.202%
5	8.664	1130	1137	1163	rBV	715854	1214930	37.90%	5.132%
6	8.990	1192	1198	1202	rBV2	6952	9423	0.29%	0.040%
7	9.028	1202	1205	1212	rVB2	7424	9137	0.29%	0.039%
8	9.605	1307	1313	1315	rBV	4871	5474	0.17%	0.023%
9	9.695	1323	1330	1335	rBB	16105	21688	0.68%	0.092%
10	10.192	1414	1423	1439	rBV	1444874	2252736	70.27%	9.516%
11	10.352	1447	1453	1459	rVB3	4911	8894	0.28%	0.038%
12	10.401	1459	1462	1470	rBB	2080	3987	0.12%	0.017%
13	10.828	1536	1542	1549	rBB2	9295	13552	0.42%	0.057%
14	10.945	1556	1564	1569	rBB	18985	27870	0.87%	0.118%
15	12.217	1799	1802	1808	rVB3	4119	7046	0.22%	0.030%
16	12.382	1828	1833	1838	rVB	9846	13473	0.42%	0.057%
17	12.527	1853	1860	1870	rBB2	8420	12544	0.39%	0.053%
18	12.660	1879	1885	1889	rBB2	4433	5522	0.17%	0.023%
19	12.805	1903	1912	1921	rBV	1707026	2533953	79.04%	10.704%
20	12.874	1921	1925	1930	rVV3	10389	16334	0.51%	0.069%
21	12.943	1932	1938	1941	rVV2	2214	4480	0.14%	0.019%
22	13.162	1973	1979	1985	rBB	2722	4310	0.13%	0.018%
23	13.248	1990	1995	2000	rBB	7576	9153	0.29%	0.039%
24	13.371	2012	2018	2025	rBB	7323	13436	0.42%	0.057%
25	13.681	2072	2076	2084	rBB2	4027	6641	0.21%	0.028%
26	13.793	2092	2097	2100	rBV	6803	9583	0.30%	0.040%
27	13.830	2100	2104	2111	rVB3	17708	26711	0.83%	0.113%
28	14.113	2152	2157	2161	rBV2	4855	5419	0.17%	0.023%
29	14.306	2185	2193	2201	rBV	1683950	2627034	81.95%	11.097%
30	14.375	2201	2206	2212	rVV	38850	64521	2.01%	0.273%
31	14.412	2212	2213	2218	rVV	8903	8039	0.25%	0.034%
32	14.455	2218	2221	2232	rVB	5683	10956	0.34%	0.046%
33	14.605	2245	2249	2251	rBV2	4135	5378	0.17%	0.023%
34	14.642	2251	2256	2262	rVB	40554	55499	1.73%	0.234%
35	14.706	2262	2268	2272	rBV	11350	16762	0.52%	0.071%
36	14.754	2273	2277	2281	rVV2	5775	9459	0.30%	0.040%
37	14.792	2281	2284	2291	rVB2	4871	8023	0.25%	0.034%
38	14.867	2292	2298	2305	rBB3	4060	8727	0.27%	0.037%

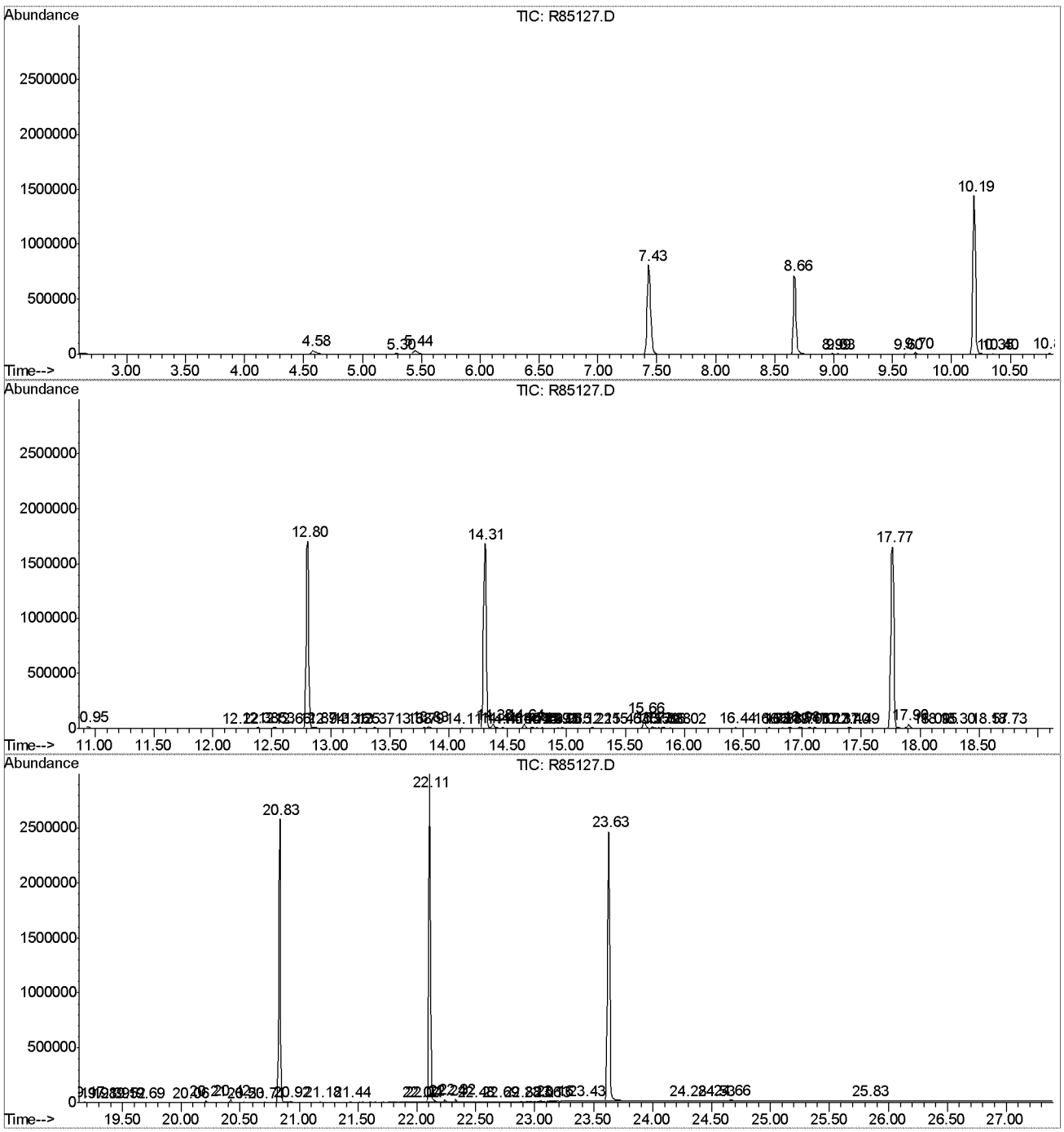
39	14.925	2305	2309	2313	rBV	6576	8318	0.26%	0.035%
40	14.963	2313	2316	2321	rVB	6149	7472	0.23%	0.032%
41	15.123	2342	2346	2350	rBV	3309	4525	0.14%	0.019%
42	15.219	2358	2364	2371	rBB2	7160	12179	0.38%	0.051%
43	15.465	2406	2410	2415	rBB	4208	5068	0.16%	0.021%
44	15.534	2420	2423	2429	rBB	3133	4578	0.14%	0.019%
45	15.657	2440	2446	2454	rVV	98816	150352	4.69%	0.635%
46	15.732	2454	2460	2464	rVV	14025	22637	0.71%	0.096%
47	15.785	2467	2470	2472	rVV2	5781	7228	0.23%	0.031%
48	15.817	2472	2476	2485	rVB2	8162	14938	0.47%	0.063%
49	15.882	2485	2488	2493	rBB2	5404	6231	0.19%	0.026%
50	16.015	2507	2513	2518	rBB2	3851	5004	0.16%	0.021%
51	16.437	2586	2592	2597	rVB2	9024	10827	0.34%	0.046%
52	16.726	2640	2646	2655	rBB2	5087	10236	0.32%	0.043%
53	16.806	2656	2661	2663	rBV3	4052	5839	0.18%	0.025%
54	16.827	2663	2665	2670	rVB	5018	5326	0.17%	0.022%
55	16.891	2670	2677	2687	rBV2	7126	17210	0.54%	0.073%
56	16.982	2687	2694	2702	rVV3	19681	29524	0.92%	0.125%
57	17.062	2702	2709	2714	rVV4	5581	13685	0.43%	0.058%
58	17.105	2714	2717	2724	rVB3	6788	9725	0.30%	0.041%
59	17.222	2731	2739	2744	rBV2	3815	6990	0.22%	0.030%
60	17.308	2750	2755	2760	rBV	3920	7537	0.24%	0.032%
61	17.399	2768	2772	2779	rBV	4997	8671	0.27%	0.037%
62	17.490	2782	2789	2799	rBV3	4034	10710	0.33%	0.045%
63	17.767	2832	2841	2856	rBV2	1656830	2764395	86.23%	11.678%
64	17.901	2856	2866	2875	rVV6	37092	66736	2.08%	0.282%
65	18.088	2896	2901	2906	rBV2	3769	4308	0.13%	0.018%
66	18.147	2907	2912	2917	rVB4	3318	5543	0.17%	0.023%
67	18.302	2935	2941	2947	rBB	2434	3850	0.12%	0.016%
68	18.574	2988	2992	3001	rVB3	3965	6694	0.21%	0.028%
69	18.734	3015	3022	3025	rBV	1774	3993	0.12%	0.017%
70	19.172	3098	3104	3110	rBV3	9057	14022	0.44%	0.059%
71	19.285	3121	3125	3129	rBV3	2798	4504	0.14%	0.019%
72	19.391	3137	3145	3150	rVB2	3152	4217	0.13%	0.018%
73	19.525	3165	3170	3173	rVB2	3955	4503	0.14%	0.019%
74	19.685	3193	3200	3203	rBV3	1652	3841	0.12%	0.016%
75	20.064	3264	3271	3276	rBV	5046	7500	0.23%	0.032%
76	20.209	3289	3298	3304	rVB2	15776	18655	0.58%	0.079%
77	20.417	3330	3337	3344	rBV3	29623	32551	1.02%	0.138%
78	20.529	3353	3358	3365	rBV3	3698	7160	0.22%	0.030%
79	20.706	3387	3391	3399	rVV3	3199	4611	0.14%	0.019%
80	20.834	3406	3415	3427	rBV	2579473	2771152	86.44%	11.706%
81	20.925	3427	3432	3446	rVB4	13753	22589	0.70%	0.095%
82	21.181	3474	3480	3485	rVB3	7610	7937	0.25%	0.034%
83	21.437	3524	3528	3532	rVB	8972	7499	0.23%	0.032%
84	22.020	3632	3637	3639	rVV5	4109	6579	0.21%	0.028%
85	22.041	3639	3641	3646	rVB4	6303	6349	0.20%	0.027%
86	22.105	3646	3653	3671	rBV	2989801	3192612	99.59%	13.487%
87	22.239	3673	3678	3687	rVB	23240	28815	0.90%	0.122%
88	22.324	3687	3694	3701	rBV	30235	33234	1.04%	0.140%
89	22.484	3720	3724	3728	rVB5	4803	4924	0.15%	0.021%
90	22.693	3758	3763	3770	rBV4	3533	6004	0.19%	0.025%
91	22.880	3794	3798	3804	rBV4	4123	6072	0.19%	0.026%
92	23.056	3828	3831	3836	rVB4	2402	4574	0.14%	0.019%
93	23.131	3842	3845	3847	rVV2	4047	4154	0.13%	0.018%
94	23.158	3847	3850	3856	rVB5	4210	5248	0.16%	0.022%
95	23.430	3897	3901	3904	rBV3	4340	6324	0.20%	0.027%

96	23.628	3929	3938	3959	rBV	2452433	3205820	100.00%	13.542%
97	24.279	4051	4060	4063	rBV6	4883	11132	0.35%	0.047%
98	24.525	4105	4106	4112	rBV6	2798	4009	0.13%	0.017%
99	24.659	4126	4131	4144	rVB2	12776	23676	0.74%	0.100%
100	25.829	4345	4350	4355	rBV6	2784	5028	0.16%	0.021%

Sum of corrected areas: 23672459

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85127.D
Operator : larisap
Acquired : 27 Jan 2011 5:56 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-2
Misc Info : op47853,er3223,1000
Vial Number: 13
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 27 Jan 2011 5:56 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85127.D
Name: ja66701-2
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.4
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:51 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

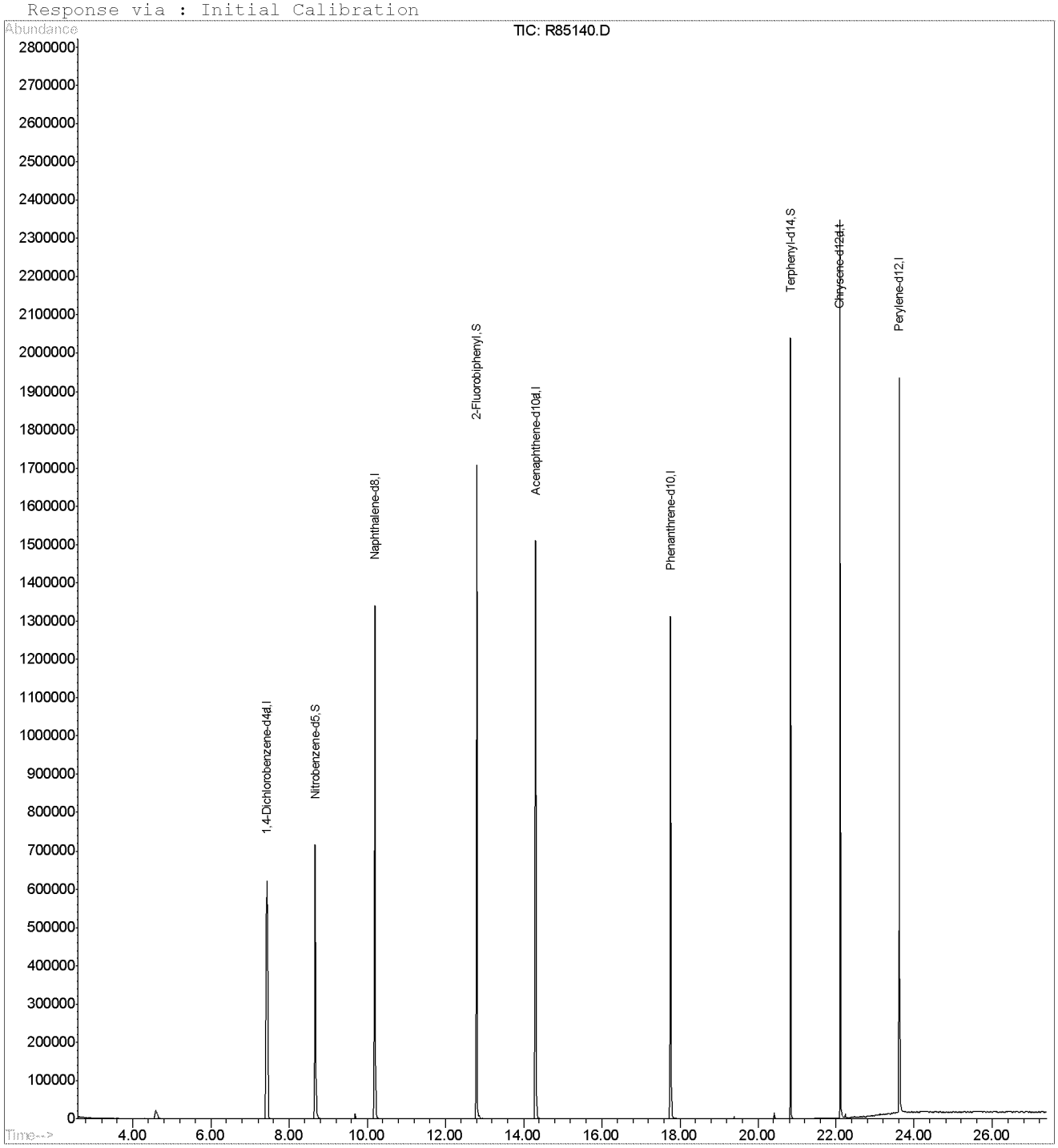
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	298758	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	1044118	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	584532	40.00	ppb	-0.21
69) Phenanthrene-d10	17.76	188	887909	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	861655	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	775629	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.43	152	298758	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	584532	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	861655	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.67	82	429722	45.29	ppb	-0.20
Spiked Amount 50.000			Recovery =	90.58%		
51) 2-Fluorobiphenyl	12.80	172	870819	42.32	ppb	-0.21
Spiked Amount 50.000			Recovery =	84.64%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	657105	40.46	ppb	-0.14
Spiked Amount 50.000			Recovery =	80.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85140.D MR3151.M Fri Jan 28 20:51:31 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:51 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.630	5	8	17	rVB3	1713	2648	0.11%	0.014%
2	3.026	80	82	86	rBV3	1024	1690	0.07%	0.009%
3	3.175	107	110	115	rVB3	974	1837	0.07%	0.009%
4	3.576	181	185	189	rBV	1348	1875	0.08%	0.010%
5	3.811	228	229	237	rBV	1240	2905	0.12%	0.015%
6	3.955	246	256	257	rBV2	745	1899	0.08%	0.010%
7	4.212	302	304	310	rVB2	1656	2483	0.10%	0.013%
8	4.297	316	320	322	rBV	1363	1600	0.06%	0.008%
9	4.468	349	352	356	rBV	1284	1885	0.08%	0.010%
10	4.586	365	374	400	rVB2	23735	100324	4.03%	0.516%
11	4.890	424	431	434	rBB	1166	1616	0.06%	0.008%
12	7.428	896	906	928	rBB2	623297	1672212	67.21%	8.593%
13	8.667	1130	1138	1167	rBV	716342	1259671	50.63%	6.473%
14	8.849	1171	1172	1181	rVB	1200	1490	0.06%	0.008%
15	9.693	1324	1330	1336	rBB	13854	19702	0.79%	0.101%
16	10.190	1414	1423	1446	rBV	1340880	2129789	85.61%	10.945%
17	12.802	1903	1912	1923	rBV	1708483	2487884	100.00%	12.785%
18	12.866	1923	1924	1932	rVV	8279	12163	0.49%	0.063%
19	12.930	1932	1936	1945	rVV2	1970	5606	0.23%	0.029%
20	13.144	1973	1976	1980	rBB	2806	2297	0.09%	0.012%
21	14.308	2185	2194	2224	rBB	1510364	2401887	96.54%	12.343%
22	17.482	2784	2788	2795	rBB	2421	4174	0.17%	0.021%
23	17.765	2828	2841	2858	rBV2	1314488	2302910	92.57%	11.834%
24	17.882	2858	2863	2873	rVV	3341	8669	0.35%	0.045%
25	17.957	2876	2877	2886	rVB2	1161	2145	0.09%	0.011%
26	18.577	2986	2993	2998	rBB	1418	2207	0.09%	0.011%
27	18.625	2999	3002	3009	rBB	652	1479	0.06%	0.008%
28	19.389	3138	3145	3151	rVB	6915	9724	0.39%	0.050%
29	20.014	3257	3262	3265	rBV	746	1699	0.07%	0.009%
30	20.420	3333	3338	3342	rVB	16028	15289	0.61%	0.079%
31	20.831	3406	3415	3435	rBV	2040195	2123890	85.37%	10.914%
32	22.102	3647	3653	3669	rBV	2348236	2380021	95.66%	12.230%
33	22.231	3673	3677	3684	rVB	10954	11097	0.45%	0.057%
34	22.311	3689	3692	3695	rBV2	1562	1872	0.08%	0.010%
35	22.599	3742	3746	3748	rBV3	1693	1989	0.08%	0.010%
36	22.754	3772	3775	3777	rBV3	1347	1740	0.07%	0.009%
37	22.776	3777	3779	3784	rBV3	1444	2299	0.09%	0.012%
38	22.936	3805	3809	3811	rVB3	2827	2851	0.11%	0.015%

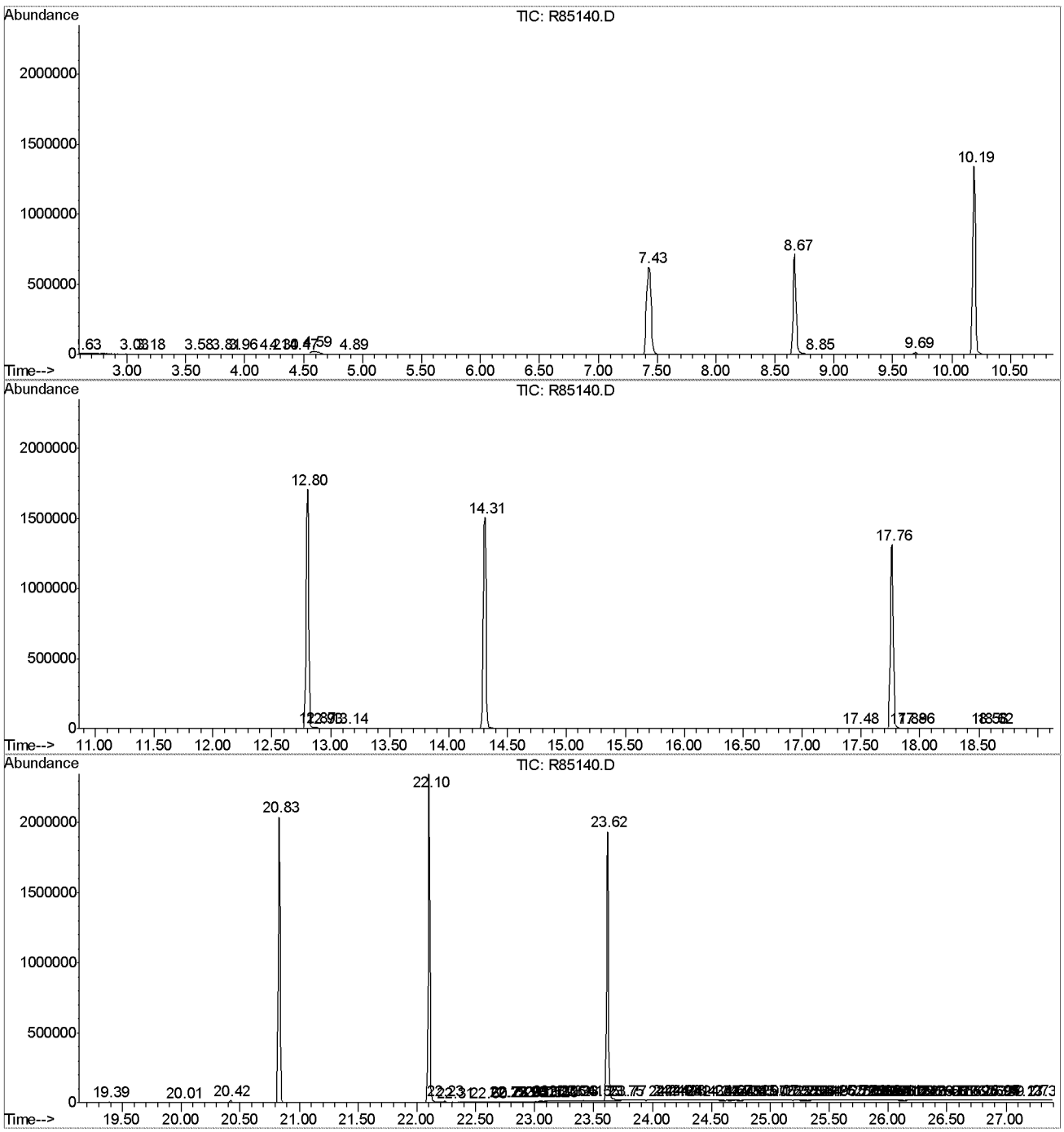
39	22.952	3811	3812	3814	rBV	1958	1549	0.06%	0.008%
40	23.005	3816	3822	3824	rBV4	2836	4468	0.18%	0.023%
41	23.053	3824	3831	3834	rBV4	1707	3649	0.15%	0.019%
42	23.101	3834	3840	3841	rBV3	2940	3702	0.15%	0.019%
43	23.128	3841	3845	3849	rBV2	4558	6526	0.26%	0.034%
44	23.198	3854	3858	3859	rVB3	1879	1620	0.07%	0.008%
45	23.262	3866	3870	3873	rVB3	2040	2064	0.08%	0.011%
46	23.358	3884	3888	3894	rVB6	2276	4375	0.18%	0.022%
47	23.411	3894	3898	3902	rBV3	4216	6960	0.28%	0.036%
48	23.550	3918	3924	3930	rVV7	1294	2488	0.10%	0.013%
49	23.620	3930	3937	3959	rBV	1921583	2286930	91.92%	11.752%
50	23.753	3959	3962	3965	rVB3	2619	3568	0.14%	0.018%
51	23.775	3965	3966	3968	rBV2	2174	1590	0.06%	0.008%
52	24.106	4027	4028	4033	rVV4	1801	2211	0.09%	0.011%
53	24.143	4033	4035	4040	rVV4	3326	4388	0.18%	0.023%
54	24.175	4040	4041	4045	rVV3	2083	2857	0.11%	0.015%
55	24.245	4046	4054	4057	rVV7	3599	8254	0.33%	0.042%
56	24.277	4057	4060	4063	rVV4	3790	5445	0.22%	0.028%
57	24.309	4063	4066	4071	rVV6	3816	5826	0.23%	0.030%
58	24.426	4081	4088	4092	rVB8	1728	3346	0.13%	0.017%
59	24.571	4114	4115	4124	rVB6	2797	4474	0.18%	0.023%
60	24.672	4128	4134	4140	rVV4	3781	7933	0.32%	0.041%
61	24.731	4143	4145	4148	rVB4	1605	1545	0.06%	0.008%
62	24.752	4148	4149	4153	rBV4	1572	1679	0.07%	0.009%
63	24.811	4159	4160	4163	rBV3	1959	1514	0.06%	0.008%
64	24.870	4168	4171	4174	rBV4	1805	2071	0.08%	0.011%
65	24.966	4186	4189	4191	rBV4	1536	1677	0.07%	0.009%
66	25.046	4201	4204	4205	rBV3	2089	1634	0.07%	0.008%
67	25.067	4207	4208	4211	rBV3	2792	1952	0.08%	0.010%
68	25.276	4243	4247	4255	rVB6	2846	8150	0.33%	0.042%
69	25.334	4255	4258	4260	rBV4	2530	3040	0.12%	0.016%
70	25.356	4260	4262	4266	rVV5	1729	2038	0.08%	0.010%
71	25.415	4271	4273	4275	rBV3	1935	1642	0.07%	0.008%
72	25.441	4275	4278	4280	rVB3	2138	1559	0.06%	0.008%
73	25.489	4285	4287	4291	rBV4	1824	2224	0.09%	0.011%
74	25.559	4296	4300	4303	rVV4	984	1712	0.07%	0.009%
75	25.724	4329	4331	4336	rVB5	2284	3009	0.12%	0.015%
76	25.815	4346	4348	4351	rVB4	2935	2772	0.11%	0.014%
77	25.853	4351	4355	4359	rBV5	2663	4529	0.18%	0.023%
78	25.906	4363	4365	4372	rVB6	2559	3870	0.16%	0.020%
79	25.954	4372	4374	4377	rBV4	2335	2704	0.11%	0.014%
80	25.976	4377	4378	4382	rVB4	2026	1570	0.06%	0.008%
81	26.018	4382	4386	4388	rBV4	1822	2004	0.08%	0.010%
82	26.045	4390	4391	4396	rVV4	2133	2737	0.11%	0.014%
83	26.109	4400	4403	4408	rVB4	3637	5319	0.21%	0.027%
84	26.147	4408	4410	4412	rBV3	1896	1770	0.07%	0.009%
85	26.184	4412	4417	4422	rBV5	1516	2600	0.10%	0.013%
86	26.227	4422	4425	4426	rBV3	2358	1574	0.06%	0.008%
87	26.243	4426	4428	4431	rBV3	1575	1822	0.07%	0.009%
88	26.387	4453	4455	4458	rBV3	1619	2138	0.09%	0.011%
89	26.467	4467	4470	4476	rVB5	2154	3667	0.15%	0.019%
90	26.504	4476	4477	4481	rVB4	1501	1610	0.06%	0.008%
91	26.552	4481	4486	4488	rBV4	2415	3945	0.16%	0.020%
92	26.686	4508	4511	4514	rBV4	2074	2495	0.10%	0.013%
93	26.766	4522	4526	4529	rBV6	1361	1919	0.08%	0.010%
94	26.830	4535	4538	4539	rBV3	1796	1803	0.07%	0.009%
95	26.937	4555	4558	4559	rBV3	1966	1752	0.07%	0.009%

96	26.948	4559	4560	4565	rVB4	2693	2758	0.11%	0.014%
97	26.985	4565	4567	4570	rBV4	2098	1473	0.06%	0.008%
98	27.135	4593	4595	4600	rVV4	1743	2145	0.09%	0.011%
99	27.322	4628	4630	4634	rBV4	2071	2180	0.09%	0.011%
100	27.370	4636	4639	4640	rBV2	2038	1531	0.06%	0.008%

Sum of corrected areas: 19459874

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85140.D
Operator : larisap
Acquired : 28 Jan 2011 5:11 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-3
Misc Info : op47853,er3224,945
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 5:11 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85140.D
Name: ja66701-3
Misc: op47853,er3224,945
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.6
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:52 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

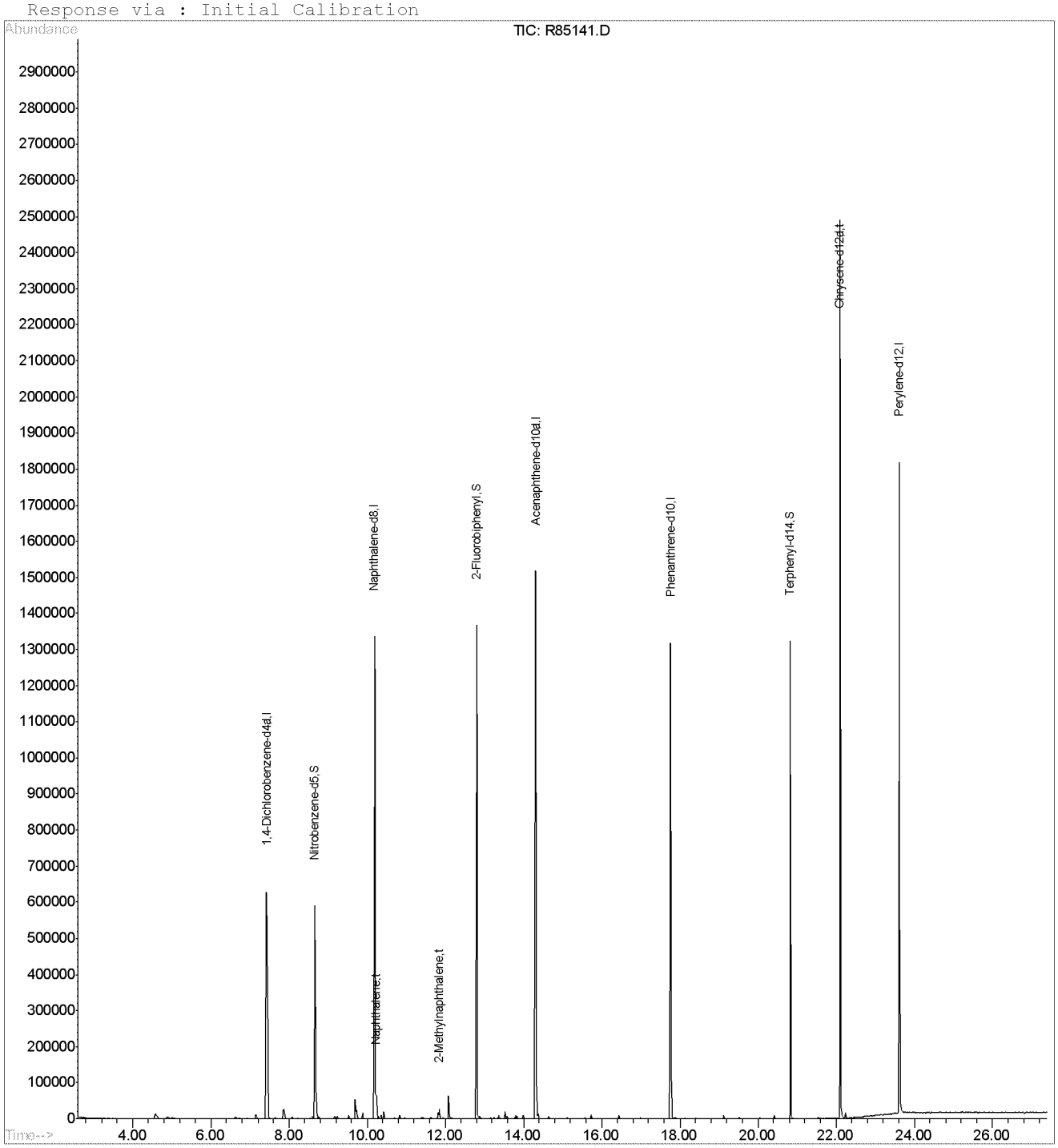
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	298967	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1042679	40.00	ppb	-0.21
47) Acenaphthene-d10	14.31	164	576651	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	856818	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	897218	40.00	ppb	-0.15
92) Perylene-d12	23.62	264	763285	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	298967	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	576651	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	897218	40.00	ppb	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	350440	36.98	ppb	-0.20
Spiked Amount 50.000			Recovery =	73.96%		
51) 2-Fluorobiphenyl	12.80	172	689909	33.99	ppb	-0.21
Spiked Amount 50.000			Recovery =	67.98%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	431455	25.51	ppb	-0.15
Spiked Amount 50.000			Recovery =	51.02%		
Target Compounds						Qvalue
38) Naphthalene	10.23	128	64432	2.20	ppb	96
44) 2-Methylnaphthalene	11.84	142	17063	0.84	ppb	96

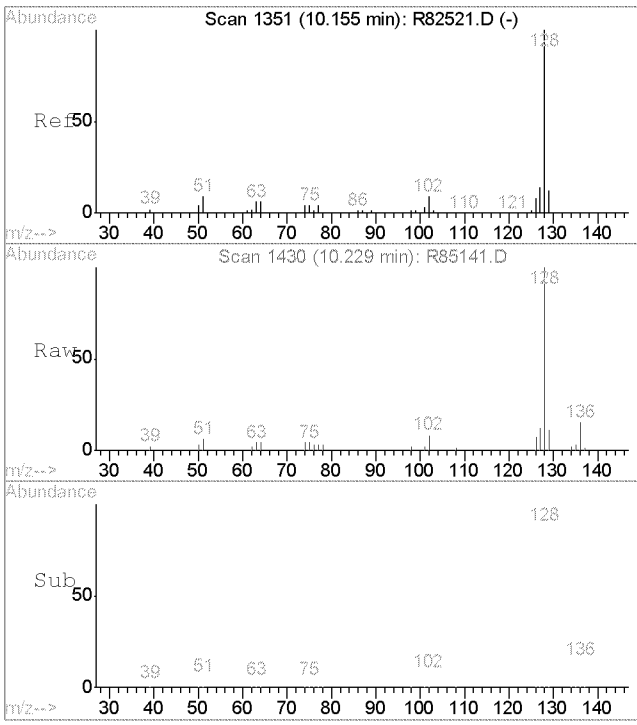
(#) = qualifier out of range (m) = manual integration
R85141.D MR3151.M Fri Jan 28 20:52:37 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:52 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration

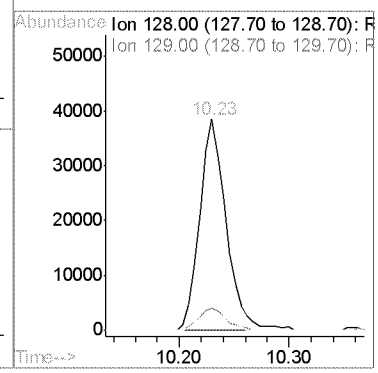


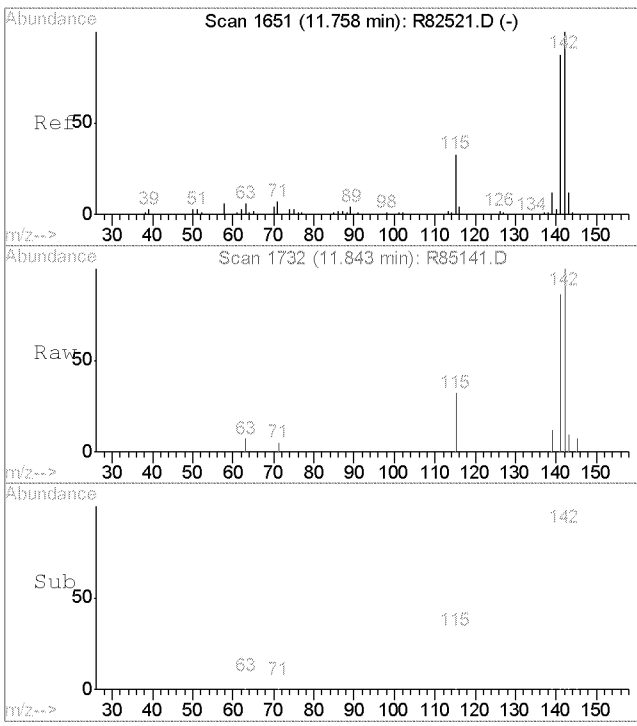


#38
Naphthalene
Concen: 2.20 ppb
RT: 10.23 min Scan# 1430
Delta R.T. -0.21 min
Lab File: R85141.D
Acq: 28 Jan 2011 5:47 pm

Tgt Ion:128 Resp: 64432

Ion	Ratio	Lower	Upper
128	100		
129	10.5	0.0	41.9
127	12.4	0.0	44.0

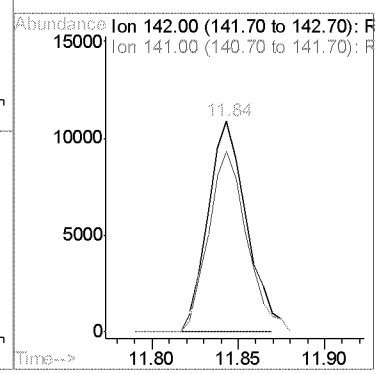




#44
2-Methylnaphthalene
Concen: 0.84 ppb
RT: 11.84 min Scan# 1732
Delta R.T. -0.21 min
Lab File: R85141.D
Acq: 28 Jan 2011 5:47 pm

Tgt Ion:142 Resp: 17063

Ion	Ratio	Lower	Upper
142	100		
141	85.6	57.0	117.0
115	26.6	3.1	63.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.572	364	371	396	rVB3	15538	66702	2.68%	0.354%
2	4.861	419	425	435	rBV2	5965	20953	0.84%	0.111%
3	5.005	446	452	460	rBV2	3257	9302	0.37%	0.049%
4	5.085	466	467	475	rVB2	2828	3626	0.15%	0.019%
5	5.961	625	631	643	rBB	1685	4431	0.18%	0.023%
6	6.458	721	724	735	rBB	1349	3344	0.13%	0.018%
7	6.634	748	757	767	rBB	5075	13844	0.56%	0.073%
8	6.720	768	773	783	rBB2	2844	7585	0.30%	0.040%
9	6.928	806	812	818	rBB	1440	3796	0.15%	0.020%
10	7.152	847	854	863	rBB2	13590	29219	1.17%	0.155%
11	7.419	896	904	922	rBV	629118	1694309	68.04%	8.982%
12	7.638	937	945	956	rBB2	5720	15878	0.64%	0.084%
13	7.863	980	987	1000	rBB	26999	62150	2.50%	0.329%
14	8.082	1022	1028	1037	rBB2	5930	11693	0.47%	0.062%
15	8.178	1040	1046	1051	rBV	2700	4719	0.19%	0.025%
16	8.226	1051	1055	1060	rVB	2846	4372	0.18%	0.023%
17	8.285	1061	1066	1070	rBB	2624	3244	0.13%	0.017%
18	8.531	1107	1112	1116	rBV2	3656	5465	0.22%	0.029%
19	8.605	1121	1126	1130	rBB2	7209	10159	0.41%	0.054%
20	8.664	1130	1137	1152	rBV	590302	1067604	42.87%	5.660%
21	8.766	1152	1156	1166	rVB2	5747	12202	0.49%	0.065%
22	8.995	1195	1199	1205	rVB2	2041	3411	0.14%	0.018%
23	9.156	1222	1229	1236	rBB2	8208	14348	0.58%	0.076%
24	9.225	1237	1242	1248	rBB2	7026	10970	0.44%	0.058%
25	9.524	1291	1298	1304	rBB2	9464	15111	0.61%	0.080%
26	9.599	1305	1312	1317	rBB3	2161	4225	0.17%	0.022%
27	9.695	1324	1330	1334	rBV2	54120	83347	3.35%	0.442%
28	9.727	1334	1336	1343	rVB	23887	27963	1.12%	0.148%
29	9.882	1360	1365	1373	rBB2	17259	23158	0.93%	0.123%
30	10.187	1414	1422	1439	rBV	1337661	2261209	90.80%	11.987%
31	10.288	1439	1441	1448	rVV3	7951	10072	0.40%	0.053%
32	10.358	1448	1454	1459	rVV2	10309	16292	0.65%	0.086%
33	10.422	1459	1466	1473	rVB2	18734	28370	1.14%	0.150%
34	10.694	1512	1517	1526	rBB2	5191	9106	0.37%	0.048%
35	10.833	1537	1543	1548	rBB2	9795	13716	0.55%	0.073%
36	10.967	1560	1568	1577	rBB3	5106	9506	0.38%	0.050%
37	11.186	1604	1609	1614	rBB	3561	4952	0.20%	0.026%
38	11.383	1641	1646	1650	rBV2	5289	7390	0.30%	0.039%

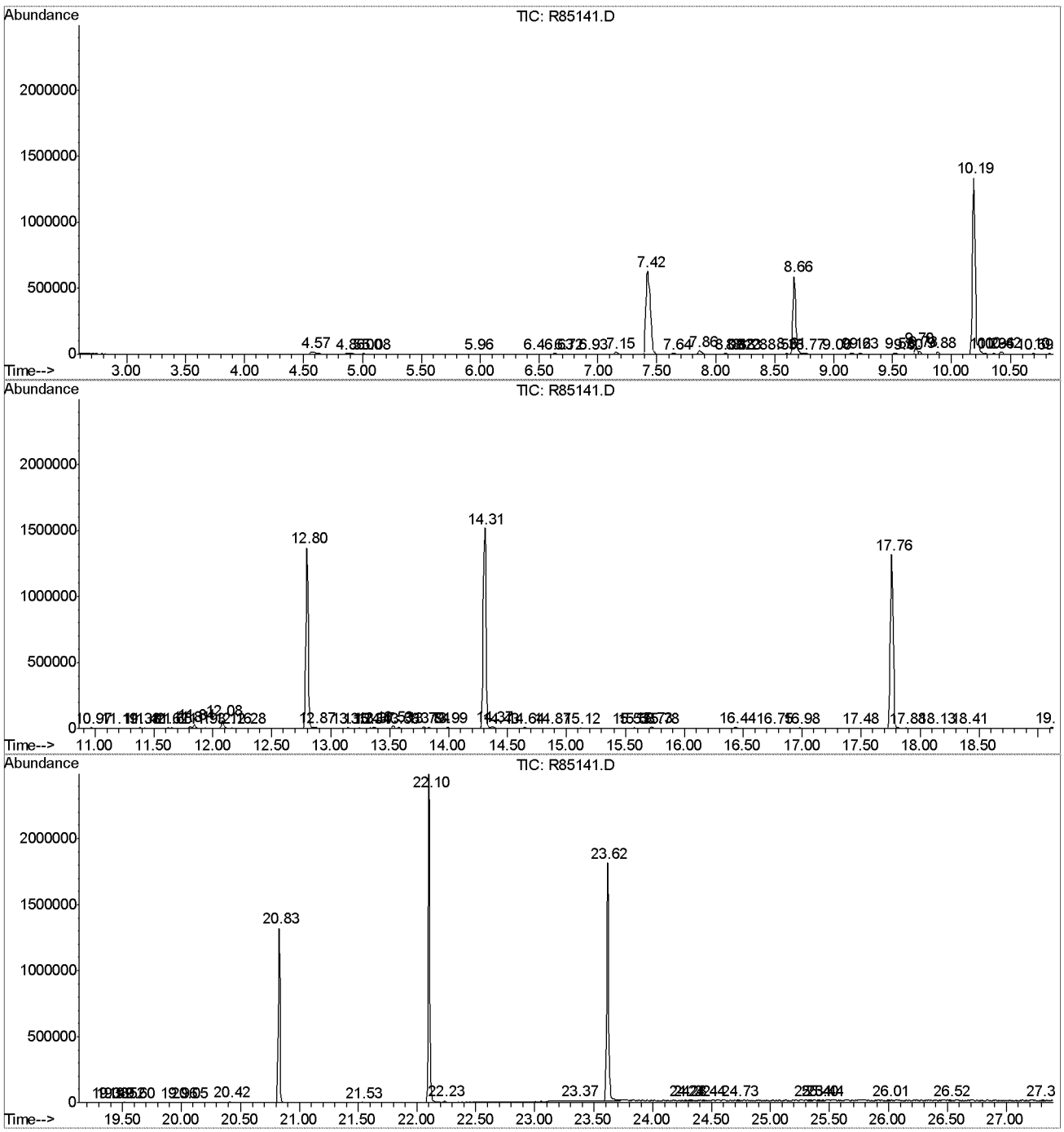
39	11.421	1650	1653	1659	rVB3	3848	5237	0.21%	0.028%
40	11.618	1681	1690	1693	rBV3	4948	9059	0.36%	0.048%
41	11.650	1693	1696	1702	rVB	6024	7814	0.31%	0.041%
42	11.805	1721	1725	1729	rBV3	17159	27472	1.10%	0.146%
43	11.843	1729	1732	1740	rVB	28080	40452	1.62%	0.214%
44	11.934	1744	1749	1754	rBB	4086	4570	0.18%	0.024%
45	12.078	1770	1776	1786	rBB	64442	99413	3.99%	0.527%
46	12.158	1787	1791	1798	rBV2	4229	6690	0.27%	0.035%
47	12.275	1809	1813	1819	rBB	2226	3494	0.14%	0.019%
48	12.799	1903	1911	1920	rBV	1369829	1970341	79.12%	10.445%
49	12.868	1921	1924	1931	rVB3	7512	10456	0.42%	0.055%
50	13.146	1971	1976	1982	rBV4	5399	9259	0.37%	0.049%
51	13.242	1989	1994	1999	rBB	4247	5895	0.24%	0.031%
52	13.339	2006	2012	2013	rBV	3952	5306	0.21%	0.028%
53	13.371	2013	2018	2025	rVB2	9412	15778	0.63%	0.084%
54	13.526	2042	2047	2053	rBV2	19004	28227	1.13%	0.150%
55	13.579	2053	2057	2062	rVB	6842	9073	0.36%	0.048%
56	13.793	2091	2097	2101	rBV	11095	16227	0.65%	0.086%
57	13.835	2101	2105	2110	rVB2	7307	10109	0.41%	0.054%
58	13.990	2129	2134	2140	rBB	8828	11483	0.46%	0.061%
59	14.305	2182	2193	2201	rBV	1519584	2367294	95.06%	12.550%
60	14.370	2201	2205	2212	rVV3	14287	27723	1.11%	0.147%
61	14.428	2212	2216	2223	rVB	3012	5452	0.22%	0.029%
62	14.642	2250	2256	2263	rBB2	6767	9946	0.40%	0.053%
63	14.866	2293	2298	2305	rVB2	1806	3620	0.15%	0.019%
64	15.118	2341	2345	2351	rBB	4637	7115	0.29%	0.038%
65	15.534	2419	2423	2427	rBV	2898	3784	0.15%	0.020%
66	15.577	2427	2431	2438	rVB	4224	6750	0.27%	0.036%
67	15.727	2452	2459	2465	rBB	13146	18974	0.76%	0.101%
68	15.780	2466	2469	2474	rBV	2461	3983	0.16%	0.021%
69	16.437	2584	2592	2596	rBB2	10466	13150	0.53%	0.070%
70	16.747	2645	2650	2656	rBB	2382	3315	0.13%	0.018%
71	16.977	2688	2693	2699	rBB2	6161	7748	0.31%	0.041%
72	17.479	2783	2787	2793	rBV	2177	3675	0.15%	0.019%
73	17.762	2829	2840	2857	rBV2	1320317	2227574	89.45%	11.809%
74	17.879	2857	2862	2870	rVV	3951	8665	0.35%	0.046%
75	18.130	2906	2909	2915	rBB2	3475	4157	0.17%	0.022%
76	18.408	2957	2961	2968	rBV	2576	5386	0.22%	0.029%
77	19.119	3090	3094	3102	rBB	9295	13975	0.56%	0.074%
78	19.381	3138	3143	3147	rBV3	3117	5230	0.21%	0.028%
79	19.418	3147	3150	3154	rVB	3200	4582	0.18%	0.024%
80	19.519	3165	3169	3174	rVB2	4602	6576	0.26%	0.035%
81	19.600	3177	3184	3190	rVV	3309	4222	0.17%	0.022%
82	19.963	3249	3252	3258	rVB	2860	3240	0.13%	0.017%
83	20.054	3258	3269	3274	rVB3	3798	8177	0.33%	0.043%
84	20.417	3333	3337	3342	rVB2	8798	8949	0.36%	0.047%
85	20.828	3408	3414	3431	rVB	1324308	1395184	56.02%	7.396%
86	21.533	3543	3546	3554	rVB	4444	4005	0.16%	0.021%
87	22.100	3646	3652	3668	rBV	2490593	2490307	100.00%	13.202%
88	22.233	3673	3677	3687	rVB2	14211	15057	0.60%	0.080%
89	23.371	3887	3890	3895	rBV5	2075	2934	0.12%	0.016%
90	23.617	3928	3936	3957	rBV	1804130	2242808	90.06%	11.890%
91	24.285	4056	4061	4063	rVB6	2352	3056	0.12%	0.016%
92	24.322	4063	4068	4072	rBV6	2868	5235	0.21%	0.028%
93	24.440	4085	4090	4092	rBV4	3185	4081	0.16%	0.022%
94	24.728	4140	4144	4147	rBV5	1755	3011	0.12%	0.016%
95	25.337	4254	4258	4261	rBV5	2807	4072	0.16%	0.022%

96	25.401	4268	4270	4275	rVB4	2776	2923	0.12%	0.015%
97	25.444	4275	4278	4281	rBV4	2914	3252	0.13%	0.017%
98	26.010	4379	4384	4386	rBV5	2786	3209	0.13%	0.017%
99	26.518	4478	4479	4484	rBV4	2386	2927	0.12%	0.016%
100	27.308	4624	4627	4631	rVB5	3853	3647	0.15%	0.019%

Sum of corrected areas: 18863068

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85141.D
Operator : larisap
Acquired : 28 Jan 2011 5:47 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-4
Misc Info : op47853,er3224,1000
Vial Number: 5
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 5:47 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85141.D
Name: ja66701-4
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.8

8

SII-SSA-0014-003657

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:53 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

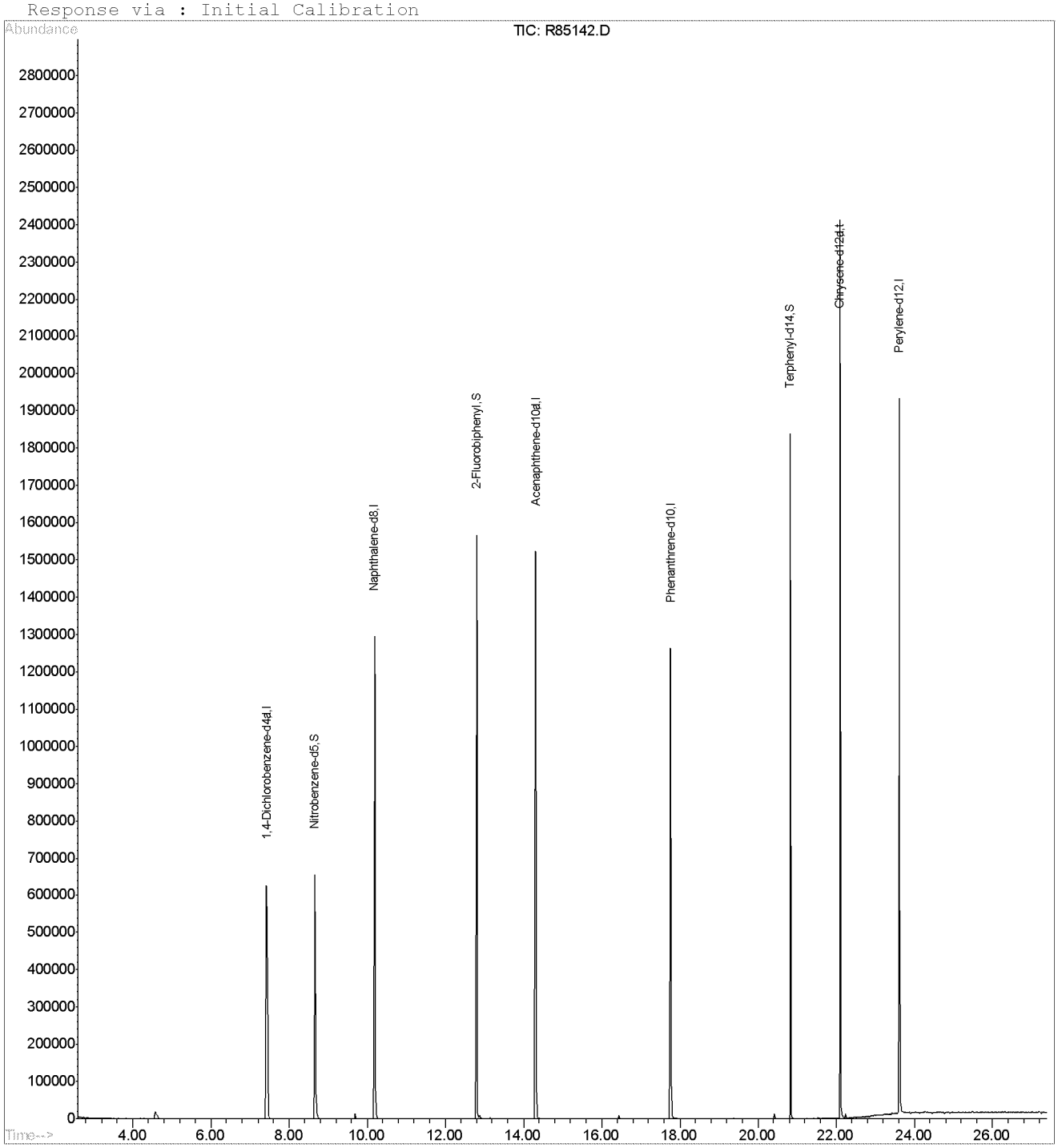
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	302488	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1035374	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	578517	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	846574	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	881025	40.00	ppb	-0.15
92) Perylene-d12	23.62	264	788822	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	302488	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	578517	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	881025	40.00	ppb	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	400619	42.58	ppb	-0.20
Spiked Amount 50.000			Recovery =	85.16%		
51) 2-Fluorobiphenyl	12.80	172	814721	40.01	ppb	-0.21
Spiked Amount 50.000			Recovery =	80.02%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	589909	35.52	ppb	-0.15
Spiked Amount 50.000			Recovery =	71.04%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85142.D MR3151.M Fri Jan 28 20:53:10 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:53 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.730	25	26	34	rVB3	1241	1830	0.07%	0.010%
2	3.050	83	86	96	rBV3	1105	3057	0.13%	0.016%
3	3.574	180	184	190	rVB2	935	2090	0.09%	0.011%
4	3.953	253	255	261	rVB2	1453	2235	0.09%	0.012%
5	4.017	261	267	271	rBV2	1381	2818	0.12%	0.015%
6	4.215	298	304	309	rVB	1540	2979	0.12%	0.016%
7	4.300	316	320	325	rVB2	1802	3081	0.13%	0.016%
8	4.354	325	330	332	rBV	1092	1774	0.07%	0.009%
9	4.423	340	343	349	rVB	1170	1669	0.07%	0.009%
10	4.573	363	371	398	rBB3	19545	88915	3.64%	0.470%
11	7.420	896	904	931	rBB	628026	1691151	69.20%	8.931%
12	8.665	1129	1137	1169	rBB	655999	1174570	48.07%	6.203%
13	9.691	1323	1329	1335	rBB2	15135	21957	0.90%	0.116%
14	10.187	1414	1422	1459	rBB	1295431	2127703	87.07%	11.237%
15	12.800	1903	1911	1921	rBV	1567780	2318358	94.87%	12.244%
16	12.869	1921	1924	1933	rVV2	8642	16681	0.68%	0.088%
17	12.939	1933	1937	1943	rVV2	2545	6012	0.25%	0.032%
18	12.987	1944	1946	1952	rVB2	1759	2830	0.12%	0.015%
19	13.142	1972	1975	1980	rBB	3831	3642	0.15%	0.019%
20	14.306	2184	2193	2211	rBV	1523025	2355325	96.38%	12.439%
21	14.408	2211	2212	2226	rVB	2357	5266	0.22%	0.028%
22	16.438	2587	2592	2596	rBB3	8808	10089	0.41%	0.053%
23	16.731	2640	2647	2651	rBB	2477	2674	0.11%	0.014%
24	16.801	2658	2660	2663	rBB	2534	1780	0.07%	0.009%
25	17.485	2782	2788	2794	rBB2	2423	4173	0.17%	0.022%
26	17.762	2829	2840	2856	rBV2	1264818	2191443	89.68%	11.574%
27	17.885	2856	2863	2867	rVV	3320	8113	0.33%	0.043%
28	17.923	2867	2870	2875	rVV2	3342	5169	0.21%	0.027%
29	18.585	2990	2994	2998	rBB	1849	2838	0.12%	0.015%
30	18.900	3050	3053	3061	rVB	678	1809	0.07%	0.010%
31	19.386	3138	3144	3149	rVB2	2605	4284	0.18%	0.023%
32	20.418	3330	3337	3342	rBV	14278	13564	0.56%	0.072%
33	20.829	3407	3414	3437	rBV	1837978	1917687	78.47%	10.128%
34	21.534	3540	3546	3549	rBV3	2966	3633	0.15%	0.019%
35	21.662	3560	3570	3571	rBV2	943	2814	0.12%	0.015%
36	22.100	3644	3652	3670	rVV	2412533	2443701	100.00%	12.906%
37	22.234	3674	3677	3685	rVB2	12206	12028	0.49%	0.064%
38	22.480	3719	3723	3728	rVB3	2447	2908	0.12%	0.015%

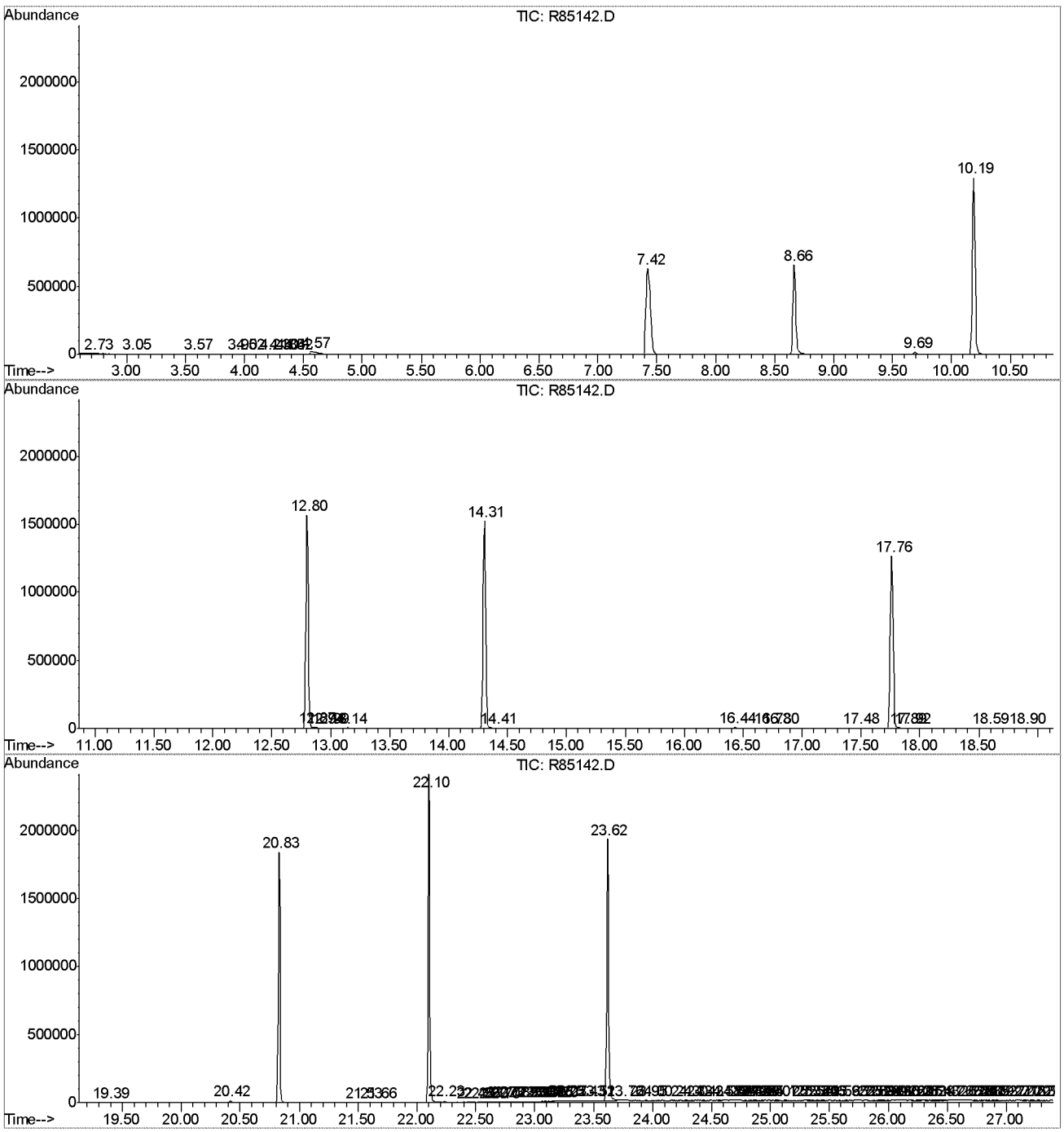
39	22.533	3728	3733	3738	rBV3	2276	4410	0.18%	0.023%
40	22.602	3743	3746	3749	rBV	1373	1865	0.08%	0.010%
41	22.704	3755	3765	3766	rBV3	1316	2923	0.12%	0.015%
42	22.731	3766	3770	3773	rVB3	1352	1662	0.07%	0.009%
43	22.773	3773	3778	3779	rBV4	1567	2124	0.09%	0.011%
44	22.854	3790	3793	3798	rBV3	2653	4836	0.20%	0.026%
45	22.928	3804	3807	3809	rBV2	2349	1882	0.08%	0.010%
46	23.003	3818	3821	3823	rVB4	2040	2034	0.08%	0.011%
47	23.067	3826	3833	3835	rVV5	2613	3797	0.16%	0.020%
48	23.094	3835	3838	3840	rVV3	2334	2334	0.10%	0.012%
49	23.121	3840	3843	3844	rVV3	2299	1897	0.08%	0.010%
50	23.153	3846	3849	3851	rBV2	3573	3824	0.16%	0.020%
51	23.195	3851	3857	3860	rVV5	2293	3902	0.16%	0.021%
52	23.249	3860	3867	3868	rVV5	2693	4247	0.17%	0.022%
53	23.270	3870	3871	3876	rVB4	2383	1829	0.07%	0.010%
54	23.334	3880	3883	3884	rBV3	2312	2019	0.08%	0.011%
55	23.425	3896	3900	3904	rBV4	2935	3669	0.15%	0.019%
56	23.505	3912	3915	3918	rBV3	1735	1690	0.07%	0.009%
57	23.617	3926	3936	3951	rBV	1919184	2306340	94.38%	12.180%
58	23.756	3960	3962	3966	rVB4	1323	1657	0.07%	0.009%
59	23.949	3996	3998	4002	rVB3	1784	1893	0.08%	0.010%
60	23.997	4002	4007	4011	rBV6	1729	2855	0.12%	0.015%
61	24.296	4056	4063	4067	rVV6	2290	4908	0.20%	0.026%
62	24.333	4067	4070	4072	rVB3	2089	1649	0.07%	0.009%
63	24.429	4086	4088	4092	rVB5	2472	3147	0.13%	0.017%
64	24.579	4111	4116	4119	rBV6	2193	2825	0.12%	0.015%
65	24.675	4132	4134	4139	rVB5	2692	2567	0.11%	0.014%
66	24.793	4152	4156	4159	rBV5	2118	3302	0.14%	0.017%
67	24.835	4159	4164	4166	rVV5	2604	3975	0.16%	0.021%
68	24.878	4166	4172	4174	rVB6	2671	4530	0.19%	0.024%
69	24.900	4174	4176	4179	rBV5	1568	1760	0.07%	0.009%
70	24.937	4179	4183	4184	rBV4	1929	2334	0.10%	0.012%
71	25.065	4201	4207	4208	rBV4	2130	3788	0.16%	0.020%
72	25.119	4214	4217	4223	rVB4	2482	3170	0.13%	0.017%
73	25.327	4254	4256	4260	rVB5	2513	2481	0.10%	0.013%
74	25.364	4260	4263	4265	rBV3	1661	1751	0.07%	0.009%
75	25.402	4267	4270	4274	rBV5	2282	3220	0.13%	0.017%
76	25.460	4274	4281	4283	rVV6	1588	2509	0.10%	0.013%
77	25.589	4302	4305	4308	rVV3	1954	1801	0.07%	0.010%
78	25.653	4313	4317	4319	rVB4	1787	1969	0.08%	0.010%
79	25.883	4357	4360	4361	rBV3	2074	1740	0.07%	0.009%
80	25.936	4365	4370	4371	rVV4	1476	2002	0.08%	0.011%
81	25.963	4371	4375	4379	rVB5	2925	3608	0.15%	0.019%
82	25.989	4379	4380	4384	rBV4	2234	2212	0.09%	0.012%
83	26.102	4400	4401	4406	rVB4	1318	1781	0.07%	0.009%
84	26.208	4418	4421	4424	rVB3	1961	1859	0.08%	0.010%
85	26.267	4424	4432	4434	rBV5	1821	2703	0.11%	0.014%
86	26.315	4440	4441	4445	rVB4	3514	2756	0.11%	0.015%
87	26.390	4449	4455	4459	rBV7	1913	3752	0.15%	0.020%
88	26.433	4459	4463	4465	rVV3	2295	2349	0.10%	0.012%
89	26.470	4466	4470	4474	rVV5	2154	2222	0.09%	0.012%
90	26.732	4516	4519	4521	rVB4	2800	3119	0.13%	0.016%
91	26.753	4521	4523	4524	rBV2	2508	1772	0.07%	0.009%
92	26.796	4528	4531	4533	rVV3	2262	1855	0.08%	0.010%
93	26.849	4538	4541	4544	rVB5	2476	2423	0.10%	0.013%
94	26.887	4544	4548	4551	rBV5	1792	2254	0.09%	0.012%
95	26.930	4551	4556	4561	rBV4	2099	3758	0.15%	0.020%

96	27.165	4596	4600	4602	rVB5	1708	2042	0.08%	0.011%
97	27.202	4605	4607	4610	rVV4	3232	2848	0.12%	0.015%
98	27.223	4610	4611	4616	rVB4	2506	3022	0.12%	0.016%
99	27.271	4616	4620	4624	rBV5	3346	4706	0.19%	0.025%
100	27.314	4627	4628	4631	rVV2	3106	2110	0.09%	0.011%

Sum of corrected areas: 18934918

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85142.D
Operator : larisap
Acquired : 28 Jan 2011 6:23 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-5
Misc Info : op47853,er3224,1000
Vial Number: 6
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 6:23 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85142.D
Name: ja66701-5
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:54 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

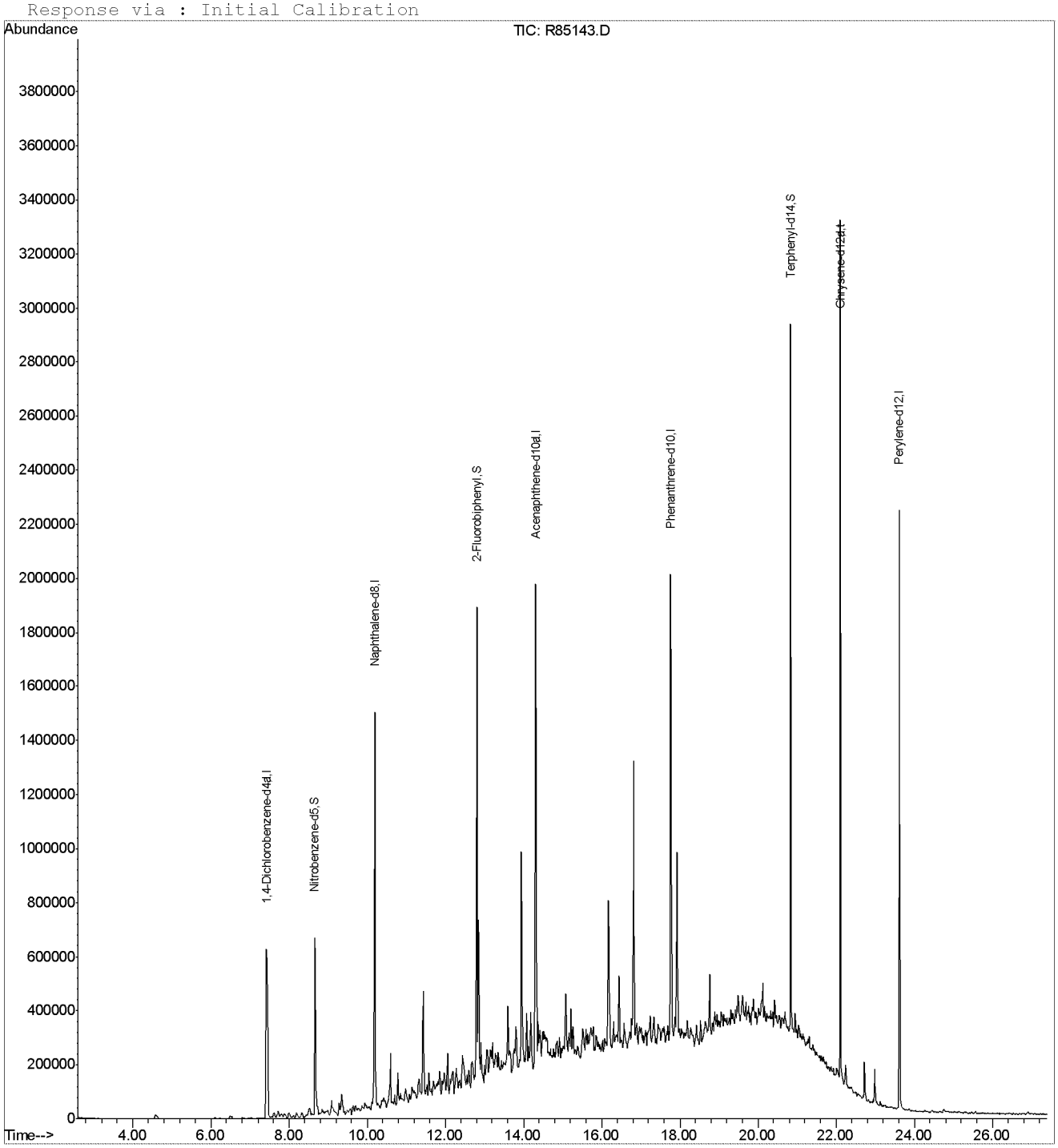
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	316195	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1084094	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	668964	40.00	ppb	-0.21
69) Phenanthrene-d10	17.77	188	1086595	40.00	ppb	-0.22
83) Chrysene-d12	22.10	240	1160109	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	932103	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	316195	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	668964	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	1160109	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	408140	41.43	ppb	-0.20
Spiked Amount 50.000			Recovery =	82.86%		
51) 2-Fluorobiphenyl	12.80	172	891759	37.87	ppb	-0.21
Spiked Amount 50.000			Recovery =	75.74%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	839330	38.39	ppb	-0.14
Spiked Amount 50.000			Recovery =	76.78%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
R85143.D MR3151.M Tue Feb 08 15:17:08 2011 RPT1

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:54 2011 Quant Results File: MR3151.RES

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.560	363	369	391	rBV4	16516	73241	2.16%	0.160%
2	7.418	895	904	925	rBV	626290	1824230	53.75%	3.980%
3	7.718	950	960	969	rVV4	23130	61909	1.82%	0.135%
4	7.995	1003	1012	1023	rBV6	19474	63061	1.86%	0.138%
5	8.188	1041	1048	1061	rBV8	22250	69408	2.05%	0.151%
6	8.519	1099	1110	1119	rBV8	25573	80700	2.38%	0.176%
7	8.663	1129	1137	1156	rBV	655482	1253550	36.93%	2.735%
8	9.085	1206	1216	1237	rBV9	54977	207886	6.13%	0.454%
9	9.283	1246	1253	1257	rBV3	47161	90055	2.65%	0.196%
10	9.342	1257	1264	1275	rVV6	77700	242548	7.15%	0.529%
11	9.555	1298	1304	1312	rVB5	23366	72939	2.15%	0.159%
12	9.635	1312	1319	1326	rBV5	35724	87771	2.59%	0.191%
13	10.191	1412	1423	1435	rVB	1456177	2464397	72.61%	5.377%
14	10.586	1479	1497	1504	rBV	199004	445208	13.12%	0.971%
15	10.779	1526	1533	1541	rBV5	119823	261816	7.71%	0.571%
16	10.982	1562	1571	1585	rVB5	52254	159003	4.68%	0.347%
17	11.153	1594	1603	1608	rBV7	48104	141894	4.18%	0.310%
18	11.329	1625	1636	1647	rBV6	67429	234380	6.91%	0.511%
19	11.430	1647	1655	1660	rBV	385132	574403	16.92%	1.253%
20	11.527	1668	1673	1679	rVB4	42776	82586	2.43%	0.180%
21	11.580	1679	1683	1690	rBV5	84633	134183	3.95%	0.293%
22	11.692	1698	1704	1711	rBV5	57996	150490	4.43%	0.328%
23	11.852	1729	1734	1741	rVB3	90014	170915	5.04%	0.373%
24	11.922	1742	1747	1750	rBV7	50500	84076	2.48%	0.183%
25	11.970	1751	1756	1764	rVB7	66872	162611	4.79%	0.355%
26	12.055	1764	1772	1778	rVB2	149092	307669	9.07%	0.671%
27	12.114	1778	1783	1786	rBV6	56697	91610	2.70%	0.200%
28	12.178	1787	1795	1802	rVB9	84417	277892	8.19%	0.606%
29	12.269	1803	1812	1822	rBV7	91837	277234	8.17%	0.605%
30	12.365	1823	1830	1834	rVB5	32371	65661	1.93%	0.143%
31	12.435	1835	1843	1847	rBV4	123303	266223	7.84%	0.581%
32	12.542	1859	1863	1869	rBV8	40579	64860	1.91%	0.142%
33	12.600	1869	1874	1881	rVB7	67224	124987	3.68%	0.273%
34	12.680	1881	1889	1898	rBV7	98587	332024	9.78%	0.724%
35	12.803	1904	1912	1916	rVV	1751833	2711608	79.89%	5.916%
36	12.846	1916	1920	1927	rVV	591686	913642	26.92%	1.993%
37	12.910	1927	1932	1944	rVB6	149562	345514	10.18%	0.754%
38	12.996	1944	1948	1953	rBV4	66629	126473	3.73%	0.276%

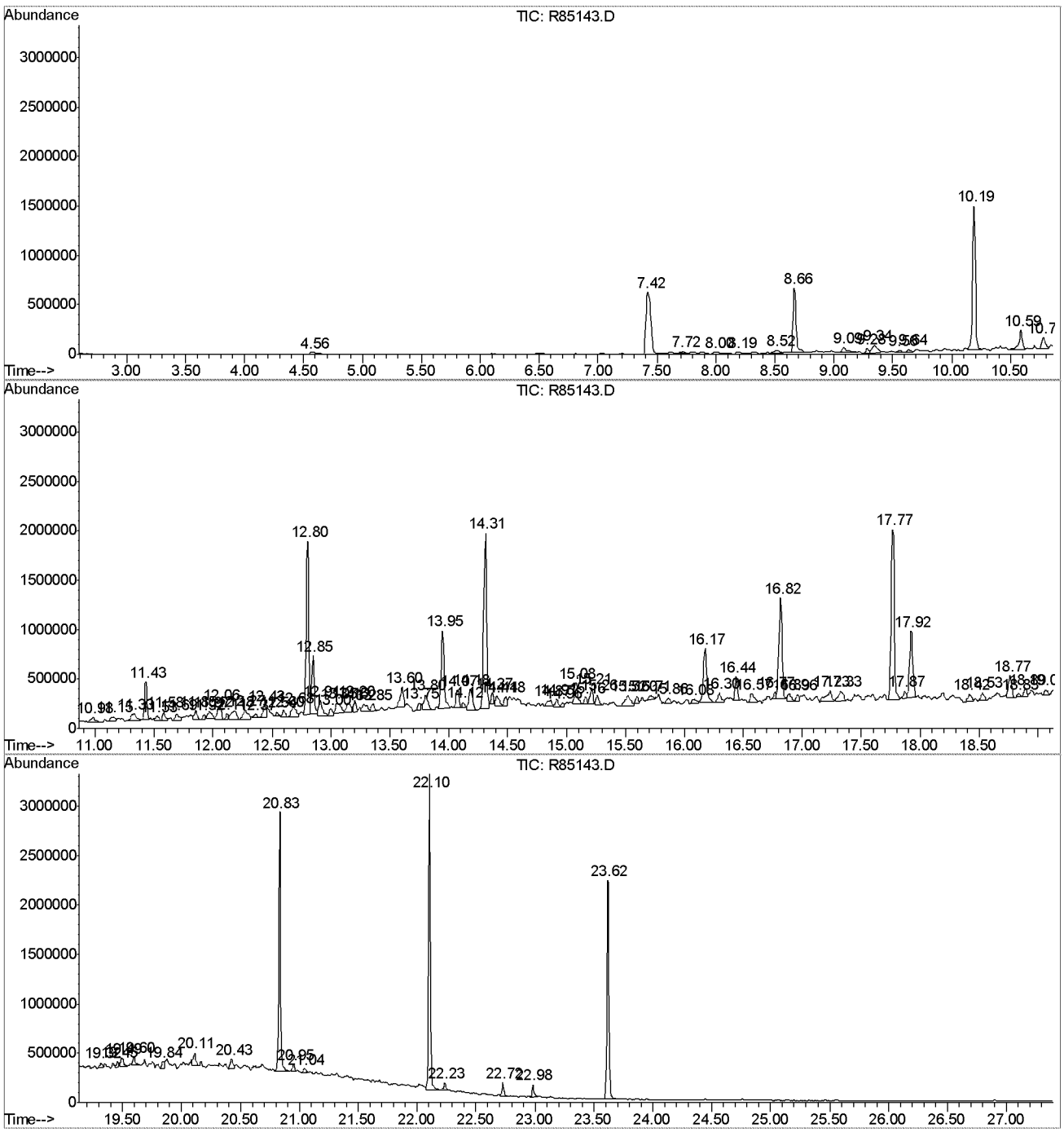
39	13.049	1953	1958	1969	rVV7	96680	299720	8.83%	0.654%
40	13.145	1970	1976	1982	rVV8	90522	253798	7.48%	0.554%
41	13.204	1983	1987	1991	rVV	114020	182477	5.38%	0.398%
42	13.279	1997	2001	2011	rVV9	68133	210413	6.20%	0.459%
43	13.354	2011	2015	2022	rVB2	65546	117226	3.45%	0.256%
44	13.605	2052	2062	2066	rBV4	202736	391649	11.54%	0.854%
45	13.749	2083	2089	2092	rBV7	77886	148197	4.37%	0.323%
46	13.802	2094	2099	2110	rVB4	151575	347326	10.23%	0.758%
47	13.947	2119	2126	2138	rVB	778831	1327903	39.13%	2.897%
48	14.075	2143	2150	2155	rBV3	181325	304404	8.97%	0.664%
49	14.123	2155	2159	2163	rBV5	54086	69832	2.06%	0.152%
50	14.182	2164	2170	2181	rVB5	209534	487265	14.36%	1.063%
51	14.310	2184	2194	2201	rBV	1779075	2971011	87.54%	6.482%
52	14.369	2201	2205	2208	rBV2	111800	149763	4.41%	0.327%
53	14.411	2209	2213	2221	rVB5	97622	202978	5.98%	0.443%
54	14.481	2221	2226	2229	rBV6	92860	157615	4.64%	0.344%
55	14.865	2288	2298	2302	rBV7	58193	151380	4.46%	0.330%
56	14.913	2303	2307	2312	rVB6	79221	125053	3.68%	0.273%
57	14.961	2313	2316	2320	rBV4	41274	67469	1.99%	0.147%
58	15.079	2332	2338	2348	rVB6	213114	400881	11.81%	0.875%
59	15.159	2349	2353	2357	rVV4	72710	113053	3.33%	0.247%
60	15.213	2357	2363	2367	rVV	164662	281744	8.30%	0.615%
61	15.261	2368	2372	2379	rVB4	100089	159293	4.69%	0.348%
62	15.517	2410	2420	2430	rBV5	107870	365037	10.76%	0.796%
63	15.597	2430	2435	2439	rBV3	78249	116557	3.43%	0.254%
64	15.715	2452	2457	2463	rVV9	38700	92268	2.72%	0.201%
65	15.859	2480	2484	2491	rBV7	55256	115642	3.41%	0.252%
66	16.083	2520	2526	2534	rBV7	40054	110694	3.26%	0.242%
67	16.174	2535	2543	2557	rVB	547645	1137664	33.52%	2.482%
68	16.297	2560	2566	2573	rBV5	94802	185607	5.47%	0.405%
69	16.436	2587	2592	2598	rVB	247358	336623	9.92%	0.734%
70	16.569	2612	2617	2627	rBV7	90406	215431	6.35%	0.470%
71	16.767	2649	2654	2655	rVV4	73453	85422	2.52%	0.186%
72	16.815	2655	2663	2671	rVV	1020930	1955293	57.61%	4.266%
73	16.890	2673	2677	2685	rVB8	76037	156588	4.61%	0.342%
74	16.959	2685	2690	2693	rBV3	62896	113579	3.35%	0.248%
75	17.232	2726	2741	2749	rBV9	111054	386557	11.39%	0.843%
76	17.328	2750	2759	2767	rVB5	98969	293997	8.66%	0.641%
77	17.766	2833	2841	2852	rBV2	1726199	3005977	88.57%	6.558%
78	17.868	2856	2860	2863	rVV5	70807	103161	3.04%	0.225%
79	17.921	2863	2870	2879	rVB	666072	1325121	39.04%	2.891%
80	18.418	2958	2963	2970	rBV8	77332	172318	5.08%	0.376%
81	18.530	2980	2984	2990	rVB2	78320	132685	3.91%	0.289%
82	18.765	3021	3028	3036	rVB2	223936	442089	13.03%	0.965%
83	18.835	3037	3041	3047	rBV9	36445	68767	2.03%	0.150%
84	18.893	3047	3052	3056	rBV5	76587	133818	3.94%	0.292%
85	19.064	3080	3084	3091	rBV7	55911	99447	2.93%	0.217%
86	19.315	3127	3131	3135	rBV7	49512	68907	2.03%	0.150%
87	19.454	3154	3157	3160	rVV3	55781	81099	2.39%	0.177%
88	19.492	3161	3164	3173	rVB3	93002	164352	4.84%	0.359%
89	19.598	3180	3184	3193	rVB5	78246	135693	4.00%	0.296%
90	19.839	3225	3229	3232	rBV5	70301	115326	3.40%	0.252%
91	20.111	3276	3280	3287	rVB2	127671	201851	5.95%	0.440%
92	20.427	3334	3339	3343	rBV7	95243	179187	5.28%	0.391%
93	20.833	3408	3415	3429	rVB	2623926	2941915	86.68%	6.419%
94	20.950	3433	3437	3441	rVB3	74910	96544	2.84%	0.211%
95	21.041	3450	3454	3459	rBV7	48992	84712	2.50%	0.185%

96	22.104	3647	3653	3671	rVB	3200299	3393965	100.00%	7.405%
97	22.232	3672	3677	3684	rVB	76016	100027	2.95%	0.218%
98	22.724	3765	3769	3778	rVB	142399	172085	5.07%	0.375%
99	22.980	3813	3817	3826	rVB	125217	154374	4.55%	0.337%
100	23.616	3929	3936	3956	rVB	2216161	2775373	81.77%	6.055%

Sum of corrected areas: 45834859

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85143.D
Operator : larisap
Acquired : 28 Jan 2011 6:52 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-6
Misc Info : op47853,er3224,1000
Vial Number: 7
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

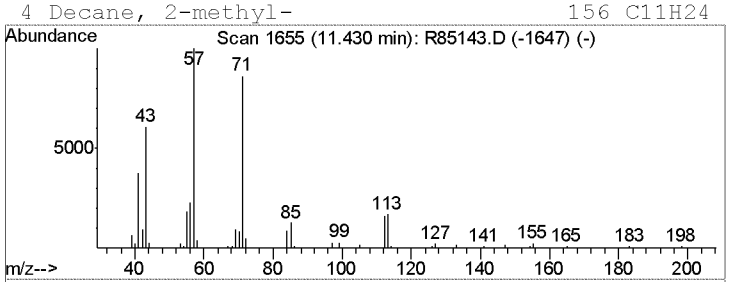
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

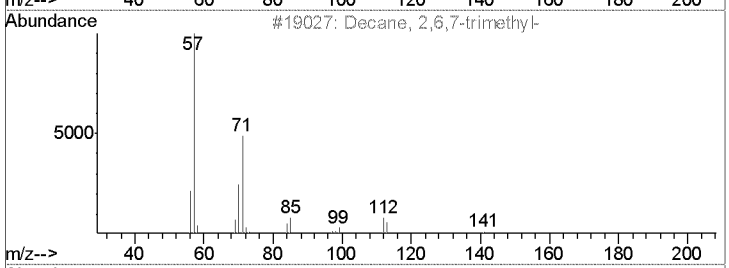
****

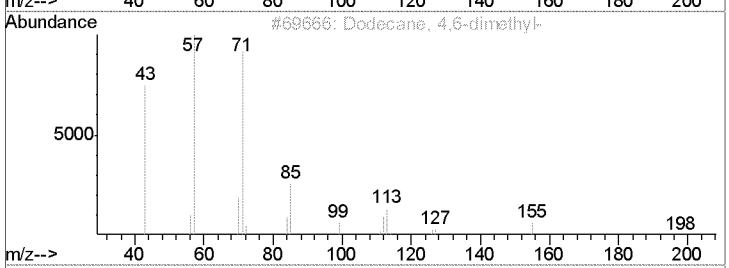
Peak Number 1 alkane Concentration Rank 5

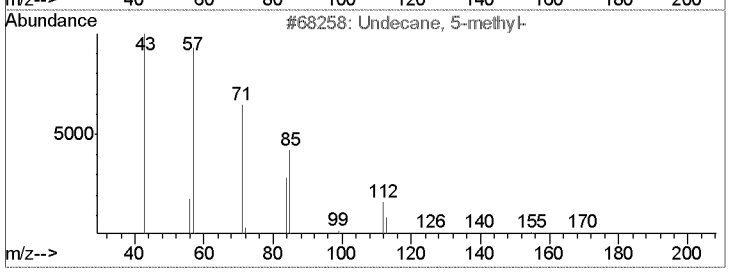
R.T.	EstConc	Area	Relative to ISTD	R.T.
11.43	9.32 ppb	574403	Naphthalene-d8	10.19

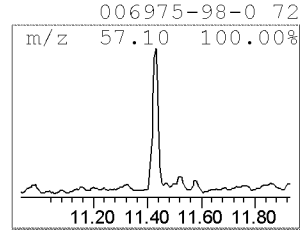
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,6,7-trimethyl-	184	C13H28	062108-25-2	83
2	Dodecane, 4,6-dimethyl-	198	C14H30	061141-72-8	72
3	Undecane, 5-methyl-	170	C12H26	001632-70-8	72
4	Decane, 2-methyl-	156	C11H24	006975-98-0	72

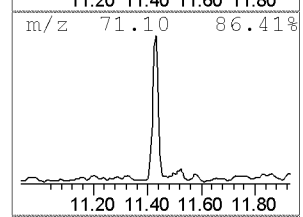


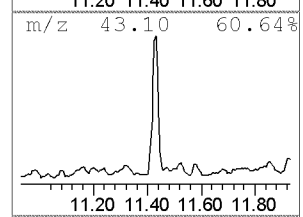


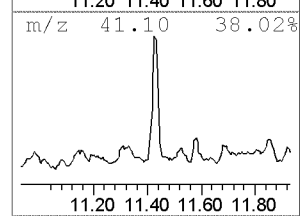


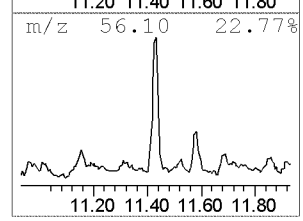












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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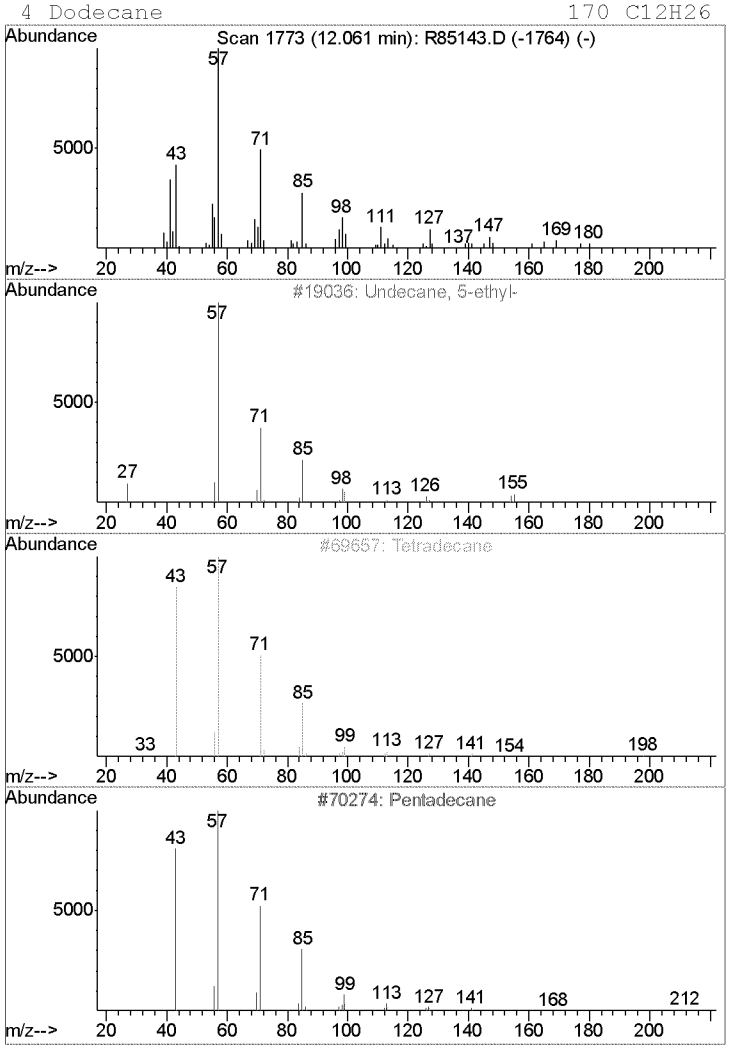
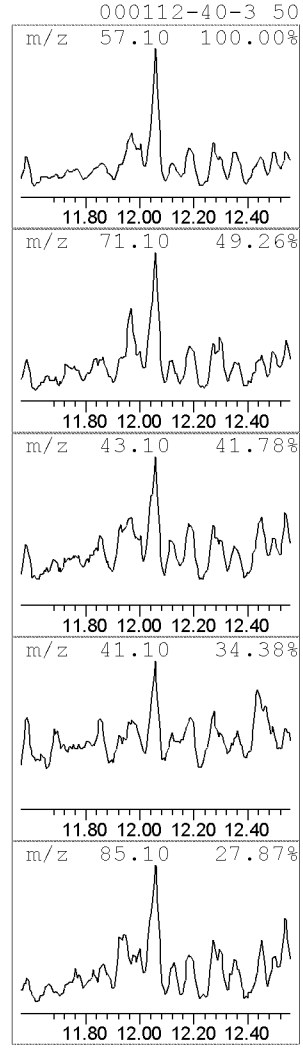
Peak Number 2 alkane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.06	4.99 ppb	307669	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 5-ethyl-	184	C13H28	017453-94-0	53
2	Tetradecane	198	C14H30	000629-59-4	50
3	Pentadecane	212	C15H32	000629-62-9	50
4	Dodecane	170	C12H26	000112-40-3	50





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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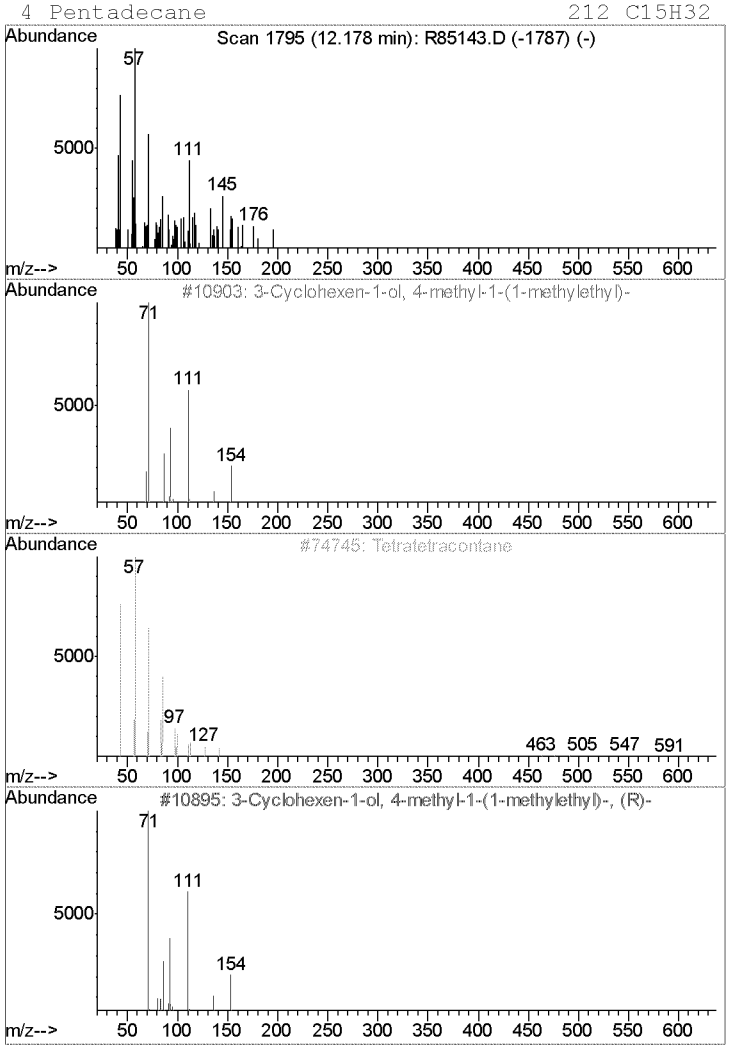
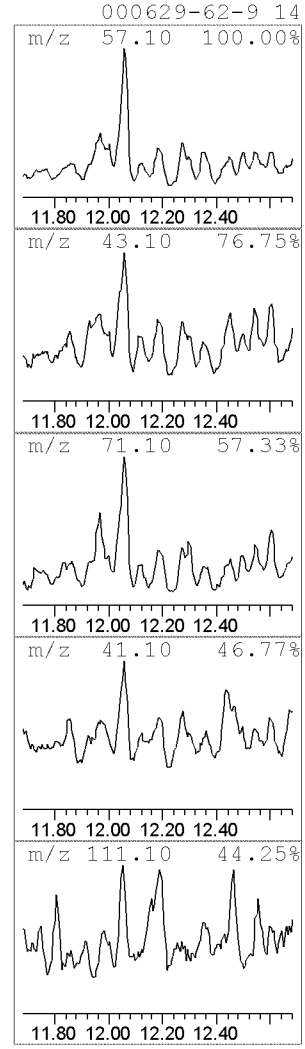
Peak Number 3 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.18	4.51 ppb	277892	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexen-1-ol, 4-methyl-1-(1...	154	C10H18O	000562-74-3	30
2	Tetratetracontane	619	C44H90	007098-22-8	22
3	3-Cyclohexen-1-ol, 4-methyl-1-(1...	154	C10H18O	020126-76-5	18
4	Pentadecane	212	C15H32	000629-62-9	14





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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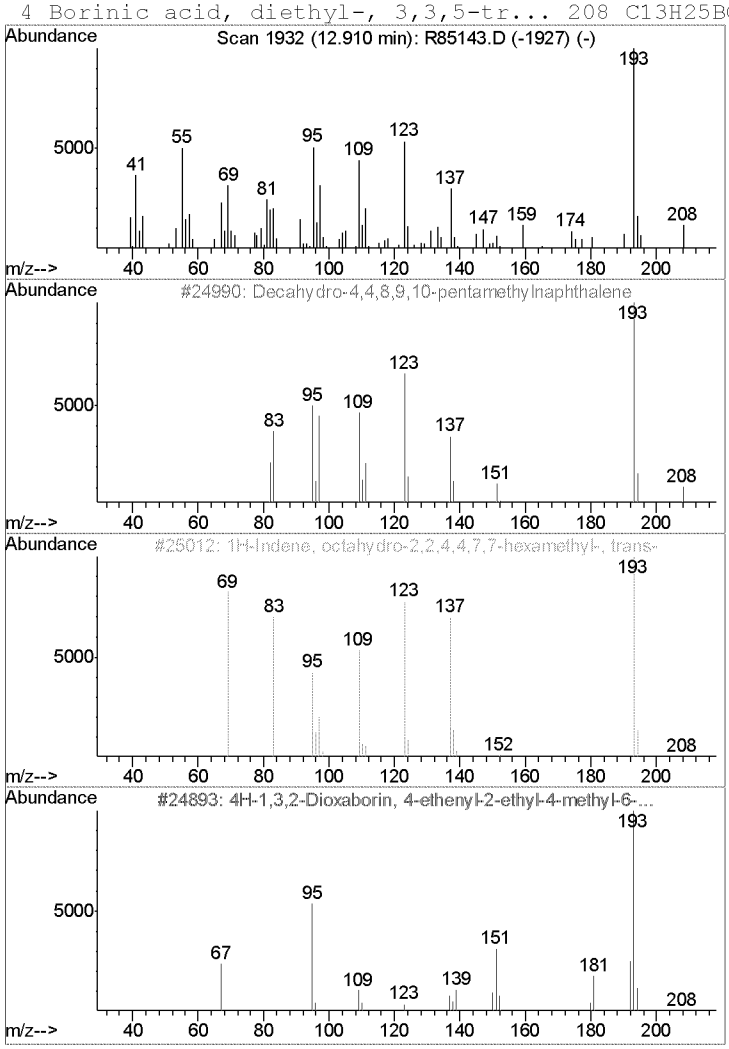
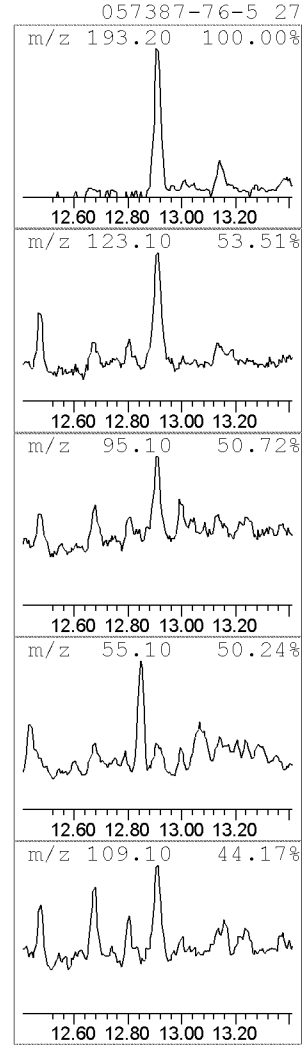
Peak Number 4 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.91	4.65 ppb	345514	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	000000-00-0	90
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	42
3	4H-1,3,2-Dioxaborin, 4-ethenyl-2...	208	C12H21BO2	074630-04-9	38
4	Borinic acid, diethyl-, 3,3,5-tr...	208	C13H25BO	057387-76-5	27





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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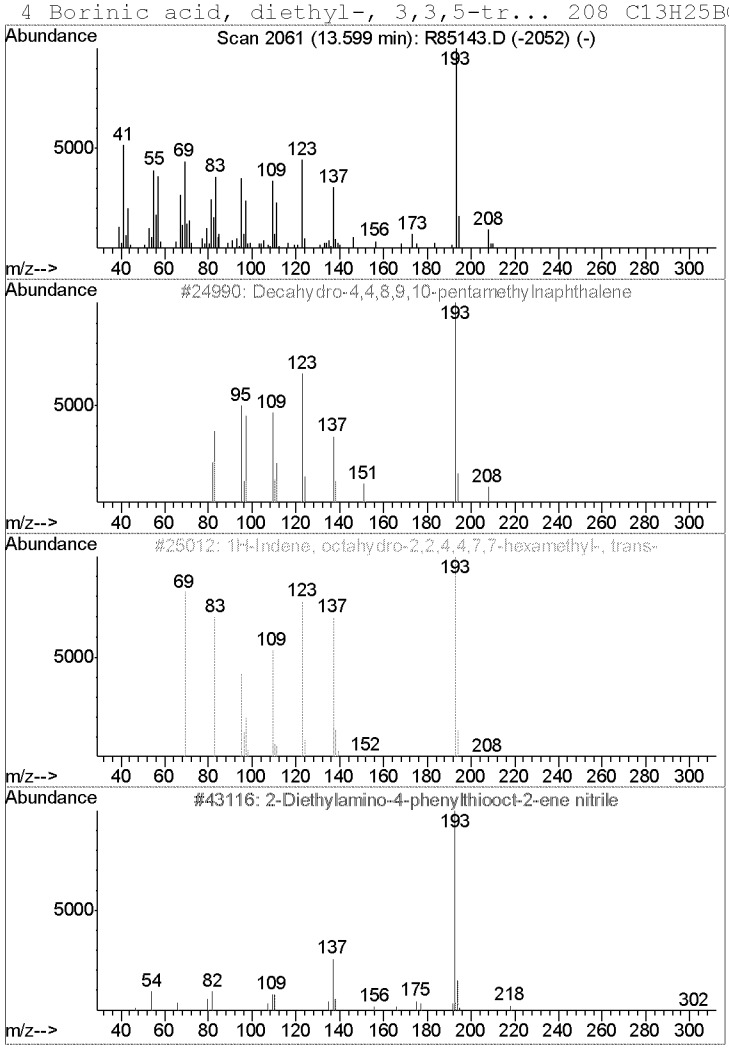
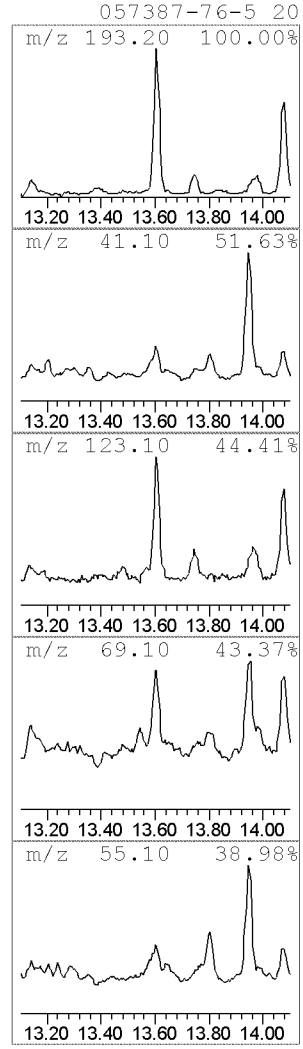
Peak Number 5 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.60	5.27 ppb	391649	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	000000-00-0	87
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	38
3	2-Diethylamino-4-phenylthiooct-2...	302	C18H26N2S	000000-00-0	25
4	Borinic acid, diethyl-, 3,3,5-tr...	208	C13H25BO	057387-76-5	20





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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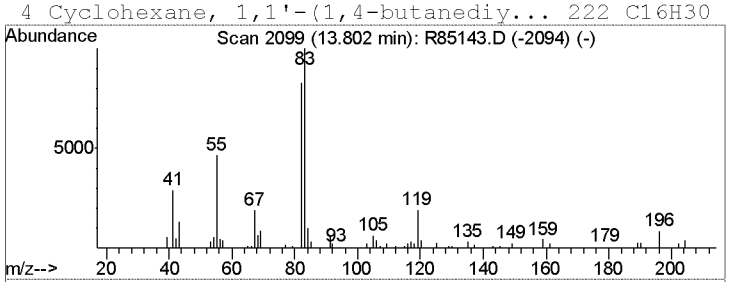
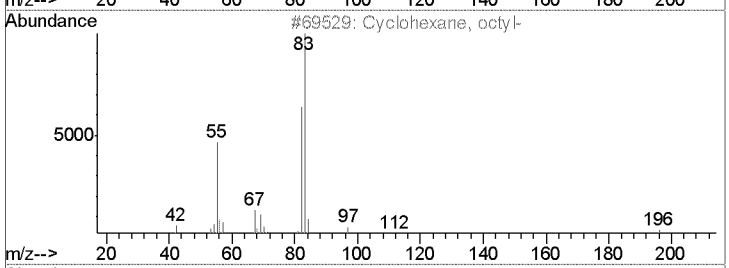
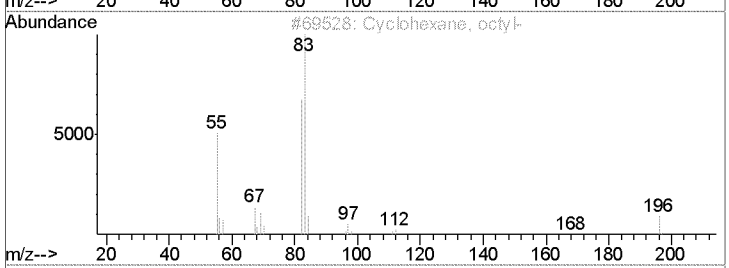
Peak Number 6 cycloalkane/alkene Concentration Rank 14

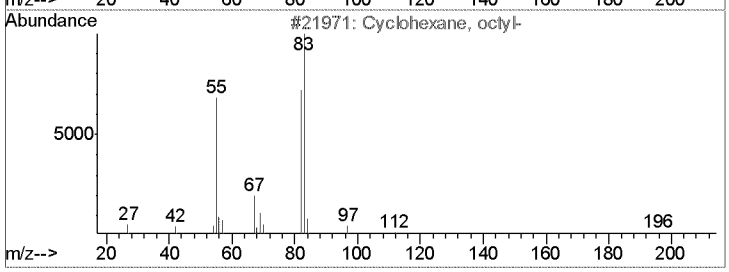
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.80	4.68 ppb	347326	Acenaphthene-d10	14.31

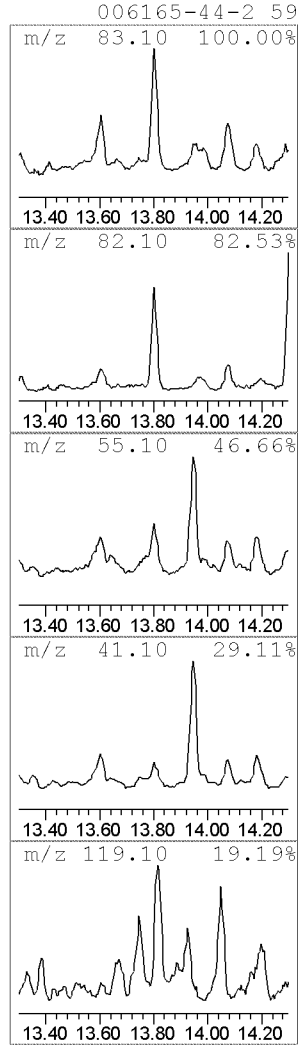
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
2	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
3	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
4	Cyclohexane, 1,1'-(1,4-butanediy...	222	C16H30	006165-44-2	59











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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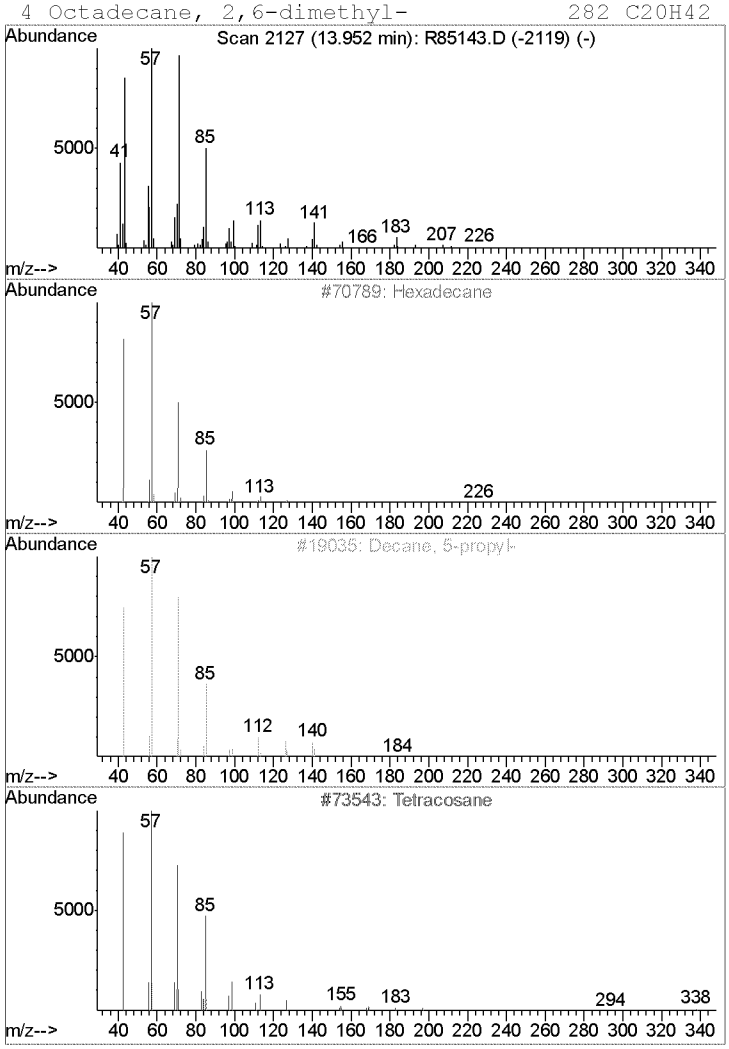
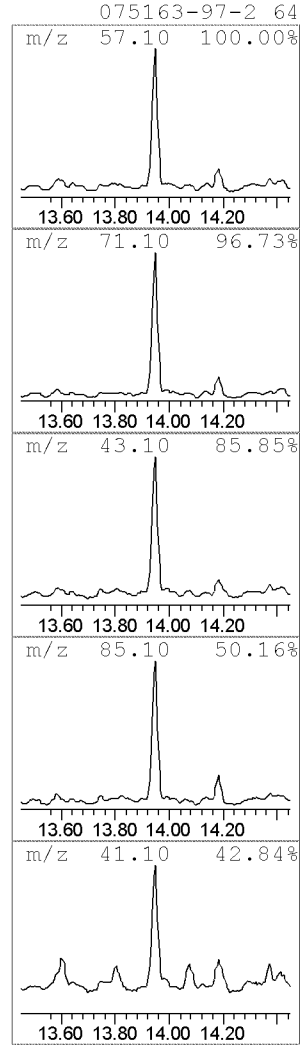
Peak Number 7 alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.95	17.88 ppb	1327900	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	76
2	Decane, 5-propyl-	184	C13H28	017312-62-8	74
3	Tetracosane	338	C24H50	000646-31-1	72
4	Octadecane, 2,6-dimethyl-	282	C20H42	075163-97-2	64





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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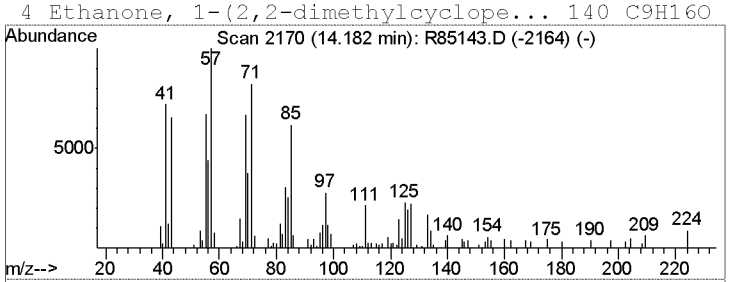
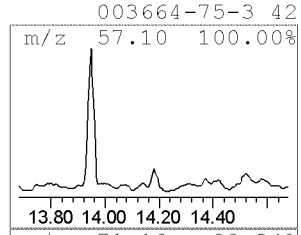
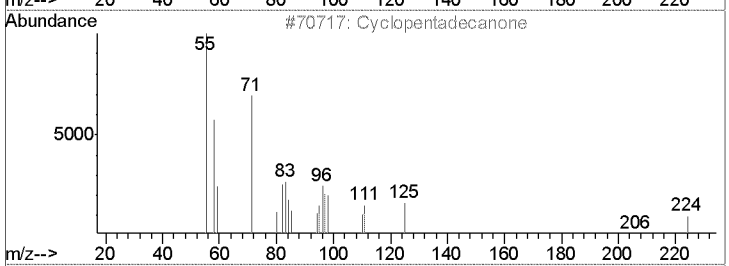
Peak Number 8 unknown Concentration Rank 7

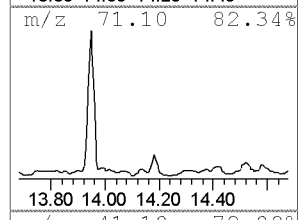
R.T.	EstConc	Area	Relative to ISTD	R.T.
14.18	6.56 ppb	487265	Acenaphthene-d10	14.31

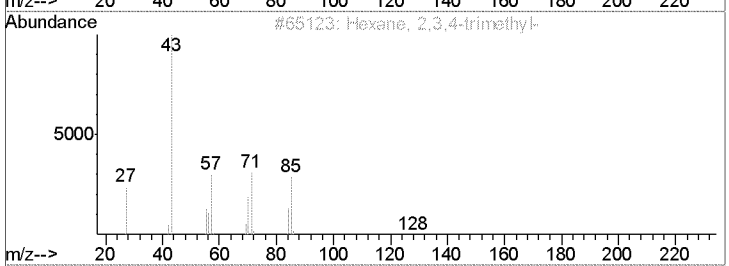
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentadecanone	224	C15H28O	000502-72-7	49
2	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	46
3	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	46
4	Ethanone, 1-(2,2-dimethylcyclope...	140	C9H16O	003664-75-3	42

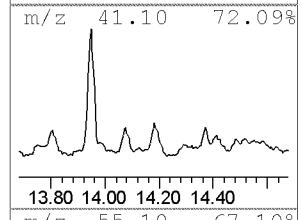


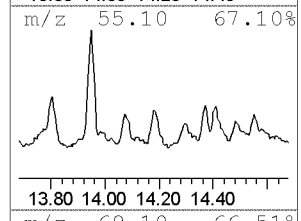


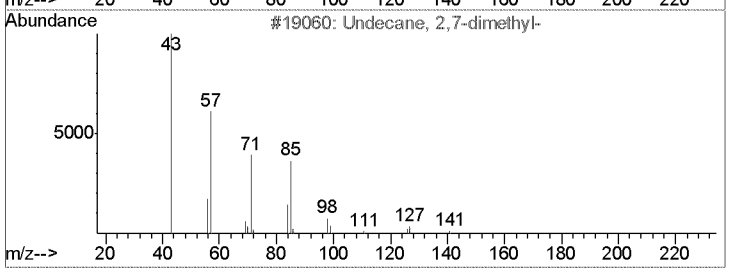


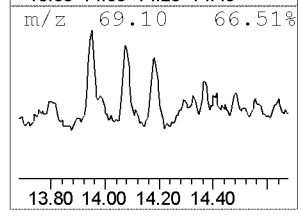












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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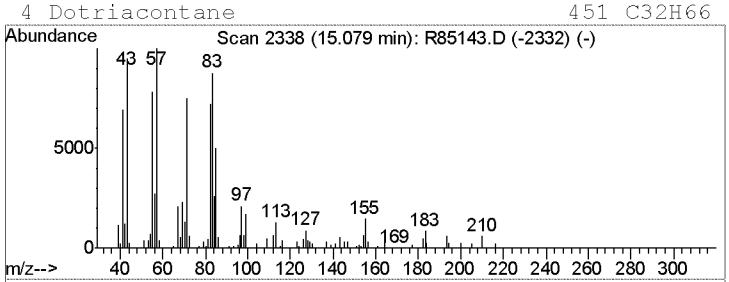
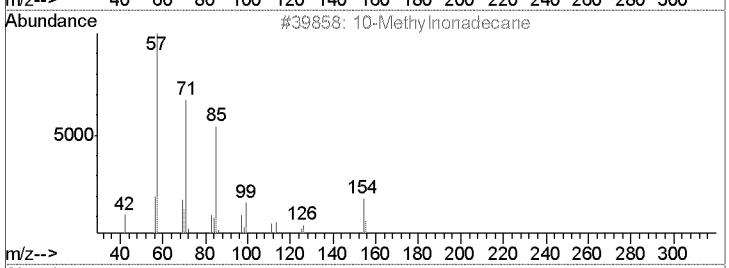
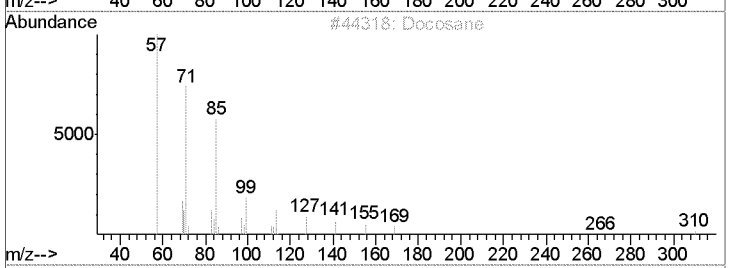
Peak Number 9 alkane Concentration Rank 9

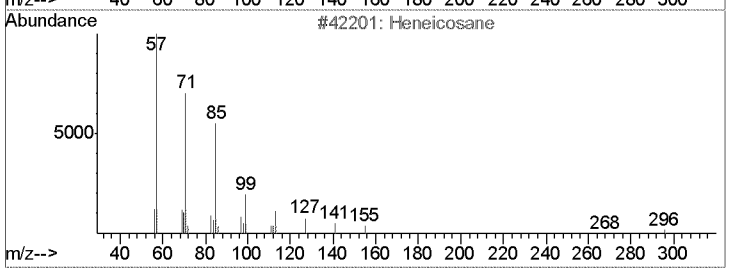
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.08	5.40 ppb	400881	Acenaphthene-d10a	14.31

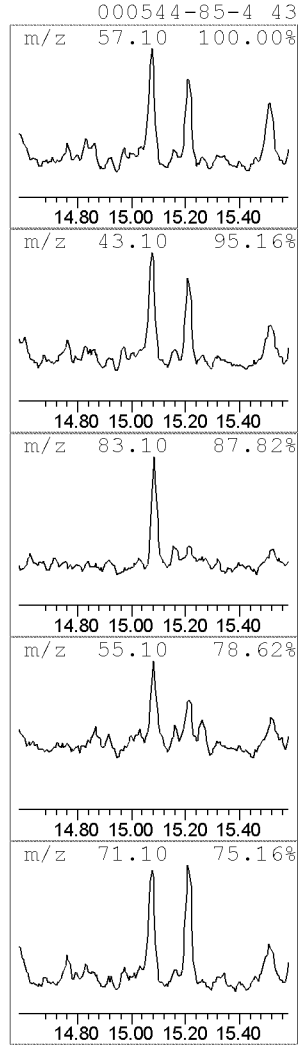
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10-Methylnonadecane	282	C20H42	000000-00-0	46
2	Docosane	310	C22H46	000629-97-0	43
3	Heneicosane	296	C21H44	000629-94-7	43
4	Dotriacontane	451	C32H66	000544-85-4	43











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

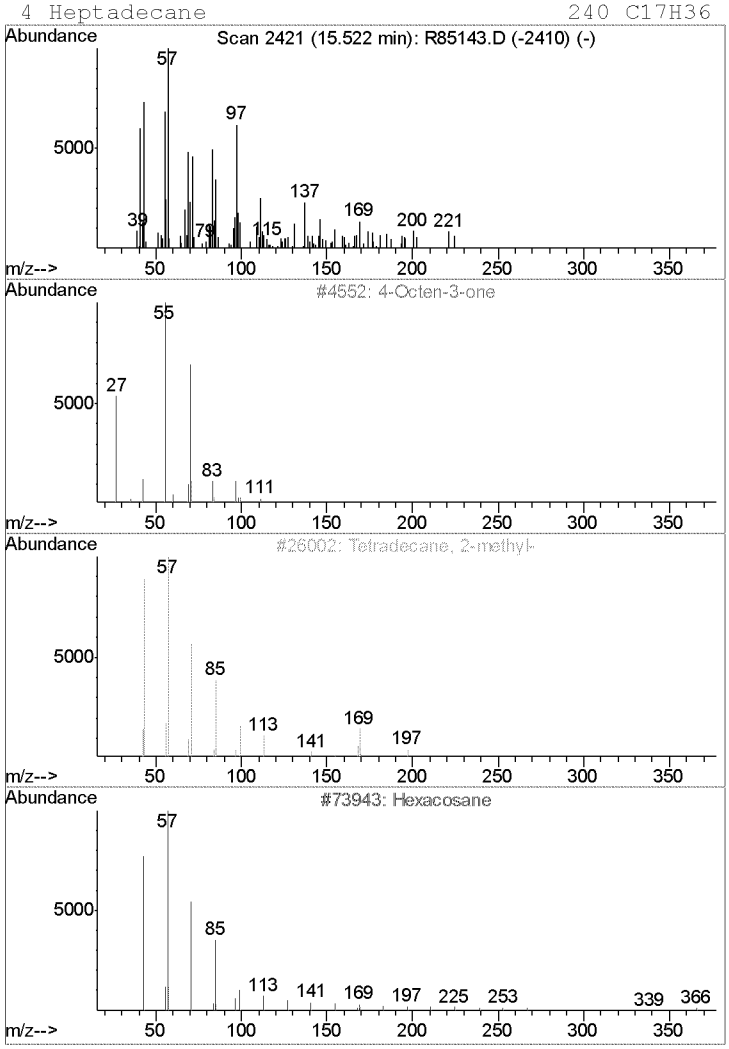
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

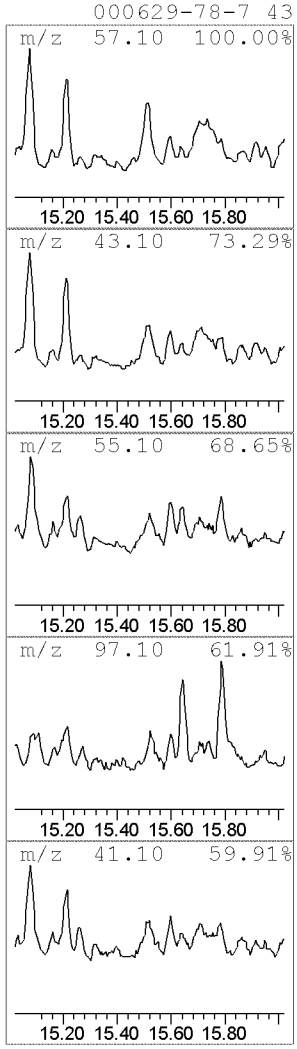
****

Peak Number 10 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.52	4.91 ppb	365037	Acenaphthene-d10a	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Octen-3-one	126	C8H14O	014129-48-7	52
2	Tetradecane, 2-methyl-	212	C15H32	001560-95-8	43
3	Hexacosane	366	C26H54	000630-01-3	43
4	Heptadecane	240	C17H36	000629-78-7	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

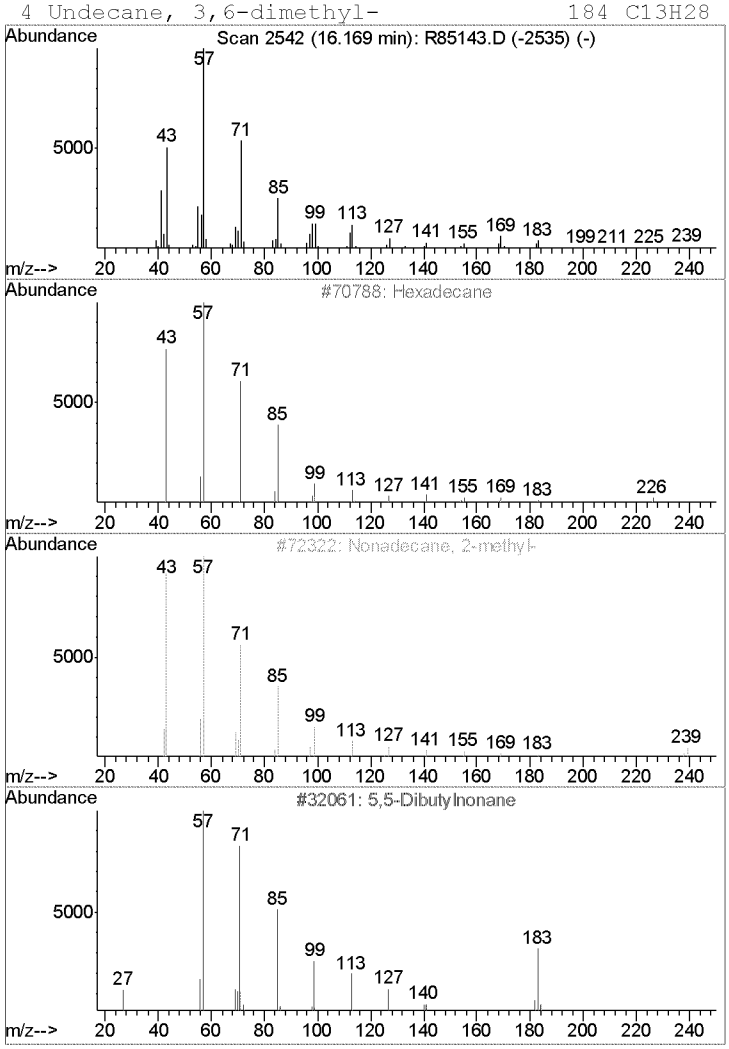
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

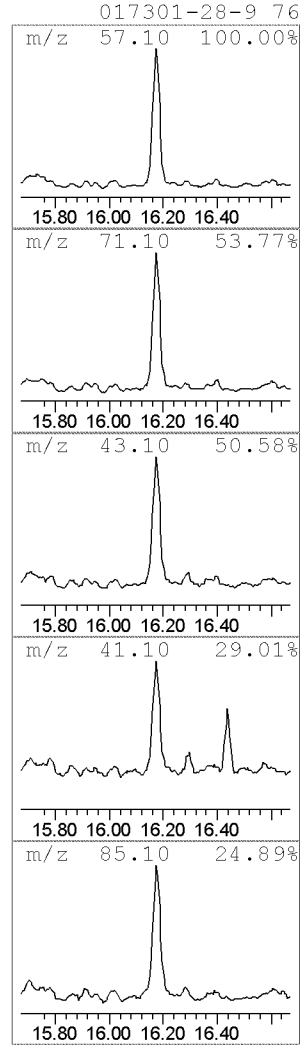
****

Peak Number 11 alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.17	15.14 ppb	1137660	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	80
2	Nonadecane, 2-methyl-	282	C20H42	001560-86-7	80
3	5,5-Dibutylnonane	240	C17H36	000000-00-0	78
4	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	76





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

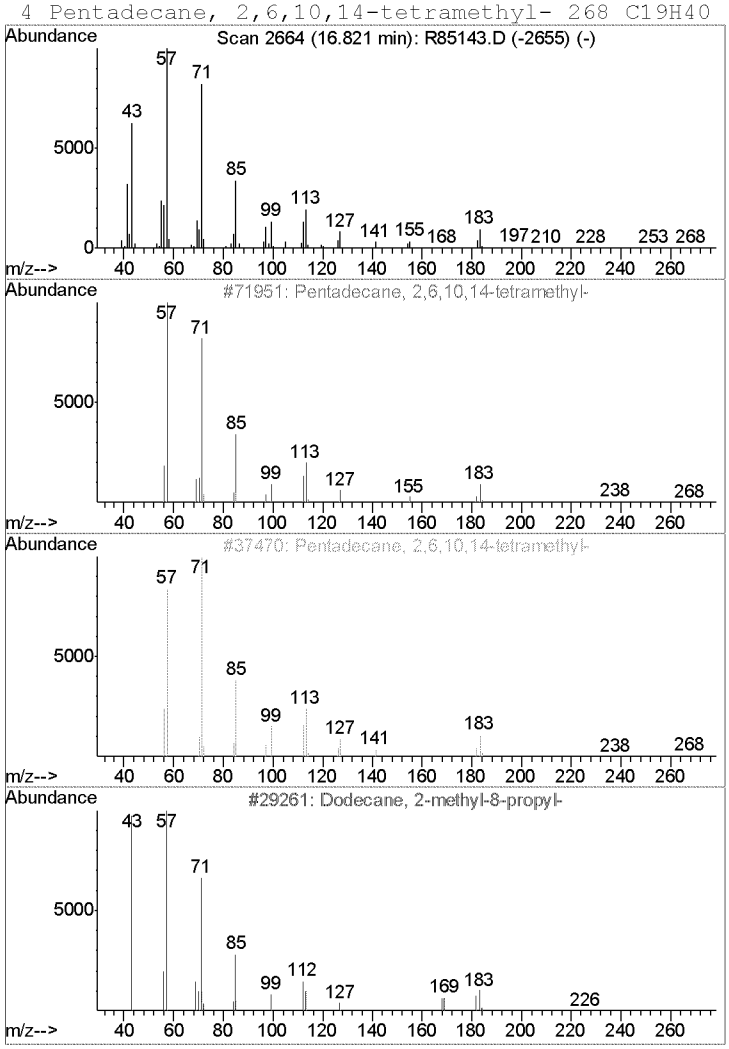
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

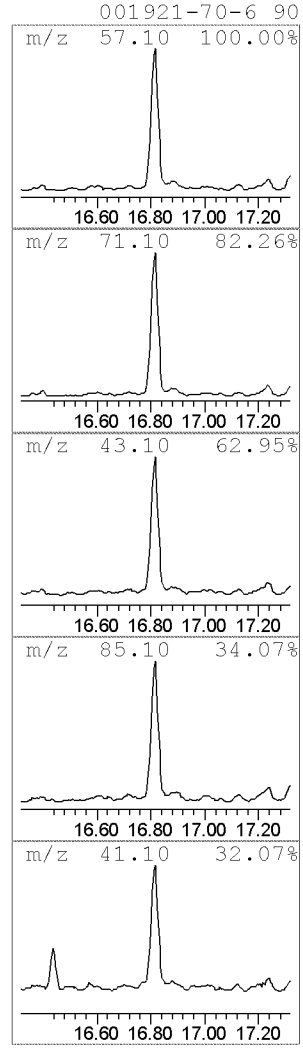
****

Peak Number 12 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.82	26.02 ppb	1955290	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90
3	Dodecane, 2-methyl-8-propyl-	226	C16H34	055045-07-3	90
4	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90





8.1.12 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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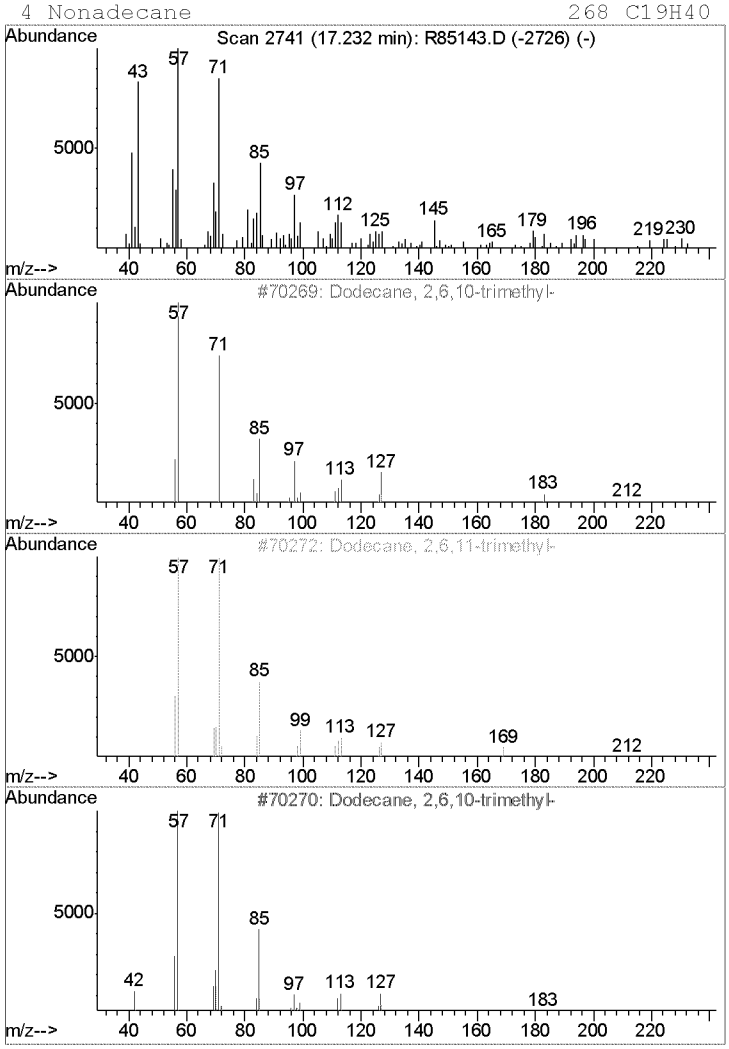
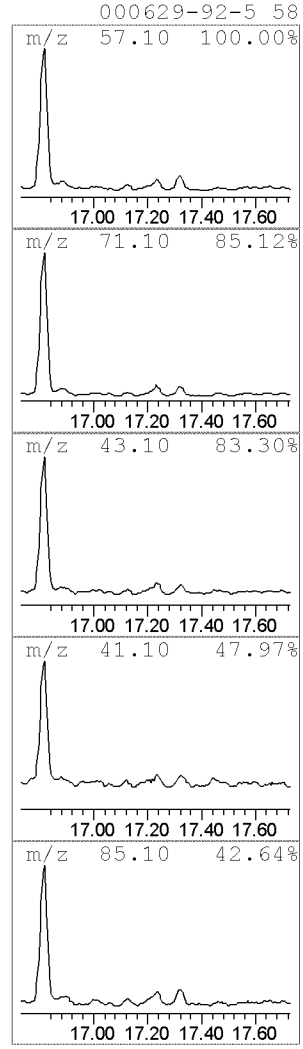
Peak Number 13 alkane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.23	5.14 ppb	386557	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	74
2	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	58
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	58
4	Nonadecane	268	C19H40	000629-92-5	58





8.1.12 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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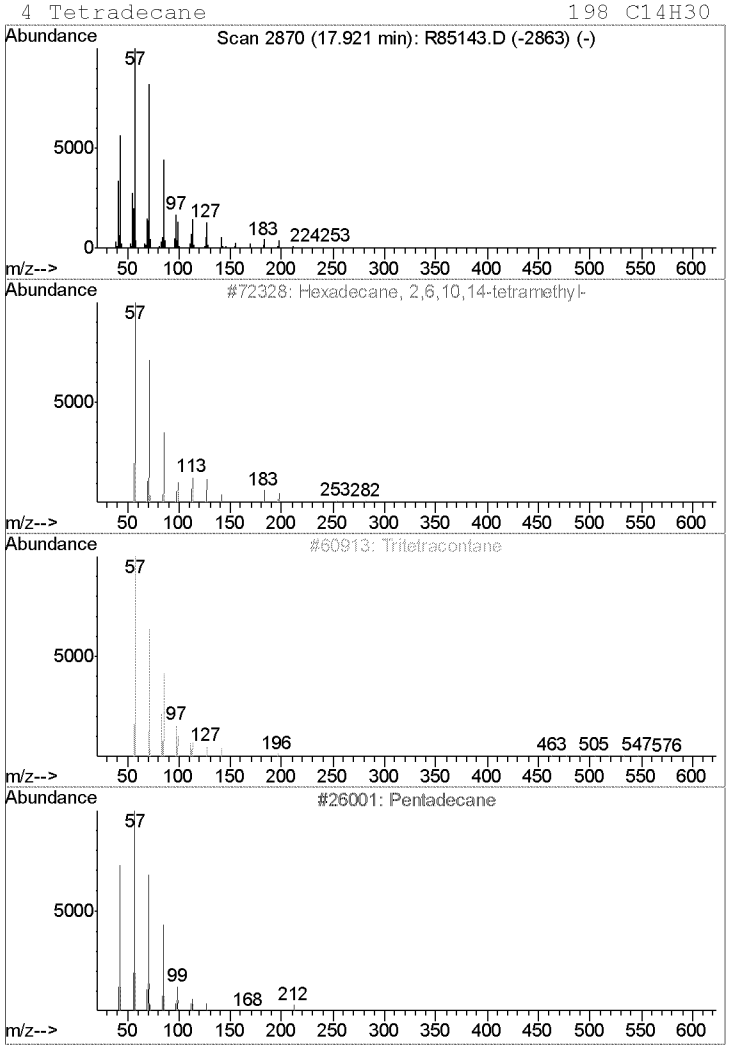
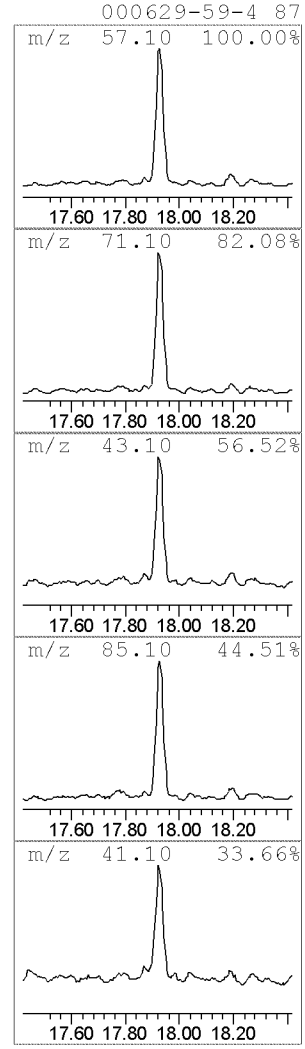
Peak Number 14 alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.92	17.63 ppb	1325120	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90
2	Tritetracontane	605	C43H88	007098-21-7	90
3	Pentadecane	212	C15H32	000629-62-9	87
4	Tetradecane	198	C14H30	000629-59-4	87





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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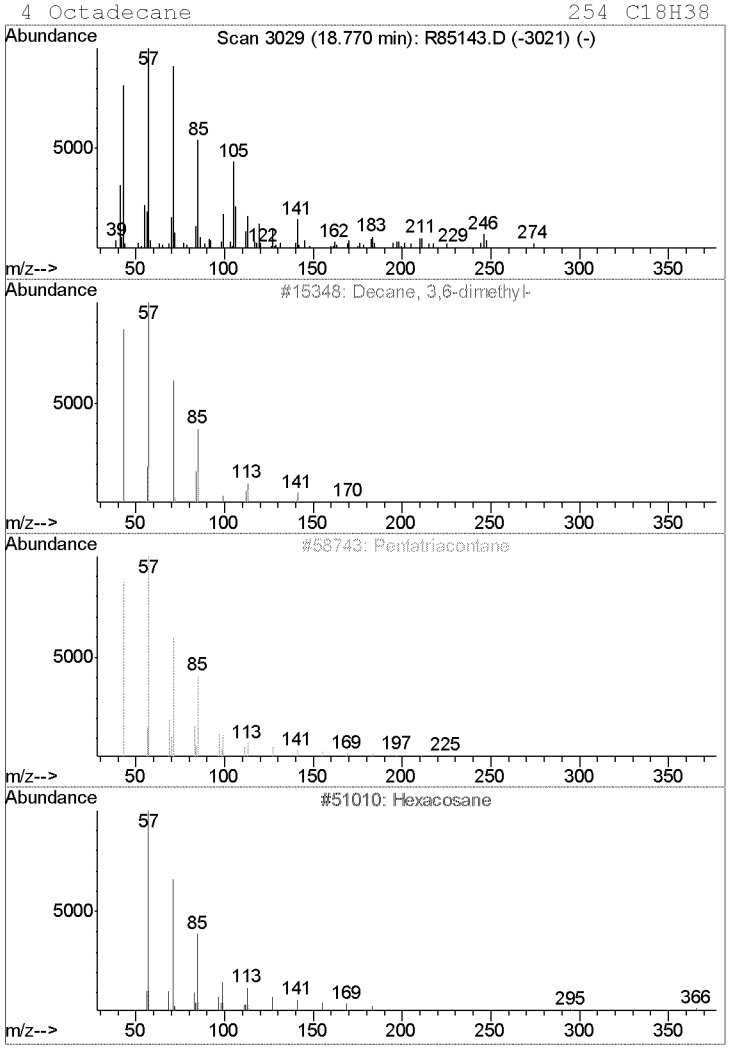
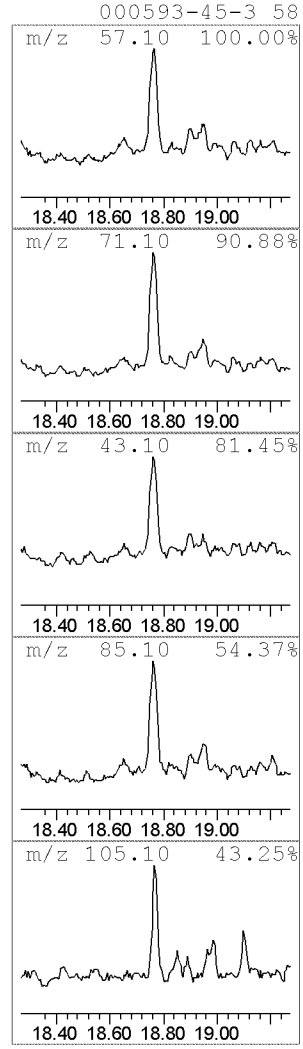
Peak Number 15 alkane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.77	5.88 ppb	442089	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3,6-dimethyl-	170	C12H26	017312-53-7	62
2	Pentatriacontane	493	C35H72	000630-07-9	59
3	Hexacosane	366	C26H54	000630-01-3	59
4	Octadecane	254	C18H38	000593-45-3	58





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 6:52 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85143.D
Name: ja66701-6
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
alkane	11.43	9.3	ppb	574403	3	10.19	2464400	40.0
alkane	12.06	5.0	ppb	307669	3	10.19	2464400	40.0
unknown	12.18	4.5	ppb	277892	3	10.19	2464400	40.0
unknown	12.91	4.7	ppb	345514	4	14.31	2971010	40.0
unknown	13.60	5.3	ppb	391649	4	14.31	2971010	40.0
cycloalkane/alkene	13.80	4.7	ppb	347326	4	14.31	2971010	40.0
alkane	13.95	17.9	ppb	1327900	4	14.31	2971010	40.0
unknown	14.18	6.6	ppb	487265	4	14.31	2971010	40.0
alkane	15.08	5.4	ppb	400881	5	14.31	2971010	40.0
unknown	15.52	4.9	ppb	365037	5	14.31	2971010	40.0
alkane	16.17	15.1	ppb	1137660	6	17.77	3005980	40.0
alkane	16.82	26.0	ppb	1955290	6	17.77	3005980	40.0
alkane	17.23	5.1	ppb	386557	6	17.77	3005980	40.0
alkane	17.92	17.6	ppb	1325120	6	17.77	3005980	40.0
alkane	18.77	5.9	ppb	442089	6	17.77	3005980	40.0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:55 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

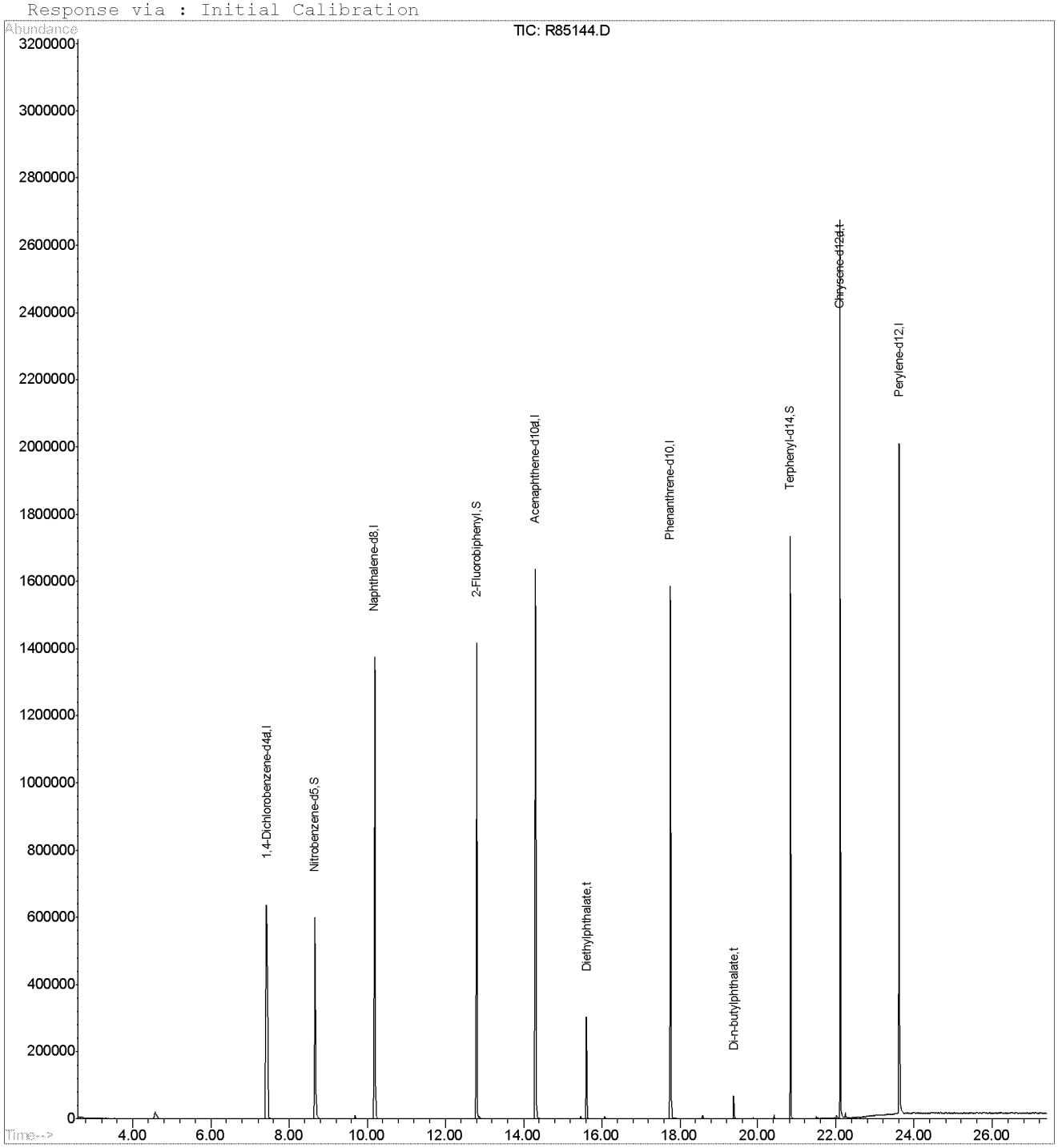
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	313571	40.00	ppb	-0.20
24) Naphthalene-d8	10.18	136	1099645	40.00	ppb	-0.21
47) Acenaphthene-d10	14.30	164	627129	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	982814	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	987860	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	833059	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	313571	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.30	164	627129	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	987860	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	374183	37.44	ppb	-0.20
Spiked Amount 50.000			Recovery =	74.88%		
51) 2-Fluorobiphenyl	12.80	172	744539	33.73	ppb	-0.21
Spiked Amount 50.000			Recovery =	67.46%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	571207	30.68	ppb	-0.15
Spiked Amount 50.000			Recovery =	61.36%		
Target Compounds						Qvalue
65) Diethylphthalate	15.61	149	196912	8.68	ppb	96
80) Di-n-butylphthalate	19.38	149	50729	1.46	ppb	98

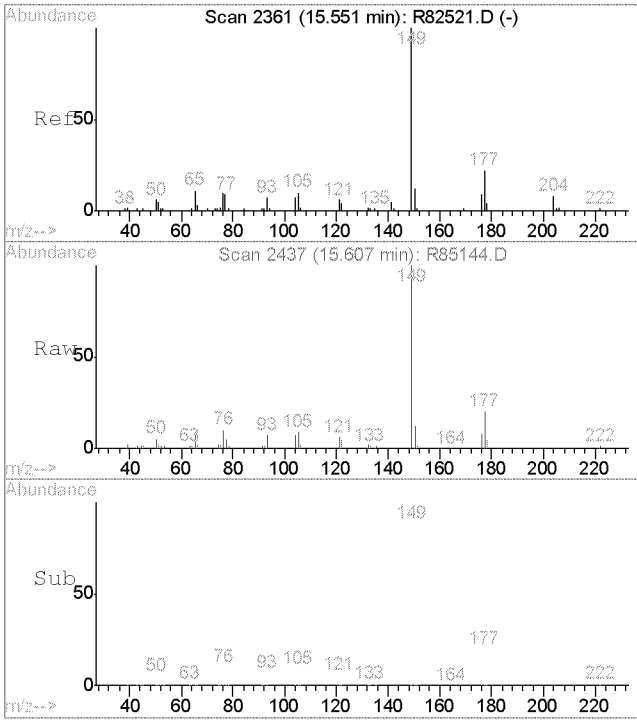
(#) = qualifier out of range (m) = manual integration
R85144.D MR3151.M Fri Jan 28 20:55:19 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:55 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration

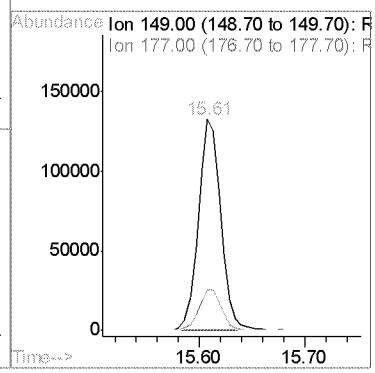


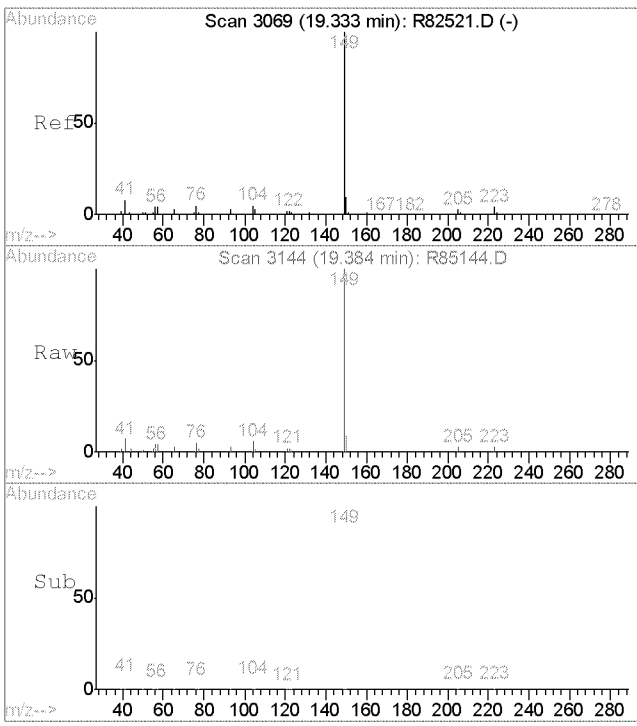


#65
Diethylphthalate
Concen: 8.68 ppb
RT: 15.61 min Scan# 2437
Delta R.T. -0.23 min
Lab File: R85144.D
Acq: 28 Jan 2011 7:28 pm

Tgt Ion:149 Resp: 196912

Ion	Ratio	Lower	Upper
149	100		
177	19.7	0.0	52.1
150	11.7	0.0	42.3

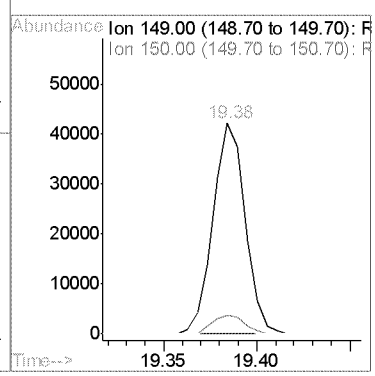




#80
Di-n-butylphthalate
Concen: 1.46 ppb
RT: 19.38 min Scan# 3144
Delta R.T. -0.18 min
Lab File: R85144.D
Acq: 28 Jan 2011 7:28 pm

Tgt Ion:149 Resp: 50729

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.7
104	5.5	0.0	35.0



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.722	23	25	33	rVB2	1540	2568	0.09%	0.013%
2	2.850	45	49	54	rVB2	1313	1969	0.07%	0.010%
3	4.191	294	300	305	rBV2	1374	2140	0.08%	0.011%
4	4.474	349	353	358	rBB	1170	2058	0.07%	0.010%
5	4.565	363	370	397	rBV2	20193	85082	3.06%	0.418%
6	7.418	896	904	932	rBB2	637015	1751317	62.99%	8.600%
7	7.738	958	964	968	rBB	1903	2786	0.10%	0.014%
8	8.662	1130	1137	1174	rBB	600039	1089735	39.20%	5.351%
9	9.688	1324	1329	1335	rBB	11660	14513	0.52%	0.071%
10	10.185	1414	1422	1453	rBV	1376027	2242415	80.65%	11.011%
11	12.797	1903	1911	1921	rBV	1418067	2104096	75.68%	10.332%
12	12.867	1921	1924	1933	rVV3	9287	17483	0.63%	0.086%
13	12.936	1933	1937	1941	rVV	2187	4258	0.15%	0.021%
14	14.058	2141	2147	2149	rBV	1893	2729	0.10%	0.013%
15	14.111	2153	2157	2162	rBB	2082	1962	0.07%	0.010%
16	14.304	2184	2193	2210	rBV	1636633	2575305	92.63%	12.646%
17	14.405	2210	2212	2230	rVB2	2322	7034	0.25%	0.035%
18	15.463	2405	2410	2416	rBB	8770	11899	0.43%	0.058%
19	15.607	2428	2437	2455	rBB	303362	444350	15.98%	2.182%
20	16.083	2519	2526	2533	rBB3	8414	12493	0.45%	0.061%
21	17.482	2781	2788	2795	rBB	2906	4878	0.18%	0.024%
22	17.760	2832	2840	2856	rBV2	1586558	2572274	92.52%	12.631%
23	17.899	2859	2866	2874	rVV2	3975	11157	0.40%	0.055%
24	18.577	2986	2993	2999	rBV	11684	16872	0.61%	0.083%
25	19.384	3134	3144	3150	rVB	68445	79456	2.86%	0.390%
26	19.865	3231	3234	3240	rVB	4532	4297	0.15%	0.021%
27	20.415	3332	3337	3342	rBV	11485	11219	0.40%	0.055%
28	20.826	3408	3414	3433	rBV	1735737	1844209	66.33%	9.056%
29	21.478	3530	3536	3540	rVB2	7065	6476	0.23%	0.032%
30	21.532	3540	3546	3551	rBV2	4548	5704	0.21%	0.028%
31	21.596	3551	3558	3565	rBV3	3100	4871	0.18%	0.024%
32	21.975	3621	3629	3633	rBV3	4603	6890	0.25%	0.034%
33	22.023	3633	3638	3645	rVB2	7704	12079	0.43%	0.059%
34	22.103	3647	3653	3671	rBV	2676043	2780273	100.00%	13.652%
35	22.231	3672	3677	3684	rVV	14239	16311	0.59%	0.080%
36	22.344	3694	3698	3704	rVB4	1523	2215	0.08%	0.011%
37	22.541	3729	3735	3736	rVV3	1500	1976	0.07%	0.010%
38	22.616	3747	3749	3751	rBV2	2662	2414	0.09%	0.012%

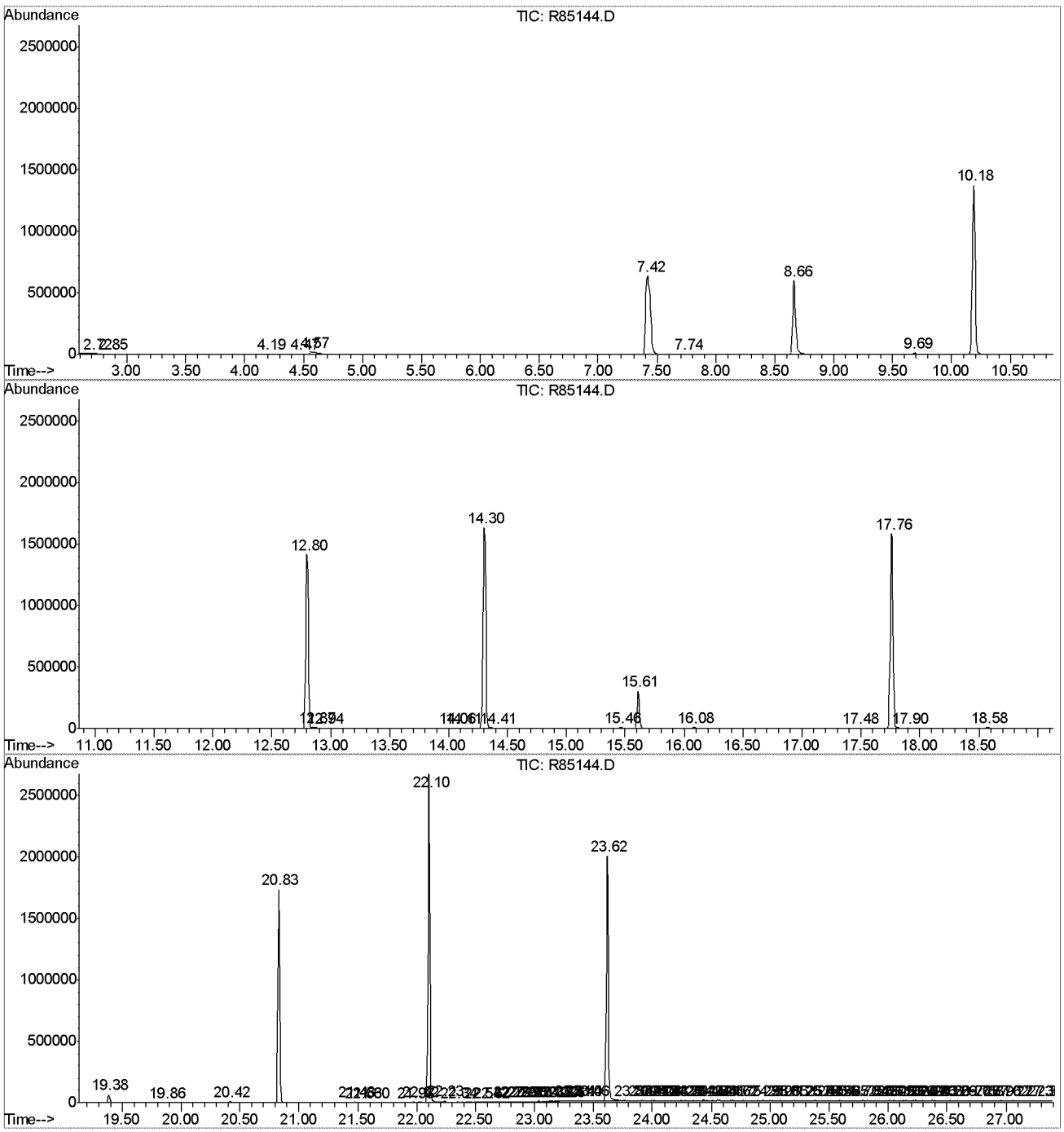
39	22.792	3774	3782	3783	rBV2	2603	3006	0.11%	0.015%
40	22.851	3789	3793	3797	rBV3	2439	2673	0.10%	0.013%
41	22.910	3800	3804	3807	rBV3	2552	2320	0.08%	0.011%
42	22.947	3807	3811	3813	rBV4	2275	3472	0.12%	0.017%
43	23.038	3823	3828	3831	rVV5	2594	2793	0.10%	0.014%
44	23.118	3842	3843	3847	rBV3	2964	3610	0.13%	0.018%
45	23.150	3847	3849	3852	rVB2	3418	3111	0.11%	0.015%
46	23.204	3852	3859	3860	rBV4	3189	5868	0.21%	0.029%
47	23.257	3866	3869	3871	rVB2	2734	2428	0.09%	0.012%
48	23.311	3876	3879	3882	rVV5	2689	2313	0.08%	0.011%
49	23.401	3890	3896	3897	rBV3	3072	4146	0.15%	0.020%
50	23.412	3897	3898	3902	rVV3	2042	2064	0.07%	0.010%
51	23.460	3906	3907	3911	rVV3	1923	2102	0.08%	0.010%
52	23.615	3928	3936	3956	rVV	1995880	2438932	87.72%	11.976%
53	23.818	3968	3974	3978	rVB5	1557	2820	0.10%	0.014%
54	23.936	3994	3996	3999	rVV3	1934	2136	0.08%	0.010%
55	23.973	3999	4003	4005	rVV4	2070	2655	0.10%	0.013%
56	24.010	4008	4010	4015	rVV5	2920	3662	0.13%	0.018%
57	24.080	4022	4023	4028	rVV5	2046	2740	0.10%	0.013%
58	24.133	4028	4033	4037	rVV4	1743	3847	0.14%	0.019%
59	24.245	4051	4054	4056	rVB4	3329	2007	0.07%	0.010%
60	24.277	4056	4060	4062	rBV3	2502	2963	0.11%	0.015%
61	24.299	4062	4064	4070	rVV5	1478	2743	0.10%	0.013%
62	24.432	4086	4089	4094	rBV5	2167	2899	0.10%	0.014%
63	24.464	4094	4095	4100	rVB4	2517	2132	0.08%	0.010%
64	24.513	4100	4104	4107	rVB5	3392	4109	0.15%	0.020%
65	24.539	4107	4109	4110	rBV	2540	2069	0.07%	0.010%
66	24.614	4120	4123	4127	rBV5	1947	3200	0.12%	0.016%
67	24.662	4129	4132	4134	rBV2	3127	2377	0.09%	0.012%
68	24.721	4140	4143	4145	rVB4	2063	2043	0.07%	0.010%
69	24.753	4145	4149	4150	rBV4	2104	2071	0.07%	0.010%
70	24.983	4188	4192	4193	rBV4	1920	1939	0.07%	0.010%
71	25.084	4210	4211	4214	rBV3	2898	2011	0.07%	0.010%
72	25.111	4214	4216	4220	rVV5	1920	1972	0.07%	0.010%
73	25.148	4220	4223	4228	rVB4	1595	2174	0.08%	0.011%
74	25.255	4241	4243	4247	rVV4	2036	2054	0.07%	0.010%
75	25.437	4274	4277	4278	rBV3	3011	2470	0.09%	0.012%
76	25.453	4278	4280	4282	rVV3	2241	2465	0.09%	0.012%
77	25.544	4292	4297	4301	rVB7	2350	4349	0.16%	0.021%
78	25.586	4301	4305	4307	rBV4	3013	3242	0.12%	0.016%
79	25.666	4319	4320	4326	rBV5	1240	2036	0.07%	0.010%
80	25.757	4334	4337	4339	rBV4	2087	2193	0.08%	0.011%
81	25.843	4351	4353	4358	rBV6	1982	2085	0.07%	0.010%
82	25.971	4373	4377	4379	rBV4	1495	2097	0.08%	0.010%
83	26.046	4387	4391	4393	rBV4	2650	2815	0.10%	0.014%
84	26.099	4396	4401	4403	rVB4	1721	2555	0.09%	0.013%
85	26.131	4403	4407	4408	rBV5	2560	2816	0.10%	0.014%
86	26.238	4425	4427	4432	rVB5	2036	2735	0.10%	0.013%
87	26.291	4434	4437	4439	rVB2	2153	2285	0.08%	0.011%
88	26.324	4439	4443	4444	rBV4	1949	2054	0.07%	0.010%
89	26.398	4454	4457	4460	rBV4	2538	2761	0.10%	0.014%
90	26.425	4460	4462	4466	rVB3	1853	2113	0.08%	0.010%
91	26.527	4478	4481	4484	rBV3	2858	2779	0.10%	0.014%
92	26.585	4489	4492	4495	rBV4	2377	2848	0.10%	0.014%
93	26.697	4512	4513	4517	rVB4	2217	2263	0.08%	0.011%
94	26.751	4517	4523	4525	rBV4	1818	3105	0.11%	0.015%
95	26.874	4544	4546	4555	rVB5	1897	3120	0.11%	0.015%

96	26.959	4561	4562	4567	rBV5	2612	2073	0.07%	0.010%
97	27.023	4572	4574	4578	rBV5	2081	3043	0.11%	0.015%
98	27.232	4609	4613	4621	rVB8	2010	4060	0.15%	0.020%
99	27.296	4621	4625	4626	rVB3	2052	2220	0.08%	0.011%
100	27.328	4626	4631	4632	rBV5	2233	2994	0.11%	0.015%

Sum of corrected areas: 20364800

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85144.D
Operator : larisap
Acquired : 28 Jan 2011 7:28 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-7
Misc Info : op47853,er3224,1000
Vial Number: 8
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 7:28 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85144.D
Name: ja66701-7
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.14
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:56 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

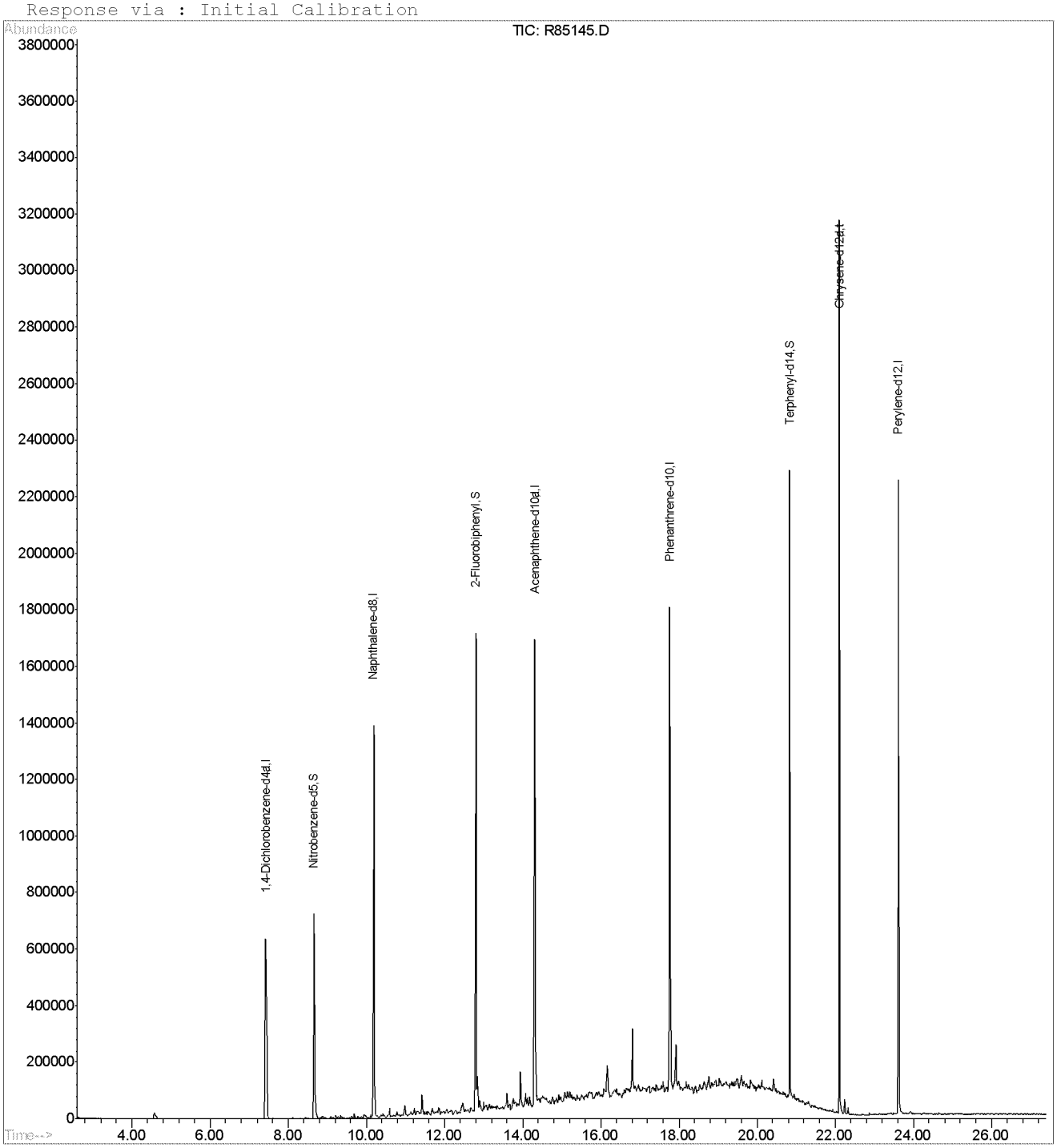
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	313837	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1092112	40.00	ppb	-0.21
47) Acenaphthene-d10	14.30	164	641229	40.00	ppb	-0.22
69) Phenanthrene-d10	17.77	188	1063552	40.00	ppb	-0.22
83) Chrysene-d12	22.10	240	1104835	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	927406	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	313837	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.30	164	641229	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	1104835	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	448389	45.18	ppb	-0.20
Spiked Amount 50.000			Recovery =	90.36%		
51) 2-Fluorobiphenyl	12.80	172	905254	40.10	ppb	-0.21
Spiked Amount 50.000			Recovery =	80.20%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	727434	34.93	ppb	-0.14
Spiked Amount 50.000			Recovery =	69.86%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85145.D MR3151.M Fri Jan 28 20:56:12 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:56 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



ACCUTEST LABORATORIES JA66701

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.560	362	369	396	rBV2	22372	84732	2.70%	0.307%
2	7.418	896	904	933	rBB	638110	1765862	56.30%	6.399%
3	8.663	1127	1137	1159	rBV	725320	1336650	42.61%	4.844%
4	9.341	1256	1264	1276	rVB6	10362	24805	0.79%	0.090%
5	9.694	1324	1330	1339	rVB4	14194	24576	0.78%	0.089%
6	9.945	1369	1377	1382	rBV4	11304	23094	0.74%	0.084%
7	10.185	1411	1422	1435	rVV	1385733	2308463	73.60%	8.366%
8	10.586	1479	1497	1503	rBV5	31641	72974	2.33%	0.264%
9	10.773	1527	1532	1541	rBV4	17159	38675	1.23%	0.140%
10	10.981	1562	1571	1585	rVB6	39009	81558	2.60%	0.296%
11	11.136	1592	1600	1607	rBV8	8505	22276	0.71%	0.081%
12	11.232	1613	1618	1622	rVB3	25606	37661	1.20%	0.136%
13	11.291	1622	1629	1630	rBV2	14116	26049	0.83%	0.094%
14	11.425	1649	1654	1660	rVB	68843	96421	3.07%	0.349%
15	11.574	1679	1682	1690	rBV7	12120	24240	0.77%	0.088%
16	11.681	1696	1702	1711	rBV6	22360	45972	1.47%	0.167%
17	11.857	1729	1735	1743	rVB5	25966	57763	1.84%	0.209%
18	11.964	1751	1755	1764	rVB7	8753	21855	0.70%	0.079%
19	12.055	1764	1772	1779	rVB4	17267	41816	1.33%	0.152%
20	12.172	1790	1794	1802	rVB7	16252	37110	1.18%	0.134%
21	12.269	1803	1812	1817	rBV7	15311	42997	1.37%	0.156%
22	12.461	1833	1848	1857	rBV7	37989	133972	4.27%	0.486%
23	12.536	1858	1862	1868	rVV9	11507	23029	0.73%	0.083%
24	12.595	1870	1873	1881	rVB8	12984	24362	0.78%	0.088%
25	12.680	1881	1889	1896	rBV8	16821	50120	1.60%	0.182%
26	12.797	1904	1911	1917	rBV	1692961	2655719	84.67%	9.624%
27	12.840	1917	1919	1926	rVV	122664	175457	5.59%	0.636%
28	12.899	1926	1930	1941	rVB7	39577	94354	3.01%	0.342%
29	12.995	1942	1948	1952	rBV7	31868	52711	1.68%	0.191%
30	13.065	1953	1961	1968	rVB9	16472	46848	1.49%	0.170%
31	13.139	1970	1975	1982	rBV9	20323	39557	1.26%	0.143%
32	13.358	2010	2016	2021	rVB10	12551	22423	0.71%	0.081%
33	13.599	2046	2061	2066	rBV6	57953	133475	4.26%	0.484%
34	13.668	2066	2074	2079	rVB9	20916	56521	1.80%	0.205%
35	13.754	2081	2090	2095	rBV7	38357	101203	3.23%	0.367%
36	13.941	2118	2125	2137	rVB	126557	248758	7.93%	0.901%
37	14.069	2143	2149	2153	rBV5	41365	63477	2.02%	0.230%
38	14.112	2153	2157	2163	rVB8	28527	47562	1.52%	0.172%

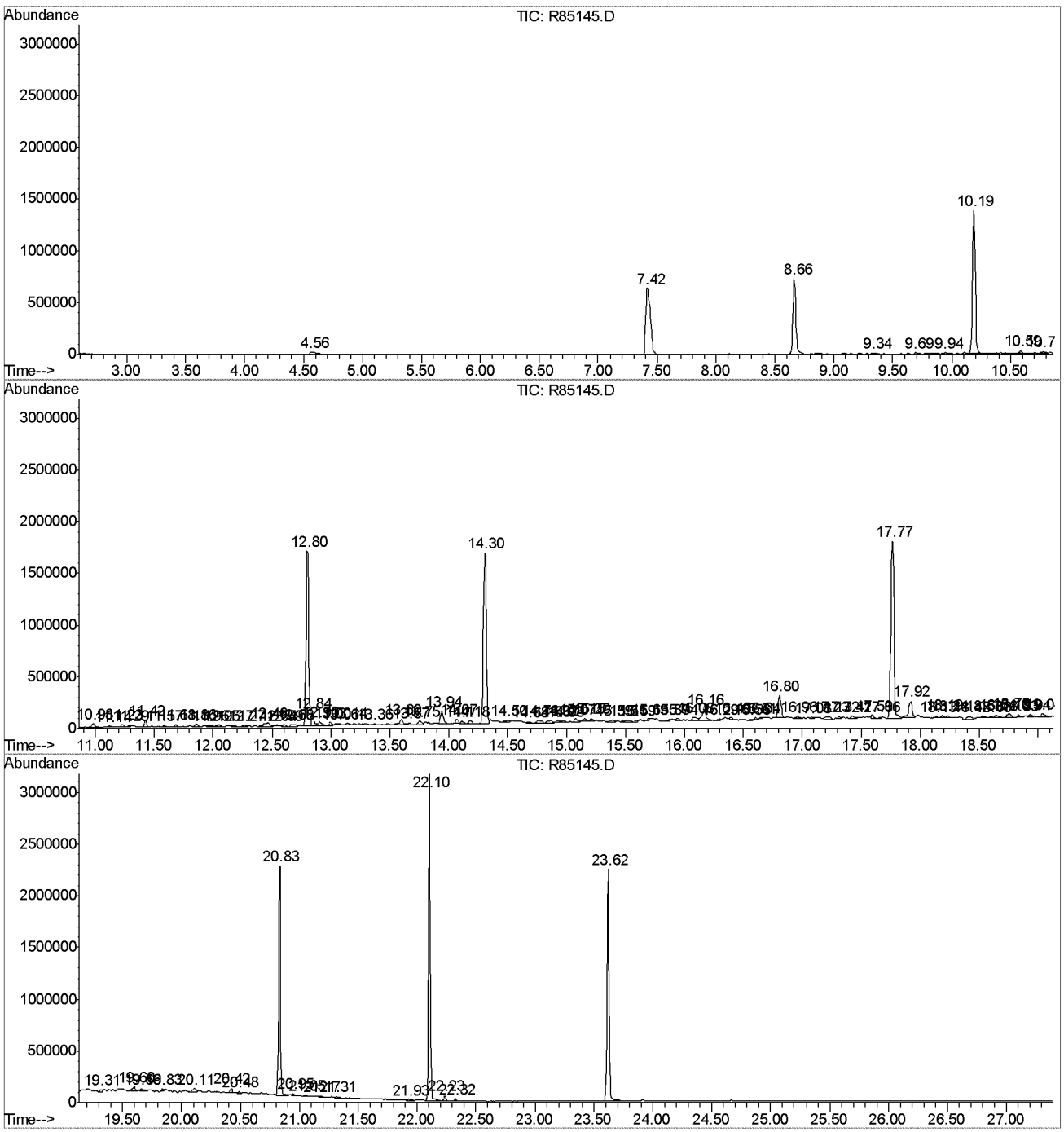
39	14.176	2164	2169	2179	rVB8	35372	76970	2.45%	0.279%
40	14.304	2183	2193	2201	rBV	1650295	2713583	86.51%	9.834%
41	14.496	2219	2229	2234	rBV	23095	76299	2.43%	0.277%
42	14.678	2260	2263	2272	rVB8	11092	20074	0.64%	0.073%
43	14.763	2272	2279	2287	rBV8	25570	68417	2.18%	0.248%
44	14.865	2288	2298	2304	rBV8	21332	58314	1.86%	0.211%
45	14.924	2304	2309	2313	rBV8	26228	44850	1.43%	0.163%
46	14.977	2314	2319	2326	rVB8	18427	36918	1.18%	0.134%
47	15.073	2333	2337	2345	rBV8	32880	69842	2.23%	0.253%
48	15.153	2346	2352	2357	rVB9	25559	41145	1.31%	0.149%
49	15.201	2357	2361	2369	rBV10	26098	51327	1.64%	0.186%
50	15.388	2389	2396	2401	rBV10	19926	45841	1.46%	0.166%
51	15.506	2409	2418	2429	rVB10	20727	64051	2.04%	0.232%
52	15.586	2430	2433	2436	rBV5	15533	24341	0.78%	0.088%
53	15.688	2447	2452	2454	rBV4	19456	27092	0.86%	0.098%
54	15.875	2480	2487	2488	rBV7	19248	33006	1.05%	0.120%
55	15.944	2495	2500	2506	rVB9	15861	33319	1.06%	0.121%
56	16.083	2520	2526	2534	rBV9	25899	75600	2.41%	0.274%
57	16.163	2534	2541	2554	rVB	114227	267733	8.54%	0.970%
58	16.291	2561	2565	2568	rBV5	13715	19749	0.63%	0.072%
59	16.398	2582	2585	2589	rVB6	18692	22501	0.72%	0.082%
60	16.558	2611	2615	2619	rBV6	14160	31148	0.99%	0.113%
61	16.606	2620	2624	2627	rVV6	14342	20492	0.65%	0.074%
62	16.639	2628	2630	2634	rBV4	16038	21250	0.68%	0.077%
63	16.804	2654	2661	2669	rBV	214022	399202	12.73%	1.447%
64	16.959	2686	2690	2697	rVB9	25546	47901	1.53%	0.174%
65	17.077	2709	2712	2717	rBV7	12401	20212	0.64%	0.073%
66	17.231	2731	2741	2747	rVB7	27169	84823	2.70%	0.307%
67	17.317	2752	2757	2761	rBV6	17863	36589	1.17%	0.133%
68	17.418	2772	2776	2785	rBV6	23085	53737	1.71%	0.195%
69	17.595	2806	2809	2816	rVB8	34668	51846	1.65%	0.188%
70	17.659	2818	2821	2824	rBV5	15770	20456	0.65%	0.074%
71	17.766	2831	2841	2855	rBV2	1713136	2934817	93.56%	10.636%
72	17.915	2855	2869	2877	rBV	160316	387277	12.35%	1.403%
73	18.134	2906	2910	2915	rBV7	12461	24802	0.79%	0.090%
74	18.188	2916	2920	2925	rVV7	28138	39964	1.27%	0.145%
75	18.236	2925	2929	2934	rVB8	18457	28856	0.92%	0.105%
76	18.423	2956	2964	2970	rBV8	25498	69044	2.20%	0.250%
77	18.530	2979	2984	2993	rBV8	19836	44051	1.40%	0.160%
78	18.604	2994	2998	3001	rBV5	10666	18390	0.59%	0.067%
79	18.642	3001	3005	3016	rVB5	30903	79648	2.54%	0.289%
80	18.759	3019	3027	3034	rVB2	42476	91578	2.92%	0.332%
81	18.834	3038	3041	3045	rVV5	17414	25274	0.81%	0.092%
82	18.936	3055	3060	3065	rVB8	25221	48354	1.54%	0.175%
83	19.037	3075	3079	3090	rVB8	28248	64545	2.06%	0.234%
84	19.310	3127	3130	3134	rBV5	20732	36019	1.15%	0.131%
85	19.598	3178	3184	3189	rVB10	39483	71132	2.27%	0.258%
86	19.657	3193	3195	3203	rVB9	19683	34555	1.10%	0.125%
87	19.833	3225	3228	3231	rBV4	27916	34140	1.09%	0.124%
88	20.111	3274	3280	3284	rBV7	31179	55626	1.77%	0.202%
89	20.415	3333	3337	3345	rBV8	45872	67860	2.16%	0.246%
90	20.485	3348	3350	3354	rVB5	20062	19701	0.63%	0.071%
91	20.832	3409	3415	3429	rVB	2222589	2470860	78.77%	8.954%
92	20.950	3433	3437	3441	rVB7	19036	23471	0.75%	0.085%
93	21.051	3451	3456	3462	rVB10	11577	25917	0.83%	0.094%
94	21.174	3477	3479	3487	rVB9	14903	26136	0.83%	0.095%
95	21.313	3502	3505	3513	rVB8	15483	23050	0.73%	0.084%

96	21.933	3616	3621	3629	rVB3	13301	25593	0.82%	0.093%
97	22.104	3646	3653	3671	rBV	3162984	3136692	100.00%	11.367%
98	22.232	3671	3677	3685	rVB	52267	56763	1.81%	0.206%
99	22.323	3690	3694	3700	rVB	25841	28640	0.91%	0.104%
100	23.621	3930	3937	3958	rBV	2242541	2757911	87.92%	9.994%

Sum of corrected areas: 27594391

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85145.D
Operator : larisap
Acquired : 28 Jan 2011 8:05 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-8
Misc Info : op47853,er3224,1000
Vial Number: 9
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

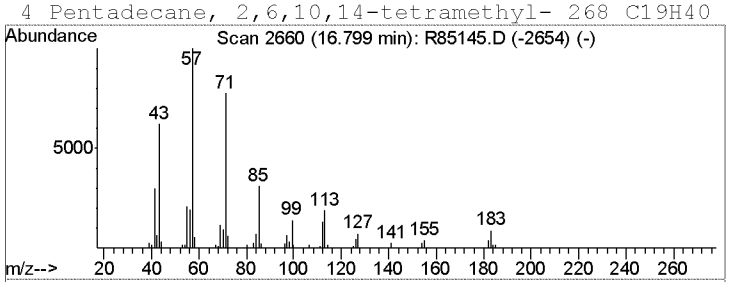
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

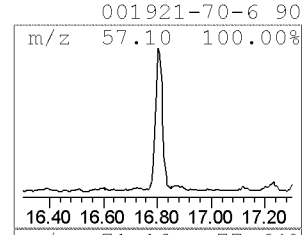
****

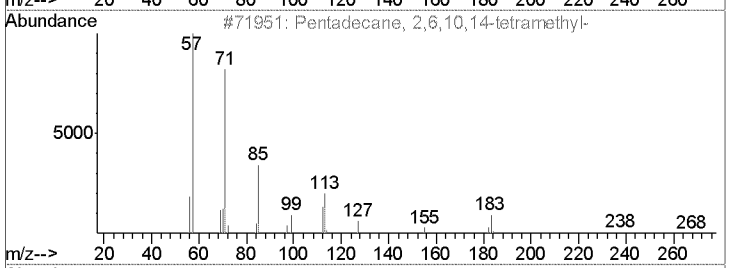
Peak Number 1 alkane Concentration Rank 1

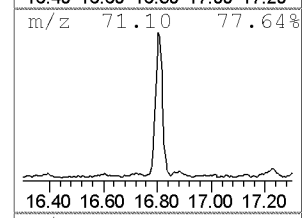
R.T.	EstConc	Area	Relative to ISTD	R.T.
16.80	5.44 ppb	399202	Phenanthrene-d10	17.77

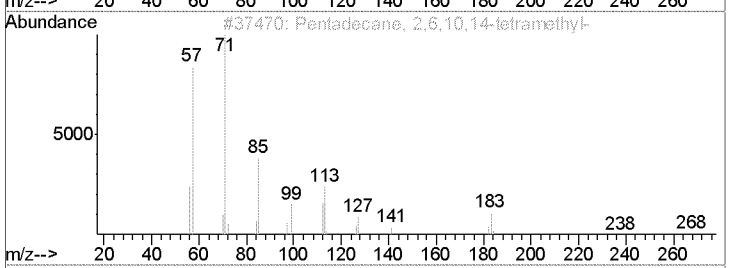
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
3	Decane, 2-methyl-	156	C11H24	006975-98-0	90
4	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90

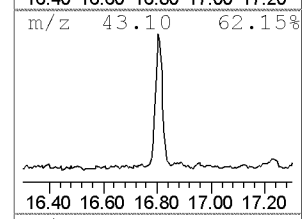


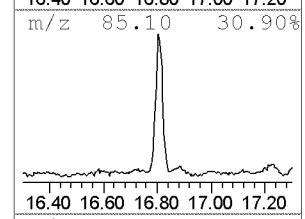


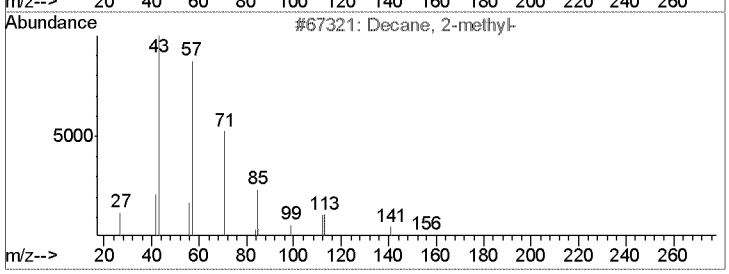


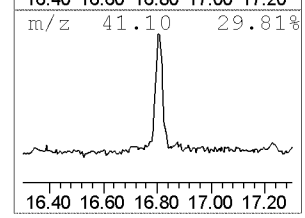












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

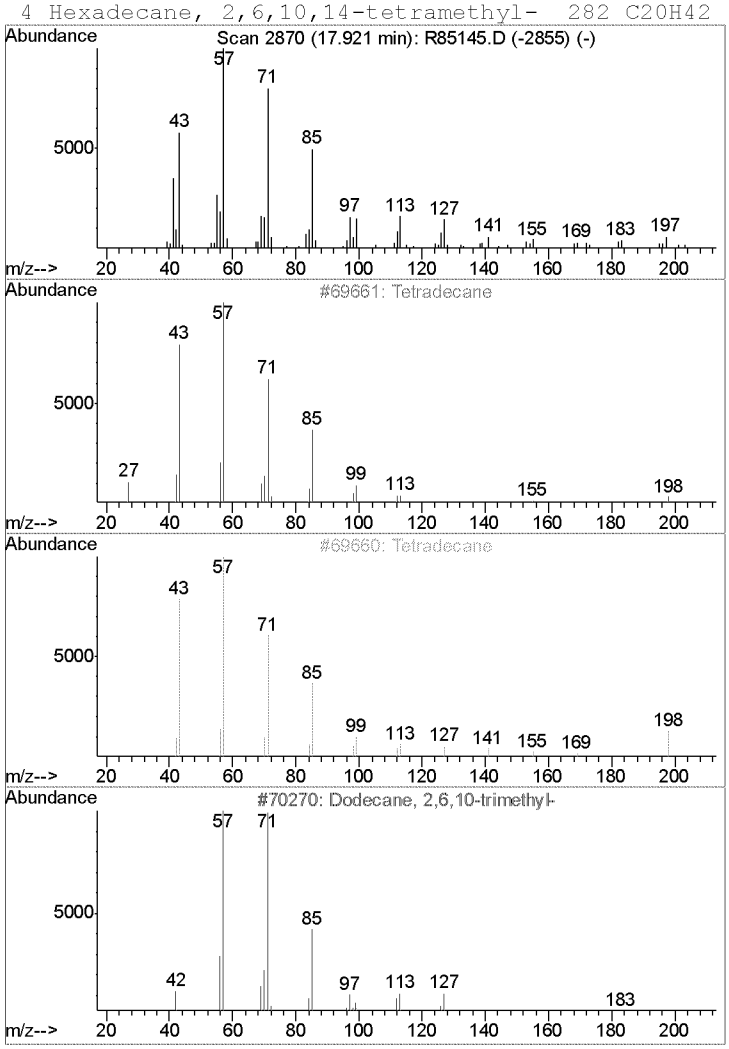
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

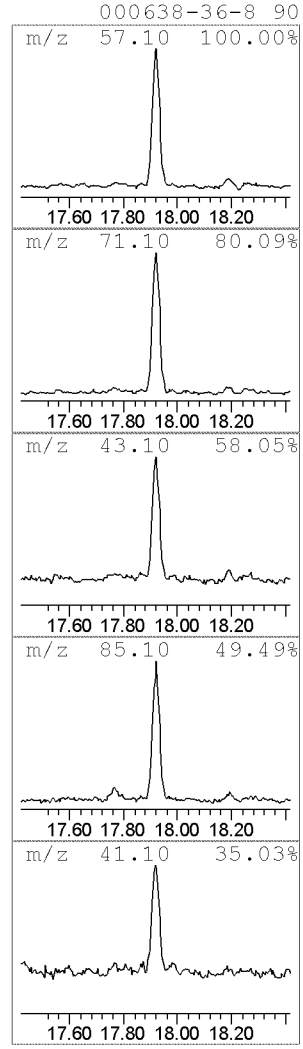
****

Peak Number 2 alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.92	5.28 ppb	387277	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	91
2	Tetradecane	198	C14H30	000629-59-4	91
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	90
4	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90





8.1.16 8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 8:05 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85145.D
Name: ja66701-8
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
alkane	16.80	5.4	ppb	399202	6	17.77	2934820	40.0
alkane	17.92	5.3	ppb	387277	6	17.77	2934820	40.0

8.1.16
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23447.D
Acq On : 31 Jan 2011 5:24 pm
Operator : ninap
Sample : ja66701-1
Misc : op47853a,e4m1022,1000
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 11:30:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	33724	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	26029	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	42614	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	45538	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	198669	40.14	ppb	0.01
Spiked Amount 50.000			Recovery =	80.28%		
11) 2-Fluorobiphenyl	7.338	172	469000	41.35	ppb	0.02
Spiked Amount 50.000			Recovery =	82.70%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	136714	29.79	ppb	0.00
Spiked Amount 50.000			Recovery =	59.58%		
Target Compounds						Qvalue
7) Naphthalene	5.625	128	23142	1.54	ppb	99
14) Acenaphthene	8.328	153	3983	0.36	ppb	88
15) Fluorene	9.117	166	5732	0.69	ppb	72

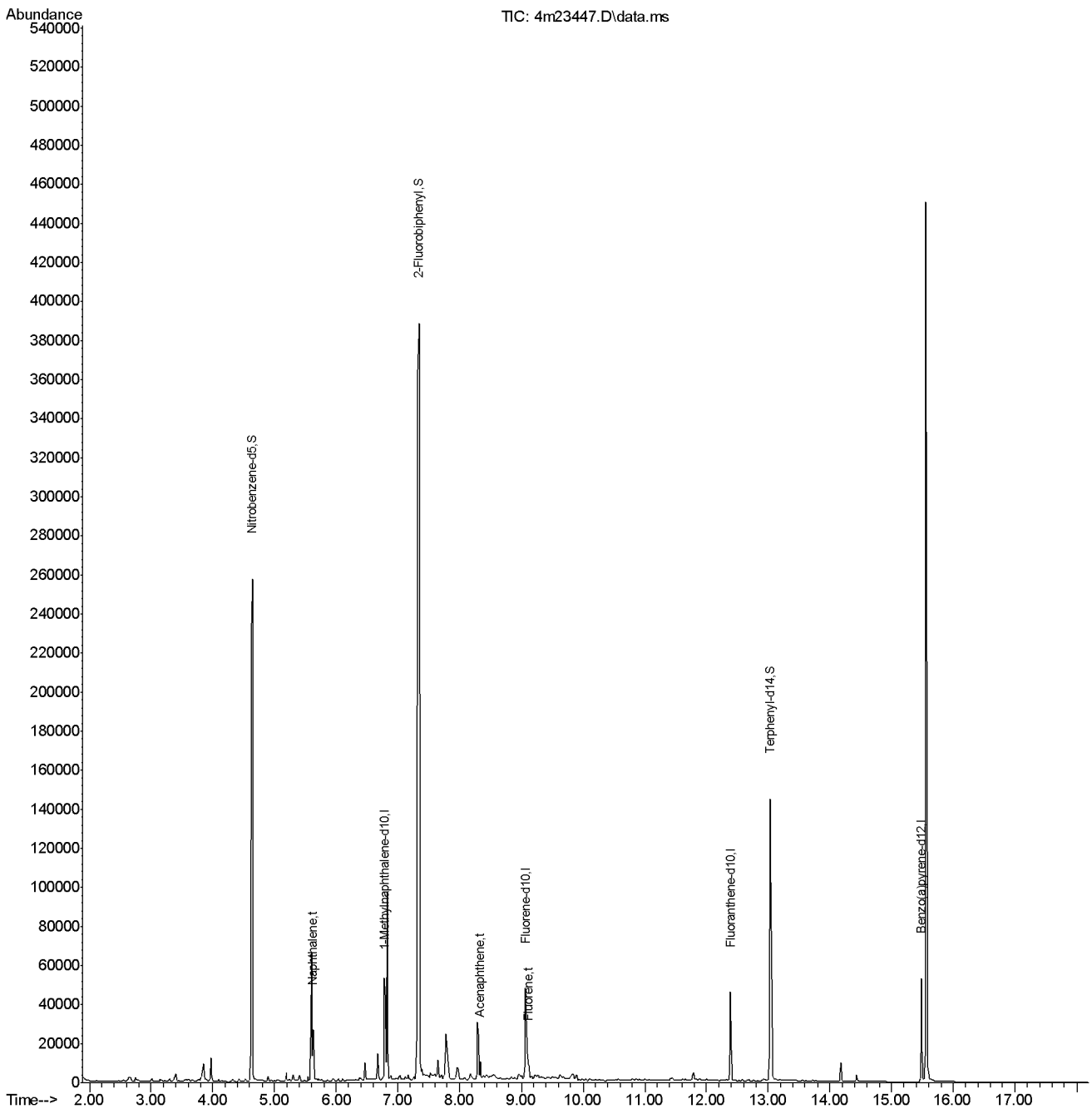
(#) = qualifier out of range (m) = manual integration (+) = signals summed

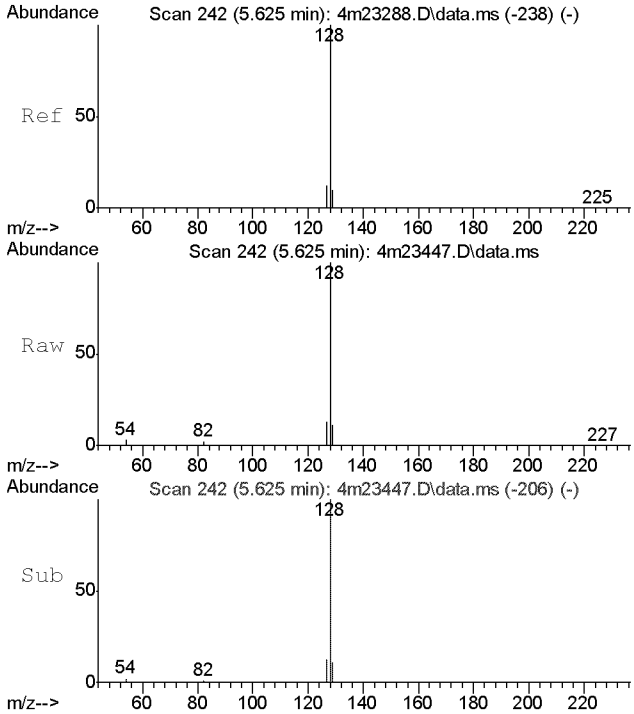
8.1.17 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23447.D
Acq On : 31 Jan 2011 5:24 pm
Operator : ninap
Sample : ja66701-1
Misc : op47853a,e4m1022,1000
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 11:30:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

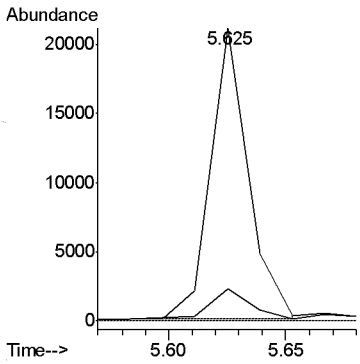


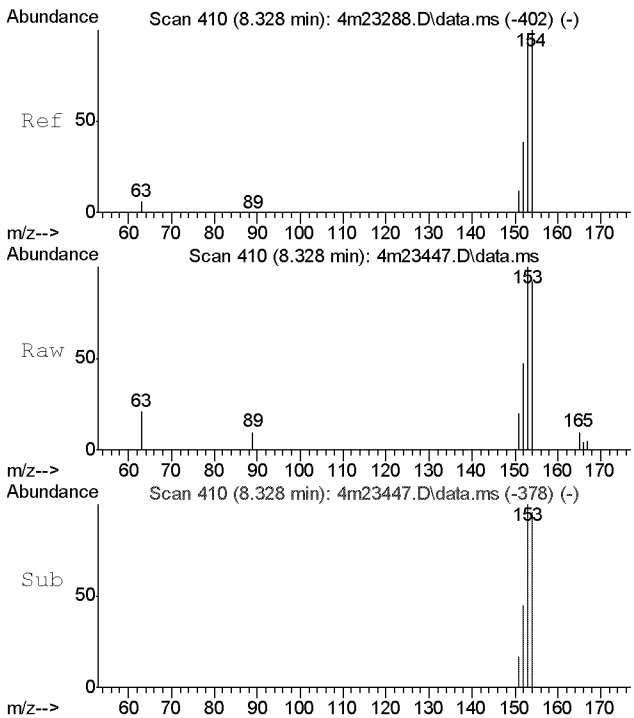


#7
Naphthalene
Concen: 1.54 ppb
RT: 5.625 min Scan# 242
Delta R.T. -0.000 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:128 Resp: 23142

Ion	Ratio	Lower	Upper
128	100		
129	10.0	0.0	40.4
122	0.0	0.0	30.0

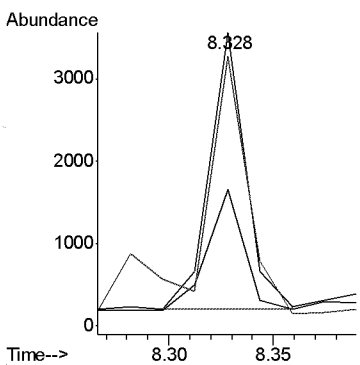


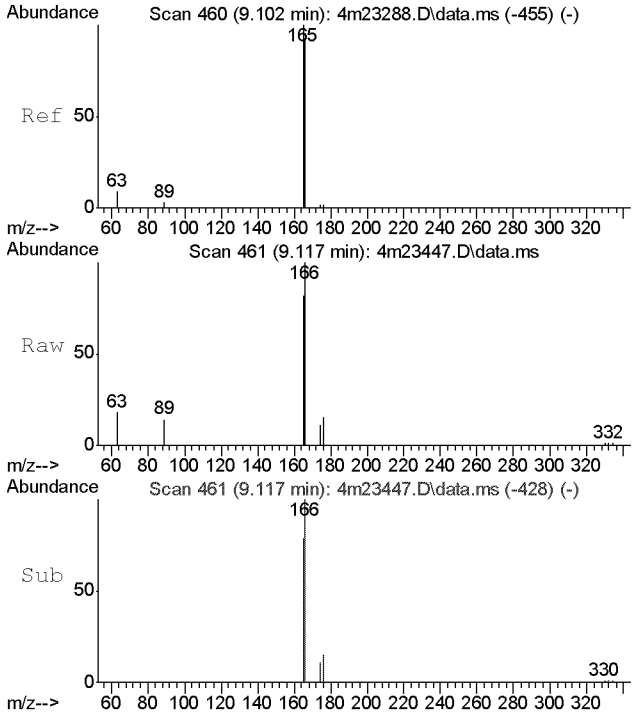


#14
Acenaphthene
Concen: 0.36 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:153 Resp: 3983

Ion	Ratio	Lower	Upper
153	100		
152	43.9	9.6	69.6
154	87.6	71.6	131.6

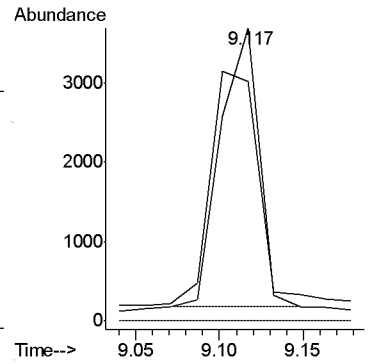




#15
Fluorene
Concen: 0.69 ppb
RT: 9.117 min Scan# 461
Delta R.T. 0.015 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:166 Resp: 5732

Ion	Ratio	Lower	Upper
166	100		
165	78.1	77.3	137.3
167	0.0	0.0	30.0



8.1.17
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23448.D
Acq On : 31 Jan 2011 5:47 pm
Operator : ninap
Sample : ja66701-2
Misc : op47853a,e4m1022,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 01 11:31:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

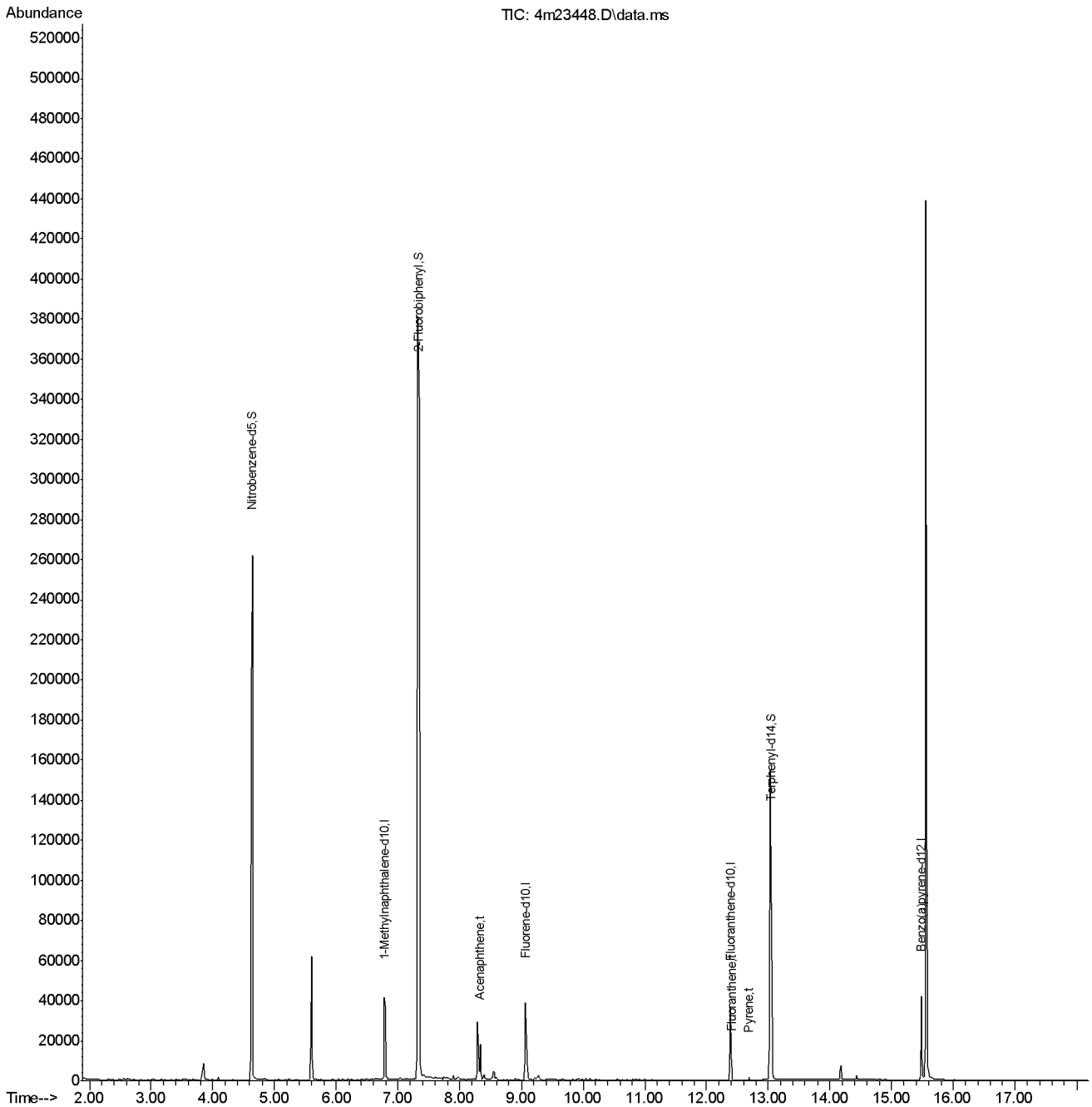
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28531	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	23017	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	36185	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	38525	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	189504	45.26	ppb	0.01
Spiked Amount 50.000			Recovery =	90.52%		
11) 2-Fluorobiphenyl	7.338	172	448991	46.79	ppb	0.02
Spiked Amount 50.000			Recovery =	93.58%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	152423	39.11	ppb	0.02
Spiked Amount 50.000			Recovery =	78.22%		
Target Compounds						Qvalue
14) Acenaphthene	8.328	153	8214	0.84	ppb	91
24) Fluoranthene	12.409	202	1413	0.13	ppb	95
25) Pyrene	12.690	202	1119	0.11	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

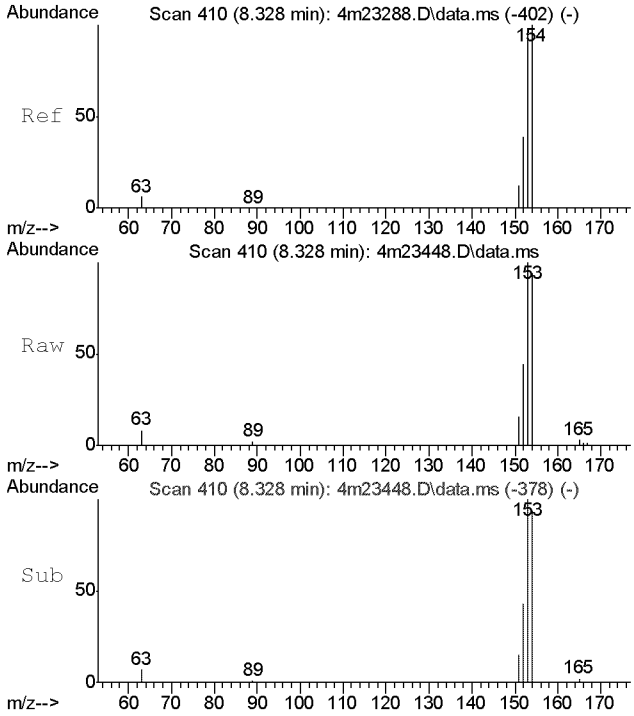
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23448.D
Acq On : 31 Jan 2011 5:47 pm
Operator : ninap
Sample : ja66701-2
Misc : op47853a,e4m1022,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 01 11:31:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



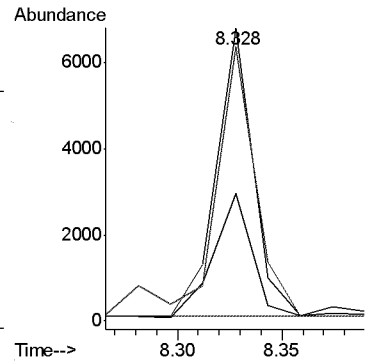
M4M1016SIM.M Tue Feb 01 11:31:33 2011 RPT1 Page: 2

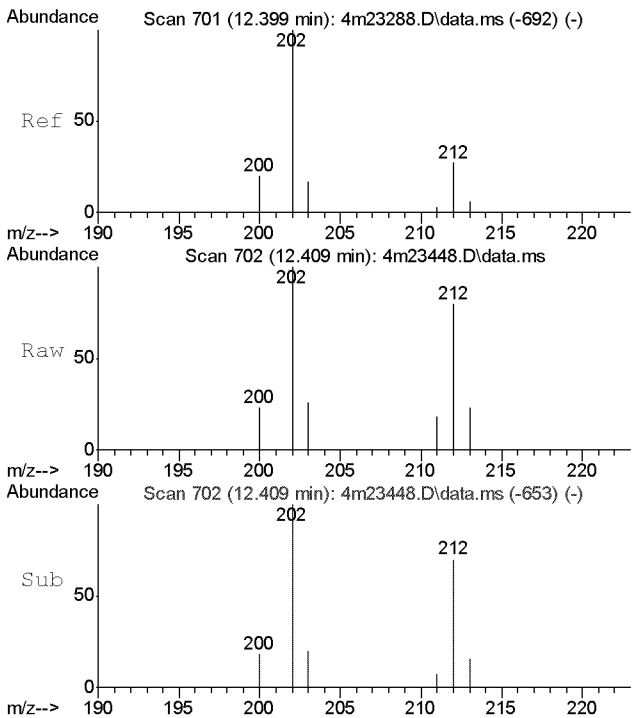


#14
Acenaphthene
Concen: 0.84 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:153 Resp: 8214

Ion	Ratio	Lower	Upper
153	100		
152	42.9	9.6	69.6
154	91.5	71.6	131.6

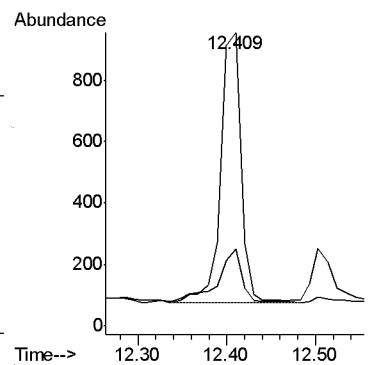


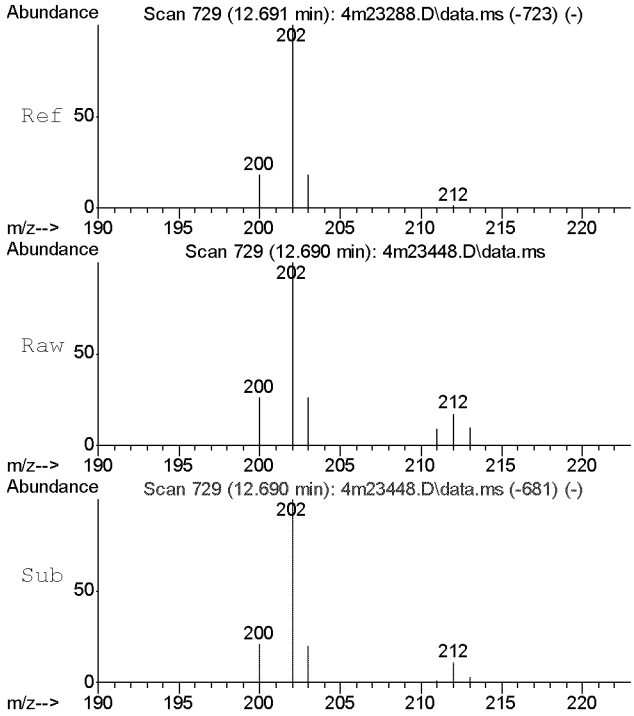


#24
Fluoranthene
Concen: 0.13 ppb
RT: 12.409 min Scan# 702
Delta R.T. 0.010 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:202 Resp: 1413

Ion	Ratio	Lower	Upper
202	100		
203	19.2	0.0	47.1

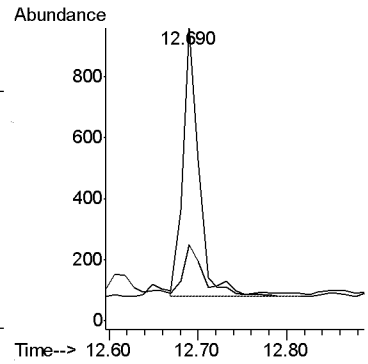




#25
Pyrene
Concen: 0.11 ppb
RT: 12.690 min Scan# 729
Delta R.T. -0.001 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:202 Resp: 1119

Ion	Ratio	Lower	Upper
202	100		
203	18.3	0.0	48.5



8.1.18

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23449.D
Acq On : 31 Jan 2011 6:12 pm
Operator : ninap
Sample : ja66701-3
Misc : op47853a,e4m1022,945
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 01 11:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	30951	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	23309	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	37487	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	38407	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	213888	47.09	ppb	0.01
Spiked Amount 50.000			Recovery =	94.18%		
11) 2-Fluorobiphenyl	7.338	172	491588	47.23	ppb	0.02
Spiked Amount 50.000			Recovery =	94.46%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	163921	40.60	ppb	0.02
Spiked Amount 50.000			Recovery =	81.20%		
Target Compounds						Qvalue

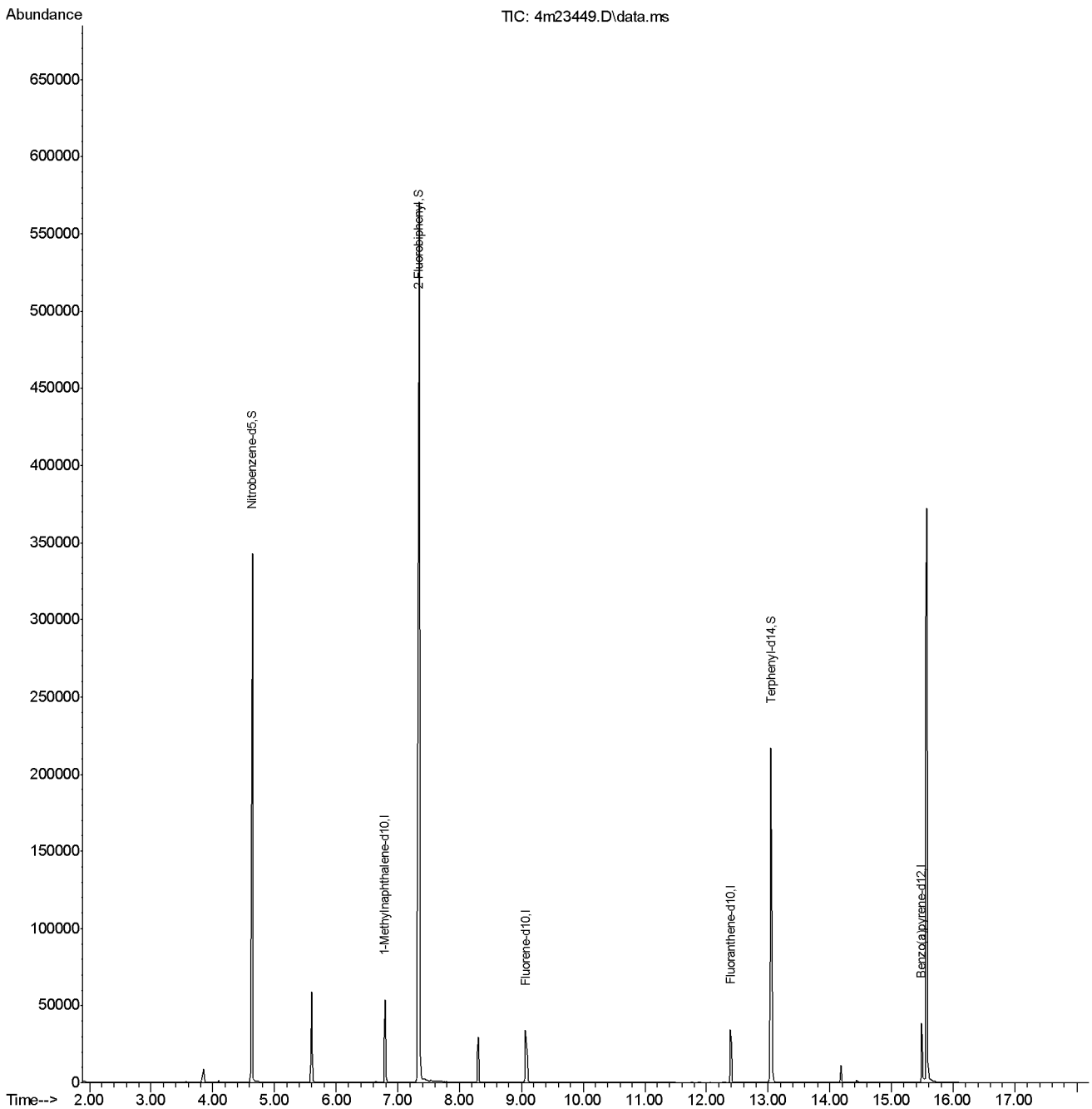
(#) = qualifier out of range (m) = manual integration (+) = signals summed

8.1.19 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23449.D
Acq On : 31 Jan 2011 6:12 pm
Operator : ninap
Sample : ja66701-3
Misc : op47853a,e4m1022,945
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 01 11:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



8.1.19 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23450.D
Acq On : 31 Jan 2011 6:36 pm
Operator : ninap
Sample : ja66701-4
Misc : op47853a,e4m1022,1000
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 01 11:32:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

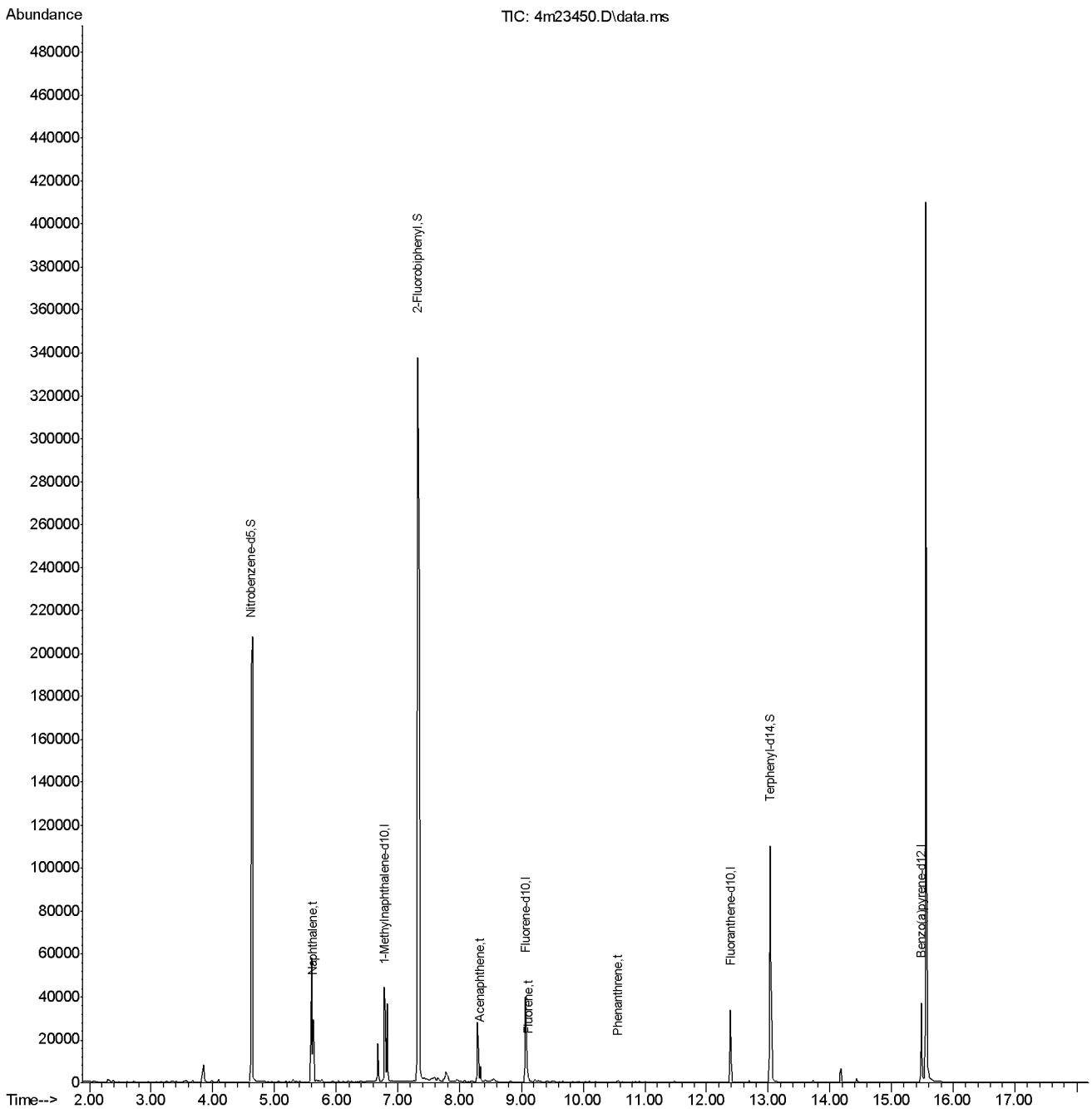
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	6.789	152	28425	4.00	ppb		0.02
12) Fluorene-d10	9.070	174	22466	4.00	ppb		0.00
23) Fluoranthene-d10	12.389	212	35277	4.00	ppb		0.01
30) Benzo(a)pyrene-d12	15.483	264	36614	4.00	ppb		0.01
System Monitoring Compounds							
2) 2-Fluorophenol	0.000	112	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
3) Phenol-d5	0.000	99	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
6) Nitrobenzene-d5	4.618	82	162295	38.91	ppb		0.00
Spiked Amount 50.000			Recovery =	77.82%			
11) 2-Fluorobiphenyl	7.321	172	358629	37.51	ppb		0.00
Spiked Amount 50.000			Recovery =	75.02%			
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
26) Terphenyl-d14	13.029	244	93842	24.70	ppb		0.00
Spiked Amount 50.000			Recovery =	49.40%			
Target Compounds							Qvalue
7) Naphthalene	5.625	128	26954	2.13	ppb		99
14) Acenaphthene	8.328	153	3135	0.33	ppb		91
15) Fluorene	9.117	166	1459	0.20	ppb	#	66
20) Phenanthrene	10.571	178	1167	0.11	ppb		91

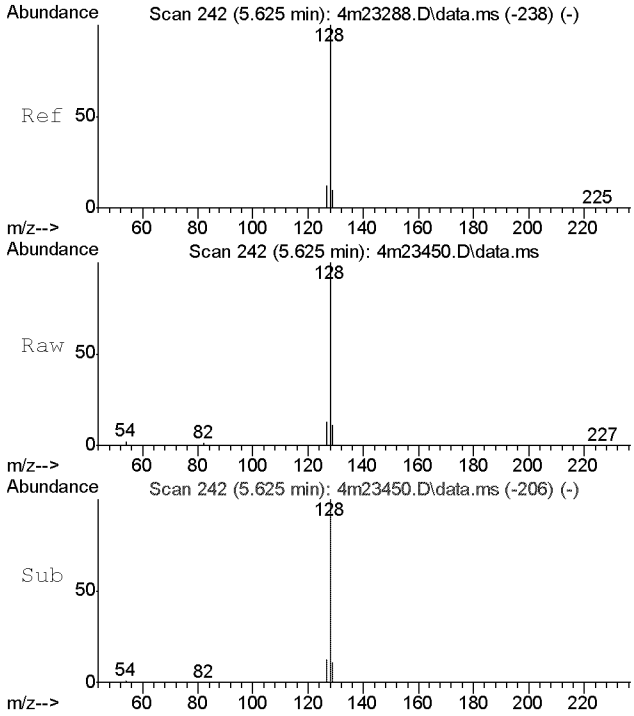
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23450.D
Acq On : 31 Jan 2011 6:36 pm
Operator : ninap
Sample : ja66701-4
Misc : op47853a,e4m1022,1000
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 01 11:32:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

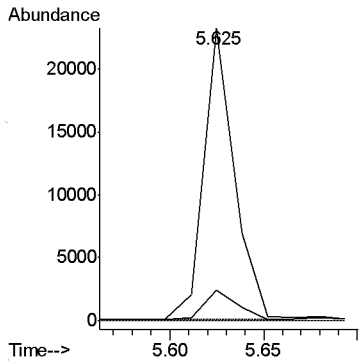


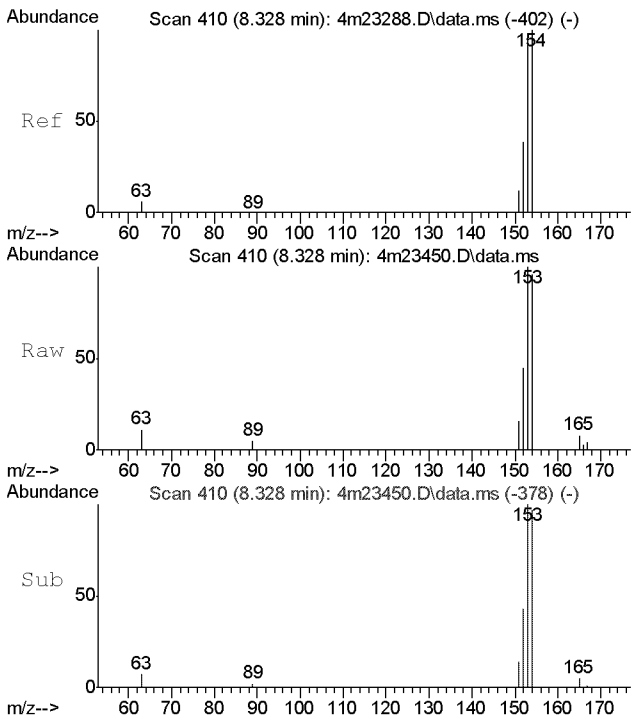


#7
Naphthalene
Concen: 2.13 ppb
RT: 5.625 min Scan# 242
Delta R.T. -0.000 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:128 Resp: 26954

Ion	Ratio	Lower	Upper
128	100		
129	10.1	0.0	40.4
122	0.0	0.0	30.0

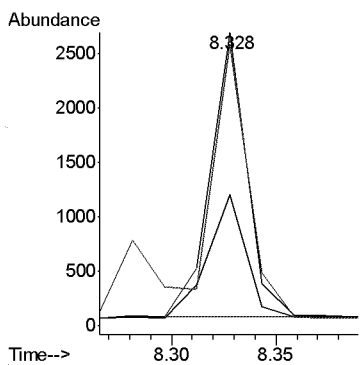


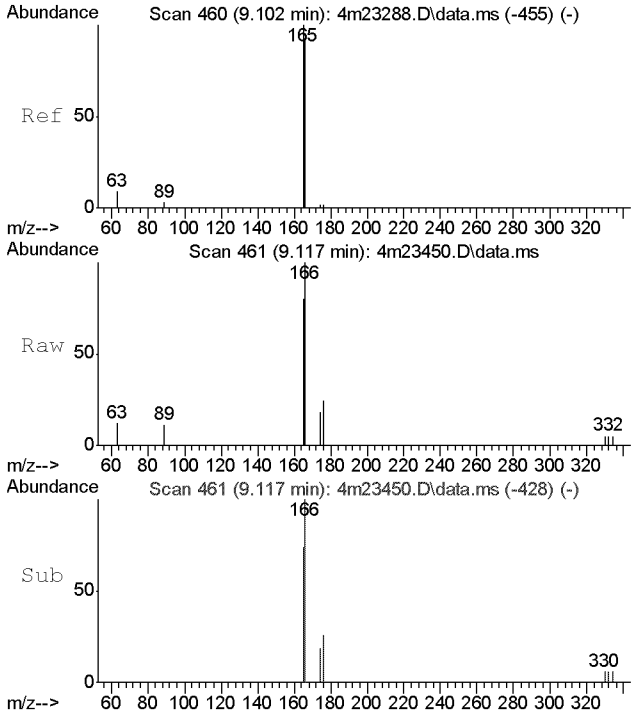


#14
Acenaphthene
Concen: 0.33 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:153 Resp: 3135

Ion	Ratio	Lower	Upper
153	100		
152	43.3	9.6	69.6
154	90.9	71.6	131.6

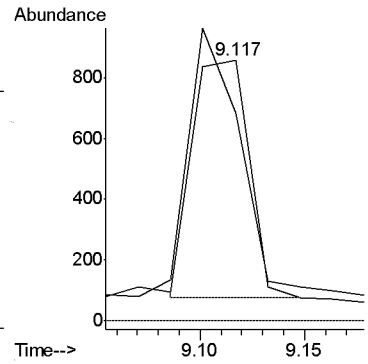


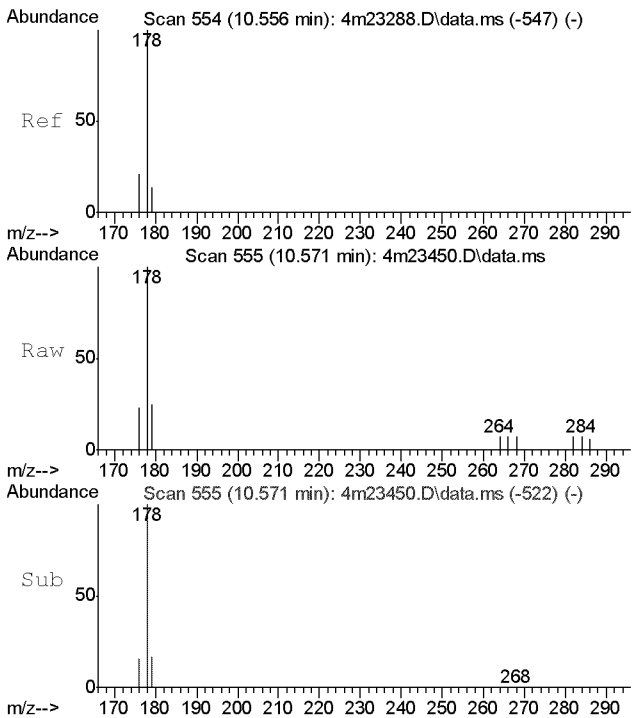


#15
Fluorene
Concen: 0.20 ppb
RT: 9.117 min Scan# 461
Delta R.T. 0.015 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:166 Resp: 1459

Ion	Ratio	Lower	Upper
166	100		
165	72.3	77.3	137.3#
167	0.0	0.0	30.0

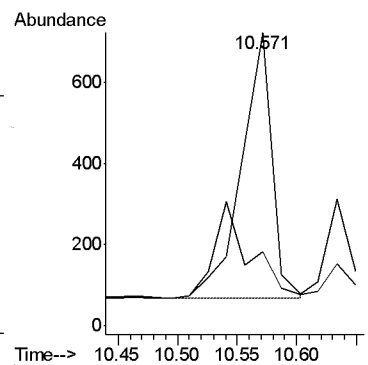




#20
Phenanthrene
Concen: 0.11 ppb
RT: 10.571 min Scan# 555
Delta R.T. 0.015 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:178 Resp: 1167

Ion	Ratio	Lower	Upper
178	100		
179	17.2	0.0	43.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23451.D
Acq On : 31 Jan 2011 6:59 pm
Operator : ninap
Sample : ja66701-5
Misc : op47853a,e4m1022,1000
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 11:33:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

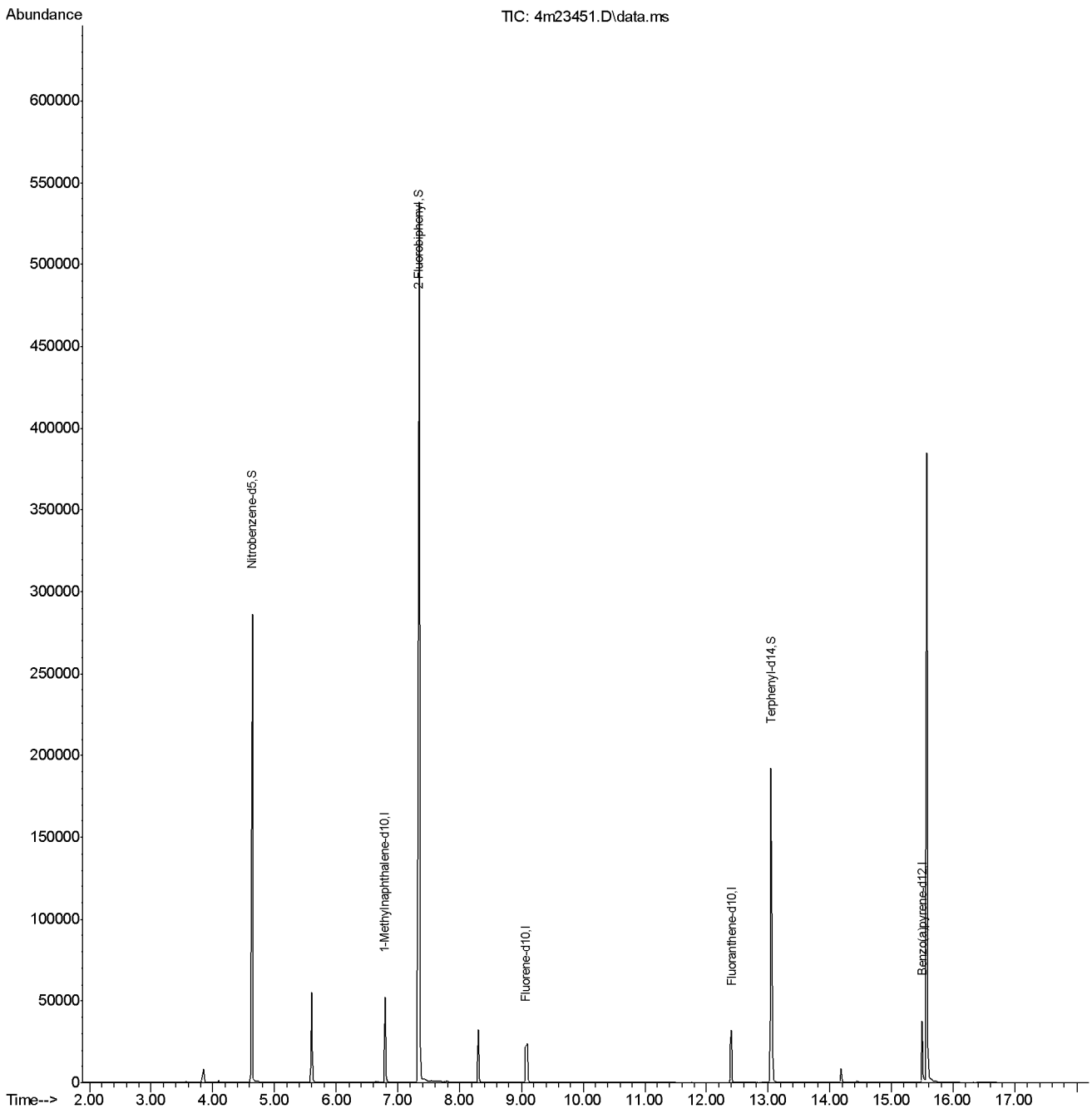
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	27548	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	20087	4.00	ppb	0.00
23) Fluoranthene-d10	12.399	212	33237	4.00	ppb	0.02
30) Benzo(a)pyrene-d12	15.494	264	33846	4.00	ppb	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	181743	44.96	ppb	0.01
Spiked Amount 50.000			Recovery =	89.92%		
11) 2-Fluorobiphenyl	7.338	172	423779	45.74	ppb	0.02
Spiked Amount 50.000			Recovery =	91.48%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	133394	37.27	ppb	0.02
Spiked Amount 50.000			Recovery =	74.54%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23451.D
Acq On : 31 Jan 2011 6:59 pm
Operator : ninap
Sample : ja66701-5
Misc : op47853a,e4m1022,1000
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 11:33:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



M4M1016SIM.M Tue Feb 01 11:33:22 2011 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23452.D
Acq On : 31 Jan 2011 7:24 pm
Operator : ninap
Sample : ja66701-6
Misc : op47853a,e4m1022,1000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 14:59:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

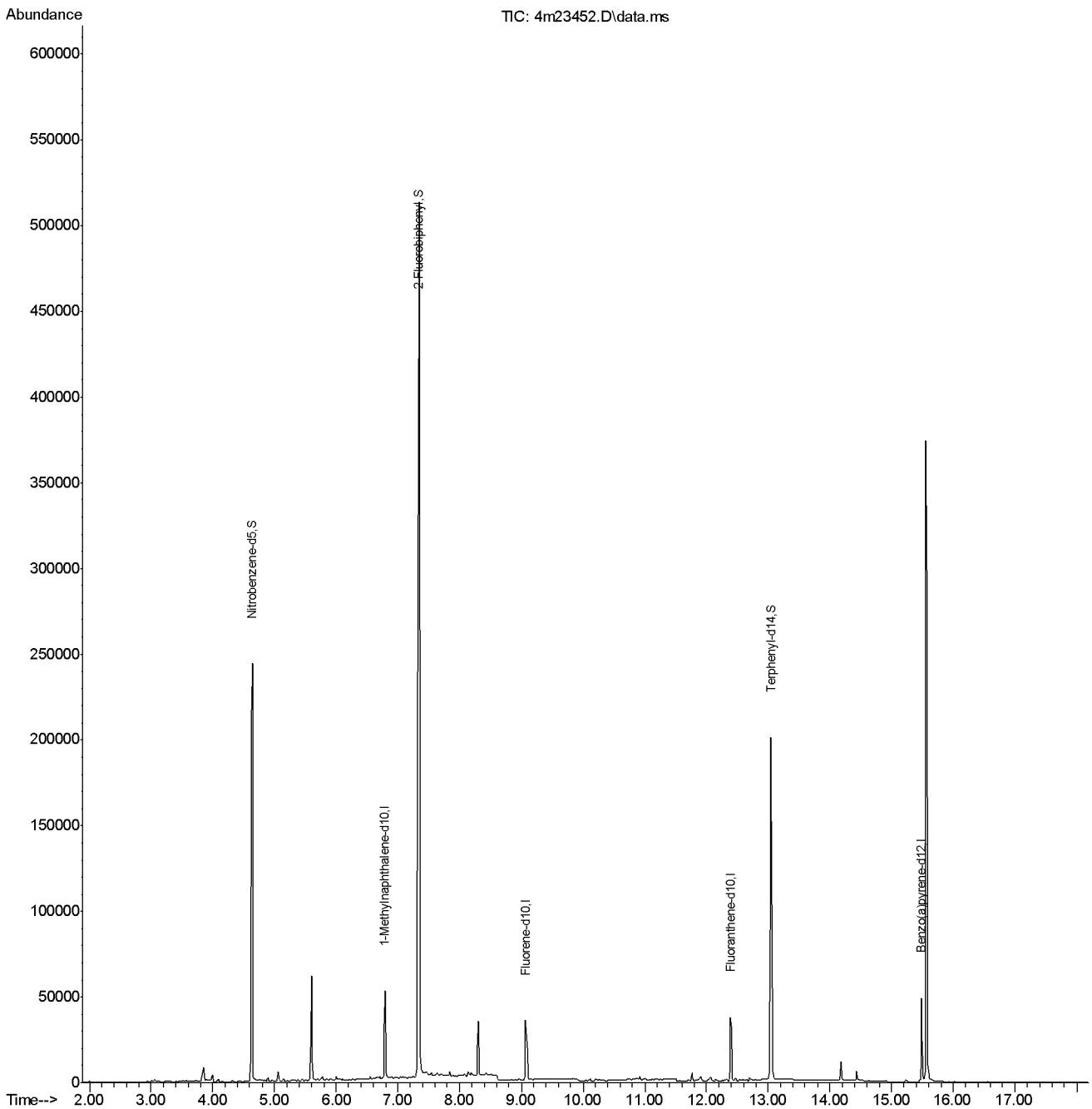
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	31496	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	24176	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	40150	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	42477	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	186190	40.28	ppb	0.01
Spiked Amount 50.000			Recovery =	80.56%		
11) 2-Fluorobiphenyl	7.338	172	465132	43.91	ppb	0.02
Spiked Amount 50.000			Recovery =	87.82%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	161546	37.36	ppb	0.02
Spiked Amount 50.000			Recovery =	74.72%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23452.D
Acq On : 31 Jan 2011 7:24 pm
Operator : ninap
Sample : ja66701-6
Misc : op47853a,e4m1022,1000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 14:59:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23453.D
Acq On : 31 Jan 2011 7:47 pm
Operator : ninap
Sample : ja66701-7
Misc : op47853a,e4m1022,1000
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 01 11:34:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

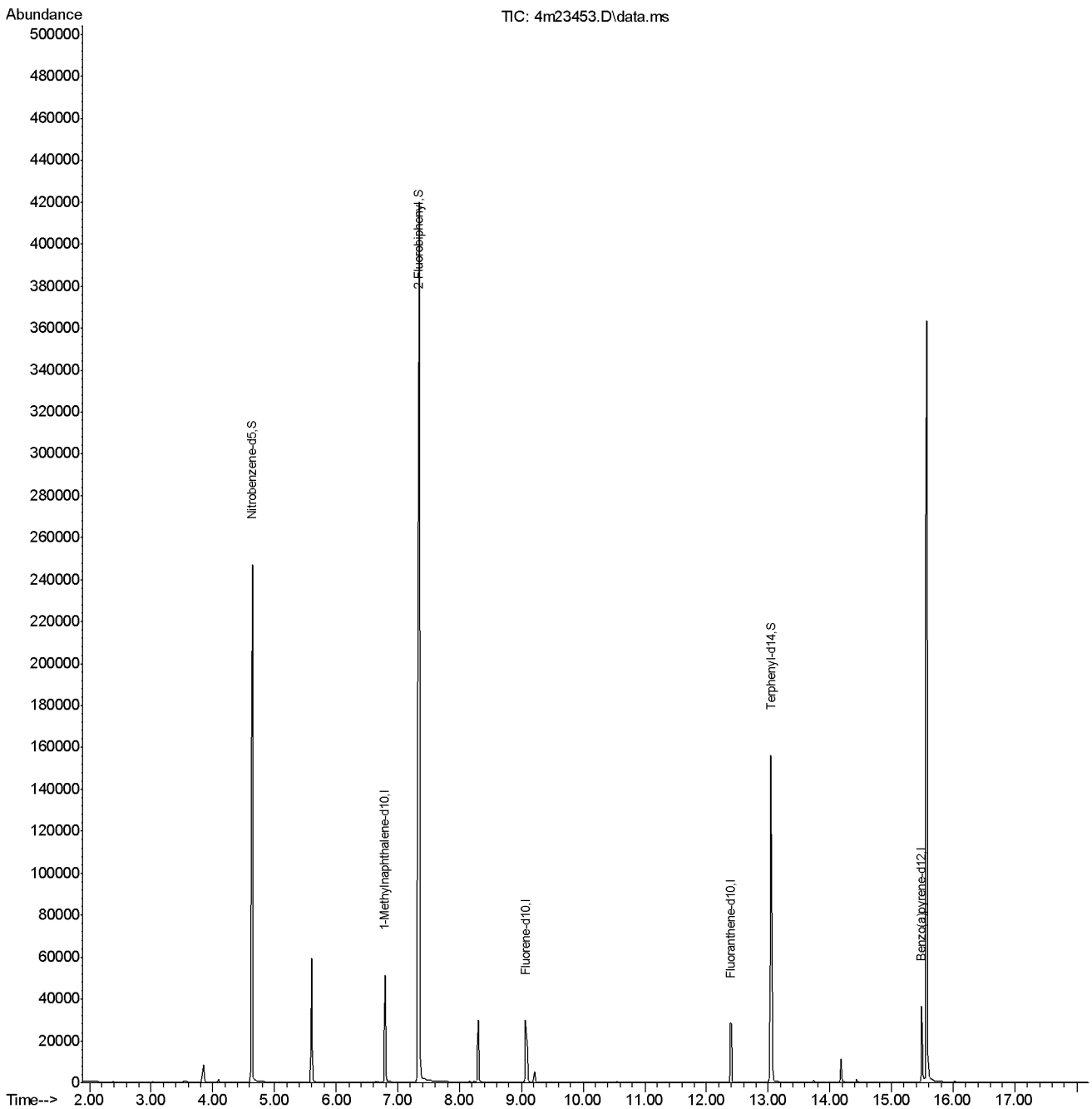
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28797	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	20783	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	33919	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	35715	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	167709	39.68	ppb	0.01
Spiked Amount 50.000			Recovery =	79.36%		
11) 2-Fluorobiphenyl	7.338	172	386355	39.89	ppb	0.02
Spiked Amount 50.000			Recovery =	79.78%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	119147	32.62	ppb	0.02
Spiked Amount 50.000			Recovery =	65.24%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23453.D
Acq On : 31 Jan 2011 7:47 pm
Operator : ninap
Sample : ja66701-7
Misc : op47853a,e4m1022,1000
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 01 11:34:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1023\
Data File : 4m23458.D
Acq On : 1 Feb 2011 9:28 am
Operator : ninap
Sample : ja66701-8
Misc : op47853a,e4m1023,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 10:30:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

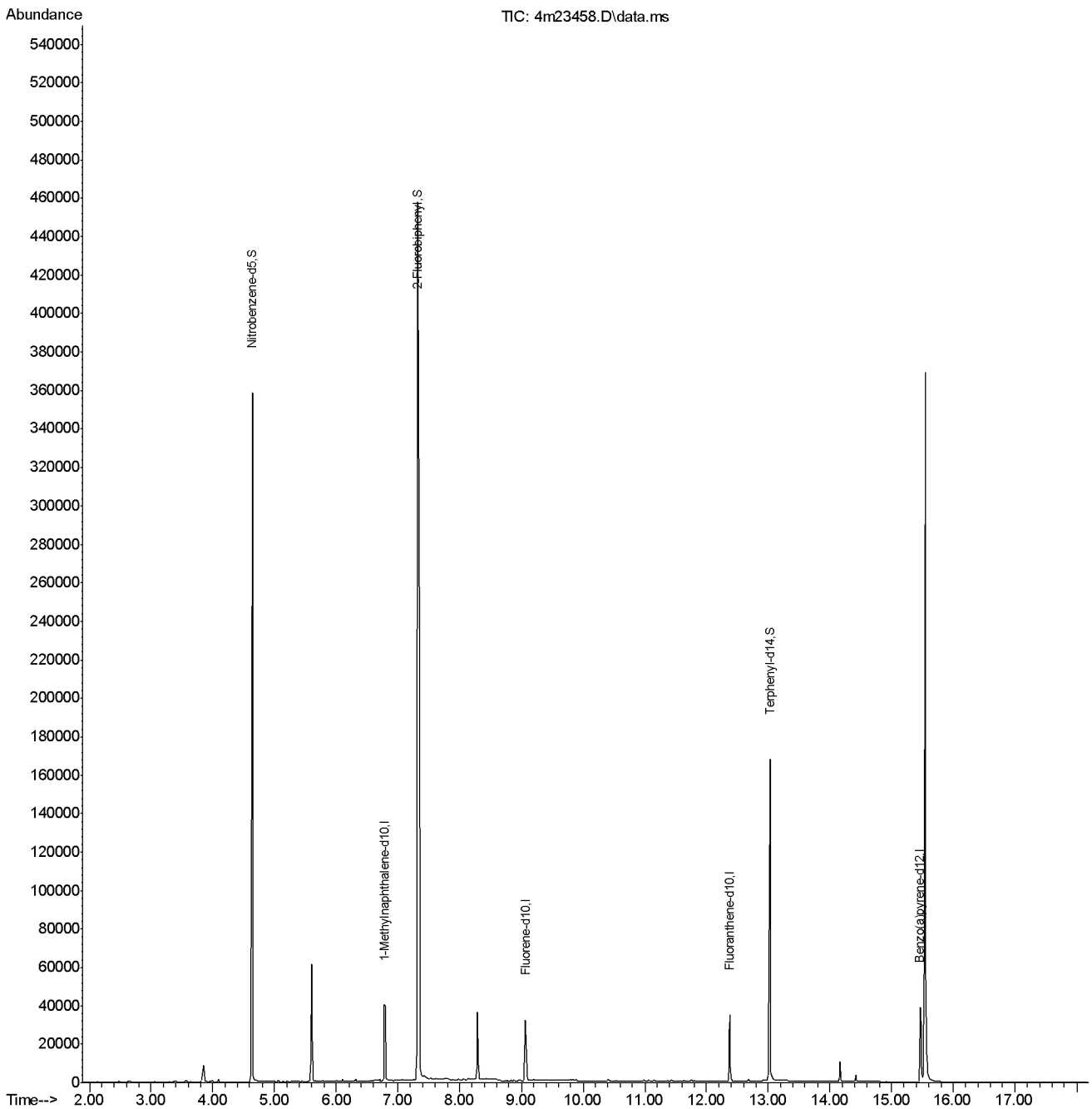
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28614	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	22516	4.00	ppb	0.00
23) Fluoranthene-d10	12.378	212	35856	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.463	264	36758	4.00	ppb	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	206379	49.15	ppb	0.01
Spiked Amount 50.000			Recovery =	98.30%		
11) 2-Fluorobiphenyl	7.321	172	439152	45.63	ppb	0.00
Spiked Amount 50.000			Recovery =	91.26%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	135534	35.10	ppb	0.00
Spiked Amount 50.000			Recovery =	70.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1023\
Data File : 4m23458.D
Acq On : 1 Feb 2011 9:28 am
Operator : ninap
Sample : ja66701-8
Misc : op47853a,e4m1023,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 10:30:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23430.D
Acq On : 31 Jan 2011 10:15 am
Operator : ninap
Sample : op47853a-mb1
Misc : op47853a,e4m1022,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 15:39:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

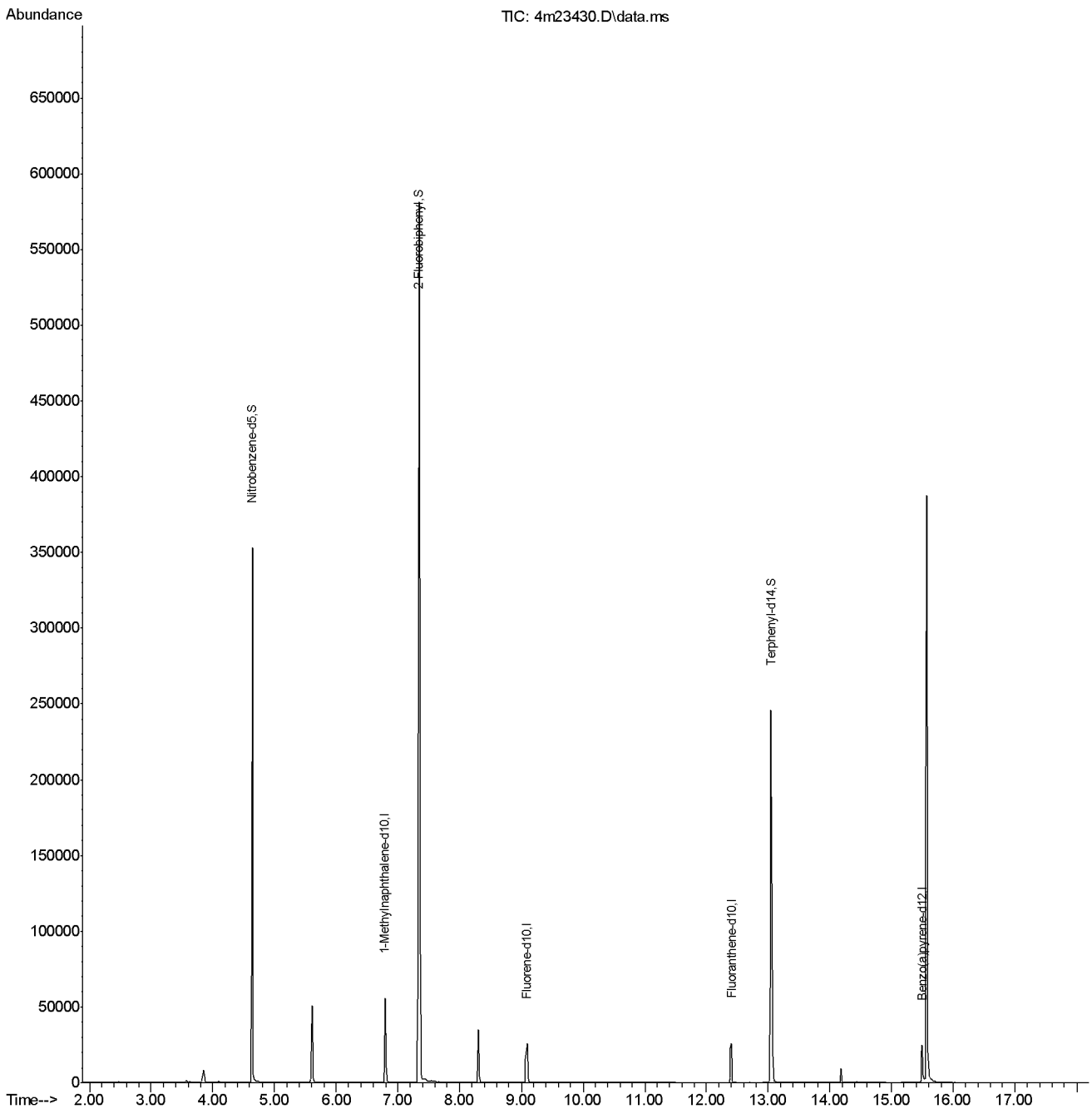
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	26558	4.00	ppb	0.02
12) Fluorene-d10	9.086	174	18655	4.00	ppb	0.02
23) Fluoranthene-d10	12.399	212	30014	4.00	ppb	0.02
30) Benzo(a)pyrene-d12	15.494	264	28495	4.00	ppb	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	198989	51.06	ppb	0.01
Spiked Amount 50.000			Recovery =	102.12%		
11) 2-Fluorobiphenyl	7.338	172	430030	48.15	ppb	0.02
Spiked Amount 50.000			Recovery =	96.30%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	175458	54.28	ppb	0.02
Spiked Amount 50.000			Recovery =	108.56%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23430.D
Acq On : 31 Jan 2011 10:15 am
Operator : ninap
Sample : op47853a-mb1
Misc : op47853a,e4m1022,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 15:39:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:47 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

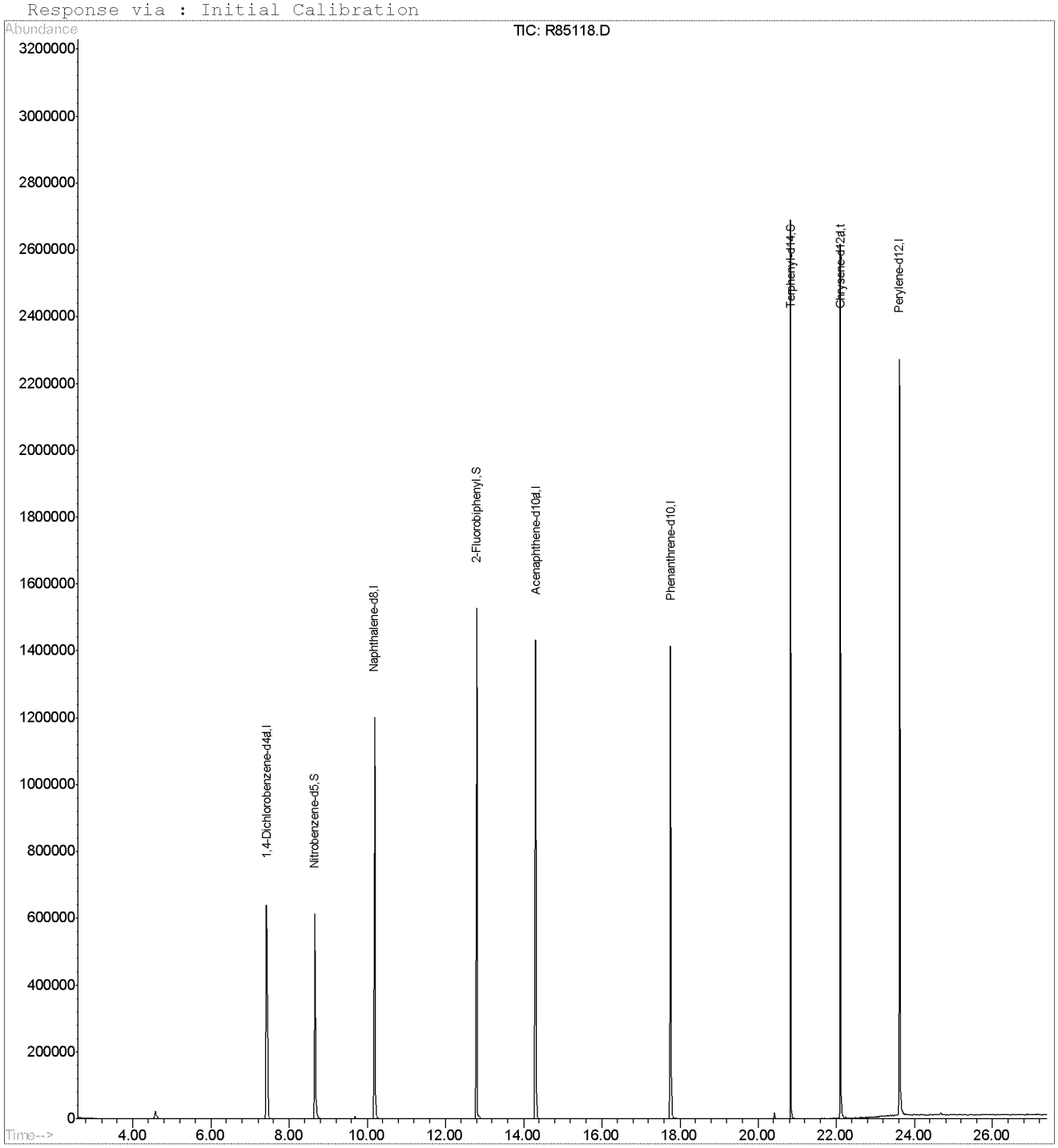
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	265301	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	949334	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	544343	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	888779	40.00	ppb	-0.23
83) Chrysene-d12	22.11	240	1004996	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	996067	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.43	152	265301	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	544343	40.00	ppb	-0.20
107) Chrysene-d12a	22.11	240	1004996	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	377850	43.80	ppb	-0.20
Spiked Amount 50.000			Recovery =	87.60%		
51) 2-Fluorobiphenyl	12.80	172	781761	40.80	ppb	-0.21
Spiked Amount 50.000			Recovery =	81.60%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	869768	45.92	ppb	-0.14
Spiked Amount 50.000			Recovery =	91.84%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85118.D MR3151.M Thu Jan 27 19:47:21 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:47 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA66701

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.671	11	15	18	rVB2	1056	1549	0.05%	0.008%
2	3.440	155	159	164	rBV2	1849	2421	0.08%	0.012%
3	4.081	272	279	283	rVB	1062	2066	0.07%	0.010%
4	4.573	362	371	394	rBV3	24993	87754	2.98%	0.435%
5	7.425	896	905	932	rBB	641796	1477715	50.20%	7.319%
6	8.665	1130	1137	1164	rBV	615063	1091106	37.07%	5.404%
7	8.836	1168	1169	1177	rVB	936	1646	0.06%	0.008%
8	9.690	1323	1329	1334	rBB2	8089	10751	0.37%	0.053%
9	10.187	1414	1422	1448	rBV	1202392	1930830	65.59%	9.563%
10	12.800	1903	1911	1921	rBV	1528660	2238501	76.04%	11.086%
11	12.869	1921	1924	1933	rVV3	8931	16506	0.56%	0.082%
12	12.938	1933	1937	1944	rVV2	1537	3959	0.13%	0.020%
13	12.986	1944	1946	1957	rVB2	1184	1985	0.07%	0.010%
14	14.306	2184	2193	2217	rBV	1433655	2219234	75.39%	10.991%
15	14.440	2217	2218	2226	rVB	1710	1890	0.06%	0.009%
16	17.485	2784	2788	2795	rBB	2084	3491	0.12%	0.017%
17	17.762	2831	2840	2858	rBV2	1413670	2293085	77.90%	11.357%
18	17.885	2858	2863	2873	rVV2	3232	9631	0.33%	0.048%
19	18.067	2894	2897	2901	rVB	1229	1647	0.06%	0.008%
20	19.039	3075	3079	3083	rBV	698	1574	0.05%	0.008%
21	20.423	3330	3338	3343	rVB2	17464	17723	0.60%	0.088%
22	20.834	3407	3415	3439	rBV	2691129	2835500	96.32%	14.043%
23	21.769	3584	3590	3591	rBV2	821	1572	0.05%	0.008%
24	22.106	3647	3653	3674	rBV	2617407	2783217	94.55%	13.784%
25	22.239	3674	3678	3682	rVB	5663	5208	0.18%	0.026%
26	22.485	3720	3724	3727	rBV	2224	2514	0.09%	0.012%
27	22.693	3759	3763	3768	rBV3	2883	3070	0.10%	0.015%
28	22.827	3786	3788	3792	rBV2	1587	1853	0.06%	0.009%
29	23.014	3820	3823	3827	rBV3	2044	2340	0.08%	0.012%
30	23.046	3827	3829	3833	rVV2	1185	1570	0.05%	0.008%
31	23.105	3838	3840	3844	rVV2	1878	2821	0.10%	0.014%
32	23.137	3844	3846	3851	rVV4	1831	2525	0.09%	0.013%
33	23.185	3851	3855	3857	rVV4	1796	2115	0.07%	0.010%
34	23.243	3860	3866	3869	rVV3	2189	3618	0.12%	0.018%
35	23.281	3869	3873	3876	rVV3	2435	3697	0.13%	0.018%
36	23.308	3876	3878	3880	rVV3	2310	2391	0.08%	0.012%
37	23.340	3880	3884	3888	rVV5	2346	4021	0.14%	0.020%
38	23.388	3888	3893	3897	rVV5	2542	4405	0.15%	0.022%

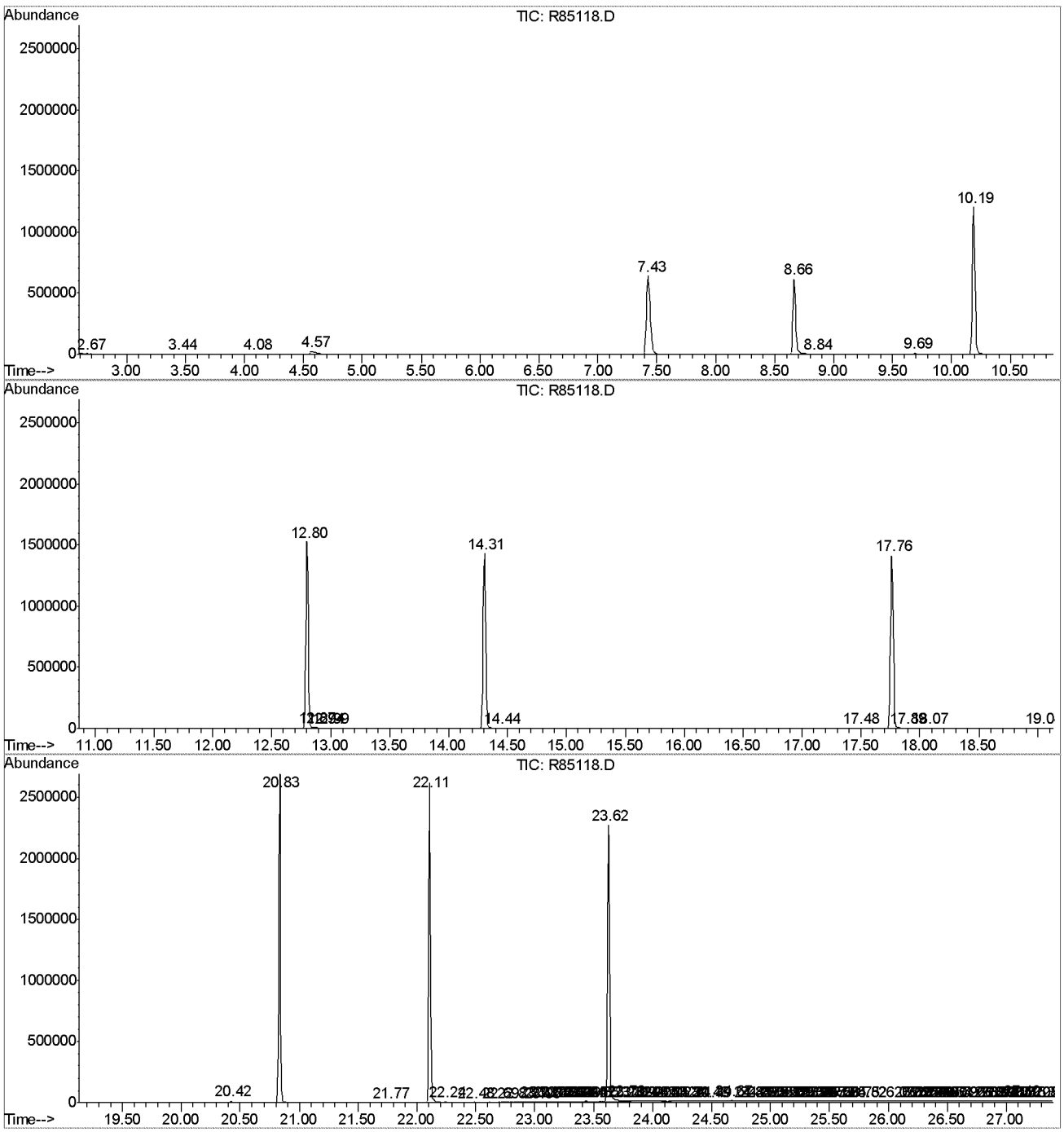
39	23.436	3897	3902	3906	rVV4	3664	6793	0.23%	0.034%
40	23.484	3910	3911	3915	rVV4	2014	2168	0.07%	0.011%
41	23.516	3915	3917	3920	rVV4	2002	2607	0.09%	0.013%
42	23.548	3920	3923	3926	rVV4	2840	3480	0.12%	0.017%
43	23.623	3929	3937	3960	rVV	2263739	2943716	100.00%	14.579%
44	23.762	3960	3963	3968	rVV4	4374	8540	0.29%	0.042%
45	23.810	3968	3972	3973	rVV4	3025	4076	0.14%	0.020%
46	23.820	3973	3974	3980	rVV4	2421	3846	0.13%	0.019%
47	23.922	3985	3993	3995	rBV5	1981	3730	0.13%	0.018%
48	23.959	3995	4000	4001	rBV4	1380	1595	0.05%	0.008%
49	24.050	4016	4017	4023	rBV4	1612	2075	0.07%	0.010%
50	24.103	4023	4027	4031	rVB3	2223	3655	0.12%	0.018%
51	24.146	4031	4035	4037	rBV3	2587	3056	0.10%	0.015%
52	24.226	4049	4050	4055	rVB5	1675	1824	0.06%	0.009%
53	24.264	4055	4057	4059	rBV3	2129	1894	0.06%	0.009%
54	24.301	4062	4064	4067	rVB2	2471	2086	0.07%	0.010%
55	24.477	4092	4097	4099	rBV4	1637	1852	0.06%	0.009%
56	24.493	4099	4100	4106	rBV5	1054	1555	0.05%	0.008%
57	24.670	4127	4133	4140	rBV4	6269	10958	0.37%	0.054%
58	24.835	4163	4164	4170	rBV3	2592	2923	0.10%	0.014%
59	24.889	4170	4174	4175	rBV2	1485	1591	0.05%	0.008%
60	24.953	4183	4186	4189	rBV4	2337	2229	0.08%	0.011%
61	25.017	4196	4198	4200	rBV2	2073	2055	0.07%	0.010%
62	25.049	4202	4204	4207	rVV3	2061	2347	0.08%	0.012%
63	25.081	4207	4210	4214	rVB3	2620	2482	0.08%	0.012%
64	25.145	4219	4222	4225	rVV3	2139	2714	0.09%	0.013%
65	25.193	4228	4231	4235	rVV5	2284	2610	0.09%	0.013%
66	25.305	4246	4252	4255	rVV6	2376	2993	0.10%	0.015%
67	25.338	4257	4258	4262	rVB4	2038	2281	0.08%	0.011%
68	25.370	4262	4264	4266	rBV3	1991	1791	0.06%	0.009%
69	25.386	4266	4267	4270	rVB3	2415	1563	0.05%	0.008%
70	25.407	4270	4271	4276	rBV3	1291	1596	0.05%	0.008%
71	25.466	4279	4282	4288	rVV5	1181	1747	0.06%	0.009%
72	25.530	4292	4294	4297	rVB3	1991	1919	0.07%	0.010%
73	25.573	4297	4302	4303	rBV3	1987	2741	0.09%	0.014%
74	25.583	4303	4304	4310	rVB2	2259	2582	0.09%	0.013%
75	25.637	4310	4314	4319	rBV5	1936	3911	0.13%	0.019%
76	25.754	4331	4336	4338	rVB4	1051	1668	0.06%	0.008%
77	25.818	4346	4348	4354	rVB4	2086	2091	0.07%	0.010%
78	26.053	4389	4392	4394	rVB3	1996	1626	0.06%	0.008%
79	26.192	4417	4418	4421	rBV3	1800	1670	0.06%	0.008%
80	26.256	4426	4430	4432	rVV3	1837	2257	0.08%	0.011%
81	26.294	4434	4437	4439	rVV4	2098	2640	0.09%	0.013%
82	26.342	4443	4446	4450	rVV4	2151	3306	0.11%	0.016%
83	26.385	4450	4454	4457	rVV5	2941	4274	0.15%	0.021%
84	26.422	4459	4461	4464	rVB3	2798	2238	0.08%	0.011%
85	26.465	4467	4469	4471	rVV3	1707	1731	0.06%	0.009%
86	26.497	4472	4475	4479	rVV4	1850	3326	0.11%	0.016%
87	26.540	4479	4483	4485	rVV4	2197	3085	0.10%	0.015%
88	26.588	4485	4492	4494	rVB6	2785	4278	0.15%	0.021%
89	26.828	4535	4537	4540	rBV3	2405	2115	0.07%	0.010%
90	26.871	4543	4545	4548	rBV3	1761	1692	0.06%	0.008%
91	26.897	4548	4550	4553	rVV3	2445	1811	0.06%	0.009%
92	26.924	4553	4555	4561	rVB4	1489	1924	0.07%	0.010%
93	26.978	4561	4565	4569	rBV3	2237	3063	0.10%	0.015%
94	27.047	4574	4578	4580	rVB4	1806	1917	0.07%	0.009%
95	27.079	4580	4584	4586	rVB5	2047	2434	0.08%	0.012%

96	27.122	4588	4592	4594	rBV4	3508	3369	0.11%	0.017%
97	27.165	4598	4600	4604	rVB2	3191	2828	0.10%	0.014%
98	27.202	4604	4607	4609	rBV3	2105	2351	0.08%	0.012%
99	27.277	4618	4621	4623	rVB3	2192	2241	0.08%	0.011%
100	27.309	4623	4627	4630	rBV6	2438	2477	0.08%	0.012%

Sum of corrected areas: 20191494

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85118.D
Operator : ninap
Acquired : 27 Jan 2011 12:39 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: op47853-mb1
Misc Info : op47853,er3223,1000
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



ACCUTEST LABORATORIES
JA66701

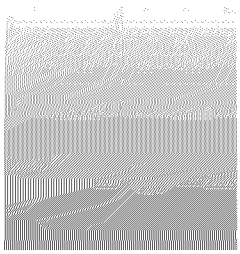
Tentatively Identified Compound (LSC) summary

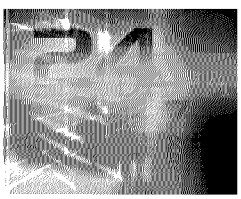
Operator ID: ninap Date Acquired: 27 Jan 2011 12:39 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85118.D
Name: op47853-mb1
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

New Jersey
ACCUTEST
LABORATORIES

03/04/11





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

NP000603.0009

Accutest Job Number: JA68506

Sampling Dates: 02/17/11 - 02/18/11

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **395**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA68506-1	02/17/11	12:05	FSF	02/18/11	AQ	Ground Water	CG
JA68506-2	02/17/11	13:45	FSF	02/18/11	AQ	Ground Water	CD
JA68506-3	02/17/11	13:50	FSF	02/18/11	AQ	Ground Water	CD-DUP
JA68506-4	02/17/11	14:55	FSF	02/18/11	AQ	Ground Water	CE
JA68506-5	02/17/11	15:25	FSF	02/18/11	AQ	Field Blank Water	FB-02172011
JA68506-6	02/18/11	10:40	FSF	02/18/11	AQ	Ground Water	CC
JA68506-7	02/18/11	11:30	FSF	02/18/11	AQ	Ground Water	CF
JA68506-8	02/18/11	11:45	FSF	02/18/11	AQ	Field Blank Water	FB-02182011
JA68506-9	02/18/11	11:45	FSF	02/18/11	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA68506
Site:	PSEG-Diesel, Salem, NJ	**Report Date**	3/4/2011 5:34:33 PM

On 02/18/2011, 6 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.6 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA68506 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V2B3591

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68307-4MS, JA68307-4MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V2C3633

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68481-8MS, JA68481-8MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V2C3637

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA68506-4MS, JA68506-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP48193

- All samples were extracted within the recommended method holding time.
- Sample(s) JA68506-1MS, JA68506-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 4-Bromophenyl phenyl ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Carbazole, Di-n-butyl phthalate, Dimethyl phthalate are outside control limits. Outside of in house control limits.
- RPD(s) for MS/MSD for 1,1'-Biphenyl, 1,2,4,5-Tetrachlorobenzene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Methylnaphthalene, 2-Nitroaniline, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Bromophenyl phenyl ether, 4-Chloroaniline, 4-Chlorophenyl phenyl ether, 4-Nitroaniline, Acetophenone, Atrazine, Benzaldehyde, bis(2-Chloroethoxy)methane, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Caprolactam, Carbazole, Di-n-butyl phthalate, Di-n-octyl phthalate, Dibenzofuran, Diethyl phthalate, Dimethyl phthalate, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Isophorone, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Nitrobenzene are outside control limits for sample OP48193-MSD. Analytical precision exceeds standard laboratory control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP48193A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68506-1MS, JA68506-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Fluoranthene, Fluorene, Hexachlorobenzene, Phenanthrene, Pyrene are outside control limits. Outside of in house control limits.
- RPD(s) for MS/MSD for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Hexachlorobenzene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits for sample OP48193A-MSD. Analytical precision exceeds standard laboratory control limits.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

New Jersey ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B80129.D	1	02/23/11	DR	n/a	n/a	V2B3591
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	0.34	1.0	0.23	ug/l	J
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		76-120%
17060-07-0	1,2-Dichloroethane-D4	102%		64-135%
2037-26-5	Toluene-D8	99%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		25-112%
321-60-8	2-Fluorobiphenyl	69%		31-106%
1718-51-0	Terphenyl-d14	45%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4.1	ug/l	J
	Internal standard added for SIM test	5.03	4.9	ug/l	J
	Internal standard added for SIM test	10.14	4.7	ug/l	J
	unknown	11.15	4.7	ug/l	J
	Internal standard added for SIM test	13.22	4.8	ug/l	J
	Internal standard added for SIM test	16.24	4.5	ug/l	J
	Total TIC, Semi-Volatile		4.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23778.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	0.442	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		32-135%
321-60-8	2-Fluorobiphenyl	76%		31-121%
1718-51-0	Terphenyl-d14	69%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B80130.D	1	02/23/11	DR	n/a	n/a	V2B3591
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	2.2	5.0	0.92	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	101%		76-117%
460-00-4	4-Bromofluorobenzene	98%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	cycloalkane/alkene	18.77	7.7	ug/l	J
	Naphthalene methyl	20.77	6.6	ug/l	J
	Total TIC, Volatile		14.3	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54992.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		25-112%
321-60-8	2-Fluorobiphenyl	72%		31-106%
1718-51-0	Terphenyl-d14	36%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.86	5	ug/l	J
	Internal standard added for SIM test	5.03	5	ug/l	J
	1H-Inden-1-one, -dihydro-	7.51	12	ug/l	J
	Phenol, -tert-butyl-	7.54	9.7	ug/l	J
	Internal standard added for SIM test	7.78	4.7	ug/l	J
	unknown	8.98	10	ug/l	J
	unknown	10.03	4.7	ug/l	J
	Internal standard added for SIM test	10.14	5.7	ug/l	J
	unknown	10.66	4	ug/l	J
	unknown	10.95	6.3	ug/l	J
	unknown	12.38	6.9	ug/l	J
	unknown	12.40	10	ug/l	J
	Internal standard added for SIM test	13.22	5.3	ug/l	J
	Internal standard added for SIM test	16.24	4.7	ug/l	J
	Total TIC, Semi-Volatile		68.6	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23779.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.223	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	0.287	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		32-135%
321-60-8	2-Fluorobiphenyl	88%		31-121%
1718-51-0	Terphenyl-d14	58%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79682.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.6	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	4.1	5.0	0.92	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	18.43	5.4	ug/l	J
	Naphthalene, tetrahydro-	18.68	5.7	ug/l	J
91-20-3	Naphthalene	19.22	5.5	ug/l	JN
	Total TIC, Volatile		16.6	ug/l	J

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54993.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	79%		31-106%
1718-51-0	Terphenyl-d14	38%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.86	5.4	ug/l	J
	Internal standard added for SIM test	5.03	4.7	ug/l	J
	unknown	5.43	4.2	ug/l	J
	1H-Inden-1-one, -dihydro-	7.51	13	ug/l	J
	Phenol, -tert-butyl-	7.55	9.8	ug/l	J
	unknown	8.98	13	ug/l	J
	unknown	10.03	4.3	ug/l	J
	Internal standard added for SIM test	10.14	5.8	ug/l	J
	unknown	10.66	6.9	ug/l	J
	unknown	10.96	7.7	ug/l	J
	unknown	12.38	6.7	ug/l	J
	unknown	12.40	9.6	ug/l	J
	unknown	12.68	4.2	ug/l	J
	Internal standard added for SIM test	13.22	4.5	ug/l	J
	Internal standard added for SIM test	16.24	4.2	ug/l	J
	Total TIC, Semi-Volatile		84.8	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23780.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.229	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	0.258	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	102%		32-135%
321-60-8	2-Fluorobiphenyl	98%		31-121%
1718-51-0	Terphenyl-d14	60%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: CE
Lab Sample ID: JA68506-4
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: PSEG-Diesel, Salem, NJ

Date Sampled: 02/17/11
Date Received: 02/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.6	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54994.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	75%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	5.5	ug/l	J
	Internal standard added for SIM test	5.03	4.1	ug/l	J
	Internal standard added for SIM test	10.14	4.6	ug/l	J
	Internal standard added for SIM test	13.22	4.4	ug/l	J
	Internal standard added for SIM test	16.24	4.4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23781.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	103%		32-135%
321-60-8	2-Fluorobiphenyl	100%		31-121%
1718-51-0	Terphenyl-d14	105%		10-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79594.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54984.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	64%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4	ug/l	J
	Internal standard added for SIM test	5.03	4.2	ug/l	J
	Internal standard added for SIM test	13.22	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23782.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	105%		32-135%
321-60-8	2-Fluorobiphenyl	106%		31-121%
1718-51-0	Terphenyl-d14	105%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79681.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	25.0	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54995.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	64%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	13.22	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23783.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.281	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		32-135%
321-60-8	2-Fluorobiphenyl	108%		31-121%
1718-51-0	Terphenyl-d14	99%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79680.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	105%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54996.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	66%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.03	4.1	ug/l	J
	Internal standard added for SIM test	10.14	4.5	ug/l	J
	Internal standard added for SIM test	13.22	4.7	ug/l	J
	Internal standard added for SIM test	16.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23796.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	97%		32-135%
321-60-8	2-Fluorobiphenyl	107%		31-121%
1718-51-0	Terphenyl-d14	98%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79595.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54985.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	86%		31-106%
1718-51-0	Terphenyl-d14	65%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4.2	ug/l	J
	Internal standard added for SIM test	10.14	4.3	ug/l	J
	Internal standard added for SIM test	13.22	4.5	ug/l	J
	Internal standard added for SIM test	16.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23785.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		32-135%
321-60-8	2-Fluorobiphenyl	114%		31-121%
1718-51-0	Terphenyl-d14	99%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA68506-9	**Date Sampled:**	02/18/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79596.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA68506-9	**Date Sampled:**	02/18/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

PAGE ___ OF ___

FED-EX Tracking #: | Bottle Order Control #:
Acutest Quote #: | Acutest Job #: JA68506

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 FRIENDS LN
City: NEWTOWN State: PA Zip: 18940
Project Contact: Jon Shafer E-mail:
Phone #: 267-685-1800 Fax #: 267-685-1201
Sampler(s) Name(s): Frank Straker Phone #:

Project Information

Project Name: PSEG - DIESEL
Street:
City: SALEM State: NJ
Project #: NP000603.0009
Client Purchase Order #:
Project Manager: BRAD PIERCE

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

8260B (VOC) | 8270C (SVOC)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Acutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	CG		2-17-11	1205	FS	GW	5	3				2				EX 9,
2	CD			1345												2274
3	CD-DUP			1350												
4	CE			1455												
5	FB-02172011			1525		AQ	4	2								
6	CC		2-18-11	1040			5	3				2				
7	CF			1130			5	3				2				
8	FB-02182011			1145		AQ	4	2				2				
9	TRIP BLANK		2-16-11	0800		AQ	2	2								

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Leblink

Approved By (Acutest PM) / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		2-18-11 1525	1	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [X] Cooler Temp: 4.6, 3.0C

1A

4.1.4

JA68506: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA68506 Client: Immediate Client Services Action Required: No

Date / Time Received: 2/18/2011 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA68506: Chain of Custody
Page 2 of 3

Job Change Order: JA68506_2/24/2011

Requested Date:	2/24/2011	**Received Date:**	2/18/2011
Account Name:	Arcadis	**Due Date:**	3/11/2011
Project Description:	PSEG-Diesel, Salem, NJ	**Deliverable:**	REDT2
CSR:	MM	**TAT (Days):**	13

Sample #:
JA68506-all

Change: Please change the TAT to 13 days; due 3/3/11.

Above Changes Per: Jonathan Shafer **Date:** 2/24/2011

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

JA68506: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA68506-1	Collected: 17-FEB-11 12:05 By: FSF		Received: 18-FEB-11 By: MPC			
CG						
JA68506-1	SW846 8270C BY SIM	22-FEB-11 10:05	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-1	SW846 8270C	22-FEB-11 12:26	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-1	SW846 8260B	23-FEB-11 12:40	DR			V8260NJPTCL11+
JA68506-2	Collected: 17-FEB-11 13:45 By: FSF		Received: 18-FEB-11 By: MPC			
CD						
JA68506-2	SW846 8270C BY SIM	22-FEB-11 10:29	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-2	SW846 8270C	22-FEB-11 13:52	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-2	SW846 8260B	23-FEB-11 13:11	DR			V8260NJPTCL11+
JA68506-3	Collected: 17-FEB-11 13:50 By: FSF		Received: 18-FEB-11 By: MPC			
CD-DUP						
JA68506-3	SW846 8270C BY SIM	22-FEB-11 10:53	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-3	SW846 8270C	22-FEB-11 14:21	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-3	SW846 8260B	28-FEB-11 14:42	DR			V8260NJPTCL11+
JA68506-4	Collected: 17-FEB-11 14:55 By: FSF		Received: 18-FEB-11 By: MPC			
CE						
JA68506-4	SW846 8270C BY SIM	22-FEB-11 11:17	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-4	SW846 8270C	22-FEB-11 14:50	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-4	SW846 8260B	28-FEB-11 13:09	DR			V8260NJPTCL11+
JA68506-5	Collected: 17-FEB-11 15:25 By: FSF		Received: 18-FEB-11 By: MPC			
FB-02172011						
JA68506-5	SW846 8270C	22-FEB-11 10:04	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-5	SW846 8270C BY SIM	22-FEB-11 11:40	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-5	SW846 8260B	24-FEB-11 19:32	DR			V8260NJPTCL11+
JA68506-6	Collected: 18-FEB-11 10:40 By: FSF		Received: 18-FEB-11 By: MPC			
CC						
JA68506-6	SW846 8270C BY SIM	22-FEB-11 12:04	NAP	21-FEB-11		B8270SIMNJ
JA68506-6	SW846 8270C	22-FEB-11 15:19	NAP	21-FEB-11	HQ	B8270NJTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA68506-6	SW846 8260B	28-FEB-11 14:11	DR			V8260NJPTCL11+
JA68506-7	Collected: 18-FEB-11 11:30 By: FSF		Received: 18-FEB-11 By: MPC			
CF						
JA68506-7	SW846 8270C	22-FEB-11 15:47	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-7	SW846 8270C BY SIM	22-FEB-11 17:18	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-7	SW846 8260B	28-FEB-11 13:40	DR			V8260NJPTCL11+
JA68506-8	Collected: 18-FEB-11 11:45 By: FSF		Received: 18-FEB-11 By: MPC			
FB-02182011						
JA68506-8	SW846 8270C	22-FEB-11 10:32	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-8	SW846 8270C BY SIM	22-FEB-11 12:52	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-8	SW846 8260B	24-FEB-11 20:02	DR			V8260NJPTCL11+
JA68506-9	Collected: 18-FEB-11 11:45 By: FSF		Received: 18-FEB-11 By: MPC			
TRIP BLANK						
JA68506-9	SW846 8260B	24-FEB-11 20:33	DR			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-1.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-1.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-1.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-1.1
JA68506-1.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-1.1
JA68506-1.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-1.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-1.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-1.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-1.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-1.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-1.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-1.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-1.2
JA68506-1.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-1.2
JA68506-1.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-1.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-1.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-1.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-1.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-1.3	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-1.3	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-1.3	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-1.3	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-1.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-1.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-1.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-1.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-1.4	Secured Storage	Dezaree Reis	02/23/11 15:54	Retrieve from Storage
JA68506-1.4	Dezaree Reis	GCMS2B	02/23/11 15:54	Load on Instrument
JA68506-1.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-1.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-2.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-2.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-2.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-2.1
JA68506-2.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-2.1
JA68506-2.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-2.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-2.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-2.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-2.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-2.3	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-2.3	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-2.3	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-2.3	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-2.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-2.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-2.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-2.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-2.4	Secured Storage	Dezaree Reis	02/23/11 15:54	Retrieve from Storage
JA68506-2.4	Dezaree Reis	GCMS2B	02/23/11 15:54	Load on Instrument
JA68506-2.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-2.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-3.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-3.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-3.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-3.1
JA68506-3.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-3.1
JA68506-3.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-3.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-3.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-3.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-3.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-3.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-3.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-3.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-3.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-3.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-3.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-3.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-3.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-4.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-4.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-4.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-4.1
JA68506-4.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-4.1
JA68506-4.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-4.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-4.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-4.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-4.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-4.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-4.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-4.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-4.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-4.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-4.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-4.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-4.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-5.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-5.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-5.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-5.2
JA68506-5.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-5.2
JA68506-5.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-5.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-5.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-5.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-5.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-5.3	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-5.3	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-5.3	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-5.3	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage
JA68506-5.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-5.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-5.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-5.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-6.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-6.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-6.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-6.2
JA68506-6.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-6.2
JA68506-6.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-6.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-6.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-6.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-6.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-6.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-6.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-6.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-6.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-6.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-6.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-6.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-6.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-7.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-7.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-7.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-7.2
JA68506-7.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-7.2
JA68506-7.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-7.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-7.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-7.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-7.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-7.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-7.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-7.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-7.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-7.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-7.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-7.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-7.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-7.4	Secured Storage	Dezaree Reis	02/23/11 16:01	Retrieve from Storage
JA68506-7.4	Dezaree Reis	GCMS2B	02/23/11 16:04	Load on Instrument
JA68506-7.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-7.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-8.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-8.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-8.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-8.1
JA68506-8.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-8.1
JA68506-8.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-8.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-8.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-8.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-8.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-8.3	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-8.3	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-8.3	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-8.3	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage
JA68506-8.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-8.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-8.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-8.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-9.1	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-9.1	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-9.1	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-9.1	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-9.2	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-9.2	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-9.2	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-9.2	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-MB	2B80126.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-MB	2B80126.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	100%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-MB	2C79580.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-MB	2C79580.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	89%	64-135%
2037-26-5	Toluene-D8	106%	76-117%
460-00-4	4-Bromofluorobenzene	108%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-MB	2C79674.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-MB	2C79674.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	101%	64-135%
2037-26-5	Toluene-D8	112%	76-117%
460-00-4	4-Bromofluorobenzene	109%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-BS	2B80127.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.8	96	51-151
71-43-2	Benzene	50	45.9	92	75-122
74-97-5	Bromochloromethane	50	48.9	98	78-124
75-27-4	Bromodichloromethane	50	52.3	105	77-128
75-25-2	Bromoform	50	50.1	100	67-141
74-83-9	Bromomethane	50	42.2	84	53-152
78-93-3	2-Butanone (MEK)	50	45.7	91	64-130
75-15-0	Carbon disulfide	50	44.7	89	59-140
56-23-5	Carbon tetrachloride	50	52.4	105	75-148
108-90-7	Chlorobenzene	50	49.5	99	76-124
75-00-3	Chloroethane	50	38.9	78	54-147
67-66-3	Chloroform	50	50.4	101	77-124
74-87-3	Chloromethane	50	31.8	64	46-144
110-82-7	Cyclohexane	50	45.8	92	62-127
124-48-1	Dibromochloromethane	50	50.1	100	76-132
95-50-1	1,2-Dichlorobenzene	50	49.7	99	74-125
541-73-1	1,3-Dichlorobenzene	50	49.3	99	73-124
106-46-7	1,4-Dichlorobenzene	50	48.3	97	71-123
75-71-8	Dichlorodifluoromethane	50	29.9	60	42-152
75-34-3	1,1-Dichloroethane	50	47.5	95	72-124
107-06-2	1,2-Dichloroethane	50	55.5	111	66-150
75-35-4	1,1-Dichloroethene	50	46.6	93	61-132
156-59-2	cis-1,2-Dichloroethene	50	51.9	104	71-119
156-60-5	trans-1,2-Dichloroethene	50	41.1	82	71-123
78-87-5	1,2-Dichloropropane	50	46.2	92	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	52.8	106	75-132
100-41-4	Ethylbenzene	50	48.1	96	77-124
76-13-1	Freon 113	50	57.8	116	58-149
591-78-6	2-Hexanone	50	49.8	100	58-136
98-82-8	Isopropylbenzene	50	51.6	103	60-136
79-20-9	Methyl Acetate	50	41.2	82	57-139
108-87-2	Methylcyclohexane	50	54.8	110	73-130
1634-04-4	Methyl Tert Butyl Ether	100	97.6	98	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	46.6	93	63-135
75-09-2	Methylene chloride	50	45.2	90	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-BS	2B80127.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	48.3	97	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	46.6	93	66-125
127-18-4	Tetrachloroethene	50	48.4	97	70-136
108-88-3	Toluene	50	49.3	99	76-126
87-61-6	1,2,3-Trichlorobenzene	50	49.2	98	62-132
120-82-1	1,2,4-Trichlorobenzene	50	49.9	100	67-132
71-55-6	1,1,1-Trichloroethane	50	54.2	108	77-136
79-00-5	1,1,2-Trichloroethane	50	48.0	96	75-123
79-01-6	Trichloroethene	50	49.6	99	79-126
75-69-4	Trichlorofluoromethane	50	49.1	98	56-154
75-01-4	Vinyl chloride	50	36.0	72	56-146
	m,p-Xylene	100	97.4	97	77-125
95-47-6	o-Xylene	50	49.6	99	76-126
1330-20-7	Xylene (total)	150	147	98	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	102%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-BS	2C79581.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	43.5	87	51-151
71-43-2	Benzene	50	49.9	100	75-122
74-97-5	Bromochloromethane	50	46.0	92	78-124
75-27-4	Bromodichloromethane	50	47.1	94	77-128
75-25-2	Bromoform	50	38.2	76	67-141
74-83-9	Bromomethane	50	54.5	109	53-152
78-93-3	2-Butanone (MEK)	50	43.6	87	64-130
75-15-0	Carbon disulfide	50	52.1	104	59-140
56-23-5	Carbon tetrachloride	50	49.6	99	75-148
108-90-7	Chlorobenzene	50	49.4	99	76-124
75-00-3	Chloroethane	50	54.7	109	54-147
67-66-3	Chloroform	50	50.0	100	77-124
74-87-3	Chloromethane	50	47.5	95	46-144
110-82-7	Cyclohexane	50	53.2	106	62-127
124-48-1	Dibromochloromethane	50	42.9	86	76-132
95-50-1	1,2-Dichlorobenzene	50	49.2	98	74-125
541-73-1	1,3-Dichlorobenzene	50	51.2	102	73-124
106-46-7	1,4-Dichlorobenzene	50	49.0	98	71-123
75-71-8	Dichlorodifluoromethane	50	41.2	82	42-152
75-34-3	1,1-Dichloroethane	50	52.8	106	72-124
107-06-2	1,2-Dichloroethane	50	44.1	88	66-150
75-35-4	1,1-Dichloroethene	50	49.4	99	61-132
156-59-2	cis-1,2-Dichloroethene	50	51.4	103	71-119
156-60-5	trans-1,2-Dichloroethene	50	42.7	85	71-123
78-87-5	1,2-Dichloropropane	50	51.5	103	75-120
10061-01-5	cis-1,3-Dichloropropene	50	48.0	96	77-124
10061-02-6	trans-1,3-Dichloropropene	50	44.8	90	75-132
100-41-4	Ethylbenzene	50	48.5	97	77-124
76-13-1	Freon 113	50	49.4	99	58-149
591-78-6	2-Hexanone	50	43.4	87	58-136
98-82-8	Isopropylbenzene	50	54.1	108	60-136
79-20-9	Methyl Acetate	50	41.8	84	57-139
108-87-2	Methylcyclohexane	50	53.9	108	73-130
1634-04-4	Methyl Tert Butyl Ether	100	90.4	90	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	42.9	86	63-135
75-09-2	Methylene chloride	50	48.8	98	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-BS	2C79581.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.0	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	40.9	82	66-125
127-18-4	Tetrachloroethene	50	49.4	99	70-136
108-88-3	Toluene	50	49.9	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	43.0	86	62-132
120-82-1	1,2,4-Trichlorobenzene	50	49.3	99	67-132
71-55-6	1,1,1-Trichloroethane	50	52.6	105	77-136
79-00-5	1,1,2-Trichloroethane	50	42.8	86	75-123
79-01-6	Trichloroethene	50	49.9	100	79-126
75-69-4	Trichlorofluoromethane	50	48.7	97	56-154
75-01-4	Vinyl chloride	50	51.2	102	56-146
	m,p-Xylene	100	99.5	100	77-125
95-47-6	o-Xylene	50	50.9	102	76-126
1330-20-7	Xylene (total)	150	150	100	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	92%	64-135%
2037-26-5	Toluene-D8	107%	76-117%
460-00-4	4-Bromofluorobenzene	107%	72-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-BS	2C79675.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	54.1	108	51-151
71-43-2	Benzene	50	49.0	98	75-122
74-97-5	Bromochloromethane	50	49.9	100	78-124
75-27-4	Bromodichloromethane	50	50.4	101	77-128
75-25-2	Bromoform	50	54.5	109	67-141
74-83-9	Bromomethane	50	48.6	97	53-152
78-93-3	2-Butanone (MEK)	50	57.4	115	64-130
75-15-0	Carbon disulfide	50	48.8	98	59-140
56-23-5	Carbon tetrachloride	50	48.0	96	75-148
108-90-7	Chlorobenzene	50	50.2	100	76-124
75-00-3	Chloroethane	50	45.7	91	54-147
67-66-3	Chloroform	50	47.4	95	77-124
74-87-3	Chloromethane	50	39.2	78	46-144
110-82-7	Cyclohexane	50	49.1	98	62-127
124-48-1	Dibromochloromethane	50	51.6	103	76-132
95-50-1	1,2-Dichlorobenzene	50	52.6	105	74-125
541-73-1	1,3-Dichlorobenzene	50	51.4	103	73-124
106-46-7	1,4-Dichlorobenzene	50	49.9	100	71-123
75-71-8	Dichlorodifluoromethane	50	37.1	74	42-152
75-34-3	1,1-Dichloroethane	50	48.7	97	72-124
107-06-2	1,2-Dichloroethane	50	49.1	98	66-150
75-35-4	1,1-Dichloroethene	50	46.5	93	61-132
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	71-119
156-60-5	trans-1,2-Dichloroethene	50	39.7	79	71-123
78-87-5	1,2-Dichloropropane	50	52.4	105	75-120
10061-01-5	cis-1,3-Dichloropropene	50	52.0	104	77-124
10061-02-6	trans-1,3-Dichloropropene	50	52.2	104	75-132
100-41-4	Ethylbenzene	50	46.9	94	77-124
76-13-1	Freon 113	50	46.2	92	58-149
591-78-6	2-Hexanone	50	60.0	120	58-136
98-82-8	Isopropylbenzene	50	50.2	100	60-136
79-20-9	Methyl Acetate	50	52.0	104	57-139
108-87-2	Methylcyclohexane	50	49.3	99	73-130
1634-04-4	Methyl Tert Butyl Ether	100	102	102	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	58.3	117	63-135
75-09-2	Methylene chloride	50	48.4	97	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-BS	2C79675.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.8	102	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	51.4	103	66-125
127-18-4	Tetrachloroethene	50	49.4	99	70-136
108-88-3	Toluene	50	50.0	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	59.1	118	62-132
120-82-1	1,2,4-Trichlorobenzene	50	60.4	121	67-132
71-55-6	1,1,1-Trichloroethane	50	47.8	96	77-136
79-00-5	1,1,2-Trichloroethane	50	52.8	106	75-123
79-01-6	Trichloroethene	50	49.0	98	79-126
75-69-4	Trichlorofluoromethane	50	44.2	88	56-154
75-01-4	Vinyl chloride	50	43.9	88	56-146
	m,p-Xylene	100	98.1	98	77-125
95-47-6	o-Xylene	50	50.8	102	76-126
1330-20-7	Xylene (total)	150	149	99	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	64-135%
2037-26-5	Toluene-D8	113%	76-117%
460-00-4	4-Bromofluorobenzene	108%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68307-4MS	2B80136.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4MSD	2B80137.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4	2B80131.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	JA68307-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	76.1	152	68.5	137	11	44-157/20
71-43-2	Benzene	0.66	J	50	44.6	88	44.1	87	1	38-139/13
74-97-5	Bromochloromethane	ND		50	50.2	100	50.1	100	0	70-129/11
75-27-4	Bromodichloromethane	ND		50	52.8	106	52.0	104	2	70-135/13
75-25-2	Bromoform	ND		50	50.5	101	50.1	100	1	53-139/13
74-83-9	Bromomethane	ND		50	41.3	83	41.6	83	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.7	91	43.1	86	6	58-140/14
75-15-0	Carbon disulfide	ND		50	40.4	81	39.8	80	1	34-136/21
56-23-5	Carbon tetrachloride	ND		50	47.3	95	46.4	93	2	50-161/18
108-90-7	Chlorobenzene	ND		50	47.0	94	46.8	94	0	65-128/12
75-00-3	Chloroethane	ND		50	37.0	74	37.2	74	1	41-151/18
67-66-3	Chloroform	ND		50	48.3	97	48.0	96	1	66-132/14
74-87-3	Chloromethane	ND		50	36.3	73	36.1	72	1	35-149/22
110-82-7	Cyclohexane	ND		50	38.8	78	38.1	76	2	29-158/18
124-48-1	Dibromochloromethane	ND		50	51.0	102	50.8	102	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.1	98	48.9	98	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.4	95	47.3	95	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	47.5	95	46.9	94	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	36.6	73	35.3	71	4	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	45.0	90	45.1	90	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	57.1	114	56.1	112	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	42.0	84	42.2	84	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	44.8	90	45.5	91	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	43.5	87	43.0	86	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	45.6	91	46.3	93	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	48.1	96	49.1	98	2	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	50.2	100	51.4	103	2	68-134/13
100-41-4	Ethylbenzene	ND		50	44.7	89	44.7	89	0	37-143/13
76-13-1	Freon 113	ND		50	47.2	94	46.1	92	2	33-159/19
591-78-6	2-Hexanone	ND		50	52.2	104	52.2	104	0	53-145/17
98-82-8	Isopropylbenzene	ND		50	46.1	92	43.8	88	5	48-141/15
79-20-9	Methyl Acetate	ND		50	43.6	87	41.2	82	6	46-147/18
108-87-2	Methylcyclohexane	ND		50	44.5	89	44.0	88	1	36-156/18
1634-04-4	Methyl Tert Butyl Ether	2.0		50	51.7	99	52.7	101	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.6	101	50.4	101	0	57-141/14
75-09-2	Methylene chloride	ND		50	44.9	90	45.4	91	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68307-4MS	2B80136.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4MSD	2B80137.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4	2B80131.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	JA68307-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	47.1	94	47.1	94	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.0	96	46.6	93	3	62-126/13
127-18-4	Tetrachloroethene	ND		50	44.1	88	44.0	88	0	48-145/15
108-88-3	Toluene	ND		50	46.5	93	46.0	92	1	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.4	103	50.4	101	2	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.1	102	50.8	102	1	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.2	98	48.5	97	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.9	98	48.7	97	0	70-127/12
79-01-6	Trichloroethene	ND		50	47.4	95	45.2	90	5	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	46.3	93	44.5	89	4	35-169/23
75-01-4	Vinyl chloride	ND		50	35.9	72	36.1	72	1	34-151/20
	m,p-Xylene	0.73	J	100	91.6	91	90.5	90	1	32-146/13
95-47-6	o-Xylene	0.54	J	50	47.4	94	46.7	92	1	46-141/12
1330-20-7	Xylene (total)	1.3		150	139	92	137	90	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68307-4	Limits
1868-53-7	Dibromofluoromethane	99%	101%	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	101%	64-135%
2037-26-5	Toluene-D8	102%	102%	101%	76-117%
460-00-4	4-Bromofluorobenzene	99%	98%	99%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68481-8MS	2C79589.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8MSD	2C79590.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8	2C79584.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	JA68481-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	46.0	92	45.2	90	2	44-157/20
71-43-2	Benzene	ND		50	51.4	103	49.2	98	4	38-139/13
74-97-5	Bromochloromethane	ND		50	49.1	98	48.3	97	2	70-129/11
75-27-4	Bromodichloromethane	ND		50	49.2	98	48.4	97	2	70-135/13
75-25-2	Bromoform	ND		50	41.7	83	40.4	81	3	53-139/13
74-83-9	Bromomethane	ND		50	52.2	104	50.1	100	4	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.8	92	45.3	91	1	58-140/14
75-15-0	Carbon disulfide	ND		50	50.2	100	46.8	94	7	34-136/21
56-23-5	Carbon tetrachloride	ND		50	49.5	99	46.8	94	6	50-161/18
108-90-7	Chlorobenzene	ND		50	49.9	100	48.9	98	2	65-128/12
75-00-3	Chloroethane	ND		50	53.5	107	50.5	101	6	41-151/18
67-66-3	Chloroform	ND		50	51.3	103	49.9	100	3	66-132/14
74-87-3	Chloromethane	ND		50	51.8	104	49.5	99	5	35-149/22
110-82-7	Cyclohexane	ND		50	52.1	104	49.0	98	6	29-158/18
124-48-1	Dibromochloromethane	ND		50	46.5	93	46.2	92	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.9	100	49.6	99	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	51.3	103	50.3	101	2	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	49.2	98	2	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	48.1	96	45.4	91	6	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	54.0	108	52.7	105	2	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	46.5	93	46.4	93	0	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	49.5	99	46.6	93	6	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	47.5	95	46.5	93	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	49.1	98	47.0	94	4	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	53.3	107	52.6	105	1	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	50.2	100	49.9	100	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.4	95	46.8	94	1	68-134/13
100-41-4	Ethylbenzene	ND		50	49.5	99	47.2	94	5	37-143/13
76-13-1	Freon 113	ND		50	44.2	88	41.8	84	6	33-159/19
591-78-6	2-Hexanone	ND		50	44.4	89	44.1	88	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	52.1	104	50.5	101	3	48-141/15
79-20-9	Methyl Acetate	ND		50	44.8	90	45.2	90	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	48.5	97	45.5	91	6	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.7	97	48.9	98	0	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.6	91	44.9	90	2	57-141/14
75-09-2	Methylene chloride	ND		50	51.2	102	50.5	101	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68481-8MS	2C79589.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8MSD	2C79590.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8	2C79584.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	JA68481-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	51.8	104	50.0	100	4	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	44.2	88	44.8	90	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	50.3	101	47.7	95	5	48-145/15
108-88-3	Toluene	0.39	J	50	51.0	101	49.3	98	3	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	44.0	88	45.6	91	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	50.5	101	51.2	102	1	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	52.4	105	50.1	100	4	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	45.7	91	45.2	90	1	70-127/12
79-01-6	Trichloroethene	ND		50	50.4	101	48.3	97	4	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	48.3	97	45.3	91	6	35-169/23
75-01-4	Vinyl chloride	ND		50	52.4	105	49.0	98	7	34-151/20
	m,p-Xylene	ND		100	99.8	100	96.4	96	3	32-146/13
95-47-6	o-Xylene	ND		50	51.3	103	49.6	99	3	46-141/12
1330-20-7	Xylene (total)	ND		150	151	101	146	97	3	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68481-8	Limits
1868-53-7	Dibromofluoromethane	102%	101%	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	95%	64-135%
2037-26-5	Toluene-D8	107%	107%	107%	76-117%
460-00-4	4-Bromofluorobenzene	106%	108%	107%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68506-4MS	2C79684.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4MSD	2C79685.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	JA68506-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	9.6	J	50	66.9	115	66.5	114	1	44-157/20
71-43-2	Benzene	ND		50	49.2	98	47.4	95	4	38-139/13
74-97-5	Bromochloromethane	ND		50	52.6	105	52.3	105	1	70-129/11
75-27-4	Bromodichloromethane	ND		50	51.2	102	50.1	100	2	70-135/13
75-25-2	Bromoform	ND		50	54.7	109	55.3	111	1	53-139/13
74-83-9	Bromomethane	ND		50	48.9	98	45.7	91	7	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	59.5	119	59.7	119	0	58-140/14
75-15-0	Carbon disulfide	ND		50	46.2	92	42.2	84	9	34-136/21
56-23-5	Carbon tetrachloride	ND		50	48.2	96	44.8	90	7	50-161/18
108-90-7	Chlorobenzene	ND		50	49.6	99	48.6	97	2	65-128/12
75-00-3	Chloroethane	ND		50	46.8	94	43.4	87	8	41-151/18
67-66-3	Chloroform	ND		50	48.5	97	47.3	95	3	66-132/14
74-87-3	Chloromethane	ND		50	44.4	89	40.7	81	9	35-149/22
110-82-7	Cyclohexane	ND		50	48.7	97	44.9	90	8	29-158/18
124-48-1	Dibromochloromethane	ND		50	52.7	105	53.0	106	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	53.1	106	52.1	104	2	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	50.8	102	50.3	101	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	49.9	100	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	44.3	89	41.0	82	8	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	49.5	99	48.3	97	2	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	50.6	101	50.0	100	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	46.5	93	42.7	85	9	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.7	91	44.6	89	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	45.7	91	44.1	88	4	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	52.9	106	51.7	103	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	53.1	106	52.1	104	2	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	53.2	106	52.8	106	1	68-134/13
100-41-4	Ethylbenzene	ND		50	46.6	93	45.4	91	3	37-143/13
76-13-1	Freon 113	ND		50	46.8	94	43.6	87	7	33-159/19
591-78-6	2-Hexanone	ND		50	61.9	124	61.4	123	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	49.0	98	47.0	94	4	48-141/15
79-20-9	Methyl Acetate	ND		50	57.4	115	57.1	114	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	48.8	98	44.8	90	9	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	54.2	108	53.0	106	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	62.1	124	61.0	122	2	57-141/14
75-09-2	Methylene chloride	ND		50	50.5	101	48.7	97	4	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68506-4MS	2C79684.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4MSD	2C79685.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	JA68506-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	51.5	103	50.7	101	2	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	54.8	110	54.9	110	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	48.0	96	46.5	93	3	48-145/15
108-88-3	Toluene	ND		50	50.2	100	48.8	98	3	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	59.9	120	60.5	121	1	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	60.9	122	61.2	122	0	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.1	98	45.6	91	7	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	53.8	108	53.6	107	0	70-127/12
79-01-6	Trichloroethene	ND		50	48.8	98	46.9	94	4	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	45.0	90	41.7	83	8	35-169/23
75-01-4	Vinyl chloride	ND		50	46.7	93	41.9	84	11	34-151/20
	m,p-Xylene	ND		100	96.8	97	93.3	93	4	32-146/13
95-47-6	o-Xylene	ND		50	49.9	100	48.1	96	4	46-141/12
1330-20-7	Xylene (total)	ND		150	147	98	141	94	4	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-4	Limits
1868-53-7	Dibromofluoromethane	108%	107%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	103%	64-135%
2037-26-5	Toluene-D8	114%	113%	112%	76-117%
460-00-4	4-Bromofluorobenzene	109%	110%	108%	72-122%

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2B3558-BFB	**Injection Date:**	01/31/11
Lab File ID:	2B79401.D	**Injection Time:**	12:17
Instrument ID:	GCMS2B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16526	18.6		Pass
75	30.0 - 60.0% of mass 95	43672	49.1		Pass
95	Base peak, 100% relative abundance	88986	100.0		Pass
96	5.0 - 9.0% of mass 95	5941	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	89714	100.8		Pass
175	5.0 - 9.0% of mass 174	7137	8.02	(7.96) [a]	Pass
176	95.0 - 101.0% of mass 174	88274	99.2	(98.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5773	6.49	(6.54) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B3558-IC3558	2B79402.D	01/31/11	12:52	00:35	Initial cal 5
V2B3558-IC3558	2B79403.D	01/31/11	13:25	01:08	Initial cal 0.5
V2B3558-IC3558	2B79404.D	01/31/11	13:56	01:39	Initial cal 1
V2B3558-IC3558	2B79405.D	01/31/11	14:27	02:10	Initial cal 2
V2B3558-IC3558	2B79406.D	01/31/11	14:58	02:41	Initial cal 10
V2B3558-IC3558	2B79407.D	01/31/11	15:28	03:11	Initial cal 20
V2B3558-ICC3558	2B79408.D	01/31/11	15:59	03:42	Initial cal 50
V2B3558-IC3558	2B79409.D	01/31/11	16:45	04:28	Initial cal 100
V2B3558-IC3558	2B79410.D	01/31/11	17:16	04:59	Initial cal 200
V2B3558-ICV3558	2B79413.D	01/31/11	18:49	06:32	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2B3591-BFB	**Injection Date:**	02/23/11
Lab File ID:	2B80124.D	**Injection Time:**	09:28
Instrument ID:	GCMS2B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12228	19.7		Pass
75	30.0 - 60.0% of mass 95	31626	50.8		Pass
95	Base peak, 100% relative abundance	62216	100.0		Pass
96	5.0 - 9.0% of mass 95	4134	6.64		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	67621	108.7		Pass
175	5.0 - 9.0% of mass 174	5489	8.82	(8.12) [a]	Pass
176	95.0 - 101.0% of mass 174	65720	105.6	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	4182	6.72	(6.36) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B3591-CC3558	2B80125.D	02/23/11	10:02	00:34	Continuing cal 20
V2B3591-MB	2B80126.D	02/23/11	10:45	01:17	Method Blank
V2B3591-BS	2B80127.D	02/23/11	11:25	01:57	Blank Spike
JA68506-1	2B80129.D	02/23/11	12:40	03:12	CG
JA68506-2	2B80130.D	02/23/11	13:11	03:43	CD
JA68307-4	2B80131.D	02/23/11	13:42	04:14	(used for QC only; not part of job JA68506)
ZZZZZZ	2B80132.D	02/23/11	14:14	04:46	(unrelated sample)
ZZZZZZ	2B80133.D	02/23/11	14:45	05:17	(unrelated sample)
ZZZZZZ	2B80134.D	02/23/11	15:16	05:48	(unrelated sample)
ZZZZZZ	2B80135.D	02/23/11	15:52	06:24	(unrelated sample)
JA68307-4MS	2B80136.D	02/23/11	16:24	06:56	Matrix Spike
JA68307-4MSD	2B80137.D	02/23/11	16:55	07:27	Matrix Spike Duplicate
ZZZZZZ	2B80139.D	02/23/11	17:57	08:29	(unrelated sample)
ZZZZZZ	2B80140.D	02/23/11	18:29	09:01	(unrelated sample)
ZZZZZZ	2B80141.D	02/23/11	19:00	09:32	(unrelated sample)
ZZZZZZ	2B80142.D	02/23/11	19:31	10:03	(unrelated sample)
ZZZZZZ	2B80144.D	02/23/11	20:33	11:05	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3580-BFB	**Injection Date:**	01/20/11
Lab File ID:	2C78505.D	**Injection Time:**	12:19
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12371	16.0		Pass
75	30.0 - 60.0% of mass 95	34096	44.2		Pass
95	Base peak, 100% relative abundance	77173	100.0		Pass
96	5.0 - 9.0% of mass 95	5123	6.64		Pass
173	Less than 2.0% of mass 174	174	0.23	(0.26) [a]	Pass
174	50.0 - 120.0% of mass 95	68221	88.4		Pass
175	5.0 - 9.0% of mass 174	4956	6.42	(7.26) [a]	Pass
176	95.0 - 101.0% of mass 174	66754	86.5	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	4457	5.78	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3580-IC3580	2C78506.D	01/20/11	13:09	00:50	Initial cal 0.5
V2C3580-IC3580	2C78507.D	01/20/11	13:39	01:20	Initial cal 1
V2C3580-IC3580	2C78508.D	01/20/11	14:10	01:51	Initial cal 2
V2C3580-IC3580	2C78509.D	01/20/11	14:41	02:22	Initial cal 5
V2C3580-IC3580	2C78510.D	01/20/11	15:13	02:54	Initial cal 10
V2C3580-IC3580	2C78511.D	01/20/11	15:44	03:25	Initial cal 20
V2C3580-ICC3580	2C78512.D	01/20/11	16:14	03:55	Initial cal 50
V2C3580-IC3580	2C78514.D	01/20/11	17:15	04:56	Initial cal 100
V2C3580-IC3580	2C78515.D	01/20/11	17:46	05:27	Initial cal 200
V2C3580-ICV3580	2C78517A.D	01/20/11	19:18	06:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3633-BFB	**Injection Date:**	02/24/11
Lab File ID:	2C79577.D	**Injection Time:**	10:25
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11165	16.6		Pass
75	30.0 - 60.0% of mass 95	29424	43.6		Pass
95	Base peak, 100% relative abundance	67411	100.0		Pass
96	5.0 - 9.0% of mass 95	4432	6.57		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	61280	90.9		Pass
175	5.0 - 9.0% of mass 174	4735	7.02	(7.73) [a]	Pass
176	95.0 - 101.0% of mass 174	60125	89.2	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	4030	5.98	(6.70) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3633-CC3580	2C79578.D	02/24/11	11:04	00:39	Continuing cal 20
V2C3633-MB	2C79580.D	02/24/11	12:17	01:52	Method Blank
V2C3633-BS	2C79581.D	02/24/11	12:48	02:23	Blank Spike
ZZZZZZ	2C79583.D	02/24/11	13:53	03:28	(unrelated sample)
JA68481-8	2C79584.D	02/24/11	14:24	03:59	(used for QC only; not part of job JA68506)
ZZZZZZ	2C79585.D	02/24/11	14:55	04:30	(unrelated sample)
ZZZZZZ	2C79586.D	02/24/11	15:25	05:00	(unrelated sample)
ZZZZZZ	2C79587.D	02/24/11	15:56	05:31	(unrelated sample)
ZZZZZZ	2C79588.D	02/24/11	16:27	06:02	(unrelated sample)
JA68481-8MS	2C79589.D	02/24/11	16:57	06:32	Matrix Spike
JA68481-8MSD	2C79590.D	02/24/11	17:28	07:03	Matrix Spike Duplicate
ZZZZZZ	2C79592.D	02/24/11	18:30	08:05	(unrelated sample)
ZZZZZZ	2C79593.D	02/24/11	19:01	08:36	(unrelated sample)
JA68506-5	2C79594.D	02/24/11	19:32	09:07	FB-02172011
JA68506-8	2C79595.D	02/24/11	20:02	09:37	FB-02182011
JA68506-9	2C79596.D	02/24/11	20:33	10:08	TRIP BLANK
ZZZZZZ	2C79597.D	02/24/11	21:04	10:39	(unrelated sample)
ZZZZZZ	2C79598.D	02/24/11	21:34	11:09	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3637-BFB	**Injection Date:**	02/28/11
Lab File ID:	2C79671.D	**Injection Time:**	08:23
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	27101	15.9		Pass
75	30.0 - 60.0% of mass 95	74643	43.9		Pass
95	Base peak, 100% relative abundance	170155	100.0		Pass
96	5.0 - 9.0% of mass 95	11174	6.57		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	164928	96.9		Pass
175	5.0 - 9.0% of mass 174	12173	7.15	(7.38) [a]	Pass
176	95.0 - 101.0% of mass 174	161067	94.7	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	10376	6.10	(6.44) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3637-CC3580	2C79672.D	02/28/11	09:02	00:39	Continuing cal 20
V2C3637-MB	2C79674.D	02/28/11	10:20	01:57	Method Blank
V2C3637-BS	2C79675.D	02/28/11	10:51	02:28	Blank Spike
ZZZZZZ	2C79677.D	02/28/11	12:07	03:44	(unrelated sample)
ZZZZZZ	2C79678.D	02/28/11	12:38	04:15	(unrelated sample)
JA68506-4	2C79679.D	02/28/11	13:09	04:46	CE
JA68506-7	2C79680.D	02/28/11	13:40	05:17	CF
JA68506-6	2C79681.D	02/28/11	14:11	05:48	CC
JA68506-3	2C79682.D	02/28/11	14:42	06:19	CD-DUP
ZZZZZZ	2C79683.D	02/28/11	15:13	06:50	(unrelated sample)
JA68506-4MS	2C79684.D	02/28/11	15:44	07:21	Matrix Spike
JA68506-4MSD	2C79685.D	02/28/11	16:14	07:51	Matrix Spike Duplicate
ZZZZZZ	2C79687.D	02/28/11	17:16	08:53	(unrelated sample)
ZZZZZZ	2C79688.D	02/28/11	17:47	09:24	(unrelated sample)
ZZZZZZ	2C79689.D	02/28/11	18:18	09:55	(unrelated sample)
ZZZZZZ	2C79690.D	02/28/11	18:49	10:26	(unrelated sample)
ZZZZZZ	2C79691.D	02/28/11	19:19	10:56	(unrelated sample)
ZZZZZZ	2C79692.D	02/28/11	19:50	11:27	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2B3591-CC3558	**Injection Date:**	02/23/11
Lab File ID:	2B80125.D	**Injection Time:**	10:02
Instrument ID:	GCMS2B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	70223	8.62	180573	11.09	216789	11.99	191063	14.95	118437	17.09
Upper Limit [a]	140446	9.12	361146	11.59	433578	12.49	382126	15.45	236874	17.59
Lower Limit [b]	35112	8.12	90287	10.59	108395	11.49	95532	14.45	59219	16.59

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2B3591-MB	74874	8.62	189438	11.09	220750	11.99	192951	14.95	120540	17.10
V2B3591-BS	76146	8.62	184412	11.09	223978	11.99	199429	14.94	119180	17.10
JA68506-1	70823	8.62	184652	11.09	220753	11.99	192480	14.95	118628	17.10
JA68506-2	72038	8.62	179572	11.09	212434	11.99	189704	14.95	119957	17.10
JA68307-4	70215	8.62	187115	11.09	224122	11.99	199562	14.95	124311	17.10
ZZZZZZ	71798	8.62	185783	11.09	217610	11.99	194943	14.95	121736	17.10
ZZZZZZ	75379	8.61	186589	11.09	220960	11.99	196759	14.95	119499	17.10
ZZZZZZ	73332	8.61	189094	11.09	222186	11.99	196644	14.95	123572	17.10
ZZZZZZ	58585	8.61	184816	11.09	216686	11.99	193504	14.95	121949	17.10
JA68307-4MS	73951	8.62	184953	11.09	221833	11.99	198164	14.95	120018	17.10
JA68307-4MSD	77914	8.62	188246	11.09	226649	11.99	203575	14.95	125036	17.10
ZZZZZZ	74932	8.61	189977	11.09	225078	11.99	201210	14.95	128160	17.10
ZZZZZZ	71849	8.61	181528	11.09	214233	11.99	191333	14.95	120328	17.09
ZZZZZZ	71591	8.61	187587	11.09	215582	11.99	193054	14.95	122053	17.10
ZZZZZZ	68053	8.61	180822	11.09	214400	11.99	191294	14.95	120544	17.10
ZZZZZZ	70656	8.62	179508	11.09	211999	11.99	190689	14.95	118344	17.10

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2C3633-CC3580	**Injection Date:**	02/24/11
Lab File ID:	2C79578.D	**Injection Time:**	11:04
Instrument ID:	GCMS2C	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	54593	8.42	253281	10.85	331130	11.78	270067	14.75	136903	16.91
Upper Limit [a]	109186	8.92	506562	11.35	662260	12.28	540134	15.25	273806	17.41
Lower Limit [b]	27297	7.92	126641	10.35	165565	11.28	135034	14.25	68452	16.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C3633-MB	54499	8.43	252883	10.86	336423	11.78	277650	14.75	145044	16.91
V2C3633-BS	59002	8.42	249823	10.86	334053	11.78	277181	14.75	143561	16.91
ZZZZZZ	59195	8.43	258650	10.86	345542	11.78	285766	14.75	149271	16.91
JA68481-8	63586	8.42	257584	10.86	343730	11.78	284989	14.75	148640	16.91
ZZZZZZ	62490	8.42	252028	10.86	338066	11.78	279032	14.75	146864	16.91
ZZZZZZ	61649	8.43	257147	10.86	346924	11.78	284776	14.76	147527	16.91
ZZZZZZ	59161	8.42	254826	10.86	342790	11.78	281690	14.76	146507	16.91
ZZZZZZ	62483	8.42	253699	10.86	336043	11.78	278861	14.76	146178	16.91
JA68481-8MS	60539	8.42	257256	10.86	340025	11.78	278952	14.75	146754	16.91
JA68481-8MSD	58018	8.42	255957	10.86	343204	11.78	282527	14.76	144914	16.91
ZZZZZZ	63785	8.43	260526	10.86	345276	11.78	289277	14.75	148077	16.91
ZZZZZZ	65814	8.42	259722	10.86	347441	11.78	285818	14.75	147558	16.91
JA68506-5	62127	8.43	260684	10.86	346401	11.78	289461	14.75	149290	16.91
JA68506-8	66718	8.42	256258	10.86	342933	11.78	285353	14.75	150641	16.91
JA68506-9	64747	8.42	258452	10.86	345628	11.78	285608	14.75	149907	16.91
ZZZZZZ	67595	8.43	259355	10.86	348629	11.78	290566	14.75	153342	16.91
ZZZZZZ	65079	8.43	254604	10.86	342544	11.78	285990	14.75	150625	16.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2C3637-CC3580	**Injection Date:**	02/28/11
Lab File ID:	2C79672.D	**Injection Time:**	09:02
Instrument ID:	GCMS2C	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	92566	8.43	258059	10.85	325570	11.78	270921	14.75	144740	16.91
Upper Limit [a]	185132	8.93	516118	11.35	651140	12.28	541842	15.25	289480	17.41
Lower Limit [b]	46283	7.93	129030	10.35	162785	11.28	135461	14.25	72370	16.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C3637-MB	80430	8.43	256064	10.86	326942	11.78	274721	14.75	148062	16.91
V2C3637-BS	77223	8.42	242081	10.86	311886	11.78	264757	14.75	142370	16.91
ZZZZZZ	74829	8.43	244123	10.86	315069	11.78	267325	14.75	147795	16.91
ZZZZZZ	79291	8.43	244279	10.86	318091	11.78	270846	14.75	148959	16.91
JA68506-4	77918	8.43	244930	10.86	319287	11.78	272317	14.75	148467	16.91
JA68506-7	79582	8.43	245737	10.86	321704	11.78	273091	14.75	148527	16.91
JA68506-6	80033	8.43	244107	10.86	321964	11.78	273537	14.75	150266	16.91
JA68506-3	91655	8.43	240241	10.86	315654	11.78	271381	14.75	151632	16.91
ZZZZZZ	79320	8.43	241661	10.86	315060	11.78	270781	14.75	148531	16.91
JA68506-4MS	83021	8.43	235202	10.86	306136	11.78	267035	14.75	142903	16.91
JA68506-4MSD	80936	8.43	239797	10.86	312580	11.78	268288	14.75	142118	16.91
ZZZZZZ	78173	8.43	242274	10.86	315028	11.78	268537	14.75	149397	16.91
ZZZZZZ	83429	8.43	241531	10.86	316908	11.78	272101	14.75	150537	16.92
ZZZZZZ	83517	8.43	241931	10.86	317443	11.78	274096	14.75	151384	16.91
ZZZZZZ	88549	8.42	240995	10.86	316453	11.78	271560	14.75	148588	16.91
ZZZZZZ	88156	8.43	243161	10.86	316669	11.78	273668	14.75	150814	16.91
ZZZZZZ	88000	8.42	239836	10.86	305076	11.78	263051	14.75	151543	16.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA68506-1	2B80129.D	98.0	102.0	99.0	100.0
JA68506-2	2B80130.D	101.0	100.0	101.0	98.0
JA68506-3	2C79682.D	106.0	106.0	112.0	107.0
JA68506-4	2C79679.D	104.0	103.0	112.0	108.0
JA68506-5	2C79594.D	100.0	94.0	107.0	107.0
JA68506-6	2C79681.D	106.0	106.0	112.0	108.0
JA68506-7	2C79680.D	105.0	105.0	112.0	108.0
JA68506-8	2C79595.D	101.0	96.0	107.0	107.0
JA68506-9	2C79596.D	101.0	94.0	107.0	107.0
JA68307-4MS	2B80136.D	99.0	99.0	102.0	99.0
JA68307-4MSD	2B80137.D	101.0	101.0	102.0	98.0
JA68481-8MS	2C79589.D	102.0	94.0	107.0	106.0
JA68481-8MSD	2C79590.D	101.0	95.0	107.0	108.0
JA68506-4MS	2C79684.D	108.0	105.0	114.0	109.0
JA68506-4MSD	2C79685.D	107.0	105.0	113.0	110.0
V2B3591-BS	2B80127.D	101.0	102.0	102.0	100.0
V2B3591-MB	2B80126.D	99.0	99.0	100.0	98.0
V2C3633-BS	2C79581.D	101.0	92.0	107.0	107.0
V2C3633-MB	2C79580.D	99.0	89.0	106.0	108.0
V2C3637-BS	2C79675.D	104.0	103.0	113.0	108.0
V2C3637-MB	2C79674.D	102.0	101.0	112.0	109.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

Response Factor Report MS2B

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 15:49:20 2011
Response via : Initial Calibration

Calibration Files
1 =2B79404.D 2 =2B79405.D 100 =2B79409.D 50 =2B79408.D
20 =2B79407.D 200 =2B79410.D 5 =2B79402.D 10 =2B79406.D
0.5 =2B79403.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD										
2) tertiary butyl alcohol			1.067	0.991	1.204	0.985	0.817	0.988		1.009	12.51
3) 1,4-dioxane			0.065	0.065	0.066	0.065	0.048	0.052		0.060	13.40
4) I pentafluorobenzene	ISTD										
5) chlorodifluoromethane	0.334	0.354	0.390	0.378	0.392	0.375	0.379	0.393		0.374	5.52
6) dichlorodifluoromethane	0.412	0.487	0.599	0.570	0.585	0.550	0.529	0.595		0.541	11.88
7) chlorotrifluoroethene										0.000#	-1.00
8) chloromethane	0.431	0.462	0.524	0.486	0.480	0.509	0.476	0.495	0.439	0.478	6.41
9) vinyl chloride	0.435	0.455	0.514	0.484	0.472	0.494	0.458	0.486	0.502	0.478	5.29
10) bromomethane	0.282	0.297	0.332	0.322	0.329	0.312	0.316	0.334	0.269	0.310	7.43
11) chloroethane	0.172	0.242	0.255	0.252	0.259	0.240	0.246	0.263		0.241	12.08
12) vinyl bromide										0.000#	-1.00
13) trichlorofluoromethane	0.468	0.582	0.648	0.623	0.639	0.611	0.588	0.658		0.602	10.09
14) ethyl ether			0.194	0.186	0.192	0.195	0.158	0.174		0.183	8.00
15) acrolein			0.064	0.062	0.061	0.066	0.054	0.057		0.061	7.08
16) 1,2-dichloro-1,2,2-trifluoroet										0.000#	-1.00
17) 1,1-dichloroethene	0.258	0.316	0.325	0.323	0.334	0.319	0.289	0.334		0.312	8.31
18) acetone			0.105	0.102	0.092	0.105	0.059	0.066		0.088	23.27
----- Linear regression ----- Coefficient = 0.9999											
Response Ratio = -0.00536 + 0.10623 *A											
19) allyl chloride	0.174	0.206	0.202	0.205	0.207	0.191	0.201			0.198	6.09
20) acetonitrile			0.016	0.015	0.014	0.015	0.012	0.012		0.014	10.38
21) iodomethane	0.536	0.641	0.682	0.669	0.680	0.668	0.629	0.687		0.649	7.70

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22)	iso-butyl alcohol										0.003#	12.00
		0.003	0.003	0.004	0.003	0.003	0.004					
23)	carbon disulfide											
	0.993	1.170	1.179	1.172	1.202	1.168	1.135	1.222	0.986		1.136	7.61
24)	methylene chloride											
	0.320	0.344	0.370	0.360	0.374	0.368	0.351	0.374	0.298		0.351	7.56
25)	methyl acetate											
		0.058	0.053	0.050	0.059	0.021	0.034				0.046	33.47
	----- Linear regression ----- Coefficient = 0.9998											
	Response Ratio = -0.00503 + 0.06043 *A											
26)	methyl tert butyl ether											
	0.975	1.059	1.134	1.131	1.156	1.091	1.091	1.144	0.908		1.077	7.81
27)	trans-1,2-dichloroethene											
	0.282	0.331	0.335	0.335	0.357	0.323	0.316	0.357			0.330	7.37
28)	di-isopropyl ether											
	0.895	0.961	1.066	1.044	1.057	1.007	1.005	1.054	0.791		0.987	9.29
29)	2-butanone											
		0.042	0.038	0.036	0.044		0.028				0.038	17.08
	----- Linear regression ----- Coefficient = 0.9993											
	Response Ratio = -0.00505 + 0.04537 *A											
30)	1,1-dichloroethane											
	0.500	0.593	0.594	0.591	0.611	0.577	0.571	0.614	0.471		0.569	8.78
31)	chloroprene											
	0.373	0.418	0.479	0.475	0.485	0.456	0.435	0.489			0.451	8.94
32)	acrylonitrile											
		0.149	0.143	0.146	0.150	0.127	0.131				0.141	6.79
33)	vinyl acetate											
		0.057	0.051	0.048	0.054		0.039				0.050	13.45
34)	ethyl tert-butyl ether											
	1.019	0.982	1.151	1.123	1.145	1.102	1.050	1.113	0.855		1.060	9.09
35)	ethyl acetate											
		0.044	0.046	0.045	0.044	0.026	0.032				0.039	21.12
	----- Linear regression ----- Coefficient = 0.9996											
	Response Ratio = -0.00111 + 0.04474 *A											
36)	2,2-dichloropropane											
	0.462	0.563	0.542	0.547	0.581	0.505	0.531	0.570	0.429		0.526	9.76
37)	cis-1,2-dichloroethene											
	0.308	0.375	0.380	0.377	0.394	0.368	0.375	0.398	0.325		0.367	8.25
38)	propionitrile											
		0.053	0.052	0.052	0.053	0.047	0.047				0.051	5.69
39)	bromochloromethane											
	0.151	0.179	0.200	0.200	0.206	0.195	0.190	0.203			0.190	9.49
40)	tetrahydrofuran											
		0.098	0.093	0.097	0.101	0.086	0.092				0.095	5.90
41)	chloroform											
	0.545	0.621	0.605	0.610	0.631	0.586	0.595	0.626	0.492		0.590	7.66
42)	t-butyl formate											
		0.334	0.319	0.325	0.326	0.288	0.325				0.319	5.13
43)	dibromofluoromethane (s)											
		0.429	0.330	0.326	0.338	0.327	0.374	0.363			0.355	10.57
44)	1,2-dichloroethane-d4 (s)											
	0.500	0.487	0.381	0.375	0.397	0.380	0.463	0.417			0.425	11.98
45)	freon 113											
		0.253	0.294	0.294	0.304	0.273	0.263	0.309			0.284	7.51
46)	methacrylonitrile											
		0.215	0.209	0.208	0.222	0.182	0.199				0.206	6.73
47)	1,1,1-trichloroethane											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

		0.457	0.541	0.562	0.563	0.577	0.542	0.537	0.582	0.360	0.525	13.69
48)	Cyclohexane											
		0.517	0.512	0.508	0.535	0.486	0.483	0.542			0.512	4.36
49)	tert amyl alcohol											
											0.000#	-1.00
50)	I 1,4-difluorobenzene	----------ISTD----------										
51)	tert amyl ethyl ether											
											0.000#	-1.00
52)	Di-isobutylene											
											0.000#	-1.00
53)	epichlorohydrin											
		0.026	0.025	0.027	0.025	0.022	0.023				0.025	7.11
54)	n-butyl alcohol											
		0.006	0.006	0.006	0.006	0.005	0.005				0.006#	9.23
55)	carbon tetrachloride											
		0.355	0.443	0.400	0.410	0.440	0.369	0.406	0.451		0.409	8.47
56)	1,1-dichloropropene											
		0.289	0.360	0.352	0.359	0.377	0.329	0.355	0.391		0.351	8.85
57)	hexane											
		0.215	0.241	0.235	0.251	0.221	0.227	0.245			0.234	5.59
58)	benzene											
		0.929	1.065	1.022	1.043	1.098	0.963	1.044	1.110	0.932	1.023	6.61
59)	2,2,4-trimethylpentane											
		0.818	0.826	0.858	0.872	0.920	0.778	0.838	0.908		0.852	5.55
60)	tert-amyl methyl ether											
		0.792	0.808	0.823	0.823	0.879	0.756	0.830	0.884	0.777	0.819	5.22
61)	heptane											
		0.147	0.144	0.158	0.134	0.137	0.157				0.146	6.73
62)	isopropyl acetate											
		0.356	0.414	0.486	0.461	0.501	0.463	0.454	0.465		0.450	10.14
63)	1,2-dichloroethane											
		0.308	0.364	0.373	0.379	0.400	0.355	0.372	0.398	0.268	0.358	12.02
64)	trichloroethene											
		0.228	0.277	0.278	0.276	0.287	0.266	0.262	0.290	0.217	0.265	9.63
65)	2-nitropropane											
		0.010	0.009	0.009	0.010		0.004				0.009#	32.49
	----- Linear regression ----- Coefficient = 0.9993											
	Response Ratio = -0.00086 + 0.01049 *A											
66)	2-chloroethyl vinyl ether											
		0.098	0.100	0.126	0.119	0.129	0.120	0.121	0.121		0.117	9.91
67)	methyl methacrylate											
		0.208	0.252	0.244	0.256	0.239	0.226	0.241			0.238	6.90
68)	1,2-dichloropropane											
		0.231	0.251	0.255	0.252	0.260	0.240	0.251	0.255	0.175	0.241	10.90
69)	dibromomethane											
		0.147	0.165	0.176	0.177	0.185	0.169	0.170	0.176		0.171	6.66
70)	methylcyclohexane											
		0.378	0.391	0.392	0.394	0.413	0.349	0.377	0.416		0.389	5.51
71)	bromodichloromethane											
		0.315	0.341	0.370	0.367	0.379	0.356	0.349	0.364	0.268	0.345	10.05
72)	cis-1,3-dichloropropene											
		0.326	0.365	0.415	0.410	0.417	0.410	0.375	0.400	0.314	0.381	10.28
73)	toluene-d8 (s)											
		1.236	0.886	0.893	0.923	0.845	1.003	0.996			0.969	13.54
74)	4-methyl-2-pentanone											
		0.105	0.102	0.108	0.104	0.094	0.099				0.102	4.98
75)	toluene											
		0.532	0.608	0.604	0.605	0.634	0.575	0.582	0.635	0.497	0.586	7.84

Initial Calibration Summary

Job Number: JA68506
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Sample: V2B3558-ICC3558
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76)	3-methyl-1-butanol											
		0.007	0.010	0.010	0.010	0.010	0.009	0.009			0.009#	12.46
77)	trans-1,3-dichloropropene											
		0.285	0.343	0.374	0.367	0.372	0.365	0.343	0.360		0.351	8.36
78)	ethyl methacrylate											
		0.230	0.306	0.299	0.309	0.298	0.266	0.293			0.286	9.92
79)	1,1,2-trichloroethane											
		0.148	0.184	0.196	0.194	0.198	0.191	0.186	0.196		0.187	8.85
80)	2-hexanone											
			0.084	0.080	0.083	0.085	0.072	0.077			0.080	6.41
81)	I chlorobenzene-d5	----------ISTD----------										
82)	butyl ether											
											0.000#	-1.00
83)	tetrachloroethene											
		0.245	0.301	0.285	0.295	0.311	0.263	0.283	0.320	0.219	0.280	11.67
84)	1,3-dichloropropane											
		0.349	0.402	0.412	0.409	0.421	0.393	0.392	0.414		0.399	5.64
85)	butyl acetate											
			0.163	0.157	0.170	0.159	0.153	0.165			0.161	3.89
86)	3,3-dimethyl-1-butanol											
		0.020	0.025	0.025	0.026	0.026	0.024	0.023			0.024	9.41
87)	dibromochloromethane											
		0.270	0.342	0.359	0.355	0.365	0.342	0.339	0.369	0.258	0.333	12.25
88)	1,2-dibromoethane											
		0.242	0.269	0.295	0.290	0.304	0.285	0.277	0.297		0.282	7.03
89)	chlorobenzene											
		0.726	0.825	0.790	0.794	0.825	0.749	0.758	0.825	0.702	0.777	5.86
90)	1,1,1,2-tetrachloroethane											
		0.293	0.345	0.337	0.342	0.366	0.308	0.327	0.367	0.317	0.334	7.51
91)	ethylbenzene											
		1.195	1.419	1.296	1.342	1.435	1.198	1.352	1.426	1.179	1.316	7.92
92)	m,p-xylene											
		0.432	0.524	0.510	0.524	0.562	0.476	0.504	0.559	0.427	0.502	9.69
93)	o-xylene											
		0.475	0.532	0.532	0.548	0.573	0.491	0.531	0.574	0.431	0.521	9.03
94)	styrene											
		0.806	0.874	0.886	0.924	0.818	0.806	0.915			0.861	5.91
95)	bromoform											
		0.231	0.252	0.301	0.300	0.307	0.289	0.284	0.299		0.283	9.58
96)	I 1,4-dichlorobenzene-d	----------ISTD----------										
97)	isopropylbenzene											
		1.993	2.431	2.547	2.542	2.592	2.382	2.310	2.575	1.918	2.366	10.63
98)	4-bromofluorobenzene (s)											
			0.670	0.660	0.674	0.650	0.776	0.753			0.697	7.62
99)	cyclohexanone											
			0.006	0.006	0.006	0.006	0.005	0.005			0.006#	7.35
100)	bromobenzene											
		0.565	0.680	0.702	0.693	0.708	0.671	0.663	0.716	0.596	0.666	7.83
101)	1,1,2,2-tetrachloroethane											
		0.597	0.652	0.707	0.692	0.717	0.674	0.682	0.700	0.541	0.662	8.75
102)	trans-1,4-dichloro-2-butene											
			0.186	0.172	0.175	0.181	0.152	0.159			0.171	7.67
103)	1,2,3-trichloropropane											
		0.164	0.182	0.179	0.192	0.172	0.175	0.179			0.178	4.92
104)	n-propylbenzene											
		2.266	2.761	2.793	2.818	2.932	2.604	2.620	2.927	2.231	2.661	9.78
105)	2-chlorotoluene											
		0.517	0.584	0.604	0.596	0.618	0.576	0.581	0.616	0.426	0.569	10.78

Initial Calibration Summary

Job Number: JA68506
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Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

106)	4-chlorotoluene										
	1.454	1.720	1.723	1.689	1.773	1.647	1.637	1.740	1.568	1.661	5.99
107)	1,3,5-trimethylbenzene										
	1.731	2.045	2.125	2.125	2.214	1.970	1.952	2.162	1.622	1.994	10.08
108)	tert-butylbenzene										
	1.489	1.897	1.986	1.962	1.967	1.918	1.703	1.928	1.447	1.811	11.69
109)	pentachloroethane										
	0.372	0.421	0.499	0.481	0.489	0.471	0.451	0.481		0.458	9.28
110)	1,2,4-trimethylbenzene										
	1.750	2.064	2.173	2.171	2.253	2.013	2.012	2.209	1.785	2.048	8.80
111)	sec-butylbenzene										
	2.286	2.740	2.882	2.849	2.944	2.680	2.567	2.873	2.019	2.649	11.76
112)	1,3-dichlorobenzene										
	1.181	1.375	1.341	1.324	1.390	1.275	1.301	1.398	1.246	1.315	5.48
113)	p-isopropyltoluene										
	1.982	2.304	2.463	2.444	2.532	2.282	2.217	2.466	1.835	2.281	10.40
114)	1,4-dichlorobenzene										
	1.294	1.438	1.396	1.360	1.421	1.339	1.341	1.410	1.282	1.364	4.08
115)	1,2-dichlorobenzene										
	1.213	1.359	1.415	1.392	1.440	1.328	1.325	1.423	1.305	1.356	5.29
116)	n-butylbenzene										
	0.969	1.116	1.268	1.244	1.280	1.172	1.106	1.233		1.173	9.03
117)	1,2-dibromo-3-chloropropane										
	0.124	0.163	0.158	0.161	0.152	0.138	0.147			0.149	9.44
118)	1,3,5-trichlorobenzene										
	1.065	1.273	1.348	1.363	1.393	1.158	1.225	1.366	1.220	1.268	8.73
119)	1,2,4-trichlorobenzene										
	0.965	1.105	1.215	1.227	1.252	1.041	1.078	1.203	1.042	1.125	9.05
120)	hexachlorobutadiene										
	0.565	0.668	0.665	0.694	0.732	0.573	0.637	0.705	0.594	0.648	9.20
121)	naphthalene										
	1.997	2.170	2.528	2.540	2.614	2.217	2.294	2.427	2.308	2.344	8.57
122)	1,2,3-trichlorobenzene										
	0.878	0.969	1.081	1.075	1.103	0.926	0.981	1.065	0.933	1.001	8.15
123)	hexachloroethane										
	0.452	0.565	0.554	0.538	0.527	0.458	0.523			0.517	8.64

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2B3558.M Tue Feb 01 16:16:00 2011 MS2B

SII-SSA-0014-003826

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B79413.D Vial: 13
Acq On : 31 Jan 2011 6:49 pm Operator: DEZAREER
Sample : icv3558-50 Inst : MS2B
Misc : MS7574,V2B3558,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 15:49:20 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	0.00	8.62
2	M	tertiary butyl alcohol	1.009	1.033	-2.4	104	0.00	8.75
3	M	1,4-dioxane	0.060	0.066	-10.0	100	0.00	12.66
4	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	11.09
5	M	chlorodifluoromethane	0.374	0.313	16.3	85	0.00	4.65
6	M	dichlorodifluoromethane	0.541	0.455	15.9	82	0.01	4.65
7	m	chlorotrifluoroethene		----------NA----------				
8	M	chloromethane	0.478	0.474	0.8	101	0.00	5.05
9	M	vinyl chloride	0.478	0.477	0.2	102	0.00	5.36
10	M	bromomethane	0.310	0.325	-4.8	104	0.00	6.14
11	M	chloroethane	0.241	0.256	-6.2	105	0.00	6.36
12		vinyl bromide		----------NA----------				
13	M	trichlorofluoromethane	0.602	0.609	-1.2	101	0.00	6.95
14	M	ethyl ether	0.183	0.188	-2.7	105	0.00	7.43
15	M	acrolein	0.061	0.079	-29.5#	131	0.00	7.65
16		1,2-dichloro-1,2,2-triflu		----------NA----------				
17	M	1,1-dichloroethene	0.312	0.337	-8.0	108	0.00	7.90
		----------	True	Calc.	% Drift	----------		
18	M	acetone	50.000	51.470	-2.9	105	0.00	7.92
		----------	AvgRF	CCRF	% Dev	----------		
19	M	allyl chloride	0.198	0.211	-6.6	108	0.00	8.49
20	M	acetonitrile	0.014	0.015	-7.1	107	0.00	8.38
21	M	iodomethane	0.633	0.685	-8.2	106	0.00	8.19
22	M	iso-butyl alcohol	0.003	0.003#	0.0	104	0.00	11.38
23	M	carbon disulfide	1.136	1.241	-9.2	109	0.00	8.36
24	M	methylene chloride	0.351	0.368	-4.8	105	0.00	8.68
		----------	True	Calc.	% Drift	----------		
25	M	methyl acetate	50.000	48.936	2.1	105	0.00	8.47
		----------	AvgRF	CCRF	% Dev	----------		
26	M	methyl tert butyl ether	1.077	1.125	-4.4	103	0.00	9.10
27	M	trans-1,2-dichloroethene	0.330	0.301	8.8	93	0.00	9.12
28	M	di-isopropyl ether	0.987	1.108	-12.3	110	0.00	9.78
		----------	True	Calc.	% Drift	----------		
29	M	2-butanone	50.000	49.276	1.4	108	0.00	10.48
		----------	AvgRF	CCRF	% Dev	----------		

Initial Calibration Verification

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Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

30	M	1,1-dichloroethane	0.569	0.606	-6.5	106	0.00	9.73
31	M	chloroprene	0.451	0.493	-9.3	107	0.00	9.88
32	M	acrylonitrile	0.141	0.149	-5.7	108	0.00	9.01
33	M	vinyl acetate	0.050	0.060	-20.0	120	0.00	9.73
34	M	ethyl tert-butyl ether	1.060	1.157	-9.2	106	0.00	10.28
			True	Calc.	% Drift			
35	M	ethyl acetate	50.000	49.075	1.8	97	0.00	10.53
			AvgRF	CCRF	% Dev			
36	M	2,2-dichloropropane	0.526	0.542	-3.0	102	0.00	10.55
37	M	cis-1,2-dichloroethene	0.367	0.425	-15.8	116	0.00	10.52
38	M	propionitrile	0.051	0.054	-5.9	106	0.00	10.54
39	M	bromochloromethane	0.190	0.196	-3.2	101	0.00	10.84
40	M	tetrahydrofuran	0.095	0.095	0.0	106	0.00	10.90
41	M	chloroform	0.590	0.614	-4.1	104	0.00	10.90
42		t-butyl formate	0.319	0.352	-10.3	114	0.00	10.98
43	S	dibromofluoromethane (s)	0.355	0.327	7.9	104	0.00	11.10
44	S	1,2-dichloroethane-d4 (s)	0.425	0.364	14.4	100	0.00	11.53
45	M	freon 113	0.284	0.315	-10.9	111	0.00	7.90
46	M	methacrylonitrile	0.206	0.207	-0.5	102	0.00	10.76
47	M	1,1,1-trichloroethane	0.525	0.555	-5.7	102	0.00	11.20
48	M	Cyclohexane	0.512	0.544	-6.3	111	0.00	11.31
49		tert amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	11.99
51		tert amyl ethyl ether		----------NA----------				
52	M	Di-isobutylene		----------NA----------				
53	M	epichlorohydrin	0.025	0.025	0.0	104	0.00	13.15
54	M	n-butyl alcohol	0.006	0.006#	0.0	104	0.00	12.07
55	M	carbon tetrachloride	0.409	0.405	1.0	102	0.00	11.42
56	M	1,1-dichloropropene	0.351	0.359	-2.3	103	0.00	11.39
57	M	hexane	0.234	0.301	-28.6#	132	0.00	9.53
58	M	benzene	1.023	1.034	-1.1	102	0.00	11.64
59		2,2,4-trimethylpentane	0.852	0.936	-9.9	111	0.00	11.71
60	M	tert-amyl methyl ether	0.819	0.852	-4.0	107	0.00	11.70
61	M	heptane	0.146	0.174	-19.2	124	0.00	11.86
62	M	isopropyl acetate	0.450	0.462	-2.7	103	0.00	11.56
63	M	1,2-dichloroethane	0.358	0.364	-1.7	99	0.00	11.62
64	M	trichloroethene	0.265	0.273	-3.0	102	0.00	12.32
			True	Calc.	% Drift			
65	M	2-nitropropane	50.000	51.432	-2.9	108	0.00	13.35
			AvgRF	CCRF	% Dev			
66	M	2-chloroethyl vinyl ether	0.117	0.100	14.5	87	0.00	13.05
67	M	methyl methacrylate	0.238	0.252	-5.9	107	0.00	12.58
68	M	1,2-dichloropropane	0.241	0.252	-4.6	103	0.00	12.56
69	M	dibromomethane	0.171	0.172	-0.6	100	0.00	12.69
70	M	methylcyclohexane	0.389	0.444	-14.1	116	0.00	12.58
71	M	bromodichloromethane	0.345	0.364	-5.5	102	0.00	12.82
72	M	cis-1,3-dichloropropene	0.381	0.401	-5.2	101	0.00	13.26
73	S	toluene-d8 (s)	0.969	0.882	9.0	102	0.00	13.56
74	M	4-methyl-2-pentanone	0.102	0.107	-4.9	108	0.00	13.36
75	M	toluene	0.586	0.602	-2.7	103	0.00	13.63
76	M	3-methyl-1-butanol	0.009	0.010	-11.1	107	0.00	13.35
77	M	trans-1,3-dichloropropene	0.351	0.363	-3.4	102	0.00	13.77
78	M	ethyl methacrylate	0.286	0.301	-5.2	104	0.00	13.79
79	M	1,1,2-trichloroethane	0.187	0.192	-2.7	102	0.00	13.97
80	M	2-hexanone	0.080	0.085	-6.3	109	0.00	14.14

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

81	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.95
82	m	butyl ether		----------NA----------				
83	M	tetrachloroethene	0.280	0.282	-0.7	98	0.00	14.18
84	M	1,3-dichloropropane	0.399	0.410	-2.8	103	0.00	14.14
85	M	butyl acetate	0.161	0.165	-2.5	108	0.00	14.22
86		3,3-dimethyl-1-butanol	0.024	0.026	-8.3	104	0.00	14.29
87	M	dibromochloromethane	0.333	0.345	-3.6	100	0.00	14.39
88	M	1,2-dibromoethane	0.282	0.288	-2.1	102	0.00	14.53
89	M	chlorobenzene	0.777	0.790	-1.7	102	0.00	14.98
90	M	1,1,1,2-tetrachloroethane	0.334	0.349	-4.5	105	0.00	15.03
91	M	ethylbenzene	1.316	1.313	0.2	101	0.00	15.04
92	M	m,p-xylene	0.502	0.517	-3.0	102	0.00	15.14
93	M	o-xylene	0.521	0.554	-6.3	104	0.00	15.52
94	M	styrene	0.861	0.861	0.0	100	0.00	15.52
95	M	bromoform	0.283	0.295	-4.2	101	0.00	15.74
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	17.10
97	M	isopropylbenzene	2.366	2.527	-6.8	103	0.00	15.84
98	S	4-bromofluorobenzene (s)	0.697	0.646	7.3	102	0.00	16.01
99	M	cyclohexanone	0.006	0.006#	0.0	105	0.00	15.96
100	M	bromobenzene	0.666	0.679	-2.0	102	0.00	16.19
101	M	1,1,2,2-tetrachloroethane	0.662	0.689	-4.1	103	0.00	16.07
102	M	trans-1,4-dichloro-2-bute	0.171	0.183	-7.0	111	0.00	16.12
103	M	1,2,3-trichloropropane	0.178	0.177	0.6	103	0.00	16.15
104	M	n-propylbenzene	2.661	2.668	-0.3	98	0.00	16.22
105	M	2-chlorotoluene	0.569	0.603	-6.0	105	0.00	16.34
106	M	4-chlorotoluene	1.661	1.648	0.8	101	0.00	16.43
107	M	1,3,5-trimethylbenzene	1.994	2.105	-5.6	103	0.00	16.35
108	M	tert-butylbenzene	1.811	1.921	-6.1	102	0.00	16.68
109	M	pentachloroethane	0.458	0.508	-10.9	110	0.00	16.73
110	M	1,2,4-trimethylbenzene	2.048	2.118	-3.4	101	0.00	16.72
111	M	sec-butylbenzene	2.649	2.797	-5.6	102	0.00	16.89
112	M	1,3-dichlorobenzene	1.315	1.342	-2.1	105	0.00	17.04
113	M	p-isopropyltoluene	2.281	2.476	-8.5	105	0.00	17.00
114	M	1,4-dichlorobenzene	1.364	1.371	-0.5	105	0.00	17.12
115	M	1,2-dichlorobenzene	1.356	1.395	-2.9	104	0.00	17.50
116	M	n-butylbenzene	1.173	1.241	-5.8	104	0.00	17.39
117	M	1,2-dibromo-3-chloropropa	0.149	0.159	-6.7	105	0.00	18.24
118		1,3,5-trichlorobenzene	1.268	1.339	-5.6	102	0.00	18.47
119	M	1,2,4-trichlorobenzene	1.125	1.193	-6.0	101	0.00	19.11
120	M	hexachlorobutadiene	0.648	0.648	0.0	97	0.00	19.25
121	M	naphthalene	2.344	2.522	-7.6	103	0.00	19.39
122	M	1,2,3-trichlorobenzene	1.001	1.088	-8.7	105	0.00	19.63
123	M	hexachloroethane	0.517	0.555	-7.4	104	0.00	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2B79408.D M2B3558.M Tue Feb 01 16:13:53 2011 MS2B

SII-SSA-0014-003829

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B80125.D Vial: 2
Acq On : 23 Feb 2011 10:02 am Operator: DEZAREER
Sample : cc3558-20 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	0.00	8.62
2	M	tertiary butyl alcohol	1.009	1.042	-3.3	78	0.00	8.75
3	M	1,4-dioxane	0.060	0.070	-16.7	96	0.00	12.66
4	I	pentafluorobenzene	1.000	1.000	0.0	77	0.00	11.09
5	M	chlorodifluoromethane	0.374	0.344	8.0	68	0.00	4.65
6	M	dichlorodifluoromethane	0.541	0.500	7.6	66	0.00	4.65
7	m	chlorotrifluoroethene		----------NA----------				
8	M	chloromethane	0.478	0.416	13.0	67	-0.01	5.04
9	M	vinyl chloride	0.478	0.437	8.6	71	0.00	5.35
10	M	bromomethane	0.310	0.309	0.3	72	0.00	6.14
11	M	chloroethane	0.241	0.222	7.9	66	0.00	6.35
12		vinyl bromide		----------NA----------				
13	M	trichlorofluoromethane	0.602	0.688	-14.3	83	0.00	6.95
14	M	ethyl ether	0.183	0.168	8.2	67	0.00	7.42
15	M	acrolein	0.061	0.063	-3.3	78	0.00	7.65
16		1,2-dichloro-1,2,2-triflu		----------NA----------				
17	M	1,1-dichloroethene	0.312	0.314	-0.6	72	0.00	7.89
		----------	True	Calc.	% Drift	----------		
18	M	acetone	20.000	16.582	17.1	62	0.01	7.93
		----------	AvgRF	CCRF	% Dev	----------		
19	M	allyl chloride	0.198	0.183	7.6	69	0.00	8.49
20	M	acetonitrile	0.014	0.017	-21.4#	91	0.01	8.38
21	M	iodomethane	0.649	0.671	-3.4	76	-0.01	8.18
22	M	iso-butyl alcohol	0.003	0.003#	0.0	75	0.00	11.38
23	M	carbon disulfide	1.136	1.112	2.1	71	0.00	8.35
24	M	methylene chloride	0.351	0.342	2.6	70	0.00	8.67
		----------	True	Calc.	% Drift	----------		
25	M	methyl acetate	20.000	16.951	15.2	60	0.00	8.47
		----------	AvgRF	CCRF	% Dev	----------		
26	M	methyl tert butyl ether	1.077	1.091	-1.3	72	0.00	9.10
27	M	trans-1,2-dichloroethene	0.330	0.321	2.7	69	0.00	9.12
28	M	di-isopropyl ether	0.987	0.964	2.3	70	0.00	9.78
		----------	True	Calc.	% Drift	----------		
29	M	2-butanone	20.000	19.840	0.8	69	0.00	10.49
		----------	AvgRF	CCRF	% Dev	----------		

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

30	M	1,1-dichloroethane	0.569	0.562	1.2	71	0.00	9.73
31	M	chloroprene	0.451	0.518	-14.9	82	0.00	9.87
32	M	acrylonitrile	0.141	0.118	16.3	62	0.00	9.01
33	M	vinyl acetate	0.050	0.045	10.0	72	0.00	9.74
34	M	ethyl tert-butyl ether	1.060	1.115	-5.2	75	-0.01	10.27
			True	Calc.	% Drift			
35	M	ethyl acetate	20.000	17.347	13.3	61	0.00	10.53
			AvgRF	CCRF	% Dev			
36	M	2,2-dichloropropane	0.526	0.588	-11.8	78	0.00	10.55
37	M	cis-1,2-dichloroethene	0.367	0.363	1.1	71	0.00	10.52
38	M	propionitrile	0.051	0.044	13.7	65	0.00	10.54
39	M	bromochloromethane	0.190	0.195	-2.6	73	-0.01	10.83
40	M	tetrahydrofuran	0.095	0.084	11.6	66	0.00	10.90
41	M	chloroform	0.590	0.611	-3.6	74	0.00	10.89
42		t-butyl formate	0.319	0.311	2.5	74	0.00	10.97
43	S	dibromofluoromethane (s)	0.355	0.359	-1.1	82	0.00	11.10
44	S	1,2-dichloroethane-d4 (s)	0.425	0.432	-1.6	83	0.00	11.52
45	M	freon 113	0.284	0.328	-15.5	83	0.00	7.89
46	M	methacrylonitrile	0.206	0.183	11.2	67	0.00	10.77
47	M	1,1,1-trichloroethane	0.525	0.593	-13.0	79	0.00	11.20
48	M	Cyclohexane	0.512	0.468	8.6	67	0.00	11.30
49		tert amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	77	0.00	11.99
51		tert amyl ethyl ether		----------NA----------				
52	M	Di-isobutylene		----------NA----------				
53	M	epichlorohydrin	0.025	0.025	0.0	74	0.00	13.14
54	M	n-butyl alcohol	0.006	0.006#	0.0	76	0.00	12.07
55	M	carbon tetrachloride	0.409	0.462	-13.0	81	0.00	11.42
56	M	1,1-dichloropropene	0.351	0.348	0.9	71	0.00	11.38
57	M	hexane	0.234	0.282	-20.5#	87	0.00	9.53
58	M	benzene	1.023	0.977	4.5	69	0.00	11.63
59		2,2,4-trimethylpentane	0.852	0.887	-4.1	74	0.00	11.70
60	M	tert-amyl methyl ether	0.819	0.849	-3.7	74	0.00	11.70
61	M	heptane	0.146	0.157	-7.5	77	0.00	11.86
62	M	isopropyl acetate	0.450	0.455	-1.1	70	0.00	11.56
63	M	1,2-dichloroethane	0.358	0.424	-18.4	82	0.00	11.61
64	M	trichloroethene	0.265	0.269	-1.5	72	0.00	12.32
			True	Calc.	% Drift			
65	M	2-nitropropane	20.000	20.439	-2.2	71	0.00	13.34
			AvgRF	CCRF	% Dev			
66	M	2-chloroethyl vinyl ether	0.117	0.156	-33.3#	93	0.00	13.05
67	M	methyl methacrylate	0.238	0.237	0.4	71	0.00	12.58
68	M	1,2-dichloropropane	0.241	0.229	5.0	68	0.00	12.56
69	M	dibromomethane	0.171	0.177	-3.5	74	0.00	12.69
70	M	methylcyclohexane	0.389	0.432	-11.1	81	0.00	12.58
71	M	bromodichloromethane	0.345	0.373	-8.1	76	0.00	12.82
72	M	cis-1,3-dichloropropene	0.381	0.402	-5.5	75	0.00	13.26
73	S	toluene-d8 (s)	0.969	0.975	-0.6	81	0.00	13.55
74	M	4-methyl-2-pentanone	0.102	0.093	8.8	67	0.00	13.36
75	M	toluene	0.586	0.596	-1.7	72	0.00	13.62
76	M	3-methyl-1-butanol	0.009	0.011	-22.2#	81	0.00	13.35
77	M	trans-1,3-dichloropropene	0.351	0.381	-8.5	79	0.00	13.77
78	M	ethyl methacrylate	0.286	0.286	0.0	71	0.00	13.79
79	M	1,1,2-trichloroethane	0.187	0.181	3.2	70	0.00	13.97
80	M	2-hexanone	0.080	0.074	7.5	69	0.00	14.14

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

81	I	chlorobenzene-d5	1.000	1.000	0.0	80	0.00	14.95
82	m	butyl ether		----------NA----------				
83	M	tetrachloroethene	0.280	0.291	-3.9	75	0.00	14.18
84	M	1,3-dichloropropane	0.399	0.391	2.0	74	0.00	14.14
85	M	butyl acetate	0.161	0.147	8.7	69	0.00	14.22
86		3,3-dimethyl-1-butanol	0.024	0.027	-12.5	83	0.00	14.29
87	M	dibromochloromethane	0.333	0.357	-7.2	78	0.00	14.38
88	M	1,2-dibromoethane	0.282	0.282	0.0	74	0.00	14.53
89	M	chlorobenzene	0.777	0.780	-0.4	76	0.00	14.97
90	M	1,1,1,2-tetrachloroethane	0.334	0.355	-6.3	78	0.00	15.03
91	M	ethylbenzene	1.316	1.325	-0.7	74	0.00	15.04
92	M	m,p-xylene	0.502	0.511	-1.8	73	0.00	15.14
93	M	o-xylene	0.521	0.519	0.4	73	0.00	15.52
94	M	styrene	0.861	0.874	-1.5	76	0.00	15.52
95	M	bromoform	0.283	0.299	-5.7	78	0.00	15.74
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	17.09
97	M	isopropylbenzene	2.366	2.383	-0.7	74	0.00	15.84
98	S	4-bromofluorobenzene (s)	0.697	0.675	3.2	81	0.00	16.01
99	M	cyclohexanone	0.006	0.008#	-33.3#	121	0.00	15.96
100	M	bromobenzene	0.666	0.677	-1.7	77	0.00	16.19
101	M	1,1,2,2-tetrachloroethane	0.662	0.615	7.1	69	0.00	16.07
102	M	trans-1,4-dichloro-2-bute	0.171	0.118	31.0#	55	0.00	16.11
103	M	1,2,3-trichloropropane	0.178	0.172	3.4	73	0.00	16.15
104	M	n-propylbenzene	2.661	2.687	-1.0	74	0.00	16.22
105	M	2-chlorotoluene	0.569	0.569	0.0	75	0.00	16.34
106	M	4-chlorotoluene	1.661	1.667	-0.4	76	0.00	16.43
107	M	1,3,5-trimethylbenzene	1.994	2.058	-3.2	75	0.00	16.35
108	M	tert-butylbenzene	1.811	1.850	-2.2	76	0.00	16.68
109	M	pentachloroethane	0.458	0.498	-8.7	83	0.00	16.73
110	M	1,2,4-trimethylbenzene	2.048	2.146	-4.8	77	0.00	16.71
111	M	sec-butylbenzene	2.649	2.730	-3.1	75	0.00	16.88
112	M	1,3-dichlorobenzene	1.315	1.326	-0.8	77	0.00	17.04
113	M	p-isopropyltoluene	2.281	2.366	-3.7	76	0.00	16.99
114	M	1,4-dichlorobenzene	1.364	1.336	2.1	76	0.00	17.12
115	M	1,2-dichlorobenzene	1.356	1.353	0.2	76	0.00	17.49
116	M	n-butylbenzene	1.173	1.152	1.8	73	0.00	17.39
117	M	1,2-dibromo-3-chloropropa	0.149	0.155	-4.0	78	0.00	18.24
118		1,3,5-trichlorobenzene	1.268	1.311	-3.4	76	0.00	18.46
119	M	1,2,4-trichlorobenzene	1.125	1.114	1.0	72	0.00	19.11
120	M	hexachlorobutadiene	0.648	0.642	0.9	71	0.00	19.25
121	M	naphthalene	2.344	2.405	-2.6	74	0.00	19.39
122	M	1,2,3-trichlorobenzene	1.001	1.008	-0.7	74	0.00	19.63
123	M	hexachloroethane	0.517	0.501	3.1	75	0.00	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2B79407.D M2B3558.M Thu Feb 24 14:21:33 2011 MS2B

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

Response Factor Report MS2C

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

Calibration Files
1 =2c78507.D 2 =2c78508.D 100 =2c78514.D 50 =2C78512.D
20 =2c78511.D 200 =2c78515.D 5 =2c78509.D 10 =2c78510.D
0.5 =2C78506.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) tertiary butyl alcohol	1.187	1.182	1.149	1.145	0.992	1.093				1.125	6.54
3) 1,4-dioxane	0.093	0.090	0.091	0.091	0.089	0.093				0.091	1.86
4) I pentafluorobenzene ----------ISTD----------											
5) FREON 115										0.000#	-1.00
6) FREON 23										0.000#	-1.00
7) FREON 143A										0.000#	-1.00
8) FREON 152A										0.000#	-1.00
9) CHLOROTRIFLUOROETHENE										0.000#	-1.00
10) chlorodifluoromethane	0.393	0.396	0.491	0.481	0.468	0.487	0.460	0.481		0.457	8.75
11) dichlorodifluoromethane	0.477	0.611	0.606	0.577	0.596	0.577	0.585			0.576	7.88
12) FREON 114										0.000#	-1.00
13) FREON 142B										0.000#	-1.00
14) chloromethane	0.505	0.512	0.640	0.606	0.553	0.637	0.561	0.566	0.546	0.569	8.62
15) vinyl chloride	0.542	0.524	0.637	0.628	0.577	0.599	0.562	0.577		0.581	6.78
16) bromomethane	0.340	0.317	0.346	0.354	0.350	0.321	0.349	0.362	0.288	0.336	6.98
17) chloroethane	0.225	0.262	0.315	0.308	0.292	0.300	0.291	0.302		0.287	10.40
18) trichlorofluoromethane	0.589	0.595	0.732	0.719	0.686	0.714	0.684	0.696		0.677	8.09
19) ethyl ether	0.165	0.195	0.197	0.193	0.196	0.180	0.181			0.187	6.34
20) FREON 123										0.000#	-1.00
21) FREON 141B										0.000#	-1.00
22) FREON 123A										0.000#	-1.00
23) acrolein											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

		0.052	0.055		0.053	0.047		0.042	0.043		0.049	10.98
24)	1,1-dichloroethene											
		0.393	0.388	0.405	0.393	0.369	0.393	0.376	0.371		0.386	3.27
25)	acetone											
				0.087	0.093	0.072	0.085		0.084		0.084	9.15
26)	allyl chloride											
				0.245	0.244	0.230	0.240	0.213	0.227		0.233	5.29
27)	acetonitrile											
				0.026	0.025	0.025	0.026	0.025	0.025		0.025	2.36
28)	iodomethane											
		0.677	0.728	0.802	0.787	0.735	0.777	0.711	0.720	0.612	0.728	8.12
29)	iso-butyl alcohol											
											0.000#	-1.00
30)	carbon disulfide											
		1.351	1.331	1.455	1.426	1.306	1.410	1.285	1.286	1.264	1.346	5.14
31)	methylene chloride											
		0.328	0.391	0.433	0.426	0.409	0.424	0.384	0.400		0.399	8.40
32)	methyl acetate											
			0.204	0.203	0.206	0.200	0.198	0.181	0.190		0.197	4.46
33)	methyl tert butyl ether											
		0.953	0.980	1.087	1.091	1.058	1.053	0.981	1.007	0.913	1.014	6.12
34)	trans-1,2-dichloroethene											
		0.410	0.427	0.402	0.398	0.390	0.386	0.385	0.399		0.400	3.49
35)	di-isopropyl ether											
		1.046	1.055	1.220	1.208	1.164	1.193	1.111	1.170	1.009	1.131	6.89
36)	2-butanone											
				0.033	0.034	0.031	0.032		0.028		0.031	7.62
37)	1,1-dichloroethane											
		0.608	0.636	0.685	0.688	0.664	0.668	0.655	0.668	0.541	0.646	7.19
38)	chloroprene											
		0.430	0.485	0.562	0.545	0.525	0.548	0.521	0.548		0.520	8.41
39)	acrylonitrile											
				0.105	0.106	0.101	0.105	0.084	0.095		0.099	8.65
40)	vinyl acetate											
				0.059	0.058	0.053	0.056		0.050		0.055	6.24
41)	ethyl tert-butyl ether											
		1.036	1.043	1.227	1.221	1.174	1.190	1.115	1.155	0.974	1.126	7.99
42)	ethyl acetate											
				0.037	0.037	0.036	0.035	0.025	0.034		0.034	14.01
43)	2,2-dichloropropane											
		0.590	0.589	0.592	0.593	0.595	0.562	0.590	0.602		0.589	1.99
44)	cis-1,2-dichloroethene											
		0.436	0.446	0.413	0.414	0.413	0.404	0.436	0.407		0.421	3.75
45)	propionitrile											
				0.039	0.039	0.039	0.038	0.035	0.037		0.038	4.05
46)	bromochloromethane											
		0.156	0.184	0.210	0.213	0.211	0.208	0.198	0.207		0.199	9.91
47)	tetrahydrofuran											
				0.091	0.094	0.092	0.088	0.080	0.090		0.089	5.61
48)	chloroform											
		0.611	0.637	0.672	0.676	0.664	0.657	0.650	0.668	0.568	0.645	5.43
49)	t-butyl formate											
			0.247	0.313	0.308	0.298	0.302	0.265	0.293		0.290	8.39
50)	dibromofluoromethane (s)											
		0.400	0.366	0.376	0.382	0.370	0.366	0.375	0.440	0.388	0.385	6.09
51)	1,2-dichloroethane-d4 (s)											
		0.421	0.385	0.381	0.391	0.380	0.367	0.380	0.443	0.420	0.396	6.39
52)	freon 113											
			0.312	0.381	0.374	0.363	0.371	0.348	0.365		0.359	6.45
53)	methacrylonitrile											

		0.127	0.167	0.169	0.167	0.166	0.147	0.158		0.157	9.75
54)	1,1,1-trichloroethane											
		0.563	0.568	0.640	0.633	0.605	0.615	0.585	0.604	0.463	0.586	9.10
55)	Cyclohexane											
		0.579	0.618	0.668	0.660	0.629	0.643	0.603	0.618		0.627	4.68
56)	tert amyl alcohol											
											0.000#	-1.00
57)	I 1,4-difluorobenzene	----------ISTD----------										
58)	Di-isobutylene											
											0.000#	-1.00
59)	epichlorohydrin											
			0.016	0.017	0.017	0.015	0.015	0.017			0.016	6.03
60)	n-butyl alcohol											
		0.004	0.005	0.005	0.005	0.005	0.005	0.005			0.005#	8.19
61)	carbon tetrachloride											
		0.390	0.407	0.436	0.430	0.413	0.417	0.410	0.416		0.415	3.39
62)	1,1-dichloropropene											
		0.363	0.397	0.397	0.394	0.386	0.381	0.389	0.400	0.307	0.379	7.77
63)	hexane											
		0.294	0.329	0.349	0.342	0.345	0.336	0.345	0.361		0.338	5.91
64)	tert amyl ethyl ether											
											0.000#	-1.00
65)	iso-octane											
											0.000#	-1.00
66)	benzene											
		1.157	1.142	1.115	1.135	1.122	1.053	1.128	1.132	1.121	1.123	2.58
67)	tert-amyl methyl ether											
		0.766	0.766	0.818	0.834	0.815	0.764	0.808	0.806	0.761	0.793	3.60
68)	heptane											
		0.156	0.186	0.194	0.194	0.195	0.185	0.192	0.210		0.189	8.13
69)	isopropyl acetate											
			0.369	0.393	0.386	0.390	0.377	0.368	0.400		0.383	3.19
70)	1,2-dichloroethane											
		0.306	0.343	0.342	0.351	0.351	0.324	0.352	0.349	0.307	0.336	5.65
71)	trichloroethene											
		0.281	0.305	0.301	0.297	0.294	0.289	0.299	0.302	0.247	0.291	6.10
72)	2-nitropropane											
			0.010	0.010	0.026	0.009	0.015	0.012			0.014	45.18
	----- Linear regression ----- Coefficient = 0.9706											
	Response Ratio = 0.00237 + 0.00886 *A											
73)	2-chloroethyl vinyl ether											
			0.099	0.132	0.130	0.126	0.124	0.108	0.121		0.120	10.20
74)	methyl methacrylate											
		0.115	0.120	0.147	0.148	0.146	0.142	0.142	0.147		0.138	9.57
75)	1,2-dichloropropane											
		0.245	0.269	0.282	0.288	0.286	0.273	0.276	0.283	0.215	0.269	8.92
76)	dibromomethane											
		0.121	0.158	0.167	0.170	0.170	0.162	0.161	0.168		0.159	10.23
77)	methylcyclohexane											
		0.442	0.475	0.528	0.518	0.491	0.499	0.499	0.516		0.496	5.55
78)	bromodichloromethane											
		0.328	0.352	0.378	0.382	0.372	0.372	0.359	0.369	0.299	0.357	7.62
79)	cis-1,3-dichloropropene											
		0.409	0.427	0.465	0.473	0.461	0.453	0.442	0.459	0.395	0.443	6.06
80)	toluene-d8 (s)											
			1.083	0.980	1.006	0.985	0.913	1.021	1.203		1.027	9.03
81)	4-methyl-2-pentanone											
			0.066	0.079	0.082	0.081	0.075	0.078	0.080		0.077	6.96

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

82) toluene
0.652 0.698 0.681 0.692 0.680 0.634 0.690 0.699 0.642 0.674 3.67
83) 3-methyl-1-butanol
0.006 0.008 0.008 0.009 0.007 0.008 0.009 0.008# 11.54
84) trans-1,3-dichloropropene
0.356 0.389 0.401 0.413 0.412 0.372 0.385 0.410 0.342 0.387 6.64
85) ethyl methacrylate
0.212 0.230 0.284 0.288 0.278 0.264 0.260 0.280 0.262 10.46
86) 1,1,2-trichloroethane
0.176 0.185 0.191 0.196 0.197 0.184 0.193 0.199 0.165 0.187 5.94
87) 2-hexanone
0.059 0.070 0.073 0.073 0.063 0.068 0.072 0.069 8.12

88) I chlorobenzene-d5 ----------ISTD----------
89) tetrachloroethene
0.317 0.342 0.318 0.313 0.311 0.302 0.309 0.322 0.250 0.309 8.05
90) 1,3-dichloropropane
0.428 0.424 0.453 0.462 0.466 0.419 0.439 0.449 0.400 0.438 4.97
91) butyl acetate
0.141 0.168 0.171 0.173 0.153 0.159 0.169 0.162 7.18
92) 3,3-dimethyl-1-butanol
0.017 0.021 0.022 0.023 0.019 0.020 0.022 0.020 10.05
93) dibromochloromethane
0.273 0.298 0.360 0.352 0.347 0.356 0.310 0.326 0.328 9.71
94) 1,2-dibromoethane
0.235 0.258 0.292 0.287 0.287 0.284 0.264 0.273 0.216 0.266 9.79
95) BUTYL ETHER
0.000# -1.00
96) chlorobenzene
0.879 0.922 0.888 0.908 0.911 0.851 0.900 0.904 0.856 0.891 2.76
97) 1,1,1,2-tetrachloroethane
0.292 0.320 0.339 0.343 0.338 0.325 0.316 0.332 0.326 5.11
98) ethylbenzene
1.547 1.559 1.497 1.563 1.554 1.408 1.511 1.552 1.535 1.525 3.24
99) m,p-xylene
0.578 0.607 0.579 0.604 0.602 0.540 0.585 0.603 0.585 0.587 3.58
100) o-xylene
0.586 0.586 0.589 0.607 0.588 0.556 0.569 0.585 0.497 0.574 5.59
101) styrene
0.836 0.850 0.974 1.002 0.982 0.913 0.888 0.939 0.773 0.906 8.43
102) bromoform
0.187 0.241 0.235 0.222 0.242 0.197 0.213 0.220 9.79

103) I 1,4-dichlorobenzene-d ----------ISTD----------
104) isopropylbenzene
2.918 2.965 2.782 2.903 2.877 2.639 2.851 2.941 2.710 2.843 3.89
105) 4-bromofluorobenzene (s)
0.803 0.863 0.864 0.756 0.821 6.38
106) cyclohexanone
0.023 0.033 0.035 0.023 0.031 0.043 0.031 24.08
----- Linear regression ----- Coefficient = 0.9904
Response Ratio = 0.04423 + 0.02231 *A

107) bromobenzene
0.741 0.740 0.712 0.751 0.759 0.679 0.768 0.770 0.670 0.732 5.06
108) 1,1,2,2-tetrachloroethane
0.575 0.612 0.607 0.649 0.649 0.581 0.634 0.660 0.562 0.614 5.84
109) trans-1,4-dichloro-2-butene
0.078 0.079 0.073 0.078 0.049 0.067 0.071 16.27
----- Linear regression ----- Coefficient = 0.9998

SII-SSA-0014-003836

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

Response Ratio = -0.00170 + 0.07858 *A

110)	1,2,3-trichloropropane										
		0.144	0.145	0.155	0.159	0.135	0.152	0.158		0.150	5.88
111)	n-propylbenzene										
			3.217	3.422	3.519	2.957	3.481	3.628		3.371	7.24
112)	2-chlorotoluene										
	0.728	0.722	0.650	0.685	0.692	0.615	0.702	0.721	0.644	0.684	5.82
113)	4-chlorotoluene										
	2.158	2.216	2.005	2.111	2.155	1.909	2.153	2.191	2.111	2.112	4.59
114)	1,3,5-trimethylbenzene										
	2.338	2.397	2.343	2.440	2.449	2.226	2.383	2.428	2.298	2.367	3.09
115)	tert-butylbenzene										
			2.094	2.135	2.067	2.067	2.012	2.086		2.077	1.94
116)	pentachloroethane										
	0.394	0.417	0.491	0.487	0.463	0.493	0.432	0.457		0.454	8.13
117)	1,2,4-trimethylbenzene										
	2.398	2.431	2.389	2.450	2.522	2.262	2.440	2.510	2.401	2.423	3.15
118)	sec-butylbenzene										
	3.109	3.253	3.176	3.268	3.263	3.010	3.170	3.285	2.960	3.166	3.73
119)	1,3-dichlorobenzene										
	1.429	1.422	1.460	1.483	1.493	1.394	1.452	1.480	1.361	1.442	3.07
120)	p-isopropyltoluene										
	2.604	2.620	2.647	2.703	2.696	2.485	2.631	2.720	2.487	2.622	3.29
121)	1,4-dichlorobenzene										
	1.446	1.466	1.477	1.500	1.509	1.408	1.459	1.508	1.567	1.482	3.08
122)	1,2-dichlorobenzene										
	1.332	1.391	1.429	1.468	1.452	1.339	1.399	1.424	1.318	1.395	3.90
123)	n-butylbenzene										
	1.369	1.443	1.466	1.516	1.508	1.340	1.414	1.485	1.310	1.428	5.22
124)	1,2-dibromo-3-chloropropane										
			0.106	0.117	0.114	0.100	0.100	0.107		0.107	6.48
125)	1,3,5-trichlorobenzene										
	1.116	1.148	1.324	1.389	1.333	1.197	1.208	1.267	1.161	1.238	7.64
126)	1,2,4-trichlorobenzene										
	0.780	0.835	1.083	1.139	1.072	1.005	0.913	0.999		0.978	12.87
127)	hexachlorobutadiene										
	0.650	0.662	0.703	0.718	0.696	0.640	0.656	0.689	0.628	0.671	4.64
128)	naphthalene										
			1.775	1.859	1.739	1.643	1.409	1.556		1.663	9.80
129)	1,2,3-trichlorobenzene										
	0.690	0.716	0.912	0.951	0.891	0.845	0.767	0.841		0.826	11.37
130)	hexachloroethane										
			0.520	0.473	0.426	0.526	0.371	0.397		0.452	14.28

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2C3580.M Fri Jan 21 15:41:05 2011 ACCUTEST

SII-SSA-0014-003837

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2C78517A.D Vial: 14
Acq On : 20 Jan 2011 7:18 pm Operator: tarar1
Sample : icv3580-50 Inst : MS2C
Misc : MS7421,V2C3580,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	98	0.00	8.43
2		tertiary butyl alcohol	1.125	1.246	-10.8	104	0.00	8.57
3		1,4-dioxane	0.091	0.093	-2.2	102	0.00	12.48
4	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	10.86
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A		----------NA----------				
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.378	17.3	84	0.00	4.43
11		dichlorodifluoromethane	0.576	0.569	1.2	100	0.01	4.42
12		FREON 114		----------NA----------				
13		FREON 142B		----------NA----------				
14		chloromethane	0.569	0.590	-3.7	103	0.00	4.82
15		vinyl chloride	0.581	0.605	-4.1	102	0.00	5.13
16		bromomethane	0.336	0.347	-3.3	104	0.00	5.90
17		chloroethane	0.287	0.305	-6.3	105	0.00	6.12
18		trichlorofluoromethane	0.677	0.697	-3.0	103	0.01	6.69
19		ethyl ether	0.187	0.200	-7.0	108	0.00	7.14
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A		----------NA----------				
23		acrolein	0.049	0.051	-4.1	103	0.00	7.45
24		1,1-dichloroethene	0.386	0.398	-3.1	108	0.00	7.65
25		acetone	0.084	0.091	-8.3	105	0.00	7.71
26		allyl chloride	0.233	0.246	-5.6	107	0.00	8.25
27		acetonitrile	0.025	0.028	-12.0	116	0.01	8.25
28		iodomethane	0.728	0.798	-9.6	108	0.00	7.98
29		iso-butyl alcohol		----------NA----------				
30		carbon disulfide	1.346	1.443	-7.2	108	0.00	8.11
31		methylene chloride	0.399	0.432	-8.3	108	0.00	8.48
32		methyl acetate	0.197	0.205	-4.1	106	0.00	8.24
33		methyl tert butyl ether	1.014	1.108	-9.3	108	0.00	8.83
34		trans-1,2-dichloroethene	0.400	0.358	10.5	96	0.00	8.89
35		di-isopropyl ether	1.131	1.244	-10.0	109	0.00	9.49
36		2-butanone	0.031	0.035	-12.9	109	0.00	10.29
37		1,1-dichloroethane	0.646	0.697	-7.9	108	0.00	9.52
38		chloroprene	0.520	0.536	-3.1	105	0.00	9.63
39		acrylonitrile	0.099	0.106	-7.1	106	0.00	8.85
40		vinyl acetate	0.055	0.061	-10.9	113	0.00	9.51
41		ethyl tert-butyl ether	1.126	1.220	-8.3	106	0.00	9.99

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

42		ethyl acetate	0.034	0.038	-11.8	109	0.00	10.30
43		2,2-dichloropropane	0.589	0.597	-1.4	107	0.00	10.32
44		cis-1,2-dichloroethene	0.421	0.461	-9.5	118	0.00	10.32
45		propionitrile	0.038	0.039	-2.6	107	0.00	10.40
46		bromochloromethane	0.199	0.218	-9.5	109	0.00	10.66
47		tetrahydrofuran	0.089	0.097	-9.0	109	0.00	10.69
48		chloroform	0.645	0.695	-7.8	109	0.00	10.72
49		t-butyl formate	0.290	0.320	-10.3	111	0.00	10.74
50	S	dibromofluoromethane (s)	0.385	0.366	4.9	102	0.00	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.372	6.1	101	0.00	11.35
52		freon 113	0.359	0.373	-3.9	106	0.00	7.61
53		methacrylonitrile	0.157	0.170	-8.3	107	0.00	10.59
54		1,1,1-trichloroethane	0.586	0.633	-8.0	106	0.00	10.97
55		Cyclohexane	0.627	0.654	-4.3	105	0.00	11.04
56		tert amyl alcohol		----------NA----------				
57	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	11.79
58		Di-isobutylene		----------NA----------				
59		epichlorohydrin	0.016	0.017	-6.3	104	0.00	13.16
60		n-butyl alcohol	0.005	0.005#	0.0	104	0.00	11.91
61		carbon tetrachloride	0.415	0.425	-2.4	105	0.00	11.18
62		1,1-dichloropropene	0.379	0.403	-6.3	108	0.00	11.15
63		hexane	0.338	0.346	-2.4	107	0.00	9.21
64		tert amyl ethyl ether		----------NA----------				
65		iso-octane		----------NA----------				
66		benzene	1.123	1.142	-1.7	107	0.00	11.42
67		tert-amyl methyl ether	0.793	0.829	-4.5	105	0.00	11.44
68		heptane	0.189	0.206	-9.0	112	0.00	11.57
69		isopropyl acetate	0.383	0.433	-13.1	119	0.00	11.33
70		1,2-dichloroethane	0.336	0.355	-5.7	107	0.00	11.44
71		trichloroethene	0.291	0.300	-3.1	107	0.00	12.12
		----------	True	Calc.	% Drift	----------		
72		2-nitropropane	50.000	42.764	14.5	104	0.00	13.34
		----------	AvgRF	CCRF	% Dev	----------		
73		2-chloroethyl vinyl ether	0.120	0.106	11.7	87	0.00	12.86
74		methyl methacrylate	0.138	0.148	-7.2	106	0.00	12.36
75		1,2-dichloropropane	0.269	0.296	-10.0	109	0.00	12.37
76		dibromomethane	0.159	0.173	-8.8	108	0.00	12.53
77		methylcyclohexane	0.496	0.524	-5.6	107	0.00	12.32
78		bromodichloromethane	0.357	0.393	-10.1	109	0.00	12.65
79		cis-1,3-dichloropropene	0.443	0.486	-9.7	109	0.00	13.08
80	S	toluene-d8 (s)	1.027	0.966	5.9	102	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.085	-10.4	110	0.00	13.16
82		toluene	0.674	0.699	-3.7	107	0.00	13.41
83		3-methyl-1-butanol	0.008	0.008#	0.0	100	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.430	-11.1	110	0.00	13.60
85		ethyl methacrylate	0.262	0.301	-14.9	111	0.00	13.58
86		1,1,2-trichloroethane	0.187	0.203	-8.6	110	0.00	13.81
87		2-hexanone	0.069	0.076	-10.1	110	0.00	13.95
88	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	14.76
89		tetrachloroethene	0.309	0.316	-2.3	106	0.00	13.96
90		1,3-dichloropropane	0.438	0.478	-9.1	108	0.00	13.97
91		butyl acetate	0.162	0.174	-7.4	107	0.00	14.01
92		3,3-dimethyl-1-butanol	0.020	0.020	0.0	96	0.00	14.11
93		dibromochloromethane	0.328	0.361	-10.1	108	0.00	14.23
94		1,2-dibromoethane	0.266	0.300	-12.8	110	0.00	14.37
95		BUTYL ETHER		----------NA----------				

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

96	chlorobenzene	0.891	0.936	-5.1	108	0.00	14.79
97	1,1,1,2-tetrachloroethane	0.326	0.354	-8.6	108	0.00	14.84
98	ethylbenzene	1.525	1.545	-1.3	104	0.00	14.83
99	m,p-xylene	0.587	0.606	-3.2	105	0.00	14.92
100	o-xylene	0.574	0.614	-7.0	106	0.00	15.32
101	styrene	0.906	0.976	-7.7	102	0.00	15.33
102	bromoform	0.220	0.242	-10.0	108	0.00	15.59
103 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.92
104	isopropylbenzene	2.843	2.946	-3.6	106	0.00	15.63
105 S	4-bromofluorobenzene (s)	0.821	0.811	1.2	98	0.00	15.83
		True	Calc.	% Drift			
106	cyclohexanone	500.000	304.870	39.0#	58	0.00	15.80
		AvgRF	CCRF	% Dev			
107	bromobenzene	0.732	0.773	-5.6	108	0.00	16.02
108	1,1,2,2-tetrachloroethane	0.614	0.641	-4.4	103	0.00	15.92
		True	Calc.	% Drift			
109	trans-1,4-dichloro-2-bute	50.000	55.733	-11.5	113	0.00	15.96
		AvgRF	CCRF	% Dev			
110	1,2,3-trichloropropane	0.150	0.155	-3.3	104	0.00	15.99
111	n-propylbenzene	3.371	3.308	1.9	101	0.00	16.00
112	2-chlorotoluene	0.684	0.707	-3.4	108	0.00	16.15
113	4-chlorotoluene	2.112	2.087	1.2	103	0.00	16.24
114	1,3,5-trimethylbenzene	2.367	2.459	-3.9	105	0.00	16.14
115	tert-butylbenzene	2.077	2.110	-1.6	103	0.00	16.47
116	pentachloroethane	0.454	0.518	-14.1	111	0.00	16.56
117	1,2,4-trimethylbenzene	2.423	2.480	-2.4	106	0.00	16.51
118	sec-butylbenzene	3.166	3.219	-1.7	103	0.00	16.67
119	1,3-dichlorobenzene	1.442	1.550	-7.5	109	0.00	16.86
120	p-isopropyltoluene	2.622	2.771	-5.7	107	0.00	16.77
121	1,4-dichlorobenzene	1.482	1.546	-4.3	108	0.00	16.94
122	1,2-dichlorobenzene	1.395	1.501	-7.6	107	0.00	17.32
123	n-butylbenzene	1.428	1.499	-5.0	103	0.00	17.17
124	1,2-dibromo-3-chloropropa	0.107	0.113	-5.6	101	0.00	18.09
125	1,3,5-trichlorobenzene	1.238	1.369	-10.6	103	0.00	18.27
126	1,2,4-trichlorobenzene	0.978	1.141	-16.7	105	0.00	18.93
127	hexachlorobutadiene	0.671	0.703	-4.8	102	0.00	19.03
128	naphthalene	1.663	1.824	-9.7	102	0.00	19.22
129	1,2,3-trichlorobenzene	0.826	0.967	-17.1	106	0.00	19.47
130	hexachloroethane	0.452	0.496	-9.7	109	0.00	17.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C78512.D M2C3580.M Fri Jan 21 15:41:05 2011 ACCUTEST

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2c...2c3633-3634\2c79578.D Vial: 2
Acq On : 24 Feb 2011 11:04 am Operator: dezareer
Sample : cc3580-20 Inst : MS2C
Misc : MS8531,V2C3633,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	0.00	8.42
2		tertiary butyl alcohol	1.125	1.198	-6.5	94	-0.01	8.55
3		1,4-dioxane	0.091	0.103	-13.2	102	0.00	12.47
4	I	pentafluorobenzene	1.000	1.000	0.0	115	-0.01	10.85
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A	0.000	0.000#	0.0	0#	-0.01	4.42
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.439	3.9	108	-0.01	4.42
11		dichlorodifluoromethane	0.576	0.556	3.5	110	0.00	4.40
12		FREON 114		----------NA----------				
13		FREON 142B	0.000	0.000#	0.0	0#	0.00	5.11
14		chloromethane	0.569	0.582	-2.3	121	0.00	4.81
15		vinyl chloride	0.581	0.592	-1.9	118	-0.02	5.11
16		bromomethane	0.336	0.356	-6.0	116	0.00	5.90
17		chloroethane	0.287	0.306	-6.6	120	0.00	6.11
18		trichlorofluoromethane	0.677	0.652	3.7	109	-0.02	6.66
19		ethyl ether	0.187	0.173	7.5	103	0.00	7.13
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A	0.000	0.000#	0.0	0#	-0.02	7.59
23		acrolein	0.049	0.036	26.5#	88	0.00	7.45
24		1,1-dichloroethene	0.386	0.396	-2.6	123	-0.01	7.63
25		acetone	0.084	0.067	20.2#	107	0.00	7.70
26		allyl chloride	0.233	0.239	-2.6	119	0.00	8.25
27		acetonitrile	0.025	0.024	4.0	107	0.00	8.23
28		iodomethane	0.728	0.720	1.1	112	-0.02	7.95
29		iso-butyl alcohol	0.000	0.000#	0.0	122	0.00	11.15
30		carbon disulfide	1.346	1.451	-7.8	127	-0.02	8.10
31		methylene chloride	0.399	0.401	-0.5	112	-0.02	8.47
32		methyl acetate	0.197	0.165	16.2	95	0.00	8.23
33		methyl tert butyl ether	1.014	0.930	8.3	101	-0.01	8.82
34		trans-1,2-dichloroethene	0.400	0.409	-2.2	120	-0.01	8.88
35		di-isopropyl ether	1.131	1.213	-7.3	119	0.00	9.48
36		2-butanone	0.031	0.026	16.1	97	0.00	10.27
37		1,1-dichloroethane	0.646	0.724	-12.1	125	-0.01	9.51
38		chloroprene	0.520	0.585	-12.5	128	0.00	9.63
39		acrylonitrile	0.099	0.084	15.2	95	0.00	8.85
40		vinyl acetate	0.055	0.044	20.0#	94	0.00	9.50
41		ethyl tert-butyl ether	1.126	1.123	0.3	110	0.00	9.98

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

42		ethyl acetate	0.034	0.030	11.8	94	0.00	10.29
43		2,2-dichloropropane	0.589	0.643	-9.2	124	0.00	10.31
44		cis-1,2-dichloroethene	0.421	0.407	3.3	113	0.00	10.31
45		propionitrile	0.038	0.033	13.2	97	0.00	10.39
46		bromochloromethane	0.199	0.190	4.5	103	0.00	10.65
47		tetrahydrofuran	0.089	0.079	11.2	98	0.00	10.69
48		chloroform	0.645	0.672	-4.2	116	-0.01	10.71
49		t-butyl formate	0.290	0.249	14.1	96	0.00	10.73
50	S	dibromofluoromethane (s)	0.385	0.376	2.3	116	-0.01	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.351	11.4	106	0.00	11.35
52		freon 113	0.359	0.362	-0.8	114	0.00	7.61
53		methacrylonitrile	0.157	0.143	8.9	98	0.00	10.59
54		1,1,1-trichloroethane	0.586	0.639	-9.0	121	0.00	10.96
55		Cyclohexane	0.627	0.680	-8.5	124	0.00	11.03
56		tert amyl alcohol	0.000	0.009#	0.0	0#	-0.03	11.33
57	I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.00	11.78
58		Di-isobutylene	0.000	0.000#	0.0	0#	-0.02	11.56
59		epichlorohydrin	0.016	0.013	18.8	84	0.00	13.16
60		n-butyl alcohol	0.005	0.004#	20.0	95	0.00	11.90
61		carbon tetrachloride	0.415	0.438	-5.5	119	0.00	11.17
62		1,1-dichloropropene	0.379	0.431	-13.7	125	0.00	11.14
63		hexane	0.338	0.396	-17.2	129	0.00	9.20
64		tert amyl ethyl ether	0.000	0.003#	0.0	0#	-0.07	12.47
65		iso-octane	0.000	0.000#	0.0	0#	0.00	11.91
66		benzene	1.123	1.221	-8.7	122	-0.01	11.41
67		tert-amyl methyl ether	0.793	0.756	4.7	104	-0.01	11.43
68		heptane	0.189	0.228	-20.6#	131	0.00	11.56
69		isopropyl acetate	0.383	0.338	11.7	97	-0.01	11.32
70		1,2-dichloroethane	0.336	0.320	4.8	102	-0.01	11.43
71		trichloroethene	0.291	0.308	-5.8	118	0.00	12.11
			True	Calc.	% Drift			
72		2-nitropropane	20.000	51.355	-156.8#	125	0.00	13.33
			AvgRF	CCRF	% Dev			
73		2-chloroethyl vinyl ether	0.120	0.098	18.3	87	0.00	12.86
74		methyl methacrylate	0.138	0.122	11.6	94	0.00	12.36
75		1,2-dichloropropane	0.269	0.291	-8.2	114	0.00	12.37
76		dibromomethane	0.159	0.144	9.4	95	0.00	12.52
77		methylcyclohexane	0.496	0.532	-7.3	122	0.00	12.31
78		bromodichloromethane	0.357	0.351	1.7	106	-0.01	12.64
79		cis-1,3-dichloropropene	0.443	0.439	0.9	107	-0.01	13.07
80	S	toluene-d8 (s)	1.027	1.101	-7.2	125	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.064	16.9	89	0.00	13.15
82		toluene	0.674	0.714	-5.9	118	0.00	13.41
83		3-methyl-1-butanol	0.008	0.006#	25.0#	81	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.350	9.6	95	0.00	13.60
85		ethyl methacrylate	0.262	0.227	13.4	92	0.00	13.57
86		1,1,2-trichloroethane	0.187	0.164	12.3	93	0.00	13.80
87		2-hexanone	0.069	0.055	20.3#	84	0.00	13.94
88	I	chlorobenzene-d5	1.000	1.000	0.0	110	0.00	14.75
89		tetrachloroethene	0.309	0.327	-5.8	116	0.00	13.95
90		1,3-dichloropropane	0.438	0.394	10.0	93	0.00	13.97
91		butyl acetate	0.162	0.136	16.0	87	0.00	14.00
92		3,3-dimethyl-1-butanol	0.020	0.016	20.0	79	0.00	14.10
93		dibromochloromethane	0.328	0.296	9.8	94	0.00	14.22
94		1,2-dibromoethane	0.266	0.237	10.9	91	0.00	14.36
95		BUTYL ETHER	0.000	0.010#	0.0	0#	0.00	14.67

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

96	chlorobenzene	0.891	0.935	-4.9	113	0.00	14.78
97	1,1,1,2-tetrachloroethane	0.326	0.333	-2.1	108	0.00	14.84
98	ethylbenzene	1.525	1.638	-7.4	116	0.00	14.82
99	m,p-xylene	0.587	0.643	-9.5	118	0.00	14.92
100	o-xylene	0.574	0.617	-7.5	115	0.00	15.31
101	styrene	0.906	0.978	-7.9	110	0.00	15.32
102	bromoform	0.220	0.171	22.3#	85	0.00	15.58
103 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	16.91
104	isopropylbenzene	2.843	3.270	-15.0	117	0.00	15.62
105 S	4-bromofluorobenzene (s)	0.821	0.883	-7.6	105	0.00	15.82
		True	Calc.	% Drift			
106	cyclohexanone	200.000	156.189	21.9#	83	0.00	15.80
		AvgRF	CCRF	% Dev			
107	bromobenzene	0.732	0.779	-6.4	105	0.00	16.01
108	1,1,2,2-tetrachloroethane	0.614	0.528	14.0	84	0.00	15.91
		True	Calc.	% Drift			
109	trans-1,4-dichloro-2-bute	20.000	14.932	25.3#	77	0.00	15.95
		AvgRF	CCRF	% Dev			
110	1,2,3-trichloropropane	0.150	0.129	14.0	83	0.00	15.99
111	n-propylbenzene	3.371	3.856	-14.4	113	0.00	16.00
112	2-chlorotoluene	0.684	0.753	-10.1	112	0.00	16.15
113	4-chlorotoluene	2.112	2.238	-6.0	107	0.00	16.24
114	1,3,5-trimethylbenzene	2.367	2.692	-13.7	113	0.00	16.13
115	tert-butylbenzene	2.077	2.391	-15.1	119	0.00	16.46
116	pentachloroethane	0.454	0.490	-7.9	109	0.00	16.56
117	1,2,4-trimethylbenzene	2.423	2.751	-13.5	112	0.00	16.51
118	sec-butylbenzene	3.166	3.691	-16.6	116	0.00	16.66
119	1,3-dichlorobenzene	1.442	1.582	-9.7	109	0.00	16.86
120	p-isopropyltoluene	2.622	3.074	-17.2	117	0.00	16.77
121	1,4-dichlorobenzene	1.482	1.566	-5.7	107	0.00	16.94
122	1,2-dichlorobenzene	1.395	1.433	-2.7	101	0.00	17.32
123	n-butylbenzene	1.428	1.645	-15.2	112	0.00	17.17
124	1,2-dibromo-3-chloropropa	0.107	0.073	31.8#	66	0.00	18.09
125	1,3,5-trichlorobenzene	1.238	1.380	-11.5	106	0.00	18.27
126	1,2,4-trichlorobenzene	0.978	1.005	-2.8	96	0.00	18.92
127	hexachlorobutadiene	0.671	0.745	-11.0	110	0.00	19.03
128	naphthalene	1.663	1.383	16.8	82	0.00	19.21
129	1,2,3-trichlorobenzene	0.826	0.725	12.2	84	0.00	19.46
130	hexachloroethane	0.452	0.495	-9.5	119	0.00	17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2c78511.D M2C3580.M Fri Feb 25 14:31:30 2011 ACCUNJ

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2c...2c3637-3638\2c79672.D Vial: 2
Acq On : 28 Feb 2011 9:02 am Operator: dezareer
Sample : cc3580-20 Inst : MS2C
Misc : MS8710,V2C3637,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	153	0.00	8.43
2		tertiary butyl alcohol	1.125	0.985	12.4	131	0.00	8.55
3		1,4-dioxane	0.091	0.088	3.3	148	0.00	12.47
4	I	pentafluorobenzene	1.000	1.000	0.0	117	-0.01	10.85
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A		----------NA----------				
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.424	7.2	106	0.00	4.43
11		dichlorodifluoromethane	0.576	0.480	16.7	97	0.00	4.41
12		FREON 114		----------NA----------				
13		FREON 142B		----------NA----------				
14		chloromethane	0.569	0.495	13.0	105	0.00	4.81
15		vinyl chloride	0.581	0.509	12.4	103	-0.01	5.12
16		bromomethane	0.336	0.322	4.2	107	0.00	5.90
17		chloroethane	0.287	0.253	11.8	101	0.00	6.11
18		trichlorofluoromethane	0.677	0.577	14.8	98	0.00	6.68
19		ethyl ether	0.187	0.193	-3.2	117	0.00	7.13
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A		----------NA----------				
23		acrolein	0.049	0.049	0.0	122	0.00	7.45
24		1,1-dichloroethene	0.386	0.352	8.8	111	-0.01	7.63
25		acetone	0.084	0.087	-3.6	141	-0.01	7.70
26		allyl chloride	0.233	0.216	7.3	110	0.00	8.25
27		acetonitrile	0.025	0.027	-8.0	124	0.00	8.23
28		iodomethane	0.728	0.688	5.5	109	0.00	7.97
29		iso-butyl alcohol		----------NA----------				
30		carbon disulfide	1.346	1.259	6.5	113	0.00	8.11
31		methylene chloride	0.399	0.390	2.3	111	-0.01	8.47
32		methyl acetate	0.197	0.214	-8.6	125	0.00	8.23
33		methyl tert butyl ether	1.014	1.030	-1.6	114	-0.01	8.82
34		trans-1,2-dichloroethene	0.400	0.366	8.5	109	-0.01	8.88
35		di-isopropyl ether	1.131	1.094	3.3	110	0.00	9.48
36		2-butanone	0.031	0.034	-9.7	130	0.00	10.28
37		1,1-dichloroethane	0.646	0.630	2.5	111	-0.01	9.51
38		chloroprene	0.520	0.487	6.3	108	0.00	9.63
39		acrylonitrile	0.099	0.112	-13.1	130	0.00	8.85
40		vinyl acetate	0.055	0.057	-3.6	125	0.00	9.50
41		ethyl tert-butyl ether	1.126	1.120	0.5	111	0.00	9.98

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

42		ethyl acetate	0.034	0.040	-17.6	127	0.00	10.29
43		2,2-dichloropropane	0.589	0.535	9.2	105	0.00	10.32
44		cis-1,2-dichloroethene	0.421	0.373	11.4	105	0.00	10.31
45		propionitrile	0.038	0.044	-15.8	134	0.00	10.39
46		bromochloromethane	0.199	0.203	-2.0	112	0.00	10.65
47		tetrahydrofuran	0.089	0.102	-14.6	129	0.00	10.69
48		chloroform	0.645	0.611	5.3	108	-0.01	10.71
49		t-butyl formate	0.290	0.292	-0.7	115	0.00	10.73
50	S	dibromofluoromethane (s)	0.385	0.392	-1.8	124	-0.01	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.400	-1.0	123	0.00	11.35
52		freon 113	0.359	0.325	9.5	105	0.00	7.60
53		methacrylonitrile	0.157	0.181	-15.3	127	0.00	10.58
54		1,1,1-trichloroethane	0.586	0.546	6.8	105	0.00	10.96
55		Cyclohexane	0.627	0.575	8.3	107	0.00	11.04
56		tert amyl alcohol		----------NA----------				
57	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	11.78
58		Di-isobutylene		----------NA----------				
59		epichlorohydrin	0.016	0.019	-18.7	123	0.00	13.16
60		n-butyl alcohol	0.005	0.007#	-40.0#	145	0.00	11.90
61		carbon tetrachloride	0.415	0.389	6.3	104	-0.01	11.17
62		1,1-dichloropropene	0.379	0.379	0.0	108	0.00	11.15
63		hexane	0.338	0.347	-2.7	111	0.00	9.20
64		tert amyl ethyl ether		----------NA----------				
65		iso-octane		----------NA----------				
66		benzene	1.123	1.120	0.3	110	-0.01	11.41
67		tert-amyl methyl ether	0.793	0.831	-4.8	112	-0.01	11.43
68		heptane	0.189	0.188	0.5	106	0.00	11.56
69		isopropyl acetate	0.383	0.426	-11.2	120	0.00	11.33
70		1,2-dichloroethane	0.336	0.344	-2.4	108	0.00	11.44
71		trichloroethene	0.291	0.285	2.1	107	0.00	12.11
		----------	True	Calc.	% Drift	----------		
72		2-nitropropane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
73		2-chloroethyl vinyl ether	0.120	0.138	-15.0	121	0.00	12.86
74		methyl methacrylate	0.138	0.163	-18.1	123	0.00	12.36
75		1,2-dichloropropane	0.269	0.285	-5.9	110	0.00	12.37
76		dibromomethane	0.159	0.169	-6.3	110	0.00	12.53
77		methylcyclohexane	0.496	0.467	5.8	105	0.00	12.31
78		bromodichloromethane	0.357	0.357	0.0	106	-0.01	12.64
79		cis-1,3-dichloropropene	0.443	0.455	-2.7	109	-0.01	13.07
80	S	toluene-d8 (s)	1.027	1.145	-11.5	128	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.091	-18.2	124	0.00	13.15
82		toluene	0.674	0.689	-2.2	112	0.00	13.41
83		3-methyl-1-butanol	0.008	0.010#	-25.0#	125	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.406	-4.9	109	0.00	13.60
85		ethyl methacrylate	0.262	0.293	-11.8	116	0.00	13.57
86		1,1,2-trichloroethane	0.187	0.199	-6.4	112	0.00	13.80
87		2-hexanone	0.069	0.082	-18.8	123	0.00	13.94
88	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.75
89		tetrachloroethene	0.309	0.306	1.0	109	0.00	13.96
90		1,3-dichloropropane	0.438	0.455	-3.9	108	0.00	13.97
91		butyl acetate	0.162	0.184	-13.6	118	0.00	14.01
92		3,3-dimethyl-1-butanol	0.020	0.025	-25.0#	123	0.00	14.10
93		dibromochloromethane	0.328	0.347	-5.8	110	0.00	14.22
94		1,2-dibromoethane	0.266	0.297	-11.7	115	0.00	14.36
95		BUTYL ETHER		----------NA----------				

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

			True	Calc.	% Drift			
106		cyclohexanone		NA				
			AvgRF	CCRF	% Dev			
107		bromobenzene	0.732	0.779	-6.4	111	0.00	16.01
108		1,1,2,2-tetrachloroethane	0.614	0.670	-9.1	112	0.00	15.92
			True	Calc.	% Drift			
109		trans-1,4-dichloro-2-bute	20.000	20.437	-2.2	114	0.00	15.95
			AvgRF	CCRF	% Dev			
110		1,2,3-trichloropropane	0.150	0.165	-10.0	113	0.00	15.99
111		n-propylbenzene	3.371	3.312	1.8	102	0.00	16.00
112		2-chlorotoluene	0.684	0.687	-0.4	108	0.00	16.15
113		4-chlorotoluene	2.112	1.998	5.4	101	0.00	16.24
114		1,3,5-trimethylbenzene	2.367	2.370	-0.1	105	0.00	16.13
115		tert-butylbenzene	2.077	2.079	-0.1	109	0.00	16.46
116		pentachloroethane	0.454	0.505	-11.2	118	0.00	16.56
117		1,2,4-trimethylbenzene	2.423	2.422	0.0	104	0.00	16.51
118		sec-butylbenzene	3.166	3.186	-0.6	106	0.00	16.66
119		1,3-dichlorobenzene	1.442	1.496	-3.7	109	0.00	16.86
120		p-isopropyltoluene	2.622	2.680	-2.2	108	0.00	16.77
121		1,4-dichlorobenzene	1.482	1.514	-2.2	109	0.00	16.94
122		1,2-dichlorobenzene	1.395	1.476	-5.8	110	0.00	17.32
123		n-butylbenzene	1.428	1.409	1.3	102	0.00	17.17
124		1,2-dibromo-3-chloropropa	0.107	0.115	-7.5	110	0.00	18.09
125		1,3,5-trichlorobenzene	1.238	1.372	-10.8	112	0.00	18.27
126		1,2,4-trichlorobenzene	0.978	1.174	-20.0#	119	0.00	18.92
127		hexachlorobutadiene	0.671	0.701	-4.5	109	0.00	19.03
128		naphthalene	1.663	2.042	-22.8#	128	0.00	19.21
129		1,2,3-trichlorobenzene	0.826	0.983	-19.0	120	0.00	19.46
130		hexachloroethane	0.452	0.470	-4.0	120	0.00	17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2c78511.D M2C3580.M Tue Mar 01 14:26:08 2011 ACCUNJ

New Jersey
ACCUTEST
LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 13:06:02 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

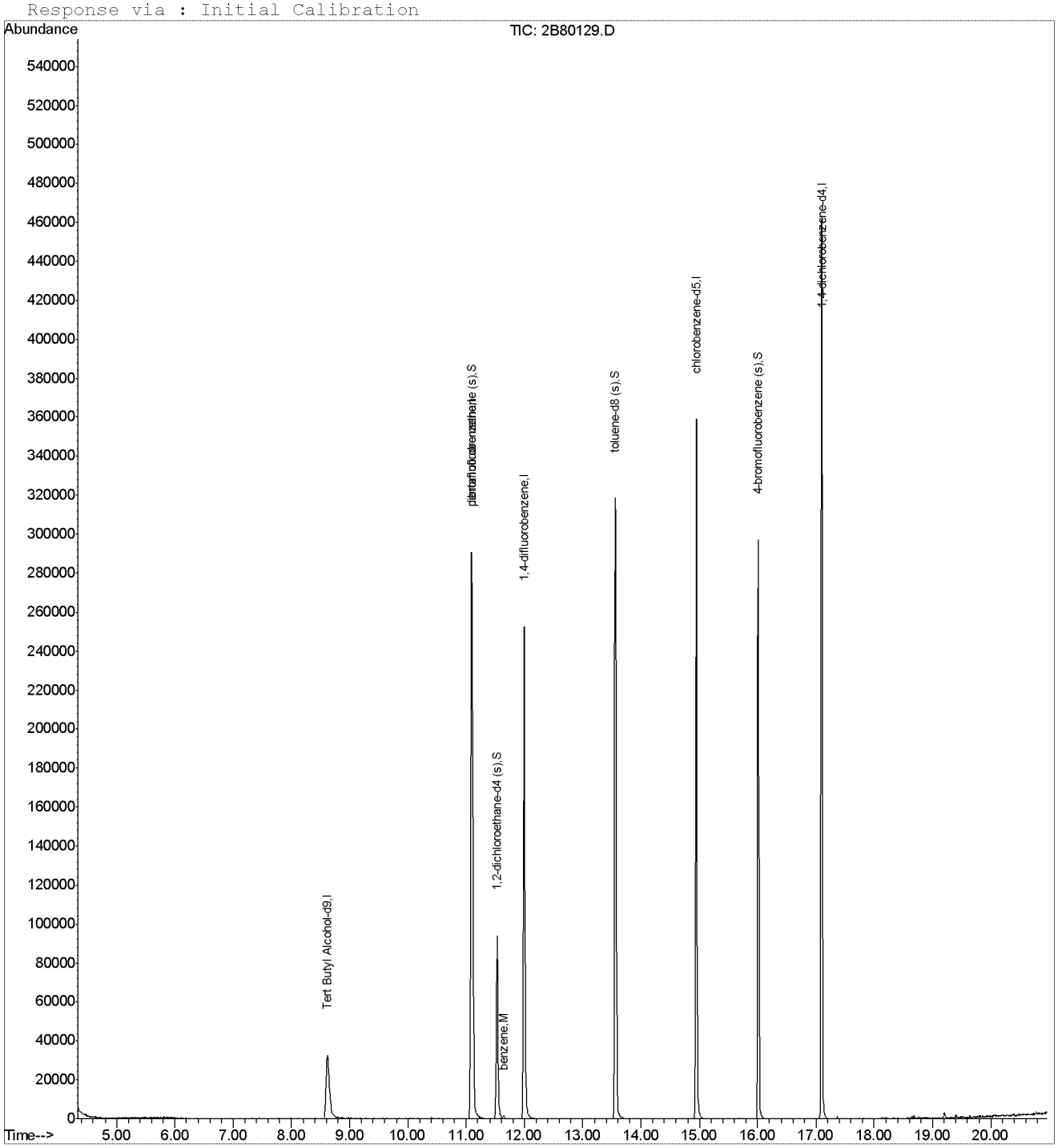
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	70823	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	184652	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	220753	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	192480	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	118628	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	64572	49.23	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.46%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	79911	50.91	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 101.82%			
73) toluene-d8 (s)	13.55	98	212205	49.62	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 99.24%			
98) 4-bromofluorobenzene (s)	16.01	95	82837	50.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.16%			
Target Compounds						Qvalue
58) benzene	11.64	78	1525	0.34	ug/L	52

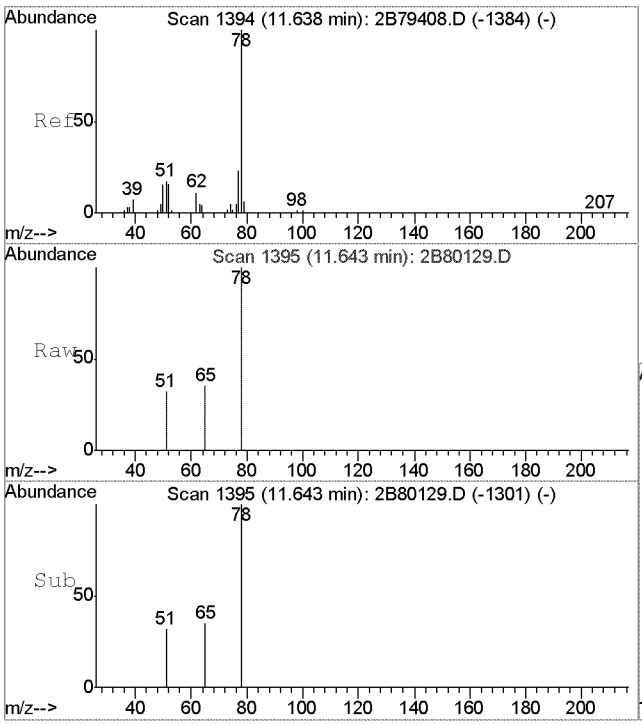
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:26 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration

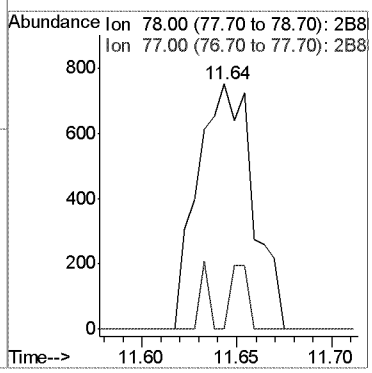




#58
benzene
Concen: 0.34 ug/L
RT: 11.64 min Scan# 1395
Delta R.T. 0.01 min
Lab File: 2B80129.D
Acq: 23 Feb 2011 12:40 pm

Tgt Ion: 78 Resp: 1525

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.618	52	55	59	rVB	797	795	0.11%	0.021%
2	4.644	59	60	67	rVB	724	704	0.10%	0.019%
3	4.691	67	69	73	rVB	671	671	0.10%	0.018%
4	4.728	73	76	79	rVB	629	542	0.08%	0.014%
5	5.121	148	151	160	rVV2	597	1225	0.18%	0.032%
6	5.325	187	190	194	rBV	593	593	0.08%	0.016%
7	5.478	214	219	220	rVB	530	586	0.08%	0.015%
8	5.493	220	222	231	rBV	546	965	0.14%	0.025%
9	5.635	247	249	252	rBV	824	861	0.12%	0.023%
10	5.813	278	283	291	rVB3	721	1139	0.16%	0.030%
11	5.897	296	299	304	rVB	566	833	0.12%	0.022%
12	5.928	304	305	315	rBV	605	980	0.14%	0.026%
13	6.191	354	355	360	rVB	748	520	0.07%	0.014%
14	6.280	369	372	377	rBB	434	633	0.09%	0.017%
15	6.311	377	378	386	rBV2	478	819	0.12%	0.022%
16	6.385	390	392	396	rVB2	402	500	0.07%	0.013%
17	6.453	402	405	411	rBB	428	627	0.09%	0.016%
18	6.510	415	416	422	rVB	441	549	0.08%	0.014%
19	6.579	422	429	435	rBB	528	877	0.13%	0.023%
20	6.626	435	438	440	rBB	692	552	0.08%	0.015%
21	6.993	503	508	511	rBB	491	825	0.12%	0.022%
22	7.050	512	519	521	rBB	585	644	0.09%	0.017%
23	7.087	524	526	536	rBB	295	741	0.11%	0.019%
24	7.417	588	589	594	rBV	469	604	0.09%	0.016%
25	7.743	648	651	656	rBV	280	492	0.07%	0.013%
26	7.942	684	689	691	rBV	531	593	0.08%	0.016%
27	8.062	707	712	718	rBV	422	816	0.12%	0.021%
28	8.115	718	722	729	rVB2	461	629	0.09%	0.017%
29	8.419	773	780	782	rBB	486	799	0.11%	0.021%
30	8.461	783	788	791	rBV	408	635	0.09%	0.017%
31	8.613	805	817	847	rBV2	32668	130021	18.63%	3.417%
32	8.781	847	849	862	rVV2	654	1621	0.23%	0.043%
33	9.116	909	913	921	rVV2	445	944	0.14%	0.025%
34	9.179	921	925	928	rVB	504	584	0.08%	0.015%
35	9.274	939	943	951	rBV	439	1030	0.15%	0.027%
36	9.436	972	974	978	rBV	495	541	0.08%	0.014%
37	9.483	981	983	989	rBB	407	534	0.08%	0.014%
38	9.588	1001	1003	1008	rVB	451	553	0.08%	0.015%

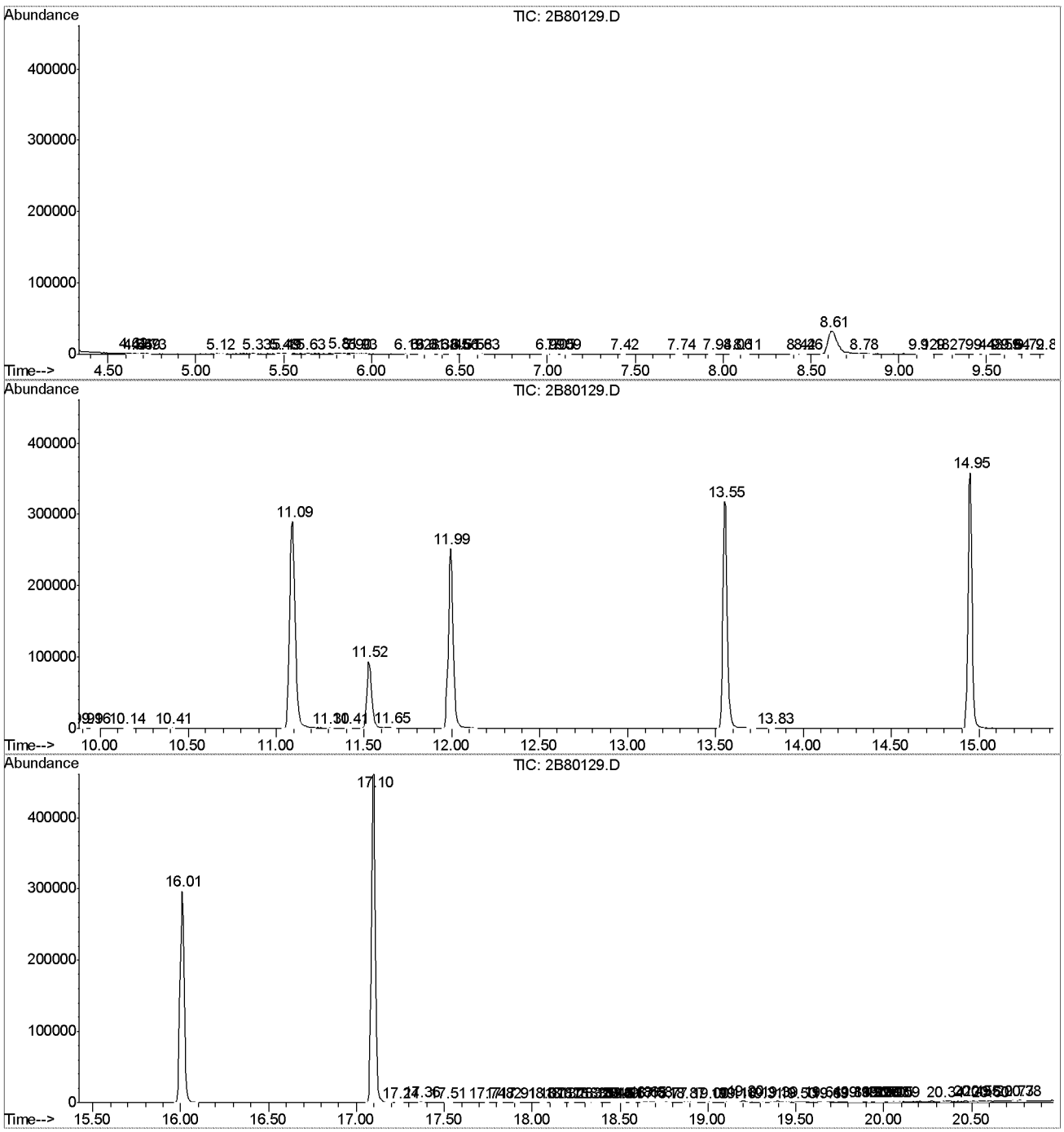
39	9.641	1008	1013	1020	rBB	351	787	0.11%	0.021%
40	9.719	1025	1028	1033	rVB	459	635	0.09%	0.017%
41	9.840	1048	1051	1058	rBB	279	670	0.10%	0.018%
42	9.908	1059	1064	1066	rBV	493	631	0.09%	0.017%
43	9.955	1071	1073	1081	rVB	526	891	0.13%	0.023%
44	10.144	1106	1109	1117	rBB	344	814	0.12%	0.021%
45	10.406	1154	1159	1162	rBV2	729	1287	0.18%	0.034%
46	11.093	1278	1290	1315	rBV2	290907	674117	96.61%	17.715%
47	11.303	1327	1330	1335	rVB2	700	915	0.13%	0.024%
48	11.413	1347	1351	1355	rBB2	436	627	0.09%	0.016%
49	11.523	1363	1372	1389	rBV	93797	192079	27.53%	5.048%
50	11.649	1389	1396	1403	rVB2	1721	3914	0.56%	0.103%
51	11.989	1452	1461	1491	rBV	252692	480009	68.79%	12.614%
52	13.552	1751	1759	1793	rBB	318691	544468	78.03%	14.308%
53	13.830	1806	1812	1814	rBB	412	515	0.07%	0.014%
54	14.946	2017	2025	2041	rBV	359386	560543	80.33%	14.730%
55	16.006	2219	2227	2245	rBB	297172	439464	62.98%	11.549%
56	17.096	2427	2435	2456	rBB	461665	697760	100.00%	18.336%
57	17.238	2459	2462	2468	rBB	462	620	0.09%	0.016%
58	17.363	2483	2486	2491	rBB	1332	1561	0.22%	0.041%
59	17.510	2512	2514	2522	rBB	273	582	0.08%	0.015%
60	17.736	2556	2557	2561	rVB	475	539	0.08%	0.014%
61	17.825	2570	2574	2576	rBB	518	551	0.08%	0.014%
62	17.909	2587	2590	2594	rBB	527	836	0.12%	0.022%
63	18.066	2616	2620	2624	rBB	506	721	0.10%	0.019%
64	18.134	2627	2633	2636	rBV	796	1036	0.15%	0.027%
65	18.166	2636	2639	2642	rBV	411	618	0.09%	0.016%
66	18.234	2647	2652	2653	rBB	488	627	0.09%	0.016%
67	18.323	2665	2669	2671	rVB	714	726	0.10%	0.019%
68	18.349	2672	2674	2676	rBB	589	527	0.08%	0.014%
69	18.375	2676	2679	2682	rBV	698	724	0.10%	0.019%
70	18.459	2692	2695	2699	rVB	546	635	0.09%	0.017%
71	18.491	2699	2701	2703	rBV	603	547	0.08%	0.014%
72	18.512	2703	2705	2709	rVV	428	522	0.07%	0.014%
73	18.569	2713	2716	2720	rBV	614	493	0.07%	0.013%
74	18.648	2725	2731	2734	rVV	1024	1614	0.23%	0.042%
75	18.685	2734	2738	2746	rVB	1563	1893	0.27%	0.050%
76	18.769	2746	2754	2759	rBV2	859	1640	0.24%	0.043%
77	18.868	2771	2773	2787	rBV2	784	1831	0.26%	0.048%
78	19.005	2795	2799	2803	rVB2	797	600	0.09%	0.016%
79	19.109	2816	2819	2824	rVB	681	767	0.11%	0.020%
80	19.157	2824	2828	2830	rBV	388	566	0.08%	0.015%
81	19.204	2830	2837	2843	rBV4	2569	3729	0.53%	0.098%
82	19.314	2854	2858	2860	rBV	526	634	0.09%	0.017%
83	19.393	2865	2873	2888	rVV3	1861	4428	0.63%	0.116%
84	19.503	2892	2894	2904	rVB2	504	876	0.13%	0.023%
85	19.639	2918	2920	2925	rVB	1183	1088	0.16%	0.029%
86	19.686	2925	2929	2930	rBV	535	592	0.08%	0.016%
87	19.807	2950	2952	2958	rBV2	807	819	0.12%	0.022%
88	19.854	2958	2961	2966	rVB	758	852	0.12%	0.022%
89	19.922	2971	2974	2975	rBV	772	566	0.08%	0.015%
90	19.969	2980	2983	2984	rVB	748	645	0.09%	0.017%
91	19.990	2984	2987	2990	rBV2	1209	1412	0.20%	0.037%
92	20.032	2993	2995	2997	rBV2	1004	695	0.10%	0.018%
93	20.053	2997	2999	3004	rVB2	1227	1026	0.15%	0.027%
94	20.090	3004	3006	3009	rBV	1081	818	0.12%	0.021%
95	20.342	3050	3054	3061	rBV3	864	1727	0.25%	0.045%

96	20.494	3082	3083	3091	rBV3	1140	1837	0.26%	0.048%
97	20.546	3092	3093	3100	rVB4	1019	1323	0.19%	0.035%
98	20.598	3100	3103	3104	rBV2	685	668	0.10%	0.018%
99	20.735	3128	3129	3134	rBV2	1339	1183	0.17%	0.031%
100	20.782	3135	3138	3144	rVB4	1506	1957	0.28%	0.051%

Sum of corrected areas: 3805354

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80129.D
Operator : DEZAREER
Acquired : 23 Feb 2011 12:40 pm using AcqMethod M2B3558
Instrument : MS2B
Sample Name: ja68506-1
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 6
Quant File :M2B3558.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 12:40 pm
Data File: C:\MSDCHEM\1\DATA\2B80129.D
Name: ja68506-1
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 13:37:14 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

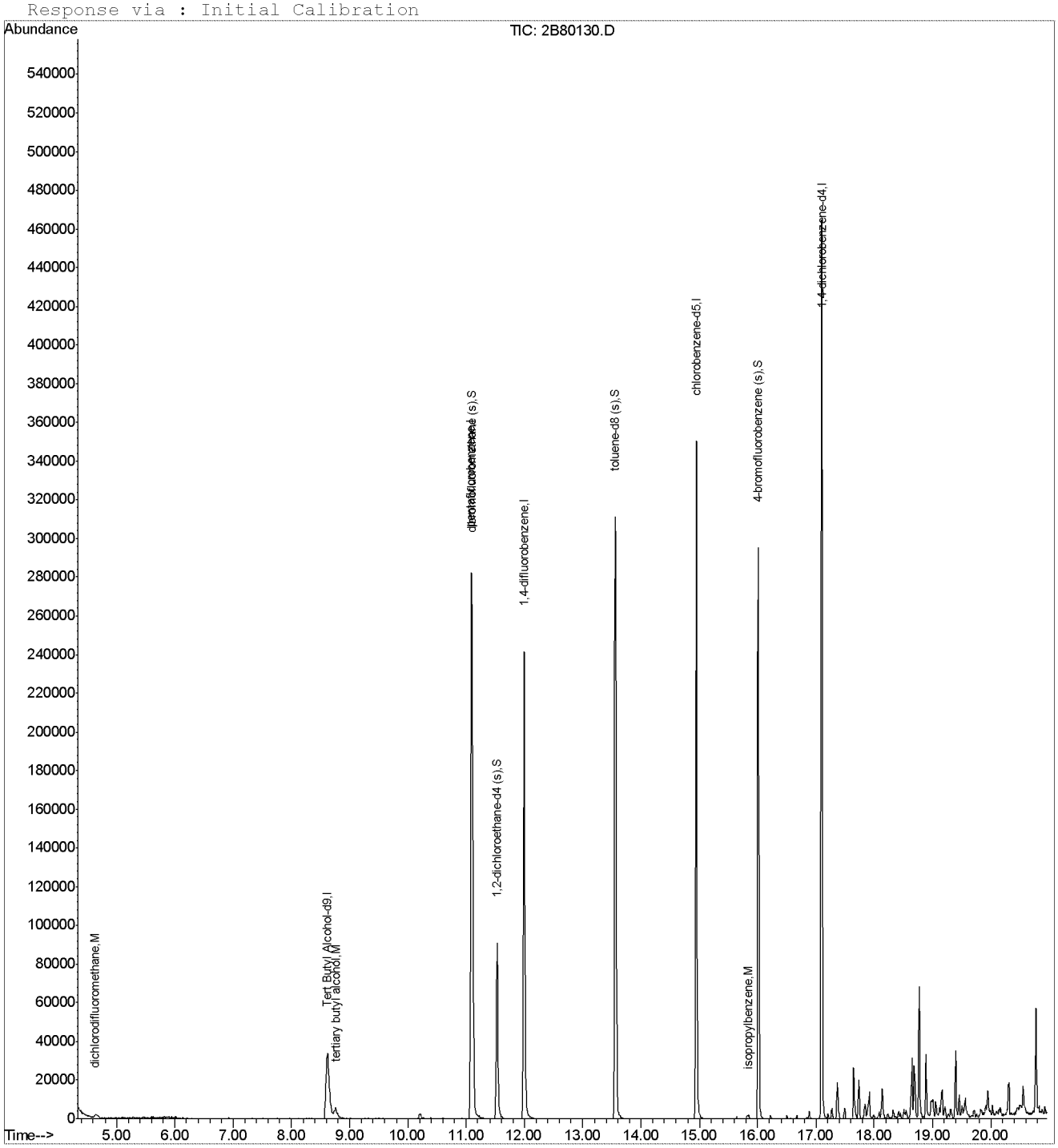
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	72038	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	179572	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	212434	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	189704	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	119957	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	64645	50.68	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.36%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	76692	50.24	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.48%			
73) toluene-d8 (s)	13.55	98	207690	50.46	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 100.92%			
98) 4-bromofluorobenzene (s)	16.01	95	81810	48.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 97.82%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.76	59	9830	67.64	ug/L	85
6) dichlorodifluoromethane	4.64	85	4306	2.22	ug/L	85
97) isopropylbenzene	15.84	105	1728	0.30	ug/L	93

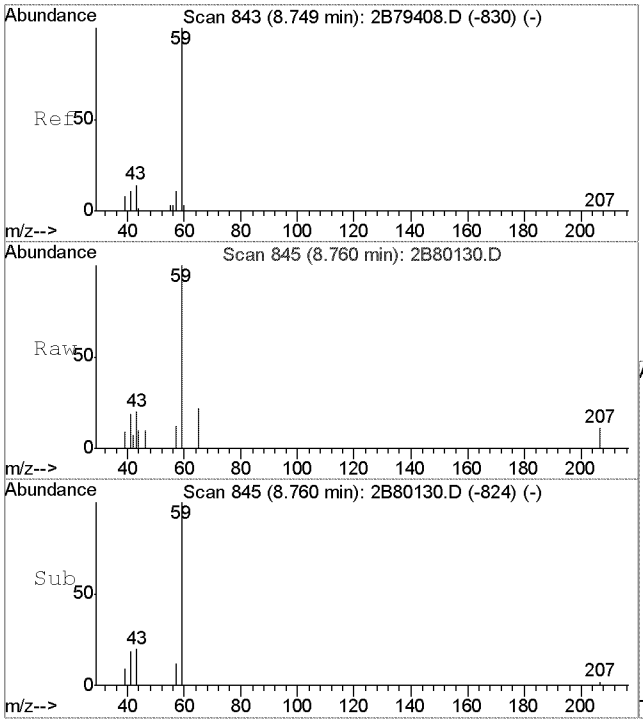
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:28 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration

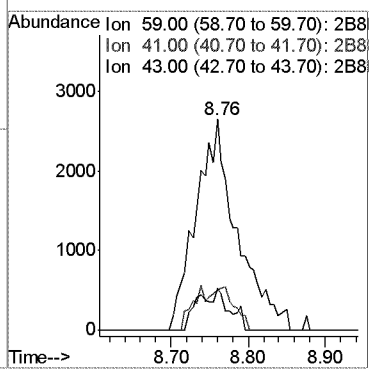


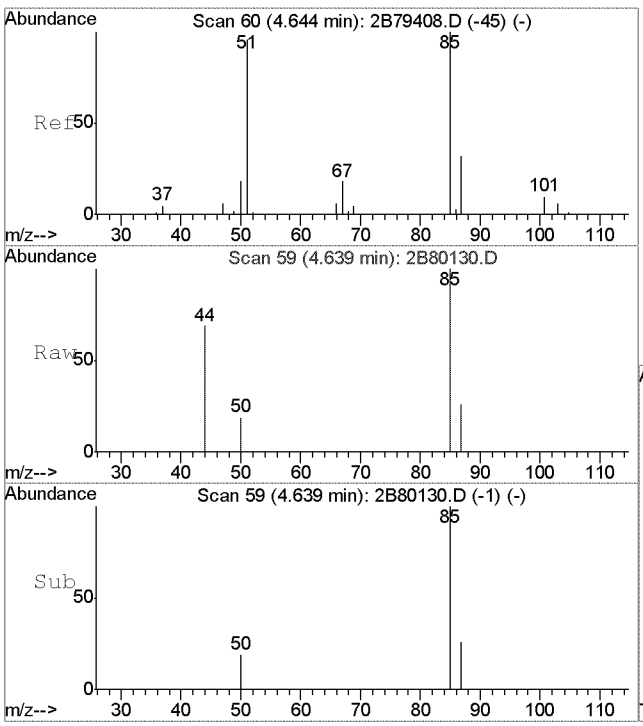


#2
tertiary butyl alcohol
Concen: 67.64 ug/L
RT: 8.76 min Scan# 845
Delta R.T. 0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion: 59 Resp: 9830

Ion	Ratio	Lower	Upper
59	100		
41	19.3	1.1	61.1
43	20.2	0.0	48.3

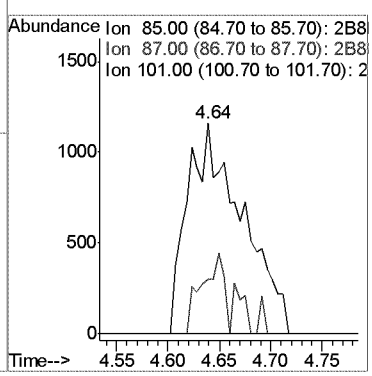


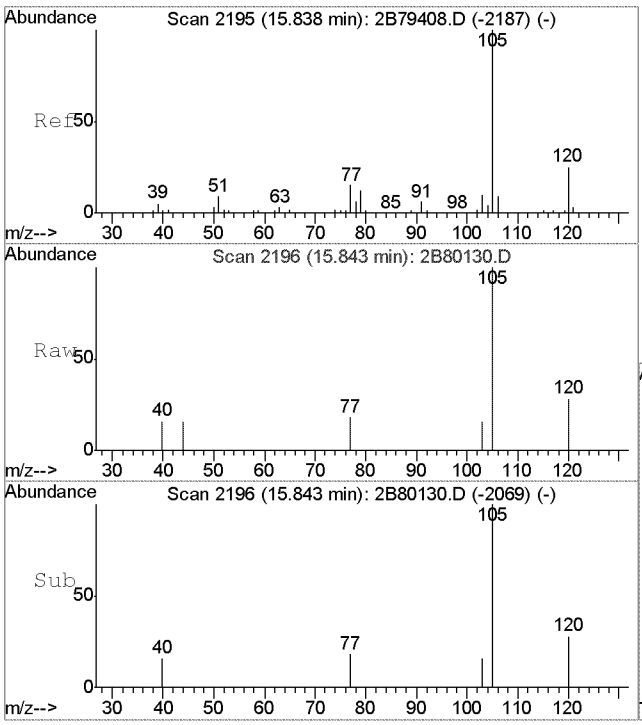


#6
dichlorodifluoromethane
Concen: 2.22 ug/L
RT: 4.64 min Scan# 59
Delta R.T. -0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion: 85 Resp: 4306

Ion	Ratio	Lower	Upper
85	100		
87	25.9	2.4	62.4
101	0.0	0.0	40.0

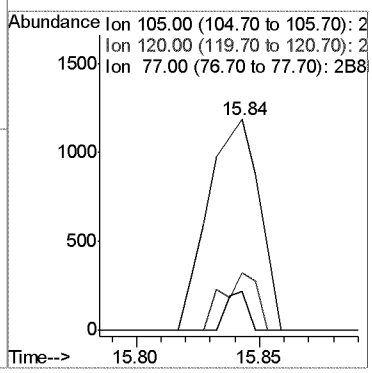




#97
isopropylbenzene
Concen: 0.30 ug/L
RT: 15.84 min Scan# 2196
Delta R.T. 0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion:105 Resp: 1728

Ion	Ratio	Lower	Upper
105	100		
120	27.6	0.0	54.8
77	18.3	0.0	44.9



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.639	52	59	75	rVB3	1954	7813	1.12%	0.167%
2	5.110	145	149	151	rVB2	483	646	0.09%	0.014%
3	5.446	212	213	231	rVB	595	1653	0.24%	0.035%
4	5.855	288	291	297	rVV3	498	1014	0.15%	0.022%
5	5.902	297	300	302	rVV	688	662	0.09%	0.014%
6	5.928	302	305	319	rVV3	847	2199	0.32%	0.047%
7	6.012	319	321	328	rVB2	819	857	0.12%	0.018%
8	6.280	369	372	384	rBB2	640	1438	0.21%	0.031%
9	6.453	403	405	413	rBB	622	800	0.11%	0.017%
10	6.552	420	424	427	rBB	455	646	0.09%	0.014%
11	6.799	466	471	477	rBB	423	680	0.10%	0.015%
12	7.758	649	654	658	rVB	468	662	0.09%	0.014%
13	7.957	689	692	696	rVB	518	688	0.10%	0.015%
14	8.314	757	760	764	rBV	682	805	0.12%	0.017%
15	8.618	806	818	836	rBV	34215	131303	18.82%	2.804%
16	8.760	838	845	865	rVV5	5650	19986	2.87%	0.427%
17	8.870	865	866	871	rVV	675	728	0.10%	0.016%
18	9.216	931	932	940	rBV	408	816	0.12%	0.017%
19	9.431	965	973	975	rBV	457	888	0.13%	0.019%
20	9.520	986	990	993	rBV	460	653	0.09%	0.014%
21	9.908	1061	1064	1071	rVB	459	745	0.11%	0.016%
22	10.201	1111	1120	1132	rBV2	2785	7110	1.02%	0.152%
23	10.390	1150	1156	1162	rVB2	851	1505	0.22%	0.032%
24	10.532	1179	1183	1186	rBV	655	706	0.10%	0.015%
25	10.642	1200	1204	1209	rBV	461	786	0.11%	0.017%
26	11.087	1279	1289	1320	rBV2	282464	664948	95.33%	14.202%
27	11.255	1320	1321	1325	rVB	688	681	0.10%	0.015%
28	11.528	1362	1373	1392	rBV	91018	189994	27.24%	4.058%
29	11.633	1392	1393	1401	rVB2	590	921	0.13%	0.020%
30	11.989	1452	1461	1499	rBB	241727	465448	66.73%	9.941%
31	12.828	1617	1621	1625	rBB	703	781	0.11%	0.017%
32	13.552	1751	1759	1788	rBB	311471	528930	75.83%	11.297%
33	14.946	2013	2025	2047	rBV	350545	550671	78.94%	11.761%
34	15.638	2152	2157	2162	rBB2	1548	1704	0.24%	0.036%
35	15.843	2186	2196	2200	rBB2	2300	4552	0.65%	0.097%
36	16.005	2219	2227	2248	rBB	295388	433187	62.10%	9.252%
37	16.215	2260	2267	2276	rBB	1767	3026	0.43%	0.065%
38	16.493	2316	2320	2326	rBB4	1850	2431	0.35%	0.052%

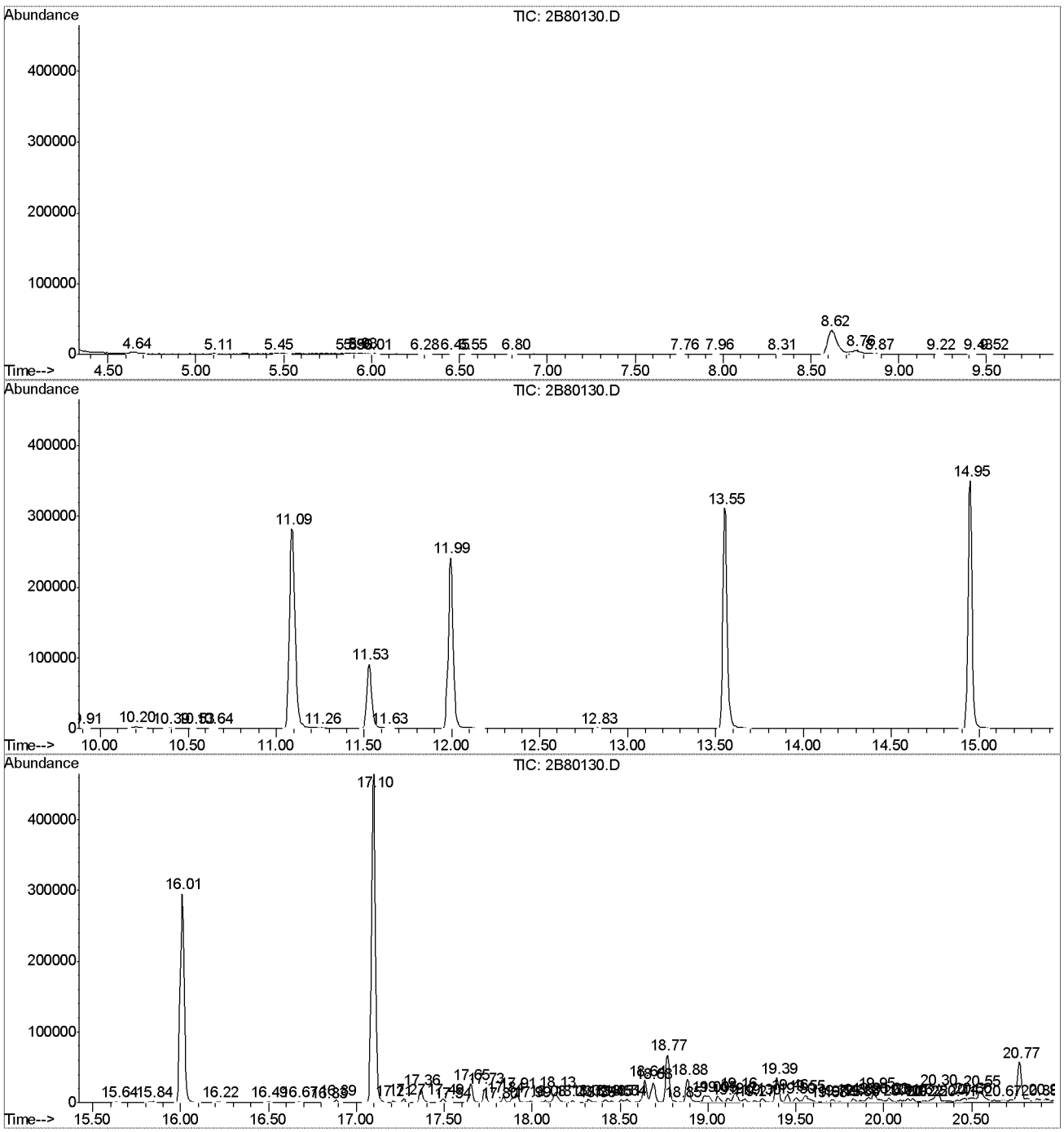
39	16.666	2350	2353	2359	rBB2	1820	1993	0.29%	0.043%
40	16.834	2379	2385	2387	rBV	705	737	0.11%	0.016%
41	16.886	2387	2395	2402	rVB3	4381	6227	0.89%	0.133%
42	17.096	2423	2435	2450	rBV	465101	697550	100.00%	14.898%
43	17.206	2454	2456	2462	rVV3	2720	3131	0.45%	0.067%
44	17.274	2462	2469	2475	rVB2	5601	7550	1.08%	0.161%
45	17.363	2479	2486	2496	rBB	19017	30003	4.30%	0.641%
46	17.494	2503	2511	2516	rBB4	5393	8030	1.15%	0.172%
47	17.536	2516	2519	2522	rBB4	620	661	0.09%	0.014%
48	17.647	2533	2540	2551	rBV2	26636	40695	5.83%	0.869%
49	17.730	2551	2556	2563	rVB2	20469	27794	3.98%	0.594%
50	17.804	2563	2570	2571	rBV	744	1172	0.17%	0.025%
51	17.835	2571	2576	2582	rBV2	7582	11269	1.62%	0.241%
52	17.909	2582	2590	2599	rVV3	13787	27792	3.98%	0.594%
53	17.993	2599	2606	2613	rVB4	2527	5290	0.76%	0.113%
54	18.076	2613	2622	2625	rBV2	3641	5455	0.78%	0.117%
55	18.134	2626	2633	2646	rVV	15228	25763	3.69%	0.550%
56	18.228	2647	2651	2659	rVB2	2722	4458	0.64%	0.095%
57	18.318	2663	2668	2674	rBV3	4264	7231	1.04%	0.154%
58	18.360	2674	2676	2680	rVB2	1058	1001	0.14%	0.021%
59	18.412	2680	2686	2691	rBV	3875	5837	0.84%	0.125%
60	18.449	2691	2693	2700	rVB2	2759	2803	0.40%	0.060%
61	18.506	2700	2704	2708	rBV4	4666	6544	0.94%	0.140%
62	18.538	2708	2710	2717	rVB6	4384	5910	0.85%	0.126%
63	18.643	2717	2730	2734	rBV	31486	49922	7.16%	1.066%
64	18.685	2734	2738	2747	rVV2	27079	41854	6.00%	0.894%
65	18.769	2747	2754	2766	rVB2	68036	107162	15.36%	2.289%
66	18.847	2766	2769	2771	rBV2	950	1020	0.15%	0.022%
67	18.884	2771	2776	2789	rBV2	33100	53812	7.71%	1.149%
68	19.004	2789	2799	2805	rVV5	9173	26391	3.78%	0.564%
69	19.052	2805	2808	2816	rVV4	8251	12516	1.79%	0.267%
70	19.115	2816	2820	2823	rVV3	5234	7853	1.13%	0.168%
71	19.162	2823	2829	2834	rVV2	14337	25235	3.62%	0.539%
72	19.209	2834	2838	2845	rVB3	5912	8349	1.20%	0.178%
73	19.267	2845	2849	2853	rBV3	2429	3476	0.50%	0.074%
74	19.303	2853	2856	2866	rVB3	4600	7991	1.15%	0.171%
75	19.392	2866	2873	2880	rBV	34684	52601	7.54%	1.123%
76	19.455	2880	2885	2889	rVV4	11147	15864	2.27%	0.339%
77	19.497	2889	2893	2899	rVV5	6026	10100	1.45%	0.216%
78	19.555	2899	2904	2918	rVB4	9947	22999	3.30%	0.491%
79	19.676	2922	2927	2930	rBV2	1115	1554	0.22%	0.033%
80	19.718	2930	2935	2939	rVB5	3392	4453	0.64%	0.095%
81	19.754	2939	2942	2948	rVB4	1847	2298	0.33%	0.049%
82	19.828	2948	2956	2961	rBV6	4312	8154	1.17%	0.174%
83	19.864	2961	2963	2966	rVV2	2214	2191	0.31%	0.047%
84	19.912	2967	2972	2975	rVV3	6354	10839	1.55%	0.231%
85	19.948	2975	2979	2989	rVV4	13228	24834	3.56%	0.530%
86	20.027	2989	2994	3002	rVV5	6276	10139	1.45%	0.217%
87	20.095	3003	3007	3012	rVV2	2701	5040	0.72%	0.108%
88	20.137	3012	3015	3018	rVV3	3898	5658	0.81%	0.121%
89	20.163	3018	3020	3025	rVB4	4498	4947	0.71%	0.106%
90	20.221	3030	3031	3033	rBV	1231	716	0.10%	0.015%
91	20.247	3033	3036	3037	rVB	1171	857	0.12%	0.018%
92	20.305	3037	3047	3055	rBV4	17169	31102	4.46%	0.664%
93	20.415	3065	3068	3071	rBV3	1955	2511	0.36%	0.054%
94	20.467	3071	3078	3080	rVV5	4132	8924	1.28%	0.191%
95	20.499	3080	3084	3089	rVV5	5393	12237	1.75%	0.261%

96	20.551	3089	3094	3105	rVB3	14382	30069	4.31%	0.642%
97	20.672	3116	3117	3122	rBV2	987	1020	0.15%	0.022%
98	20.771	3130	3136	3153	rVB	54065	91709	13.15%	1.959%
99	20.876	3153	3156	3161	rVB4	2118	3450	0.49%	0.074%
100	20.923	3161	3165	3169	rBV5	3545	4364	0.63%	0.093%

Sum of corrected areas: 4682170

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80130.D
Operator : DEZAREER
Acquired : 23 Feb 2011 1:11 pm using AcqMethod M2B3558
Instrument : MS2B
Sample Name: ja68506-2
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 7
Quant File :M2B3558.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

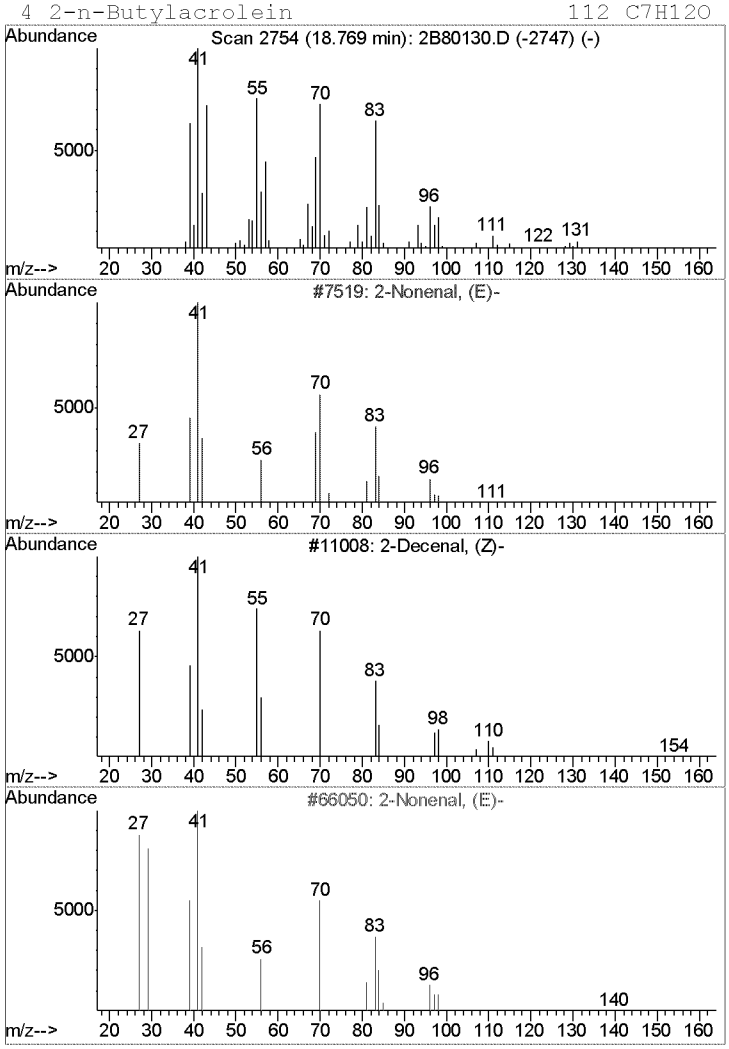
Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library : C:\DATABASE\NBS75K.L

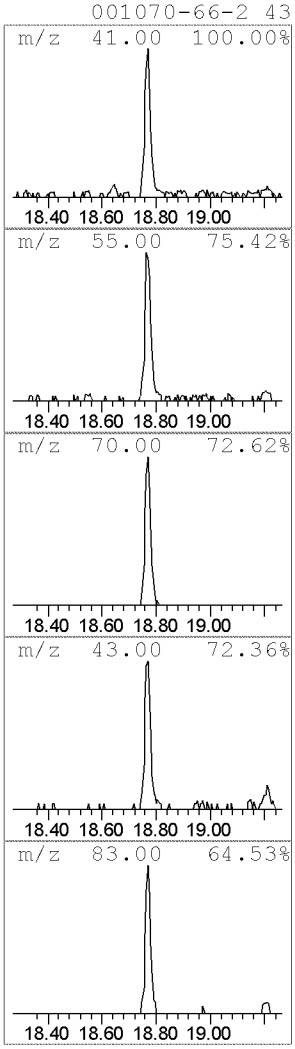
****

Peak Number 1 2-Nonenal, (E)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.77	7.68 ug/L	107162	1,4-dichlorobenzene-d4	17.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Nonenal, (E)-	140	C9H16O	018829-56-6	72
2	2-Decenal, (Z)-	154	C10H18O	002497-25-8	52
3	2-Nonenal, (E)-	140	C9H16O	018829-56-6	47
4	2-n-Butylacrolein	112	C7H12O	001070-66-2	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

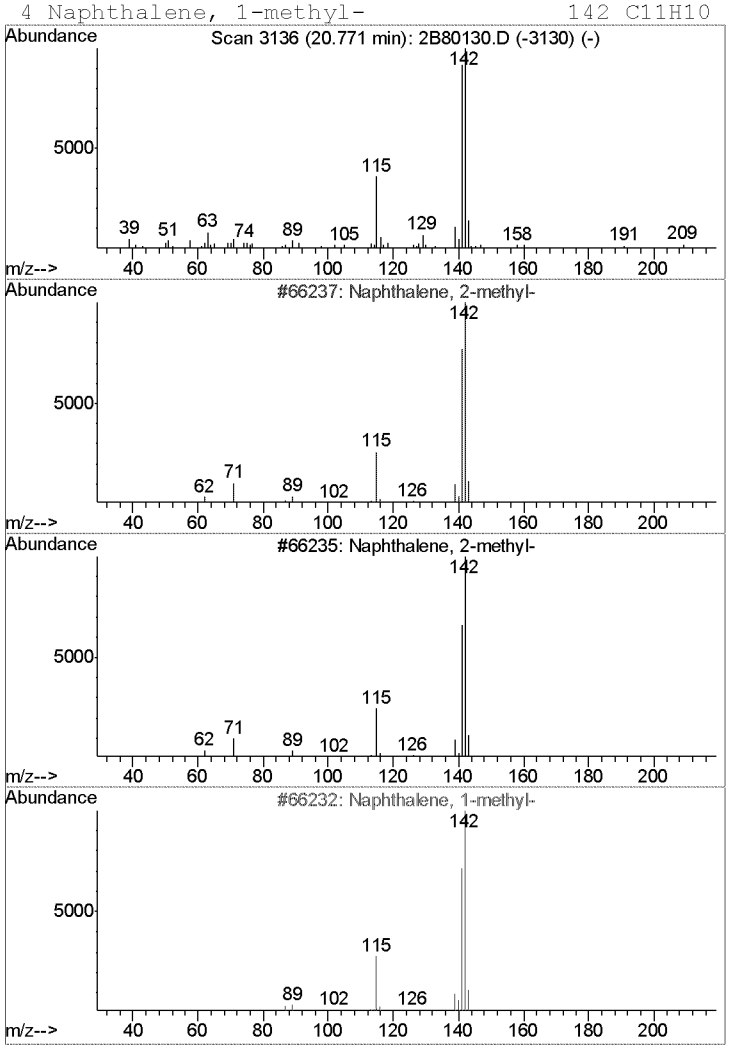
Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library : C:\DATABASE\NBS75K.L

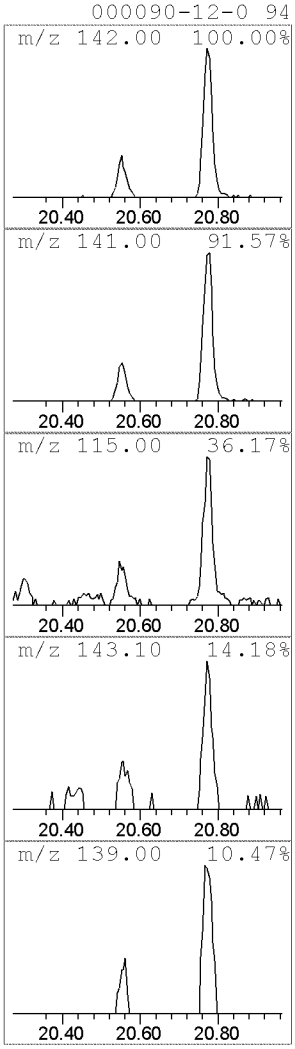
****

Peak Number 2 Naphthalene, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.77	6.57 ug/L	91709	1,4-dichlorobenzene-d4	17.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	95
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94





Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 1:11 pm
Data File: C:\MSDCHEM\1\DATA\2B80130.D
Name: ja68506-2
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Nonenal, (E)-	18.77	7.7	ug/L	107162	5	17.10	697550	50.0
Naphthalene, 2-me...	20.77	6.6	ug/L	91709	5	17.10	697550	50.0

6.1.4 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 01 14:33:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

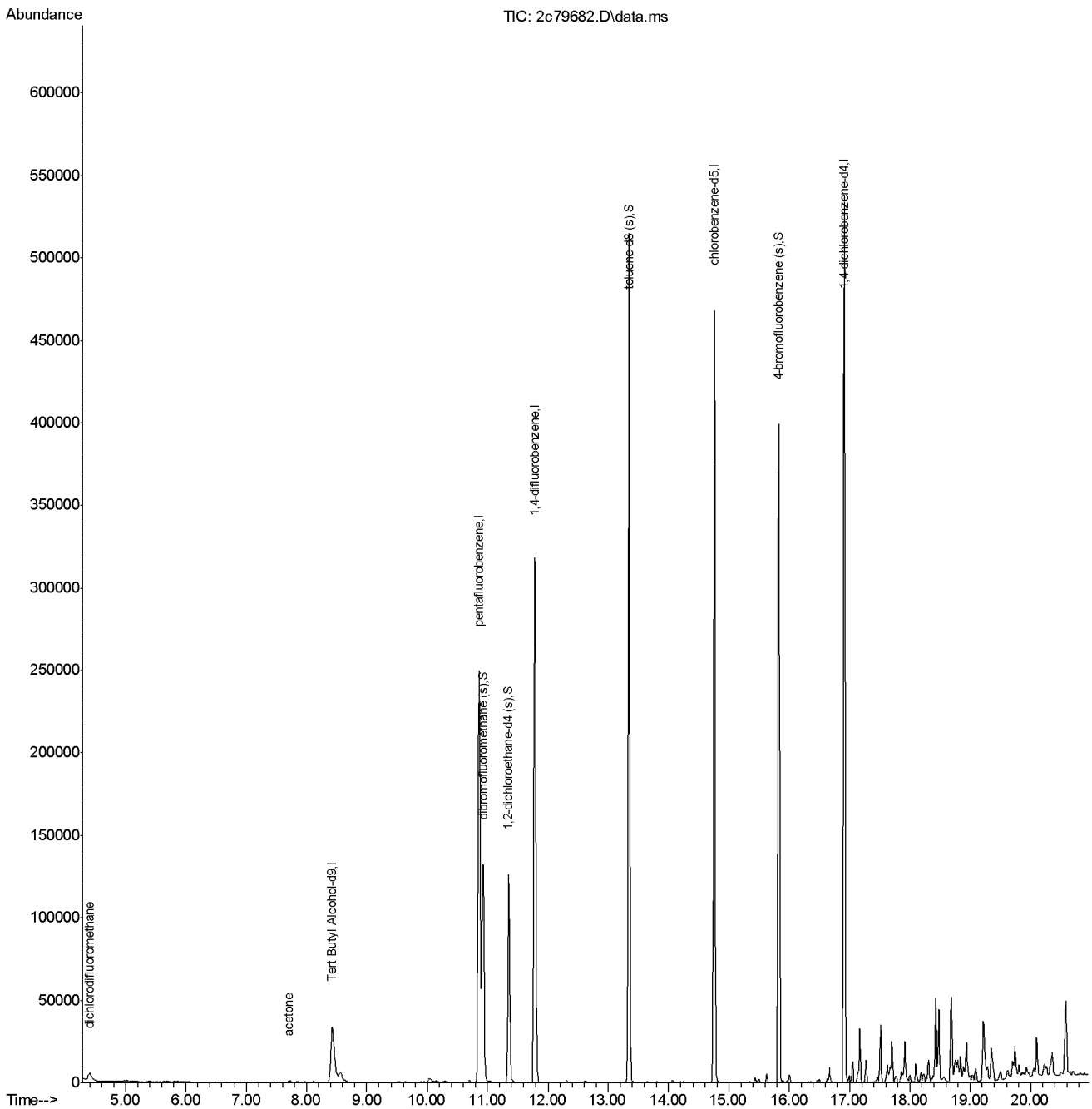
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	91655	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	240241	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	315654	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	271381	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	151632	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	98046	53.04	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.08%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	101305	53.18	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 106.36%			
80) toluene-d8 (s)	13.339	98	364073	56.13	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.26%			
105) 4-bromofluorobenzene (s)	15.824	95	133599	53.63	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.26%			
Target Compounds						Qvalue
11) dichlorodifluoromethane	4.400	85	11340	4.10	ug/L	96
25) acetone	7.708	43	2252	5.58	ug/L	89

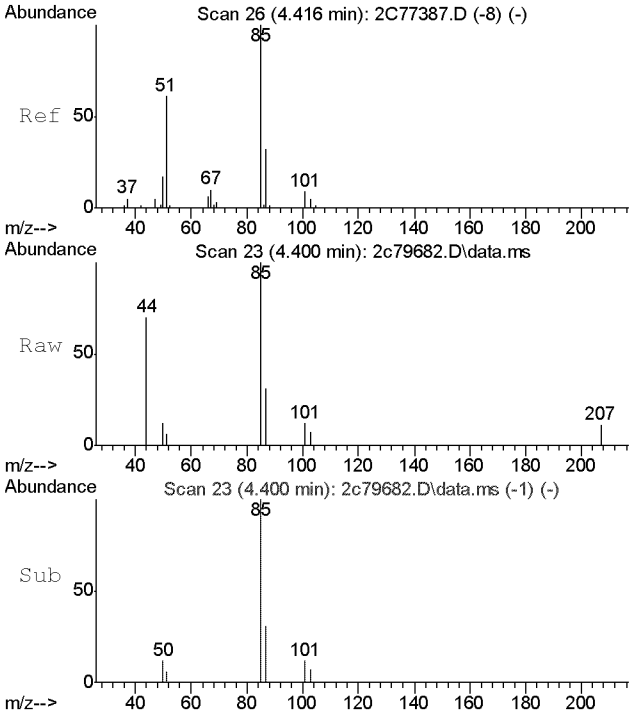
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 01 14:33:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

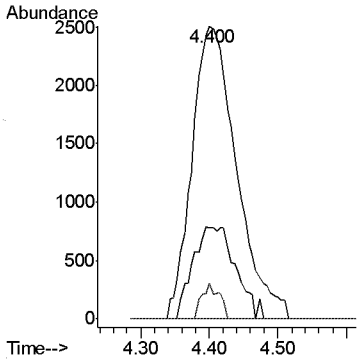


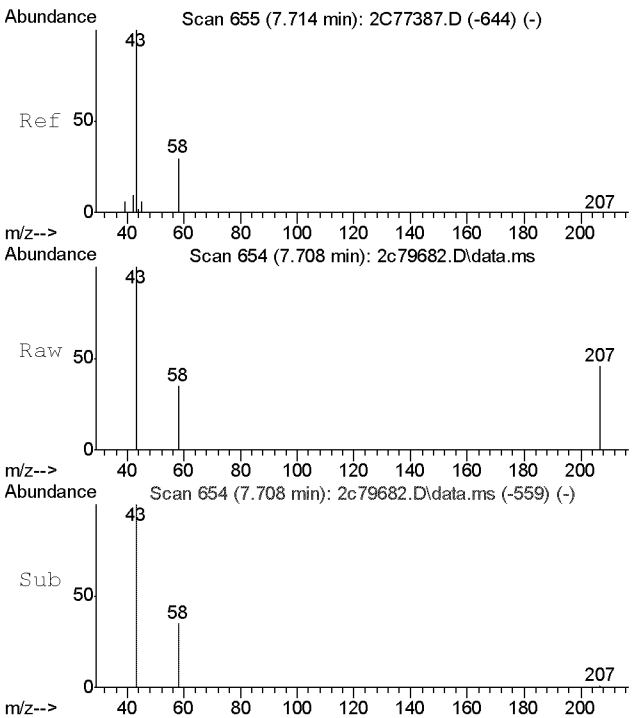


#11
dichlorodifluoromethane
Concen: 4.10 ug/L
RT: 4.400 min Scan# 23
Delta R.T. -0.005 min
Lab File: 2c79682.D
Acq: 28 Feb 2011 2:42 pm

Tgt Ion: 85 Resp: 11340

Ion	Ratio	Lower	Upper
85	100		
87	31.1	2.5	62.5
101	12.1	0.0	39.2

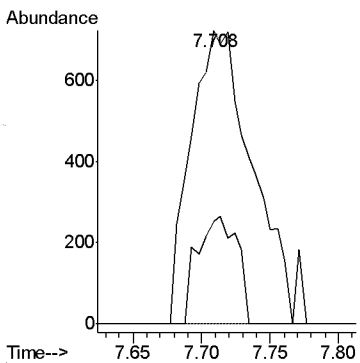




#25
acetone
Concen: 5.58 ug/L
RT: 7.708 min Scan# 654
Delta R.T. 0.000 min
Lab File: 2c79682.D
Acq: 28 Feb 2011 2:42 pm

Tgt Ion: 43 Resp: 2252

Ion	Ratio	Lower	Upper
43	100		
58	34.7	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79682.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.400	13	23	45	rVB3	5080	23073	2.53%	0.351%
2	5.003	129	138	145	rVV2	755	2253	0.25%	0.034%
3	5.076	149	152	159	rVV2	508	905	0.10%	0.014%
4	5.165	166	169	178	rVB2	531	1055	0.12%	0.016%
5	5.386	207	211	219	rVV2	594	1462	0.16%	0.022%
6	5.679	263	267	278	rBV2	481	1015	0.11%	0.015%
7	5.999	326	328	335	rVV2	566	877	0.10%	0.013%
8	6.046	335	337	354	rVB2	635	1157	0.13%	0.018%
9	6.838	483	488	496	rVB2	416	940	0.10%	0.014%
10	7.719	648	656	668	rBV3	1215	3871	0.42%	0.059%
11	7.839	672	679	681	rBV2	854	1100	0.12%	0.017%
12	8.117	720	732	736	rVB3	555	1651	0.18%	0.025%
13	8.426	776	791	809	rBV2	33904	147456	16.14%	2.245%
14	8.558	809	816	835	rVB2	5680	22245	2.44%	0.339%
15	9.538	995	1003	1005	rVB2	451	936	0.10%	0.014%
16	10.026	1088	1096	1114	rBV3	2317	9049	0.99%	0.138%
17	10.151	1114	1120	1131	rVB5	1151	3071	0.34%	0.047%
18	10.293	1140	1147	1160	rVB2	963	3010	0.33%	0.046%
19	10.697	1217	1224	1229	rVV	1008	1631	0.18%	0.025%
20	10.859	1243	1255	1261	rVV	249431	594142	65.05%	9.044%
21	10.917	1261	1266	1283	rVV	132265	315796	34.57%	4.807%
22	11.043	1283	1290	1295	rVB3	942	2106	0.23%	0.032%
23	11.347	1338	1348	1366	rBV	125979	280456	30.70%	4.269%
24	11.682	1406	1412	1417	rBV3	511	1095	0.12%	0.017%
25	11.777	1421	1430	1454	rVB	318507	668949	73.24%	10.182%
26	12.317	1525	1533	1538	rVV3	1777	3119	0.34%	0.047%
27	12.364	1538	1542	1547	rVV	366	837	0.09%	0.013%
28	12.610	1580	1589	1594	rVB3	1151	2020	0.22%	0.031%
29	13.339	1718	1728	1743	rVV	515005	913392	100.00%	13.903%
30	13.649	1780	1787	1793	rBV2	837	1229	0.13%	0.019%
31	13.801	1811	1816	1820	rBV	738	879	0.10%	0.013%
32	13.911	1831	1837	1845	rBV	341	891	0.10%	0.014%
33	14.063	1859	1866	1873	rBV3	1494	2002	0.22%	0.030%
34	14.199	1883	1892	1895	rBV2	926	1779	0.19%	0.027%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	14.236	1895	1899	1906	rVB2	1105	1530	0.17%	0.023%
36	14.755	1989	1998	2009	rBV	468363	763646	83.61%	11.624%
37	14.833	2009	2013	2018	rVB3	1186	1867	0.20%	0.028%
38	15.342	2100	2110	2114	rBV2	1052	1832	0.20%	0.028%
39	15.431	2121	2127	2132	rBV2	2967	4690	0.51%	0.071%
40	15.494	2132	2139	2147	rVB3	1839	3100	0.34%	0.047%
41	15.625	2157	2164	2175	rVV2	5735	9755	1.07%	0.148%
42	15.824	2192	2202	2212	rVV	399135	636856	69.72%	9.694%
43	15.893	2212	2215	2223	rVV4	1707	2494	0.27%	0.038%
44	15.961	2223	2228	2231	rVV2	1640	2439	0.27%	0.037%
45	16.003	2231	2236	2245	rVB	5195	8833	0.97%	0.134%
46	16.066	2245	2248	2252	rBV2	493	881	0.10%	0.013%
47	16.354	2300	2303	2308	rVV	761	1009	0.11%	0.015%
48	16.459	2318	2323	2327	rVV3	1556	1872	0.20%	0.028%
49	16.501	2327	2331	2336	rVV	1929	2475	0.27%	0.038%
50	16.627	2346	2355	2358	rBV3	2379	3899	0.43%	0.059%
51	16.663	2358	2362	2368	rVV	9227	13629	1.49%	0.207%
52	16.910	2400	2409	2419	rBV	534025	848258	92.87%	12.912%
53	16.994	2419	2425	2429	rVV2	3959	6373	0.70%	0.097%
54	17.046	2429	2435	2445	rVB	12539	19722	2.16%	0.300%
55	17.167	2445	2458	2465	rBV2	32639	59424	6.51%	0.905%
56	17.271	2472	2478	2487	rBV2	13591	21862	2.39%	0.333%
57	17.408	2497	2504	2507	rBV4	585	968	0.11%	0.015%
58	17.455	2507	2513	2517	rBV2	2747	4347	0.48%	0.066%
59	17.507	2517	2523	2532	rVB	35017	55683	6.10%	0.848%
60	17.628	2532	2546	2550	rBV3	10775	23654	2.59%	0.360%
61	17.696	2550	2559	2566	rVB2	23651	50441	5.52%	0.768%
62	17.764	2566	2572	2581	rVB8	3488	8281	0.91%	0.126%
63	17.859	2581	2590	2593	rBV	6256	12327	1.35%	0.188%
64	17.911	2595	2600	2612	rVB2	23909	44269	4.85%	0.674%
65	18.000	2612	2617	2624	rVB2	4404	6906	0.76%	0.105%
66	18.095	2629	2635	2644	rVB3	10954	19050	2.09%	0.290%
67	18.184	2644	2652	2656	rBV	5860	9829	1.08%	0.150%
68	18.226	2656	2660	2667	rVB	4751	7036	0.77%	0.107%
69	18.304	2667	2675	2682	rBV3	13279	25434	2.78%	0.387%
70	18.425	2682	2698	2703	rBV	50093	90953	9.96%	1.384%
71	18.477	2703	2708	2716	rVB	43341	76118	8.33%	1.159%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	18.567	2716	2725	2736	rVB	3439	11047	1.21%	0.168%
73	18.682	2738	2747	2755	rBV	51352	96440	10.56%	1.468%
74	18.750	2755	2760	2764	rVV2	10822	21826	2.39%	0.332%
75	18.792	2764	2768	2772	rVV2	10398	17386	1.90%	0.265%
76	18.834	2772	2776	2781	rVV2	12510	19374	2.12%	0.295%
77	18.886	2781	2786	2790	rVV5	6483	11126	1.22%	0.169%
78	18.939	2790	2796	2803	rVB	21298	42599	4.66%	0.648%
79	18.986	2804	2805	2810	rVB4	2503	2753	0.30%	0.042%
80	19.033	2810	2814	2819	rBV5	2969	4035	0.44%	0.061%
81	19.086	2819	2824	2835	rVB3	7710	15402	1.69%	0.234%
82	19.217	2835	2849	2858	rBV2	36327	93883	10.28%	1.429%
83	19.280	2858	2861	2868	rVB3	8269	14167	1.55%	0.216%
84	19.348	2868	2874	2888	rVB4	20075	49055	5.37%	0.747%
85	19.495	2888	2902	2911	rBV5	5857	14611	1.60%	0.222%
86	19.620	2916	2926	2935	rBV8	5748	16047	1.76%	0.244%
87	19.704	2935	2942	2945	rBV	9368	17040	1.87%	0.259%
88	19.741	2945	2949	2957	rVV4	17003	30511	3.34%	0.464%
89	19.809	2959	2962	2967	rVB2	6611	8428	0.92%	0.128%
90	19.856	2967	2971	2980	rBV7	1960	5509	0.60%	0.084%
91	19.930	2980	2985	2990	rBV4	4152	7256	0.79%	0.110%
92	20.056	3000	3009	3012	rBV6	5053	10615	1.16%	0.162%
93	20.097	3012	3017	3027	rVV2	23614	41483	4.54%	0.631%
94	20.160	3027	3029	3033	rVV4	1032	936	0.10%	0.014%
95	20.234	3033	3043	3055	rVV7	7199	24238	2.65%	0.369%
96	20.354	3055	3066	3088	rVB5	13672	34793	3.81%	0.530%
97	20.501	3092	3094	3098	rBV4	1698	2212	0.24%	0.034%
98	20.580	3100	3109	3119	rVV3	43369	83544	9.15%	1.272%
99	20.706	3127	3133	3147	rBV6	2305	4728	0.52%	0.072%
100	20.821	3153	3155	3164	rVB5	1158	1404	0.15%	0.021%

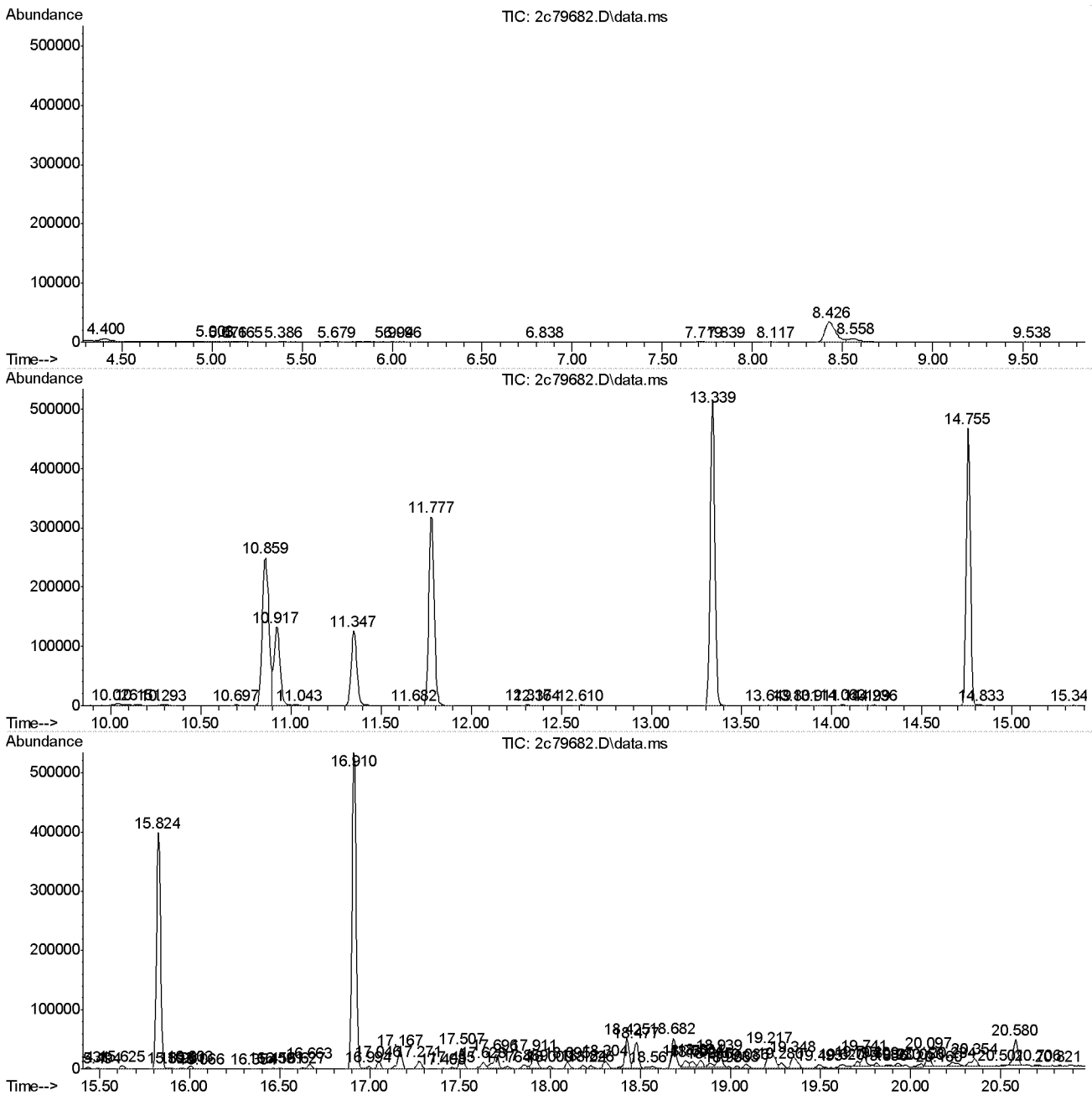
Sum of corrected areas: 6569639

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

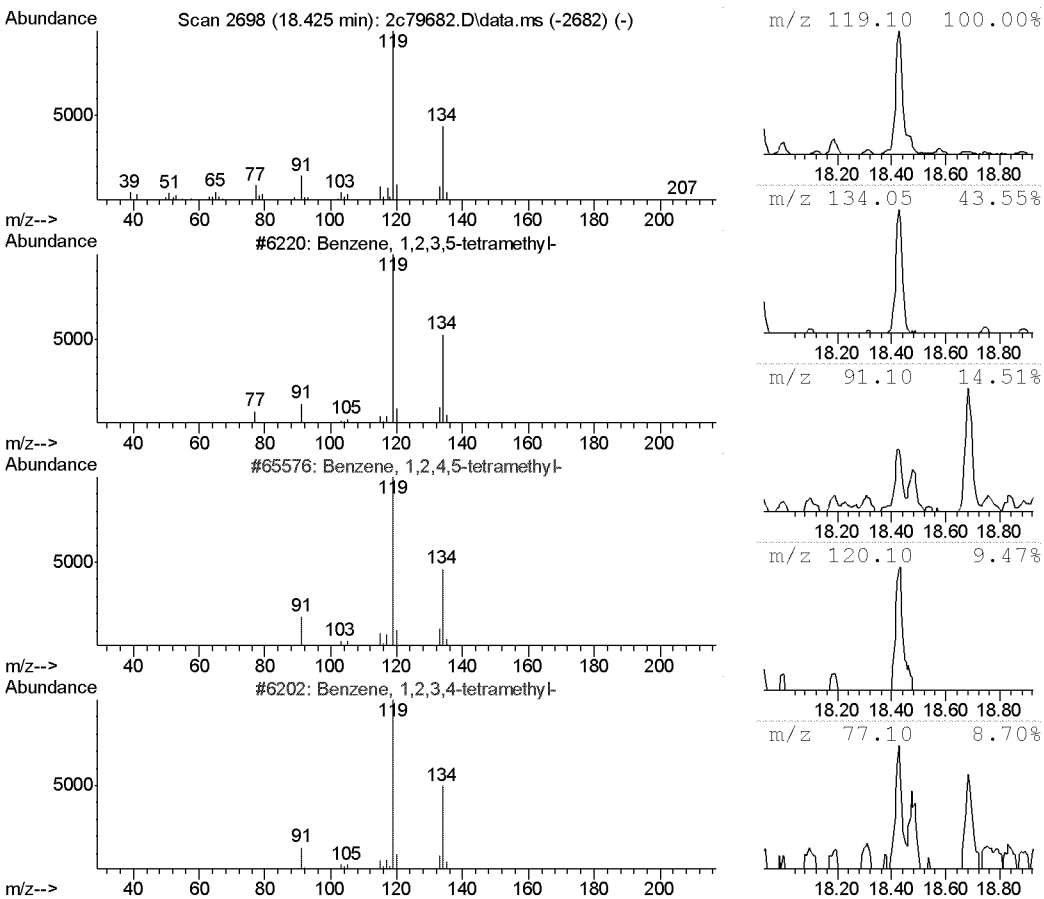
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 1 C4 alkyl benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.425	5.36 ug/L	90953	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

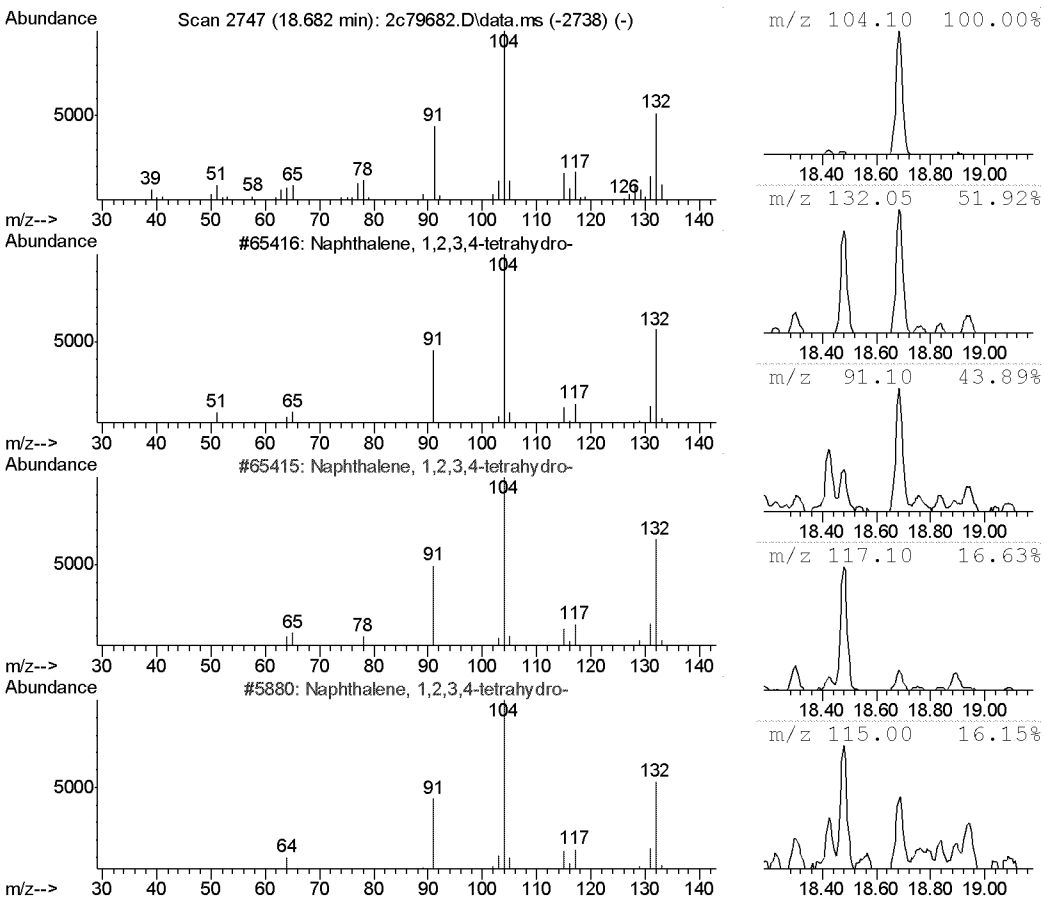
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 2 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.682	5.68 ug/L	96440	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
3	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	94
4	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	93
5	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	64



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

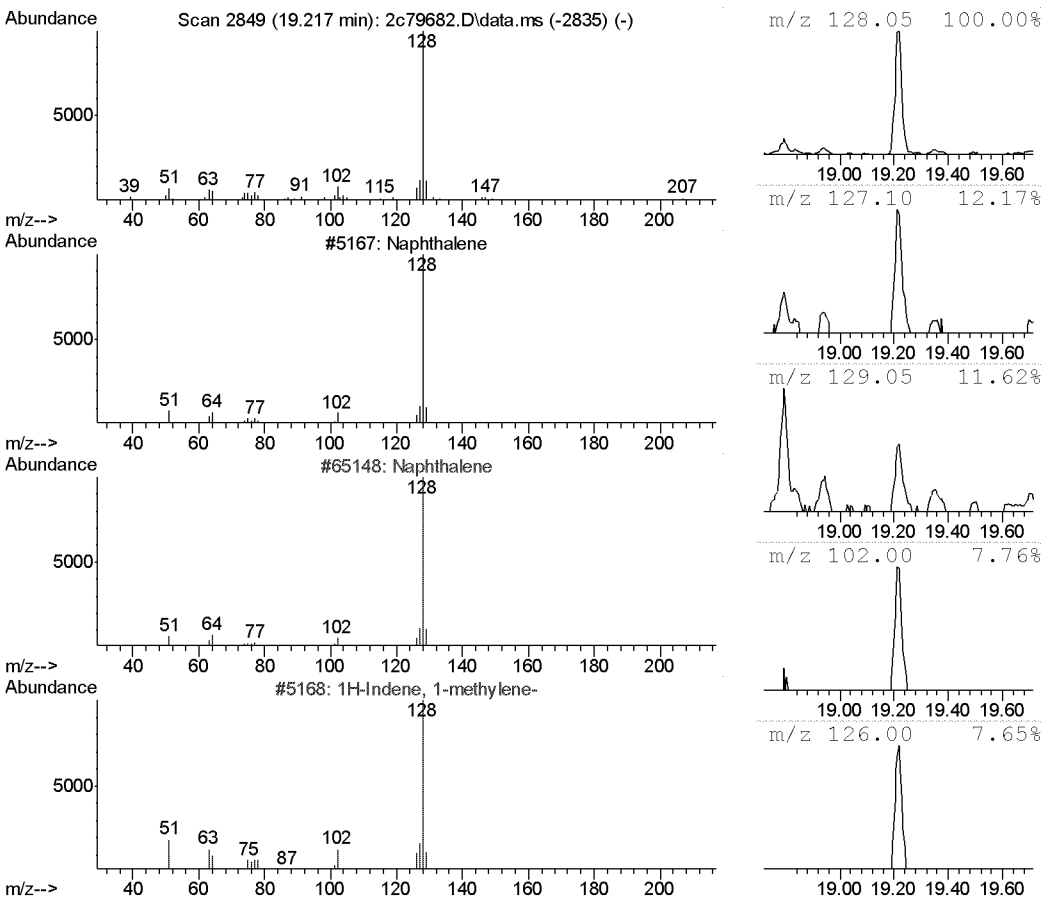
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 3 Naphthalene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.217	5.53 ug/L	93883	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	94
2	Naphthalene	128	C10H8	000091-20-3	93
3	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	93
4	Naphthalene	128	C10H8	000091-20-3	90
5	Naphthalene	128	C10H8	000091-20-3	90



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
C4 alkyl benzene	18.425	5.4	ug/L	90953	5	16.910	848258	50.0
Naphthalene, 1,...	18.682	5.7	ug/L	96440	5	16.910	848258	50.0
Naphthalene	19.217	5.5	ug/L	93883	5	16.910	848258	50.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 14:30:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

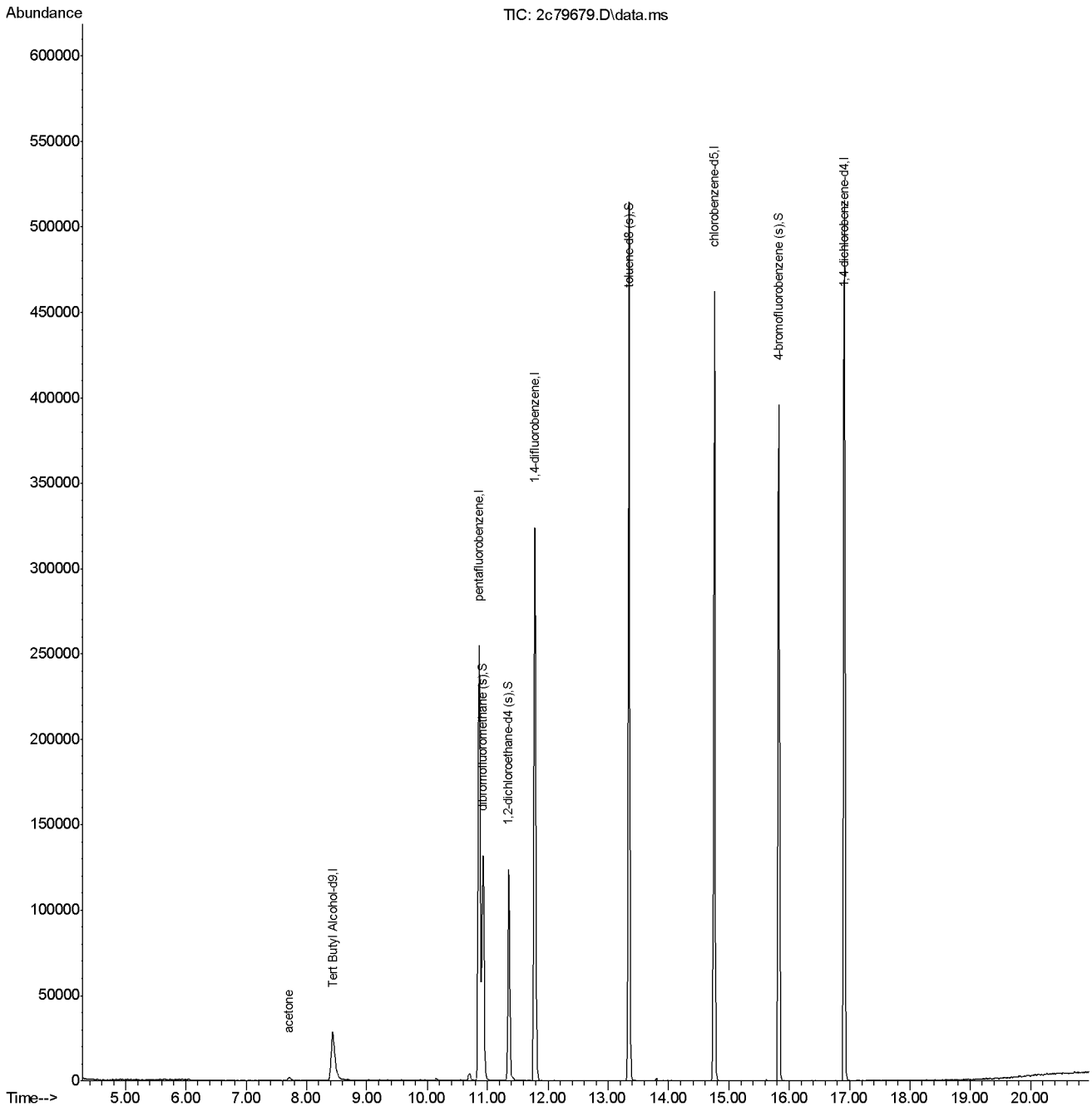
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	77918	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	244930	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	319287	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	272317	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148467	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	98366	52.19	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.38%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	100158	51.57	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 103.14%			
80) toluene-d8 (s)	13.339	98	367771	56.06	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.12%			
105) 4-bromofluorobenzene (s)	15.824	95	131303	53.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.66%			
Target Compounds						Qvalue
25) acetone	7.708	43	3947	9.59	ug/L	98

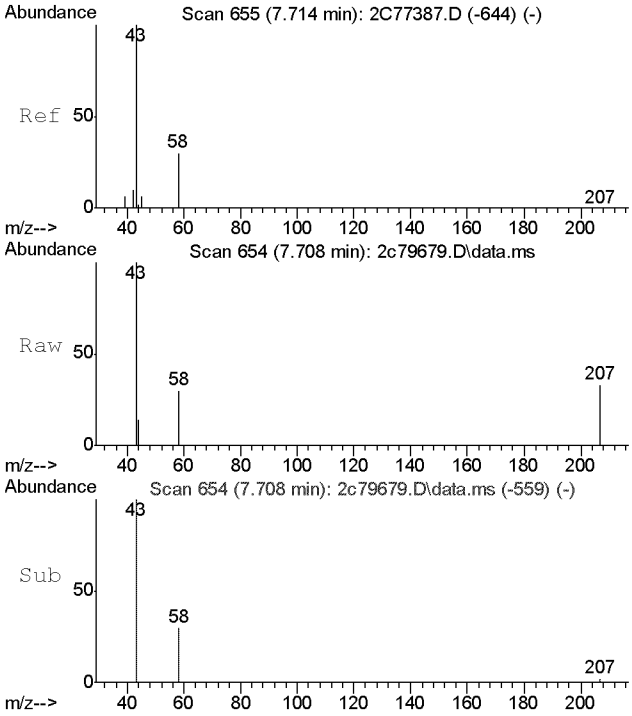
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 14:30:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

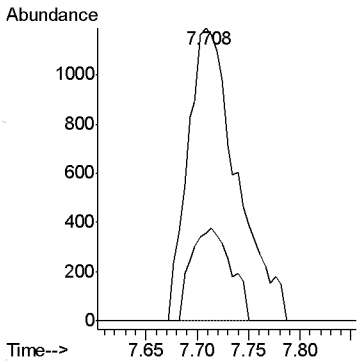




#25
acetone
Concen: 9.59 ug/L
RT: 7.708 min Scan# 654
Delta R.T. 0.000 min
Lab File: 2c79679.D
Acq: 28 Feb 2011 1:09 pm

Tgt Ion: 43 Resp: 3947

Ion	Ratio	Lower	Upper
43	100		
58	30.0	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79679.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.374	16	18	26	rBV2	384	731	0.08%	0.014%
2	4.505	41	43	58	rVB2	445	1433	0.16%	0.027%
3	4.693	76	79	87	rBV2	329	708	0.08%	0.014%
4	4.783	90	96	99	rBV2	557	786	0.09%	0.015%
5	4.845	104	108	112	rVB2	504	654	0.07%	0.013%
6	4.893	112	117	124	rBV2	412	988	0.11%	0.019%
7	4.940	124	126	132	rVV	458	533	0.06%	0.010%
8	5.024	140	142	147	rVB2	460	491	0.05%	0.009%
9	5.181	169	172	181	rVB2	467	827	0.09%	0.016%
10	5.417	216	217	224	rVB2	343	572	0.06%	0.011%
11	5.564	242	245	250	rBV2	481	681	0.07%	0.013%
12	5.810	291	292	297	rBV2	481	466	0.05%	0.009%
13	5.857	297	301	303	rBV2	453	516	0.06%	0.010%
14	5.915	311	312	321	rVV3	338	637	0.07%	0.012%
15	6.030	333	334	351	rVB2	600	1315	0.14%	0.025%
16	6.518	422	427	436	rBV	256	446	0.05%	0.009%
17	6.633	447	449	455	rVB2	386	482	0.05%	0.009%
18	6.722	462	466	475	rBV	285	700	0.08%	0.013%
19	6.922	498	504	518	rVB2	277	1307	0.14%	0.025%
20	7.210	557	559	564	rVV	312	475	0.05%	0.009%
21	7.477	607	610	615	rVB2	359	558	0.06%	0.011%
22	7.624	633	638	641	rBV2	446	619	0.07%	0.012%
23	7.713	645	655	670	rVB3	1980	6770	0.74%	0.129%
24	7.939	691	698	699	rBV2	318	473	0.05%	0.009%
25	8.018	704	713	715	rVV2	279	608	0.07%	0.012%
26	8.180	739	744	749	rBV	325	602	0.07%	0.012%
27	8.432	777	792	825	rBV2	28103	128718	14.00%	2.461%
28	8.615	825	827	830	rVV	735	810	0.09%	0.015%
29	8.636	830	831	837	rVV	511	808	0.09%	0.015%
30	8.678	837	839	849	rVB3	629	1269	0.14%	0.024%
31	9.082	911	916	920	rBV2	410	613	0.07%	0.012%
32	9.302	954	958	961	rBV	289	467	0.05%	0.009%
33	9.344	961	966	968	rVV	504	477	0.05%	0.009%
34	9.412	978	979	987	rVV2	346	633	0.07%	0.012%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.569	1007	1009	1014	rVB	517	480	0.05%	0.009%
36	9.832	1052	1059	1062	rVB2	268	524	0.06%	0.010%
37	10.041	1097	1099	1108	rVB	349	663	0.07%	0.013%
38	10.146	1113	1119	1131	rVV2	1005	2554	0.28%	0.049%
39	10.314	1149	1151	1159	rBV2	337	586	0.06%	0.011%
40	10.429	1169	1173	1180	rBV2	320	680	0.07%	0.013%
41	10.597	1204	1205	1211	rBV2	348	478	0.05%	0.009%
42	10.697	1215	1224	1234	rVV2	3890	9242	1.01%	0.177%
43	10.859	1243	1255	1261	rBV	254519	600677	65.33%	11.484%
44	10.922	1261	1267	1288	rVB	131670	319220	34.72%	6.103%
45	11.347	1337	1348	1369	rBV	123276	281208	30.59%	5.376%
46	11.504	1375	1378	1386	rBV	210	498	0.05%	0.010%
47	11.672	1406	1410	1415	rBV	376	596	0.06%	0.011%
48	11.782	1421	1431	1449	rBV	324081	671200	73.00%	12.832%
49	11.882	1449	1450	1459	rVB2	455	836	0.09%	0.016%
50	12.107	1488	1493	1500	rBV2	619	1021	0.11%	0.020%
51	12.217	1509	1514	1519	rBB	219	497	0.05%	0.010%
52	12.369	1532	1543	1546	rBV	268	857	0.09%	0.016%
53	12.694	1599	1605	1609	rBV	230	591	0.06%	0.011%
54	12.783	1620	1622	1628	rBV	376	628	0.07%	0.012%
55	13.040	1669	1671	1677	rBV	380	558	0.06%	0.011%
56	13.140	1685	1690	1692	rBV	354	474	0.05%	0.009%
57	13.192	1699	1700	1706	rBV	336	443	0.05%	0.008%
58	13.339	1717	1728	1748	rVV	514464	919419	100.00%	17.578%
59	13.449	1748	1749	1759	rVB	513	738	0.08%	0.014%
60	13.664	1788	1790	1795	rVB	418	448	0.05%	0.009%
61	13.732	1795	1803	1807	rBV	194	641	0.07%	0.012%
62	13.795	1807	1815	1822	rVV2	1573	2754	0.30%	0.053%
63	13.905	1830	1836	1842	rVB2	404	551	0.06%	0.011%
64	14.267	1903	1905	1912	rVB	246	515	0.06%	0.010%
65	14.681	1979	1984	1988	rBV	363	608	0.07%	0.012%
66	14.755	1988	1998	2016	rVB	462420	764985	83.20%	14.625%
67	14.886	2019	2023	2028	rBV	220	546	0.06%	0.010%
68	15.295	2097	2101	2108	rBV	375	714	0.08%	0.014%
69	15.358	2108	2113	2118	rVB	389	670	0.07%	0.013%
70	15.415	2118	2124	2128	rBV	409	715	0.08%	0.014%
71	15.620	2159	2163	2171	rBV	874	1154	0.13%	0.022%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.824	2194	2202	2218	rBV	395938	629909	68.51%	12.043%
73	15.966	2226	2229	2233	rVB	383	460	0.05%	0.009%
74	16.564	2339	2343	2347	rVB	432	600	0.07%	0.011%
75	16.611	2347	2352	2353	rBV	472	552	0.06%	0.011%
76	16.910	2400	2409	2429	rVB	515650	831906	90.48%	15.905%
77	17.146	2451	2454	2460	rVV	378	516	0.06%	0.010%
78	17.198	2460	2464	2470	rVB2	408	521	0.06%	0.010%
79	17.513	2520	2524	2526	rVB2	603	835	0.09%	0.016%
80	17.555	2526	2532	2538	rBV2	745	1874	0.20%	0.036%
81	17.916	2595	2601	2606	rVB2	311	501	0.05%	0.010%
82	18.278	2667	2670	2684	rVB2	406	987	0.11%	0.019%
83	18.362	2684	2686	2692	rBV2	360	497	0.05%	0.010%
84	18.839	2774	2777	2785	rBV	417	494	0.05%	0.009%
85	19.154	2832	2837	2839	rBV2	408	482	0.05%	0.009%
86	19.222	2843	2850	2855	rVB3	714	1183	0.13%	0.023%
87	19.285	2855	2862	2864	rBV3	604	1088	0.12%	0.021%
88	19.332	2868	2871	2878	rVV2	322	524	0.06%	0.010%
89	19.426	2883	2889	2891	rBV2	792	1358	0.15%	0.026%
90	19.447	2891	2893	2898	rVB	532	635	0.07%	0.012%
91	19.505	2900	2904	2909	rBV4	462	1098	0.12%	0.021%
92	19.578	2914	2918	2921	rBV2	434	646	0.07%	0.012%
93	19.683	2937	2938	2941	rVB2	551	450	0.05%	0.009%
94	19.709	2941	2943	2947	rBV3	905	623	0.07%	0.012%
95	19.762	2951	2953	2959	rVB4	803	1057	0.11%	0.020%
96	19.804	2959	2961	2963	rBV2	1115	907	0.10%	0.017%
97	19.851	2969	2970	2973	rBV3	636	520	0.06%	0.010%
98	19.935	2979	2986	2989	rBV4	811	1682	0.18%	0.032%
99	19.961	2990	2991	2997	rVB3	663	1050	0.11%	0.020%
100	20.045	3006	3007	3010	rBV2	552	474	0.05%	0.009%

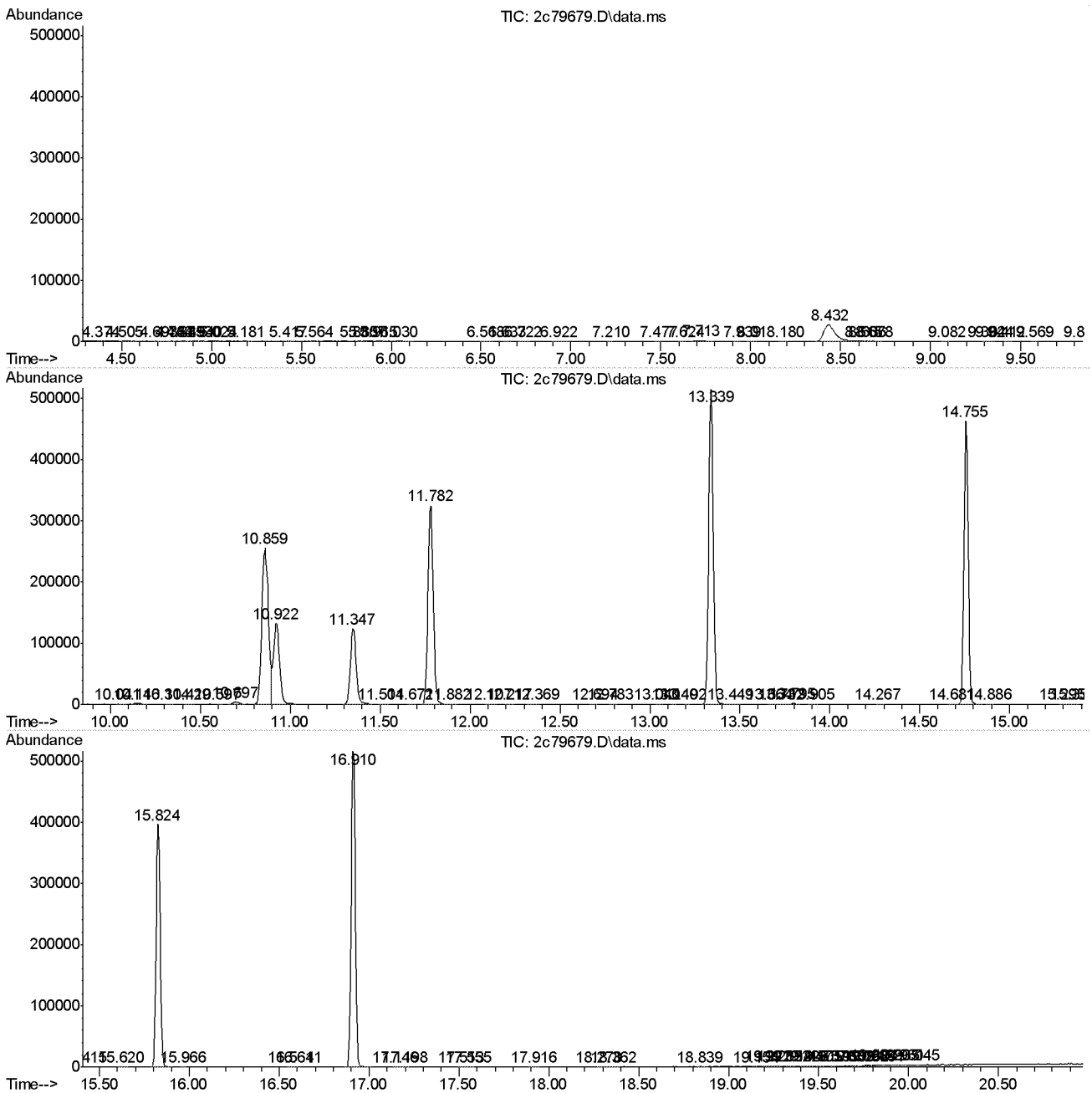
Sum of corrected areas: 5230571

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 07:29:31 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

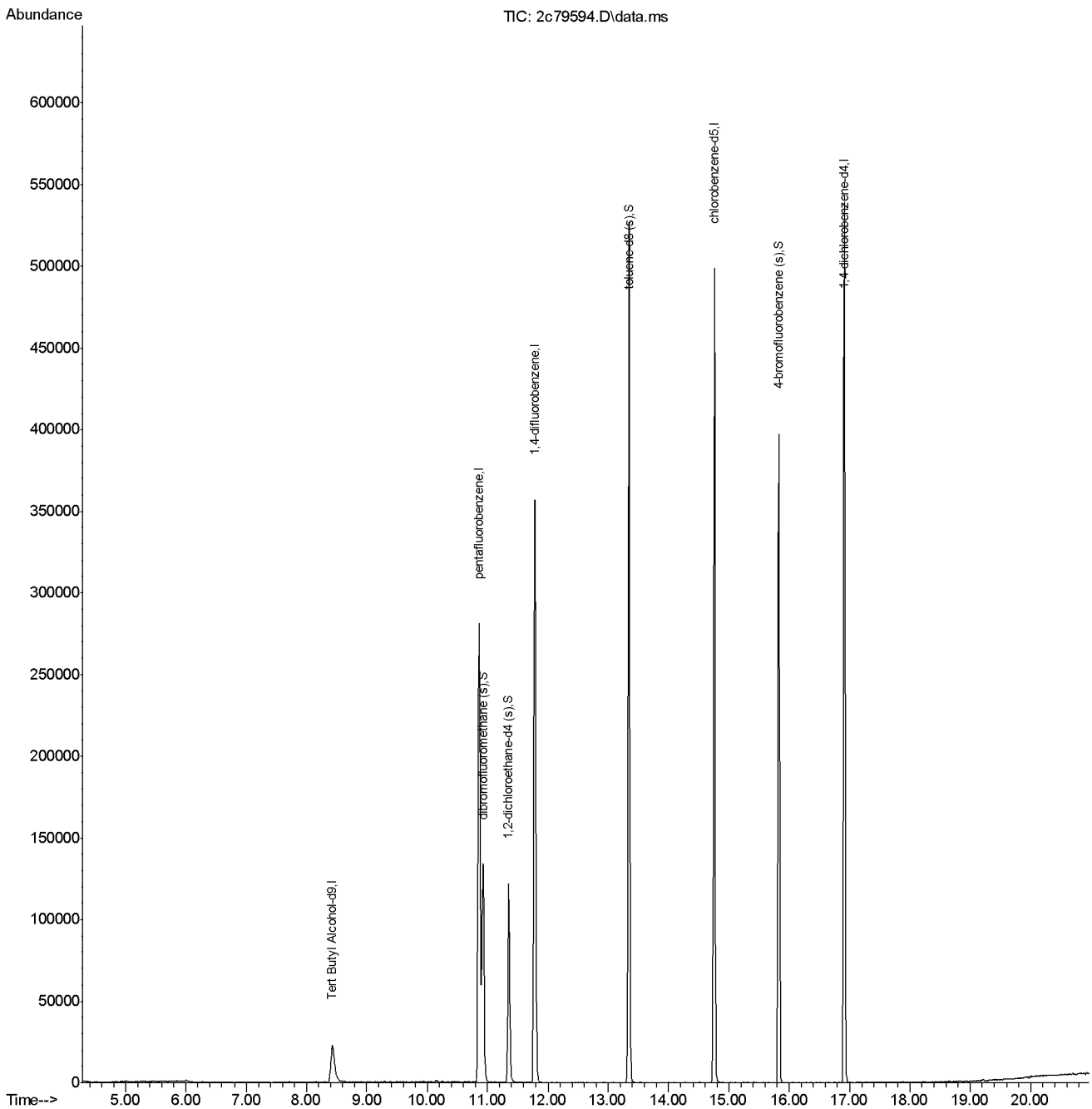
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	62127	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	260684	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	346401	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	289461	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	149290	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	99853	49.78	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.56%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	97248	47.05	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.10%			
80) toluene-d8 (s)	13.339	98	381423	53.59	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 107.18%			
105) 4-bromofluorobenzene (s)	15.824	95	131118	53.46	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.92%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 07:29:31 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79594.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.484	37	39	45	rVB3	487	901	0.09%	0.017%
2	4.520	45	46	55	rBV3	514	978	0.10%	0.018%
3	4.767	91	93	96	rBV3	539	429	0.04%	0.008%
4	4.856	108	110	118	rBV2	494	1011	0.10%	0.019%
5	4.914	118	121	124	rVB	523	582	0.06%	0.011%
6	5.097	154	156	157	rBV	558	380	0.04%	0.007%
7	5.307	191	196	203	rBV3	497	1111	0.11%	0.020%
8	5.511	234	235	240	rVB2	395	479	0.05%	0.009%
9	5.800	287	290	297	rBV4	540	998	0.10%	0.018%
10	6.088	342	345	351	rVB2	504	857	0.09%	0.016%
11	6.277	379	381	389	rBV	388	636	0.07%	0.012%
12	6.644	443	451	454	rBV2	243	530	0.05%	0.010%
13	6.806	481	482	486	rBV	335	419	0.04%	0.008%
14	6.843	486	489	493	rVB3	402	583	0.06%	0.011%
15	6.890	493	498	500	rBV	328	493	0.05%	0.009%
16	7.242	562	565	568	rVB	412	508	0.05%	0.009%
17	7.289	572	574	583	rVV2	428	1017	0.11%	0.019%
18	7.378	584	591	596	rVB	444	1063	0.11%	0.019%
19	7.493	610	613	617	rVB2	283	383	0.04%	0.007%
20	7.540	617	622	624	rBV	258	408	0.04%	0.007%
21	7.614	633	636	642	rBV2	338	532	0.05%	0.010%
22	7.713	652	655	658	rVB2	652	813	0.08%	0.015%
23	7.886	684	688	691	rVB2	394	599	0.06%	0.011%
24	8.159	739	740	747	rVB2	343	435	0.04%	0.008%
25	8.426	777	791	844	rBV2	22806	103585	10.70%	1.899%
26	8.762	853	855	862	rVB2	672	957	0.10%	0.018%
27	8.804	862	863	869	rBV2	574	789	0.08%	0.014%
28	8.851	869	872	875	rVB2	695	624	0.06%	0.011%
29	8.904	876	882	890	rVV2	347	746	0.08%	0.014%
30	9.134	924	926	932	rBV	476	703	0.07%	0.013%
31	9.234	941	945	953	rVB2	405	770	0.08%	0.014%
32	9.307	953	959	963	rBV	466	1006	0.10%	0.018%
33	9.800	1047	1053	1055	rBV2	597	995	0.10%	0.018%
34	10.146	1115	1119	1126	rVB2	1056	2168	0.22%	0.040%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	10.335	1151	1155	1159	rBV2	516	971	0.10%	0.018%
36	10.408	1164	1169	1171	rVV2	417	467	0.05%	0.009%
37	10.629	1209	1211	1217	rVB2	524	667	0.07%	0.012%
38	10.691	1222	1223	1233	rVB2	465	597	0.06%	0.011%
39	10.859	1244	1255	1261	rBV	280704	665999	68.82%	12.208%
40	10.917	1261	1266	1289	rVB	133726	321814	33.26%	5.899%
41	11.158	1309	1312	1317	rVB2	392	382	0.04%	0.007%
42	11.195	1317	1319	1323	rBV	331	392	0.04%	0.007%
43	11.347	1337	1348	1372	rVB	121409	271676	28.07%	4.980%
44	11.509	1373	1379	1381	rBV2	362	520	0.05%	0.010%
45	11.640	1400	1404	1406	rBV	397	538	0.06%	0.010%
46	11.656	1406	1407	1412	rVB	381	465	0.05%	0.009%
47	11.782	1419	1431	1460	rVV	356898	754525	77.97%	13.830%
48	11.960	1464	1465	1470	rVB	387	447	0.05%	0.008%
49	12.081	1481	1488	1493	rBV	246	443	0.05%	0.008%
50	12.233	1516	1517	1527	rVB	392	781	0.08%	0.014%
51	12.333	1531	1536	1537	rVB	397	445	0.05%	0.008%
52	12.348	1537	1539	1543	rBB	403	493	0.05%	0.009%
53	12.443	1555	1557	1562	rBV	372	495	0.05%	0.009%
54	12.500	1562	1568	1575	rVV2	272	599	0.06%	0.011%
55	12.637	1593	1594	1599	rVB	362	505	0.05%	0.009%
56	12.710	1607	1608	1615	rVB	405	572	0.06%	0.010%
57	12.768	1615	1619	1621	rBV	379	502	0.05%	0.009%
58	12.825	1628	1630	1635	rBV	407	491	0.05%	0.009%
59	13.030	1667	1669	1672	rVB	407	394	0.04%	0.007%
60	13.061	1672	1675	1678	rBV	437	582	0.06%	0.011%
61	13.129	1687	1688	1694	rBV	378	587	0.06%	0.011%
62	13.339	1717	1728	1752	rVB	527033	967704	100.00%	17.738%
63	13.727	1797	1802	1804	rVB	347	493	0.05%	0.009%
64	13.869	1824	1829	1834	rVB	413	819	0.08%	0.015%
65	13.911	1834	1837	1841	rBV	349	606	0.06%	0.011%
66	14.052	1862	1864	1869	rVB	416	488	0.05%	0.009%
67	14.084	1869	1870	1877	rBV	444	792	0.08%	0.015%
68	14.236	1898	1899	1904	rVB	363	461	0.05%	0.008%
69	14.278	1904	1907	1911	rBV	423	646	0.07%	0.012%
70	14.755	1988	1998	2018	rBV	498678	831162	85.89%	15.235%
71	14.917	2023	2029	2032	rVB	275	450	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.237	2088	2090	2097	rVB	233	396	0.04%	0.007%
73	15.326	2101	2107	2108	rBV2	263	420	0.04%	0.008%
74	15.672	2171	2173	2178	rVB	379	606	0.06%	0.011%
75	15.824	2194	2202	2217	rVB	397351	623440	64.42%	11.428%
76	16.281	2287	2289	2295	rBV2	271	400	0.04%	0.007%
77	16.459	2319	2323	2329	rVB	393	650	0.07%	0.012%
78	16.553	2336	2341	2344	rBB2	370	385	0.04%	0.007%
79	16.642	2355	2358	2365	rBV	315	522	0.05%	0.010%
80	16.731	2371	2375	2378	rBV2	354	442	0.05%	0.008%
81	16.805	2387	2389	2396	rVB2	395	563	0.06%	0.010%
82	16.910	2396	2409	2424	rBV	539452	857267	88.59%	15.714%
83	17.036	2432	2433	2438	rVB	386	469	0.05%	0.009%
84	17.104	2444	2446	2451	rBV2	379	445	0.05%	0.008%
85	17.245	2468	2473	2476	rBV2	426	708	0.07%	0.013%
86	17.303	2481	2484	2489	rVB2	343	619	0.06%	0.011%
87	17.507	2520	2523	2527	rVB3	338	447	0.05%	0.008%
88	17.722	2560	2564	2568	rBV3	300	433	0.04%	0.008%
89	17.885	2593	2595	2600	rVB3	430	432	0.04%	0.008%
90	17.937	2600	2605	2607	rBV2	267	403	0.04%	0.007%
91	18.053	2624	2627	2644	rBV2	396	1302	0.13%	0.024%
92	18.902	2788	2789	2797	rBV2	547	727	0.08%	0.013%
93	18.975	2802	2803	2811	rBV2	602	1193	0.12%	0.022%
94	19.117	2828	2830	2841	rBV4	400	821	0.08%	0.015%
95	19.185	2841	2843	2845	rBV3	477	445	0.05%	0.008%
96	19.631	2909	2928	2931	rBV7	1106	3593	0.37%	0.066%

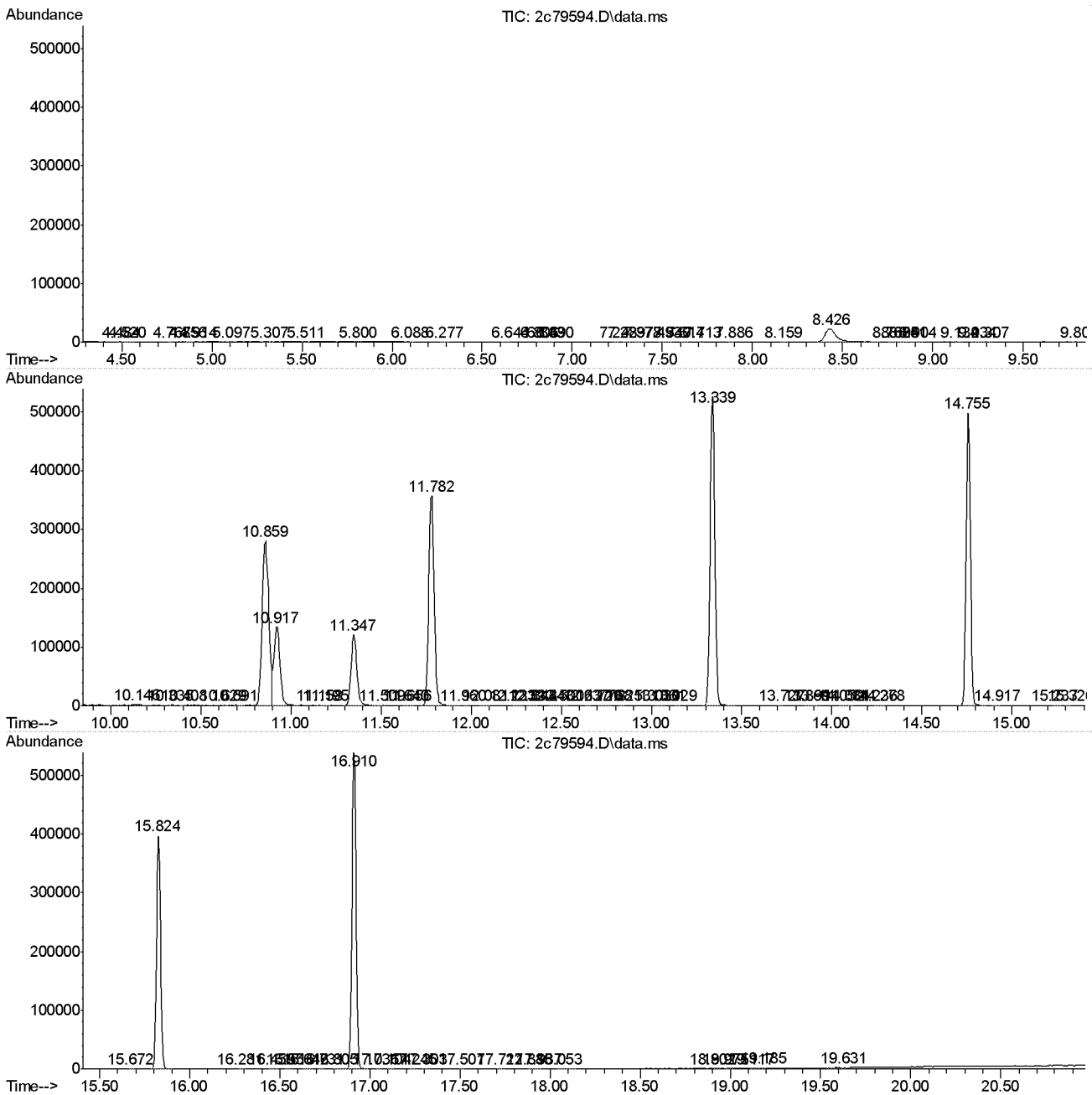
Sum of corrected areas: 5455586

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 01 14:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

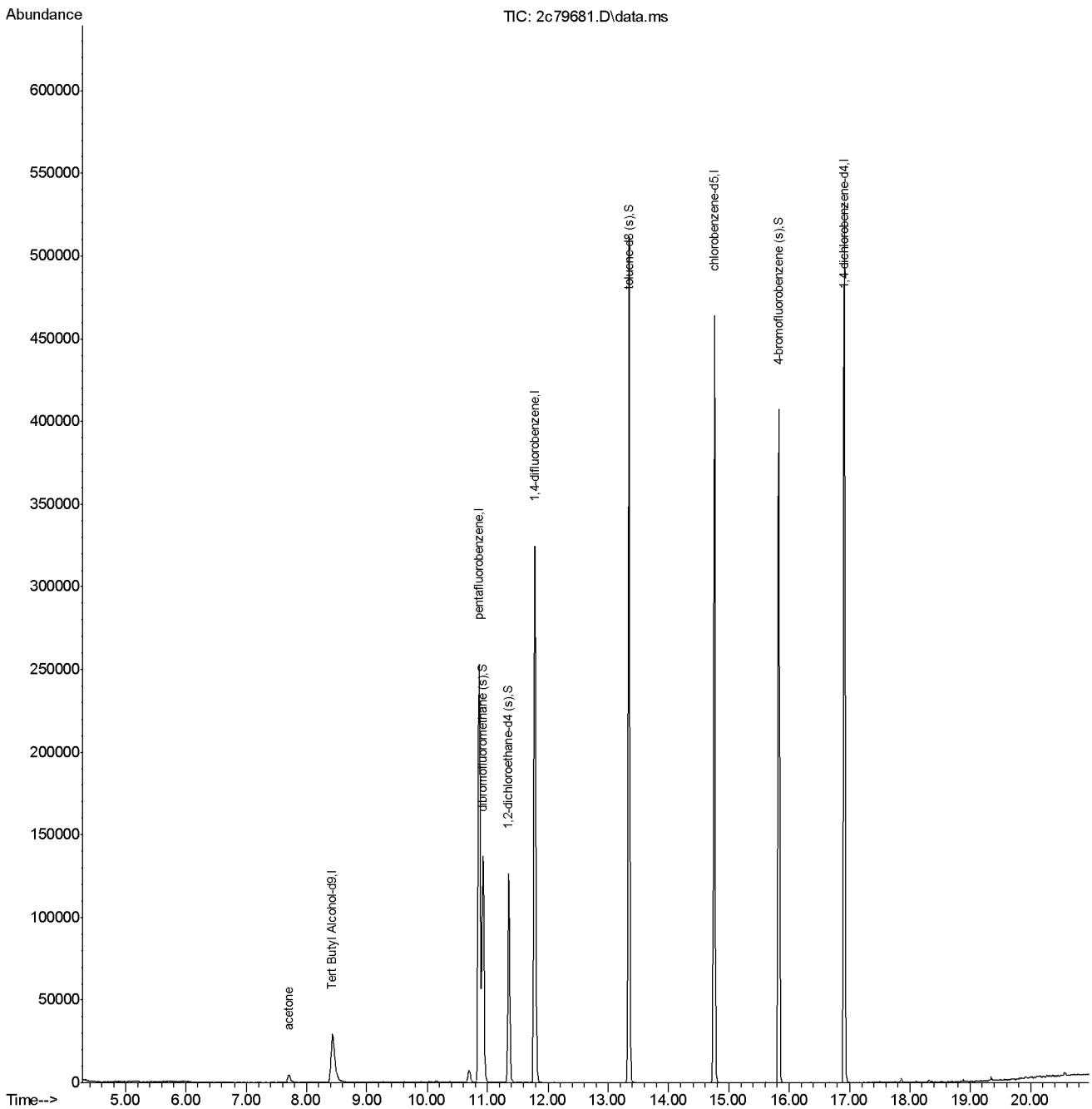
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.427	65	80033	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	244107	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	321964	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	273537	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	150266	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99905	53.19	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.38%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	102397	52.90	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 105.80%			
80) toluene-d8 (s)	13.339	98	370025	55.93	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 111.86%			
105) 4-bromofluorobenzene (s)	15.824	95	133830	54.21	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 108.42%			
Target Compounds						Qvalue
25) acetone	7.703	43	10240	24.97	ug/L	91

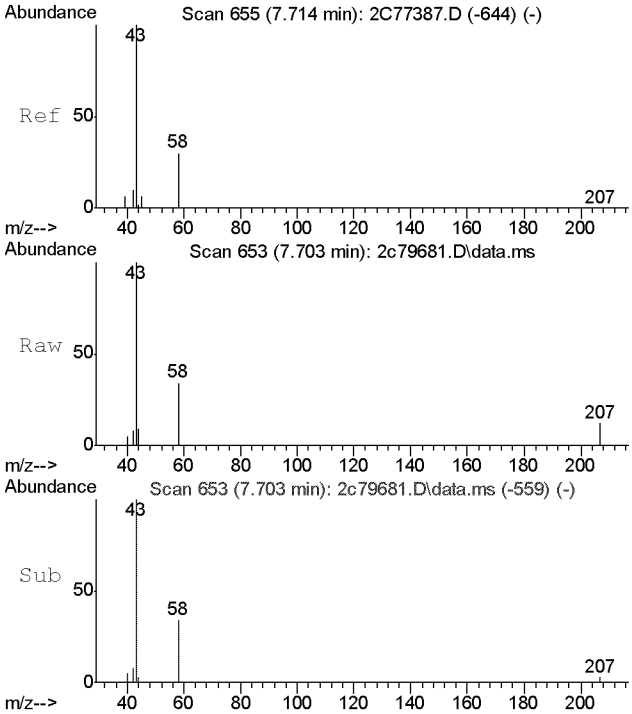
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 01 14:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

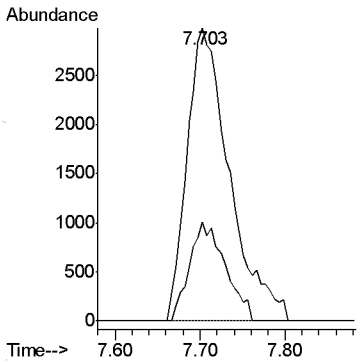




#25
acetone
Concen: 24.97 ug/L
RT: 7.703 min Scan# 653
Delta R.T. -0.005 min
Lab File: 2c79681.D
Acq: 28 Feb 2011 2:11 pm

Tgt Ion: 43 Resp: 10240

Ion	Ratio	Lower	Upper
43	100		
58	33.8	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79681.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.306	3	5	8	rBV2	645	550	0.06%	0.010%
2	4.342	8	12	30	rVB2	1350	3941	0.42%	0.074%
3	4.447	30	32	46	rVB2	453	862	0.09%	0.016%
4	4.699	76	80	91	rVB3	586	1329	0.14%	0.025%
5	4.861	110	111	119	rBV2	500	882	0.09%	0.017%
6	4.914	119	121	130	rVV2	421	812	0.09%	0.015%
7	5.134	160	163	170	rVB2	394	684	0.07%	0.013%
8	5.291	190	193	199	rVB2	410	476	0.05%	0.009%
9	5.359	203	206	209	rVB3	546	541	0.06%	0.010%
10	5.391	209	212	214	rBV	446	483	0.05%	0.009%
11	5.412	214	216	223	rVV2	441	508	0.05%	0.010%
12	5.585	247	249	254	rBV	476	491	0.05%	0.009%
13	5.732	274	277	281	rVB2	642	719	0.08%	0.013%
14	5.821	288	294	296	rVV2	398	547	0.06%	0.010%
15	5.968	319	322	330	rVB3	581	1256	0.13%	0.024%
16	6.025	330	333	337	rBV2	666	795	0.09%	0.015%
17	6.429	408	410	418	rVB2	402	861	0.09%	0.016%
18	6.497	418	423	427	rBV2	277	691	0.07%	0.013%
19	6.880	493	496	505	rVB2	406	788	0.08%	0.015%
20	7.011	517	521	525	rVB2	262	470	0.05%	0.009%
21	7.074	530	533	540	rVB2	272	528	0.06%	0.010%
22	7.703	643	653	673	rBV	4689	15874	1.71%	0.298%
23	8.023	712	714	720	rBV	475	568	0.06%	0.011%
24	8.427	776	791	831	rBV	29093	134264	14.42%	2.518%
25	8.689	839	841	844	rBV	431	490	0.05%	0.009%
26	8.851	870	872	878	rVB3	396	544	0.06%	0.010%
27	9.108	913	921	923	rBV2	272	538	0.06%	0.010%
28	9.129	923	925	932	rVV	330	477	0.05%	0.009%
29	9.349	964	967	973	rBV2	338	715	0.08%	0.013%
30	9.480	988	992	994	rBV	379	477	0.05%	0.009%
31	9.507	994	997	1004	rVV2	362	569	0.06%	0.011%
32	9.564	1004	1008	1011	rVV2	378	495	0.05%	0.009%
33	9.617	1014	1018	1022	rVV2	472	711	0.08%	0.013%
34	9.669	1026	1028	1037	rVV	337	790	0.08%	0.015%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.732	1039	1040	1045	rVV2	275	462	0.05%	0.009%
36	9.795	1050	1052	1057	rVV2	335	546	0.06%	0.010%
37	9.895	1069	1071	1076	rVV	450	483	0.05%	0.009%
38	10.041	1090	1099	1101	rVV3	546	1303	0.14%	0.024%
39	10.068	1102	1104	1109	rVV	421	535	0.06%	0.010%
40	10.157	1111	1121	1136	rBV3	949	3353	0.36%	0.063%
41	10.692	1214	1223	1237	rVB	7368	18758	2.01%	0.352%
42	10.859	1242	1255	1261	rVV	252623	603683	64.85%	11.322%
43	10.917	1261	1266	1291	rVB	136811	323551	34.76%	6.068%
44	11.080	1291	1297	1299	rVB	404	684	0.07%	0.013%
45	11.121	1299	1305	1307	rBV2	416	717	0.08%	0.013%
46	11.347	1337	1348	1370	rVB	126358	283555	30.46%	5.318%
47	11.588	1392	1394	1407	rBV2	322	986	0.11%	0.018%
48	11.782	1421	1431	1446	rBV	324211	677555	72.78%	12.707%
49	12.102	1483	1492	1497	rBV2	634	1297	0.14%	0.024%
50	12.191	1506	1509	1513	rBB	349	460	0.05%	0.009%
51	12.369	1542	1543	1552	rVB	237	580	0.06%	0.011%
52	12.658	1594	1598	1603	rBB	233	464	0.05%	0.009%
53	12.904	1641	1645	1650	rBV	242	467	0.05%	0.009%
54	13.051	1669	1673	1679	rVB	226	511	0.05%	0.010%
55	13.339	1716	1728	1743	rBV	511635	930925	100.00%	17.459%
56	13.539	1762	1766	1772	rBV	388	636	0.07%	0.012%
57	13.864	1821	1828	1835	rBB	328	783	0.08%	0.015%
58	13.963	1845	1847	1853	rBV	260	511	0.05%	0.010%
59	14.446	1936	1939	1944	rBV	352	518	0.06%	0.010%
60	14.755	1987	1998	2017	rBV	463960	770418	82.76%	14.449%
61	15.342	2109	2110	2117	rVB	404	544	0.06%	0.010%
62	15.667	2168	2172	2175	rBB	370	548	0.06%	0.010%
63	15.699	2175	2178	2182	rBV	259	466	0.05%	0.009%
64	15.824	2192	2202	2219	rBV	407057	639616	68.71%	11.996%
65	15.935	2221	2223	2229	rVB	318	504	0.05%	0.009%
66	16.003	2229	2236	2241	rBV	354	739	0.08%	0.014%
67	16.359	2299	2304	2305	rVB	387	454	0.05%	0.009%
68	16.910	2397	2409	2425	rBV	532735	840653	90.30%	15.766%
69	17.235	2465	2471	2473	rBV2	419	455	0.05%	0.009%
70	17.308	2481	2485	2493	rVB2	412	974	0.10%	0.018%
71	17.361	2493	2495	2503	rBV2	330	849	0.09%	0.016%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	17.502	2515	2522	2530	rBV3	646	1197	0.13%	0.022%
73	17.597	2539	2540	2551	rVB	257	533	0.06%	0.010%
74	17.754	2566	2570	2573	rVV3	496	606	0.07%	0.011%
75	17.859	2582	2590	2596	rBV	2398	3748	0.40%	0.070%
76	18.095	2629	2635	2645	rVB	892	1523	0.16%	0.029%
77	18.215	2654	2658	2665	rBV2	292	540	0.06%	0.010%
78	18.315	2671	2677	2682	rBV3	1343	2343	0.25%	0.044%
79	18.362	2682	2686	2691	rVV2	590	805	0.09%	0.015%
80	18.415	2692	2696	2701	rVB2	458	573	0.06%	0.011%
81	18.525	2715	2717	2736	rVB2	358	701	0.08%	0.013%
82	18.687	2746	2748	2758	rVB2	460	735	0.08%	0.014%
83	18.755	2758	2761	2766	rBV2	396	518	0.06%	0.010%
84	18.834	2772	2776	2781	rBV2	673	940	0.10%	0.018%
85	18.886	2782	2786	2792	rVV	1164	1684	0.18%	0.032%
86	18.934	2792	2795	2800	rVV3	548	703	0.08%	0.013%
87	19.101	2820	2827	2832	rBV2	1135	2231	0.24%	0.042%
88	19.190	2841	2844	2847	rVB2	554	485	0.05%	0.009%
89	19.274	2858	2860	2863	rBV2	468	467	0.05%	0.009%
90	19.343	2869	2873	2879	rBV2	2099	2537	0.27%	0.048%
91	19.537	2905	2910	2913	rBV3	482	703	0.08%	0.013%
92	19.594	2913	2921	2925	rBV4	665	1379	0.15%	0.026%
93	19.631	2925	2928	2934	rVB4	769	1008	0.11%	0.019%
94	19.689	2934	2939	2944	rBV4	928	2034	0.22%	0.038%
95	19.725	2944	2946	2948	rBV2	582	498	0.05%	0.009%
96	19.825	2962	2965	2969	rVV3	921	920	0.10%	0.017%
97	19.856	2969	2971	2979	rVB3	845	1073	0.12%	0.020%
98	19.914	2979	2982	2998	rBV4	1271	4197	0.45%	0.079%
99	20.260	3044	3048	3056	rBV5	1271	3146	0.34%	0.059%
100	20.575	3101	3108	3147	rBV9	2053	9943	1.07%	0.186%

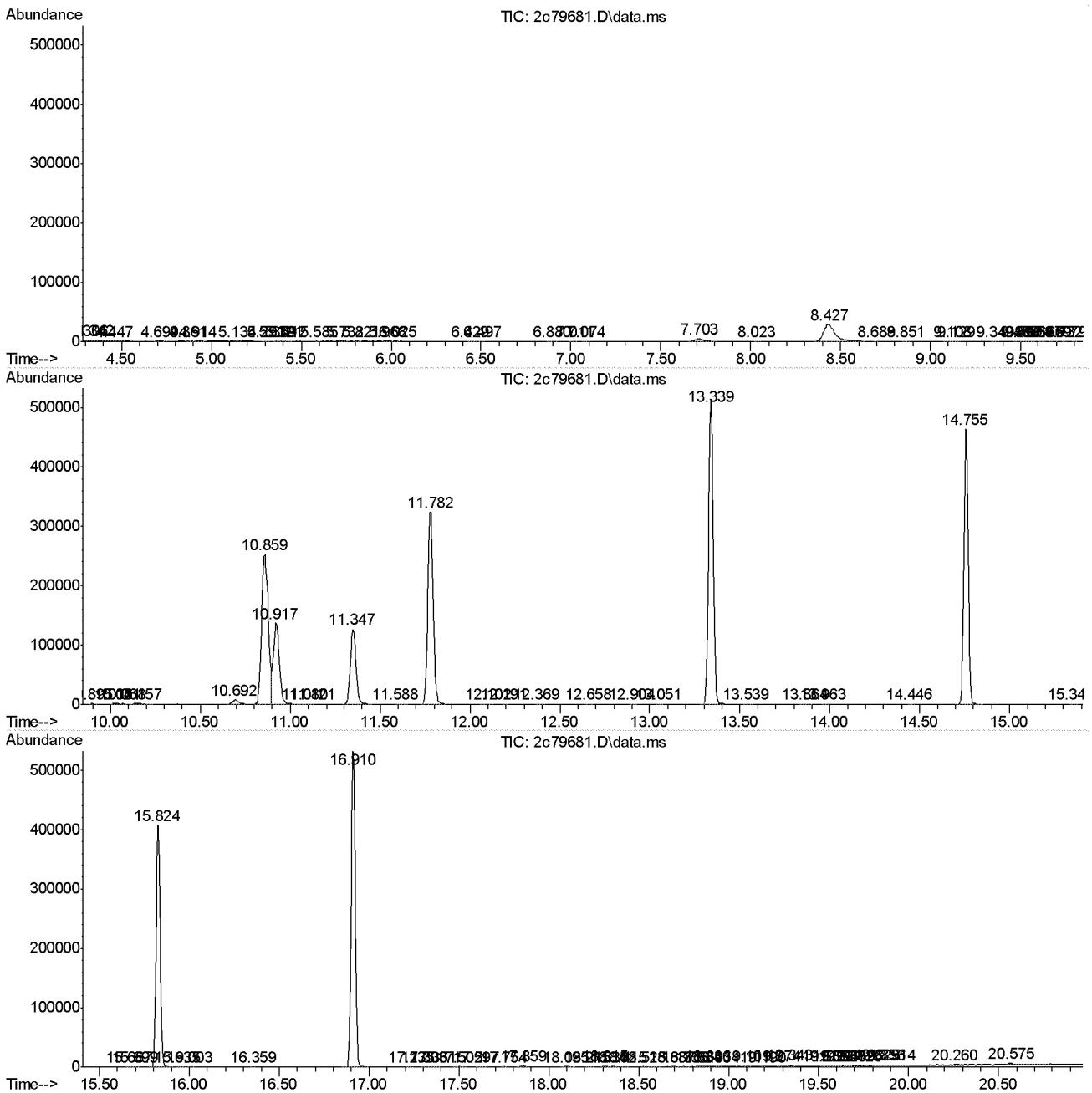
Sum of corrected areas: 5332039

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 14:31:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

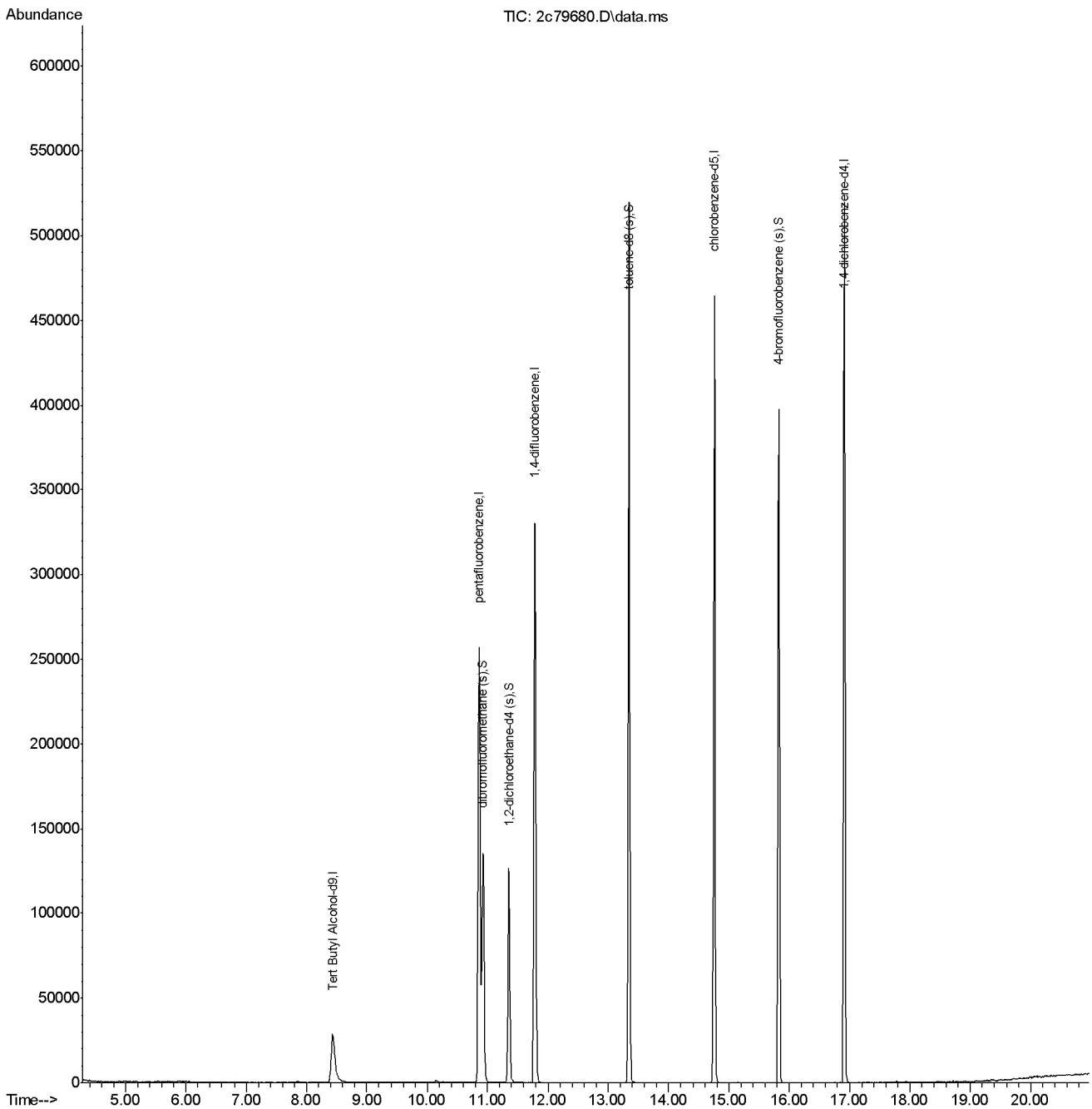
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	79582	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	245737	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	321704	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	273091	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148527	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99408	52.57	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.14%			
51) 1,2-dichloroethane-d4 (s)	11.352	65	102487	52.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 105.20%			
80) toluene-d8 (s)	13.339	98	371014	56.13	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.26%			
105) 4-bromofluorobenzene (s)	15.824	95	132180	54.17	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 108.34%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 14:31:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79680.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.536	47	49	54	rVV2	473	483	0.05%	0.009%
2	4.578	56	57	65	rVV	485	759	0.08%	0.014%
3	4.856	106	110	113	rBV2	380	588	0.06%	0.011%
4	4.893	113	117	127	rVB2	512	1056	0.11%	0.020%
5	4.971	127	132	134	rBV2	422	645	0.07%	0.012%
6	4.992	134	136	142	rBV2	295	420	0.05%	0.008%
7	5.186	172	173	179	rVB2	568	417	0.04%	0.008%
8	5.260	182	187	189	rBV2	294	415	0.04%	0.008%
9	5.359	204	206	208	rBV2	490	425	0.05%	0.008%
10	5.527	235	238	247	rBV2	397	703	0.08%	0.013%
11	5.815	291	293	297	rVB3	445	450	0.05%	0.009%
12	5.905	297	310	314	rBV3	433	1578	0.17%	0.030%
13	6.041	333	336	344	rVB2	573	836	0.09%	0.016%
14	6.099	344	347	359	rVB	316	480	0.05%	0.009%
15	6.833	486	487	493	rVV2	336	446	0.05%	0.008%
16	6.974	513	514	521	rVV2	323	567	0.06%	0.011%
17	7.027	521	524	530	rVV2	286	541	0.06%	0.010%
18	7.069	530	532	537	rVV	354	497	0.05%	0.009%
19	7.100	537	538	543	rVB2	342	454	0.05%	0.009%
20	7.142	543	546	551	rBV	303	486	0.05%	0.009%
21	7.346	578	585	588	rBV	372	465	0.05%	0.009%
22	7.530	619	620	627	rVB2	313	555	0.06%	0.011%
23	7.577	627	629	634	rBV2	302	473	0.05%	0.009%
24	7.656	641	644	649	rVB	339	592	0.06%	0.011%
25	7.692	649	651	656	rBV2	277	421	0.05%	0.008%
26	7.734	656	659	664	rVV	342	495	0.05%	0.009%
27	7.845	676	680	688	rVV4	953	1812	0.19%	0.034%
28	8.059	719	721	733	rBV2	400	1010	0.11%	0.019%
29	8.133	733	735	739	rVB2	416	445	0.05%	0.008%
30	8.264	758	760	767	rVB2	438	738	0.08%	0.014%
31	8.426	777	791	831	rVV2	28532	133245	14.30%	2.535%
32	8.877	871	877	880	rBV	304	686	0.07%	0.013%
33	9.129	921	925	930	rVB	308	541	0.06%	0.010%
34	9.339	962	965	970	rVB2	301	461	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.444	978	985	988	rVB	303	449	0.05%	0.009%
36	9.517	998	999	1007	rVV2	292	565	0.06%	0.011%
37	9.695	1026	1033	1036	rVB2	325	622	0.07%	0.012%
38	9.732	1036	1040	1044	rBV	312	546	0.06%	0.010%
39	10.146	1113	1119	1130	rVB3	948	2590	0.28%	0.049%
40	10.262	1138	1141	1144	rBV	438	543	0.06%	0.010%
41	10.366	1160	1161	1169	rVB2	306	556	0.06%	0.011%
42	10.424	1169	1172	1183	rBV2	428	922	0.10%	0.018%
43	10.560	1194	1198	1207	rBV2	342	1019	0.11%	0.019%
44	10.859	1244	1255	1261	rVV	256523	606891	65.13%	11.546%
45	10.917	1261	1266	1287	rVV	135462	323491	34.72%	6.154%
46	11.053	1287	1292	1294	rVB	317	469	0.05%	0.009%
47	11.263	1330	1332	1338	rBV2	429	628	0.07%	0.012%
48	11.347	1338	1348	1369	rVB	126691	283255	30.40%	5.389%
49	11.562	1388	1389	1397	rVB2	261	473	0.05%	0.009%
50	11.782	1421	1431	1446	rBV	330472	680264	73.01%	12.942%
51	11.866	1446	1447	1454	rVB	691	936	0.10%	0.018%
52	12.044	1472	1481	1482	rBB	201	483	0.05%	0.009%
53	12.264	1521	1523	1530	rBB	210	465	0.05%	0.009%
54	12.768	1614	1619	1623	rBB	339	494	0.05%	0.009%
55	12.993	1657	1662	1664	rBV	320	439	0.05%	0.008%
56	13.182	1695	1698	1704	rBB	231	465	0.05%	0.009%
57	13.240	1704	1709	1713	rBV	223	535	0.06%	0.010%
58	13.339	1718	1728	1759	rVB	520079	931774	100.00%	17.727%
59	13.743	1801	1805	1810	rBB	242	475	0.05%	0.009%
60	13.827	1819	1821	1827	rBB	215	423	0.05%	0.008%
61	14.052	1862	1864	1874	rVB	421	879	0.09%	0.017%
62	14.126	1874	1878	1882	rBB	399	452	0.05%	0.009%
63	14.251	1901	1902	1908	rBV	217	416	0.04%	0.008%
64	14.351	1915	1921	1924	rBV	364	635	0.07%	0.012%
65	14.613	1970	1971	1978	rVB	227	434	0.05%	0.008%
66	14.655	1978	1979	1986	rBB	363	448	0.05%	0.009%
67	14.755	1986	1998	2020	rBV	464676	767483	82.37%	14.602%
68	15.027	2044	2050	2055	rBV	405	721	0.08%	0.014%
69	15.358	2108	2113	2119	rBV	362	743	0.08%	0.014%
70	15.824	2193	2202	2216	rBV	397420	632130	67.84%	12.026%
71	16.731	2371	2375	2377	rVB	393	424	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	16.910	2399	2409	2425	rVV	519989	830295	89.11%	15.797%
73	17.193	2461	2463	2470	rBV2	295	505	0.05%	0.010%
74	17.324	2483	2488	2494	rVB2	328	772	0.08%	0.015%
75	17.403	2500	2503	2508	rBV2	397	555	0.06%	0.011%
76	17.476	2516	2517	2522	rBV2	392	493	0.05%	0.009%
77	17.513	2522	2524	2531	rVB2	332	648	0.07%	0.012%
78	17.555	2531	2532	2540	rBV2	400	701	0.08%	0.013%
79	17.780	2568	2575	2586	rVV3	504	1068	0.11%	0.020%
80	17.943	2600	2606	2615	rVB2	892	1458	0.16%	0.028%
81	18.719	2748	2754	2758	rVV2	937	1063	0.11%	0.020%
82	19.075	2818	2822	2825	rBV	460	514	0.06%	0.010%
83	19.101	2825	2827	2830	rVV	674	543	0.06%	0.010%
84	19.138	2830	2834	2836	rVB2	470	521	0.06%	0.010%
85	19.222	2844	2850	2854	rBV	702	785	0.08%	0.015%
86	19.295	2862	2864	2868	rVB3	689	607	0.07%	0.012%
87	19.348	2868	2874	2891	rBV5	964	4447	0.48%	0.085%
88	19.463	2892	2896	2897	rBV2	575	605	0.06%	0.012%
89	19.505	2901	2904	2913	rVV3	777	1279	0.14%	0.024%
90	19.578	2913	2918	2919	rVB3	607	736	0.08%	0.014%
91	19.699	2934	2941	2944	rBV3	642	1192	0.13%	0.023%
92	19.720	2944	2945	2952	rVB3	857	1044	0.11%	0.020%
93	19.778	2953	2956	2958	rVV2	490	551	0.06%	0.010%
94	19.820	2961	2964	2969	rVB5	608	917	0.10%	0.017%
95	19.877	2974	2975	2983	rVV5	768	581	0.06%	0.011%
96	19.945	2983	2988	2993	rBV5	611	1273	0.14%	0.024%
97	19.982	2993	2995	3002	rBV4	938	1309	0.14%	0.025%
98	20.024	3002	3003	3005	rBV2	592	451	0.05%	0.009%
99	20.134	3022	3024	3031	rBV5	696	1034	0.11%	0.020%
100	20.344	3059	3064	3068	rBV4	1106	1516	0.16%	0.029%

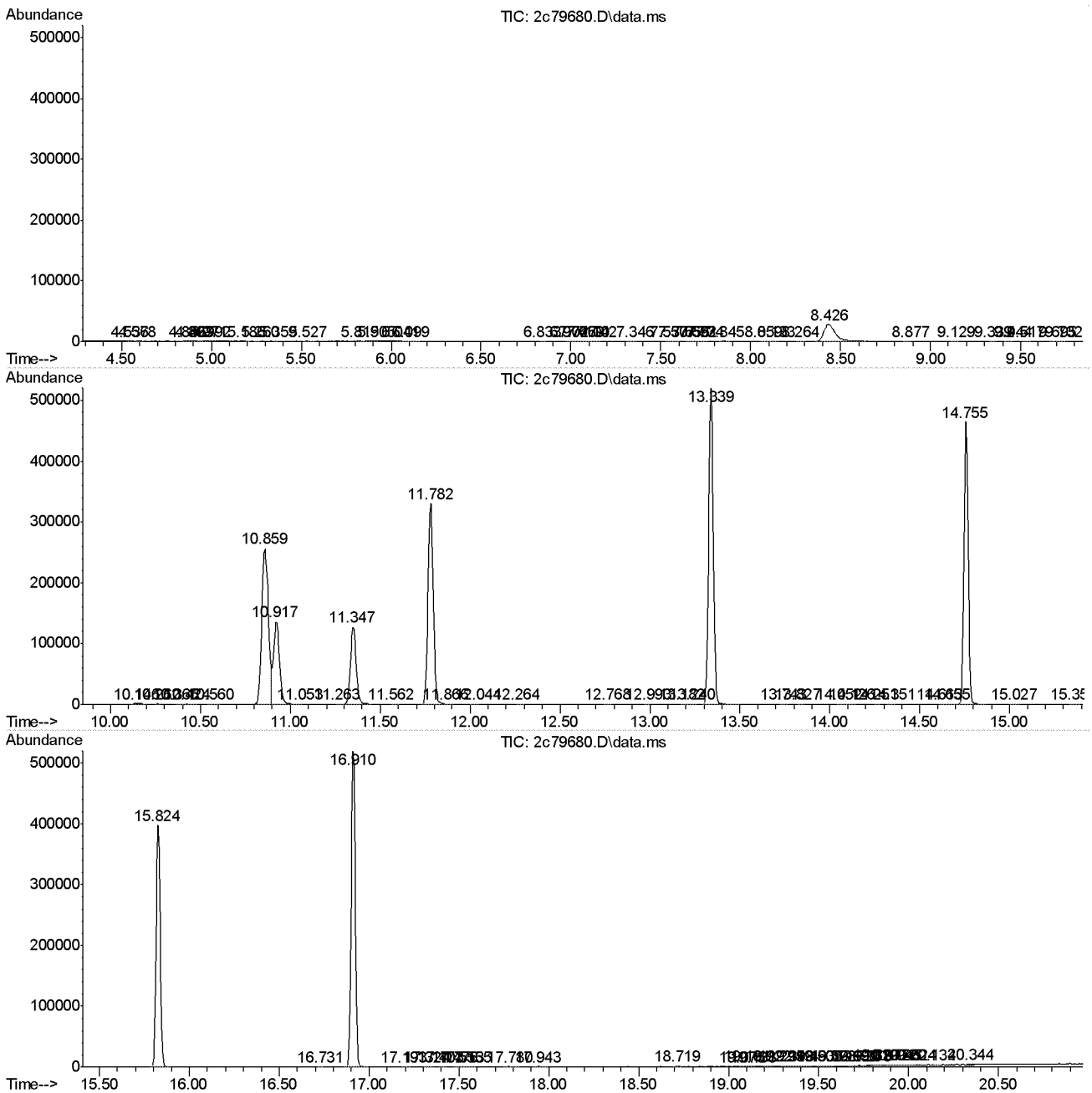
Sum of corrected areas: 5256185

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 07:30:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

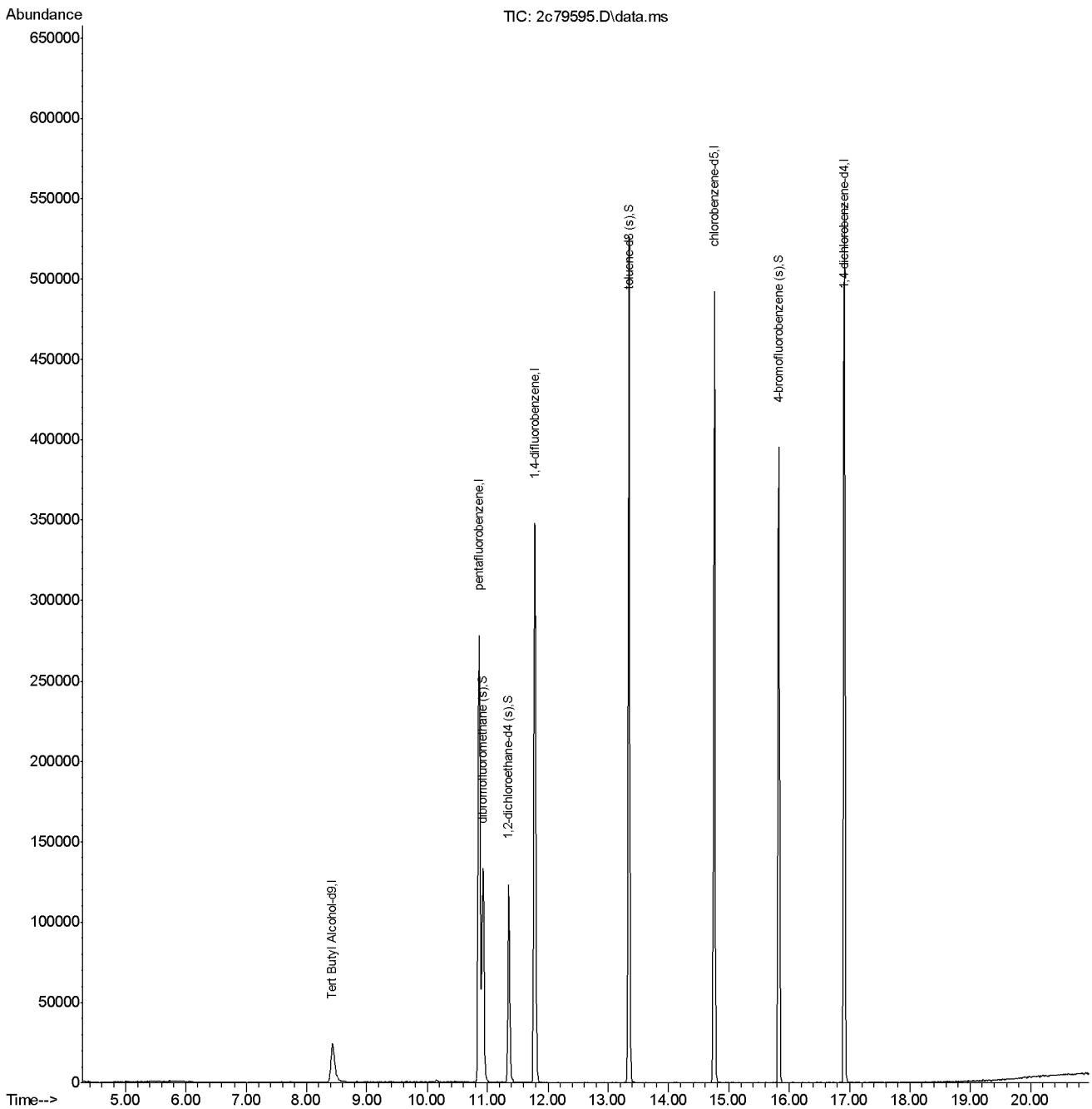
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.421	65	66718	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	256258	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	342933	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	285353	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	150641	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99243	50.33	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.66%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	97555	48.01	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.02%			
80) toluene-d8 (s)	13.339	98	377222	53.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 107.06%			
105) 4-bromofluorobenzene (s)	15.825	95	132432	53.51	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.02%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 07:30:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79595.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.594	56	60	62	rBV2	458	577	0.06%	0.011%
2	4.610	62	63	70	rVV	353	547	0.06%	0.010%
3	4.762	87	92	97	rBV3	264	465	0.05%	0.009%
4	4.819	97	103	105	rBV2	489	761	0.08%	0.014%
5	4.840	105	107	113	rVB3	403	572	0.06%	0.011%
6	4.945	118	127	134	rBV4	515	1548	0.16%	0.029%
7	5.092	153	155	159	rVB2	474	482	0.05%	0.009%
8	5.124	159	161	165	rVB2	607	691	0.07%	0.013%
9	5.160	165	168	171	rBV2	615	831	0.09%	0.015%
10	5.186	171	173	182	rBV2	478	660	0.07%	0.012%
11	5.627	254	257	263	rBV3	582	1084	0.11%	0.020%
12	5.726	274	276	288	rBV3	579	977	0.10%	0.018%
13	6.036	333	335	342	rVB2	692	1186	0.12%	0.022%
14	6.523	421	428	434	rVB2	415	886	0.09%	0.016%
15	6.581	434	439	442	rBV2	325	450	0.05%	0.008%
16	6.654	449	453	456	rBV2	320	403	0.04%	0.007%
17	6.717	463	465	471	rBV	319	401	0.04%	0.007%
18	7.027	522	524	528	rBV2	515	682	0.07%	0.013%
19	7.289	566	574	578	rBV	275	724	0.08%	0.013%
20	7.462	605	607	617	rVB2	431	880	0.09%	0.016%
21	7.535	619	621	627	rVB	405	683	0.07%	0.013%
22	7.583	627	630	635	rBV	572	790	0.08%	0.015%
23	7.651	639	643	647	rVV2	339	467	0.05%	0.009%
24	7.740	653	660	669	rVB3	449	865	0.09%	0.016%
25	8.421	777	790	840	rBV3	24290	113470	11.85%	2.095%
26	8.836	864	869	871	rBV	428	569	0.06%	0.011%
27	9.056	901	911	916	rBV2	422	1291	0.13%	0.024%
28	9.098	916	919	932	rVB2	483	1013	0.11%	0.019%
29	9.176	932	934	938	rBV2	413	451	0.05%	0.008%
30	9.239	944	946	953	rVB	405	656	0.07%	0.012%
31	9.360	965	969	974	rBV2	357	666	0.07%	0.012%
32	9.638	1019	1022	1024	rBV	529	583	0.06%	0.011%
33	9.716	1030	1037	1040	rBV2	500	672	0.07%	0.012%
34	9.816	1053	1056	1066	rBV2	522	1107	0.12%	0.020%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.973	1085	1086	1094	rBV2	434	686	0.07%	0.013%
36	10.146	1115	1119	1127	rVB4	1100	2821	0.29%	0.052%
37	10.215	1127	1132	1137	rBV2	470	942	0.10%	0.017%
38	10.277	1142	1144	1154	rBV2	572	1184	0.12%	0.022%
39	10.340	1154	1156	1168	rVV2	544	1241	0.13%	0.023%
40	10.409	1168	1169	1180	rVV2	508	1047	0.11%	0.019%
41	10.498	1180	1186	1189	rVB2	378	582	0.06%	0.011%
42	10.592	1194	1204	1206	rVV2	434	861	0.09%	0.016%
43	10.618	1206	1209	1213	rVB	379	390	0.04%	0.007%
44	10.671	1218	1219	1229	rVB2	463	942	0.10%	0.017%
45	10.859	1243	1255	1261	rBV	277952	654070	68.32%	12.075%
46	10.917	1262	1266	1292	rVB2	133160	301947	31.54%	5.575%
47	11.242	1325	1328	1334	rVB2	438	678	0.07%	0.013%
48	11.347	1337	1348	1379	rBV	123269	274274	28.65%	5.064%
49	11.525	1379	1382	1388	rVB3	318	464	0.05%	0.009%
50	11.777	1419	1430	1450	rVB	347856	739839	77.27%	13.659%
51	11.971	1462	1467	1476	rBV2	292	625	0.07%	0.012%
52	12.170	1503	1505	1509	rBV	395	518	0.05%	0.010%
53	12.254	1516	1521	1523	rBB	375	433	0.05%	0.008%
54	12.270	1523	1524	1528	rBV	431	418	0.04%	0.008%
55	12.621	1585	1591	1595	rBV2	229	410	0.04%	0.008%
56	12.757	1613	1617	1619	rBB	370	382	0.04%	0.007%
57	13.041	1668	1671	1673	rBV	393	469	0.05%	0.009%
58	13.339	1717	1728	1751	rVB	526547	957411	100.00%	17.676%
59	13.512	1758	1761	1765	rVB	384	443	0.05%	0.008%
60	13.612	1776	1780	1785	rBV2	420	857	0.09%	0.016%
61	13.680	1790	1793	1799	rVB	391	601	0.06%	0.011%
62	13.717	1799	1800	1805	rBV	386	547	0.06%	0.010%
63	13.806	1814	1817	1819	rBV	403	416	0.04%	0.008%
64	14.084	1868	1870	1876	rVB	421	661	0.07%	0.012%
65	14.121	1876	1877	1884	rBV2	419	838	0.09%	0.015%
66	14.304	1908	1912	1914	rBV	409	543	0.06%	0.010%
67	14.755	1989	1998	2020	rBV	492503	823598	86.02%	15.205%
68	14.876	2020	2021	2026	rVB	419	509	0.05%	0.009%
69	14.923	2026	2030	2033	rBV	429	542	0.06%	0.010%
70	15.033	2047	2051	2060	rBV	235	583	0.06%	0.011%
71	15.631	2159	2165	2167	rVB	395	643	0.07%	0.012%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.825	2194	2202	2219	rVB	395471	625348	65.32%	11.545%
73	16.165	2261	2267	2270	rVB	381	726	0.08%	0.013%
74	16.207	2270	2275	2276	rBV	413	465	0.05%	0.009%
75	16.317	2293	2296	2302	rBV2	351	426	0.04%	0.008%
76	16.459	2319	2323	2328	rBV2	224	407	0.04%	0.008%
77	16.527	2333	2336	2339	rVB	365	388	0.04%	0.007%
78	16.669	2358	2363	2367	rVB2	248	461	0.05%	0.009%
79	16.737	2372	2376	2380	rVV	362	407	0.04%	0.008%
80	16.910	2400	2409	2424	rVB	547875	864066	90.25%	15.952%
81	16.999	2424	2426	2440	rVB3	548	1597	0.17%	0.029%
82	17.104	2440	2446	2448	rBV2	391	679	0.07%	0.013%
83	17.167	2453	2458	2462	rVB	434	603	0.06%	0.011%
84	17.203	2462	2465	2469	rVB2	428	529	0.06%	0.010%
85	17.230	2469	2470	2473	rBV2	429	391	0.04%	0.007%
86	17.256	2473	2475	2479	rVB2	393	426	0.04%	0.008%
87	17.298	2479	2483	2484	rBV2	472	415	0.04%	0.008%
88	17.434	2504	2509	2513	rVB2	259	465	0.05%	0.009%
89	17.591	2536	2539	2542	rBV	566	627	0.07%	0.012%
90	17.707	2554	2561	2566	rVB2	304	651	0.07%	0.012%
91	17.827	2582	2584	2588	rBV	432	561	0.06%	0.010%
92	18.152	2641	2646	2650	rVB2	295	475	0.05%	0.009%
93	18.189	2651	2653	2663	rBV2	271	458	0.05%	0.008%
94	18.299	2673	2674	2683	rVB3	297	575	0.06%	0.011%
95	18.404	2690	2694	2700	rBV3	313	551	0.06%	0.010%
96	18.509	2709	2714	2719	rBV3	398	743	0.08%	0.014%
97	18.551	2720	2722	2729	rVB3	515	688	0.07%	0.013%
98	18.970	2800	2802	2821	rBV3	718	1939	0.20%	0.036%

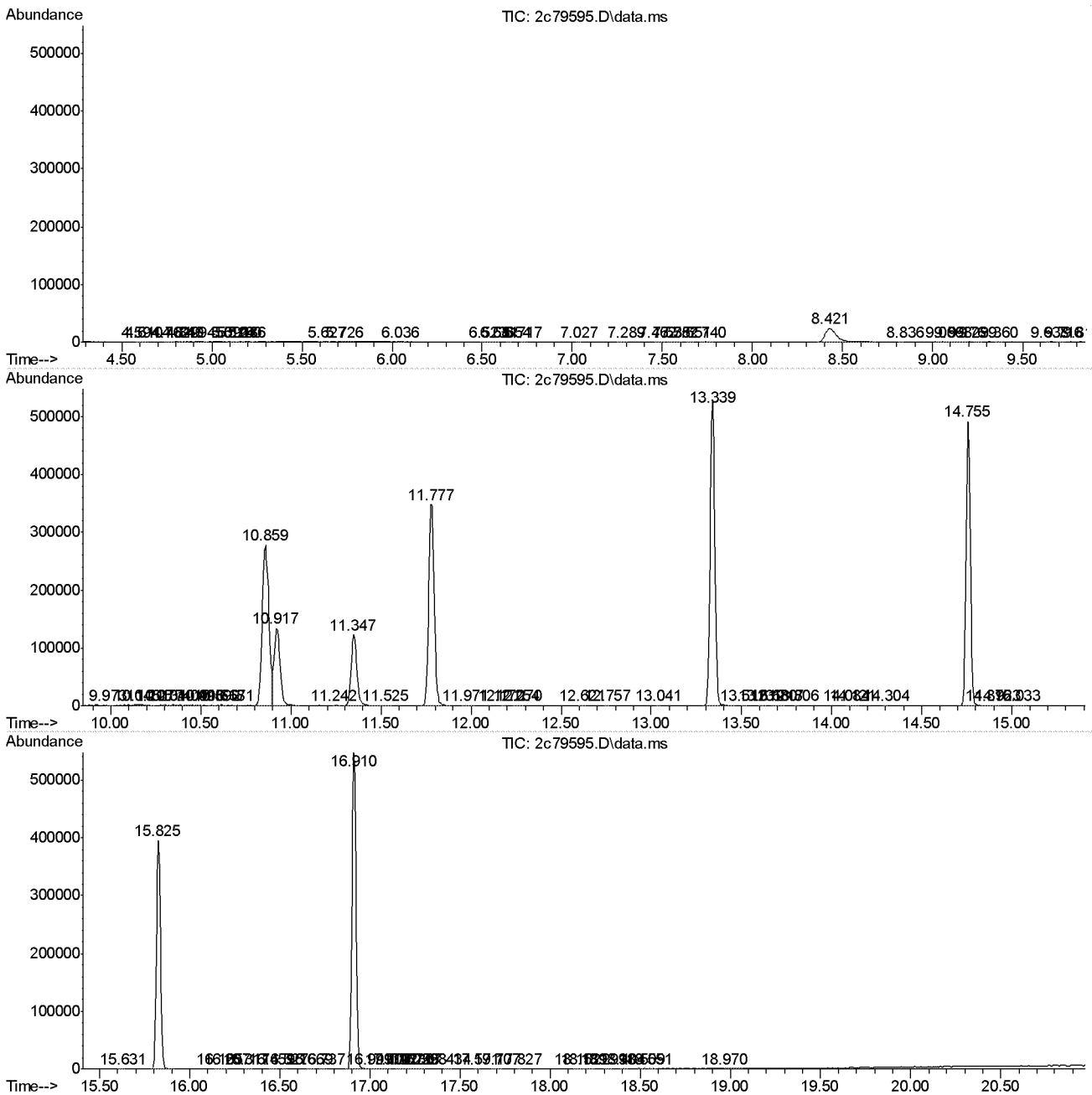
Sum of corrected areas: 5416572

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 07:31:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

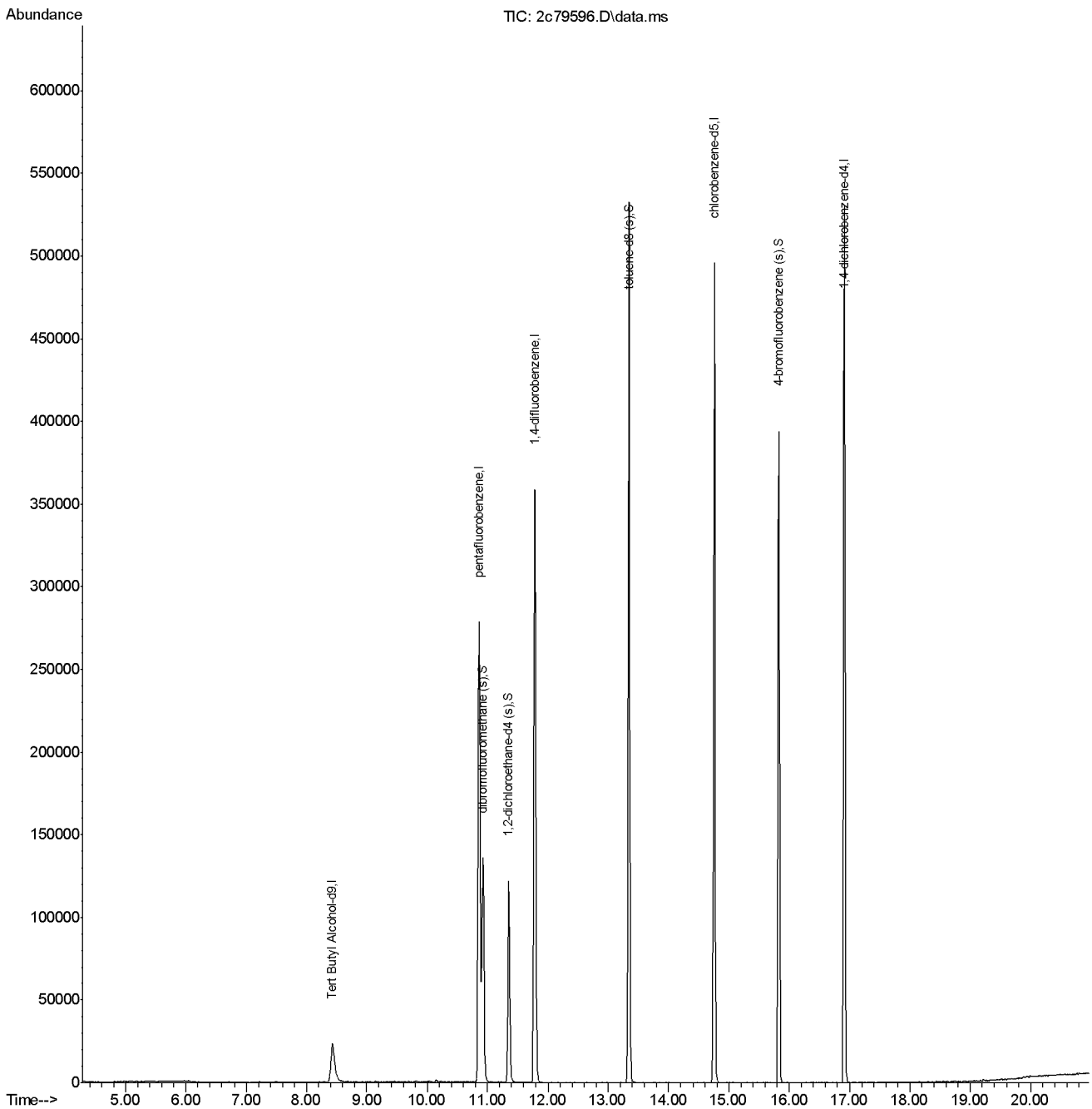
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.421	65	64747	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	258452	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	345628	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	285608	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.915	152	149907	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	100175	50.37	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.74%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	96702	47.19	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.38%			
80) toluene-d8 (s)	13.339	98	379381	53.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 106.84%			
105) 4-bromofluorobenzene (s)	15.824	95	131600	53.43	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.86%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 07:31:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79596.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.547	39	51	60	rVB3	378	1201	0.12%	0.022%
2	4.615	63	64	80	rBV3	464	1612	0.17%	0.030%
3	4.741	87	88	96	rVB	406	758	0.08%	0.014%
4	4.814	98	102	103	rVV	394	452	0.05%	0.008%
5	4.877	110	114	116	rBV2	521	554	0.06%	0.010%
6	5.543	240	241	247	rVB3	407	430	0.04%	0.008%
7	6.235	370	373	378	rBV3	319	439	0.05%	0.008%
8	6.324	389	390	399	rBV3	322	621	0.06%	0.011%
9	6.712	460	464	471	rBV	353	514	0.05%	0.009%
10	7.090	531	536	540	rBV2	519	903	0.09%	0.017%
11	7.226	560	562	578	rVB2	442	1327	0.14%	0.025%
12	7.483	608	611	617	rVB2	453	727	0.08%	0.013%
13	7.645	639	642	645	rBV2	346	441	0.05%	0.008%
14	7.698	645	652	654	rVB3	493	937	0.10%	0.017%
15	7.734	654	659	663	rBV2	487	835	0.09%	0.015%
16	8.101	728	729	735	rVB	436	469	0.05%	0.009%
17	8.426	777	791	833	rVB2	23324	107245	11.12%	1.980%
18	8.731	847	849	855	rVB2	347	395	0.04%	0.007%
19	8.925	883	886	891	rVB	409	659	0.07%	0.012%
20	8.972	891	895	898	rBV2	427	562	0.06%	0.010%
21	9.035	905	907	923	rVB2	515	939	0.10%	0.017%
22	9.140	923	927	935	rVB3	484	1286	0.13%	0.024%
23	9.187	935	936	943	rBV2	379	663	0.07%	0.012%
24	9.386	970	974	979	rBV2	414	539	0.06%	0.010%
25	9.722	1036	1038	1045	rVB2	353	397	0.04%	0.007%
26	9.805	1051	1054	1062	rVB3	646	1380	0.14%	0.025%
27	9.957	1082	1083	1091	rVB3	676	1000	0.10%	0.018%
28	10.010	1091	1093	1104	rBV2	504	1553	0.16%	0.029%
29	10.162	1113	1122	1128	rBV4	1123	2700	0.28%	0.050%
30	10.225	1132	1134	1140	rVB2	301	487	0.05%	0.009%
31	10.440	1172	1175	1179	rVB	660	795	0.08%	0.015%
32	10.597	1203	1205	1212	rVB	641	1020	0.11%	0.019%
33	10.655	1212	1216	1219	rVB3	493	717	0.07%	0.013%
34	10.676	1219	1220	1224	rBV2	465	596	0.06%	0.011%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	10.859	1243	1255	1261	rBV	278360	659283	68.35%	12.172%
36	10.917	1262	1266	1288	rVB	135506	301425	31.25%	5.565%
37	11.074	1294	1296	1304	rVB2	325	404	0.04%	0.007%
38	11.190	1317	1318	1322	rBV2	412	425	0.04%	0.008%
39	11.347	1335	1348	1382	rVB	121704	273968	28.40%	5.058%
40	11.551	1382	1387	1389	rVB2	449	641	0.07%	0.012%
41	11.782	1421	1431	1451	rVV	358319	750361	77.79%	13.854%
42	11.897	1451	1453	1460	rVB2	406	590	0.06%	0.011%
43	12.757	1614	1617	1621	rBV	409	608	0.06%	0.011%
44	12.867	1635	1638	1642	rVB	419	558	0.06%	0.010%
45	12.904	1642	1645	1647	rBV	362	381	0.04%	0.007%
46	12.936	1647	1651	1658	rVB	425	935	0.10%	0.017%
47	12.977	1658	1659	1664	rBV2	373	532	0.06%	0.010%
48	13.056	1671	1674	1677	rBV	406	467	0.05%	0.009%
49	13.234	1704	1708	1710	rBV	421	494	0.05%	0.009%
50	13.339	1717	1728	1751	rBV	532716	964618	100.00%	17.810%
51	13.559	1767	1770	1776	rVB	279	405	0.04%	0.007%
52	13.774	1808	1811	1815	rVB	256	399	0.04%	0.007%
53	14.314	1913	1914	1920	rBB	380	430	0.04%	0.008%
54	14.755	1989	1998	2013	rVB	495915	822540	85.27%	15.186%
55	15.048	2052	2054	2062	rVB	434	989	0.10%	0.018%
56	15.111	2062	2066	2068	rBV	422	519	0.05%	0.010%
57	15.824	2192	2202	2216	rBV	394011	623189	64.60%	11.506%
58	15.966	2223	2229	2234	rBV	235	576	0.06%	0.011%
59	16.553	2337	2341	2345	rBV2	425	791	0.08%	0.015%
60	16.600	2345	2350	2352	rVV2	356	589	0.06%	0.011%
61	16.616	2352	2353	2363	rVV2	473	704	0.07%	0.013%
62	16.726	2370	2374	2377	rVB2	388	435	0.05%	0.008%
63	16.773	2382	2383	2388	rBV	421	431	0.04%	0.008%
64	16.910	2401	2409	2429	rBV	530097	862290	89.39%	15.920%
65	17.046	2433	2435	2439	rBV3	379	460	0.05%	0.008%
66	17.146	2453	2454	2463	rBV3	491	916	0.09%	0.017%
67	17.219	2464	2468	2470	rVB	380	437	0.05%	0.008%
68	17.261	2471	2476	2479	rVB2	423	668	0.07%	0.012%
69	17.340	2488	2491	2500	rVB	408	568	0.06%	0.010%
70	17.445	2508	2511	2514	rBV2	322	424	0.04%	0.008%
71	17.597	2534	2540	2551	rVB2	372	869	0.09%	0.016%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	17.733	2563	2566	2574	rBV3	317	643	0.07%	0.012%
73	17.869	2589	2592	2602	rBV3	240	557	0.06%	0.010%
74	18.299	2671	2674	2679	rVB2	368	527	0.05%	0.010%
75	18.373	2686	2688	2698	rBV2	398	750	0.08%	0.014%
76	18.441	2698	2701	2705	rVV2	289	422	0.04%	0.008%
77	18.540	2719	2720	2736	rBV	442	1326	0.14%	0.024%
78	18.724	2752	2755	2762	rBV3	428	816	0.08%	0.015%
79	18.844	2774	2778	2781	rVB2	423	510	0.05%	0.009%
80	19.211	2845	2848	2855	rBV3	765	1248	0.13%	0.023%

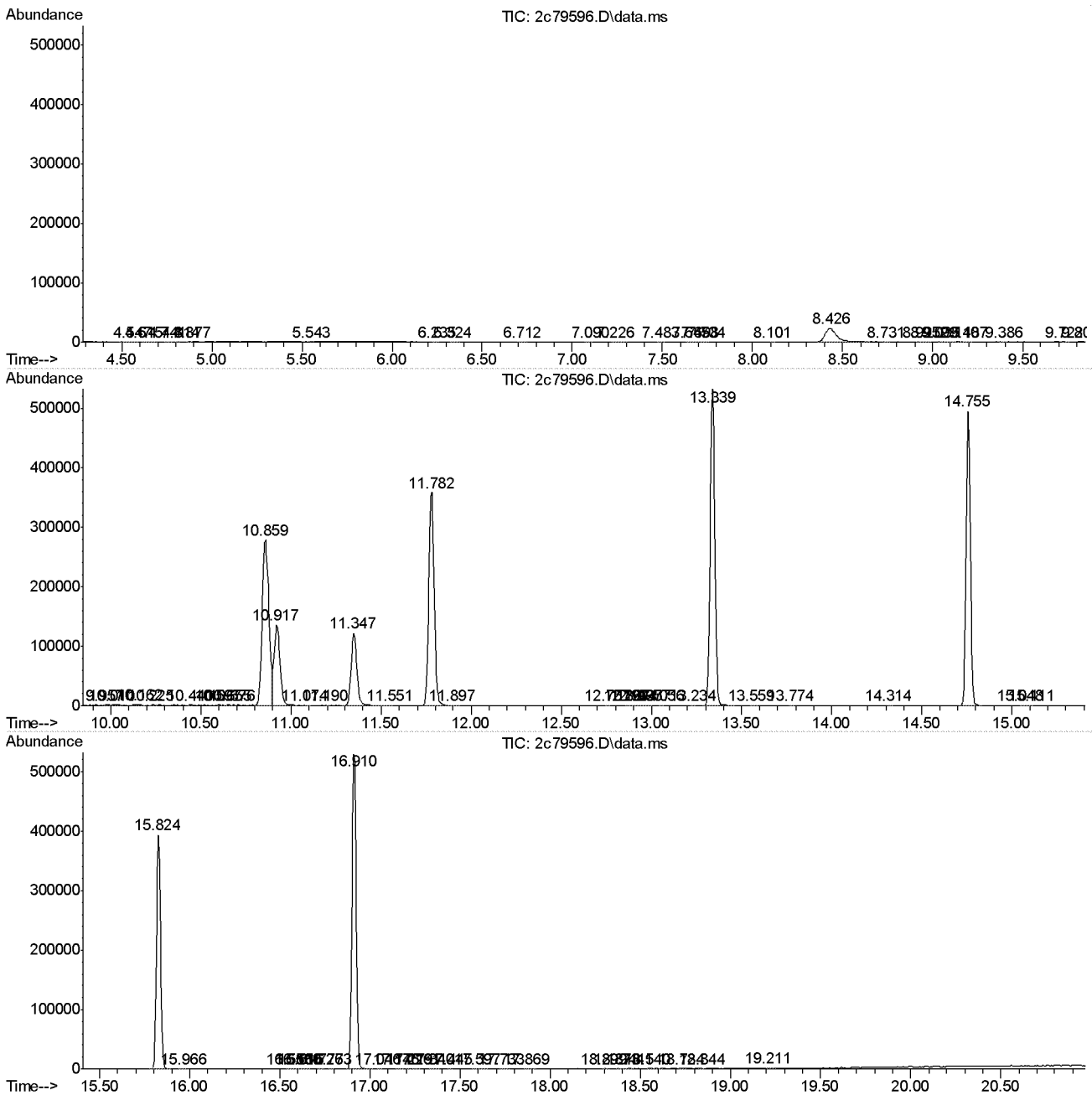
Sum of corrected areas: 5416271

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

SII-SSA-0014-003921

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 11:11:06 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

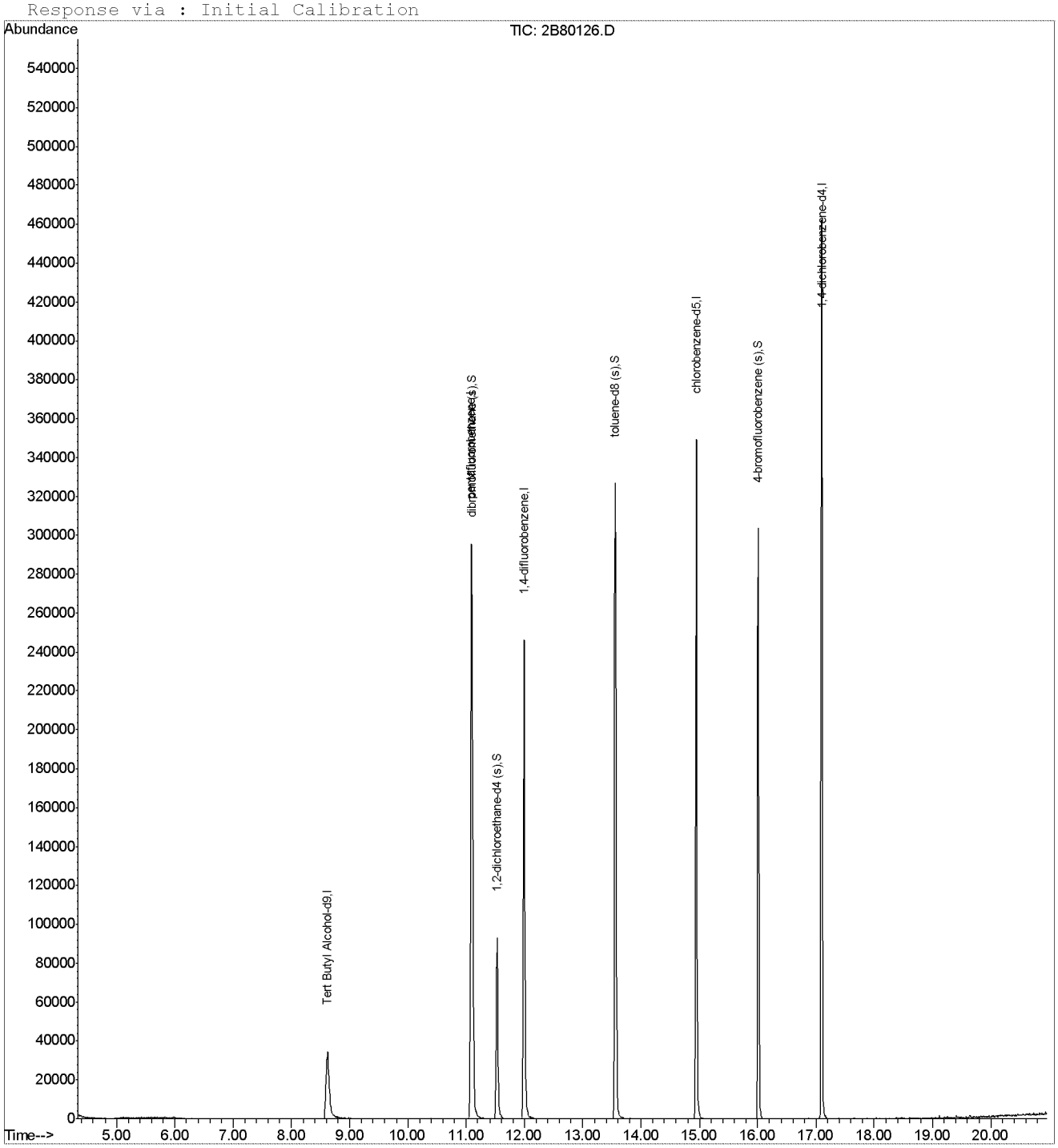
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	74874	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	189438	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	220750	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	192951	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	120540	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	66670	49.54	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.08%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	79788	49.54	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.08%			
73) toluene-d8 (s)	13.55	98	214554	50.17	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 100.34%			
98) 4-bromofluorobenzene (s)	16.01	95	82690	49.19	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 98.38%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:24 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration



ACCUTEST LABORATORIES JA68506

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.376	7	9	17	rVB	1051	1608	0.23%	0.042%
2	4.481	27	29	33	rVB	562	557	0.08%	0.015%
3	4.518	33	36	43	rVV	560	653	0.09%	0.017%
4	4.565	43	45	49	rVB	436	449	0.06%	0.012%
5	4.791	85	88	98	rVB	650	1409	0.20%	0.037%
6	4.859	99	101	106	rBV	481	582	0.08%	0.015%
7	4.911	109	111	114	rVB	492	436	0.06%	0.011%
8	4.979	118	124	129	rBV	620	1435	0.20%	0.037%
9	5.215	168	169	174	rVB	497	382	0.05%	0.010%
10	5.273	179	180	185	rVB2	328	391	0.06%	0.010%
11	5.346	189	194	196	rBV2	564	548	0.08%	0.014%
12	5.504	220	224	229	rVV	317	440	0.06%	0.011%
13	5.630	244	248	250	rVB	456	473	0.07%	0.012%
14	5.656	250	253	255	rBV	522	442	0.06%	0.012%
15	5.703	259	262	266	rVB	487	551	0.08%	0.014%
16	5.834	283	287	291	rVB2	338	498	0.07%	0.013%
17	5.960	309	311	313	rVV	615	424	0.06%	0.011%
18	5.976	313	314	318	rVV2	521	635	0.09%	0.017%
19	6.007	318	320	326	rVV	573	678	0.10%	0.018%
20	6.232	360	363	366	rVB	423	436	0.06%	0.011%
21	6.280	366	372	376	rBB	418	836	0.12%	0.022%
22	6.589	430	431	438	rBB	429	411	0.06%	0.011%
23	6.725	456	457	465	rBB	233	391	0.06%	0.010%
24	6.793	465	470	474	rBB	427	574	0.08%	0.015%
25	7.444	589	594	599	rBB	476	471	0.07%	0.012%
26	8.618	806	818	853	rBV2	34924	135311	19.25%	3.534%
27	8.807	853	854	858	rVV	902	1019	0.14%	0.027%
28	8.854	860	863	866	rVV2	822	967	0.14%	0.025%
29	8.901	870	872	875	rVB	723	613	0.09%	0.016%
30	8.933	875	878	881	rBV	568	650	0.09%	0.017%
31	8.980	881	887	891	rBV	577	542	0.08%	0.014%
32	10.390	1151	1156	1163	rBB	646	1231	0.18%	0.032%
33	11.088	1279	1289	1321	rBV2	295640	692067	98.44%	18.074%
34	11.282	1321	1326	1333	rVB	738	1403	0.20%	0.037%
35	11.523	1364	1372	1388	rBV	93125	197003	28.02%	5.145%
36	11.617	1388	1390	1399	rVB	1158	1754	0.25%	0.046%
37	11.989	1452	1461	1482	rBV	246076	478782	68.10%	12.504%
38	13.552	1751	1759	1783	rBV	326987	548697	78.05%	14.330%

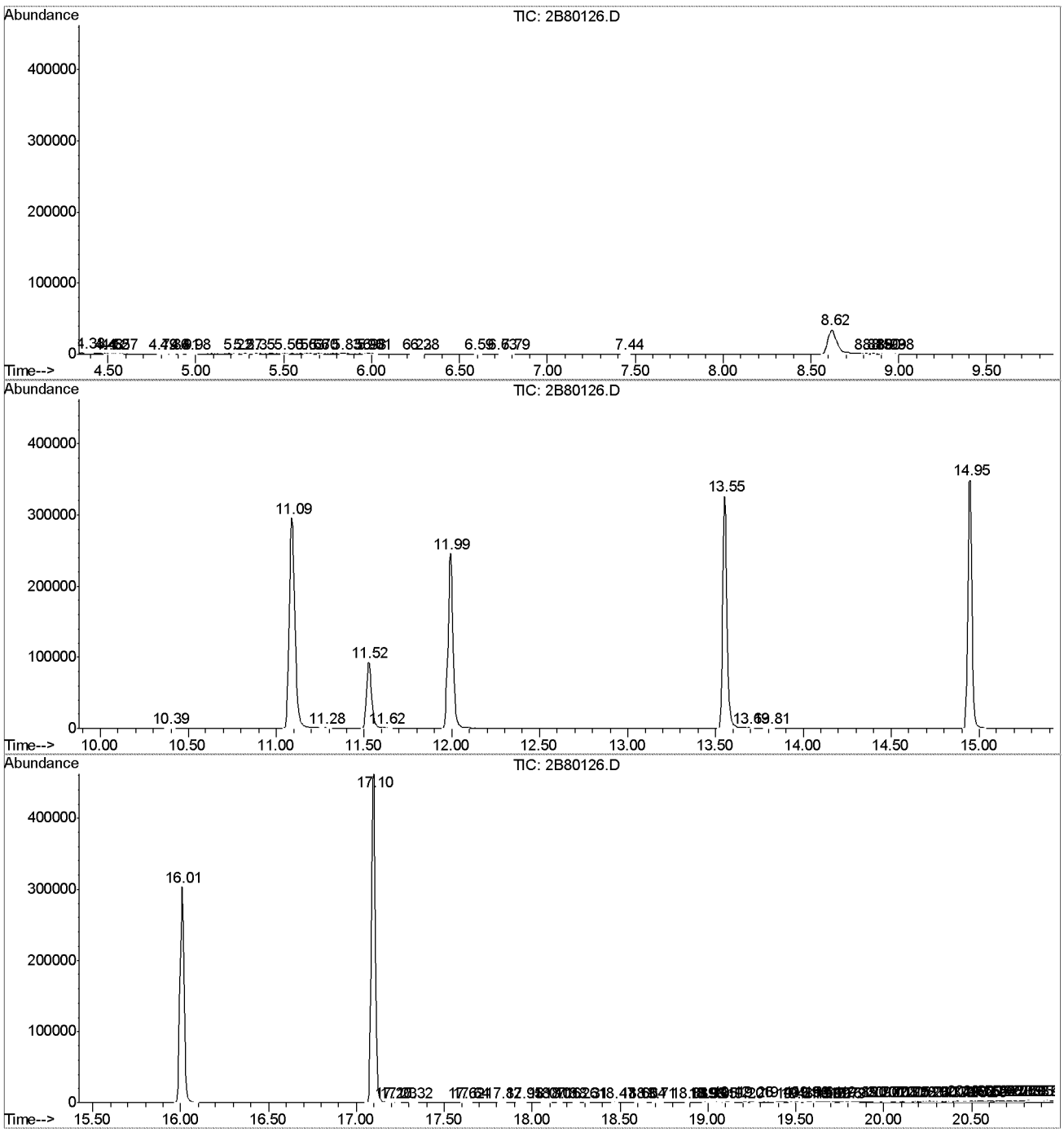
39	13.693	1783	1786	1791	rVB2	809	1155	0.16%	0.030%
40	13.809	1801	1808	1814	rBB	607	1086	0.15%	0.028%
41	14.946	2017	2025	2043	rBV	349646	560202	79.68%	14.630%
42	16.006	2219	2227	2246	rBB	303716	438224	62.33%	11.445%
43	17.096	2426	2435	2453	rBB	462599	703042	100.00%	18.360%
44	17.201	2453	2455	2458	rBV	575	464	0.07%	0.012%
45	17.227	2459	2460	2465	rVB	459	388	0.06%	0.010%
46	17.322	2474	2478	2483	rBB	225	377	0.05%	0.010%
47	17.615	2530	2534	2537	rBB	525	418	0.06%	0.011%
48	17.641	2537	2539	2542	rBV	587	646	0.09%	0.017%
49	17.825	2570	2574	2580	rBB	454	628	0.09%	0.016%
50	17.945	2589	2597	2601	rBB	441	799	0.11%	0.021%
51	18.071	2617	2621	2623	rVB	448	421	0.06%	0.011%
52	18.103	2623	2627	2629	rBB	487	535	0.08%	0.014%
53	18.160	2635	2638	2640	rBV	475	453	0.06%	0.012%
54	18.260	2651	2657	2659	rBV	456	836	0.12%	0.022%
55	18.312	2664	2667	2670	rBV	649	601	0.09%	0.016%
56	18.470	2693	2697	2701	rVB	808	945	0.13%	0.025%
57	18.596	2718	2721	2725	rVB	708	856	0.12%	0.022%
58	18.643	2725	2730	2732	rBV	570	886	0.13%	0.023%
59	18.706	2737	2742	2750	rBV	467	1076	0.15%	0.028%
60	18.884	2773	2776	2779	rBV	334	462	0.07%	0.012%
61	18.984	2791	2795	2796	rVV2	414	469	0.07%	0.012%
62	18.994	2796	2797	2805	rVV	331	479	0.07%	0.013%
63	19.052	2805	2808	2813	rVB2	483	573	0.08%	0.015%
64	19.120	2814	2821	2827	rBV3	1295	1964	0.28%	0.051%
65	19.204	2836	2837	2841	rBV2	626	654	0.09%	0.017%
66	19.256	2844	2847	2853	rVB2	925	1269	0.18%	0.033%
67	19.403	2870	2875	2880	rVV2	1048	1391	0.20%	0.036%
68	19.482	2886	2890	2892	rBV	547	489	0.07%	0.013%
69	19.508	2893	2895	2899	rVB	524	387	0.06%	0.010%
70	19.576	2902	2908	2912	rBV	833	1038	0.15%	0.027%
71	19.639	2912	2920	2927	rBV3	1271	2808	0.40%	0.073%
72	19.691	2927	2930	2932	rVB	502	496	0.07%	0.013%
73	19.707	2932	2933	2936	rBV	683	557	0.08%	0.015%
74	19.760	2941	2943	2946	rVB	557	539	0.08%	0.014%
75	19.786	2946	2948	2952	rBV	532	439	0.06%	0.011%
76	19.849	2952	2960	2962	rBV2	802	1596	0.23%	0.042%
77	19.969	2978	2983	2985	rBV2	930	1146	0.16%	0.030%
78	20.001	2988	2989	2992	rBV	703	714	0.10%	0.019%
79	20.022	2992	2993	2996	rBV	626	511	0.07%	0.013%
80	20.079	3002	3004	3006	rBV	828	807	0.11%	0.021%
81	20.148	3012	3017	3019	rBV	579	781	0.11%	0.020%
82	20.179	3022	3023	3025	rBV	905	488	0.07%	0.013%
83	20.226	3030	3032	3037	rVB3	726	870	0.12%	0.023%
84	20.258	3037	3038	3044	rVB2	938	1359	0.19%	0.035%
85	20.300	3044	3046	3051	rBV	916	1059	0.15%	0.028%
86	20.368	3057	3059	3063	rBV	727	934	0.13%	0.024%
87	20.425	3065	3070	3074	rVB2	856	1153	0.16%	0.030%
88	20.457	3074	3076	3082	rBV3	1076	1246	0.18%	0.033%
89	20.520	3082	3088	3090	rVV2	477	675	0.10%	0.018%
90	20.546	3090	3093	3100	rVB3	750	1424	0.20%	0.037%
91	20.588	3100	3101	3103	rBV2	686	410	0.06%	0.011%
92	20.635	3109	3110	3113	rBV2	994	687	0.10%	0.018%
93	20.677	3113	3118	3121	rVB2	1128	1355	0.19%	0.035%
94	20.729	3121	3128	3130	rBV2	1179	1551	0.22%	0.041%
95	20.750	3130	3132	3135	rVB3	897	849	0.12%	0.022%

96	20.792	3135	3140	3143	rBV3	1075	1863	0.26%	0.049%
97	20.824	3143	3146	3149	rVB2	1279	1057	0.15%	0.028%
98	20.850	3149	3151	3154	rBV2	819	868	0.12%	0.023%
99	20.871	3154	3155	3162	rBV4	854	1064	0.15%	0.028%
100	20.929	3163	3166	3169	rVB	1083	850	0.12%	0.022%

Sum of corrected areas: 3829118

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80126.D
Operator : DEZAREER
Acquired : 23 Feb 2011 10:45 am using AcqMethod M2B3558
Instrument : MS2B
Sample Name: mb
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 3
Quant File :M2B3558.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 10:45 am
Data File: C:\MSDCHEM\1\DATA\2B80126.D
Name: mb
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 25 14:32:36 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

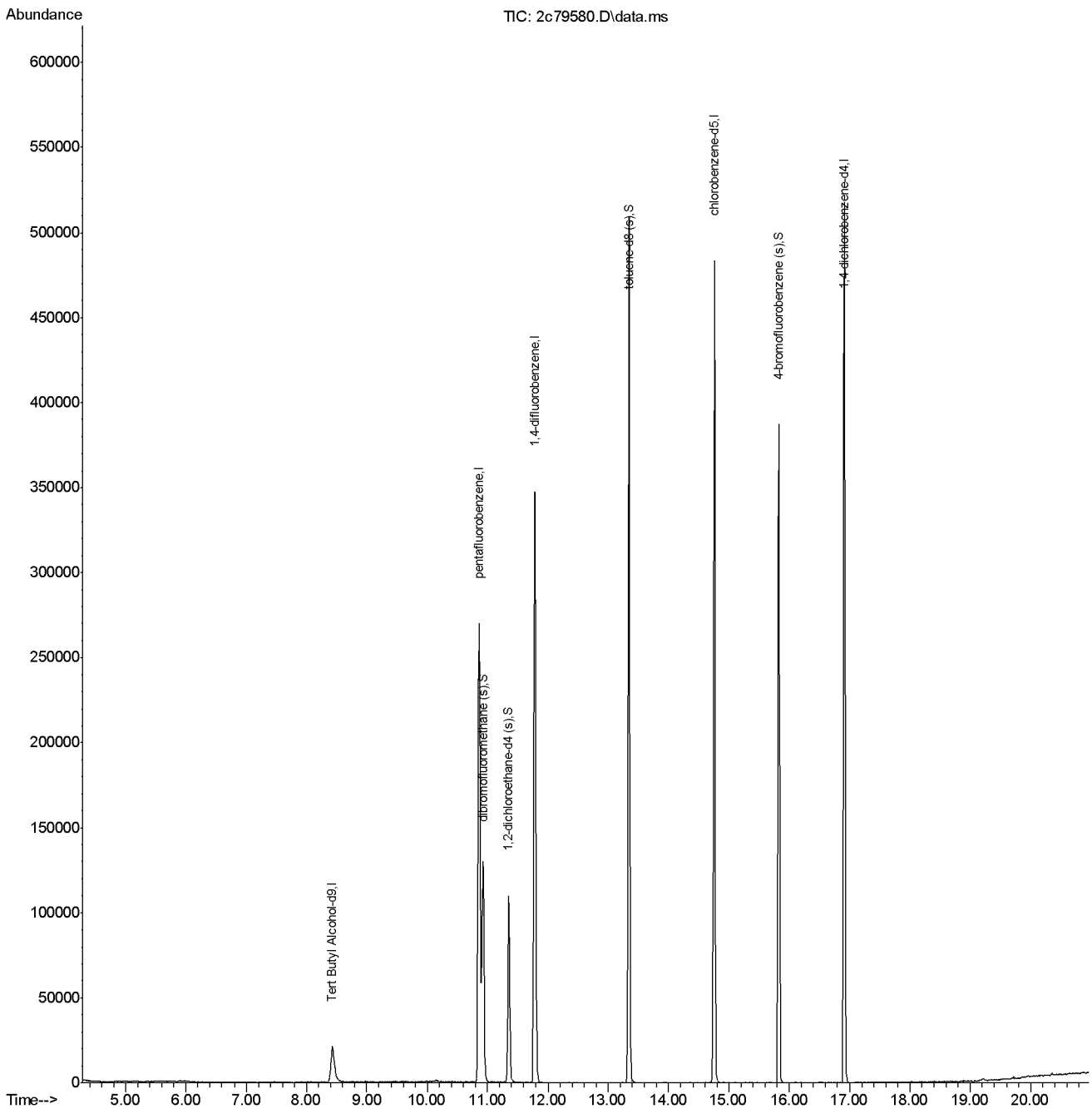
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	54499	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	252883	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	336423	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	277650	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	145044	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	96291	49.48	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.96%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	88967	44.37	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 88.74%			
80) toluene-d8 (s)	13.339	98	367772	53.20	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 106.40%			
105) 4-bromofluorobenzene (s)	15.824	95	128497	53.92	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.84%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 25 14:32:36 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79580.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.762	89	92	98	rBV3	380	619	0.07%	0.012%
2	4.798	98	99	103	rBV2	345	441	0.05%	0.008%
3	4.956	127	129	141	rBV3	450	734	0.08%	0.014%
4	5.165	167	169	179	rVB3	503	1181	0.13%	0.023%
5	5.228	179	181	193	rVB2	457	991	0.11%	0.019%
6	5.344	201	203	212	rVB3	580	938	0.10%	0.018%
7	5.459	223	225	235	rBV3	455	1342	0.14%	0.026%
8	5.527	235	238	245	rVV3	480	946	0.10%	0.018%
9	5.627	245	257	269	rVB4	461	2382	0.26%	0.045%
10	6.382	399	401	408	rVB2	310	548	0.06%	0.010%
11	6.434	408	411	418	rBV2	359	612	0.07%	0.012%
12	6.895	498	499	505	rVB2	404	495	0.05%	0.009%
13	7.226	561	562	568	rBV	422	422	0.05%	0.008%
14	7.278	570	572	581	rBV2	409	866	0.09%	0.017%
15	7.383	589	592	595	rVB	352	418	0.04%	0.008%
16	7.441	600	603	606	rBV2	440	475	0.05%	0.009%
17	7.614	630	636	637	rVB	447	595	0.06%	0.011%
18	7.666	641	646	647	rVB	413	461	0.05%	0.009%
19	7.761	663	664	670	rVB2	405	552	0.06%	0.011%
20	7.829	670	677	682	rBV	478	1154	0.12%	0.022%
21	7.865	682	684	688	rVV2	373	518	0.06%	0.010%
22	7.902	688	691	694	rVB2	536	488	0.05%	0.009%
23	7.981	705	706	712	rBV2	457	530	0.06%	0.010%
24	8.180	741	744	751	rBV2	345	605	0.06%	0.012%
25	8.295	763	766	770	rVB2	456	552	0.06%	0.011%
26	8.426	776	791	822	rBV3	21094	91734	9.84%	1.750%
27	8.662	835	836	842	rVB2	440	508	0.05%	0.010%
28	8.704	842	844	848	rBV2	428	560	0.06%	0.011%
29	8.856	870	873	878	rBV2	398	636	0.07%	0.012%
30	8.982	889	897	899	rBV2	506	988	0.11%	0.019%
31	9.255	947	949	956	rVB	344	445	0.05%	0.008%
32	9.454	984	987	989	rBV	436	425	0.05%	0.008%
33	9.580	1009	1011	1015	rBV2	305	429	0.05%	0.008%
34	9.648	1021	1024	1030	rVB	416	809	0.09%	0.015%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.721	1036	1038	1051	rBV	561	1057	0.11%	0.020%
36	9.805	1052	1054	1060	rVB	427	567	0.06%	0.011%
37	9.847	1060	1062	1067	rBV	467	604	0.06%	0.012%
38	10.020	1085	1095	1103	rVB2	510	1875	0.20%	0.036%
39	10.078	1103	1106	1108	rBV2	683	584	0.06%	0.011%
40	10.151	1115	1120	1129	rVB4	1022	2957	0.32%	0.056%
41	10.408	1166	1169	1177	rBV2	452	805	0.09%	0.015%
42	10.503	1182	1187	1190	rBB2	438	592	0.06%	0.011%
43	10.560	1194	1198	1205	rVB2	452	694	0.07%	0.013%
44	10.859	1242	1255	1261	rBV	269902	644418	69.11%	12.296%
45	10.917	1262	1266	1288	rVB	129902	290370	31.14%	5.540%
46	11.347	1335	1348	1370	rBV	109775	248344	26.63%	4.738%
47	11.583	1390	1393	1398	rBV	447	638	0.07%	0.012%
48	11.703	1414	1416	1419	rBV	393	433	0.05%	0.008%
49	11.782	1419	1431	1450	rVB	347381	726488	77.91%	13.862%
50	11.960	1462	1465	1469	rBV	354	461	0.05%	0.009%
51	12.002	1469	1473	1479	rVB	342	696	0.07%	0.013%
52	12.055	1479	1483	1488	rBB	362	510	0.05%	0.010%
53	12.102	1488	1492	1494	rBV	376	406	0.04%	0.008%
54	12.228	1514	1516	1521	rVB	375	549	0.06%	0.010%
55	12.259	1521	1522	1527	rBV	366	440	0.05%	0.008%
56	12.474	1558	1563	1566	rVB	379	569	0.06%	0.011%
57	12.642	1592	1595	1597	rVB	392	388	0.04%	0.007%
58	12.804	1625	1626	1632	rVB	327	388	0.04%	0.007%
59	13.166	1694	1695	1700	rBV	359	496	0.05%	0.009%
60	13.245	1706	1710	1712	rVB	372	523	0.06%	0.010%
61	13.261	1712	1713	1717	rBV	442	467	0.05%	0.009%
62	13.339	1717	1728	1746	rVV	509365	932462	100.00%	17.792%
63	13.449	1747	1749	1755	rVB	665	826	0.09%	0.016%
64	13.575	1766	1773	1775	rBV	405	723	0.08%	0.014%
65	13.811	1815	1818	1822	rBV	369	543	0.06%	0.010%
66	13.968	1843	1848	1851	rVB	404	658	0.07%	0.013%
67	14.026	1856	1859	1863	rBV	349	457	0.05%	0.009%
68	14.346	1917	1920	1923	rVB	398	418	0.04%	0.008%
69	14.613	1968	1971	1975	rVB	403	504	0.05%	0.010%
70	14.650	1975	1978	1983	rBV2	385	725	0.08%	0.014%
71	14.755	1988	1998	2018	rVV	483639	799193	85.71%	15.249%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	14.928	2022	2031	2034	rVV2	517	805	0.09%	0.015%
73	15.274	2095	2097	2103	rVB2	384	614	0.07%	0.012%
74	15.332	2103	2108	2109	rBV	364	507	0.05%	0.010%
75	15.379	2113	2117	2121	rBV	419	832	0.09%	0.016%
76	15.824	2192	2202	2222	rVB	387497	611011	65.53%	11.658%
77	15.940	2222	2224	2228	rBV2	432	598	0.06%	0.011%
78	16.516	2327	2334	2344	rVB2	465	1292	0.14%	0.025%
79	16.674	2358	2364	2365	rBV	251	392	0.04%	0.007%
80	16.836	2393	2395	2401	rVB2	376	507	0.05%	0.010%
81	16.910	2401	2409	2426	rBV	517998	828337	88.83%	15.805%
82	17.088	2439	2443	2450	rBV2	441	986	0.11%	0.019%
83	17.182	2458	2461	2466	rVB2	446	698	0.07%	0.013%
84	17.240	2469	2472	2479	rVB3	390	823	0.09%	0.016%
85	17.303	2479	2484	2486	rBV	470	628	0.07%	0.012%
86	17.371	2490	2497	2503	rBV2	486	1306	0.14%	0.025%
87	17.722	2561	2564	2570	rBV2	340	515	0.06%	0.010%
88	17.785	2571	2576	2583	rVB2	341	672	0.07%	0.013%
89	17.885	2593	2595	2604	rBV3	310	697	0.07%	0.013%
90	17.943	2604	2606	2613	rVV2	301	522	0.06%	0.010%
91	18.011	2613	2619	2623	rVV	365	525	0.06%	0.010%
92	18.409	2693	2695	2707	rVB2	278	604	0.06%	0.012%
93	18.608	2731	2733	2739	rBV2	424	699	0.07%	0.013%
94	18.760	2760	2762	2765	rVB2	408	436	0.05%	0.008%
95	18.829	2772	2775	2777	rBV2	529	387	0.04%	0.007%
96	18.850	2777	2779	2785	rVB2	547	782	0.08%	0.015%
97	18.892	2785	2787	2789	rBV	693	480	0.05%	0.009%
98	18.960	2798	2800	2807	rBV3	551	786	0.08%	0.015%
99	19.138	2816	2834	2835	rBV2	704	2809	0.30%	0.054%
100	19.217	2843	2849	2861	rVB2	1602	3512	0.38%	0.067%

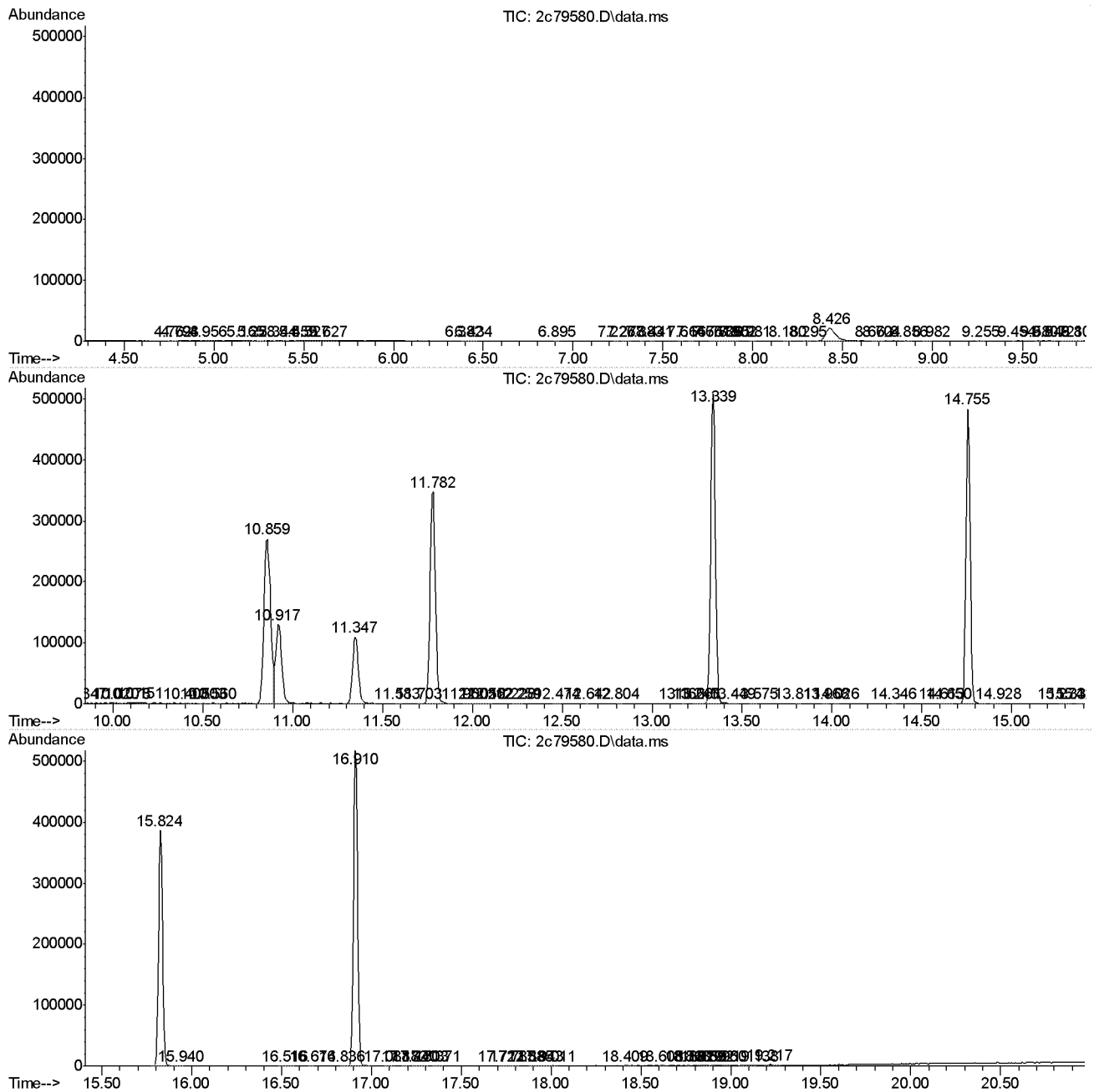
Sum of corrected areas: 5240989

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 01 14:26:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	80430	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	256064	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	326942	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	274721	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148062	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	100369	50.94	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.88%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	102746	50.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 101.20%			
80) toluene-d8 (s)	13.339	98	377669	56.22	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.44%			
105) 4-bromofluorobenzene (s)	15.824	95	132568	54.50	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 109.00%			
Target Compounds						Qvalue

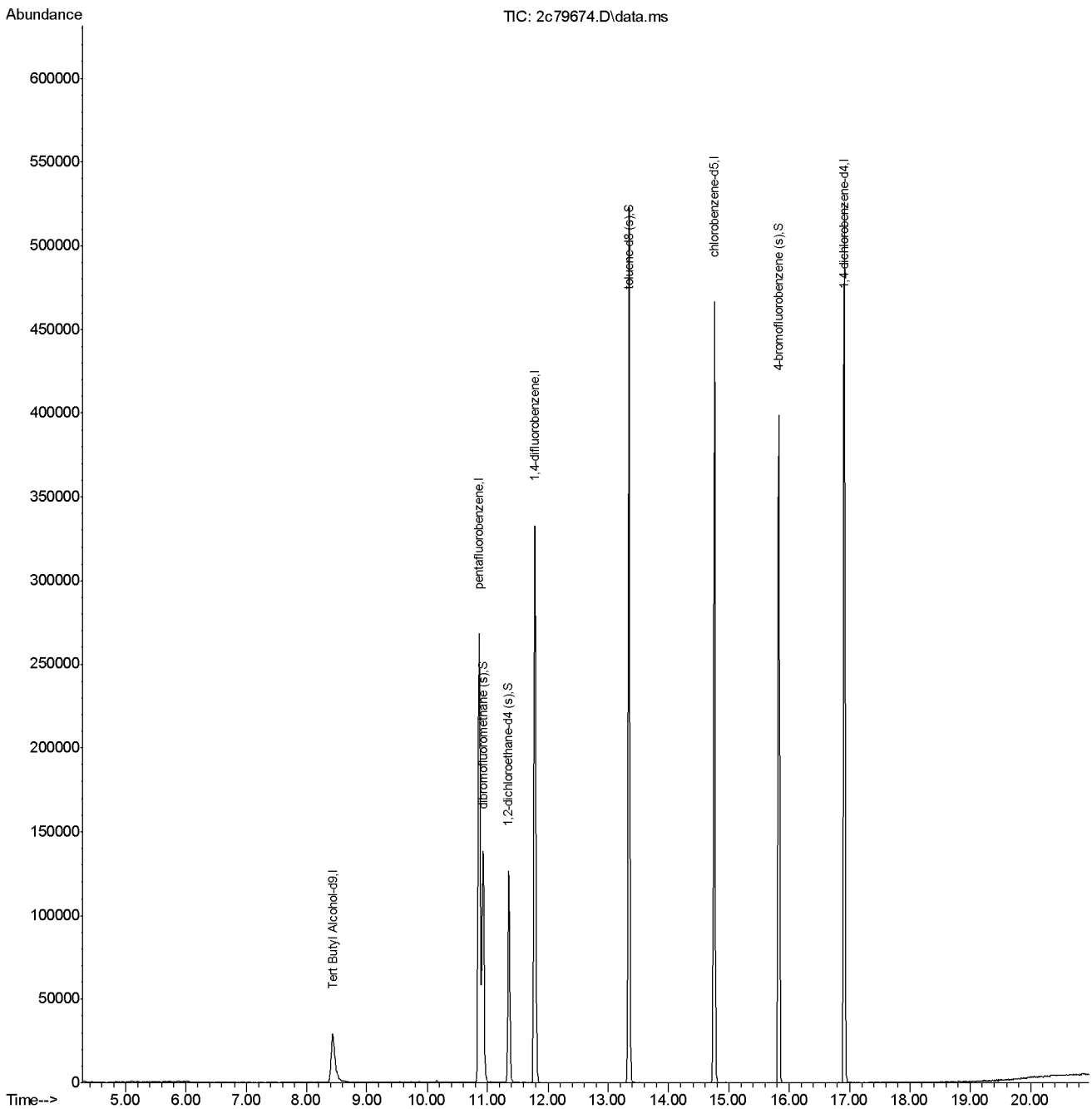
(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.2.5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 01 14:26:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79674.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.589	54	59	61	rBV2	440	513	0.05%	0.010%
2	4.615	61	64	72	rVB2	288	649	0.07%	0.012%
3	4.798	95	99	100	rBV2	291	391	0.04%	0.007%
4	4.835	104	106	112	rVB2	438	612	0.06%	0.012%
5	4.956	125	129	136	rBV2	479	1109	0.12%	0.021%
6	5.013	136	140	144	rBV2	336	573	0.06%	0.011%
7	5.055	144	148	150	rBV	359	479	0.05%	0.009%
8	5.102	154	157	169	rVB2	439	835	0.09%	0.016%
9	5.275	186	190	193	rVB2	533	577	0.06%	0.011%
10	5.359	198	206	208	rVV2	414	695	0.07%	0.013%
11	5.391	208	212	218	rVV	339	541	0.06%	0.010%
12	5.511	230	235	238	rVV2	543	535	0.06%	0.010%
13	5.553	241	243	247	rVB	465	569	0.06%	0.011%
14	5.632	251	258	260	rVB3	366	626	0.07%	0.012%
15	5.716	268	274	276	rVV2	491	627	0.07%	0.012%
16	5.810	290	292	297	rVB	369	500	0.05%	0.009%
17	5.852	297	300	302	rBV2	450	415	0.04%	0.008%
18	5.884	305	306	314	rVB2	442	621	0.07%	0.012%
19	6.387	398	402	408	rVB2	360	813	0.09%	0.015%
20	6.439	408	412	416	rBV	352	656	0.07%	0.012%
21	6.492	416	422	424	rBV2	284	449	0.05%	0.008%
22	6.738	464	469	475	rBV	421	658	0.07%	0.012%
23	6.922	499	504	512	rBV2	256	729	0.08%	0.014%
24	7.268	564	570	572	rVB2	308	416	0.04%	0.008%
25	7.598	628	633	637	rBV2	350	461	0.05%	0.009%
26	7.645	639	642	651	rVV	234	552	0.06%	0.010%
27	8.432	776	792	842	rVV2	28971	138160	14.62%	2.603%
28	8.699	842	843	850	rVB3	388	630	0.07%	0.012%
29	8.825	862	867	871	rVB	352	420	0.04%	0.008%
30	8.909	879	883	887	rBV	250	469	0.05%	0.009%
31	9.066	906	913	916	rBV2	229	428	0.05%	0.008%
32	9.150	927	929	937	rVB2	415	623	0.07%	0.012%
33	9.229	940	944	948	rVV2	225	396	0.04%	0.007%
34	9.323	959	962	968	rVB	319	503	0.05%	0.009%

M2C3580.M Tue Mar 01 14:27:12 2011 ACCUNJ

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.407	974	978	986	rBV	248	576	0.06%	0.011%
36	9.543	997	1004	1007	rBV2	521	864	0.09%	0.016%
37	9.590	1011	1013	1024	rVB2	250	552	0.06%	0.010%
38	9.957	1076	1083	1086	rBV2	269	408	0.04%	0.008%
39	10.162	1111	1122	1128	rBV4	982	2741	0.29%	0.052%
40	10.702	1221	1225	1234	rBV2	266	616	0.07%	0.012%
41	10.859	1239	1255	1261	rBV	268011	626726	66.32%	11.807%
42	10.917	1261	1266	1287	rVV2	137731	326913	34.59%	6.159%
43	11.038	1287	1289	1294	rVB2	498	483	0.05%	0.009%
44	11.116	1297	1304	1309	rBV	385	988	0.10%	0.019%
45	11.179	1314	1316	1319	rBV	322	418	0.04%	0.008%
46	11.347	1337	1348	1367	rVV	126446	284878	30.15%	5.367%
47	11.509	1375	1379	1388	rVV2	369	935	0.10%	0.018%
48	11.588	1392	1394	1407	rVV	368	1197	0.13%	0.023%
49	11.682	1407	1412	1413	rVV2	500	575	0.06%	0.011%
50	11.782	1417	1431	1450	rVV	333028	689842	73.00%	12.996%
51	11.987	1464	1470	1473	rBV	210	504	0.05%	0.009%
52	12.028	1473	1478	1482	rVB	191	452	0.05%	0.009%
53	12.306	1524	1531	1532	rVB	206	406	0.04%	0.008%
54	12.348	1532	1539	1542	rBV	321	597	0.06%	0.011%
55	12.432	1552	1555	1562	rBB	382	588	0.06%	0.011%
56	12.511	1569	1570	1578	rVB	234	503	0.05%	0.009%
57	12.616	1586	1590	1597	rBB	389	636	0.07%	0.012%
58	12.684	1600	1603	1607	rBV	315	435	0.05%	0.008%
59	12.825	1627	1630	1635	rBB	373	427	0.05%	0.008%
60	12.867	1635	1638	1643	rBV	230	489	0.05%	0.009%
61	13.051	1671	1673	1678	rBB	323	426	0.05%	0.008%
62	13.109	1678	1684	1685	rBB	330	400	0.04%	0.008%
63	13.166	1689	1695	1696	rBV	338	480	0.05%	0.009%
64	13.339	1717	1728	1754	rVV	522897	944976	100.00%	17.803%
65	13.512	1758	1761	1766	rVV	454	750	0.08%	0.014%
66	13.722	1798	1801	1809	rBB	334	628	0.07%	0.012%
67	13.921	1837	1839	1847	rBB	247	521	0.06%	0.010%
68	13.979	1847	1850	1853	rBV	343	437	0.05%	0.008%
69	14.173	1880	1887	1893	rBV	347	813	0.09%	0.015%
70	14.314	1911	1914	1919	rBV	366	524	0.06%	0.010%
71	14.372	1919	1925	1932	rVB	385	935	0.10%	0.018%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	14.561	1954	1961	1963	rBV	224	553	0.06%	0.010%
73	14.755	1988	1998	2012	rBV	466597	769030	81.38%	14.488%
74	15.510	2141	2142	2153	rVB	262	720	0.08%	0.014%
75	15.615	2153	2162	2167	rBV	418	927	0.10%	0.017%
76	15.824	2193	2202	2215	rVB	398934	633690	67.06%	11.938%
77	16.910	2400	2409	2421	rBV	526248	826877	87.50%	15.578%
78	17.036	2428	2433	2436	rVB	368	444	0.05%	0.008%
79	17.083	2436	2442	2443	rVV2	348	455	0.05%	0.009%
80	17.334	2485	2490	2493	rBV2	398	562	0.06%	0.011%
81	17.361	2494	2495	2501	rVB2	372	529	0.06%	0.010%
82	17.476	2514	2517	2522	rVB2	371	545	0.06%	0.010%
83	18.414	2692	2696	2702	rBV2	301	490	0.05%	0.009%
84	18.504	2707	2713	2716	rBV2	436	588	0.06%	0.011%
85	18.813	2771	2772	2777	rVB2	384	445	0.05%	0.008%
86	18.881	2784	2785	2792	rBV2	340	559	0.06%	0.011%
87	19.211	2846	2848	2854	rVB3	482	798	0.08%	0.015%
88	19.316	2864	2868	2871	rBV4	552	666	0.07%	0.013%
89	19.369	2877	2878	2882	rBV2	558	428	0.05%	0.008%
90	19.432	2887	2890	2894	rVB3	637	623	0.07%	0.012%
91	19.463	2894	2896	2900	rBV4	628	657	0.07%	0.012%
92	19.500	2900	2903	2904	rVB2	637	436	0.05%	0.008%
93	19.573	2914	2917	2922	rBV2	411	551	0.06%	0.010%
94	19.720	2943	2945	2949	rBV2	649	677	0.07%	0.013%
95	19.757	2949	2952	2955	rBV2	697	774	0.08%	0.015%
96	20.061	3004	3010	3014	rBV5	671	1390	0.15%	0.026%
97	20.166	3026	3030	3037	rBV6	691	1565	0.17%	0.029%
98	20.276	3048	3051	3060	rVB5	1050	1723	0.18%	0.032%
99	20.449	3060	3084	3092	rBV8	1092	8485	0.90%	0.160%
100	20.868	3160	3164	3165	rBV4	747	915	0.10%	0.017%

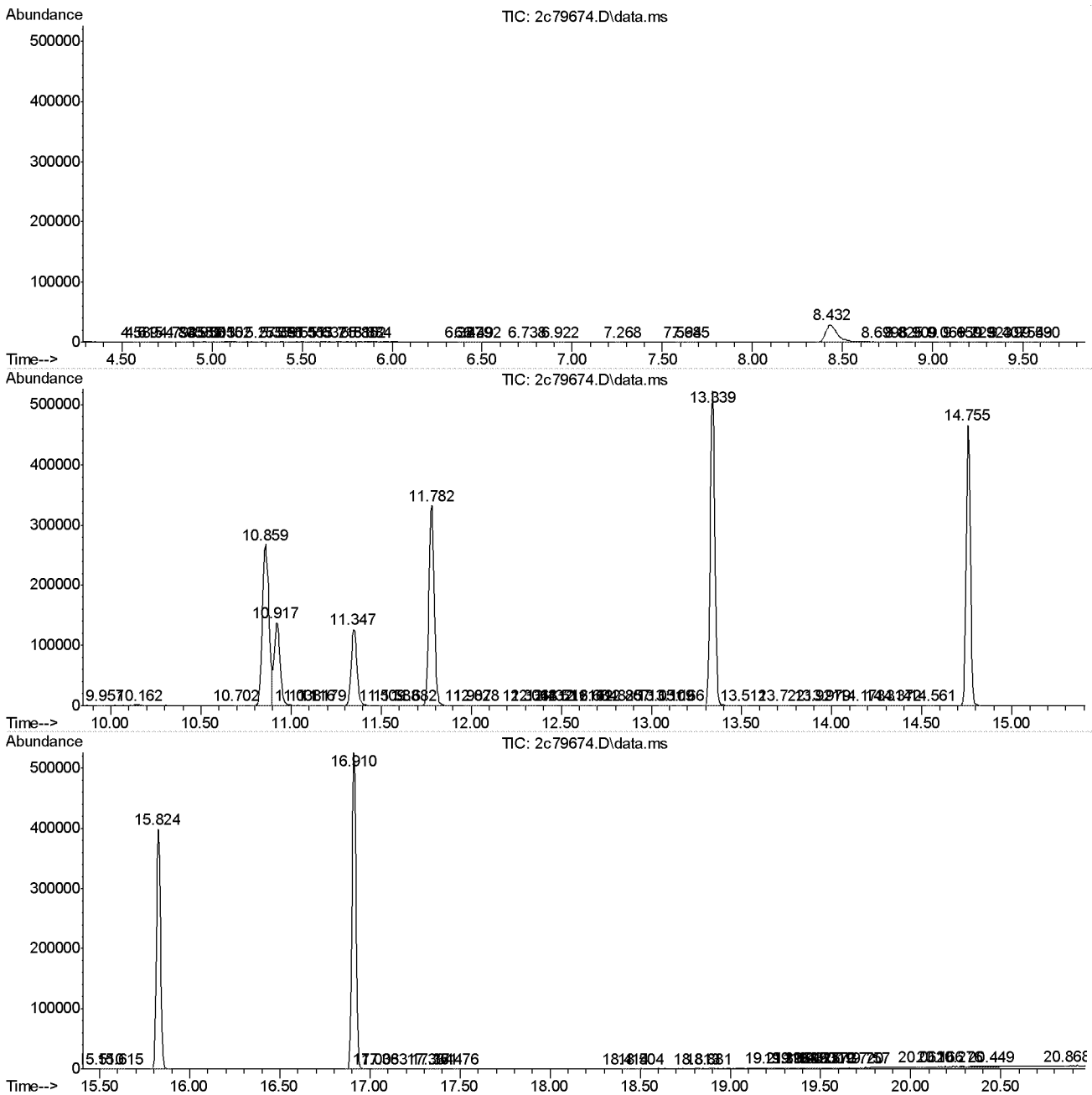
Sum of corrected areas: 5307971

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MB1	P54982.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MB1	P54982.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	98%	25-112%
321-60-8	2-Fluorobiphenyl	91%	31-106%
1718-51-0	Terphenyl-d14	77%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.03	4.9	ug/l	J
	Internal standard added for SIM test	7.78	4.3	ug/l	J
	Internal standard added for SIM test	10.14	5.4	ug/l	J
	Internal standard added for SIM test	13.22	6	ug/l	J
	Internal standard added for SIM test	16.24	5	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-MB1	4M23774.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	93%	32-135%
321-60-8	2-Fluorobiphenyl	94%	31-121%
1718-51-0	Terphenyl-d14	105%	10-130%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-BS1	P54983.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	42.5	85	46-113
1912-24-9	Atrazine	50	43.9	88	55-127
100-52-7	Benzaldehyde	50	56.8	114	31-130
101-55-3	4-Bromophenyl phenyl ether	50	39.7	79	55-121
85-68-7	Butyl benzyl phthalate	50	39.5	79	55-132
92-52-4	1,1'-Biphenyl	50	38.6	77	43-107
91-58-7	2-Chloronaphthalene	50	35.2	70	39-108
106-47-8	4-Chloroaniline	50	32.3	65	34-103
86-74-8	Carbazole	50	38.9	78	63-122
105-60-2	Caprolactam	50	4.8	10	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	39.1	78	43-119
111-44-4	bis(2-Chloroethyl)ether	50	33.9	68	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	34.5	69	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	37.2	74	50-117
121-14-2	2,4-Dinitrotoluene	50	40.3	81	56-124
606-20-2	2,6-Dinitrotoluene	50	49.6	99	55-128
91-94-1	3,3'-Dichlorobenzidine	50	36.7	73	42-116
132-64-9	Dibenzofuran	50	38.2	76	53-109
84-74-2	Di-n-butyl phthalate	50	42.1	84	58-130
117-84-0	Di-n-octyl phthalate	50	41.6	83	55-133
84-66-2	Diethyl phthalate	50	40.8	82	52-123
131-11-3	Dimethyl phthalate	50	32.1	64	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	40.0	80	57-134
87-68-3	Hexachlorobutadiene	50	33.3	67	11-100
77-47-4	Hexachlorocyclopentadiene	100	85.4	85	5-120
67-72-1	Hexachloroethane	50	27.1	54	13-88
78-59-1	Isophorone	50	40.3	81	43-120
91-57-6	2-Methylnaphthalene	50	33.1	66	33-103
88-74-4	2-Nitroaniline	50	48.0	96	48-132
99-09-2	3-Nitroaniline	50	38.0	76	48-115
100-01-6	4-Nitroaniline	50	35.2	70	51-125
98-95-3	Nitrobenzene	50	31.6	63	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	43.0	86	41-121
86-30-6	N-Nitrosodiphenylamine	50	35.2	70	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	37.8	76	18-130

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-BS1	P54983.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	100%	25-112%
321-60-8	2-Fluorobiphenyl	93%	31-106%
1718-51-0	Terphenyl-d14	80%	14-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-BS12	4M23775.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.866	87	53-125
208-96-8	Acenaphthylene	1	0.906	91	51-111
120-12-7	Anthracene	1	0.992	99	62-134
56-55-3	Benzo(a)anthracene	1	0.901	90	46-142
50-32-8	Benzo(a)pyrene	1	0.855	86	49-132
205-99-2	Benzo(b)fluoranthene	1	0.679	68	36-167
191-24-2	Benzo(g,h,i)perylene	1	0.885	89	43-149
207-08-9	Benzo(k)fluoranthene	1	0.999	100	27-173
218-01-9	Chrysene	1	1.06	106	59-137
53-70-3	Dibenzo(a,h)anthracene	1	0.802	80	47-149
206-44-0	Fluoranthene	1	0.852	85	57-126
86-73-7	Fluorene	1	0.848	85	58-126
118-74-1	Hexachlorobenzene	1	0.913	91	36-140
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.829	83	51-151
91-20-3	Naphthalene	1	0.765	77	40-130
85-01-8	Phenanthrene	1	0.862	86	52-130
129-00-0	Pyrene	1	0.916	92	60-134

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	88%	32-135%
321-60-8	2-Fluorobiphenyl	89%	31-121%
1718-51-0	Terphenyl-d14	97%	10-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
OP48193-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
JA68506-1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	JA68506-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		100	48.0	48	81.1	81	51* [a]	25-127/35
1912-24-9	Atrazine	ND		100	53.7	54	80.4	80	40* [a]	40-133/27
100-52-7	Benzaldehyde	ND		100	55.8	56	98.8	99	56* [a]	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		100	44.9	45* [b]	71.4	71	46* [a]	47-123/28
85-68-7	Butyl benzyl phthalate	ND		100	43.7	44* [b]	71.6	72	48* [a]	47-137/27
92-52-4	1,1'-Biphenyl	ND		100	45.0	45	75.4	75	50* [a]	36-113/32
91-58-7	2-Chloronaphthalene	ND		100	41.6	42	69.1	69	50* [a]	35-110/32
106-47-8	4-Chloroaniline	ND		100	40.3	40	59.6	60	39* [a]	22-98/36
86-74-8	Carbazole	ND		100	46.8	47* [b]	72.9	73	44* [a]	54-127/26
105-60-2	Caprolactam	ND		100	15.6	16	26.5	27	52* [a]	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		100	43.7	44	74.3	74	52* [a]	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		100	36.3	36	63.2	63	54* [a]	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	37.8	38	64.7	65	52* [a]	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	45.3	45	71.9	72	45* [a]	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		100	47.8	48	79.6	80	50* [a]	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		100	61.4	61	98.9	99	47* [a]	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		100	44.7	45	67.6	68	41* [a]	17-119/36
132-64-9	Dibenzofuran	ND		100	44.9	45	73.9	74	49* [a]	44-114/30
84-74-2	Di-n-butyl phthalate	ND		100	47.0	47* [b]	75.5	76	47* [a]	49-134/26
117-84-0	Di-n-octyl phthalate	ND		100	48.2	48	77.8	78	47* [a]	46-140/25
84-66-2	Diethyl phthalate	ND		100	46.1	46	74.9	75	48* [a]	46-123/27
131-11-3	Dimethyl phthalate	ND		100	31.8	32* [b]	52.7	53	49* [a]	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	48.2	48* [b]	76.3	76	45* [a]	49-141/27
87-68-3	Hexachlorobutadiene	ND		100	40.1	40	71.2	71	56* [a]	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		200	88.4	44	167	84	62* [a]	4-124/39
67-72-1	Hexachloroethane	ND		100	30.5	31	56.6	57	60* [a]	16-86/39
78-59-1	Isophorone	ND		100	47.3	47	77.7	78	49* [a]	33-117/36
91-57-6	2-Methylnaphthalene	ND		100	38.9	39	64.1	64	49* [a]	22-117/37
88-74-4	2-Nitroaniline	ND		100	58.8	59	95.1	95	47* [a]	37-135/29
99-09-2	3-Nitroaniline	ND		100	48.0	48	72.4	72	41* [a]	34-115/28
100-01-6	4-Nitroaniline	ND		100	45.3	45	72.2	72	46* [a]	36-128/30
98-95-3	Nitrobenzene	ND		100	35.7	36	61.9	62	54* [a]	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		100	50.8	51	81.8	82	47* [a]	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		100	42.9	43	65.8	66	42* [a]	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	43.7	44	73.2	73	50* [a]	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
OP48193-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
JA68506-1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-1	Limits
4165-60-0	Nitrobenzene-d5	55%	96%	77%	25-112%
321-60-8	2-Fluorobiphenyl	53%	88%	69%	31-106%
1718-51-0	Terphenyl-d14	31%	52%	45%	14-122%

(a) Analytical precision exceeds standard laboratory control limits.
(b) Outside of in house control limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193A	EP2378
OP48193A-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193A	EP2378
JA68506-1	4M23778.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	JA68506-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		100	43.7	44* [a]	73.9	74	51* [b]	51-125/22
208-96-8	Acenaphthylene	0.442		100	42.1	42* [a]	68.5	68	48* [b]	46-113/22
120-12-7	Anthracene	ND		100	44.6	45* [a]	71.8	72	47* [b]	59-131/23
56-55-3	Benzo(a)anthracene	ND		100	44.2	44* [a]	70.3	70	46* [b]	53-127/23
50-32-8	Benzo(a)pyrene	ND		100	45.9	46* [a]	72.1	72	44* [b]	49-135/23
205-99-2	Benzo(b)fluoranthene	ND		100	46.6	47	69.5	70	39* [b]	42-140/30
191-24-2	Benzo(g,h,i)perylene	ND		100	48.1	48	75.7	76	45* [b]	37-146/25
207-08-9	Benzo(k)fluoranthene	ND		100	51.8	52	89.3	89	53* [b]	41-141/34
218-01-9	Chrysene	ND		100	43.6	44* [a]	69.8	70	46* [b]	54-129/21
53-70-3	Dibenzo(a,h)anthracene	ND		100	49.7	50	78.8	79	45* [b]	38-146/25
206-44-0	Fluoranthene	ND		100	46.5	47* [a]	73.5	74	45* [b]	56-129/22
86-73-7	Fluorene	ND		100	47.8	48* [a]	75.4	75	45* [b]	58-126/25
118-74-1	Hexachlorobenzene	ND		100	44.1	44* [a]	68.5	69	43* [b]	52-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	48.0	48	76.4	76	46* [b]	36-150/25
91-20-3	Naphthalene	ND		100	37.8	38	66.4	66	55* [b]	38-121/25
85-01-8	Phenanthrene	ND		100	45.0	45* [a]	72.4	72	47* [b]	57-127/23
129-00-0	Pyrene	ND		100	43.5	44* [a]	69.4	69	46* [b]	51-128/23

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-1	Limits
4165-60-0	Nitrobenzene-d5	55%	96%	75%	32-135%
321-60-8	2-Fluorobiphenyl	53%	88%	76%	31-121%
1718-51-0	Terphenyl-d14	31%	52%	69%	10-130%

(a) Outside of in house control limits.
(b) Analytical precision exceeds standard laboratory control limits.

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1016-DFTPP	**Injection Date:**	01/21/11
Lab File ID:	4M23284.D	**Injection Time:**	09:44
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33290	33.3		Pass
68	Less than 2.0% of mass 69	510	0.51	(1.63) [a]	Pass
69	Mass 69 relative abundance	31340	31.4		Pass
70	Less than 2.0% of mass 69	102	0.10	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47020	47.1		Pass
197	Less than 1.0% of mass 198	366	0.37		Pass
198	Base peak, 100% relative abundance	99900	100.0		Pass
199	5.0 - 9.0% of mass 198	6849	6.86		Pass
275	10.0 - 30.0% of mass 198	19792	19.8		Pass
365	1.0 - 100.0% of mass 198	2508	2.51		Pass
441	Present, but less than mass 443	11432	11.4	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	77293	77.4		Pass
443	17.0 - 23.0% of mass 442	15327	15.3	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1016-IC1016	4M23287.D	01/21/11	13:00	03:16	Initial cal 5
E4M1016-ICC1016	4M23288.D	01/21/11	13:27	03:43	Initial cal 1
E4M1016-IC1016	4M23289.D	01/21/11	13:51	04:07	Initial cal .01
E4M1016-IC1016	4M23290.D	01/21/11	14:15	04:31	Initial cal .02
E4M1016-IC1016	4M23291.D	01/21/11	14:39	04:55	Initial cal .05
E4M1016-IC1016	4M23293.D	01/21/11	15:58	06:14	Initial cal .2
E4M1016-IC1016	4M23294.D	01/21/11	16:22	06:38	Initial cal .5
E4M1016-IC1016	4M23295.D	01/21/11	16:46	07:02	Initial cal 2.5
E4M1016-IC1016	4M23292.D	01/21/11	17:10	07:26	Initial cal .1
E4M1016-ICV1016	4M23296.D	01/21/11	17:34	07:50	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1040-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	4M23772.D	**Injection Time:**	07:10
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	16653	41.6		Pass
68	Less than 2.0% of mass 69	186	0.46	(1.15) [a]	Pass
69	Mass 69 relative abundance	16237	40.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	20038	50.0		Pass
197	Less than 1.0% of mass 198	98	0.24		Pass
198	Base peak, 100% relative abundance	40075	100.0		Pass
199	5.0 - 9.0% of mass 198	2730	6.81		Pass
275	10.0 - 30.0% of mass 198	8167	20.4		Pass
365	1.0 - 100.0% of mass 198	964	2.41		Pass
441	Present, but less than mass 443	4869	12.1	(75.7) [b]	Pass
442	40.0 - 100.0% of mass 198	32632	81.4		Pass
443	17.0 - 23.0% of mass 442	6431	16.0	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1040-CC1016	4M23773.D	02/22/11	07:56	00:46	Continuing cal .5
OP48193A-MB1	4M23774.D	02/22/11	08:27	01:17	Method Blank
OP48193A-BS12	4M23775.D	02/22/11	08:54	01:44	Blank Spike
ZZZZZZ	4M23776.D	02/22/11	09:18	02:08	(unrelated sample)
JA68506-1	4M23778.D	02/22/11	10:05	02:55	CG
JA68506-2	4M23779.D	02/22/11	10:29	03:19	CD
JA68506-3	4M23780.D	02/22/11	10:53	03:43	CD-DUP
JA68506-4	4M23781.D	02/22/11	11:17	04:07	CE
JA68506-5	4M23782.D	02/22/11	11:40	04:30	FB-02172011
JA68506-6	4M23783.D	02/22/11	12:04	04:54	CC
JA68506-8	4M23785.D	02/22/11	12:52	05:42	FB-02182011
ZZZZZZ	4M23786.D	02/22/11	13:16	06:06	(unrelated sample)
ZZZZZZ	4M23787.D	02/22/11	13:41	06:31	(unrelated sample)
ZZZZZZ	4M23788.D	02/22/11	14:05	06:55	(unrelated sample)
ZZZZZZ	4M23789.D	02/22/11	14:29	07:19	(unrelated sample)
ZZZZZZ	4M23790.D	02/22/11	14:54	07:44	(unrelated sample)
ZZZZZZ	4M23791.D	02/22/11	15:18	08:08	(unrelated sample)
ZZZZZZ	4M23792.D	02/22/11	15:42	08:32	(unrelated sample)
ZZZZZZ	4M23793.D	02/22/11	16:06	08:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1040-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	4M23772.D	**Injection Time:**	07:10
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M23794.D	02/22/11	16:30	09:20	(unrelated sample)
ZZZZZZ	4M23795.D	02/22/11	16:54	09:44	(unrelated sample)
JA68506-7	4M23796.D	02/22/11	17:18	10:08	CF
ZZZZZZ	4M23797.D	02/22/11	17:42	10:32	(unrelated sample)
ZZZZZZ	4M23798.D	02/22/11	18:06	10:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2339-DFTPP	**Injection Date:**	12/29/10
Lab File ID:	P54216.D	**Injection Time:**	14:06
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	62252	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	81862	40.0		Pass
70	Less than 2.0% of mass 69	554	0.27	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	102292	50.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	204529	100.0		Pass
199	5.0 - 9.0% of mass 198	14305	6.99		Pass
275	10.0 - 30.0% of mass 198	49843	24.4		Pass
365	1.0 - 100.0% of mass 198	5966	2.92		Pass
441	Present, but less than mass 443	26016	12.7	(78.0) [b]	Pass
442	40.0 - 100.0% of mass 198	165461	80.9		Pass
443	17.0 - 23.0% of mass 442	33333	16.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2339-ICC2339	P54217.D	12/29/10	14:20	00:14	Initial cal 50
EP2339-IC2339	P54218.D	12/29/10	14:48	00:42	Initial cal 1
EP2339-IC2339	P54219.D	12/29/10	15:17	01:11	Initial cal 2
EP2339-IC2339	P54220.D	12/29/10	15:45	01:39	Initial cal 5
EP2339-IC2339	P54221.D	12/29/10	16:13	02:07	Initial cal 10
EP2339-IC2339	P54222.D	12/29/10	16:42	02:36	Initial cal 25
EP2339-IC2339	P54223.D	12/29/10	17:10	03:04	Initial cal 80
EP2339-IC2339	P54224.D	12/29/10	17:39	03:33	Initial cal 100
EP2339-ICV2338	P54225.D	12/29/10	18:07	04:01	Initial cal verification 50
EP2339-ICV2339	P54225A.D	12/29/10	18:07	04:01	Initial cal verification 50
EP2339-ICV2338	P54226.D	12/29/10	18:36	04:30	Initial cal verification 50
EP2339-ICV2339	P54226A.D	12/29/10	18:36	04:30	Initial cal verification 50
EP2339-ICV2338	P54227.D	12/29/10	19:04	04:58	Initial cal verification 50
EP2339-ICV2338	P54228.D	12/29/10	19:33	05:27	Initial cal verification 50
EP2339-ICV2338	P54229.D	12/29/10	20:01	05:55	Initial cal verification 50
EP2339-ICV2339	P54229A.D	12/29/10	20:01	05:55	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2364-DFTPP	**Injection Date:**	02/01/11
Lab File ID:	P54689.D	**Injection Time:**	09:48
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	58014	40.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	72347	50.7		Pass
70	Less than 2.0% of mass 69	359	0.25	(0.50) [a]	Pass
127	40.0 - 60.0% of mass 198	78237	54.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	142709	100.0		Pass
199	5.0 - 9.0% of mass 198	10109	7.08		Pass
275	10.0 - 30.0% of mass 198	34096	23.9		Pass
365	1.0 - 100.0% of mass 198	3944	2.76		Pass
441	Present, but less than mass 443	16406	11.5	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	99317	69.6		Pass
443	17.0 - 23.0% of mass 442	19400	13.6	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2364-ICC2364	P54690.D	02/01/11	10:18	00:30	Initial cal 50
EP2364-IC2364	P54691.D	02/01/11	10:48	01:00	Initial cal 1
EP2364-IC2364	P54692.D	02/01/11	11:16	01:28	Initial cal 2
EP2364-IC2364	P54693.D	02/01/11	11:45	01:57	Initial cal 5
EP2364-IC2364	P54694.D	02/01/11	12:14	02:26	Initial cal 10
EP2364-IC2364	P54695.D	02/01/11	12:43	02:55	Initial cal 25
EP2364-IC2364	P54696.D	02/01/11	13:11	03:23	Initial cal 80
EP2364-IC2364	P54697.D	02/01/11	13:40	03:52	Initial cal 100
EP2364-ICV2364	P54698.D	02/01/11	15:17	05:29	Initial cal verification 50
EP2364-ICV2364	P54700.D	02/01/11	15:46	05:58	Initial cal verification 50
EP2364-ICV2364	P54701.D	02/01/11	16:15	06:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2378-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	P54978.D	**Injection Time:**	07:27
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	64125	37.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	77200	45.1		Pass
70	Less than 2.0% of mass 69	423	0.25	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	87504	51.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	171157	100.0		Pass
199	5.0 - 9.0% of mass 198	12081	7.06		Pass
275	10.0 - 30.0% of mass 198	43090	25.2		Pass
365	1.0 - 100.0% of mass 198	6367	3.72		Pass
441	Present, but less than mass 443	20768	12.1	(81.6) [b]	Pass
442	40.0 - 100.0% of mass 198	131104	76.6		Pass
443	17.0 - 23.0% of mass 442	25442	14.9	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2378-CC2364	P54979.D	02/22/11	07:40	00:13	Continuing cal 50
EP2378-CC2339	P54980.D	02/22/11	08:08	00:41	Continuing cal 25
OP48193-MB1	P54982.D	02/22/11	09:07	01:40	Method Blank
OP48193-BS1	P54983.D	02/22/11	09:35	02:08	Blank Spike
JA68506-5	P54984.D	02/22/11	10:04	02:37	FB-02172011
JA68506-8	P54985.D	02/22/11	10:32	03:05	FB-02182011
ZZZZZZ	P54986.D	02/22/11	11:00	03:33	(unrelated sample)
ZZZZZZ	P54987.D	02/22/11	11:29	04:02	(unrelated sample)
ZZZZZZ	P54988.D	02/22/11	11:58	04:31	(unrelated sample)
JA68506-1	P54989.D	02/22/11	12:26	04:59	CG
OP48193-MS	P54990.D	02/22/11	12:55	05:28	Matrix Spike
OP48193A-MS	P54990.D	02/22/11	12:55	05:28	Matrix Spike
OP48193-MSD	P54991.D	02/22/11	13:24	05:57	Matrix Spike Duplicate
OP48193A-MSD	P54991.D	02/22/11	13:24	05:57	Matrix Spike Duplicate
JA68506-2	P54992.D	02/22/11	13:52	06:25	CD
JA68506-3	P54993.D	02/22/11	14:21	06:54	CD-DUP
JA68506-4	P54994.D	02/22/11	14:50	07:23	CE
JA68506-6	P54995.D	02/22/11	15:19	07:52	CC
JA68506-7	P54996.D	02/22/11	15:47	08:20	CF

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2378-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	P54978.D	**Injection Time:**	07:27
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P54997.D	02/22/11	16:16	08:49	(unrelated sample)
ZZZZZZ	P54998.D	02/22/11	16:45	09:18	(unrelated sample)
ZZZZZZ	P54999.D	02/22/11	17:13	09:46	(unrelated sample)
ZZZZZZ	P55000.D	02/22/11	17:42	10:15	(unrelated sample)
ZZZZZZ	P55001.D	02/22/11	18:11	10:44	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1040-CC1016	**Injection Date:**	02/22/11
Lab File ID:	4M23773.D	**Injection Time:**	07:56
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	24227	6.76	18462	9.06	30952	12.36	30706	15.45
Upper Limit [a]	48454	7.26	36924	9.56	61904	12.86	61412	15.95
Lower Limit [b]	12114	6.26	9231	8.56	15476	11.86	15353	14.95

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP48193A-MB1	19201	6.76	12967	9.04	22653	12.36	23394	15.45
OP48193A-BS12	20390	6.76	14627	9.04	24918	12.36	25845	15.45
ZZZZZZ	12185	6.76	15323	9.06	19973	12.38	22361	15.45
JA68506-1	19324	6.77	12584	9.06	22191	12.37	25321	15.46
JA68506-2	17238	6.76	13210	9.04	22959	12.36	25739	15.45
JA68506-3	17113	6.77	13034	9.06	22864	12.37	25099	15.45
JA68506-4	16866	6.76	13018	9.05	22030	12.37	26242	15.46
JA68506-5	16782	6.76	12101	9.04	19877	12.36	22306	15.45
JA68506-6	16649	6.77	13067	9.06	22964	12.37	27759	15.46
JA68506-8	12931	6.77	9689	9.05	17530	12.37	19408	15.46
ZZZZZZ	10901*	6.77	8722*	9.05	15213*	12.37	17359	15.46
ZZZZZZ	15031	6.76	11877	9.04	20892	12.36	23183	15.45
ZZZZZZ	11965*	6.77	10215	9.05	19369	12.37	23178	15.46
ZZZZZZ	16809	6.77	13357	9.05	22457	12.37	25446	15.46
ZZZZZZ	16098	6.77	13769	9.06	24121	12.37	26793	15.46
ZZZZZZ	16145	6.76	12120	9.04	19867	12.36	21528	15.45
ZZZZZZ	17367	6.76	13554	9.04	23376	12.36	25424	15.45
ZZZZZZ	16779	6.77	13930	9.06	23465	12.36	25588	15.46
ZZZZZZ	18175	6.77	14631	9.06	25339	12.37	26709	15.46
ZZZZZZ	14687	6.77	12164	9.05	21786	12.37	30835	15.46
JA68506-7	13339	6.76	10388	9.04	18708	12.36	22359	15.45
ZZZZZZ	6467*	6.77	5337*	9.06	9389*	12.37	10979*	15.46
ZZZZZZ	11474*	6.77	8904*	9.06	16118	12.36	18897	15.46

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	EP2378-CC2364	**Injection Date:**	02/22/11
Lab File ID:	P54979.D	**Injection Time:**	07:40
Instrument ID:	GCMSP	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	117374	4.78	428789	6.58	283001	9.33	458815	11.65	485209	14.85	458101	16.33
Upper Limit [a]	234748	5.28	857578	7.08	566002	9.83	917630	12.15	970418	15.35	916202	16.83
Lower Limit [b]	58687	4.28	214395	6.08	141501	8.83	229408	11.15	242605	14.35	229051	15.83
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP48193-MB1	156843	4.78	544048	6.57	344454	9.33	607637	11.64	671707	14.85	561533	16.33
OP48193-BS1	126203	4.78	473344	6.58	280151	9.33	482579	11.64	508352	14.85	471782	16.33
JA68506-5	161372	4.78	575979	6.57	355651	9.33	609508	11.64	672762	14.85	576551	16.33
JA68506-8	160648	4.78	557580	6.57	360586	9.33	622742	11.64	684669	14.85	571229	16.33
ZZZZZZ	164254	4.78	571365	6.57	365699	9.33	637879	11.64	699223	14.85	583588	16.33
ZZZZZZ	148943	4.79	501037	6.58	245035	9.33	362814	11.65	384091	14.86	401197	16.33
ZZZZZZ	149448	4.78	531183	6.57	311925	9.33	507352	11.64	579736	14.85	467944	16.33
JA68506-1	152671	4.78	540381	6.57	330608	9.33	579415	11.64	652840	14.85	548258	16.33
OP48193-MS	140501	4.78	528241	6.58	320807	9.33	571409	11.64	594908	14.85	543368	16.33
OP48193A-MS	140501	4.78	528241	6.58	320807	9.33	571409	11.64	594908	14.85	543368	16.33
OP48193-MSD	126847	4.78	462750	6.58	274710	9.33	493814	11.65	502849	14.85	462760	16.33
OP48193A-MSD	126847	4.78	462750	6.58	274710	9.33	493814	11.65	502849	14.85	462760	16.33
JA68506-2	144025	4.78	504955	6.57	290881	9.33	461733	11.65	569067	14.85	503336	16.33
JA68506-3	150848	4.78	530356	6.57	305333	9.33	471038	11.64	594393	14.85	538009	16.33
JA68506-4	155533	4.78	554125	6.57	346833	9.33	584336	11.64	643221	14.85	549267	16.33
JA68506-6	170412	4.78	597617	6.57	377525	9.33	634571	11.64	709052	14.85	600666	16.33
JA68506-7	158740	4.78	558030	6.57	333733	9.33	543598	11.64	636496	14.85	548275	16.33
ZZZZZZ	158674	4.78	565373	6.57	357348	9.33	616432	11.64	666724	14.85	562397	16.33
ZZZZZZ	178532	4.78	624445	6.57	395592	9.33	686640	11.64	758127	14.85	635413	16.33
ZZZZZZ	179325	4.78	627166	6.57	399642	9.33	680081	11.64	739932	14.85	625464	16.33
ZZZZZZ	145060	4.78	482778	6.57	282143	9.33	482698	11.64	622362	14.85	553046	16.33
ZZZZZZ	161481	4.78	535959	6.57	327862	9.33	565631	11.64	691890	14.85	601597	16.33

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA68506-1	P54989.D	77.0	69.0	45.0
JA68506-2	P54992.D	76.0	72.0	36.0
JA68506-3	P54993.D	83.0	79.0	38.0
JA68506-4	P54994.D	83.0	80.0	75.0
JA68506-5	P54984.D	85.0	82.0	64.0
JA68506-6	P54995.D	87.0	82.0	64.0
JA68506-7	P54996.D	84.0	82.0	66.0
JA68506-8	P54985.D	93.0	86.0	65.0
OP48193-BS1	P54983.D	100.0	93.0	80.0
OP48193-MB1	P54982.D	98.0	91.0	77.0
OP48193-MS	P54990.D	55.0	53.0	31.0
OP48193-MSD	P54991.D	96.0	88.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA68506-1	4M23778.D	75.0	76.0	69.0
JA68506-2	4M23779.D	86.0	88.0	58.0
JA68506-3	4M23780.D	102.0	98.0	60.0
JA68506-4	4M23781.D	103.0	100.0	105.0
JA68506-5	4M23782.D	105.0	106.0	105.0
JA68506-6	4M23783.D	106.0	108.0	99.0
JA68506-7	4M23796.D	97.0	107.0	98.0
JA68506-8	4M23785.D	106.0	114.0	99.0
OP48193A-BS12	4M23775.D	88.0	89.0	97.0
OP48193A-MB1	4M23774.D	93.0	94.0	105.0
OP48193A-MS	P54990.D	55.0	53.0	31.0
OP48193A-MSD	P54991.D	96.0	88.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-135%
S2 = 2-Fluorobiphenyl	31-121%
S3 = Terphenyl-d14	10-130%

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Initial Calibration

Calibration Files
0.05=4m23291.D .2 =4m23293.D 2.5 =4m23295.D .02 =4m23290.D
.1 =4m23292.D 1 =4m23288.D .01 =4m23289.D .5 =4m23294.D
5 =4m23287.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.614	0.610	0.578	0.604	0.604	0.590		0.575	0.558	0.592	3.34
3) Phenol-d5	0.771	0.763	0.694	0.761	0.795	0.746		0.740	0.615	0.736	7.71
4) Phenol	0.761	0.825	0.795	0.721	0.793	0.840		0.759	0.929	0.803	7.92
5) bis(2-Chloroethyl)ether	0.822	0.802	0.779	0.912	0.783	0.757	1.004	0.744	0.758	0.818	10.56
6) Nitrobenzene-d5	0.590	0.611	0.600	0.551	0.589	0.596		0.590	0.570	0.587	3.17
7) Naphthalene	1.926	1.856	1.675	1.901	1.851	1.691		1.687	1.661	1.781	6.32
8) Hexachlorobutadiene	0.316	0.283		0.328	0.287			0.298	0.277	0.298	6.71
9) 2-Methylnaphthalene	1.520	1.346	1.397	1.509	1.343	1.372	1.868	1.322	1.352	1.448	11.97
10) 1-Methylnaphthalene	1.450	1.431	1.269	1.475	1.365	1.351		1.296	1.255	1.362	6.19
11) 2-Fluorobiphenyl	1.430	1.397	1.287	1.374	1.383	1.280		1.298	1.313	1.345	4.26
12) I Fluorene-d10	ISTD										
13) Acenaphthylene	2.355	2.183	2.225	2.585	2.243	2.203		1.993	2.333	2.265	7.49
14) Acenaphthene	1.777	1.681	1.594	2.043	1.698	1.624		1.517	1.598	1.691	9.60
15) Fluorene	1.377	1.277	1.184	1.569	1.326	1.191		1.139	1.190	1.282	11.03
16) 2,6-Dinitrotoluene	0.388	0.582		0.384	0.568			0.418	0.682	0.504	24.67
----- Linear regression ----- Coefficient = 0.9953											
Response Ratio = -0.02627 + 0.68713 *A											
17) 2,4,6-Tribromophenol	0.135	0.172		0.129	0.168			0.146	0.181	0.155	13.83
18) Hexachlorobenzene	0.536	0.461	0.413	0.587	0.499	0.416		0.423	0.420	0.469	13.91
19) Pentachlorophenol	0.155	0.140	0.220	0.282	0.155	0.214		0.151	0.262	0.197	27.88
----- Linear regression ----- Coefficient = 0.9936											
Response Ratio = -0.03525 + 0.25937 *A											
20) Phenanthrene											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

```
      2.032 1.826 1.725 2.438 1.942 1.701       1.654 1.757        1.884   13.66
21)  Anthracene
      1.687 1.389 1.590 1.987 1.356 1.562       1.277 1.673        1.565   14.55
22)  2,4-Dinitrotoluene
            0.342 0.679       0.301 0.596       0.391 0.735        0.507   36.65
            ----- Linear regression -----  Coefficient =  0.9983
              Response Ratio = -0.03017 + 0.75147 *A


23) I   Fluoranthene-d10      ----------------ISTD---------------------
24)  Fluoranthene
      1.482 1.176 1.099       1.282 1.141       1.073 1.118        1.196   11.99
25)  Pyrene
      1.137 1.026 1.115 1.371 1.030 1.092       0.974 1.137        1.110   10.88
26)  Terphenyl-d14
      0.432 0.441 0.377 0.536 0.405 0.419       0.420 0.416        0.431   10.79
27)  Benzo[a]anthracene
      0.629 0.531 0.797       0.540 0.709       0.542 0.813        0.652   18.81
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.01678 + 0.82341 *A

28)  Chrysene
      0.888 0.774 0.772       0.742 0.884       0.710 0.881        0.807    9.32
29)  bis(2-Ethylhexyl)phthalate
      0.327 0.247 0.348       0.357 0.290       0.220 0.497        0.327   27.83
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = 0.00237 + 0.20009 *A + 0.23586 *A^2


30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
      0.319 0.258 0.327       0.280 0.306       0.271 0.329        0.298    9.62
32)  Benzo[k]fluoranthene
      0.302 0.207 0.255       0.271 0.281       0.231 0.286        0.262   12.66
33)  Benzo[a]pyrene
            1.506 1.258       1.889 1.394       1.293 1.289        1.438   16.62
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.01149 + 1.27359 *A

34)  Indeno[1,2,3-cd]pyrene
      1.027 0.746 1.097       0.762 1.036       0.778 1.252        0.957   20.56
            ----- Linear regression -----  Coefficient =  0.9961
              Response Ratio = -0.03593 + 1.25236 *A

35)  Dibenz[a,h]anthracene
      0.736 0.555 0.856       0.602 0.796       0.573 0.973        0.727   21.78
            ----- Linear regression -----  Coefficient =  0.9962
              Response Ratio = -0.02925 + 0.97470 *A

36)  Benzo[g,h,i]perylene
      1.308 0.968 1.096       1.019 1.091       0.962 1.160        1.086   11.20
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M1016SIM.M        Mon Jan 24 15:30:58 2011   RPT1
```

7.1.1

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICV1016
Lab FileID: 4M23296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1016\4m23296.D Vial: 11
Acq On : 21 Jan 2011 5:34 pm Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1016,acid Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 08:13:52 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	68	0.00	6.77
4	t	Phenol	0.803	0.921	-14.7	75	0.00	3.57
12	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	9.07
19	t	Pentachlorophenol	5.000	5.009	-0.2	73	0.00	10.40
23	I	Fluoranthene-d10	1.000	1.000	0.0	64	0.00	12.38
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 08:29:16 2011 RPT1

7.7.2

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1017\4m23300.D Vial: 3
Acq On : 24 Jan 2011 10:50 am Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1017 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.02	6.79
5	t	bis(2-Chloroethyl)ether	0.818	0.702	14.2	75	0.00	3.62
7	t	Naphthalene	1.781	1.785	-0.2	86	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.321	-7.7	91	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.236	14.6	73	0.00	6.67
12	I	Fluorene-d10	1.000	1.000	0.0	70	0.00	9.07
13	t	Acenaphthylene	2.265	2.256	0.4	71	0.00	8.03
14	t	Acenaphthene	1.691	1.774	-4.9	76	0.00	8.33
15	t	Fluorene	1.282	1.315	-2.6	77	0.01	9.12
18	t	Hexachlorobenzene	0.469	0.447	4.7	75	0.02	10.11
20	t	Phenanthrene	1.884	1.826	3.1	75	0.02	10.57
21	t	Anthracene	1.565	1.469	6.1	65	0.00	10.63
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	61	0.01	12.39
24	t	Fluoranthene	1.196	1.223	-2.3	65	0.01	12.41
25	t	Pyrene	1.110	1.137	-2.4	63	0.00	12.70
		----------	True	Calc.	% Drift		----------	
27	t	Benzo[a]anthracene	1.000	0.943	5.7	61	0.02	14.16
		----------	AvgRF	CCRF	% Dev		----------	
28	t	Chrysene	0.807	0.947	-17.3	65	0.00	14.19
		----------	True	Calc.	% Drift		----------	
29		bis(2-Ethylhexyl)phthalat	1.000	1.148	-14.8	66	0.00	14.43
		----------	AvgRF	CCRF	% Dev		----------	
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	61	0.01	15.48
31	t	Benzo[b]fluoranthene	0.298	0.280	6.0	56	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.256	2.3	56	0.01	15.24

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	1.000	0.934	6.6	54	0.00	15.49
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	56	0.01	16.38
35	t	Dibenz[a,h]anthracene	1.000	0.893	10.7	58	0.01	16.41

			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.066	1.8	59	0.01	16.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 15:33:12 2011 RPT1

7.7.3

7

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1040-CC1016
Lab FileID: 4M23773.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1040\4m23773.D Vial: 2
Acq On : 22 Feb 2011 7:56 am Operator: ninap
Sample : cc1016-.5 Inst : MS4M
Misc : op48186a,e4m1040 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Feb 21 12:22:38 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	103	-0.02	6.76
2	S	2-Fluorophenol	0.592	0.568	4.1	101	0.00	2.47
3	S	Phenol-d5	0.736	0.711	3.4	99	0.00	3.55
4	t	Phenol	0.803	0.762	5.1	103	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.719	12.1	99	-0.02	3.60
6	S	Nitrobenzene-d5	0.587	0.548	6.6	95	-0.01	4.60
7	t	Naphthalene	1.781	1.637	8.1	100	-0.01	5.61
8	t	Hexachlorobutadiene	0.298	0.303	-1.7	105	-0.01	5.94
9	t	2-Methylnaphthalene		----------	NA	----------		
10	t	1-Methylnaphthalene	1.362	1.289	5.4	102	-0.02	6.81
11	S	2-Fluorobiphenyl	1.345	1.373	-2.1	109	-0.02	7.30
12	I	Fluorene-d10	1.000	1.000	0.0	100	-0.02	9.06
13	t	Acenaphthylene	2.265	2.370	-4.6	119	-0.02	8.02
14	t	Acenaphthene	1.691	1.607	5.0	106	-0.02	8.31
15	t	Fluorene	1.282	1.189	7.3	104	-0.02	9.09
		----------	True	Calc.	% Drift		----------	
16	t	2,6-Dinitrotoluene	0.500	0.547	-9.4	129	-0.02	8.13
		----------	AvgRF	CCRF	% Dev		----------	
17	S	2,4,6-Tribromophenol	0.155	0.188	-21.3#	129	-0.02	9.50
18	t	Hexachlorobenzene	0.469	0.462	1.5	109	-0.02	10.08
		----------	True	Calc.	% Drift		----------	
19	t	Pentachlorophenol	2.500	2.968	-18.7	167	-0.02	10.39
		----------	AvgRF	CCRF	% Dev		----------	
20	t	Phenanthrene	1.884	1.702	9.7	103	-0.02	10.54
21	t	Anthracene	1.565	1.596	-2.0	125	-0.01	10.62
		----------	True	Calc.	% Drift		----------	
22	t	2,4-Dinitrotoluene	0.500	0.475	5.0	121	0.00	8.71
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	107	-0.02	12.36
24	t	Fluoranthene	1.196	1.091	8.8	109	-0.02	12.38
25	t	Pyrene	1.110	1.066	4.0	117	-0.02	12.67
26	S	Terphenyl-d14	0.431	0.403	6.5	103	-0.02	13.01
		----------	True	Calc.	% Drift		----------	

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1040-CC1016
Lab FileID: 4M23773.D

27	t	Benzo[a]anthracene	0.500	0.591	-18.2	166	-0.02	14.13
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.802	0.6	121	-0.04	14.18
		----------	True	Calc.	% Drift	----------		
29		bis(2-Ethylhexyl)phthalat		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	120	0.00	15.45
31	t	Benzo[b]fluoranthene	0.298	0.301	-1.0	133	0.00	15.21
32	t	Benzo[k]fluoranthene	0.262	0.215	17.9	112	-0.02	15.21
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	0.500	0.512	-2.4	129	-0.01	15.47
34	t	Indeno[1,2,3-cd]pyrene	0.500	0.508	-1.6	152	-0.02	16.35
35	t	Dibenz[a,h]anthracene	0.500	0.495	1.0	153	-0.02	16.38
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	1.062	2.2	132	-0.02	16.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23294.D M4M1016SIM.M Tue Feb 22 09:50:16 2011 RPT1

7.7.4

SII-SSA-0014-003970

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICC2339
Lab FileID: P54217.D

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Initial Calibration

Calibration Files
100 =P54224.D 80 =P54223.D 50 =P54217.D 25 =P54222.D
10 =P54221.D 5 =P54220.D 2 =P54219.D 1 =P54218.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
102) 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	0.630	0.821	0.855	0.997	0.858	0.890	0.988	0.863		14.23
104) Phenanthrene-d10a	ISTD									
105) Atrazine	0.120	0.125	0.134	0.139	0.140	0.127	0.123	0.156	0.133	8.97
106) Acenaphthene-d10a	ISTD									
107) 1,2,4,5-Tetr	0.527	0.539	0.570	0.615	0.671	0.638	0.695	0.786	0.630	13.80
108) Chrysene-d12a	ISTD									
109) Benzidine	0.362	0.392	0.638	0.627	0.708	0.602	0.488	0.583	0.550	22.45

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP2339.M Thu Dec 30 12:19:21 2010 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54225A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54225A.D Vial: 10
Acq On : 29 Dec 2010 6:07 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.29- 5.29
103	Benzaldehyde		----------NA----------				
104	Phenanthrene-d10a	1.000	1.000	0.0	89	0.00	11.15-12.15
105	Atrazine		----------NA----------				
106	Acenaphthene-d10a	1.000	1.000	0.0	79	0.00	8.84- 9.84
107	1,2,4,5-Tetrachloroben	0.630	0.687	-9.0	96	0.00	7.50- 8.50
108	Chrysene-d12a	1.000	1.000	0.0	76	0.00	14.35-15.35
109	Benzidine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54217.D MP2339.M Thu Dec 30 12:47:20 2010 MSP

7.7.6

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54226A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54226A.D Vial: 11
Acq On : 29 Dec 2010 6:36 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	4.29- 5.29
103	Benzaldehyde	0.863	1.016	-17.7	128	0.00	3.76- 4.76
104	Phenanthrene-d10a	1.000	1.000	0.0	87	0.00	11.15-12.15
105	Atrazine	0.133	0.147	-10.5	95	0.00	10.85-11.85
106	Acenaphthene-d10a	1.000	1.000	0.0	98	0.00	8.84- 9.84
107	1,2,4,5-Tetrachlorobenzen		----------NA----------				
108	Chrysene-d12a	1.000	1.000	0.0	106	0.00	14.35-15.35
109	Benzidine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54217.D MP2339.M Thu Dec 30 12:48:58 2010 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54229A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54229A.D Vial: 14
Acq On : 29 Dec 2010 8:01 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,benzidine Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2338.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 12:52:11 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	146	0.00	4.29- 5.29
103	Benzaldehyde		----------NA----------				
104	Phenanthrene-d10a	1.000	1.000	0.0	143	0.00	11.15-12.15
105	Atrazine		----------NA----------				
106	Acenaphthene-d10a	1.000	1.000	0.0	135	0.00	8.84- 9.84
107	1,2,4,5-Tetrachlorobenzen		----------NA----------				
108	Chrysene-d12a	1.000	1.000	0.0	121	0.00	14.35-15.35
109	Benzidine	0.550	1.001	-82.0#	190	0.04	12.93-13.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54208.D MP2338.M Thu Dec 30 13:01:43 2010 MSP

7.7.8

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Calibration Files
100 =P54697.D 80 =P54696.D 50 =P54690.D 25 =P54695.D
10 =P54694.D 5 =P54693.D 2 =P54692.D 1 =P54691.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.970	0.991	1.052	1.005	0.940	0.893	0.907	1.019	0.972	5.71
3) Pyridine	1.923	2.001	2.202	2.186	2.168	2.115	2.210	2.556	2.170	8.61
4) N-Nitrosodim	1.424	1.475	1.585	1.535	1.425	1.354	1.403	1.570	1.471	5.71
5) 2-Fluorophen	1.686	1.734	1.810	1.768	1.676	1.585	1.545	1.721	1.691	5.28
6) Indene	1.932	1.972	2.040	2.076	2.023	2.001	2.179	2.399	2.078	7.19
7) Cumene	3.446	3.603	3.789	3.916	3.834	3.730	3.780	4.319	3.802	6.69
8) Phenol-d5	2.107	2.176	2.262	2.218	2.144	2.022	2.015	2.060	2.126	4.27
9) Phenol	2.070	2.158	2.353	2.444	2.434	2.325	2.386	2.428	2.325	5.95
10) Aniline	1.940	1.962	2.460	2.594	2.557	2.541	2.697		2.393	12.96
11) bis(2-Chloro	1.436	1.495	1.568	1.594	1.640	1.634	1.818	2.089	1.659	12.48
12) 2-Chlorophen	1.305	1.354	1.441	1.513	1.575	1.567	1.649	1.712	1.514	9.27
13) Decane	1.723	1.797	1.982	2.087	2.185	2.228	2.434		2.062	12.09
14) 1,3-Dichloro	1.570	1.617	1.690	1.706	1.791	1.783	1.927	2.220	1.788	11.56
15) 1,4-Dichloro	1.430	1.475	1.547	1.567	1.544	1.572	1.654	2.016	1.601	11.28
16) Benzyl alcoh	1.056	1.075	1.065	1.052	0.975	0.879	0.853	0.814	0.971	11.03
17) 1,2-Dichloro	1.286	1.334	1.431	1.531	1.571	1.586	1.708	1.945	1.549	13.67
18) Acetophenone	1.960	2.025	2.128	2.086	2.025	2.025	1.988	2.175	2.052	3.52
19) 2-Methylphen	1.144	1.182	1.259	1.289	1.265	1.244	1.314	1.344	1.255	5.26
20) 2,2'-oxybis(	0.430	0.444	0.471	0.480	0.502	0.500	0.551	0.661	0.505	14.54
21) 3&4-Methylph	1.273	1.315	1.360	1.385	1.333	1.295	1.341	1.390	1.336	3.10
22) n-Nitroso-di	1.023	1.050	1.121	1.135	1.124	1.091	1.161	1.307	1.127	7.62
23) Hexachloroet	0.521	0.548	0.571	0.585	0.595	0.586	0.650	0.748	0.601	11.71
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.490	0.496	0.501	0.509	0.498	0.484	0.491	0.563	0.504	4.95
26) Nitrobenzene	0.189	0.193	0.203	0.209	0.214	0.205	0.227	0.257	0.212	10.17
27) Quinoline	0.710	0.726	0.736	0.741	0.721	0.699	0.722	0.848	0.738	6.30
28) Isophorone	0.911	0.929	0.948	0.951	0.922	0.875	0.940	1.056	0.942	5.55
29) 2-Nitropheno	0.231	0.236	0.243	0.245	0.227	0.224	0.214	0.261	0.235	6.22
30) 2,4-Dimethyl	0.378	0.386	0.408	0.419	0.396	0.399	0.430	0.490	0.413	8.55
31) Benzoic Acid	0.325	0.322	0.251	0.263	0.187	0.114			0.244	33.42
----- Linear regression ----- Coefficient = 0.9912										
Response Ratio = -0.04716 + 0.33766 *A										
32) bis(2-Chloro	0.496	0.508	0.513	0.521	0.525	0.515	0.546	0.604	0.528	6.39
33) 2,4-Dichloro	0.311	0.320	0.336	0.342	0.348	0.331	0.349	0.381	0.340	6.24
34) 2,6-Dichloro	0.292	0.296	0.310	0.323	0.317	0.311	0.321	0.346	0.314	5.37
35) 1,3,5-Trichl	0.342	0.354	0.377	0.409	0.417	0.425	0.456	0.516	0.412	13.76
36) 1,2,4-Trichl	0.347	0.360	0.375	0.399	0.404	0.408	0.452	0.493	0.405	11.87
37) 1,2,3-Trichl	0.330	0.339	0.346	0.373	0.365	0.362	0.399	0.466	0.372	11.68
38) Naphthalene	1.006	1.023	1.053	1.087	1.071	1.065	1.160	1.308	1.097	8.87
39) 4-Chloroanil	0.466	0.473	0.500	0.521	0.490	0.463	0.496	0.552	0.495	6.07
40) 2,3-Dichloro	0.351	0.362	0.368	0.390	0.395	0.393	0.447	0.484	0.399	11.37
41) Caprolactam	0.248	0.250	0.242	0.236	0.222	0.210	0.209	0.263	0.235	8.35
42) Hexachlorobu	0.183	0.192	0.199	0.211	0.214	0.220	0.231	0.263	0.214	11.76

7.7.9

7

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

43)	4-Chloro-3-m	0.391	0.400	0.408	0.407	0.389	0.349	0.376	0.378	0.387	5.07
44)	2-Methylnaph	0.784	0.806	0.835	0.886	0.892	0.866	0.914	1.022	0.876	8.45
45)	1-Methylnaph	0.745	0.764	0.785	0.830	0.834	0.846	0.917	1.029	0.844	10.95
46)	Dimethylnaph	0.651	0.669	0.680	0.721	0.714	0.721	0.744	0.845	0.718	8.34
47)	I Acenaphthene-d10	----------ISTD----------									
48)	Hexachlorocy	0.321	0.332	0.341	0.337	0.311	0.276	0.251	0.249	0.302	12.56
49)	2,4,6-Trichl	0.371	0.388	0.407	0.415	0.416	0.394	0.410	0.454	0.407	6.01
50)	2,4,5-Trichl	0.386	0.401	0.406	0.426	0.425	0.399	0.411	0.501	0.419	8.48
51)	2-Fluorobiph	1.186	1.236	1.289	1.360	1.433	1.483	1.627		1.374	11.18
52)	2-Chloronaph	1.073	1.115	1.147	1.212	1.285	1.315	1.494		1.234	11.70
53)	Biphenyl	1.397	1.434	1.489	1.539	1.633	1.643	1.845	2.105	1.636	14.48
54)	2-Nitroanili	0.454	0.470	0.481	0.483	0.479	0.449	0.458	0.479	0.469	2.88
55)	Dimethylphth	1.476	1.520	1.569	1.588	1.615	1.538	1.731	1.949	1.623	9.36
56)	Acenaphthyle	1.752	1.827	1.930	2.000	2.067	2.030	2.210	2.461	2.034	10.97
57)	2,6-Dinitrot	0.191	0.195	0.203	0.206	0.211	0.203	0.216	0.256	0.210	9.66
58)	3-Nitroanili	0.368	0.378	0.384	0.377	0.353	0.319	0.299	0.351	0.353	8.56
59)	Acenaphthene	1.073	1.103	1.137	1.157	1.147	1.116	1.236	1.402	1.171	8.95
60)	2,4-Dinitrop	0.182	0.184	0.168	0.136	0.098	0.065	0.042		0.125	46.03
	----- Linear regression ----- Coefficient = 0.9976										
	Response Ratio = -0.03895 + 0.18933 *A										
61)	4-Nitropheno	0.220	0.228	0.227	0.217	0.190	0.129	0.121		0.190	24.34
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.00683 + 0.22686 *A										
62)	Dibenzofuran	1.602	1.655	1.732	1.784	1.827	1.785	1.946	2.275	1.826	11.48
63)	2,4-Dinitrot	0.421	0.438	0.448	0.443	0.438	0.396	0.376	0.375	0.417	7.24
64)	2,3,4,6-Tetr	0.363	0.369	0.374	0.371	0.358	0.316	0.307	0.328	0.348	7.74
65)	Diethylphtha	1.469	1.518	1.570	1.578	1.572	1.515	1.587	1.797	1.576	6.23
66)	Fluorene	1.217	1.260	1.322	1.403	1.476	1.426	1.567	1.747	1.427	12.07
67)	4-Chlorophen	0.556	0.575	0.619	0.663	0.719	0.727	0.815		0.668	13.83
68)	4-Nitroanili	0.357	0.362	0.365	0.361	0.352	0.323	0.321	0.358	0.350	5.02
69)	I Phenanthrene-d10	----------ISTD----------									
70)	4,6-Dinitro-	0.169	0.170	0.170	0.162	0.138	0.106	0.082	0.086	0.136	28.42
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00543 + 0.17221 *A										
71)	n-Nitrosodip	0.570	0.591	0.610	0.638	0.662	0.649	0.676	0.763	0.645	9.31
72)	1,2-Diphenyl	0.894	0.923	0.973	0.992	1.033	1.010	1.098	1.193	1.014	9.43
73)	2,4,6-Tribro	0.106	0.112	0.113	0.117	0.111	0.105	0.105	0.111	0.110	3.98
74)	4-Bromopheny	0.252	0.261	0.269	0.277	0.272	0.251	0.280	0.293	0.269	5.36
75)	Hexachlorobe	0.254	0.267	0.279	0.294	0.300	0.303	0.321	0.364	0.298	11.46
76)	Pentachlorop	0.160	0.167	0.174	0.172	0.155	0.131	0.112	0.107	0.147	18.20
	----- Linear regression ----- Coefficient = 0.9982										
	Response Ratio = 0.00007 + 0.16436 *A										
77)	Phenanthrene	1.004	1.032	1.068	1.080	1.083	1.077	1.177	1.331	1.106	9.36
78)	Anthracene	1.026	1.060	1.114	1.152	1.171	1.137	1.228	1.328	1.152	8.23
79)	Carbazole	1.068	1.107	1.164	1.186	1.189	1.123	1.183	1.289	1.164	5.73
80)	Di-n-butylph	1.565	1.606	1.690	1.677	1.633	1.463	1.475	1.596	1.588	5.31
81)	Fluoranthene	1.365	1.419	1.475	1.528	1.522	1.421	1.499	1.616	1.481	5.32
82)	Octadecane	0.608	0.630	0.674	0.689	0.681	0.636	0.655	0.694	0.658	4.74
83)	I Chrysene-d12	----------ISTD----------									
84)	Pyrene	1.359	1.402	1.375	1.387	1.504	1.455	1.598	1.775	1.482	9.62
85)	Butyl steara	0.469	0.482	0.484	0.452	0.486	0.452	0.604		0.490	10.64
86)	Terphenyl-d1	0.925	0.937	0.923	0.916	0.944	0.902	0.960	1.054	0.945	5.04
87)	Butylbenzylp	0.786	0.789	0.784	0.733	0.706	0.622	0.642	0.698	0.720	9.04

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

88)	Benzo[a]anth	1.177	1.195	1.222	1.230	1.274	1.239	1.376	1.585	1.287	10.49
89)	3,3'-Dichlor	0.540	0.548	0.527	0.502	0.485	0.429	0.429	0.544	0.500	9.83
90)	Chrysene	1.075	1.079	1.058	1.053	1.067	1.038	1.169	1.304	1.106	8.10
91)	bis(2-Ethylh	0.815	0.828	0.822	0.775	0.752	0.674	0.712	0.804	0.773	7.27
92)	I Perylene-d12	----------ISTD----------									
93)	Di-n-octylph	1.773	1.816	1.845	1.725	1.576	1.375	1.339	1.360	1.601	13.55
94)	Benzo[b]fluo	1.410	1.547	1.471	1.468	1.576	1.331	1.355	1.472	1.454	5.89
95)	Benzo[k]fluo	0.977	0.916	1.061	1.193	1.208	1.341	1.477	1.701	1.234	21.40

----- Linear regression ----- Coefficient = 0.9942
Response Ratio = 0.06376 + 0.94090 *A

96)	Benzo[a]pyre	1.232	1.267	1.311	1.331	1.280	1.203	1.287	1.379	1.286	4.31
97)	Indeno[1,2,3	1.378	1.421	1.435	1.474	1.484	1.382	1.434	1.574	1.448	4.38
98)	Dibenz(a,h)a	1.154	1.195	1.169	1.171	1.078	0.996	0.985	1.136	1.111	7.36
99)	Dibenz[a,h]a	1.090	1.130	1.160	1.192	1.212	1.080	1.173	1.262	1.162	5.30
100)	7,12-Dimethy	0.569	0.579	0.604	0.623	0.590	0.559	0.588	0.608	0.590	3.58
101)	Benzo[g,h,i]	1.210	1.252	1.254	1.276	1.264	1.187	1.228	1.285	1.244	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP2364.M Fri Feb 04 06:58:04 2011 MSP

7.7.9

SII-SSA-0014-003977

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54698.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54698.D Vial: 10
Acq On : 1 Feb 2011 3:17 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	127	0.00	4.35- 5.35
3	t	Pyridine	2.170	1.746	19.5	100	0.00	1.88- 2.88
4	t	N-Nitrosodimethylamine	1.471	1.185	19.4	95	0.00	1.86- 2.86
11	t	bis(2-Chloroethyl)ethe	1.659	1.725	-4.0	139	0.00	4.05- 5.05
14	t	1,3-Dichlorobenzene	1.788	1.794	-0.3	134	0.00	4.31- 5.31
15	t	1,4-Dichlorobenzene	1.601	1.530	4.4	125	0.00	4.37- 5.37
16	t	Benzyl alcohol	0.971	0.984	-1.3	117	0.00	4.56- 5.56
17	t	1,2-Dichlorobenzene	1.549	1.497	3.4	132	0.00	4.62- 5.62
20	t	2,2'-oxybis(1-Chloropr	0.505	0.527	-4.4	142	0.00	4.76- 5.76
22	t	n-Nitroso-di-n-propyla	1.127	1.259	-11.7	142	-0.01	4.95- 5.95
23	t	Hexachloroethane	0.601	0.591	1.7	131	0.00	5.04- 6.04
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	6.15- 7.15
26	t	Nitrobenzene	0.212	0.213	-0.5	129	0.00	5.16- 6.16
28	t	Isophorone	0.942	0.946	-0.4	123	0.00	5.48- 6.48
32	t	bis(2-Chloroethoxy)met	0.528	0.574	-8.7	138	0.00	5.83- 6.83
36	t	1,2,4-Trichlorobenzene	0.405	0.402	0.7	132	0.00	6.09- 7.09
38	t	Naphthalene	1.097	1.059	3.5	124	0.00	6.18- 7.18
42	t	Hexachlorobutadiene	0.214	0.231	-7.9	143	0.00	6.47- 7.47
44	t	2-Methylnaphthalene	0.876	0.783	10.6	116	0.00	7.24- 8.24
47	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00	8.91- 9.91
48	t	Hexachlorocyclopentadi	0.302	0.440	-45.7#	144	0.00	7.61- 8.61
52	t	2-Chloronaphthalene	1.234	1.382	-12.0	134	0.00	8.00- 9.00
54	t	2-Nitroaniline	0.469	0.515	-9.8	119	0.00	8.23- 9.23
55	t	Dimethylphthalate	1.623	1.577	2.8	111	0.00	8.59- 9.59
56	t	Acenaphthylene	2.034	1.892	7.0	109	0.00	8.66- 9.66
57	t	2,6-Dinitrotoluene	0.210	0.197	6.2	108	0.00	8.68- 9.68
58	t	3-Nitroaniline	0.353	0.329	6.8	95	0.00	8.90- 9.90
59	t	Acenaphthene	1.171	1.166	0.4	114	0.00	8.96- 9.96
62	t	Dibenzofuran	1.826	1.795	1.7	115	0.00	9.22-10.22
63	t	2,4-Dinitrotoluene	0.417	0.407	2.4	101	0.00	9.30-10.30
65	t	Diethylphthalate	1.576	1.551	1.6	110	0.00	9.73-10.73
66	t	Fluorene	1.427	1.395	2.2	117	0.00	9.77-10.77
67	t	4-Chlorophenyl-phenyle	0.668	0.595	10.9	107	0.00	9.79-10.79
68	t	4-Nitroaniline	0.350	0.337	3.7	102	0.00	9.89-10.89
69	I	Phenanthrene-d10	1.000	1.000	0.0	121	0.00	11.22-12.22
71	t	n-Nitrosodiphenylamine	0.645	0.552	14.4	110	0.00	9.99-10.99
72	t	1,2-Diphenylhydrazine	1.014	0.908	10.5	113	0.00	10.04-11.04

7.7.10

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54698.D

74	t	4-Bromophenyl-phenylet	0.269	0.242	10.0	109	0.00	10.56-11.56
75	t	Hexachlorobenzene	0.298	0.246	17.4	107	0.00	10.78-11.78
77	t	Phenanthrene	1.106	1.037	6.2	118	0.00	11.25-12.25
78	t	Anthracene	1.152	1.020	11.5	111	0.00	11.31-12.31
79	t	Carbazole	1.164	1.038	10.8	108	0.00	11.56-12.56
80	t	Di-n-butylphthalate	1.588	1.421	10.5	102	0.00	12.13-13.13
81	t	Fluoranthene	1.481	1.269	14.3	104	0.00	12.81-13.81
83	I	Chrysene-d12	1.000	1.000	0.0	101	0.00	14.41-15.41
84	t	Pyrene	1.482	1.511	-2.0	111	0.00	13.07-14.07
87	t	Butylbenzylphthalate	0.720	0.780	-8.3	100	0.00	13.85-14.85
88	t	Benzo[a]anthracene	1.287	1.257	2.3	104	0.00	14.39-15.39
89	t	3,3'-Dichlorobenzidine	0.500	0.426	14.8	81	0.00	14.38-15.38
90	t	Chrysene	1.106	1.082	2.2	103	0.00	14.43-15.43
91	t	bis(2-Ethylhexyl)phtha	0.773	0.783	-1.3	96	0.00	14.48-15.48
92	I	Perylene-d12	1.000	1.000	0.0	95	0.00	15.90-16.90
93	t	Di-n-octylphthalate	1.601	1.814	-13.3	93	0.00	15.06-16.06
94	t	Benzo[b]fluoranthene	1.454	1.566	-7.7	101	0.00	15.49-16.49
			True	Calc.	% Drift			
95	t	Benzo[k]fluoranthene	50.000	57.569	-15.1	101	0.00	15.51-16.51
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.286	1.331	-3.5	96	0.00	15.84-16.84
97	t	Indeno[1,2,3-cd]pyrene	1.448	1.512	-4.4	100	0.00	17.29-18.29
99	t	Dibenz[a,h]anthracene	1.162	1.237	-6.5	101	0.00	17.30-18.30
101	t	Benzo[g,h,i]perylene	1.244	1.304	-4.8	99	0.00	17.69-18.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 01 16:23:44 2011 MSP

7.7.10

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54700.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54700.D Vial: 12
Acq On : 1 Feb 2011 3:46 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,acid Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	138	0.00	4.35- 5.35
9	t	Phenol	2.325	2.130	8.4	125	0.00	3.96- 4.96
12	t	2-Chlorophenol	1.514	1.493	1.4	143	0.00	4.13- 5.13
19	t	2-Methylphenol	1.255	1.318	-5.0	145	0.00	4.74- 5.74
21	t	3&4-Methylphenol	1.336	1.308	2.1	133	0.00	4.93- 5.93
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	6.15- 7.15
29	t	2-Nitrophenol	0.235	0.259	-10.2	131	0.00	5.62- 6.62
30	t	2,4-Dimethylphenol	0.413	0.420	-1.7	126	0.00	5.70- 6.70
		---------- True Calc. % Drift ----------						
31		Benzoic Acid	50.000	44.946	10.1	130	0.00	5.89- 6.89
		---------- AvgRF CCRF % Dev ----------						
33	t	2,4-Dichlorophenol	0.340	0.315	7.4	115	0.00	5.97- 6.97
34		2,6-Dichlorophenol	0.314	0.319	-1.6	126	-0.01	6.31- 7.31
43	t	4-Chloro-3-methylpheno	0.387	0.384	0.8	116	-0.01	7.08- 8.08
47	I	Acenaphthene-d10	1.000	1.000	0.0	133	0.00	8.91- 9.91
49	t	2,4,6-Trichlorophenol	0.407	0.398	2.2	130	0.00	7.74- 8.74
50	t	2,4,5-Trichlorophenol	0.419	0.377	10.0	124	-0.01	7.80- 8.80
		---------- True Calc. % Drift ----------						
60	t	2,4-Dinitrophenol	100.000	89.330	10.7	110	0.00	9.05-10.05
61	t	4-Nitrophenol	50.000	42.707	14.6	110	0.00	9.22-10.22
		---------- AvgRF CCRF % Dev ----------						
64		2,3,4,6-Tetrachlorophe	0.348	0.291	16.4	103	0.00	9.50-10.50
69	I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00	11.22-12.22
		---------- True Calc. % Drift ----------						
70	t	4,6-Dinitro-2-methylph	50.000	48.623	2.8	115	0.00	9.95-10.95
		---------- AvgRF CCRF % Dev ----------						
		---------- True Calc. % Drift ----------						
76	t	Pentachlorophenol	100.000	106.888	-6.9	122	0.00	11.06-12.06
		---------- AvgRF CCRF % Dev ----------						
83	I	Chrysene-d12	1.000	1.000	0.0	131	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	112	0.00	15.90-16.90

7.7.11

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54700.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 01 16:18:26 2011 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54701.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54701.D Vial: 13
Acq On : 1 Feb 2011 4:15 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,3rd source Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	161	0.00	4.35- 5.35
10	t	Aniline	2.393	2.411	-0.8	158	0.00	3.99- 4.99
24	I	Naphthalene-d8	1.000	1.000	0.0	163	0.00	6.15- 7.15
39	t	4-Chloroaniline	0.495	0.435	12.1	142	0.00	6.31- 7.31
47	I	Acenaphthene-d10	1.000	1.000	0.0	141	0.00	8.91- 9.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	162	0.00	11.22-12.22
83	I	Chrysene-d12	1.000	1.000	0.0	180	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	160	0.00	15.90-16.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Wed Feb 02 12:55:57 2011 MSP

7.7.12
7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2365-ICV2364
Lab FileID: P54723.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2365\P54723.D Vial: 21
Acq On : 2 Feb 2011 1:39 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47915,ep2365,1000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	0.00	4.35- 5.35
2	t	1,4-Dioxane	0.972	1.090	-12.1	124	0.00	1.65- 2.65
6	t	Indene	2.078	2.932	-41.1#	172	0.00	4.72- 5.72
7	t	Cumene	3.802	4.566	-20.1#	144	0.00	3.45- 4.45
13	t	Decane	2.062	2.353	-14.1	142	0.00	4.16- 5.16
18	t	Acetophenone	2.052	2.236	-9.0	126	0.00	4.92- 5.92
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.15- 7.15
27	t	Quinoline	0.738	0.814	-10.3	143	-0.02	6.69- 7.69
40	t	2,3-Dichloroaniline	0.399	0.345	13.5	122	0.00	7.74- 8.74
41	t	Caprolactam	0.235	0.200	14.9	107	-0.03	6.76- 7.76
45	t	1-Methylnaphthalene	0.844	0.775	8.2	128	0.00	7.41- 8.41
46	t	Dimethylnaphthalene	0.718	0.656	8.6	125	0.00	8.24- 9.24
47	I	Acenaphthene-d10	1.000	1.000	0.0	121	0.00	8.91- 9.91
53	t	Biphenyl	1.636	1.607	1.8	130	0.00	8.00- 9.00
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	11.22-12.22
			True	Calc.	% Drift			
82	t	Octadecane	0.658	0.818	-24.3#	124	0.00	11.14-12.14
83	I	Chrysene-d12	1.000	1.000	0.0	126	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	102	0.00	15.90-16.90
100	t	7,12-Dimethylbenz(a)an	0.590	0.702	-19.0	119	0.00	15.50-16.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Wed Feb 02 14:19:37 2011 MSP

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2378\P54979.D Vial: 2
Acq On : 22 Feb 2011 7:40 am Operator: ninap
Sample : cc2364-50 Inst : MSP
Misc : op48151,ep2378 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	63	-0.07	4.28- 5.28
2	t	1,4-Dioxane	0.972	0.886	8.8	53	-0.05	1.59- 2.59
3	t	Pyridine	2.170	1.956	9.9	56	-0.05	1.83- 2.83
4	t	N-Nitrosodimethylamine	1.471	1.397	5.0	56	-0.05	1.81- 2.81
5	S	2-Fluorophenol	1.691	1.634	3.4	57	-0.05	2.88- 3.88
6	t	Indene	2.078	1.997	3.9	62	-0.07	4.66- 5.66
7	t	Cumene	3.802	3.872	-1.8	65	-0.06	3.39- 4.39
8	S	Phenol-d5	2.126	2.101	1.2	59	-0.06	3.89- 4.89
9	t	Phenol	2.325	2.249	3.3	60	-0.06	3.91- 4.91
10	t	Aniline	2.393	2.036	14.9	52	-0.07	3.92- 4.92
11	t	bis(2-Chloroethyl)ethe	1.659	1.431	13.7	58	-0.07	3.98- 4.98
12	t	2-Chlorophenol	1.514	1.424	5.9	62	-0.06	4.07- 5.07
13	t	Decane	2.062	2.187	-6.1	70	-0.06	4.10- 5.10
14	t	1,3-Dichlorobenzene	1.788	1.678	6.2	63	-0.07	4.24- 5.24
15	t	1,4-Dichlorobenzene	1.601	1.551	3.1	63	-0.07	4.30- 5.30
16	t	Benzyl alcohol	0.971	1.041	-7.2	62	-0.07	4.49- 5.49
17	t	1,2-Dichlorobenzene	1.549	1.469	5.2	65	-0.08	4.55- 5.55
18	t	Acetophenone	2.052	2.185	-6.5	65	-0.07	4.85- 5.85
19	t	2-Methylphenol	1.255	1.200	4.4	60	-0.06	4.68- 5.68
20	t	2,2'-oxybis(1-Chloropr	0.505	0.465	7.9	62	-0.07	4.70- 5.70
21	t	3&4-Methylphenol	1.336	1.321	1.1	61	-0.06	4.88- 5.88
22	t	n-Nitroso-di-n-propyla	1.127	1.238	-9.8	70	-0.08	4.89- 5.89
23	t	Hexachloroethane	0.601	0.621	-3.3	69	-0.07	4.97- 5.97
24	I	Naphthalene-d8	1.000	1.000	0.0	63	-0.08	6.08- 7.08
25	S	Nitrobenzene-d5	0.504	0.550	-9.1	70	-0.07	5.07- 6.07
26	t	Nitrobenzene	0.212	0.191	9.9	60	-0.08	5.09- 6.09
27	t	Quinoline	0.738	0.743	-0.7	64	-0.08	6.63- 7.63
28	t	Isophorone	0.942	1.008	-7.0	68	-0.07	5.42- 6.42
29	t	2-Nitrophenol	0.235	0.245	-4.3	64	-0.08	5.55- 6.55
30	t	2,4-Dimethylphenol	0.413	0.425	-2.9	66	-0.07	5.63- 6.63
			True	Calc.	% Drift			
31		Benzoic Acid	50.000	55.234	-10.5	85	-0.04	5.85- 6.85
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)met	0.528	0.500	5.3	62	-0.07	5.76- 6.76
33	t	2,4-Dichlorophenol	0.340	0.342	-0.6	65	-0.07	5.91- 6.91
34		2,6-Dichlorophenol	0.314	0.329	-4.8	67	-0.08	6.25- 7.25
35	t	1,3,5-Trichlorobenzene	0.412	0.399	3.2	67	-0.08	5.56- 6.56
36	t	1,2,4-Trichlorobenzene	0.405	0.398	1.7	67	-0.08	6.02- 7.02
37	t	1,2,3-Trichlorobenzene	0.372	0.378	-1.6	69	-0.08	6.38- 7.38

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

38	t	Naphthalene	1.097	1.088	0.8	66	-0.08	6.10- 7.10
39	t	4-Chloroaniline	0.495	0.491	0.8	62	-0.07	6.24- 7.24
40	t	2,3-Dichloroaniline	0.399	0.405	-1.5	70	-0.08	7.67- 8.67
41	t	Caprolactam	0.235	0.265	-12.8	69	-0.07	6.72- 7.72
42	t	Hexachlorobutadiene	0.214	0.248	-15.9	79	-0.08	6.39- 7.39
43	t	4-Chloro-3-methylpheno	0.387	0.451	-16.5	70	-0.06	7.03- 8.03
44	t	2-Methylnaphthalene	0.876	0.867	1.0	66	-0.08	7.17- 8.17
45	t	1-Methylnaphthalene	0.844	0.815	3.4	66	-0.08	7.33- 8.33
46	t	Dimethylnaphthalene	0.718	0.758	-5.6	71	-0.08	8.16- 9.16
47	I	Acenaphthene-d10	1.000	1.000	0.0	70	-0.08	8.83- 9.83
48	t	Hexachlorocyclopentadi	0.302	0.325	-7.6	67	-0.08	7.53- 8.53
49	t	2,4,6-Trichlorophenol	0.407	0.411	-1.0	71	-0.08	7.67- 8.67
50	t	2,4,5-Trichlorophenol	0.419	0.408	2.6	71	-0.06	7.75- 8.75
51	S	2-Fluorobiphenyl	1.374	1.268	7.7	69	-0.08	7.79- 8.79
52	t	2-Chloronaphthalene	1.234	1.166	5.5	71	-0.07	7.93- 8.93
53	t	Biphenyl	1.636	1.514	7.5	71	-0.08	7.92- 8.92
54	t	2-Nitroaniline	0.469	0.555	-18.3	81	-0.07	8.16- 9.16
55	t	Dimethylphthalate	1.623	1.607	1.0	72	-0.08	8.51- 9.51
56	t	Acenaphthylene	2.034	1.873	7.9	68	-0.08	8.59- 9.59
57	t	2,6-Dinitrotoluene	0.210	0.252	-20.0#	87	-0.08	8.61- 9.61
58	t	3-Nitroaniline	0.353	0.355	-0.6	65	-0.08	8.82- 9.82
59	t	Acenaphthene	1.171	1.131	3.4	70	-0.08	8.88- 9.88
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	93.248	6.8	68	-0.06	8.99- 9.99
61	t	4-Nitrophenol	50.000	59.922	-19.8	82	-0.05	9.17-10.17
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.826	1.732	5.1	70	-0.07	9.14-10.14
63	t	2,4-Dinitrotoluene	0.417	0.428	-2.6	67	-0.07	9.23-10.23
64		2,3,4,6-Tetrachlorophe	0.348	0.392	-12.6	74	-0.07	9.43-10.43
65	t	Diethylphthalate	1.576	1.657	-5.1	74	-0.08	9.65-10.65
66	t	Fluorene	1.427	1.323	7.3	70	-0.08	9.69-10.69
67	t	4-Chlorophenyl-phenyle	0.668	0.630	5.7	71	-0.08	9.71-10.71
68	t	4-Nitroaniline	0.350	0.326	6.9	63	-0.08	9.82-10.82
69	I	Phenanthrene-d10	1.000	1.000	0.0	70	-0.08	11.15-12.15
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylph	50.000	49.855	0.3	69	-0.06	9.89-10.89
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.645	0.607	5.9	70	-0.08	9.92-10.92
72	t	1,2-Diphenylhydrazine	1.014	1.044	-3.0	75	-0.08	9.96-10.96
73	S	2,4,6-Tribromophenol	0.110	0.139	-26.4#	86	-0.08	10.11-11.11
74	t	4-Bromophenyl-phenylet	0.269	0.294	-9.3	77	-0.08	10.48-11.48
75	t	Hexachlorobenzene	0.298	0.310	-4.0	78	-0.07	10.70-11.70
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	118.284	-18.3	78	-0.07	10.99-11.99
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.106	1.066	3.6	70	-0.08	11.18-12.18
78	t	Anthracene	1.152	1.115	3.2	70	-0.08	11.24-12.24
79	t	Carbazole	1.164	1.137	2.3	68	-0.06	11.50-12.50
80	t	Di-n-butylphthalate	1.588	1.712	-7.8	71	-0.06	12.07-13.07
81	t	Fluoranthene	1.481	1.530	-3.3	73	-0.06	12.74-13.74
82	t	Octadecane	0.658	0.700	-6.4	73	-0.07	11.07-12.07

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

83	I	Chrysene-d12	1.000	1.000	0.0	78	-0.06	14.35-15.35
84	t	Pyrene	1.482	1.371	7.5	77	-0.06	13.01-14.01
85		Butyl stearate	0.490	0.434	11.4	70	-0.06	13.82-14.82
86	S	Terphenyl-d14	0.945	0.919	2.8	77	-0.06	13.21-14.21
87	t	Butylbenzylphthalate	0.720	0.766	-6.4	76	-0.06	13.79-14.79
88	t	Benzo[a]anthracene	1.287	1.196	7.1	76	-0.06	14.33-15.33
89	t	3,3'-Dichlorobenzidine	0.500	0.539	-7.8	79	-0.06	14.32-15.32
90	t	Chrysene	1.106	1.034	6.5	76	-0.06	14.38-15.38
91	t	bis(2-Ethylhexyl)phtha	0.773	0.817	-5.7	77	-0.06	14.42-15.42
92	I	Perylene-d12	1.000	1.000	0.0	80	-0.07	15.83-16.83
93	t	Di-n-octylphthalate	1.601	1.709	-6.7	74	-0.06	15.00-16.00
94	t	Benzo[b]fluoranthene	1.454	1.470	-1.1	80	-0.06	15.42-16.42
			True	Calc.	% Drift			
95	t	Benzo[k]fluoranthene	50.000	54.994	-10.0	81	-0.06	15.45-16.45
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.286	1.210	5.9	73	-0.07	15.77-16.77
97	t	Indeno[1,2,3-cd]pyrene	1.448	1.463	-1.0	81	-0.10	17.19-18.19
98	t	Dibenz(a,h)acridine	1.111	1.140	-2.6	78	-0.09	16.86-17.86
99	t	Dibenz[a,h]anthracene	1.162	1.219	-4.9	84	-0.10	17.20-18.20
100	t	7,12-Dimethylbenz(a)an	0.590	0.616	-4.4	81	-0.07	15.43-16.43
101	t	Benzo[g,h,i]perylene	1.244	1.277	-2.7	81	-0.10	17.58-18.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 22 08:07:51 2011 MSP

7.7.14

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2339
Lab FileID: P54980.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2378\P54980.D Vial: 3
Acq On : 22 Feb 2011 8:08 am Operator: ninap
Sample : cc2339-25 Inst : MSP
Misc : op48151,ep2378, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	47	-0.07	4.28- 5.28
103	Benzaldehyde	0.863	0.925	-7.2	51	-0.06	3.76- 4.76
104	Phenanthrene-d10a	1.000	1.000	0.0	54	-0.08	11.14-12.14
105	Atrazine	0.133	0.136	-2.3	53	0.04	10.83-11.83
106	Acenaphthene-d10a	1.000	1.000	0.0	51	-0.09	8.83- 9.83
107	1,2,4,5-Tetrachloroben	0.630	0.603	4.3	50	0.05	7.49- 8.49
108	Chrysene-d12a	1.000	1.000	0.0	57	-0.06	14.35-15.35
109	Benzidine	0.550	0.579	-5.3	53	0.03	12.92-13.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54695.D MP2364.M Tue Feb 22 09:55:25 2011 MSP

7.7.15

7

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 22 12:49:12 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	152671	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	540381	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	330608	40.00	ppb	-0.08
69) Phenanthrene-d10	11.64	188	579415	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	652840	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	548258	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	152671	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	579415	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	330608	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	652840	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	261321	38.38	ppb	-0.07
Spiked Amount 50.000			Recovery =	76.76%		
51) 2-Fluorobiphenyl	8.29	172	389860	34.34	ppb	-0.08
Spiked Amount 50.000			Recovery =	68.68%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	347883	22.55	ppb	-0.06
Spiked Amount 50.000			Recovery =	45.10%		

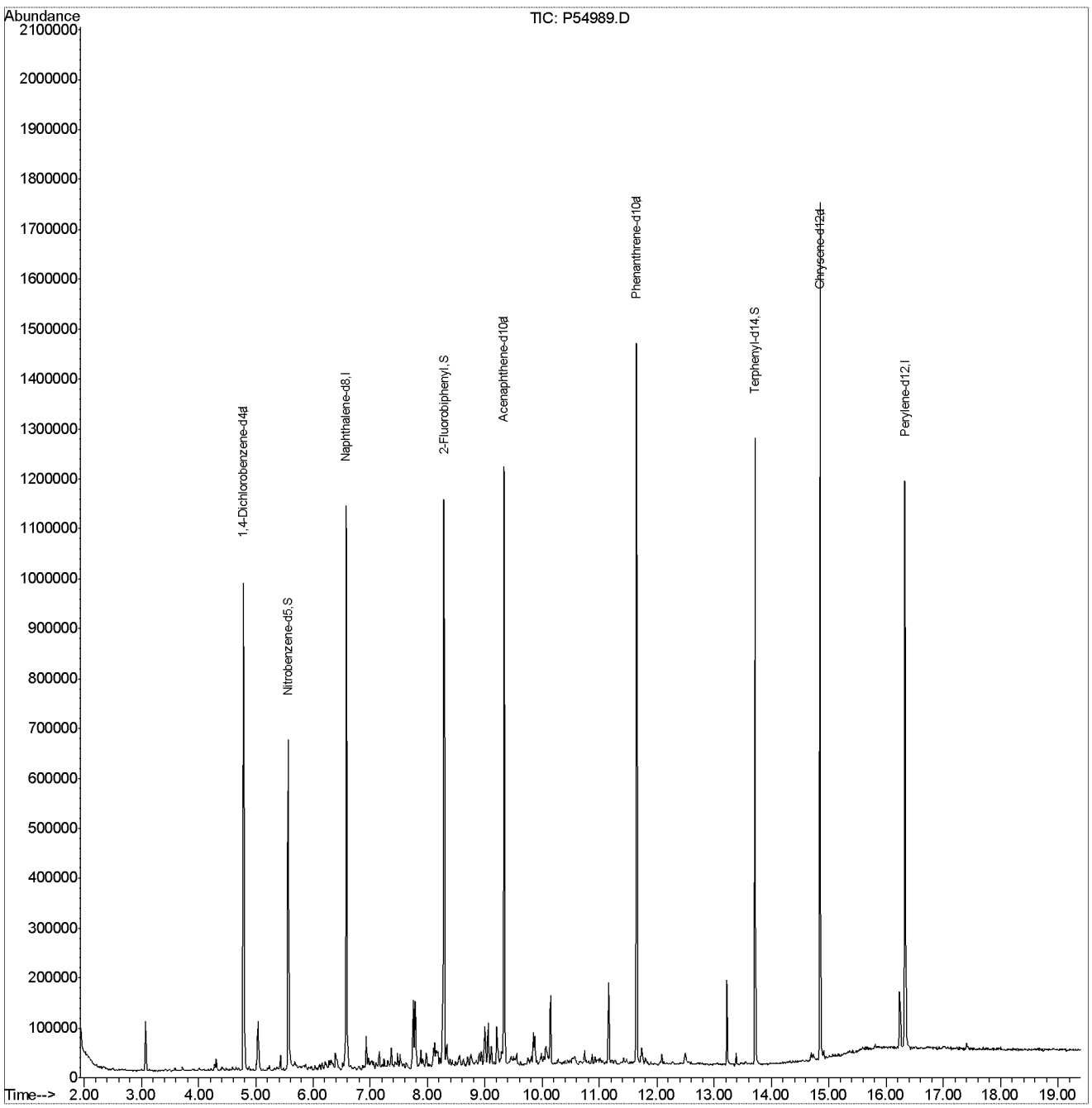
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 22 12:49:12 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.507	101	108	112	rVB10	5720	12481	0.73%	0.075%
2	3.067	209	213	221	rBV	99568	119424	6.98%	0.718%
3	3.580	305	309	314	rVB8	7208	11660	0.68%	0.070%
4	3.719	328	335	340	rVB2	8496	12302	0.72%	0.074%
5	4.275	435	439	442	rBV4	13145	17197	1.01%	0.103%
6	4.307	442	445	457	rVB	23375	30189	1.77%	0.182%
7	4.398	457	462	474	rBV	6927	17323	1.01%	0.104%
8	4.782	524	534	548	rBV	977494	1173315	68.60%	7.057%
9	4.873	548	551	558	rVB9	8416	13096	0.77%	0.079%
10	5.033	572	581	594	rVB2	98468	161599	9.45%	0.972%
11	5.231	614	618	623	rVB5	10421	13940	0.82%	0.084%
12	5.365	639	643	649	rVV8	6707	15075	0.88%	0.091%
13	5.429	649	655	659	rVV	30494	41239	2.41%	0.248%
14	5.562	671	680	695	rBV	661717	851581	49.79%	5.122%
15	5.680	698	702	713	rVB9	12384	25264	1.48%	0.152%
16	5.872	734	738	743	rVB7	9966	13682	0.80%	0.082%
17	6.032	762	768	776	rBV7	10191	16147	0.94%	0.097%
18	6.107	776	782	787	rBV9	11162	16039	0.94%	0.096%
19	6.161	787	792	796	rBV6	13533	19481	1.14%	0.117%
20	6.209	796	801	811	rBV9	13846	30440	1.78%	0.183%
21	6.278	811	814	816	rBV3	14812	15746	0.92%	0.095%
22	6.305	817	819	831	rVV9	19343	48424	2.83%	0.291%
23	6.390	831	835	851	rVB7	32192	76054	4.45%	0.457%
24	6.508	853	857	860	rBV3	14502	18463	1.08%	0.111%
25	6.572	860	869	881	rVB	1126124	1399003	81.80%	8.414%
26	6.722	893	897	904	rVB10	4986	12126	0.71%	0.073%
27	6.791	904	910	919	rBV10	8067	15410	0.90%	0.093%
28	6.925	930	935	940	rBV5	62945	85046	4.97%	0.512%
29	6.967	940	943	946	rVB3	16543	16015	0.94%	0.096%
30	7.021	947	953	956	rVV7	11933	22653	1.32%	0.136%
31	7.047	956	958	963	rVB5	13964	15661	0.92%	0.094%
32	7.096	963	967	971	rBV7	13573	18696	1.09%	0.112%
33	7.149	973	977	984	rVB7	31173	45152	2.64%	0.272%
34	7.240	990	994	1002	rBV6	16851	22812	1.33%	0.137%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.304	1002	1006	1010	rVV4	12668	17049	1.00%	0.103%
36	7.363	1012	1017	1021	rBV3	36788	39112	2.29%	0.235%
37	7.432	1026	1030	1034	rBV7	10913	17572	1.03%	0.106%
38	7.469	1034	1037	1042	rVV3	28087	35043	2.05%	0.211%
39	7.518	1042	1046	1054	rVV6	27871	48637	2.84%	0.293%
40	7.582	1054	1058	1061	rVB6	9362	13097	0.77%	0.079%
41	7.624	1062	1066	1074	rVB10	11958	21137	1.24%	0.127%
42	7.742	1080	1088	1092	rBV4	136926	213200	12.47%	1.282%
43	7.779	1092	1095	1105	rVB2	130940	178959	10.46%	1.076%
44	7.875	1107	1113	1116	rBV3	31633	36085	2.11%	0.217%
45	7.913	1117	1120	1126	rVB3	16193	21900	1.28%	0.132%
46	7.972	1126	1131	1136	rBV4	27921	42335	2.48%	0.255%
47	8.100	1148	1155	1157	rBV2	38368	55467	3.24%	0.334%
48	8.121	1157	1159	1162	rVV	47920	54935	3.21%	0.330%
49	8.148	1162	1164	1173	rVB5	29307	69045	4.04%	0.415%
50	8.217	1174	1177	1180	rVV3	17720	21530	1.26%	0.129%
51	8.281	1180	1189	1195	rVV	1136041	1504781	87.99%	9.050%
52	8.330	1195	1198	1206	rVV3	43888	60564	3.54%	0.364%
53	8.388	1206	1209	1212	rVB3	13137	12943	0.76%	0.078%
54	8.426	1212	1216	1223	rVB10	13372	20242	1.18%	0.122%
55	8.485	1223	1227	1232	rBV7	9803	14066	0.82%	0.085%
56	8.554	1232	1240	1246	rBV7	20523	43931	2.57%	0.264%
57	8.618	1247	1252	1258	rVB9	15193	24327	1.42%	0.146%
58	8.693	1262	1266	1272	rVB7	16981	23760	1.39%	0.143%
59	8.752	1272	1277	1287	rBV5	23227	44330	2.59%	0.267%
60	8.891	1299	1303	1308	rBV8	21701	32568	1.90%	0.196%
61	8.933	1308	1311	1316	rVB3	27481	35341	2.07%	0.213%
62	8.992	1316	1322	1329	rBV2	77211	123611	7.23%	0.743%
63	9.051	1329	1333	1339	rVV	82675	97884	5.72%	0.589%
64	9.110	1339	1344	1350	rVV	36362	45523	2.66%	0.274%
65	9.206	1357	1362	1370	rBV2	74519	126501	7.40%	0.761%
66	9.286	1371	1377	1380	rVV8	24448	45572	2.66%	0.274%
67	9.329	1380	1385	1397	rVB	1197878	1509344	88.25%	9.078%
68	9.451	1403	1408	1411	rBV7	11470	15786	0.92%	0.095%
69	9.548	1422	1426	1430	rVB4	19510	23645	1.38%	0.142%
70	9.751	1459	1464	1468	rBV8	13383	22002	1.29%	0.132%
71	9.804	1469	1474	1477	rVV5	15515	20093	1.17%	0.121%

LSC Area Percent Report

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Acq On : 22 Feb 2011 12:26 pm
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Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
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Start Thrs: 0.05 Max Peaks: 100
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Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	9.841	1477	1481	1484	rVV3	60967	85100	4.98%	0.512%
73	9.868	1484	1486	1491	rVB3	53154	57608	3.37%	0.346%
74	9.980	1498	1507	1512	rBV3	19704	44384	2.60%	0.267%
75	10.023	1512	1515	1518	rBV4	10163	12331	0.72%	0.074%
76	10.060	1518	1522	1528	rVV4	28045	47288	2.76%	0.284%
77	10.141	1533	1537	1547	rVB	138524	177422	10.37%	1.067%
78	10.274	1558	1562	1575	rVB	11567	24502	1.43%	0.147%
79	10.525	1606	1609	1611	rBV4	10544	12564	0.73%	0.076%
80	10.734	1643	1648	1651	rBV3	24342	26581	1.55%	0.160%
81	10.862	1668	1672	1677	rVB7	17430	22346	1.31%	0.134%
82	10.915	1678	1682	1686	rBV7	10634	12499	0.73%	0.075%
83	11.150	1721	1726	1733	rBV	163389	191909	11.22%	1.154%
84	11.262	1744	1747	1759	rVB	8907	16170	0.95%	0.097%
85	11.417	1772	1776	1782	rVB8	9093	13958	0.82%	0.084%
86	11.471	1783	1786	1792	rVB7	10757	16385	0.96%	0.099%
87	11.642	1811	1818	1829	rVB2	1440751	1641262	95.97%	9.871%
88	11.738	1829	1836	1843	rVB5	32386	59123	3.46%	0.356%
89	11.797	1843	1847	1854	rBV7	13519	22650	1.32%	0.136%
90	12.053	1890	1895	1897	rBV6	7425	12035	0.70%	0.072%
91	12.080	1897	1900	1906	rVB2	20010	24977	1.46%	0.150%
92	12.491	1971	1977	1985	rBV2	20938	50414	2.95%	0.303%
93	13.218	2108	2113	2124	rBV	171693	197380	11.54%	1.187%
94	13.378	2139	2143	2153	rVB9	22878	27603	1.61%	0.166%
95	13.709	2200	2205	2219	rBV	1254499	1250126	73.10%	7.519%
96	14.692	2386	2389	2393	rBV5	16416	22885	1.34%	0.138%
97	14.847	2411	2418	2427	rBV	1717754	1710258	100.00%	10.286%
98	14.911	2428	2430	2434	rVB2	14172	12946	0.76%	0.078%
99	16.236	2673	2678	2688	rBV	113178	169954	9.94%	1.022%
100	16.327	2688	2695	2713	rVB	1138503	1509282	88.25%	9.078%

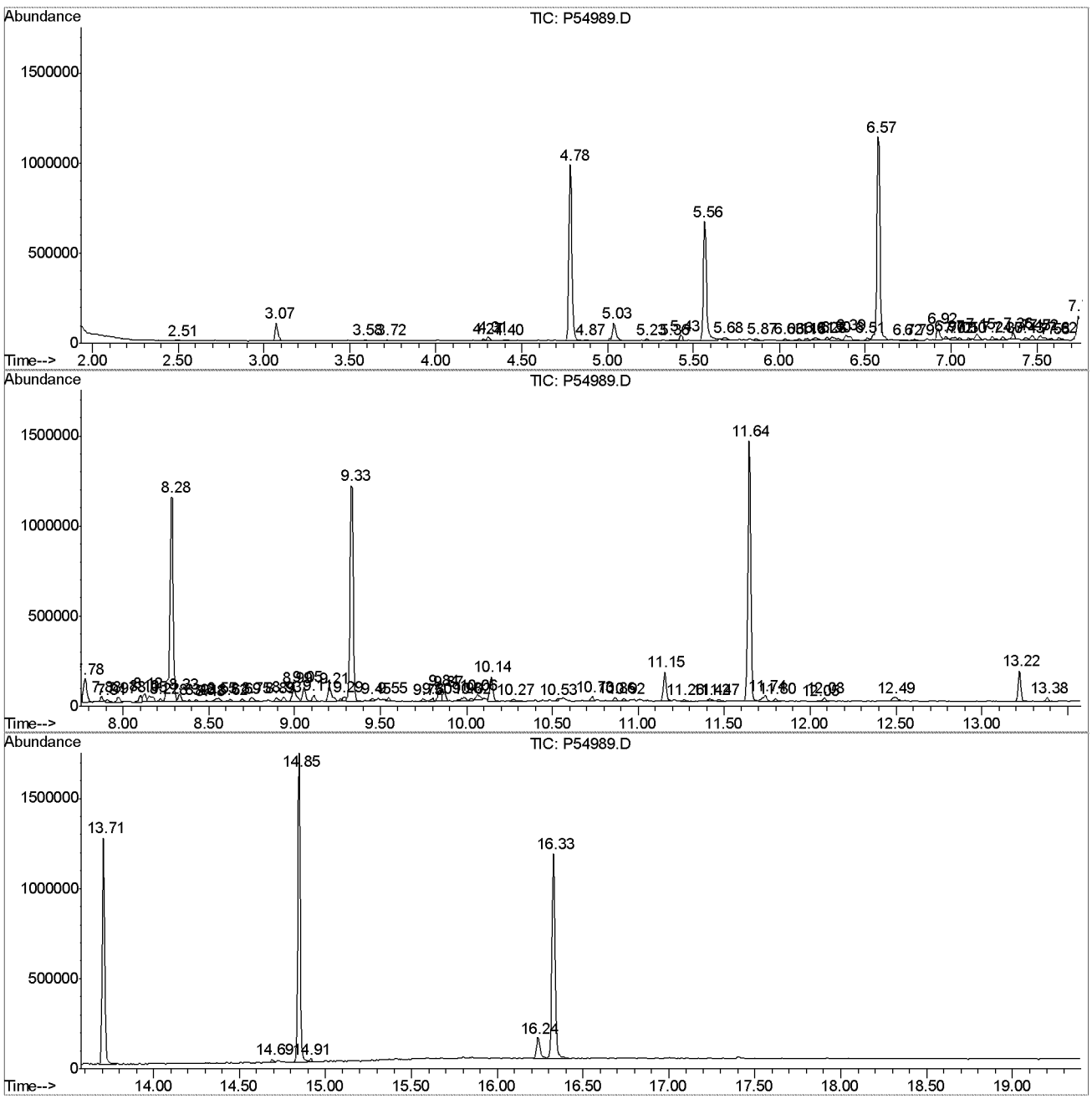
Sum of corrected areas: 16626594

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

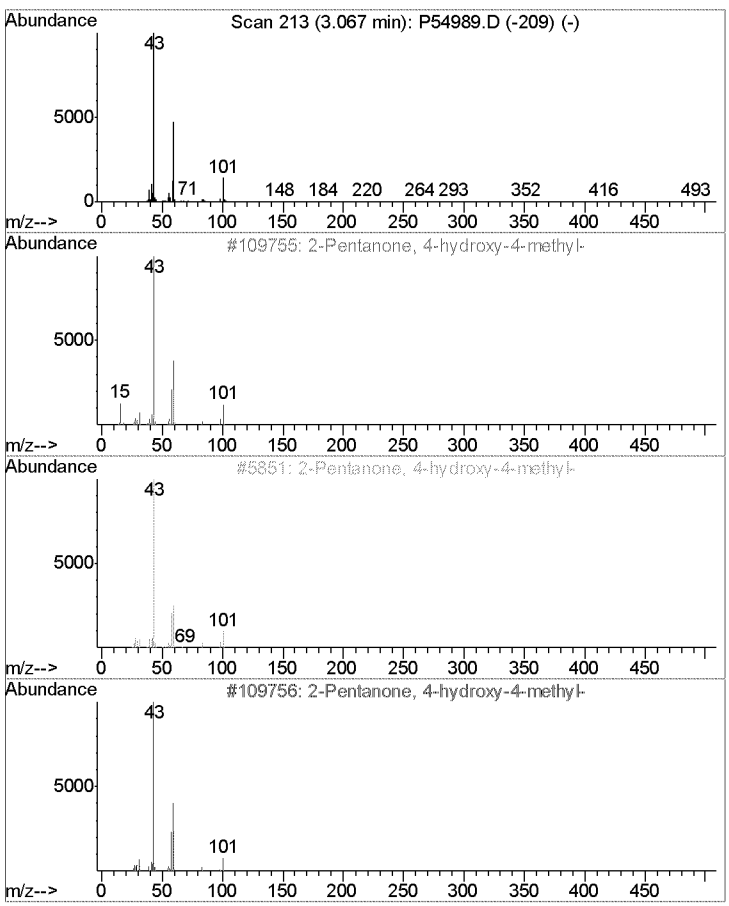
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

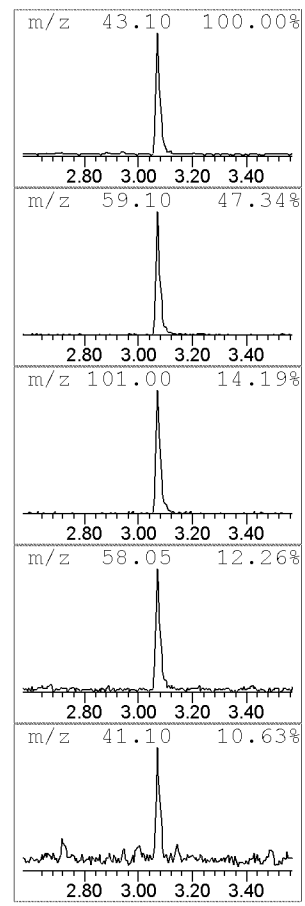
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.07 ppb	119424	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	25
5	1-Propanamine	59	C3H9N	000107-10-8	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

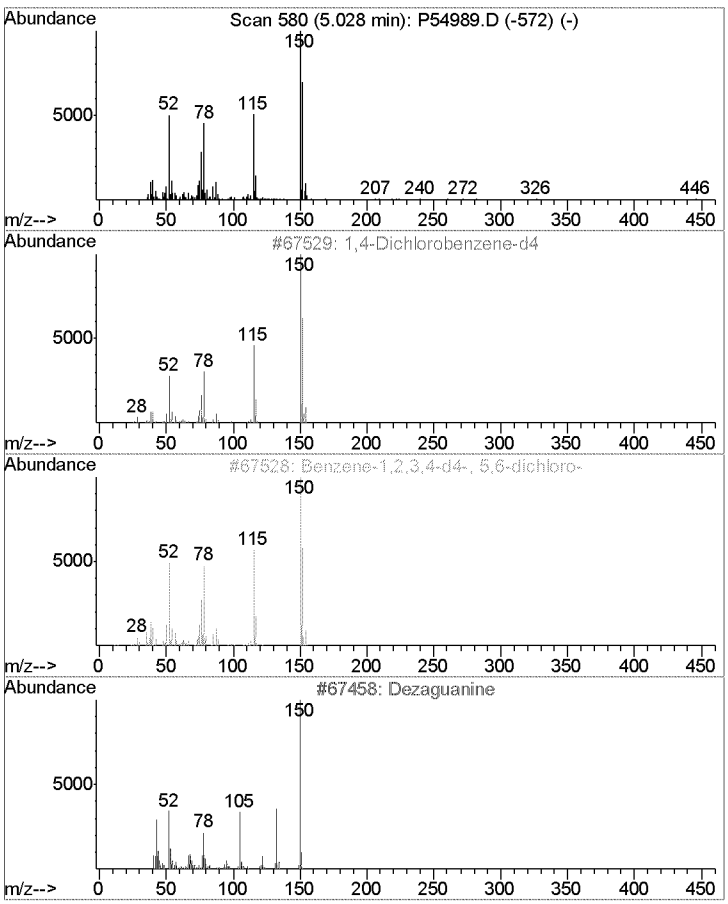
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

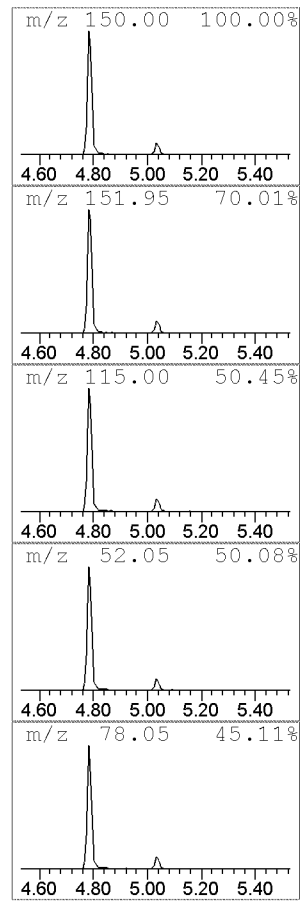
****

Peak Number 2 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.87 ppb	142985	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	94
2	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
3	Dezaguanine	150	C6H6N4O	041729-52-6	28
4	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
5	Cyclobuta[1,2-A:3,4-A']diindene,...	300	C18H14Cl2	110848-73-2	12





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

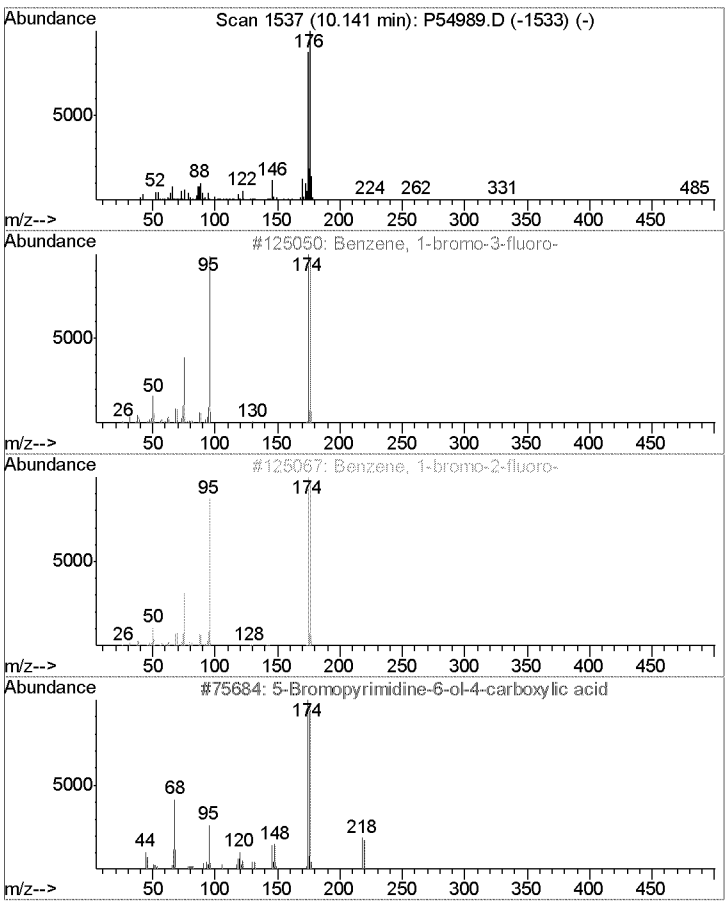
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

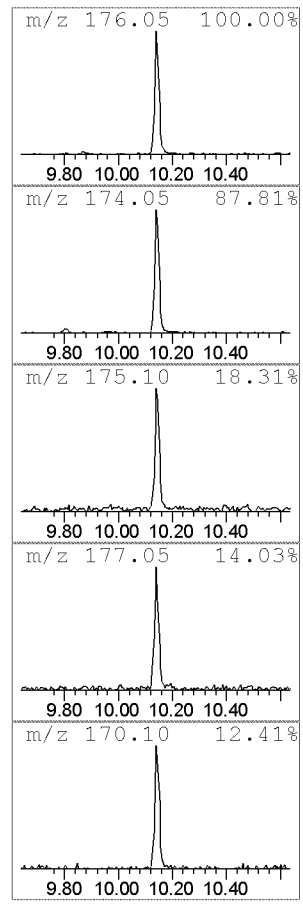
****

Peak Number 3 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.70 ppb	177422	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	64
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	50
3	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	39
4	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	35
5	Phenol, 4-[(5,6,7,8-tetrahydro-1...	283	C17H17NO3	034168-00-8	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
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Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

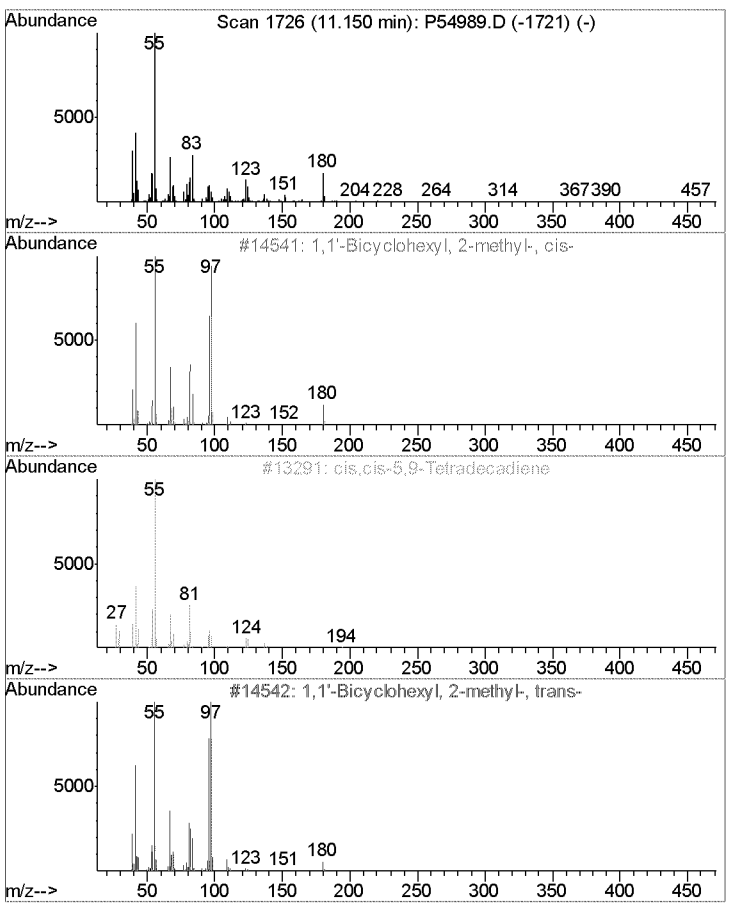
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

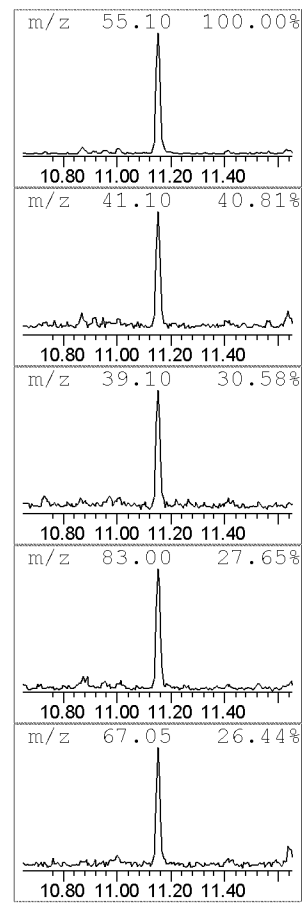
****

Peak Number 4 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.15	4.68 ppb	191909	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Bicyclohexyl, 2-methyl-, cis-	180	C13H24	050991-08-7	46
2	cis,cis-5,9-Tetradecadiene	194	C14H26	051255-62-0	43
3	1,1'-Bicyclohexyl, 2-methyl-, tr...	180	C13H24	050991-09-8	43
4	Cyclohexanemethanol	114	C7H14O	000100-49-2	38
5	1-Cyclohexylheptene	180	C13H24	114614-83-4	38





Library Search Compound Report

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Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

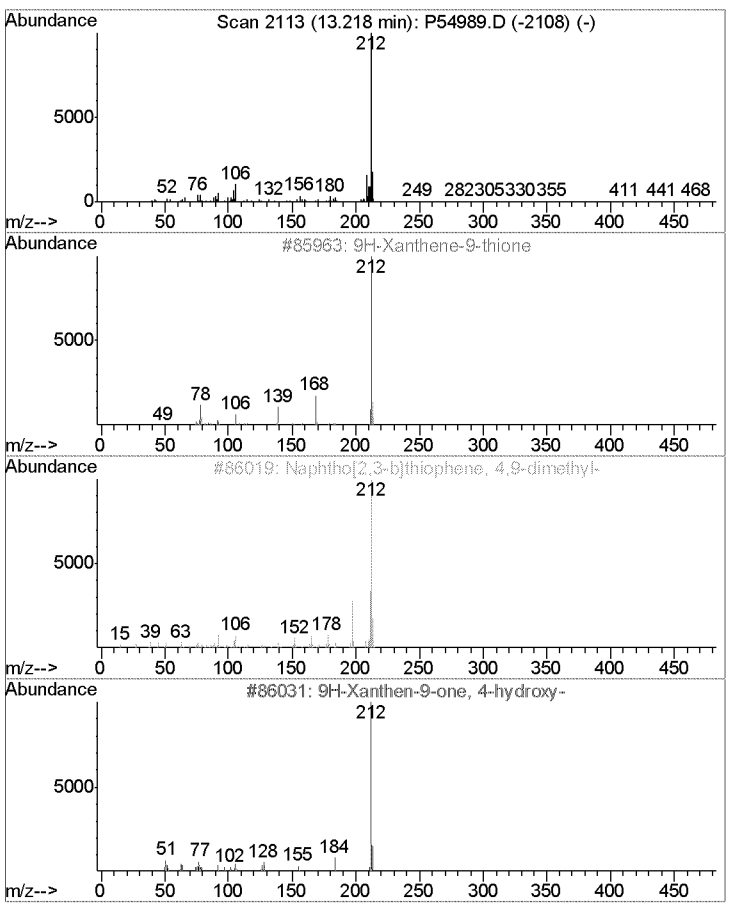
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

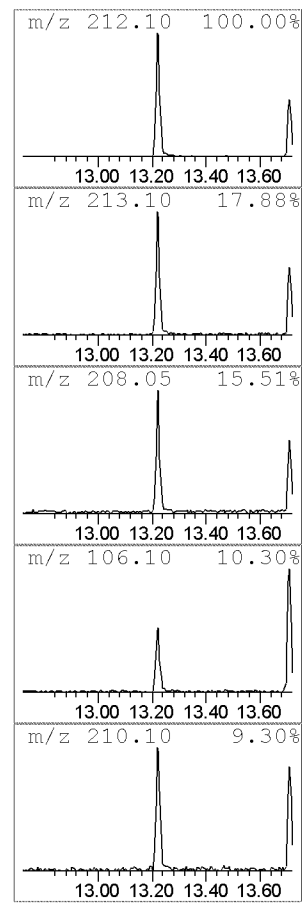
****

Peak Number 5 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.81 ppb	197380	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	53
4	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	47
5	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	45





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

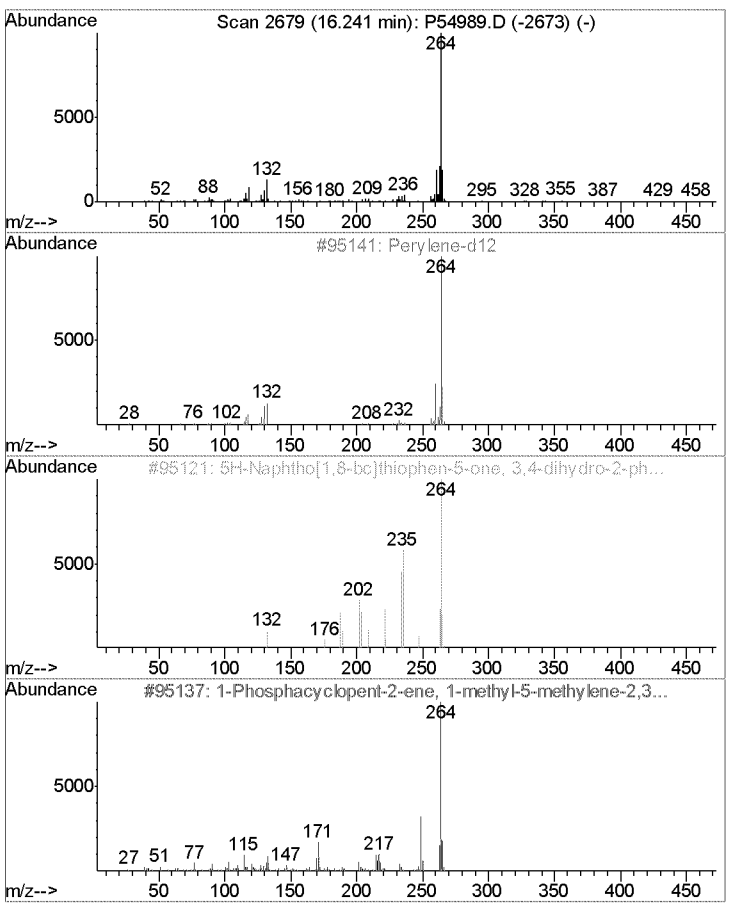
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

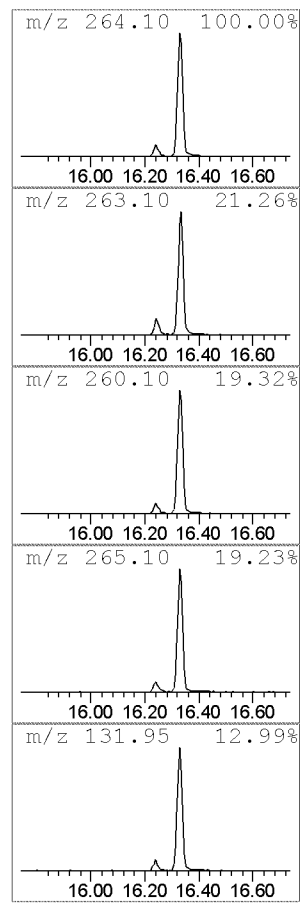
****

Peak Number 6 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.50 ppb	169954	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	93
2	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	53
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	53
5	Naphtho[2,1-b]furan-2,8-dione, d...	264	C16H24O3	029065-00-7	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.1	ppb	119424	1	4.78	1173320	40.0
Internal standard...	5.03	4.9	ppb	142985	2	4.78	1173320	40.0
Internal standard...	10.14	4.7	ppb	177422	5	9.33	1509340	40.0
unknown	11.15	4.7	ppb	191909	6	11.64	1641260	40.0
Internal standard...	13.22	4.8	ppb	197380	7	11.64	1641260	40.0
Internal standard...	16.24	4.5	ppb	169954	10	16.33	1509280	40.0

8.1.2
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:18:25 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	144025	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	504955	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	290881	40.00	ppb	-0.08
69) Phenanthrene-d10	11.65	188	461733	40.00	ppb	-0.07
83) Chrysene-d12	14.85	240	569067	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	503336	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	144025	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.65	188	461733	40.00	ppb	-0.07
106) Acenaphthene-d10a	9.33	164	290881	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	569067	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	241442	37.95	ppb	-0.07
Spiked Amount 50.000			Recovery =	75.90%		
51) 2-Fluorobiphenyl	8.29	172	360116	36.05	ppb	-0.08
Spiked Amount 50.000			Recovery =	72.10%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	241505	17.96	ppb	-0.06
Spiked Amount 50.000			Recovery =	35.92%		

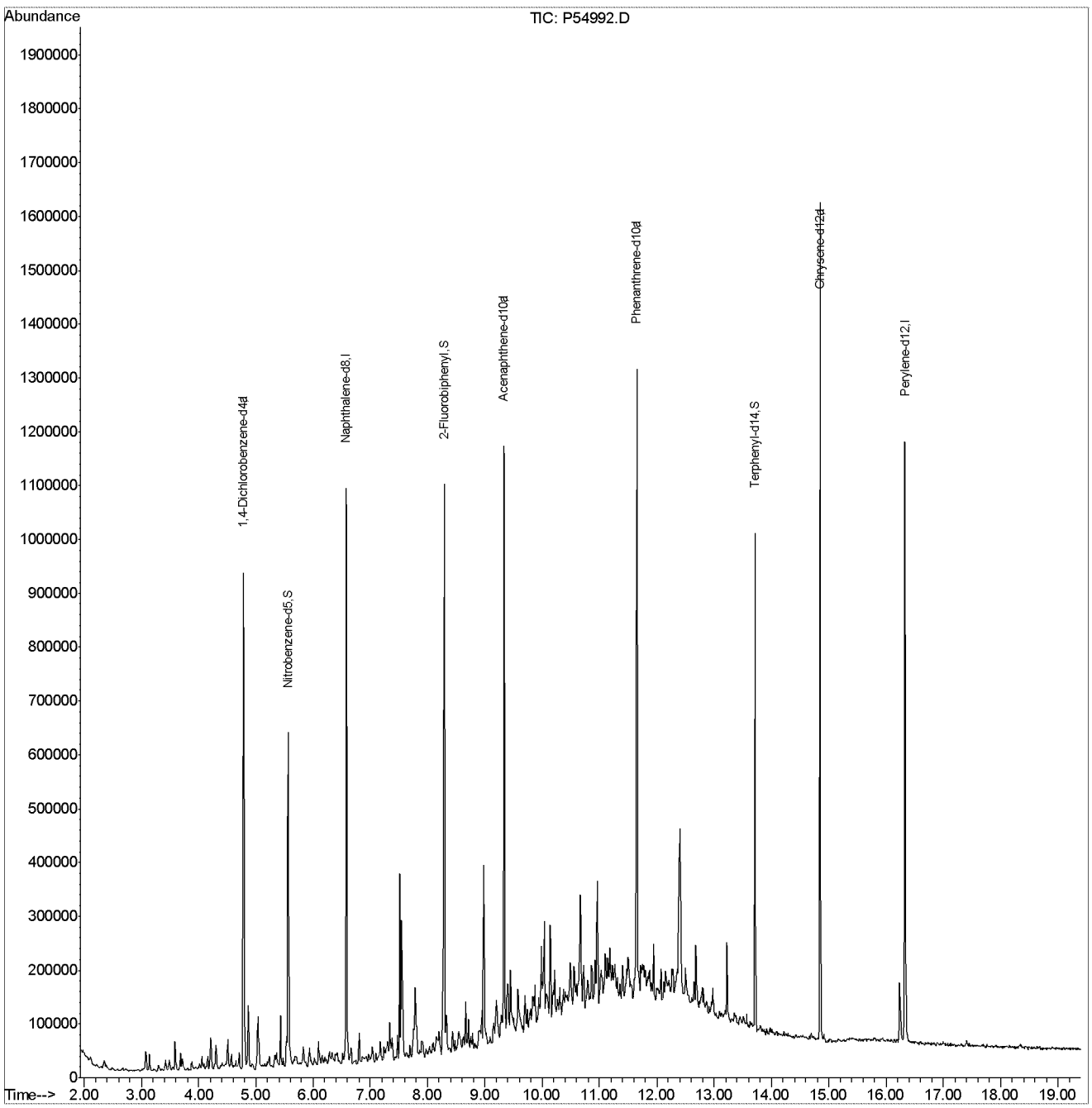
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:18:25 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.073	204	214	221	rVV3	34797	58778	3.91%	0.280%
2	3.137	223	226	234	rVB	31588	40291	2.68%	0.192%
3	3.420	274	279	285	rBV3	19921	27841	1.85%	0.133%
4	3.484	285	291	298	rVV5	20342	29744	1.98%	0.142%
5	3.586	306	310	322	rVB2	53036	74189	4.93%	0.354%
6	3.682	322	328	331	rBV	31349	38842	2.58%	0.185%
7	3.714	331	334	344	rVB2	21051	32285	2.15%	0.154%
8	3.879	358	365	372	rBV2	16937	27565	1.83%	0.131%
9	4.152	409	416	421	rBV2	24256	35630	2.37%	0.170%
10	4.205	421	426	435	rVB2	57929	87371	5.81%	0.417%
11	4.302	435	444	452	rBV5	44230	87015	5.78%	0.415%
12	4.505	477	482	488	rVV3	52341	70997	4.72%	0.339%
13	4.569	488	494	501	rVB2	24603	34843	2.32%	0.166%
14	4.702	513	519	526	rVB2	30262	44063	2.93%	0.210%
15	4.782	526	534	543	rBV	921893	1116635	74.22%	5.326%
16	4.862	544	549	559	rVV	113233	140613	9.35%	0.671%
17	4.932	559	562	572	rVB8	12206	27857	1.85%	0.133%
18	5.033	572	581	594	rBV2	99102	201421	13.39%	0.961%
19	5.231	615	618	624	rVB5	19853	26545	1.76%	0.127%
20	5.327	632	636	638	rBV2	24647	28438	1.89%	0.136%
21	5.354	638	641	650	rVV4	29187	56271	3.74%	0.268%
22	5.429	650	655	660	rVV2	96119	118830	7.90%	0.567%
23	5.562	669	680	694	rBV	620994	871932	57.95%	4.159%
24	5.685	700	703	713	rVB8	15135	34748	2.31%	0.166%
25	5.824	725	729	743	rVB5	36112	70542	4.69%	0.336%
26	5.936	743	750	761	rBV7	35308	74016	4.92%	0.353%
27	6.091	775	779	787	rBV3	43948	72073	4.79%	0.344%
28	6.284	810	815	819	rBV5	19987	30914	2.05%	0.147%
29	6.321	819	822	831	rVB10	18384	36593	2.43%	0.175%
30	6.572	861	869	880	rVV	1068900	1337654	88.91%	6.381%
31	6.657	880	885	891	rVB7	29671	45464	3.02%	0.217%
32	6.796	906	911	918	rBV3	57626	85320	5.67%	0.407%
33	7.031	950	955	962	rVB7	28805	54762	3.64%	0.261%
34	7.170	971	981	988	rVB10	37228	76856	5.11%	0.367%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.240	989	994	997	rBV4	23912	33798	2.25%	0.161%
36	7.299	998	1005	1008	rVV6	36286	89622	5.96%	0.428%
37	7.336	1008	1012	1016	rVV3	71606	109445	7.27%	0.522%
38	7.373	1016	1019	1026	rVB	43481	57947	3.85%	0.276%
39	7.469	1027	1037	1040	rBV	47782	67107	4.46%	0.320%
40	7.512	1040	1045	1048	rBV	343152	408777	27.17%	1.950%
41	7.544	1048	1051	1062	rVB	251306	323428	21.50%	1.543%
42	7.779	1083	1095	1107	rBV5	130451	336221	22.35%	1.604%
43	7.897	1114	1117	1126	rVB6	30656	59919	3.98%	0.286%
44	7.966	1126	1130	1137	rBV9	15644	33203	2.21%	0.158%
45	8.153	1161	1165	1169	rBV6	19231	34664	2.30%	0.165%
46	8.196	1170	1173	1181	rVB6	43753	72552	4.82%	0.346%
47	8.287	1181	1190	1194	rBV	1060324	1390175	92.40%	6.631%
48	8.324	1195	1197	1202	rVB2	65684	74058	4.92%	0.353%
49	8.431	1211	1217	1222	rBV7	39499	72441	4.81%	0.346%
50	8.538	1232	1237	1247	rVB7	30571	78584	5.22%	0.375%
51	8.655	1256	1259	1265	rVV	81743	94507	6.28%	0.451%
52	8.709	1265	1269	1273	rVV2	52547	63491	4.22%	0.303%
53	8.746	1273	1276	1280	rVV4	22998	26891	1.79%	0.128%
54	8.784	1280	1283	1286	rVB3	29191	31473	2.09%	0.150%
55	8.896	1298	1304	1309	rBV10	34155	95641	6.36%	0.456%
56	8.939	1309	1312	1315	rVV3	57535	61648	4.10%	0.294%
57	8.976	1315	1319	1325	rVV2	322025	395475	26.29%	1.886%
58	9.152	1347	1352	1355	rBV5	36292	58509	3.89%	0.279%
59	9.195	1355	1360	1370	rVB5	74289	187476	12.46%	0.894%
60	9.286	1370	1377	1380	rBV6	43048	86055	5.72%	0.410%
61	9.329	1380	1385	1391	rVV	1086860	1339718	89.05%	6.391%
62	9.398	1391	1398	1402	rVV4	82848	156879	10.43%	0.748%
63	9.446	1402	1407	1414	rVV3	103733	160382	10.66%	0.765%
64	9.574	1427	1431	1444	rVB3	74302	154391	10.26%	0.736%
65	9.697	1449	1454	1458	rBV4	64682	86140	5.73%	0.411%
66	9.735	1458	1461	1465	rVB4	34853	45051	2.99%	0.215%
67	9.831	1475	1479	1483	rBV7	43812	80938	5.38%	0.386%
68	9.868	1483	1486	1491	rVB4	68887	89782	5.97%	0.428%
69	9.938	1496	1499	1502	rBV5	41873	47710	3.17%	0.228%
70	9.980	1502	1507	1511	rBV3	118465	174807	11.62%	0.834%
71	10.028	1512	1516	1520	rVB2	164575	211910	14.08%	1.011%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.135	1532	1536	1541	rVB2	173139	236775	15.74%	1.129%
73	10.189	1542	1546	1547	rBV4	45493	57881	3.85%	0.276%
74	10.210	1548	1550	1556	rVB4	78458	91233	6.06%	0.435%
75	10.301	1564	1567	1573	rVB7	52494	74930	4.98%	0.357%
76	10.365	1575	1579	1582	rBV5	42504	61023	4.06%	0.291%
77	10.488	1599	1602	1610	rVB6	79273	136527	9.07%	0.651%
78	10.552	1610	1614	1619	rBV6	71868	120192	7.99%	0.573%
79	10.664	1630	1635	1640	rVB3	199475	277935	18.47%	1.326%
80	10.718	1641	1645	1650	rVB4	79120	105437	7.01%	0.503%
81	10.787	1655	1658	1664	rVB6	38390	59531	3.96%	0.284%
82	10.856	1668	1671	1677	rVB7	61923	99847	6.64%	0.476%
83	10.921	1679	1683	1686	rBV4	66820	99905	6.64%	0.477%
84	10.958	1686	1690	1695	rVB2	228529	279230	18.56%	1.332%
85	11.022	1698	1702	1710	rBV9	45737	90951	6.05%	0.434%
86	11.097	1712	1716	1722	rBV7	59325	96617	6.42%	0.461%
87	11.177	1729	1731	1735	rVB4	60627	59334	3.94%	0.283%
88	11.396	1768	1772	1778	rBV9	62295	85658	5.69%	0.409%
89	11.647	1812	1819	1829	rVB	1155803	1472159	97.85%	7.022%
90	11.717	1829	1832	1834	rBV2	48290	54682	3.63%	0.261%
91	11.936	1870	1873	1881	rVB2	103040	117702	7.82%	0.561%
92	12.064	1895	1897	1902	rVB3	57489	67818	4.51%	0.323%
93	12.400	1953	1960	1972	rVB3	307100	685595	45.57%	3.270%
94	12.497	1975	1978	1995	rVB10	64440	137141	9.12%	0.654%
95	12.678	2009	2012	2021	rVB2	116846	162332	10.79%	0.774%
96	13.218	2110	2113	2125	rVB	150541	195612	13.00%	0.933%
97	13.709	2201	2205	2213	rVB	924412	873249	58.04%	4.165%
98	14.847	2412	2418	2427	rVB	1556047	1504521	100.00%	7.177%
99	16.236	2673	2678	2688	rBV	110961	164654	10.94%	0.785%
100	16.327	2688	2695	2719	rVB	1118317	1407797	93.57%	6.715%

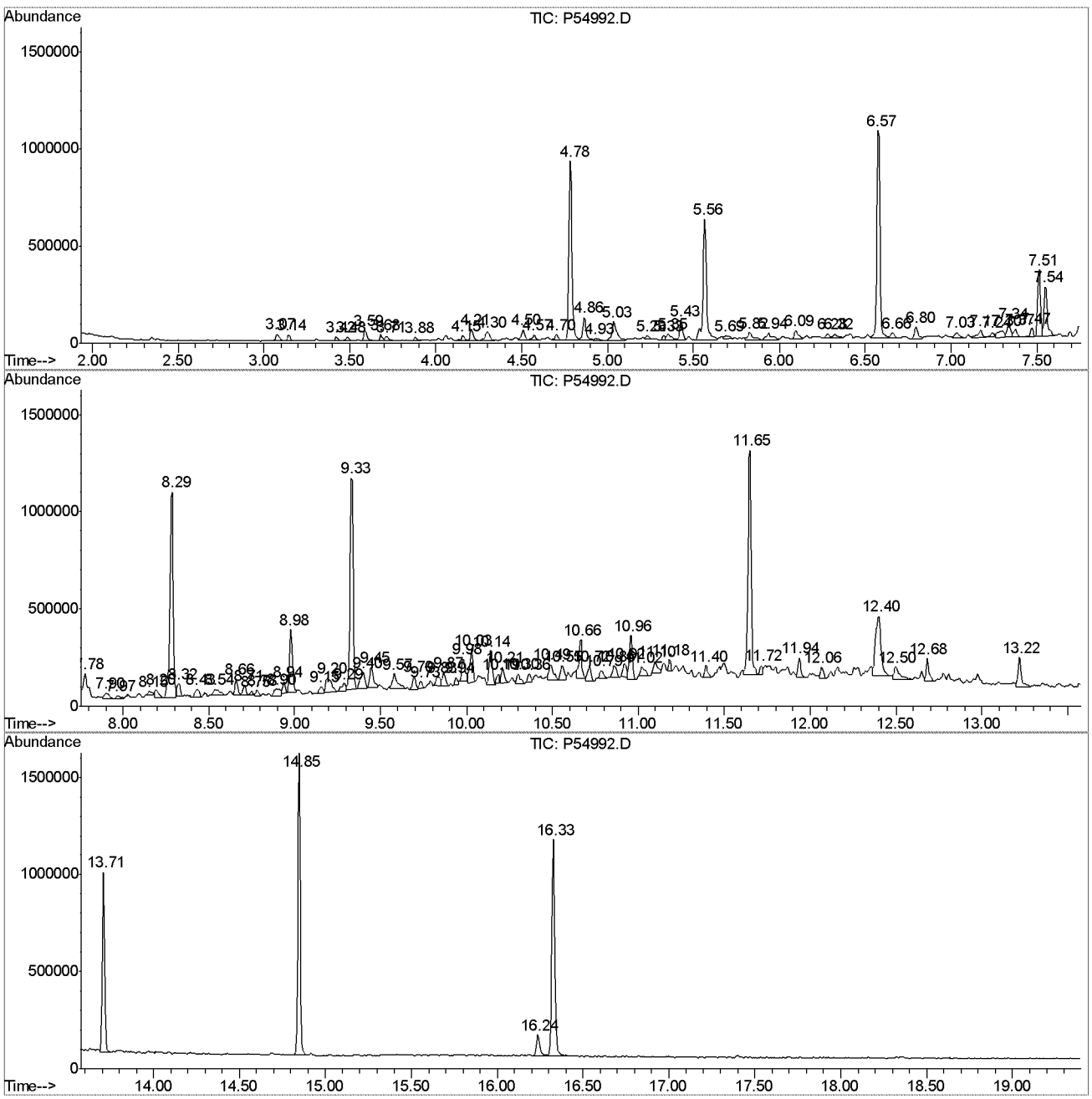
Sum of corrected areas: 20964021

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

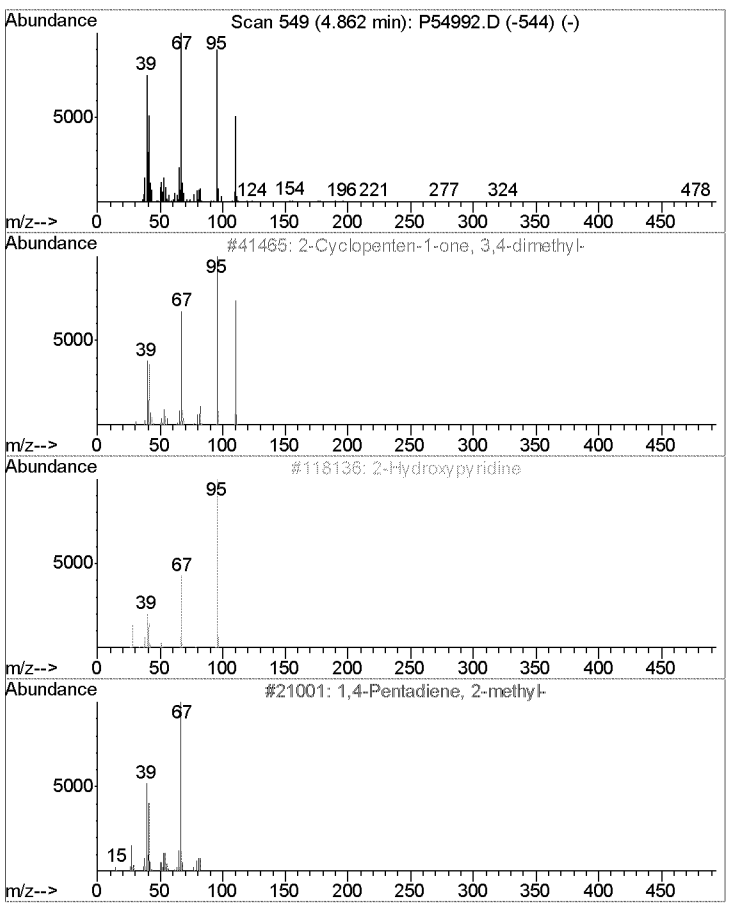
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

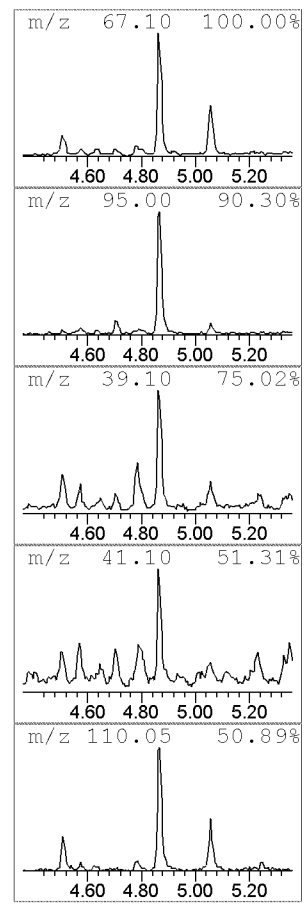
****

Peak Number 1 cycloalkane/alkene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	5.04 ppb	140613	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4-dimethyl-	110	C7H10O	030434-64-1	91
2	2-Hydroxypyridine	95	C5H5NO	000142-08-5	80
3	1,4-Pentadiene, 2-methyl-	82	C6H10	000763-30-4	76
4	1,5-Hexadiene	82	C6H10	000592-42-7	62
5	1,4-Hexadiene, 2,3-dimethyl-	110	C8H14	018669-52-8	59





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

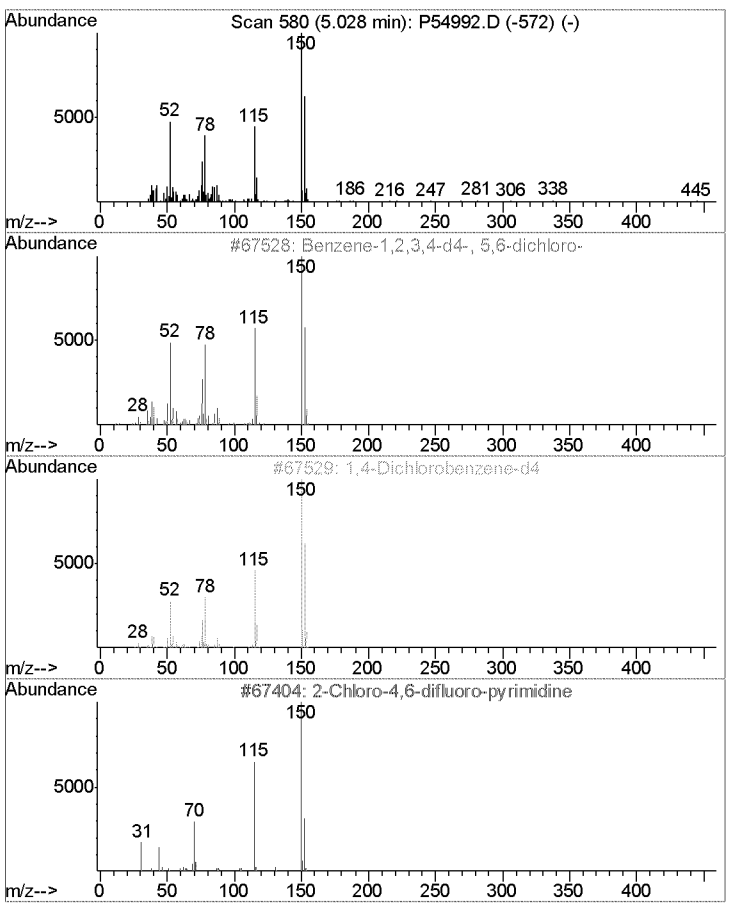
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

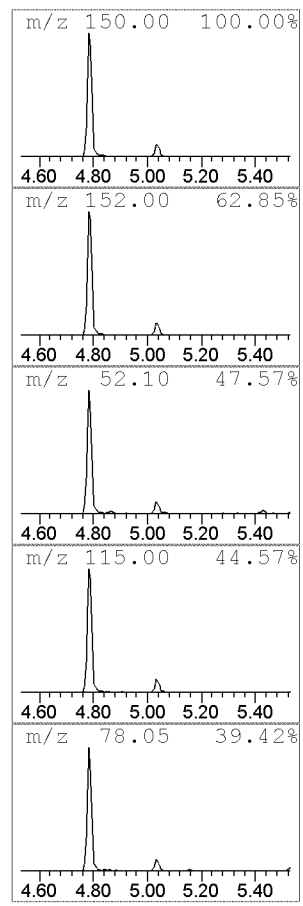
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.96 ppb	138385	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	91
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
4	4H-1-Benzopyran-4-one, 2,3-dihyd...	254	C16H14O3	005128-69-8	12
5	4-Nitrophenylglyoxylic acid	195	C8H5NO5	014922-36-2	11





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

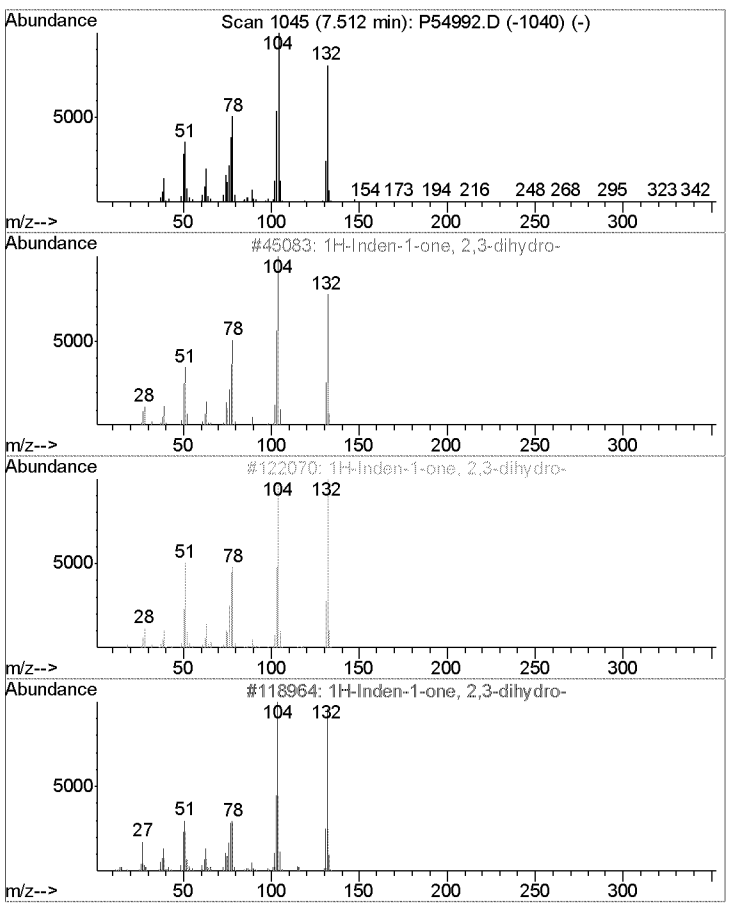
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

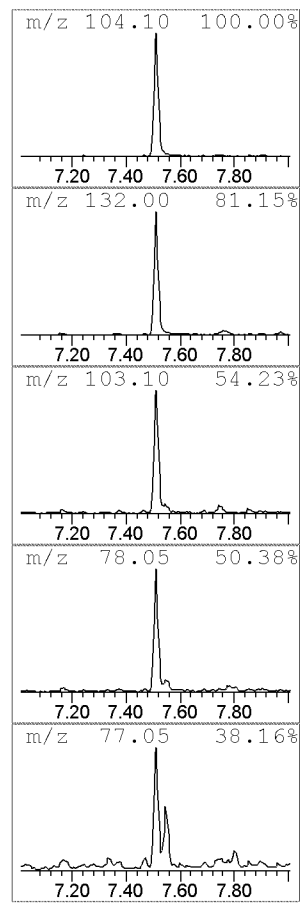
****

Peak Number 3 1H-Inden-1-one, -dihydro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.51	12.22 ppb	408777	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	98
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
4	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	94
5	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	64





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

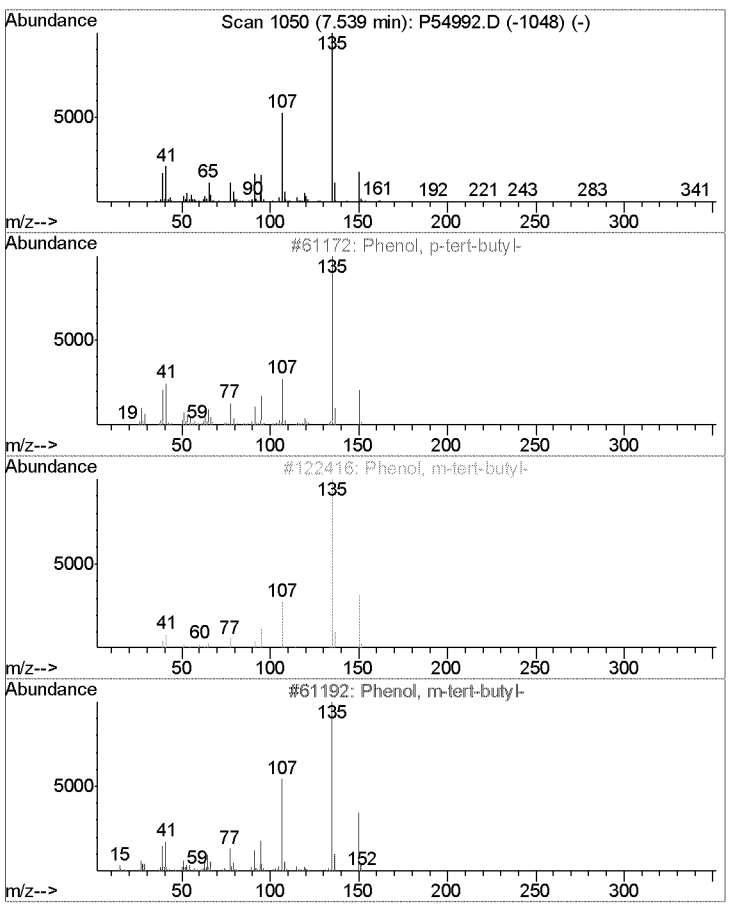
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

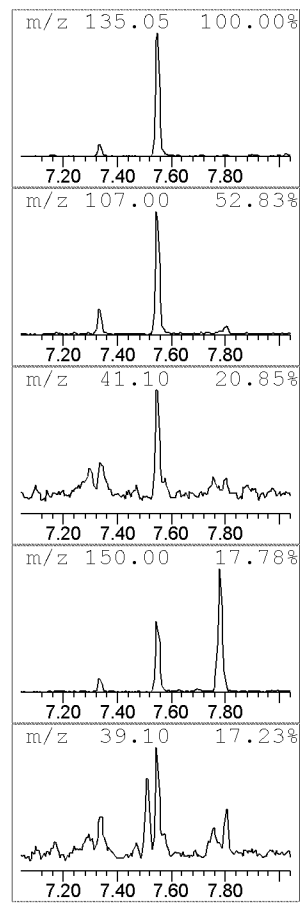
****

Peak Number 4 Phenol, -tert-butyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.54	9.67 ppb	323428	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	93
2	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
3	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	76
4	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	64
5	Ethanone, 1-(3-methoxyphenyl)-	150	C9H10O2	000586-37-8	64





Library Search Compound Report

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Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

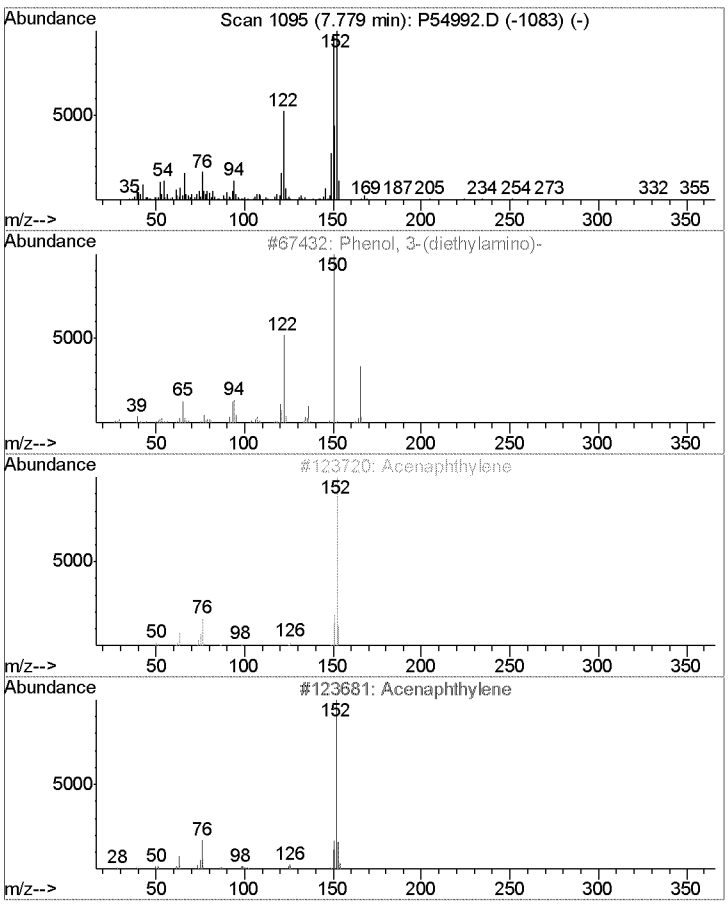
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

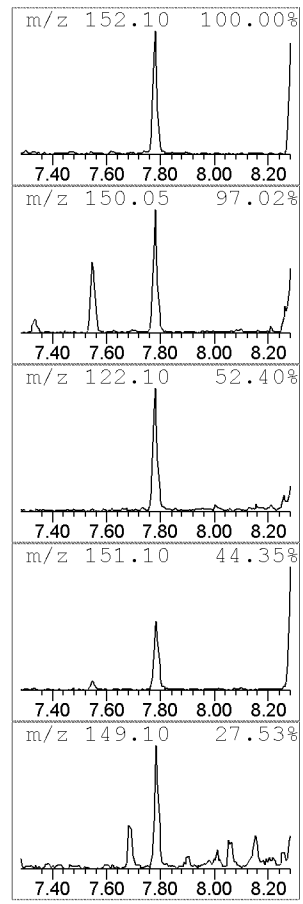
****

Peak Number 5 Internal standard added for... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.78	4.70 ppb	157020	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 3-(diethylamino)-	165	C10H15NO	000091-68-9	25
2	Acenaphthylene	152	C12H8	000208-96-8	22
3	Acenaphthylene	152	C12H8	000208-96-8	22
4	1,4-Benzenediol, 2,3,5-trimethyl-	152	C9H12O2	000700-13-0	22
5	2,6-Dimethoxytoluene	152	C9H12O2	005673-07-4	16





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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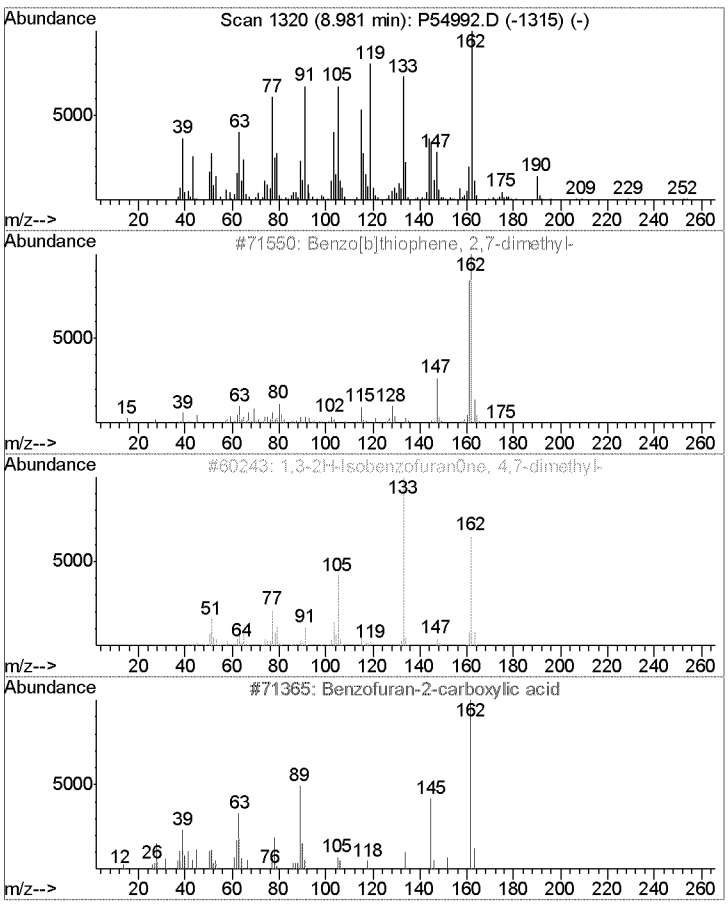
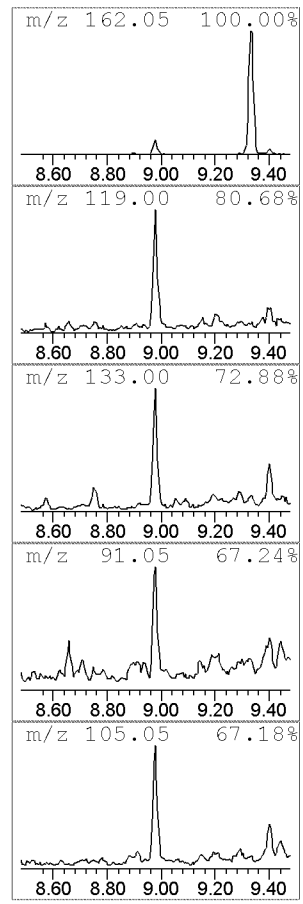
Peak Number 6 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.98	10.23 ppb	342605	Acenaphthene-d10	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]thiophene, 2,7-dimethyl-	162	C10H10S	016587-40-9	55
2	1,3-2H-Isobenzofuran0ne, 4,7-dim...	162	C10H10O2	1000129-71-5	55
3	Benzofuran-2-carboxylic acid	162	C9H6O3	000496-41-3	55
4	Indoxazene, 3-ethyl-	147	C9H9NO	1000131-51-1	49
5	1,4-Benzenedicarboxaldehyde, 2,5...	162	C10H10O2	007044-92-0	35





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
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Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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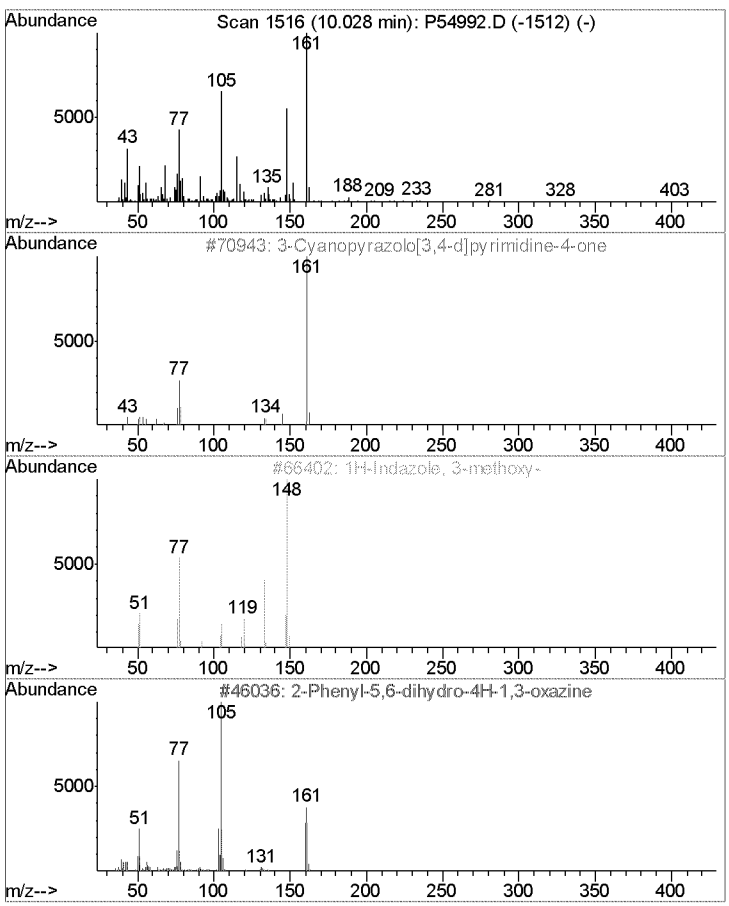
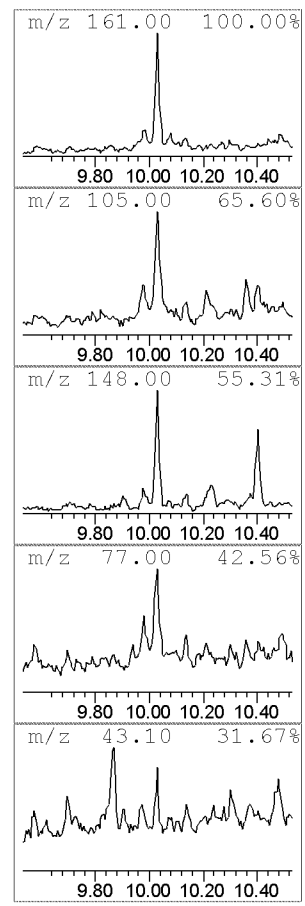
Peak Number 7 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.03	4.69 ppb	157055	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyanopyrazolo[3,4-d]pyrimidine...	161	C6H3N5O	1000212-40-6	35
2	1H-Indazole, 3-methoxy-	148	C8H8N2O	001848-41-5	27
3	2-Phenyl-5,6-dihydro-4H-1,3-oxazine	161	C10H11NO	1000223-47-5	22
4	4-Dimethylaminobenzoin	255	C16H17NO2	006317-85-7	22
5	Thiazole, 5-phenyl-	161	C9H7NS	001826-13-7	22





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

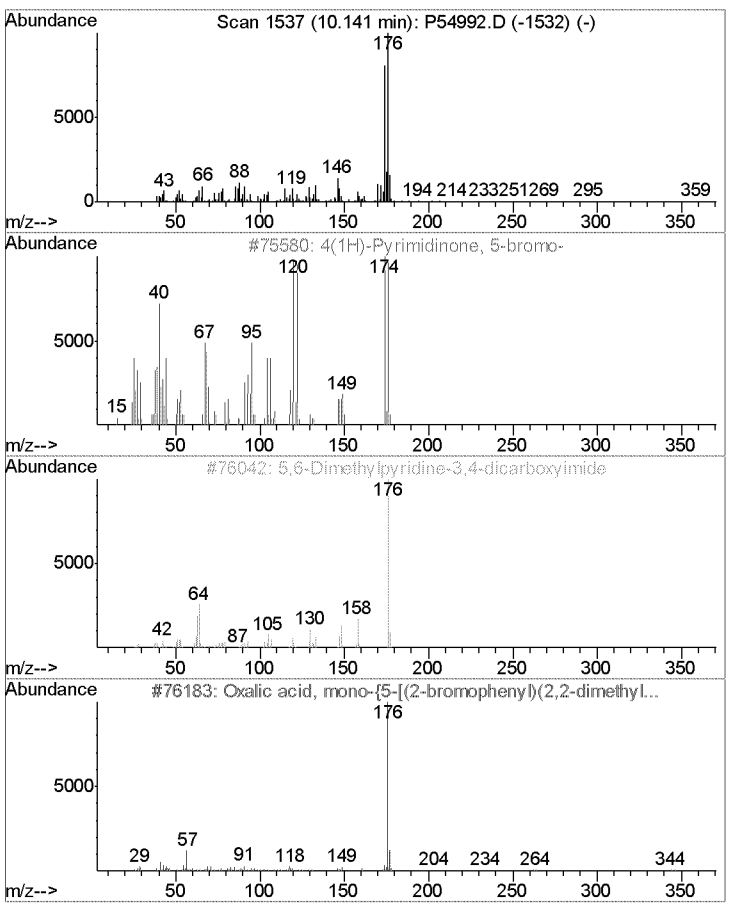
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

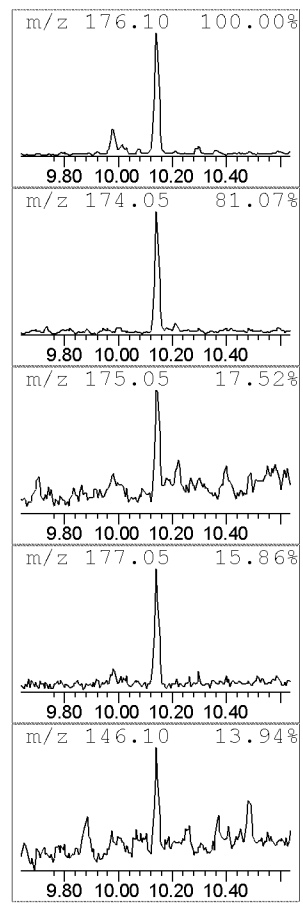
****

Peak Number 8 Internal standard added for... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.67 ppb	190027	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4(1H)-Pyrimidinone, 5-bromo-	174	C4H3BrN2O	019808-30-1	50
2	5,6-Dimethylpyridine-3,4-dicarbo...	176	C9H8N2O2	1000222-05-7	27
3	Oxalic acid, mono-{5-[(2-bromoph...	535	C24H26BrNO8	1000188-38-2	27
4	7-Methoxy-1-tetralone	176	C11H12O2	006836-19-7	27
5	4-Hydrazino-1-oxo-1,2-dihydropht...	176	C8H8N4O	014161-35-4	27





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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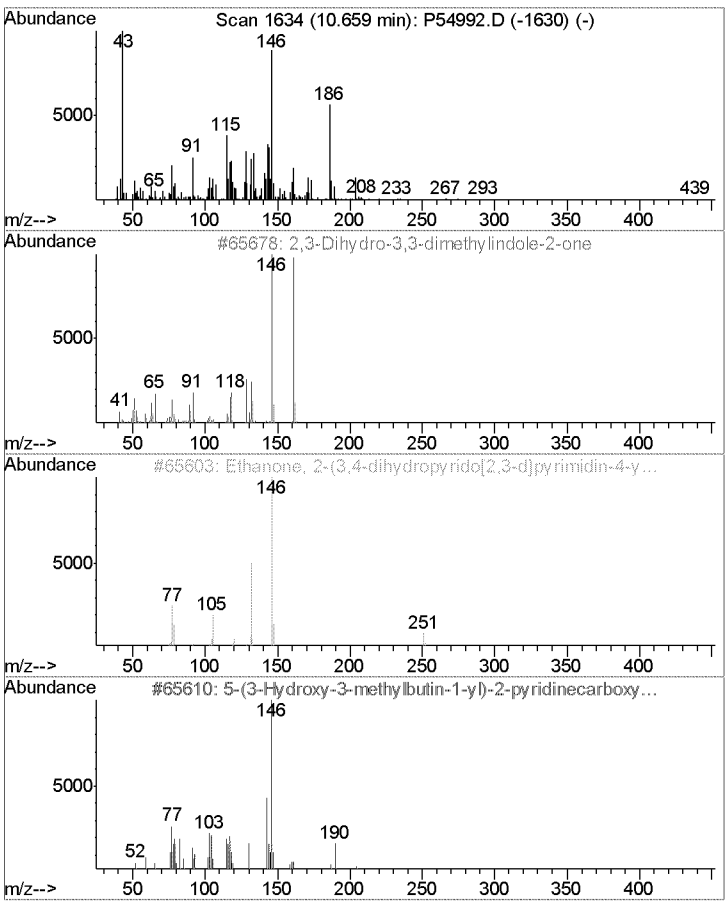
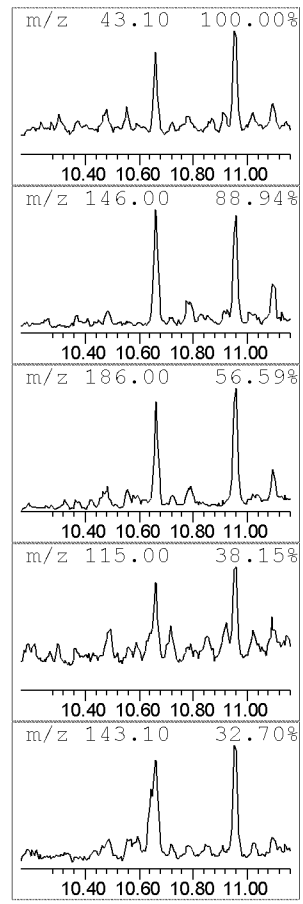
Peak Number 9 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.66	4.00 ppb	147309	Phenanthrene-d10	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-3,3-dimethylindole-2...	161	C10H11NO	1000128-67-0	38
2	Ethanone, 2-(3,4-dihydropyrido[2...	251	C15H13N3O	028732-76-5	30
3	5-(3-Hydroxy-3-methylbutin-1-yl)...	205	C11H11NO3	017880-58-9	27
4	1H-Isoindole, 3-methoxy-1-methyl-	161	C10H11NO	083889-38-7	25
5	4(1H)-Quinazolinone	146	C8H6N2O	000491-36-1	22





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Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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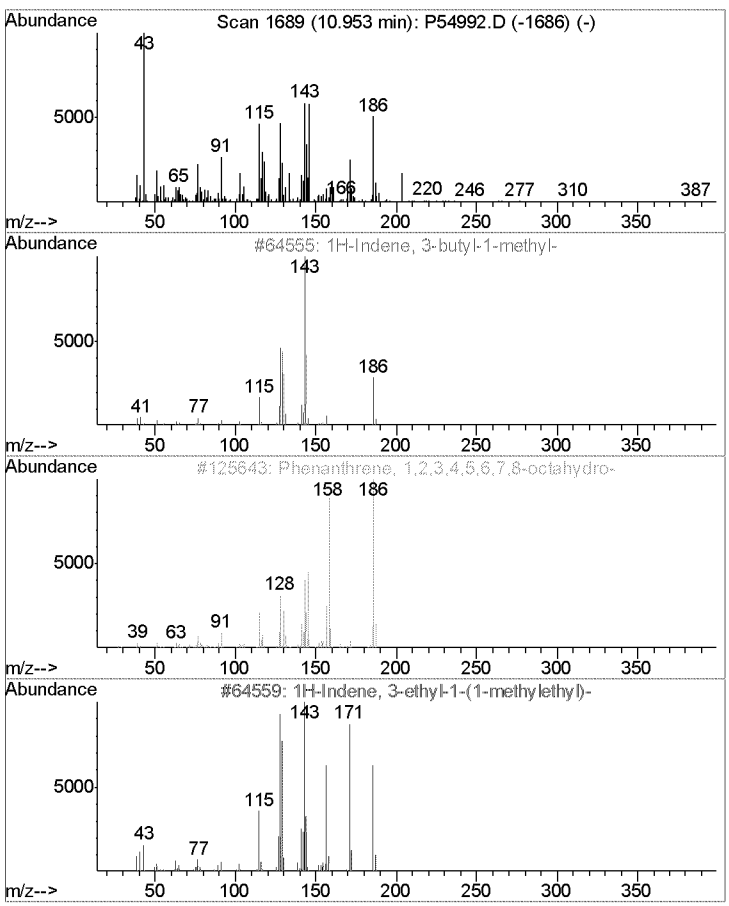
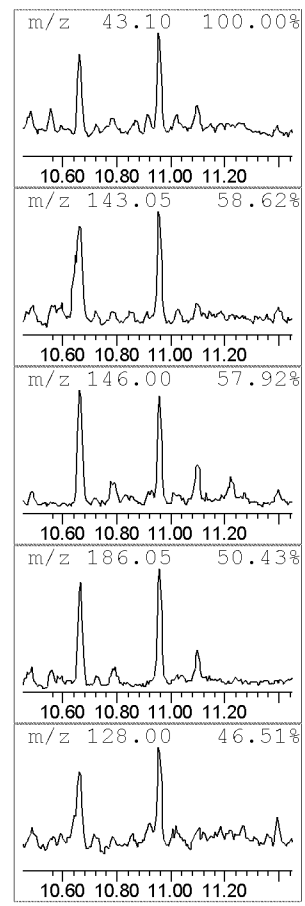
Peak Number 10 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.95	6.34 ppb	233210	Phenanthrene-d10	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 3-butyl-1-methyl-	186	C14H18	111400-84-1	50
2	Phenanthrene, 1,2,3,4,5,6,7,8-oc...	186	C14H18	005325-97-3	38
3	1H-Indene, 3-ethyl-1-(1-methylet...	186	C14H18	111400-85-2	27
4	Propanamide, N-[3-(acetylmethyla...	186	C9H18N2O2	067139-07-5	22
5	Detomidine	186	C12H14N2	076631-46-4	22





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ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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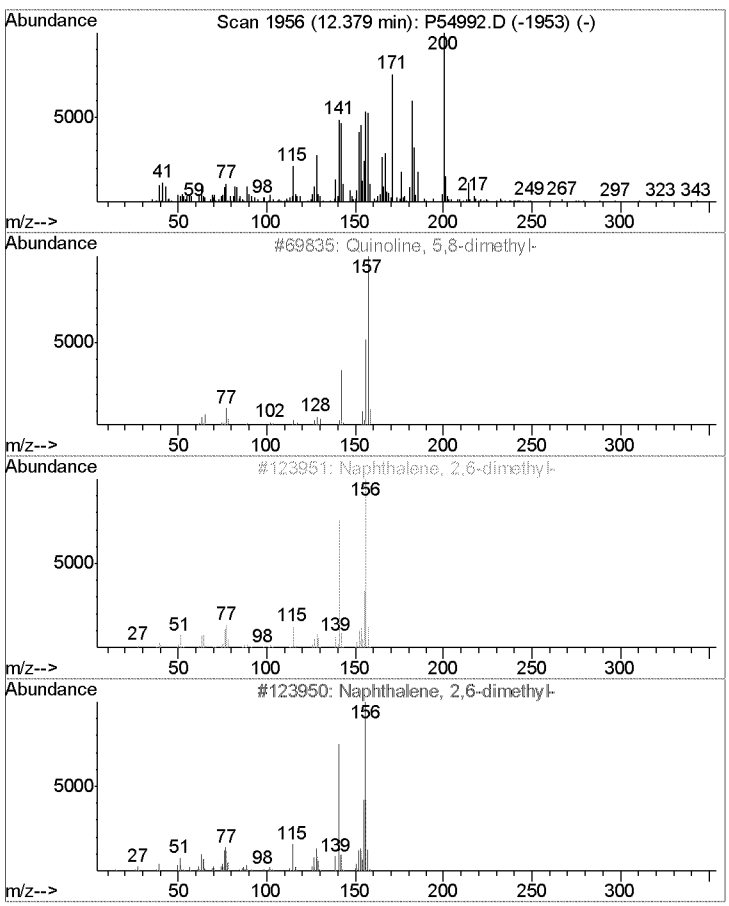
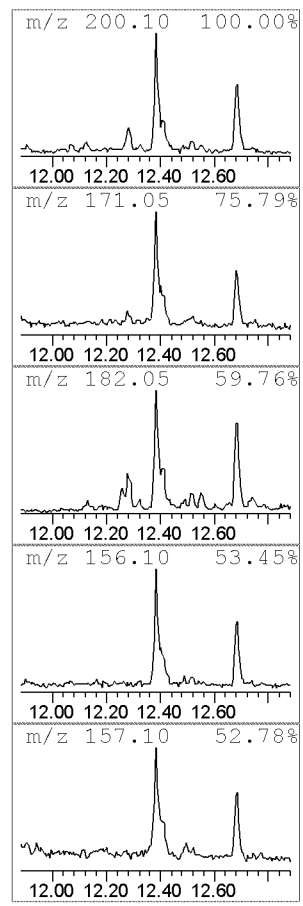
Peak Number 11 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	6.92 ppb	254597	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Quinoline, 5,8-dimethyl-	157	C11H11N	002623-50-9	11
2	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
3	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
4	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
5	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	11





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Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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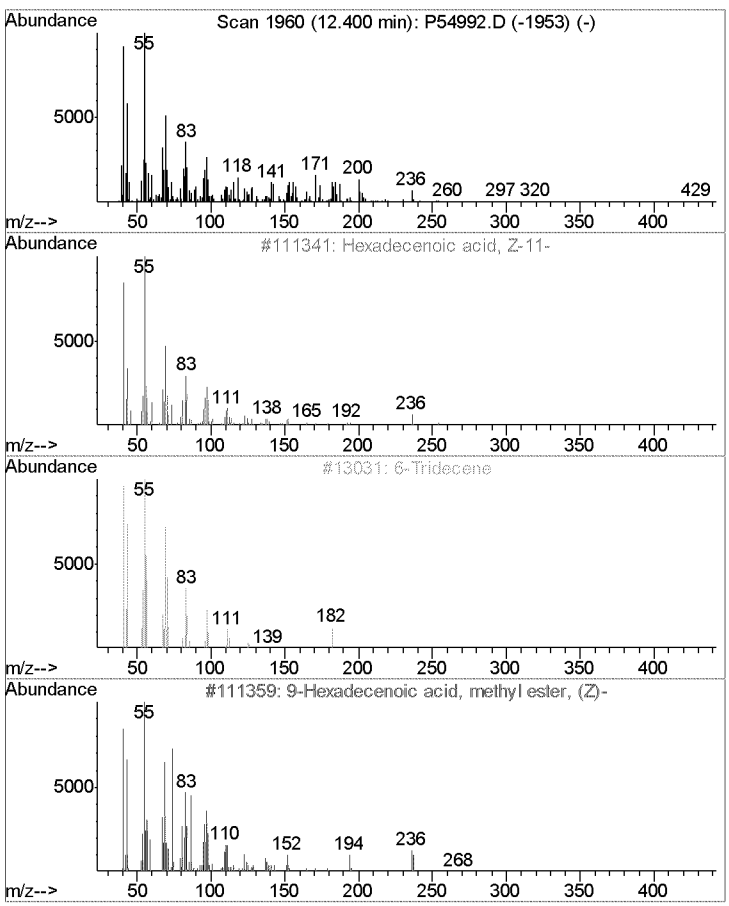
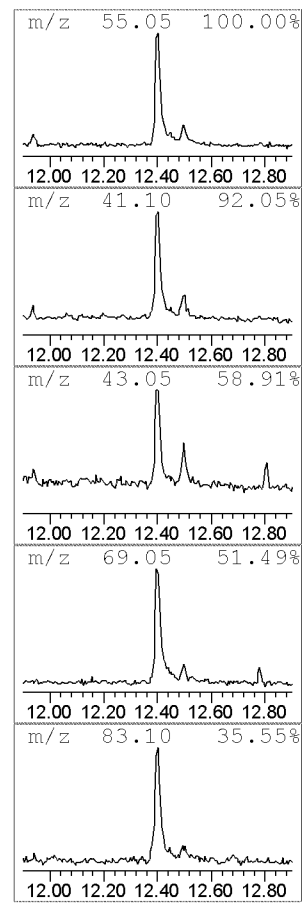
Peak Number 12 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	10.11 ppb	372207	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	50
2	6-Tridecene	182	C13H26	024949-38-0	49
3	9-Hexadecenoic acid, methyl este...	268	C17H32O2	001120-25-8	45
4	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	42
5	2-Tridecene, (Z)-	182	C13H26	041446-59-7	42





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TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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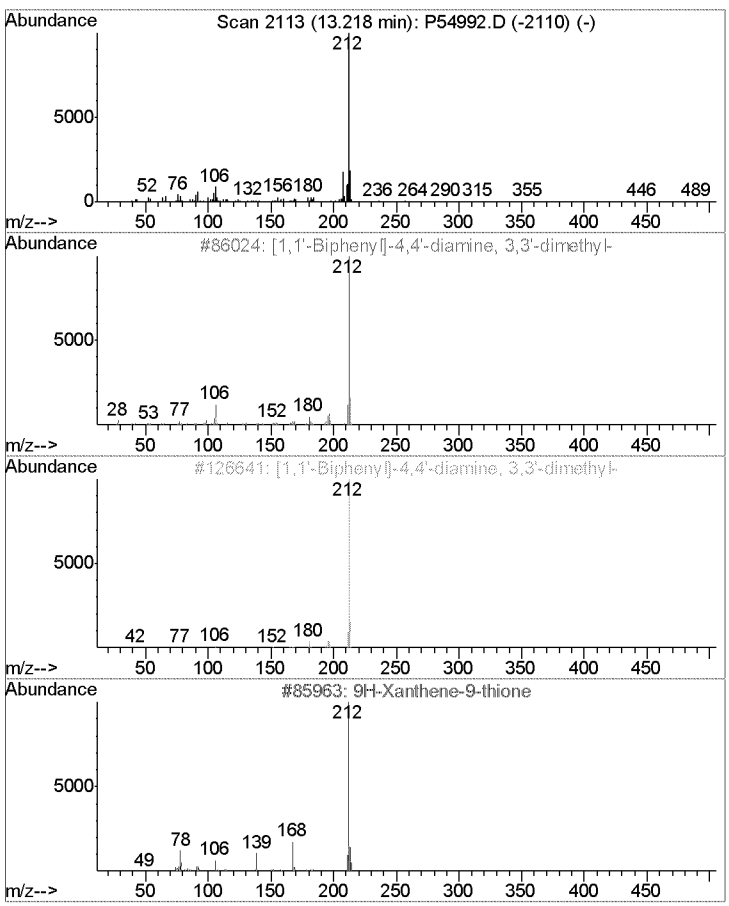
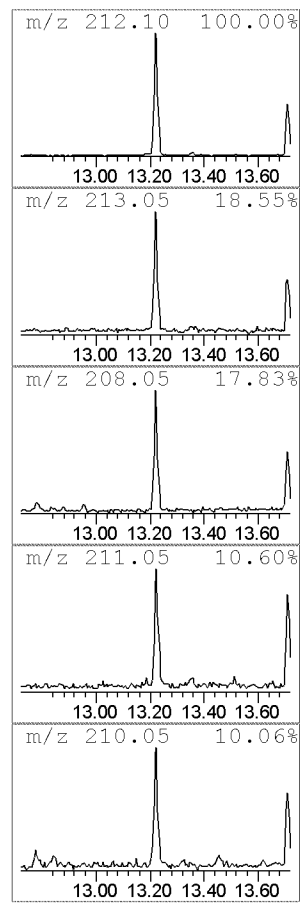
Peak Number 13 Internal standard added for... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.31 ppb	195612	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
5	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

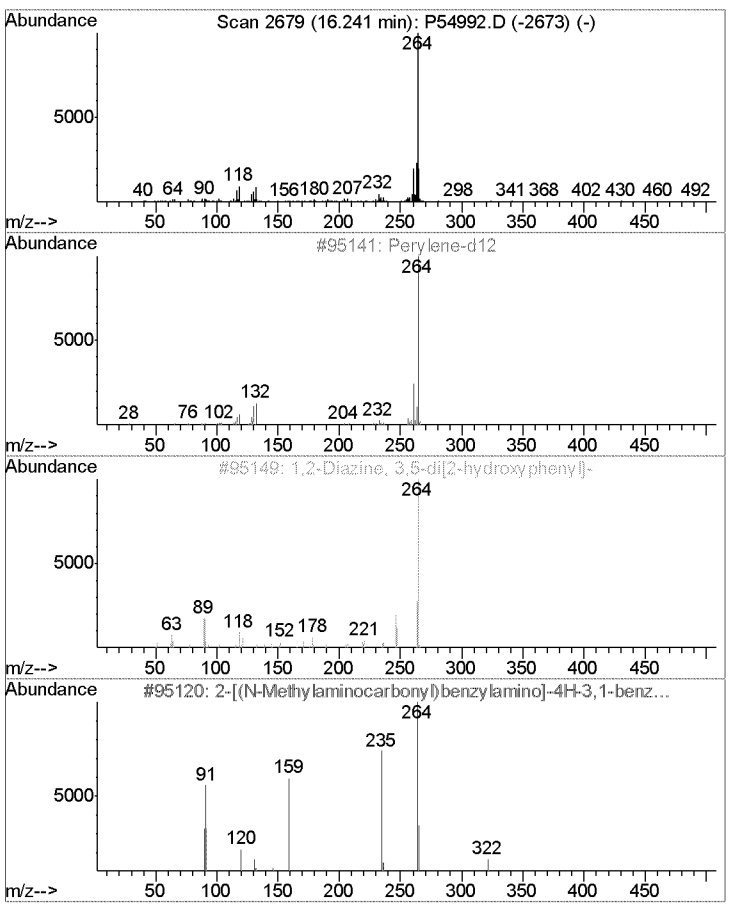
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

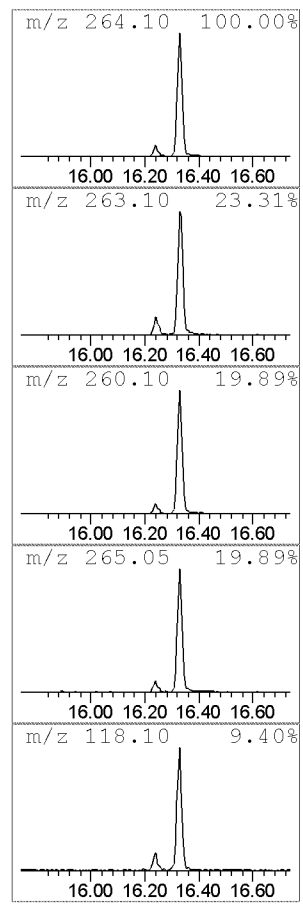
****

Peak Number 14 Internal standard added for... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.68 ppb	164654	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	96
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	58
3	2-[(N-Methylaminocarbonyl)benzyl...	322	C18H18N4O2	1000148-36-9	50
4	1H-Pyrazole-4,5-dione, 1-phenyl-...	264	C15H12N4O	016335-50-5	47
5	2-Nitro-4-methoxytrifluoroacetan...	264	C9H7F3N2O4	1000214-43-5	41





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
cycloalkane/alkene	4.86	5.0	ppb	140613	2	4.78	1116640	40.0
Internal standard...	5.03	5.0	ppb	138385	2	4.78	1116640	40.0
1H-Inden-1-one, -...	7.51	12.2	ppb	408777	3	6.57	1337650	40.0
Phenol, -tert-butyl-	7.54	9.7	ppb	323428	3	6.57	1337650	40.0
Internal standard...	7.78	4.7	ppb	157020	3	6.57	1337650	40.0
unknown	8.98	10.2	ppb	342605	4	9.33	1339720	40.0
unknown	10.03	4.7	ppb	157055	5	9.33	1339720	40.0
Internal standard...	10.14	5.7	ppb	190027	5	9.33	1339720	40.0
unknown	10.66	4.0	ppb	147309	6	11.65	1472160	40.0
unknown	10.95	6.3	ppb	233210	6	11.65	1472160	40.0
unknown	12.38	6.9	ppb	254597	7	11.65	1472160	40.0
unknown	12.40	10.1	ppb	372207	7	11.65	1472160	40.0
Internal standard...	13.22	5.3	ppb	195612	7	11.65	1472160	40.0
Internal standard...	16.24	4.7	ppb	164654	10	16.33	1407800	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:17:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

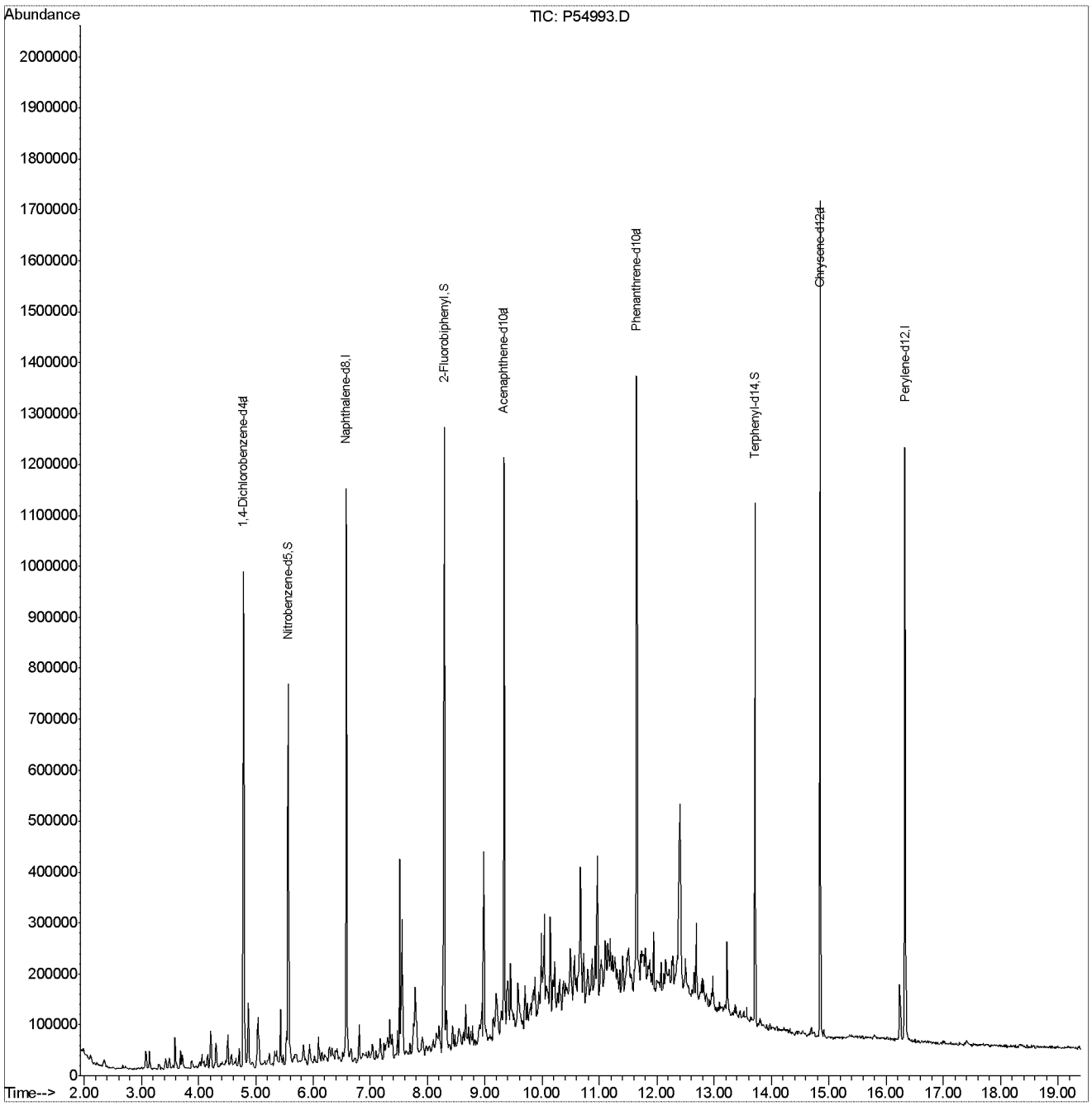
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	150848	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	530356	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	305333	40.00	ppb	-0.08
69) Phenanthrene-d10	11.64	188	471038	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	594393	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	538009	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	4.78	152	150848	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	471038	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	305333	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	594393	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	278793	41.72	ppb	-0.08
Spiked Amount 50.000			Recovery =	83.44%		
51) 2-Fluorobiphenyl	8.29	172	415995	39.68	ppb	-0.08
Spiked Amount 50.000			Recovery =	79.36%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	268234	19.10	ppb	-0.06
Spiked Amount 50.000			Recovery =	38.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:17:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.106	30	33	44	rVB8	17664	38247	2.24%	0.165%
2	3.073	208	214	223	rVV3	36475	65700	3.84%	0.284%
3	3.142	223	227	236	rVV2	35806	51315	3.00%	0.222%
4	3.585	306	310	321	rVB	60395	82326	4.81%	0.355%
5	3.676	322	327	331	rVV	34845	42073	2.46%	0.182%
6	3.714	331	334	343	rVB2	25683	36101	2.11%	0.156%
7	4.056	394	398	402	rVV3	26331	35153	2.05%	0.152%
8	4.152	409	416	421	rVB3	26290	39447	2.31%	0.170%
9	4.205	421	426	435	rBV	71741	103540	6.05%	0.447%
10	4.301	435	444	454	rBV5	48354	97043	5.67%	0.419%
11	4.504	477	482	488	rVB3	58823	76286	4.46%	0.329%
12	4.649	501	509	513	rVV5	18153	37634	2.20%	0.162%
13	4.702	513	519	526	rVB2	36756	51543	3.01%	0.223%
14	4.782	527	534	543	rBV	971503	1180777	69.01%	5.097%
15	4.862	543	549	557	rVB	123121	159241	9.31%	0.687%
16	5.033	572	581	592	rBV2	98635	200607	11.72%	0.866%
17	5.231	607	618	624	rVB9	22921	49611	2.90%	0.214%
18	5.354	638	641	648	rVB5	26366	44028	2.57%	0.190%
19	5.429	650	655	660	rVB	105549	124313	7.26%	0.537%
20	5.562	669	680	694	rBV	748484	1019381	59.57%	4.401%
21	5.685	701	703	713	rVB4	16288	37245	2.18%	0.161%
22	5.824	725	729	734	rVB4	31557	38484	2.25%	0.166%
23	5.936	742	750	761	rBV7	40845	81518	4.76%	0.352%
24	6.091	775	779	788	rBV4	52534	88582	5.18%	0.382%
25	6.203	796	800	809	rVB4	12660	34075	1.99%	0.147%
26	6.283	810	815	818	rBV4	28096	36965	2.16%	0.160%
27	6.321	819	822	831	rVB8	23915	44941	2.63%	0.194%
28	6.572	860	869	880	rVV	1124836	1387772	81.10%	5.991%
29	6.657	880	885	892	rVB7	25795	44038	2.57%	0.190%
30	6.796	905	911	918	rBV2	75544	109014	6.37%	0.471%
31	7.031	949	955	962	rVB9	30975	58040	3.39%	0.251%
32	7.170	971	981	988	rVB10	41168	88141	5.15%	0.380%
33	7.240	988	994	997	rBV5	33350	49909	2.92%	0.215%
34	7.298	998	1005	1008	rVV8	39333	95734	5.59%	0.413%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.336	1008	1012	1017	rVV3	74488	123556	7.22%	0.533%
36	7.373	1017	1019	1027	rVB	49118	54126	3.16%	0.234%
37	7.469	1027	1037	1040	rBV2	55749	81109	4.74%	0.350%
38	7.512	1040	1045	1048	rVV	385381	447084	26.13%	1.930%
39	7.549	1048	1052	1061	rVB	265565	339472	19.84%	1.465%
40	7.747	1083	1089	1092	rVV5	58840	108215	6.32%	0.467%
41	7.779	1092	1095	1108	rVB3	127682	228799	13.37%	0.988%
42	7.902	1114	1118	1126	rVB8	38253	79818	4.66%	0.345%
43	7.971	1126	1131	1136	rBV8	20771	43864	2.56%	0.189%
44	8.148	1161	1164	1169	rBV4	24311	39332	2.30%	0.170%
45	8.190	1169	1172	1181	rVB6	54382	106023	6.20%	0.458%
46	8.287	1181	1190	1194	rBV	1229337	1605734	93.84%	6.932%
47	8.324	1195	1197	1202	rVB2	77061	87106	5.09%	0.376%
48	8.431	1211	1217	1222	rBV7	49414	89532	5.23%	0.386%
49	8.548	1232	1239	1248	rVB7	33283	94005	5.49%	0.406%
50	8.618	1248	1252	1255	rBV5	25544	33540	1.96%	0.145%
51	8.655	1255	1259	1265	rBV2	72948	81481	4.76%	0.352%
52	8.709	1266	1269	1273	rVV5	37832	49586	2.90%	0.214%
53	8.746	1273	1276	1280	rVV3	28533	34997	2.05%	0.151%
54	8.783	1280	1283	1286	rVB2	38416	36837	2.15%	0.159%
55	8.890	1298	1303	1308	rBV9	38116	87388	5.11%	0.377%
56	8.938	1308	1312	1315	rVB3	67915	75028	4.38%	0.324%
57	8.976	1315	1319	1325	rBV	362611	441117	25.78%	1.904%
58	9.147	1347	1351	1354	rBV4	44313	69193	4.04%	0.299%
59	9.189	1355	1359	1369	rVB5	84474	222109	12.98%	0.959%
60	9.286	1371	1377	1380	rBV7	42127	82168	4.80%	0.355%
61	9.328	1380	1385	1391	rVV	1122658	1403026	81.99%	6.057%
62	9.398	1391	1398	1402	rVV5	87173	184793	10.80%	0.798%
63	9.446	1402	1407	1414	rVV3	113437	178933	10.46%	0.772%
64	9.574	1426	1431	1444	rVB3	83867	192129	11.23%	0.829%
65	9.697	1449	1454	1458	rBV4	87007	121263	7.09%	0.523%
66	9.734	1458	1461	1465	rVB5	38924	51344	3.00%	0.222%
67	9.836	1475	1480	1483	rBV6	46637	83754	4.89%	0.362%
68	9.868	1484	1486	1491	rVB4	78628	89812	5.25%	0.388%
69	9.937	1496	1499	1502	rBV5	44224	54835	3.20%	0.237%
70	9.980	1502	1507	1511	rBV5	141278	201647	11.78%	0.870%
71	10.028	1512	1516	1520	rVB2	169978	212397	12.41%	0.917%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.135	1532	1536	1541	rVB2	186137	244862	14.31%	1.057%
73	10.183	1542	1545	1548	rBV5	59118	86587	5.06%	0.374%
74	10.210	1548	1550	1556	rVB5	91085	116410	6.80%	0.503%
75	10.301	1564	1567	1574	rVB5	62546	98855	5.78%	0.427%
76	10.365	1575	1579	1583	rBV6	57334	96507	5.64%	0.417%
77	10.488	1599	1602	1610	rVB7	103120	184189	10.76%	0.795%
78	10.557	1610	1615	1619	rBV6	89364	154971	9.06%	0.669%
79	10.664	1631	1635	1640	rVB	246930	296411	17.32%	1.280%
80	10.717	1641	1645	1650	rVB4	97654	131080	7.66%	0.566%
81	10.862	1668	1672	1677	rVB6	62549	97189	5.68%	0.420%
82	10.920	1679	1683	1686	rBV3	79803	108429	6.34%	0.468%
83	10.958	1686	1690	1695	rVB	274426	328676	19.21%	1.419%
84	11.022	1697	1702	1710	rBV	63380	149146	8.72%	0.644%
85	11.097	1711	1716	1722	rBV6	91038	180206	10.53%	0.778%
86	11.145	1723	1725	1729	rVV4	61425	75565	4.42%	0.326%
87	11.182	1729	1732	1735	rVB2	62619	66373	3.88%	0.287%
88	11.396	1768	1772	1777	rBV6	71790	98599	5.76%	0.426%
89	11.642	1807	1818	1829	rBV2	1210277	1711124	100.00%	7.387%
90	11.935	1870	1873	1881	rVB2	117208	141941	8.30%	0.613%
91	12.069	1895	1898	1902	rVB3	57212	63759	3.73%	0.275%
92	12.400	1953	1960	1971	rVB4	360950	805834	47.09%	3.479%
93	12.646	2003	2006	2009	rVV2	43189	43673	2.55%	0.189%
94	12.683	2009	2013	2021	rVB	148215	179415	10.49%	0.775%
95	12.972	2065	2067	2075	rVB2	66465	87384	5.11%	0.377%
96	13.218	2110	2113	2126	rVB	146835	193916	11.33%	0.837%
97	13.709	2200	2205	2213	rVB	1026343	993039	58.03%	4.287%
98	14.847	2413	2418	2427	rBV	1641327	1576521	92.13%	6.806%
99	16.236	2674	2678	2687	rVB	107712	153890	8.99%	0.664%
100	16.327	2688	2695	2710	rVB	1165313	1456501	85.12%	6.287%

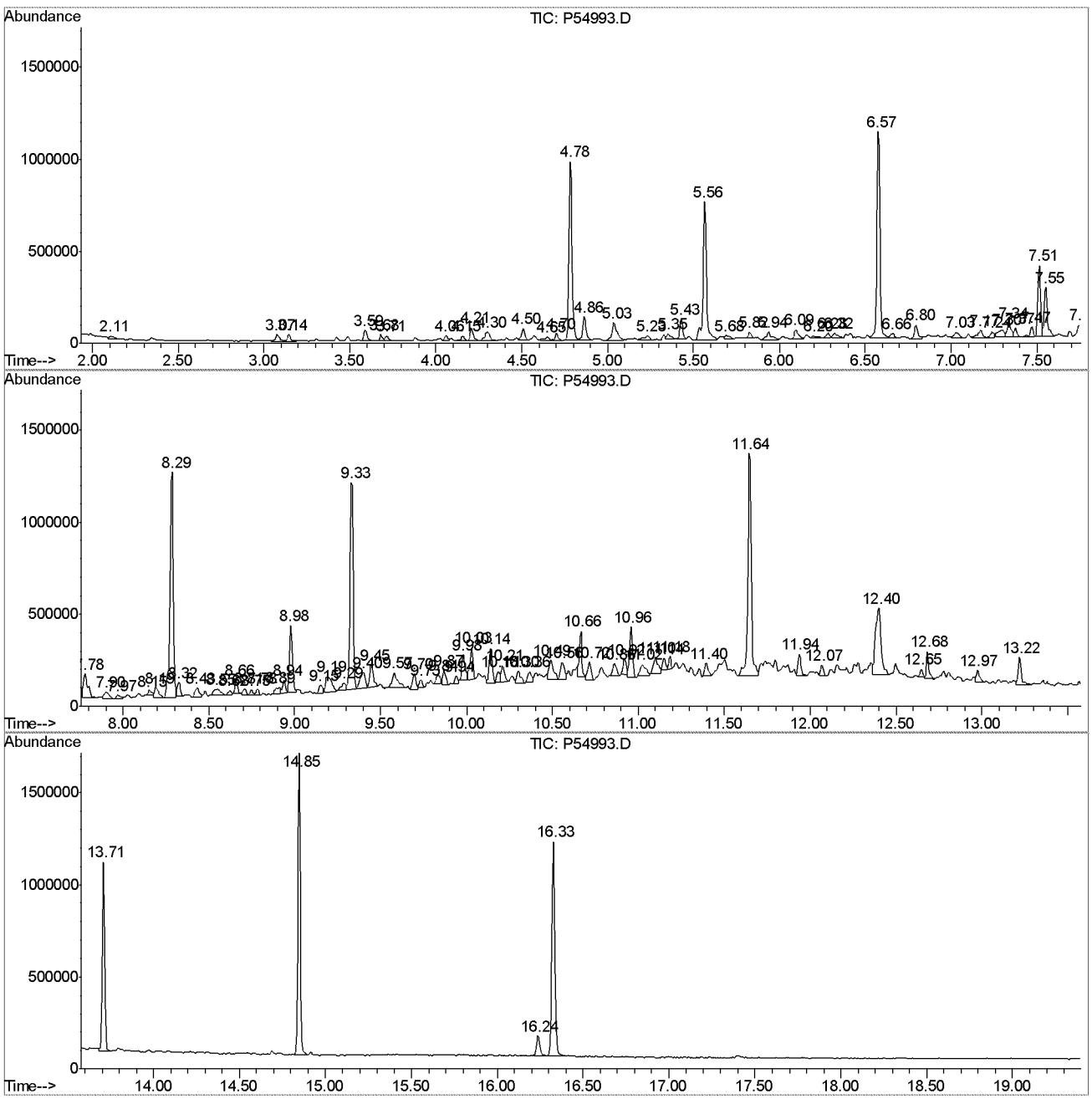
Sum of corrected areas: 23165028

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

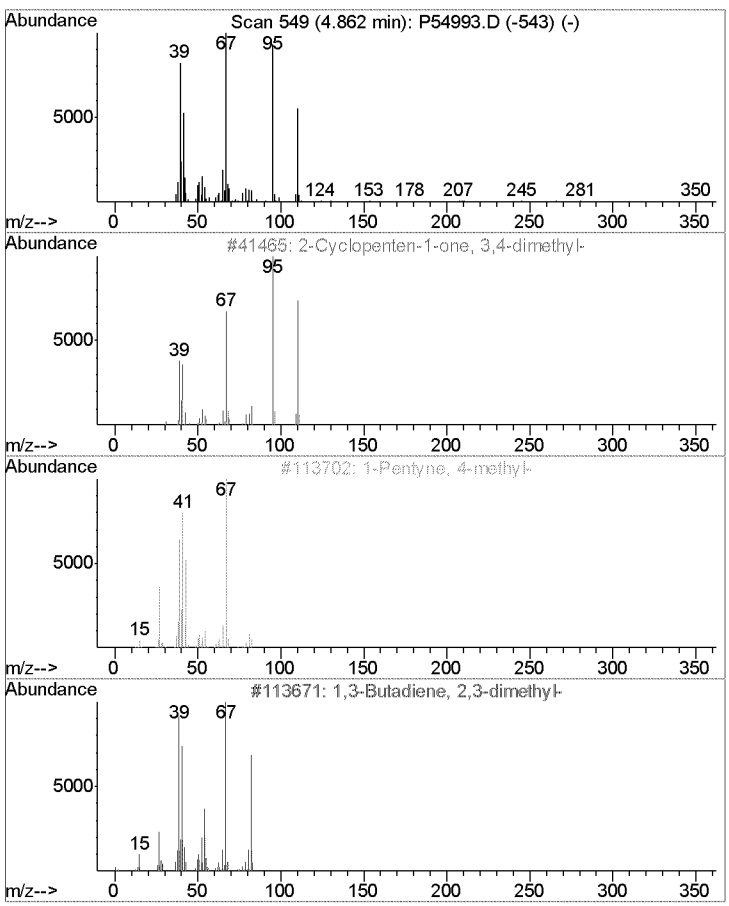
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

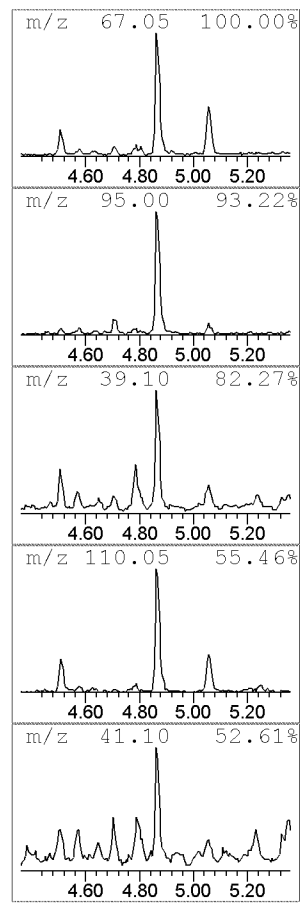
****

Peak Number 1 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	5.39 ppb	159241	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4-dimethyl-	110	C7H10O	030434-64-1	91
2	1-Pentyne, 4-methyl-	82	C6H10	007154-75-8	68
3	1,3-Butadiene, 2,3-dimethyl-	82	C6H10	000513-81-5	59
4	Spiropentane	68	C5H8	000157-40-4	58
5	Cyclopropane, (1-methylethenyl)-	82	C6H10	004663-22-3	53





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

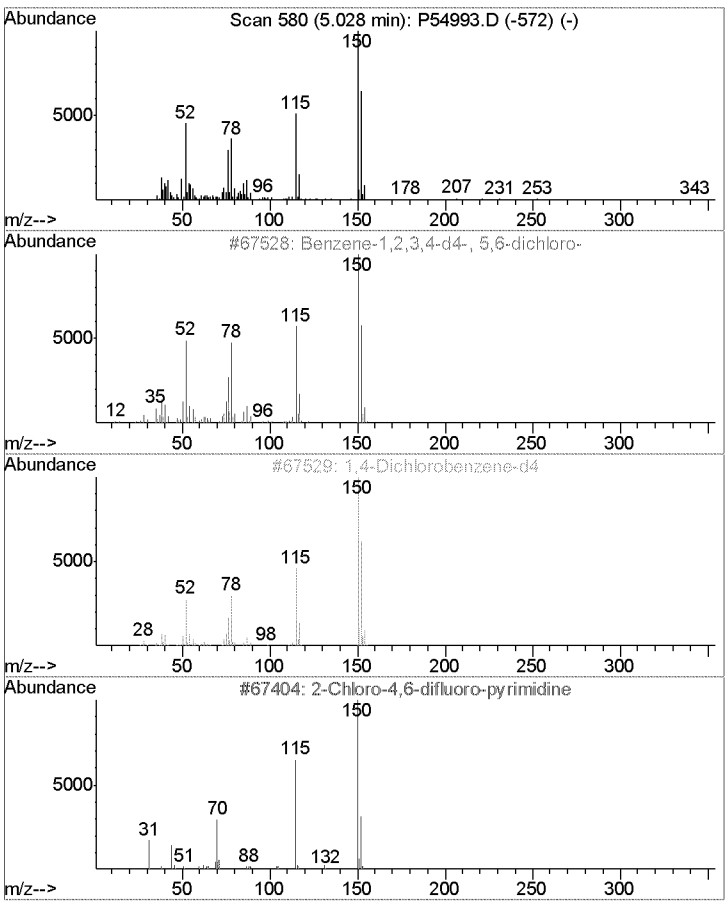
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

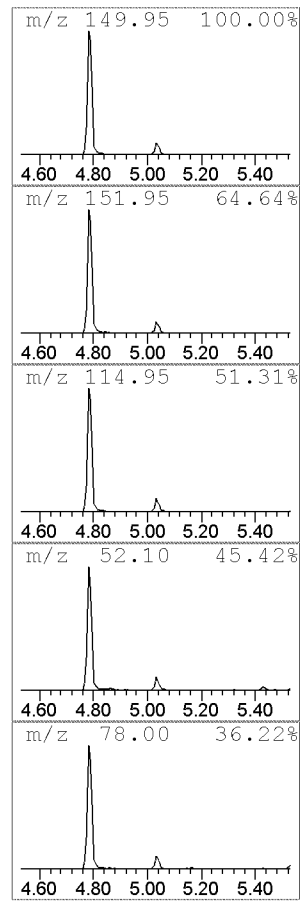
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.68 ppb	138172	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	12
4	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	10
5	3-Methyl-4,4'-bi(1,2,4-triazole)	150	C5H6N6	1000146-57-2	10





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ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

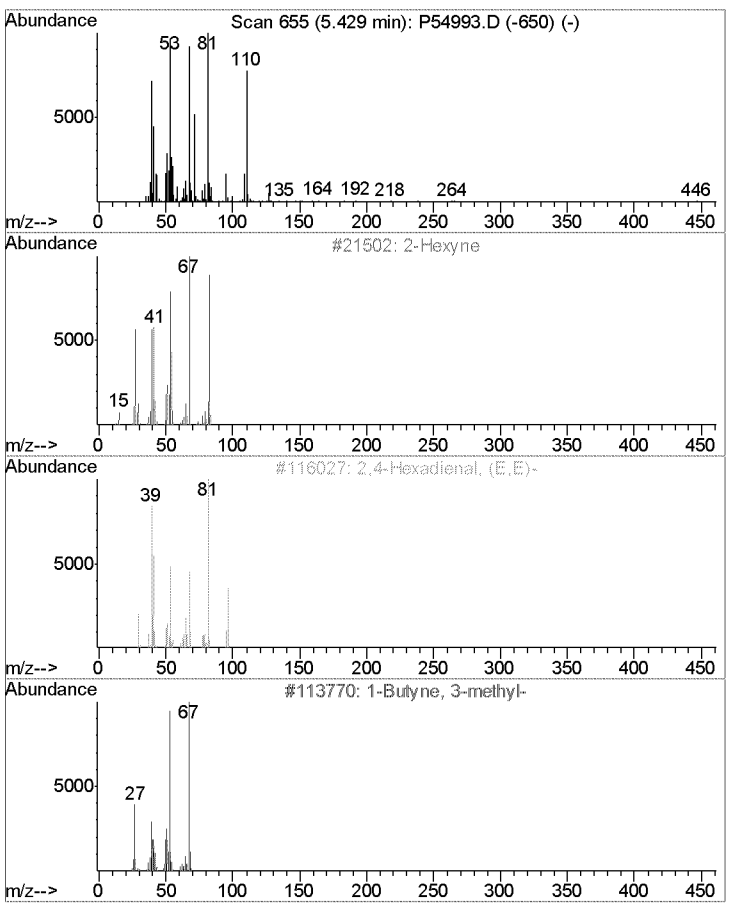
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

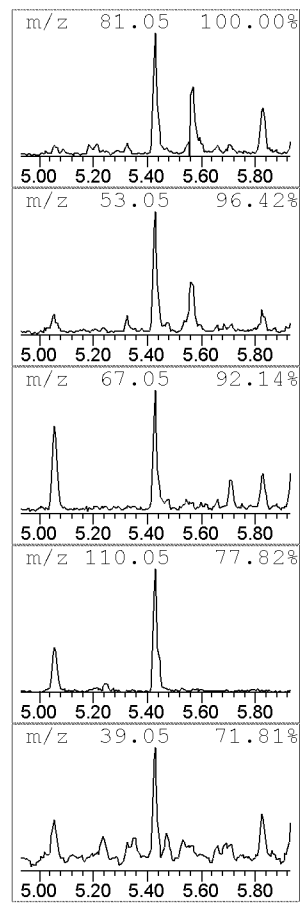
****

Peak Number 3 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.43	4.21 ppb	124313	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Hexyne	82	C6H10	000764-35-2	64
2	2,4-Hexadienal, (E,E)-	96	C6H8O	000142-83-6	59
3	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	49
4	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	49
5	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	47





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ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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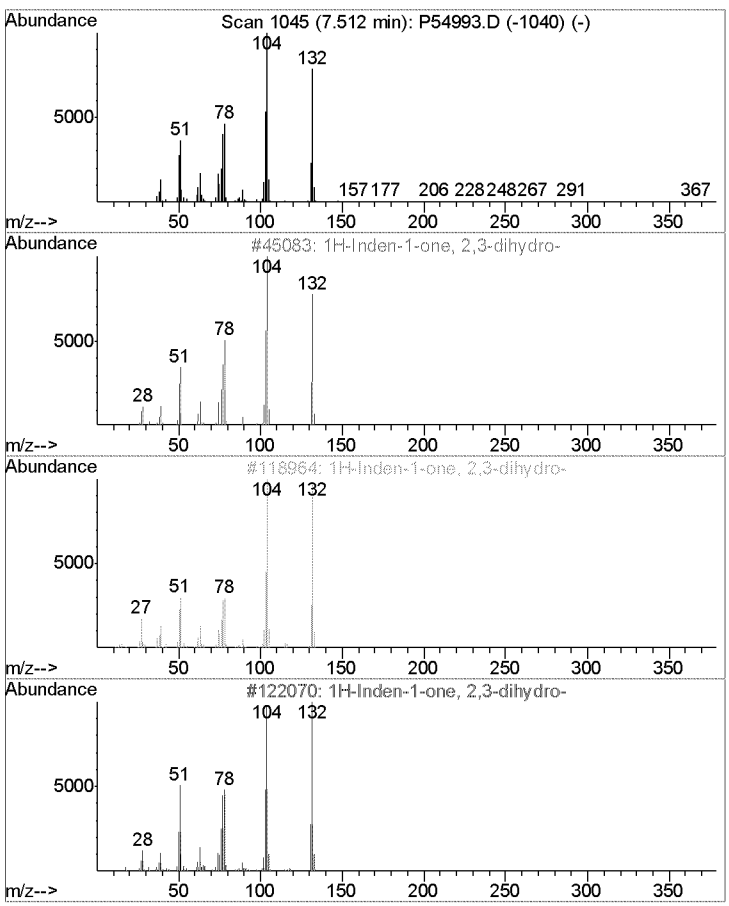
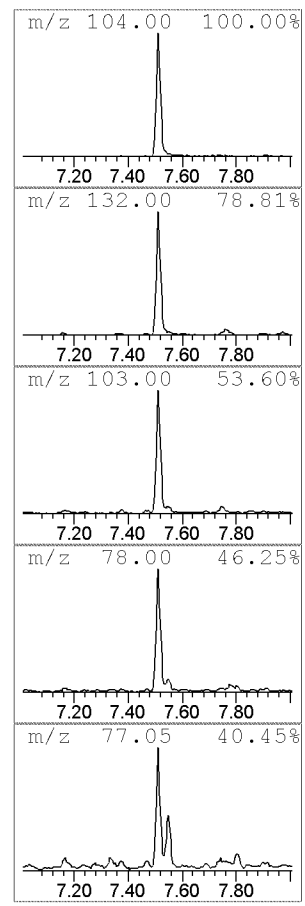
Peak Number 4 1H-Inden-1-one, -dihydro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.51	12.89 ppb	447084	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	98
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
4	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
5	Styrene	104	C8H8	000100-42-5	64





Library Search Compound Report

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Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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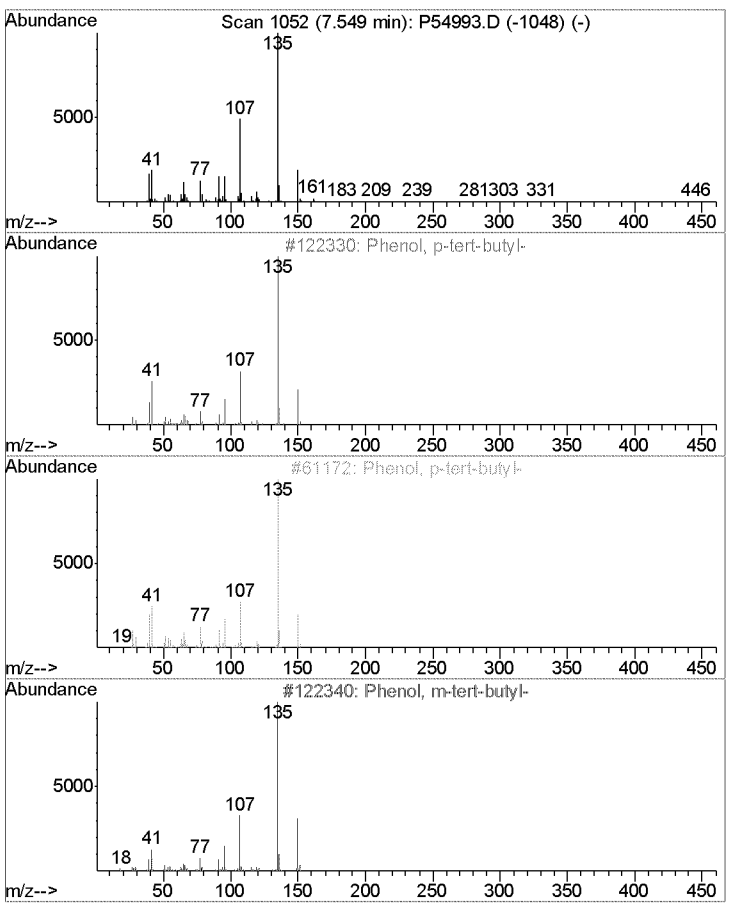
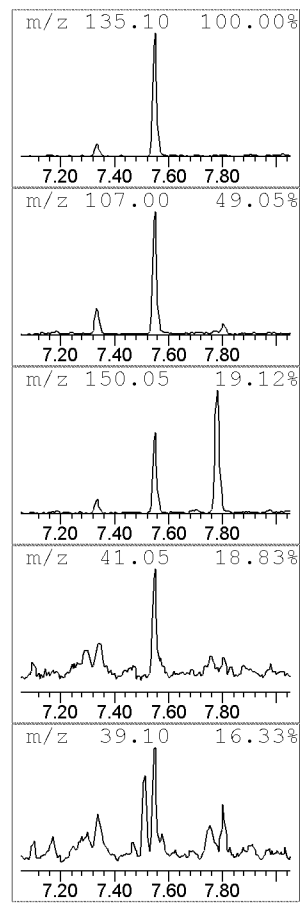
Peak Number 5 Phenol, -tert-butyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.55	9.78 ppb	339472	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	87
2	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	87
3	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
4	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
5	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	83





Library Search Compound Report

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Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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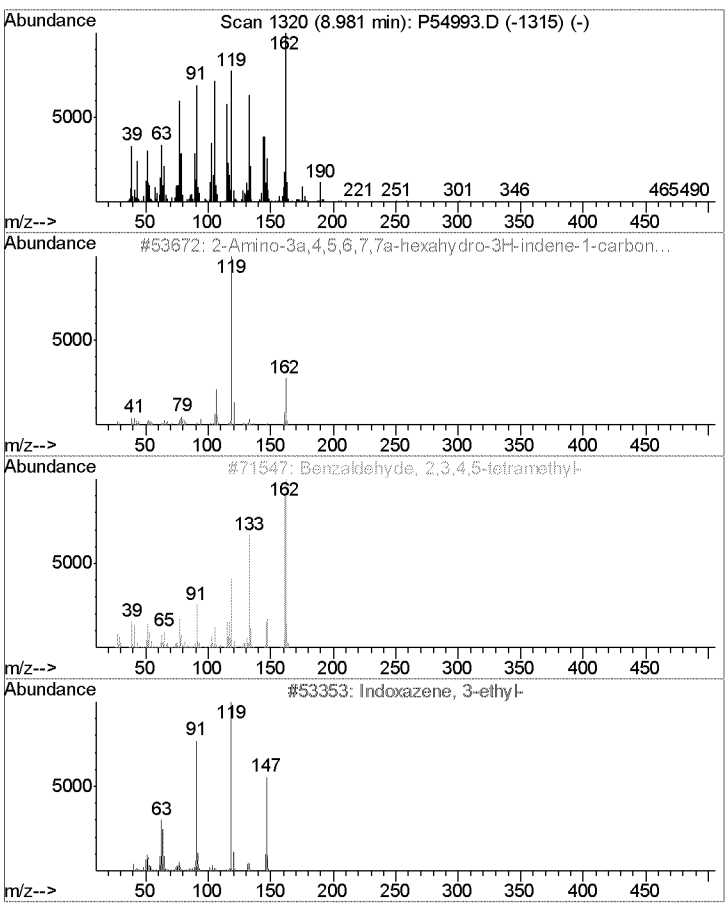
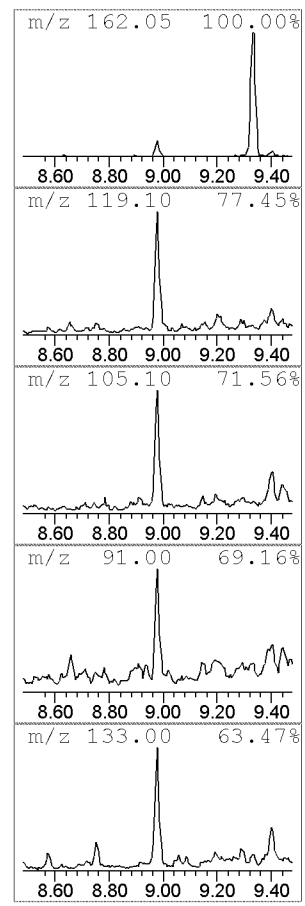
Peak Number 6 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.98	12.58 ppb	441117	Acenaphthene-d10	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Amino-3a,4,5,6,7,7a-hexahydro-...	162	C10H14N2	1000185-29-8	42
2	Benzaldehyde, 2,3,4,5-tetramethyl-	162	C11H14O	029344-95-4	38
3	Indoxazene, 3-ethyl-	147	C9H9NO	1000131-51-1	38
4	Anisole, p-(1-ethylvinyl)-	162	C11H14O	021758-19-0	30
5	Benzene, 1-(2-methoxy-1-propenyl...	162	C11H14O	053291-92-2	30





Library Search Compound Report

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ALS Vial : 16 Sample Multiplier: 1

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Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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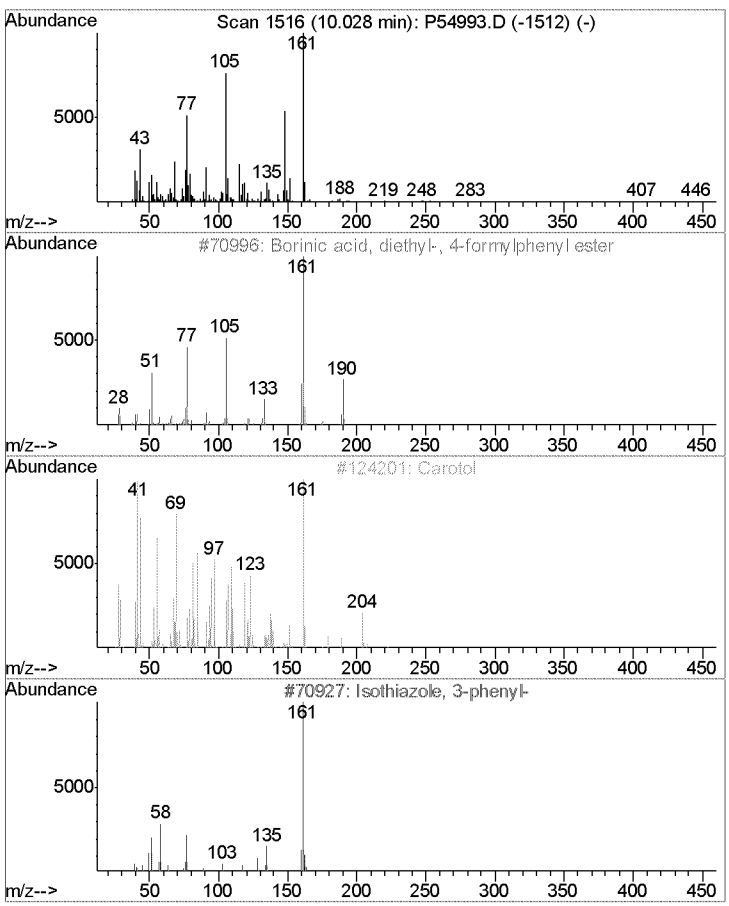
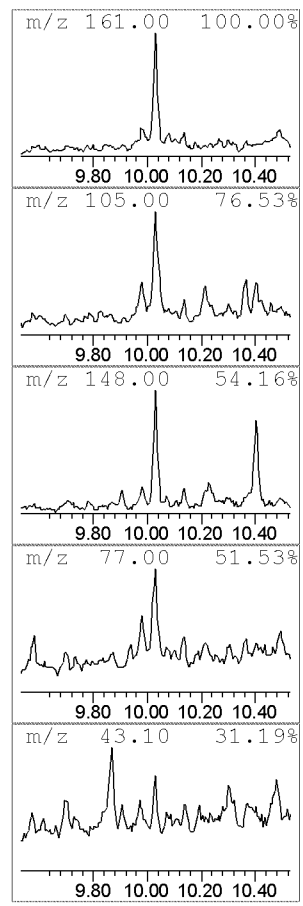
Peak Number 7 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.03	4.33 ppb	151705	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Borinic acid, diethyl-, 4-formyl...	190	C11H15BO2	061142-75-4	43
2	Carotol	222	C15H26O	000465-28-1	38
3	Isothiazole, 3-phenyl-	161	C9H7NS	010514-34-8	35
4	2-(3-Thienyl)pyridine	161	C9H7NS	021298-55-5	35
5	3-Cyanopyrazolo[3,4-d]pyrimidine...	161	C6H3N5O	1000212-40-6	35





Library Search Compound Report

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Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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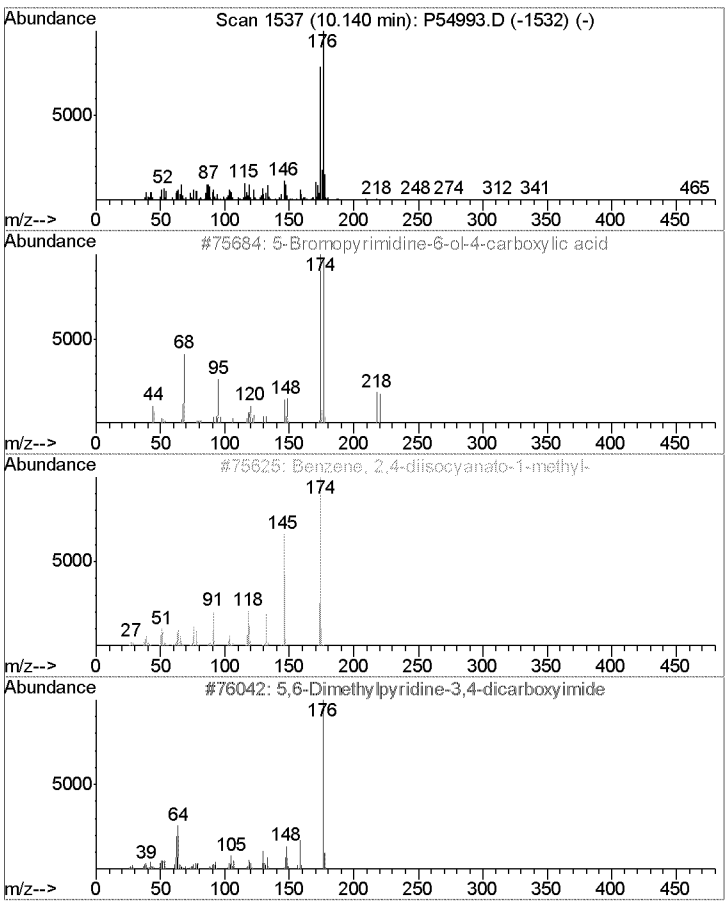
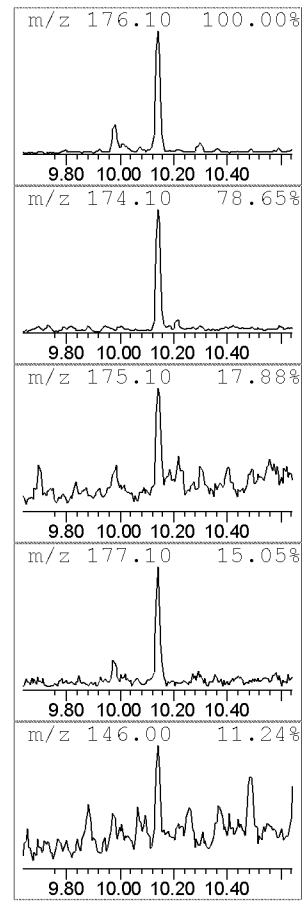
Peak Number 8 Internal standard added for... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.80 ppb	203342	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	40
2	Benzene, 2,4-diisocyanato-1-methyl-	174	C9H6N2O2	000584-84-9	38
3	5,6-Dimethylpyridine-3,4-dicarbo...	176	C9H8N2O2	1000222-05-7	35
4	2-Cyanomethyl-1,3-benzothiazole	174	C9H6N2S	056278-50-3	35
5	5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	35





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ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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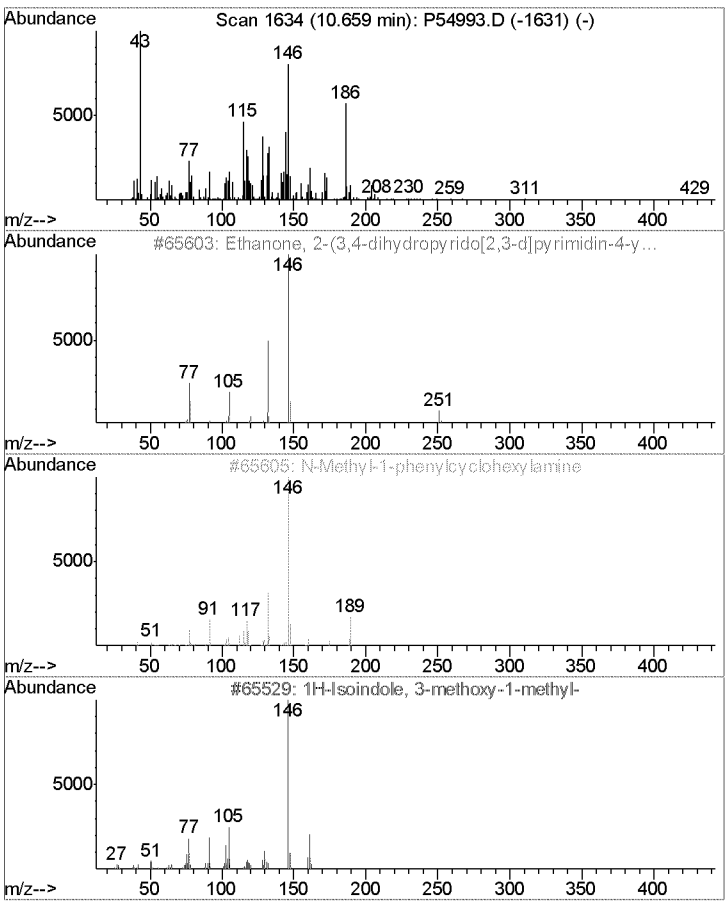
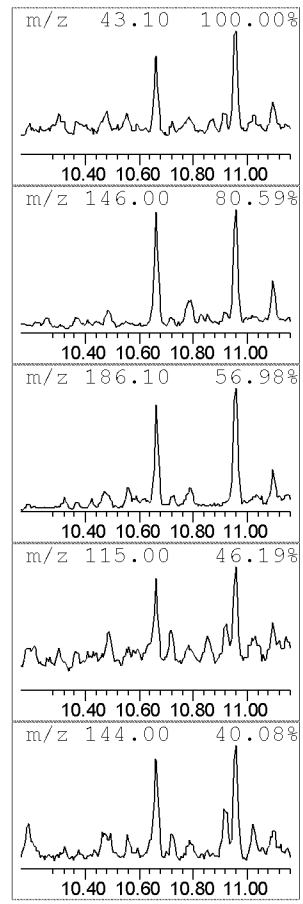
Peak Number 9 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.66	6.93 ppb	296411	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanone, 2-(3,4-dihydropyrido[2...	251	C15H13N3O	028732-76-5	22
2	N-Methyl-1-phenylcyclohexylamine	189	C13H19N	002201-16-3	22
3	1H-Isoindole, 3-methoxy-1-methyl-	161	C10H11NO	083889-38-7	18
4	Phenanthrene, 1,2,3,4,5,6,7,8-oc...	186	C14H18	005325-97-3	18
5	Naphth[1,2-b]oxirene, 1a,2,3,7b-...	146	C10H10O	002461-34-9	18





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ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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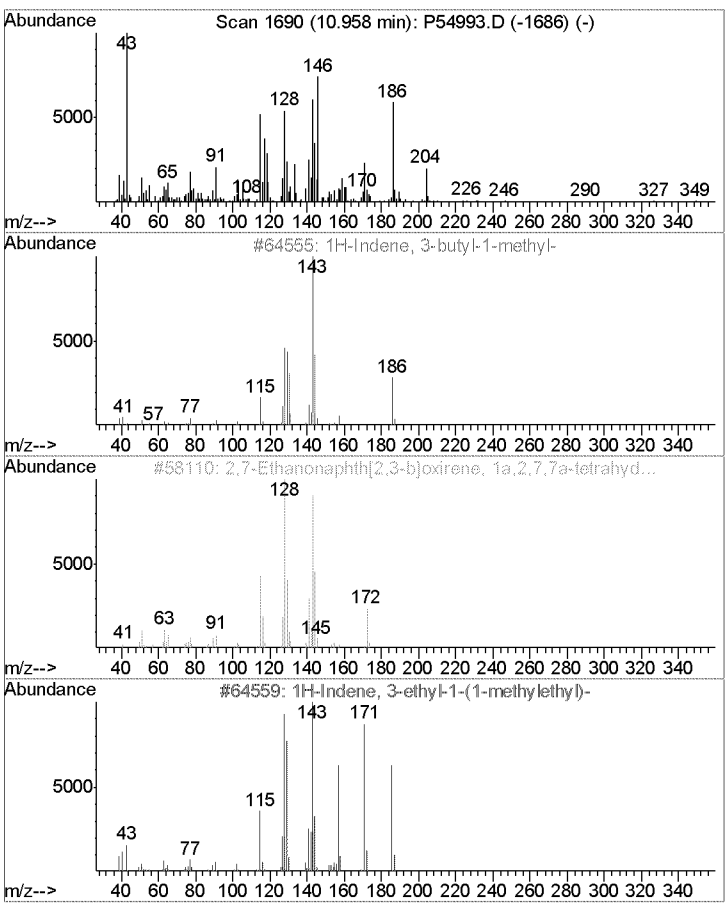
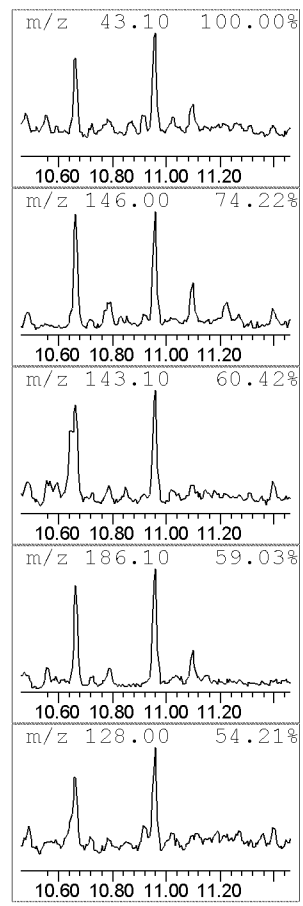
Peak Number 10 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.96	7.68 ppb	328676	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 3-butyl-1-methyl-	186	C14H18	111400-84-1	38
2	2,7-Ethanonaphth[2,3-b]oxirene, ...	172	C12H12O	054515-76-3	27
3	1H-Indene, 3-ethyl-1-(1-methylet...	186	C14H18	111400-85-2	25
4	Benzene, (1,2,3-trimethyl-2-cycl...	158	C12H14	006393-13-1	18
5	(1-Methylpenta-1,3-dienyl)benzene	158	C12H14	116669-49-9	14





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Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

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Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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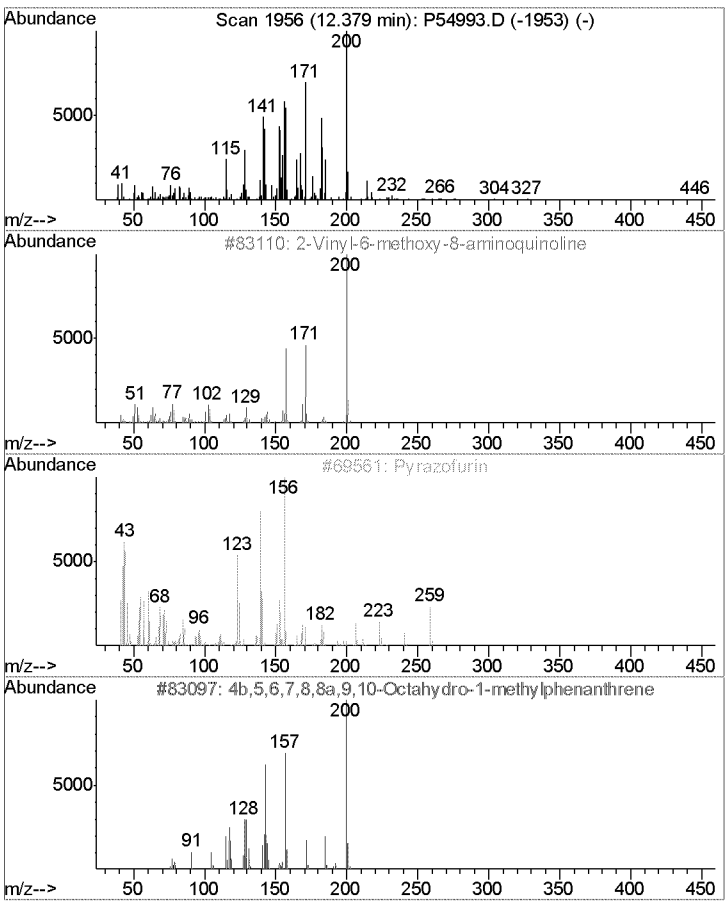
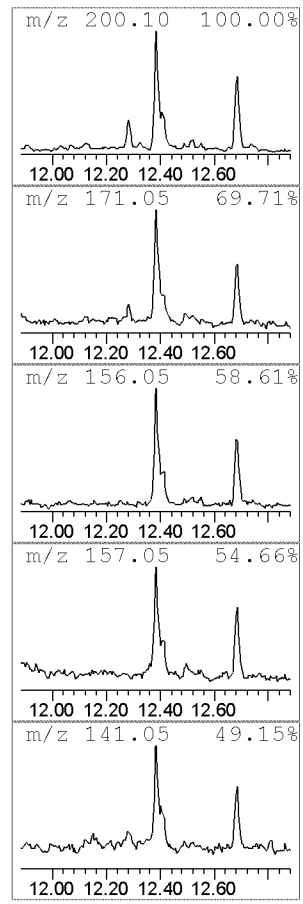
Peak Number 11 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	6.72 ppb	287599	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	30
2	Pyrazofurin	259	C9H13N3O6	030868-30-5	18
3	4b,5,6,7,8,8a,9,10-Octahydro-1-m...	200	C15H20	1000080-19-3	14
4	Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	11
5	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	11





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TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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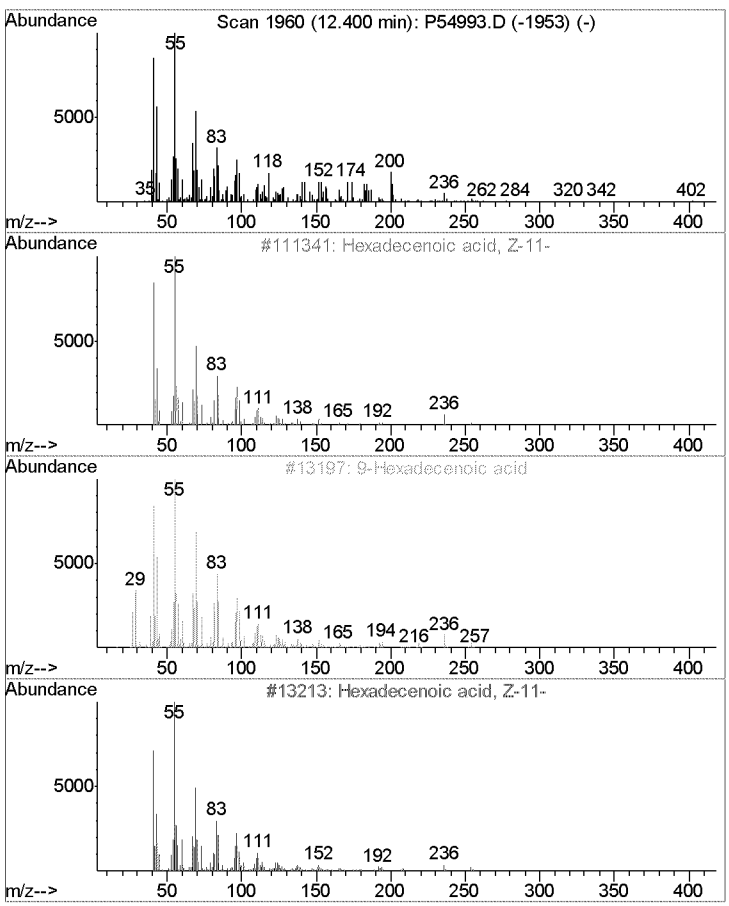
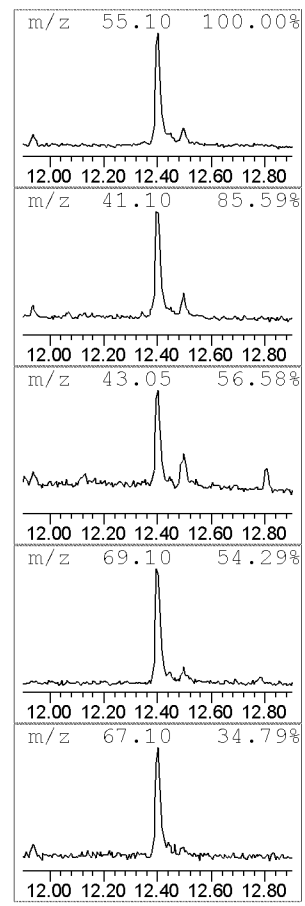
Peak Number 12 unknown acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	9.57 ppb	409243	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	93
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	91
3	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	91
4	2-Tridecene, (E)-	182	C13H26	041446-58-6	42
5	4-Tridecene, (Z)-	182	C13H26	041446-54-2	38





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

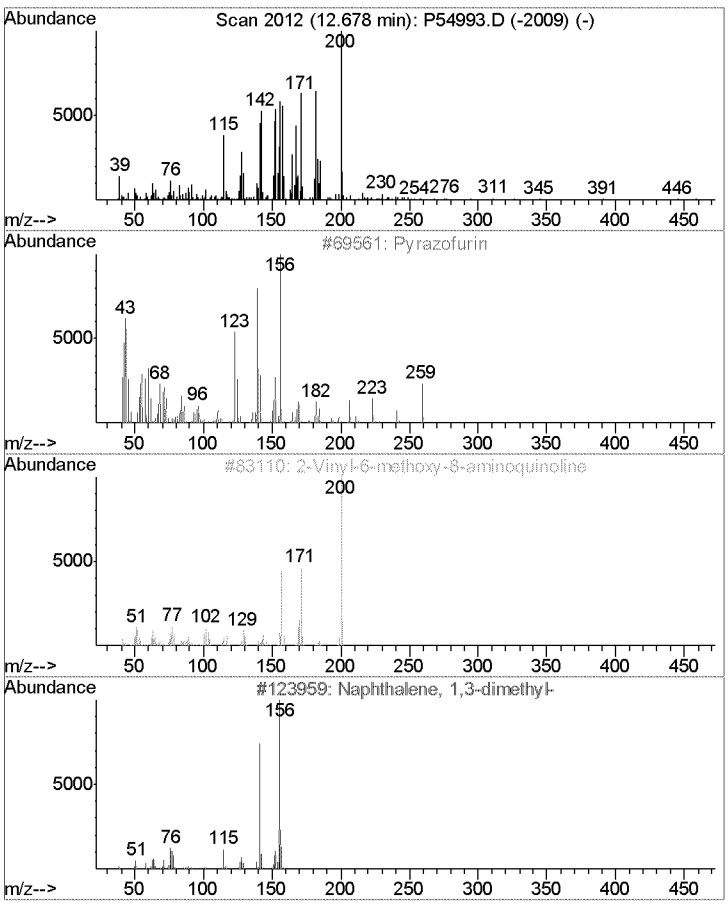
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

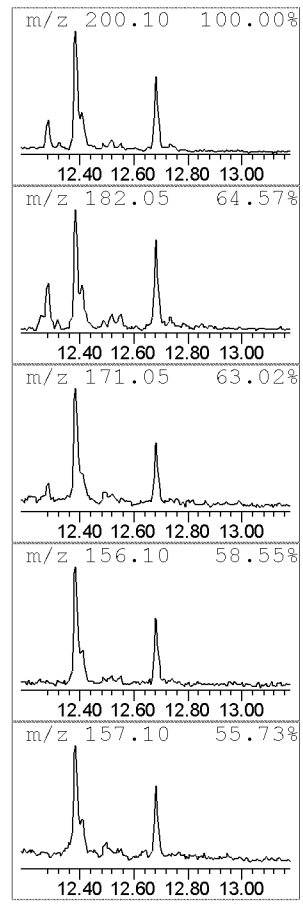
****

Peak Number 13 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.68	4.19 ppb	179415	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrazofurin	259	C9H13N3O6	030868-30-5	92
2	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	22
3	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	11
4	4,6(1H,5H)-Pyrimidinedione, 1,3-...	200	C8H12N2O2S	005217-47-0	11
5	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	11





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

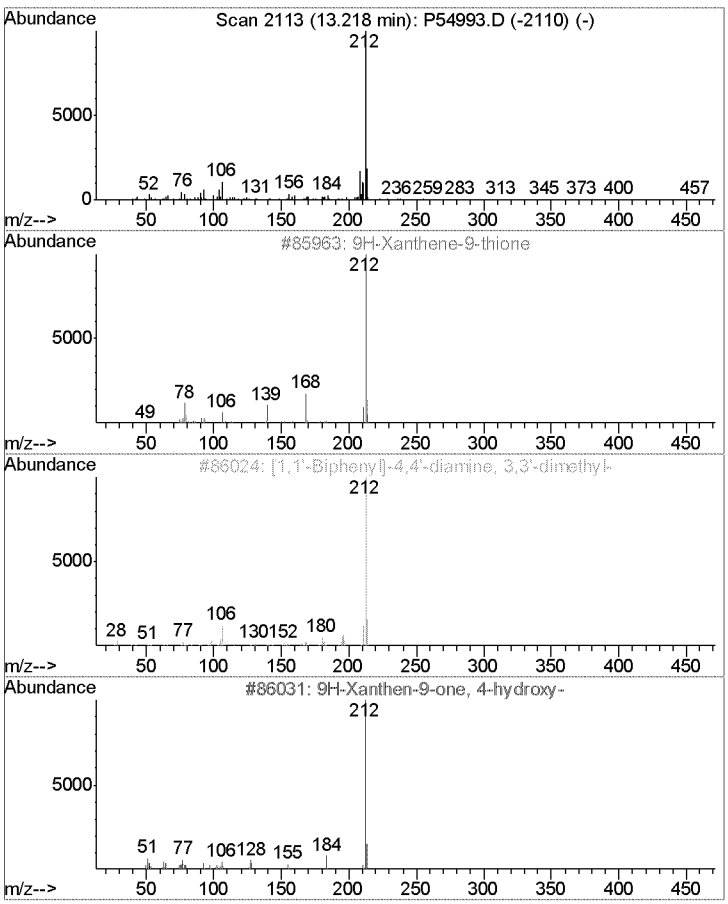
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

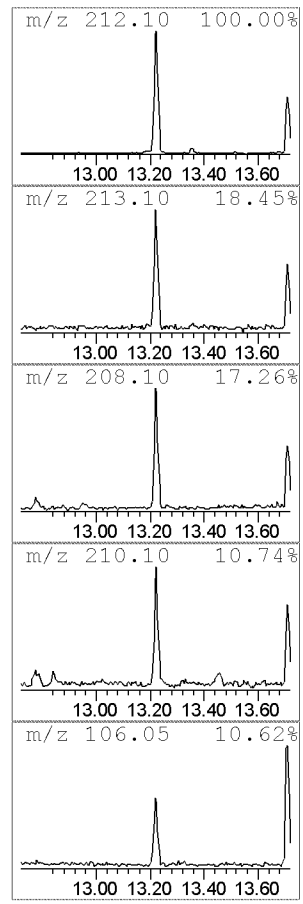
****

Peak Number 14 Internal standard added for... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.53 ppb	193916	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	52
4	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	50
5	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	50





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

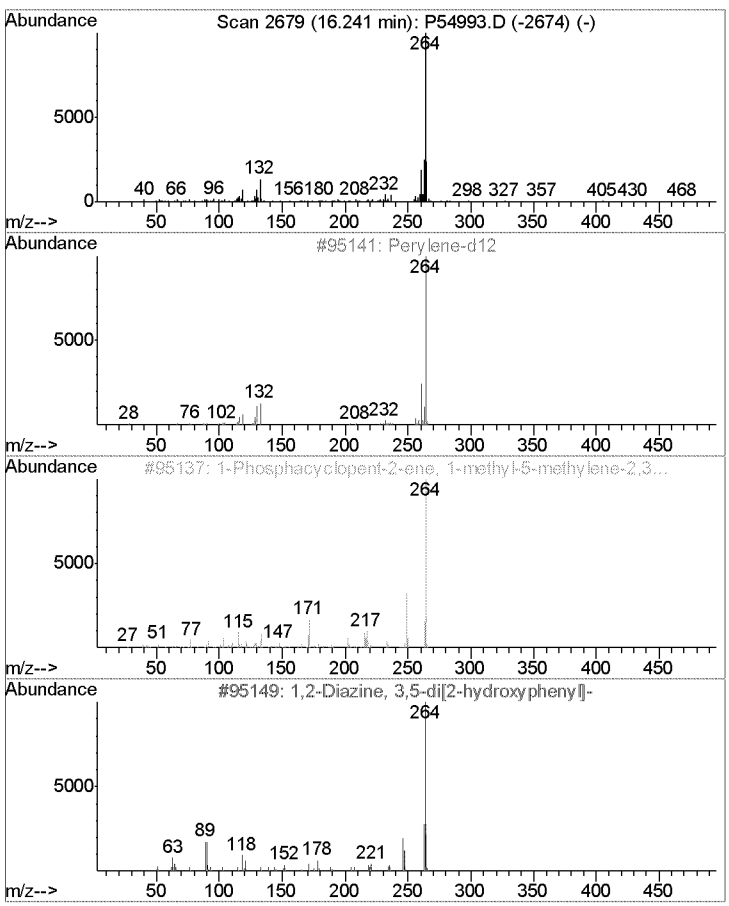
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

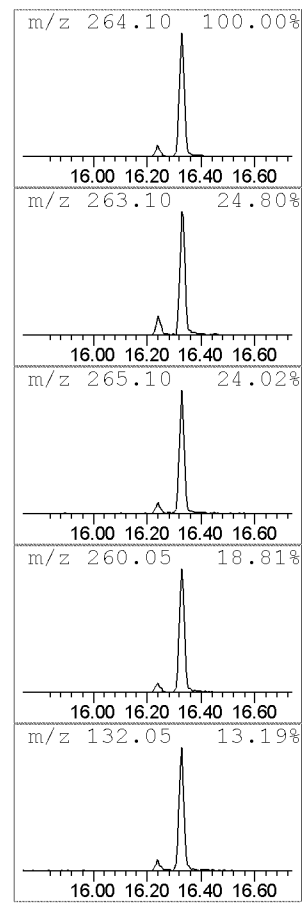
****

Peak Number 15 Internal standard added for... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.23 ppb	153890	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	95
2	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	72
3	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	64
4	2-[(N-Methylaminocarbonyl)benzyl...	322	C18H18N4O2	1000148-36-9	53
5	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	4.86	5.4	ppb	159241	2	4.78	1180780	40.0
Internal standard...	5.03	4.7	ppb	138172	2	4.78	1180780	40.0
unknown	5.43	4.2	ppb	124313	2	4.78	1180780	40.0
1H-Inden-1-one, -...	7.51	12.9	ppb	447084	3	6.57	1387770	40.0
Phenol, -tert-butyl-	7.55	9.8	ppb	339472	3	6.57	1387770	40.0
unknown	8.98	12.6	ppb	441117	4	9.33	1403030	40.0
unknown	10.03	4.3	ppb	151705	5	9.33	1403030	40.0
Internal standard...	10.14	5.8	ppb	203342	5	9.33	1403030	40.0
unknown	10.66	6.9	ppb	296411	6	11.64	1711120	40.0
unknown	10.96	7.7	ppb	328676	6	11.64	1711120	40.0
unknown	12.38	6.7	ppb	287599	7	11.64	1711120	40.0
unknown acid	12.40	9.6	ppb	409243	7	11.64	1711120	40.0
unknown	12.68	4.2	ppb	179415	7	11.64	1711120	40.0
Internal standard...	13.22	4.5	ppb	193916	7	11.64	1711120	40.0
Internal standard...	16.24	4.2	ppb	153890	10	16.33	1456500	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	155533	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	554125	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	346833	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	584336	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	643221	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	549267	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	155533	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	584336	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	346833	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	643221	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	289308	41.44	ppb	-0.07
Spiked Amount 50.000			Recovery =	82.88%		
51) 2-Fluorobiphenyl	8.28	172	478893	40.21	ppb	-0.09
Spiked Amount 50.000			Recovery =	80.42%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	566776	37.29	ppb	-0.06
Spiked Amount 50.000			Recovery =	74.58%		

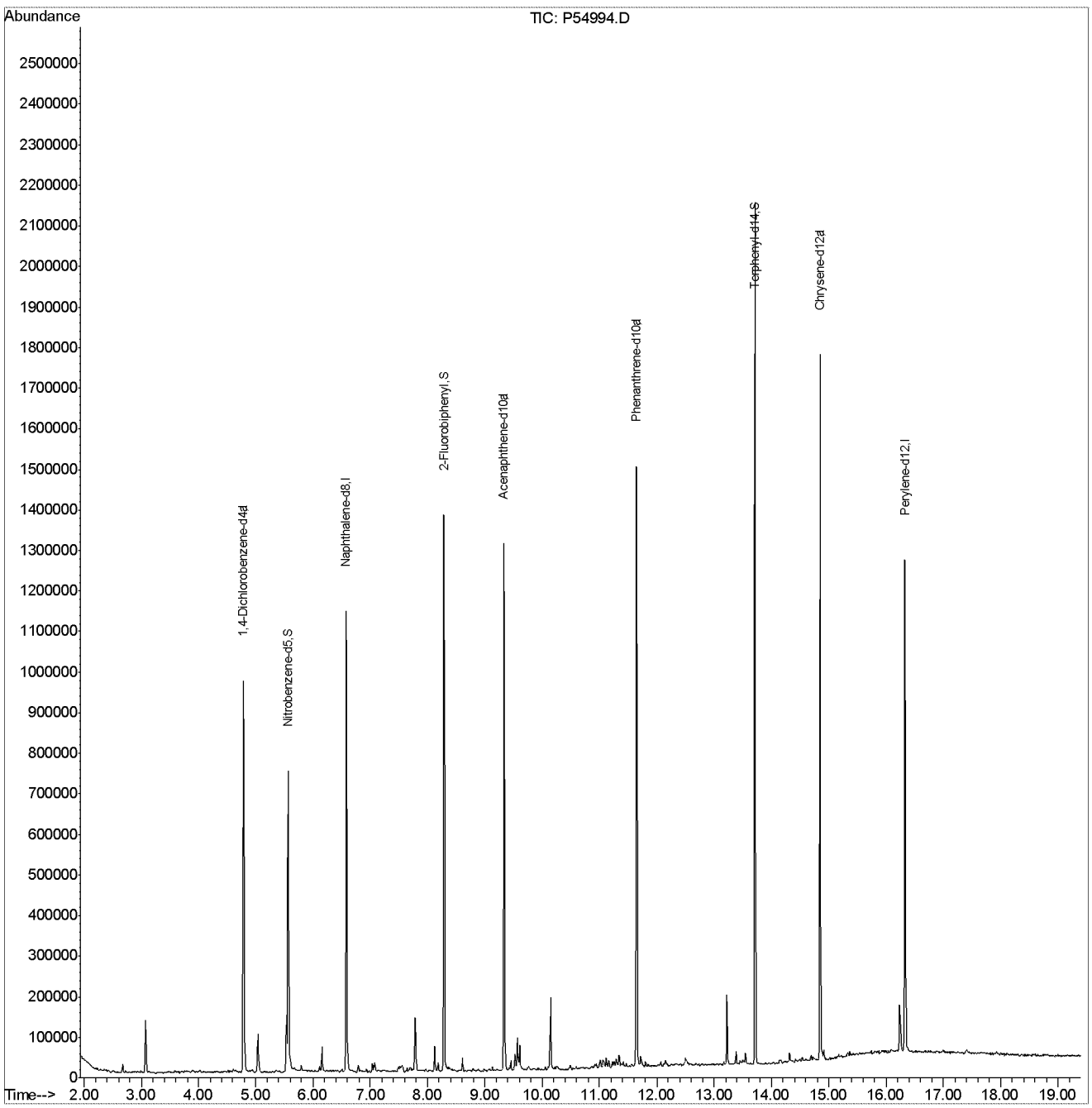
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.384	82	85	100	rVB	7252	18643	0.92%	0.112%
2	2.501	100	107	114	rVB	4482	10529	0.52%	0.063%
3	2.667	134	138	144	rVV2	20694	27565	1.36%	0.165%
4	2.726	144	149	156	rVB2	5349	11297	0.56%	0.068%
5	3.068	205	213	222	rBV	130265	158651	7.81%	0.951%
6	3.137	222	226	231	rBV8	3761	6787	0.33%	0.041%
7	3.591	303	311	315	rBV10	4721	9922	0.49%	0.059%
8	3.794	345	349	361	rVB10	4254	10354	0.51%	0.062%
9	3.896	361	368	377	rVB10	5921	13851	0.68%	0.083%
10	4.024	383	392	397	rBV10	5224	11726	0.58%	0.070%
11	4.435	465	469	477	rBV9	3335	8869	0.44%	0.053%
12	4.601	497	500	504	rBV5	7582	11184	0.55%	0.067%
13	4.638	504	507	516	rVB7	6365	10786	0.53%	0.065%
14	4.782	526	534	549	rBV	964731	1164577	57.31%	6.978%
15	4.937	559	563	571	rVB7	7427	12756	0.63%	0.076%
16	5.033	576	581	591	rVB	93359	120255	5.92%	0.721%
17	5.349	634	640	641	rBV6	5977	8676	0.43%	0.052%
18	5.402	646	650	659	rVB9	4399	8701	0.43%	0.052%
19	5.530	665	674	677	rBV	141713	177662	8.74%	1.064%
20	5.562	677	680	697	rVB	738837	907967	44.68%	5.440%
21	5.792	719	723	729	rVB4	14442	17917	0.88%	0.107%
22	6.113	779	783	786	rBV5	12734	14652	0.72%	0.088%
23	6.155	786	791	802	rVB	60414	75585	3.72%	0.453%
24	6.497	846	855	860	rBV9	7799	13407	0.66%	0.080%
25	6.572	860	869	888	rBV	1134405	1409229	69.35%	8.444%
26	6.780	903	908	913	rBV5	17462	23409	1.15%	0.140%
27	6.930	932	936	940	rVB6	8982	11173	0.55%	0.067%
28	7.031	950	955	958	rBV	21793	26253	1.29%	0.157%
29	7.069	958	962	966	rVB	20775	24391	1.20%	0.146%
30	7.218	985	990	995	rBV9	5260	8452	0.42%	0.051%
31	7.486	1035	1040	1042	rBV5	11828	17184	0.85%	0.103%
32	7.512	1042	1045	1049	rVV5	13829	23974	1.18%	0.144%
33	7.550	1049	1052	1061	rVB4	17067	32456	1.60%	0.194%
34	7.640	1061	1069	1072	rBV9	11537	20240	1.00%	0.121%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.689	1073	1078	1085	rBV9	7305	12988	0.64%	0.078%
36	7.779	1090	1095	1107	rVB2	132730	177043	8.71%	1.061%
37	7.966	1126	1130	1136	rVB9	7488	10409	0.51%	0.062%
38	8.020	1136	1140	1147	rBV8	5896	9974	0.49%	0.060%
39	8.116	1150	1158	1165	rBV	63234	81065	3.99%	0.486%
40	8.175	1165	1169	1176	rVB4	22481	28692	1.41%	0.172%
41	8.282	1181	1189	1200	rBV	1373010	1622903	79.86%	9.724%
42	8.356	1200	1203	1206	rVB2	5730	6698	0.33%	0.040%
43	8.538	1233	1237	1244	rBV10	3883	8857	0.44%	0.053%
44	8.602	1244	1249	1256	rVB	32538	41634	2.05%	0.249%
45	8.704	1265	1268	1273	rBV7	4652	7306	0.36%	0.044%
46	8.789	1279	1284	1293	rBV7	6924	12466	0.61%	0.075%
47	8.875	1294	1300	1310	rVB7	6857	16911	0.83%	0.101%
48	8.981	1316	1320	1329	rVB10	6269	12582	0.62%	0.075%
49	9.062	1330	1335	1343	rBV10	6196	15710	0.77%	0.094%
50	9.126	1343	1347	1350	rBV6	8981	10336	0.51%	0.062%
51	9.195	1356	1360	1369	rVB6	5254	11843	0.58%	0.071%
52	9.329	1377	1385	1398	rBV	1298790	1586717	78.08%	9.507%
53	9.414	1398	1401	1404	rVV4	5875	7153	0.35%	0.043%
54	9.451	1404	1408	1412	rVB	24917	31060	1.53%	0.186%
55	9.521	1412	1421	1424	rBV	41452	54430	2.68%	0.326%
56	9.564	1424	1429	1433	rVV	80612	117737	5.79%	0.705%
57	9.606	1433	1437	1449	rVB	61988	92750	4.56%	0.556%
58	9.761	1457	1466	1475	rBV	9619	25044	1.23%	0.150%
59	9.847	1475	1482	1484	rBV8	3850	7266	0.36%	0.044%
60	10.050	1514	1520	1524	rBV7	7083	13123	0.65%	0.079%
61	10.141	1526	1537	1547	rBV2	179964	250675	12.34%	1.502%
62	10.247	1554	1557	1564	rVB9	6395	9101	0.45%	0.055%
63	10.488	1597	1602	1610	rVB9	9156	15385	0.76%	0.092%
64	10.589	1616	1621	1625	rBV7	6813	11100	0.55%	0.067%
65	10.867	1668	1673	1676	rBV6	6610	9236	0.45%	0.055%
66	10.910	1678	1681	1684	rBV5	9127	9859	0.49%	0.059%
67	10.942	1685	1687	1692	rVB2	11101	11314	0.56%	0.068%
68	11.006	1695	1699	1704	rBV	19971	24219	1.19%	0.145%
69	11.065	1707	1710	1716	rBV4	16040	25060	1.23%	0.150%
70	11.113	1716	1719	1723	rVV3	20337	22517	1.11%	0.135%
71	11.156	1724	1727	1733	rVB4	18875	21745	1.07%	0.130%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	11.220	1733	1739	1742	rBV4	15529	24825	1.22%	0.149%
73	11.252	1742	1745	1748	rVV5	11958	12225	0.60%	0.073%
74	11.284	1748	1751	1757	rVV5	18070	28420	1.40%	0.170%
75	11.337	1757	1761	1765	rVB2	27786	37592	1.85%	0.225%
76	11.407	1771	1774	1781	rVB4	12280	12686	0.62%	0.076%
77	11.471	1781	1786	1792	rVB8	8483	12758	0.63%	0.076%
78	11.562	1800	1803	1809	rBV8	7013	15071	0.74%	0.090%
79	11.642	1811	1818	1828	rBV2	1476640	1745432	85.89%	10.458%
80	11.722	1830	1833	1844	rVB7	25459	39964	1.97%	0.239%
81	11.797	1844	1847	1853	rBV6	13316	17105	0.84%	0.102%
82	11.845	1854	1856	1862	rVB7	5280	6951	0.34%	0.042%
83	12.064	1894	1897	1904	rVB7	10898	12979	0.64%	0.078%
84	12.123	1904	1908	1910	rVV4	6801	9611	0.47%	0.058%
85	12.149	1910	1913	1924	rVB4	14341	25891	1.27%	0.155%
86	12.497	1972	1978	1990	rBV4	19302	52474	2.58%	0.314%
87	13.164	2099	2103	2107	rBV7	8014	12336	0.61%	0.074%
88	13.218	2108	2113	2125	rVB	173468	193882	9.54%	1.162%
89	13.378	2139	2143	2147	rVB2	29583	29559	1.45%	0.177%
90	13.448	2153	2156	2160	rBV6	8246	13817	0.68%	0.083%
91	13.544	2171	2174	2187	rVB	26921	29088	1.43%	0.174%
92	13.709	2199	2205	2224	rVB	2124624	2032060	100.00%	12.176%
93	14.142	2283	2286	2295	rVB	8794	15841	0.78%	0.095%
94	14.313	2315	2318	2328	rVB4	21440	25862	1.27%	0.155%
95	14.692	2386	2389	2393	rBV6	11968	14265	0.70%	0.085%
96	14.847	2413	2418	2428	rBV	1736285	1704648	83.89%	10.214%
97	14.911	2428	2430	2443	rVB	25923	32909	1.62%	0.197%
98	15.365	2513	2515	2519	rBV5	11247	11629	0.57%	0.070%
99	16.236	2673	2678	2688	rBV	115013	164332	8.09%	0.985%
100	16.327	2688	2695	2718	rVB	1212042	1493543	73.50%	8.949%

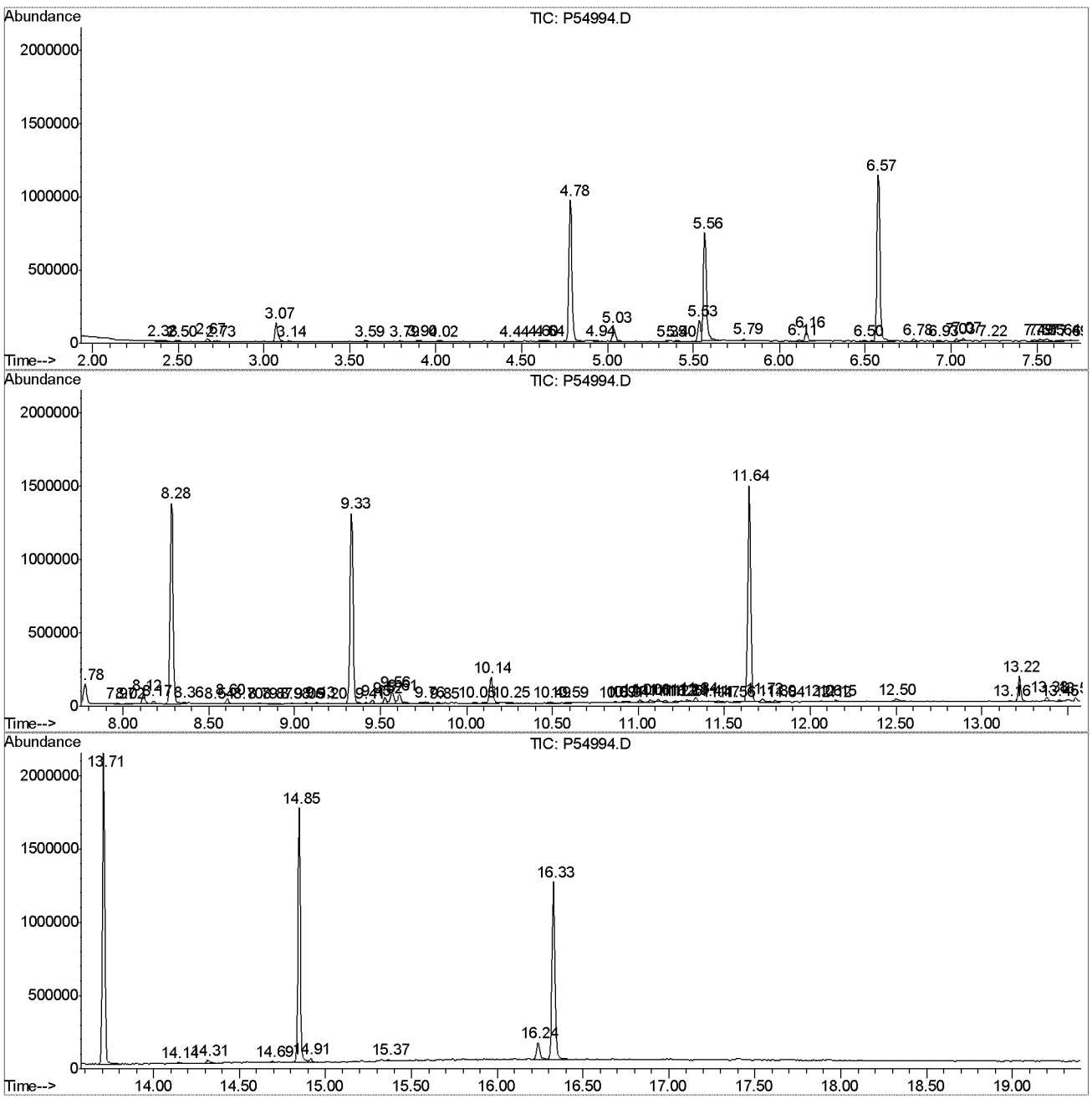
Sum of corrected areas: 16689743

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

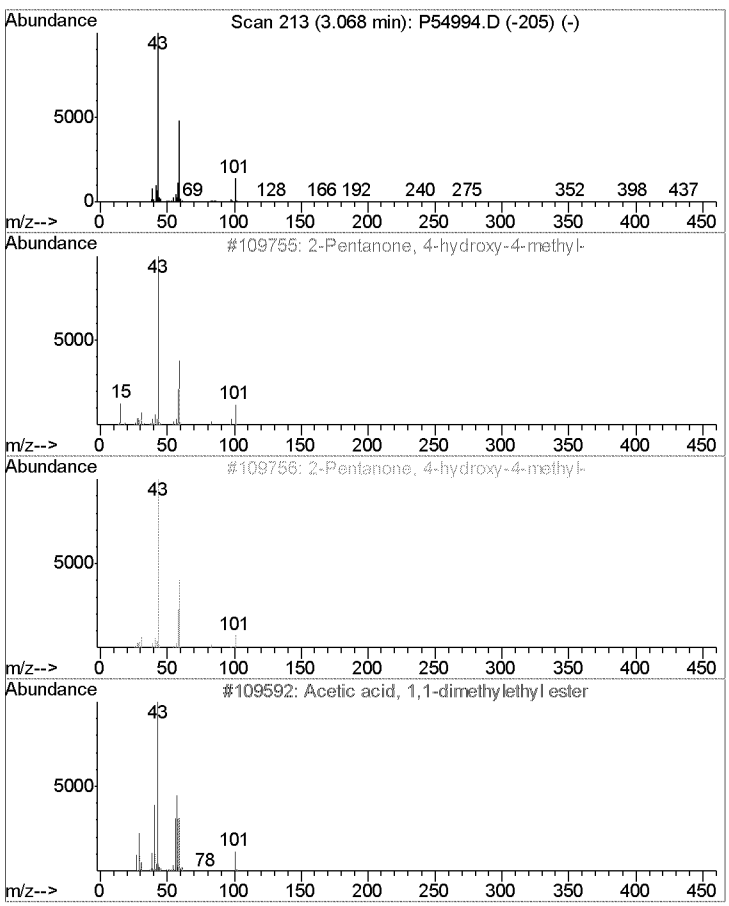
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

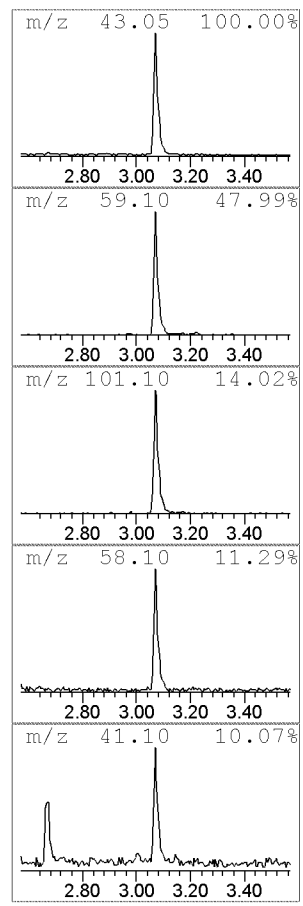
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 1 system artifact/aldol-conde... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	5.45 ppb	158651	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	1-Butene, 4-ethoxy-	100	C6H12O	044611-46-3	23
5	Diacetamide	101	C4H7NO2	000625-77-4	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

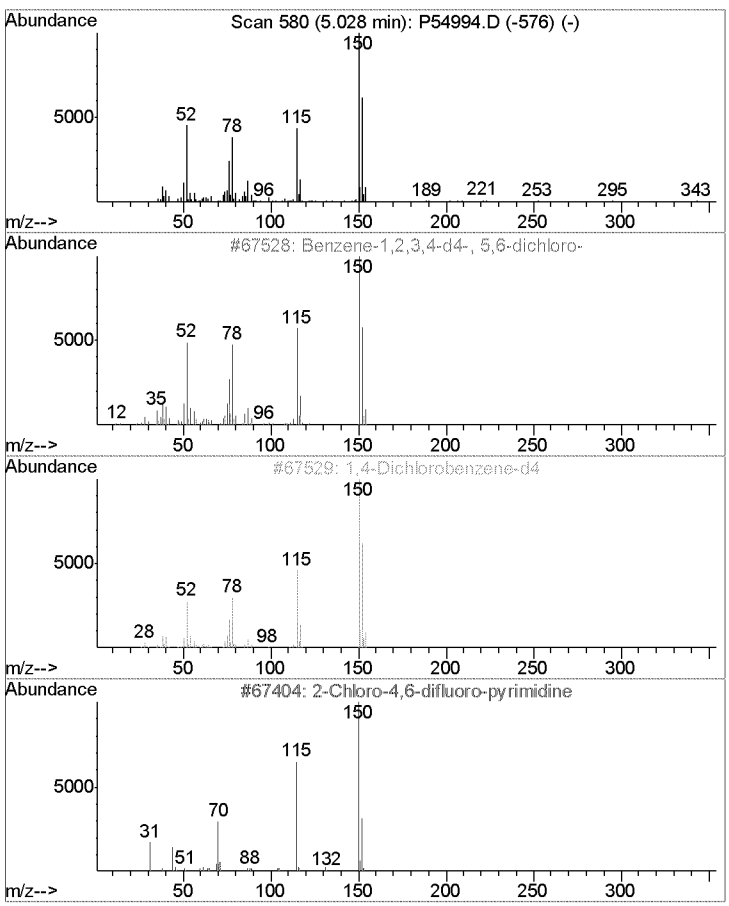
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

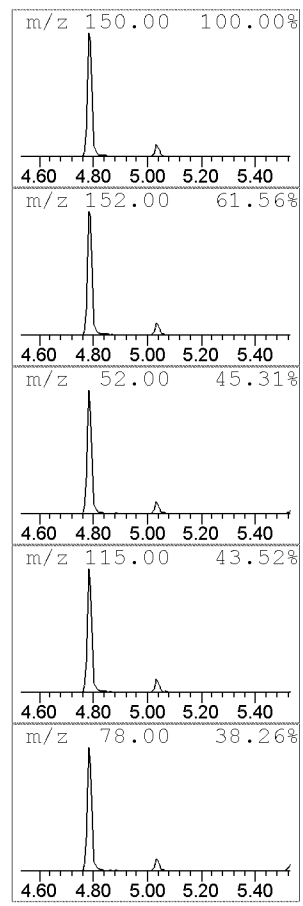
****

Peak Number 2 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.13 ppb	120255	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	90
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
4	Benzeneacetonitrile, 2,4-dichloro-	185	C8H5Cl2N	006306-60-1	10
5	Ethanone, 1-(3,5-dimethylpyrazin...	150	C8H10N2O	054300-08-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

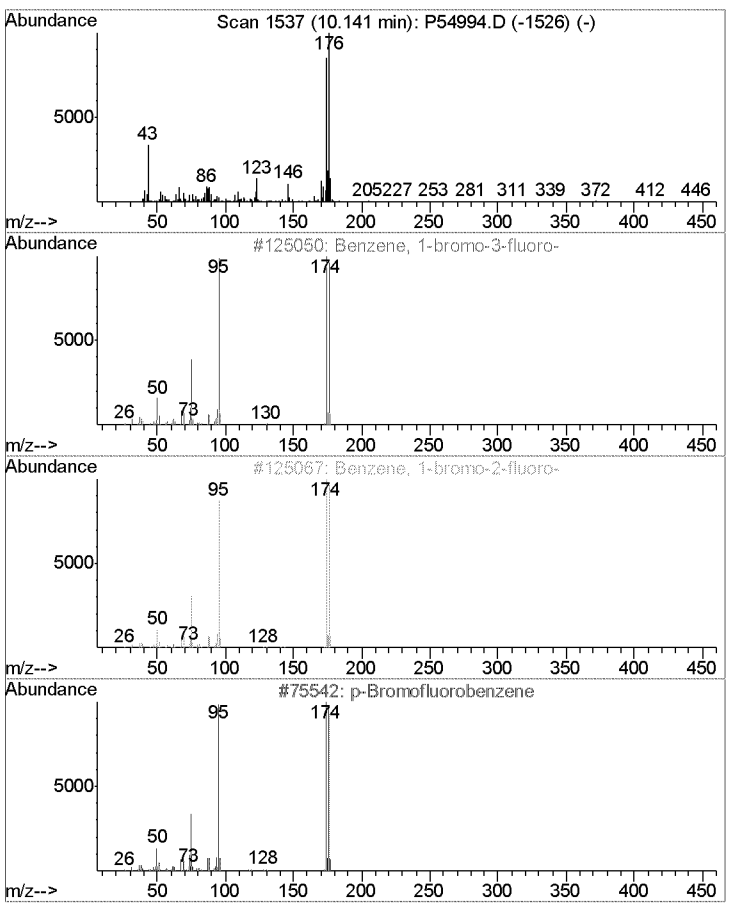
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

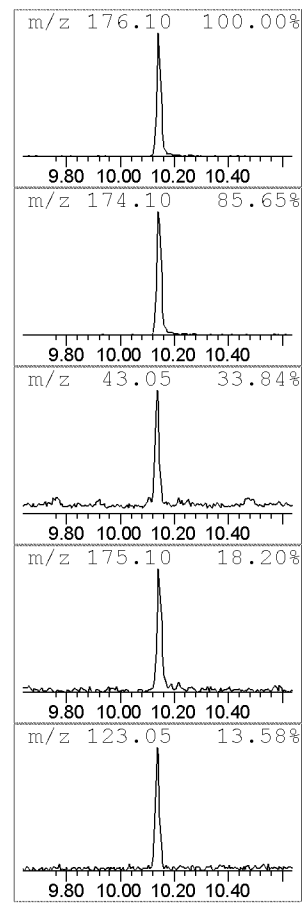
****

Peak Number 3 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.55 ppb	180600	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	53
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	42
3	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	36
4	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	27
5	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

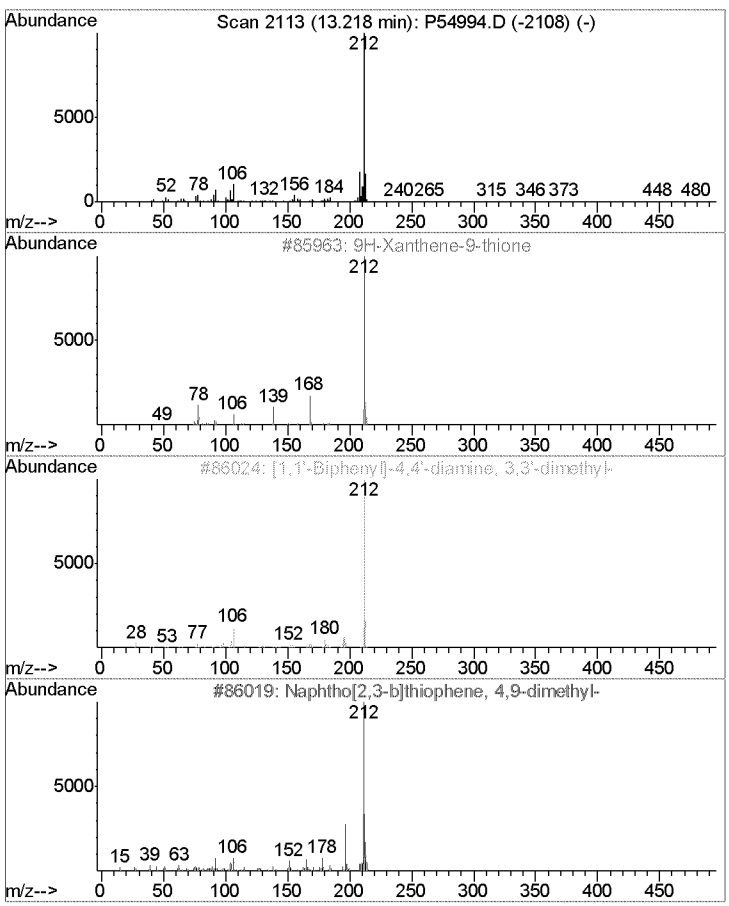
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

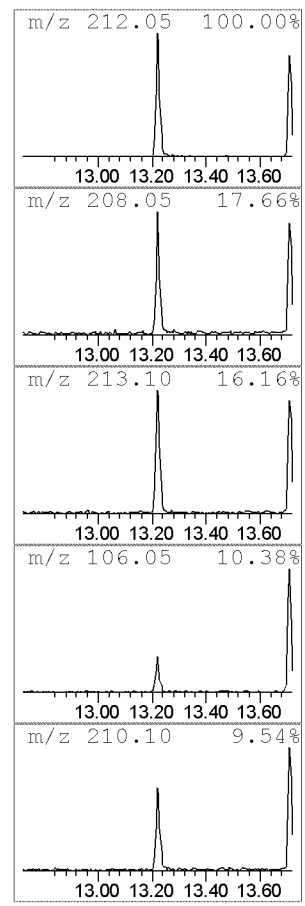
****

Peak Number 4 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.44 ppb	193882	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
4	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	59
5	Harmine	212	C13H12N2O	000442-51-3	59





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

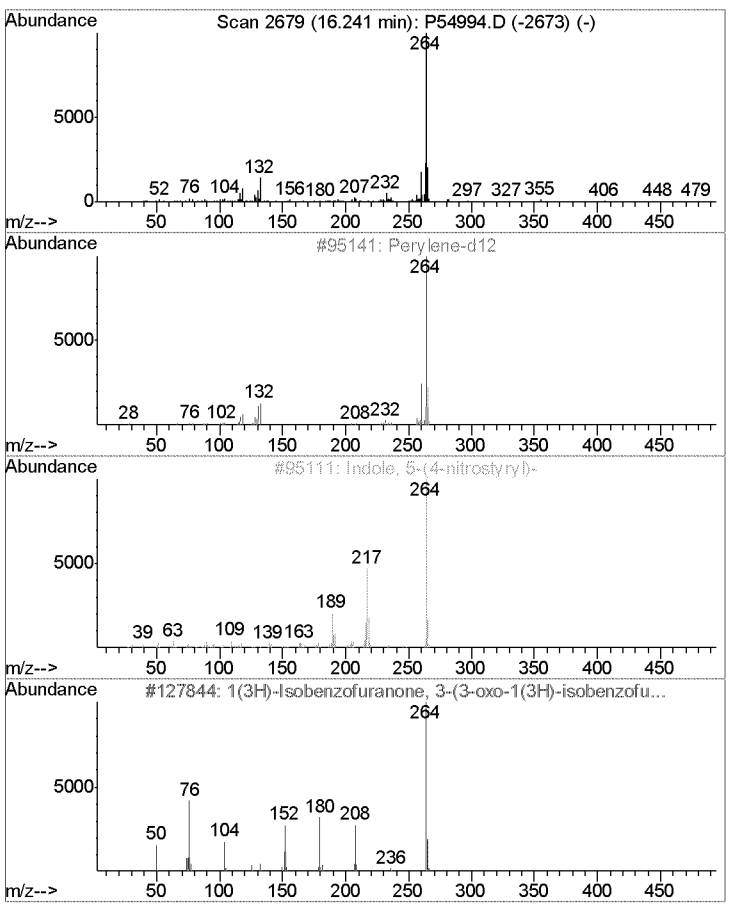
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

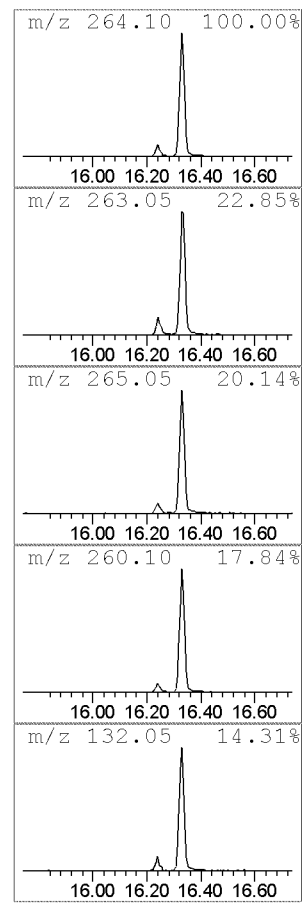
****

Peak Number 5 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.40 ppb	164332	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	94
2	Indole, 5-(4-nitrostyryl)-	264	C16H12N2O2	1000151-40-1	50
3	1(3H)-Isobenzofuranone, 3-(3-oxo...	264	C16H8O4	000482-23-5	47
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	45
5	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	45





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	5.5	ppb	158651	1	4.78	1164580	40.0
Internal standard...	5.03	4.1	ppb	120255	2	4.78	1164580	40.0
Internal standard...	10.14	4.5	ppb	180600	5	9.33	1586720	40.0
Internal standard...	13.22	4.4	ppb	193882	7	11.64	1745430	40.0
Internal standard...	16.24	4.4	ppb	164332	10	16.33	1493540	40.0

8.1.8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:39:00 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

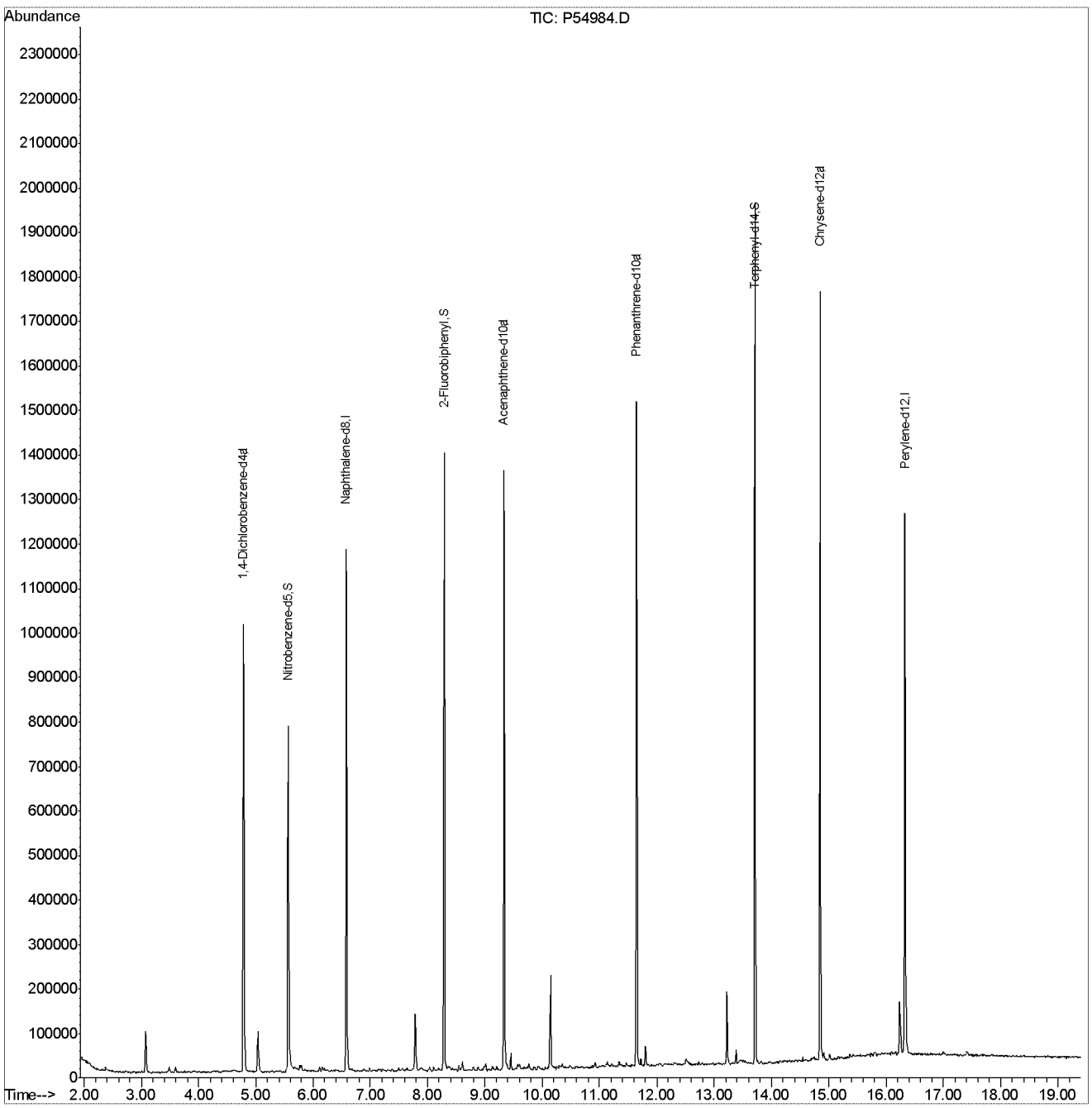
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	161372	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	575979	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	355651	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	609508	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	672762	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	576551	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	161372	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	609508	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	355651	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	672762	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	308955	42.58	ppb	-0.08
Spiked Amount 50.000			Recovery =	85.16%		
51) 2-Fluorobiphenyl	8.29	172	500372	40.97	ppb	-0.08
Spiked Amount 50.000			Recovery =	81.94%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	505683	31.81	ppb	-0.06
Spiked Amount 50.000			Recovery =	63.62%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:39:00 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.373	80	83	85	rBV4	6542	3938	0.22%	0.025%
2	2.496	102	106	114	rVB8	5104	10746	0.60%	0.067%
3	2.587	117	123	127	rVB8	2929	5260	0.29%	0.033%
4	2.715	143	147	158	rVB8	4253	9160	0.51%	0.057%
5	2.789	159	161	167	rVB7	2784	4393	0.24%	0.028%
6	2.838	167	170	173	rBV5	3273	4147	0.23%	0.026%
7	2.880	174	178	183	rVB7	2769	4932	0.27%	0.031%
8	3.003	197	201	205	rBV6	4846	5912	0.33%	0.037%
9	3.067	209	213	224	rVB	91427	121119	6.72%	0.758%
10	3.206	235	239	246	rBV10	3898	8365	0.46%	0.052%
11	3.361	261	268	271	rBV8	3609	7422	0.41%	0.046%
12	3.484	284	291	297	rVB3	11553	18357	1.02%	0.115%
13	3.596	304	312	321	rBV7	12070	21541	1.19%	0.135%
14	4.323	444	448	453	rVB8	3576	7466	0.41%	0.047%
15	4.446	465	471	478	rVB8	3432	5802	0.32%	0.036%
16	4.595	495	499	506	rVB9	4263	10068	0.56%	0.063%
17	4.643	506	508	513	rBV6	3924	4199	0.23%	0.026%
18	4.782	526	534	550	rBV	1005446	1199272	66.52%	7.509%
19	5.033	576	581	595	rVB	91561	124605	6.91%	0.780%
20	5.471	659	663	667	rVB7	3032	4455	0.25%	0.028%
21	5.562	671	680	698	rBV	779481	1017424	56.44%	6.370%
22	5.669	699	700	705	rVB5	4586	6834	0.38%	0.043%
23	5.765	714	718	720	rBV4	9937	9965	0.55%	0.062%
24	5.792	720	723	731	rVB5	14055	21223	1.18%	0.133%
25	5.851	731	734	736	rBV4	4650	4439	0.25%	0.028%
26	5.920	743	747	749	rVB5	3690	4050	0.22%	0.025%
27	5.989	757	760	764	rBV6	4082	4680	0.26%	0.029%
28	6.112	776	783	787	rBV10	10344	16704	0.93%	0.105%
29	6.160	787	792	795	rVV5	10660	14169	0.79%	0.089%
30	6.193	795	798	802	rVB4	7615	8230	0.46%	0.052%
31	6.390	834	835	840	rBV4	3980	4359	0.24%	0.027%
32	6.433	840	843	848	rVB7	5202	6367	0.35%	0.040%
33	6.492	851	854	861	rVB9	2843	5652	0.31%	0.035%
34	6.572	863	869	881	rBV	1175311	1443233	80.06%	9.037%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	6.785	904	909	913	rVB7	3039	4991	0.28%	0.031%
36	6.887	926	928	933	rVB6	4919	5548	0.31%	0.035%
37	6.983	942	946	950	rVB4	9700	12055	0.67%	0.075%
38	7.031	950	955	958	rBV7	3337	5378	0.30%	0.034%
39	7.133	967	974	980	rBV7	5871	13866	0.77%	0.087%
40	7.208	984	988	995	rBV10	4730	10969	0.61%	0.069%
41	7.304	1000	1006	1016	rBV10	4857	13106	0.73%	0.082%
42	7.378	1016	1020	1024	rVV7	5154	6903	0.38%	0.043%
43	7.491	1036	1041	1044	rBV7	6548	8259	0.46%	0.052%
44	7.549	1048	1052	1062	rVB7	7667	13041	0.72%	0.082%
45	7.640	1062	1069	1074	rBV7	7166	16362	0.91%	0.102%
46	7.747	1084	1089	1090	rBV5	4818	7081	0.39%	0.044%
47	7.779	1090	1095	1106	rVB2	128463	171472	9.51%	1.074%
48	7.870	1107	1112	1114	rBV5	5871	7810	0.43%	0.049%
49	7.966	1128	1130	1134	rVB5	3866	4553	0.25%	0.029%
50	8.025	1134	1141	1147	rBV6	11024	19704	1.09%	0.123%
51	8.105	1150	1156	1162	rBV9	8870	14554	0.81%	0.091%
52	8.180	1166	1170	1173	rBV6	4765	6560	0.36%	0.041%
53	8.287	1182	1190	1199	rBV	1389393	1672012	92.75%	10.469%
54	8.356	1200	1203	1207	rVB2	5594	6407	0.36%	0.040%
55	8.426	1213	1216	1220	rVB6	3727	4129	0.23%	0.026%
56	8.543	1233	1238	1242	rBV7	12747	20016	1.11%	0.125%
57	8.607	1243	1250	1257	rVB3	20693	36332	2.02%	0.227%
58	8.794	1279	1285	1294	rBV3	8535	14012	0.78%	0.088%
59	8.874	1295	1300	1308	rVB3	8430	15235	0.85%	0.095%
60	8.986	1316	1321	1322	rBV5	9049	12812	0.71%	0.080%
61	9.008	1322	1325	1331	rVB8	17327	24330	1.35%	0.152%
62	9.125	1344	1347	1350	rBV4	9296	11120	0.62%	0.070%
63	9.206	1358	1362	1367	rVB7	7766	10761	0.60%	0.067%
64	9.328	1375	1385	1403	rBV	1349310	1648572	91.45%	10.322%
65	9.451	1403	1408	1415	rVV	37332	44549	2.47%	0.279%
66	9.526	1418	1422	1424	rBV5	4755	6382	0.35%	0.040%
67	9.569	1425	1430	1432	rVV3	11130	14398	0.80%	0.090%
68	9.596	1432	1435	1441	rVB5	9686	16536	0.92%	0.104%
69	9.676	1449	1450	1457	rBV7	4397	7444	0.41%	0.047%
70	9.761	1463	1466	1475	rVB7	13479	17242	0.96%	0.108%
71	9.868	1479	1486	1489	rBV9	6824	13816	0.77%	0.087%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	9.921	1493	1496	1507	rVB9	7978	20107	1.12%	0.126%
73	10.050	1518	1520	1525	rBV6	5039	4571	0.25%	0.029%
74	10.140	1531	1537	1548	rVB2	210068	287896	15.97%	1.803%
75	10.258	1555	1559	1563	rBV7	5958	9975	0.55%	0.062%
76	10.295	1563	1566	1569	rBV4	8205	10650	0.59%	0.067%
77	10.349	1572	1576	1581	rVB8	11751	16560	0.92%	0.104%
78	10.397	1583	1585	1590	rVB6	5173	5740	0.32%	0.036%
79	10.578	1616	1619	1620	rBV3	4883	4283	0.24%	0.027%
80	10.685	1636	1639	1642	rBV5	3940	4940	0.27%	0.031%
81	10.867	1669	1673	1677	rBV6	6358	9117	0.51%	0.057%
82	10.915	1677	1682	1687	rVV8	11388	17814	0.99%	0.112%
83	11.113	1715	1719	1720	rBV4	6029	7109	0.39%	0.045%
84	11.284	1748	1751	1756	rBV7	5914	8386	0.47%	0.053%
85	11.337	1756	1761	1767	rBV7	11235	21528	1.19%	0.135%
86	11.465	1781	1785	1794	rBV9	9423	18649	1.03%	0.117%
87	11.642	1811	1818	1829	rBV2	1494682	1752564	97.22%	10.973%
88	11.716	1829	1832	1840	rVB6	16557	23172	1.29%	0.145%
89	11.797	1843	1847	1854	rBV	44487	51412	2.85%	0.322%
90	12.293	1937	1940	1942	rBV4	5431	4926	0.27%	0.031%
91	12.507	1975	1980	1988	rBV4	12484	27822	1.54%	0.174%
92	12.726	2018	2021	2027	rVB8	7944	10246	0.57%	0.064%
93	13.218	2107	2113	2124	rVB	164306	202251	11.22%	1.266%
94	13.378	2140	2143	2147	rVB2	30036	28894	1.60%	0.181%
95	13.709	2199	2205	2220	rBV	1935285	1802752	100.00%	11.288%
96	14.542	2359	2361	2364	rBV3	8490	5443	0.30%	0.034%
97	14.847	2411	2418	2428	rBV	1728510	1760338	97.65%	11.022%
98	14.911	2428	2430	2438	rVB2	16742	19383	1.08%	0.121%
99	16.236	2673	2678	2687	rBV2	117108	159898	8.87%	1.001%
100	16.327	2688	2695	2721	rVB	1216490	1587658	88.07%	9.941%

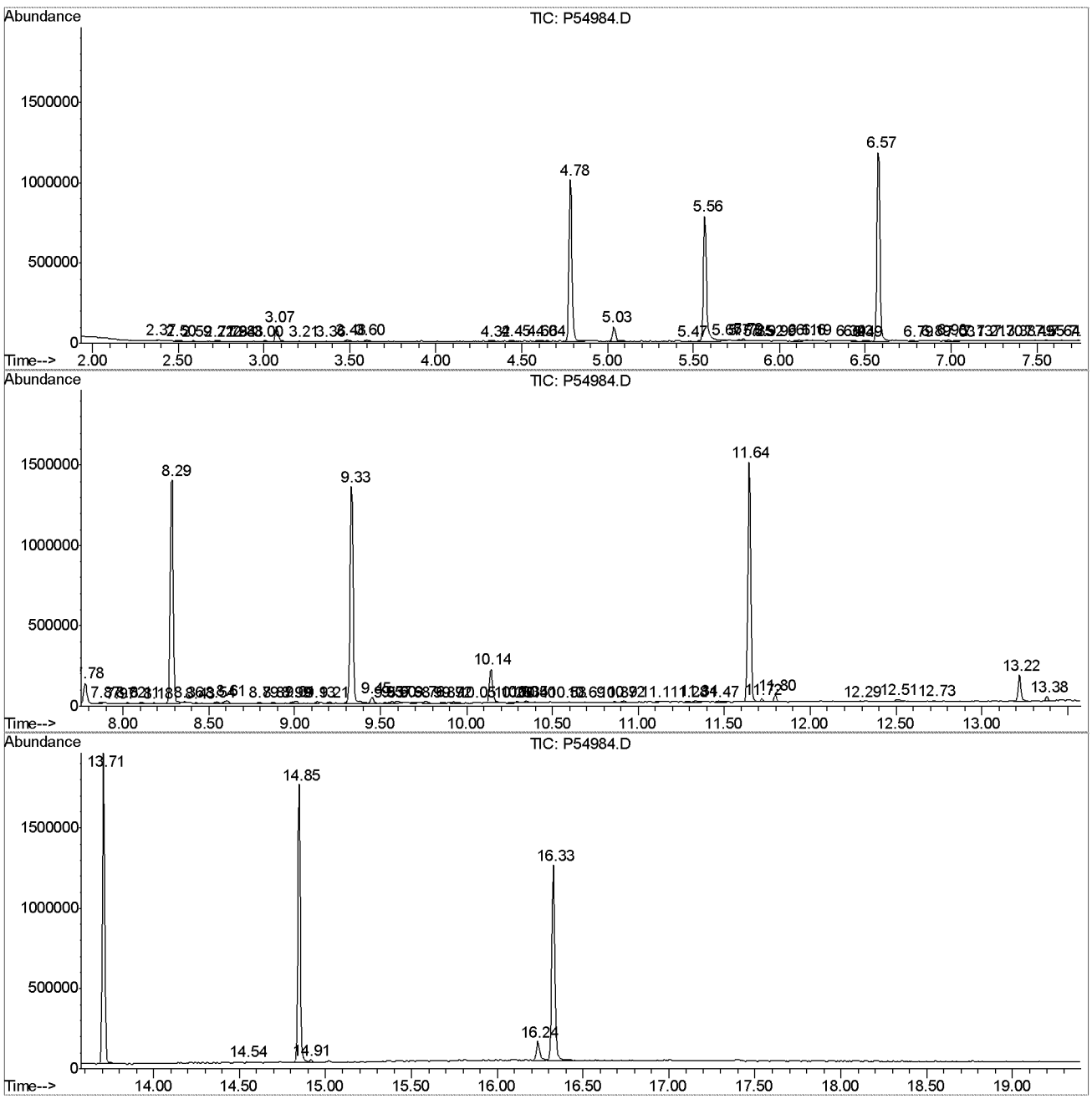
Sum of corrected areas: 15970889

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

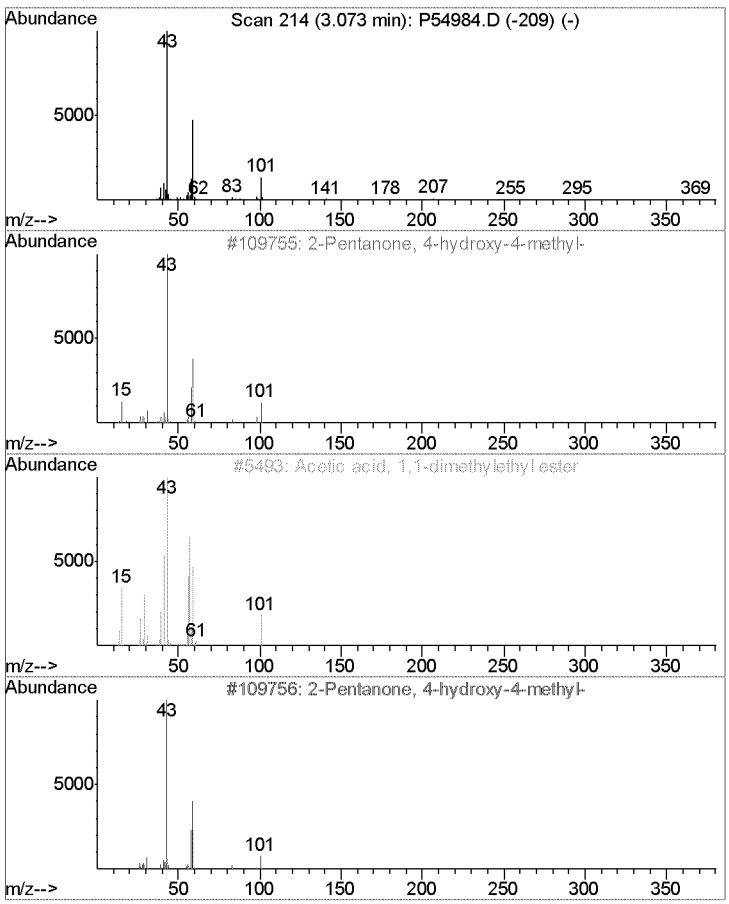
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

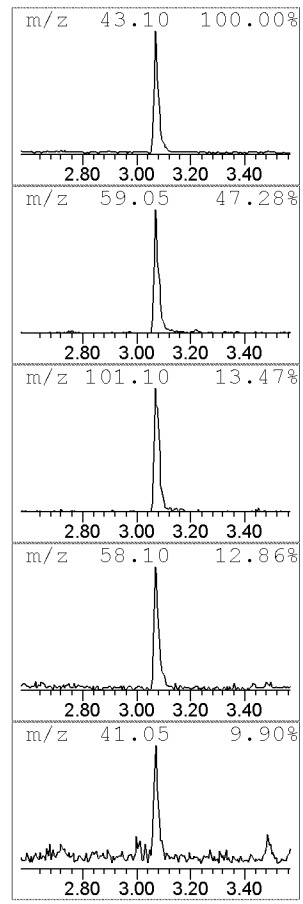
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.04 ppb	121119	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	39
5	Diacetamide	101	C4H7NO2	000625-77-4	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

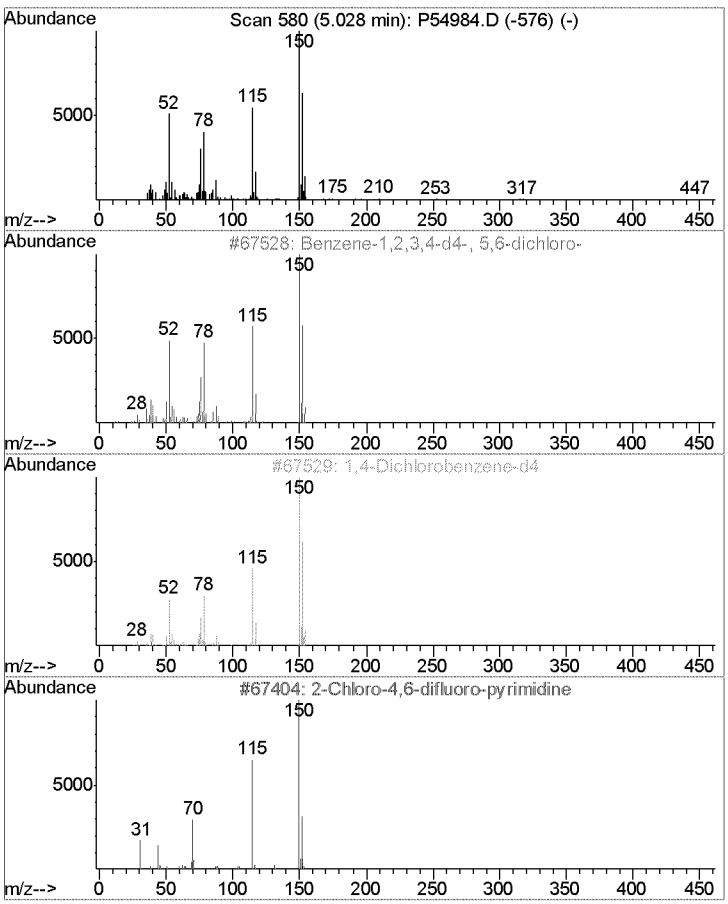
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

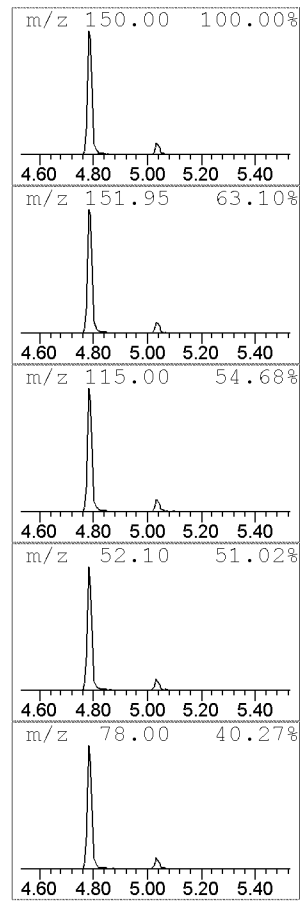
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.16 ppb	124605	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	14
4	Dezaguanine	150	C6H6N4O	041729-52-6	12
5	Ethanone, 1-(2-nitrophenyl)-	165	C8H7NO3	000577-59-3	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

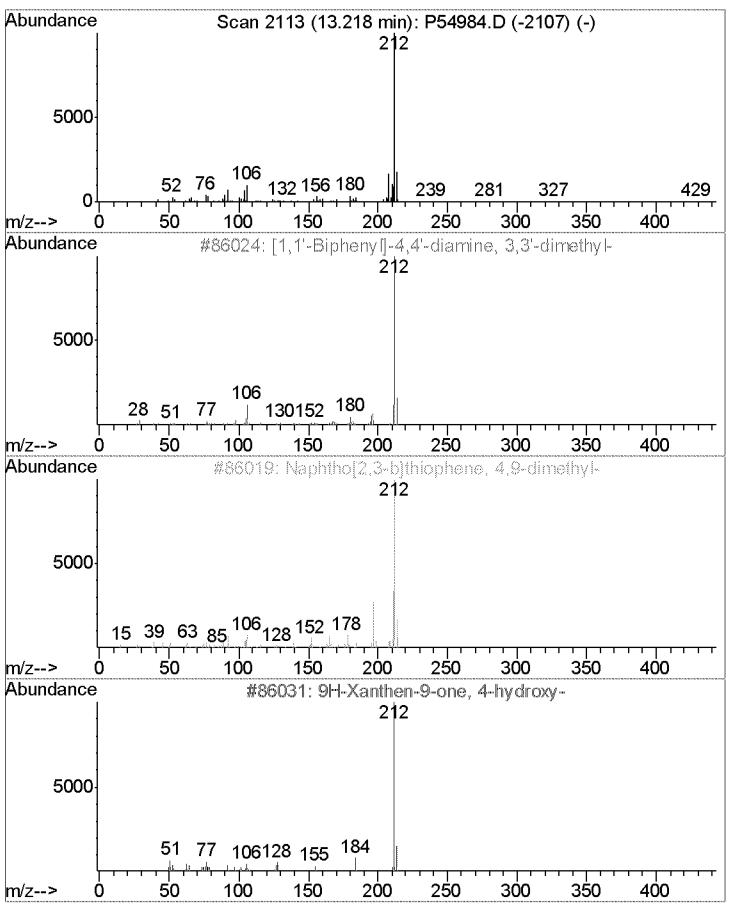
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

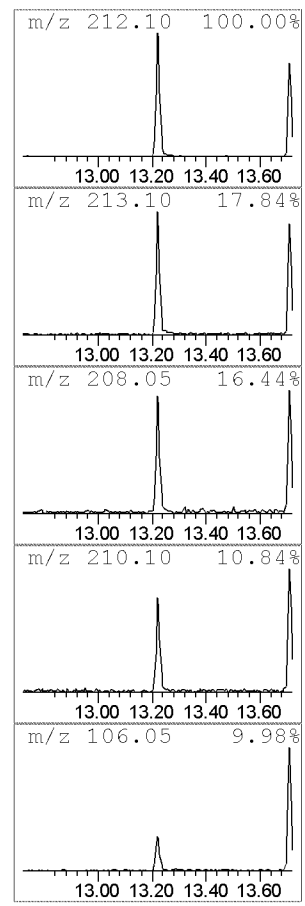
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.62 ppb	202251	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	72
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	64
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	59
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
5	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	53





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.0	ppb	121119	1	4.78	1199270	40.0
Internal standard...	5.03	4.2	ppb	124605	2	4.78	1199270	40.0
Internal standard...	13.22	4.6	ppb	202251	7	11.64	1752560	40.0

8.1.10
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 23 11:21:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	170412	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	597617	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	377525	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	634571	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	709052	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	600666	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	170412	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	634571	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	377525	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	709052	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	329145	43.72	ppb	-0.07
Spiked Amount 50.000			Recovery =	87.44%		
51) 2-Fluorobiphenyl	8.29	172	531982	41.04	ppb	-0.08
Spiked Amount 50.000			Recovery =	82.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	535665	31.97	ppb	-0.06
Spiked Amount 50.000			Recovery =	63.94%		

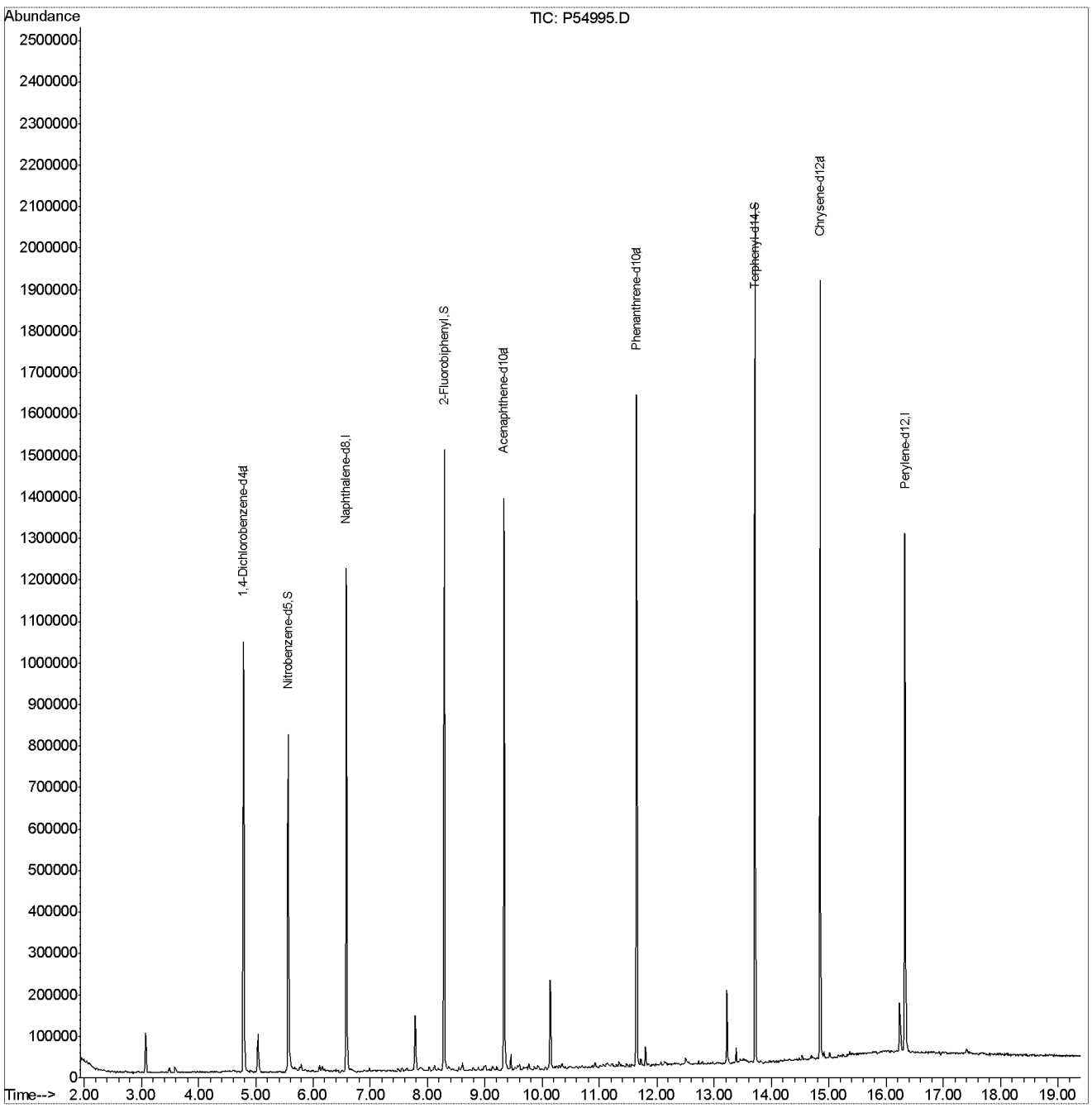
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 23 11:21:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.346	75	78	84	rVB7	5018	7662	0.40%	0.045%
2	2.496	103	106	112	rVB5	4373	5370	0.28%	0.032%
3	2.715	144	147	155	rVB8	4232	7748	0.41%	0.046%
4	2.827	165	168	173	rVB7	3287	4568	0.24%	0.027%
5	2.934	184	188	194	rVB7	2358	4689	0.25%	0.028%
6	3.003	194	201	208	rBV10	4029	7191	0.38%	0.043%
7	3.067	208	213	223	rBV	94948	124985	6.54%	0.742%
8	3.489	287	292	296	rBV3	11492	15997	0.84%	0.095%
9	3.591	306	311	321	rBV6	14212	21199	1.11%	0.126%
10	4.419	460	466	468	rBV7	3147	6044	0.32%	0.036%
11	4.601	495	500	505	rBV9	3722	7137	0.37%	0.042%
12	4.782	527	534	548	rBV	1037128	1255148	65.63%	7.447%
13	5.033	576	581	592	rBV	92326	124902	6.53%	0.741%
14	5.252	618	622	626	rVB7	3133	4784	0.25%	0.028%
15	5.418	646	653	657	rVB9	3860	9024	0.47%	0.054%
16	5.562	667	680	696	rBV	816768	1075474	56.24%	6.381%
17	5.674	699	701	705	rVB5	5258	5150	0.27%	0.031%
18	5.760	714	717	721	rBV5	7815	12144	0.64%	0.072%
19	5.792	721	723	729	rVB3	14759	16321	0.85%	0.097%
20	5.851	730	734	742	rVB10	4482	9686	0.51%	0.057%
21	5.915	744	746	752	rVB6	4483	5449	0.28%	0.032%
22	5.990	757	760	765	rBV7	4705	6034	0.32%	0.036%
23	6.112	777	783	788	rBV8	15316	21503	1.12%	0.128%
24	6.161	788	792	795	rVV4	12685	17428	0.91%	0.103%
25	6.193	795	798	803	rVV6	7248	10638	0.56%	0.063%
26	6.246	803	808	816	rVV6	4274	9360	0.49%	0.056%
27	6.358	826	829	834	rVB6	3609	4741	0.25%	0.028%
28	6.396	834	836	839	rVV4	5930	4948	0.26%	0.029%
29	6.428	839	842	851	rVB4	6323	10575	0.55%	0.063%
30	6.492	851	854	858	rBV5	5536	6815	0.36%	0.040%
31	6.572	861	869	881	rBV	1214121	1500748	78.47%	8.904%
32	6.892	925	929	934	rVB8	5398	7244	0.38%	0.043%
33	6.983	942	946	950	rVB4	8986	10185	0.53%	0.060%
34	7.069	957	962	967	rVB8	4423	7180	0.38%	0.043%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.128	970	973	977	rBV5	3250	5562	0.29%	0.033%
36	7.224	986	991	999	rVB5	4792	8921	0.47%	0.053%
37	7.485	1035	1040	1045	rBV9	6400	12857	0.67%	0.076%
38	7.550	1047	1052	1057	rVB8	8394	16281	0.85%	0.097%
39	7.640	1062	1069	1072	rVB9	6853	9591	0.50%	0.057%
40	7.742	1084	1088	1090	rBV5	6832	8633	0.45%	0.051%
41	7.779	1090	1095	1107	rVV2	133269	181811	9.51%	1.079%
42	7.865	1107	1111	1124	rVB2	6425	19253	1.01%	0.114%
43	8.020	1135	1140	1146	rVB7	9749	16534	0.86%	0.098%
44	8.116	1147	1158	1166	rBV9	14845	35415	1.85%	0.210%
45	8.287	1182	1190	1200	rBV	1496861	1767789	92.44%	10.488%
46	8.356	1200	1203	1213	rVV7	8158	18061	0.94%	0.107%
47	8.538	1233	1237	1242	rBV8	10733	17479	0.91%	0.104%
48	8.602	1242	1249	1257	rVB2	20139	36289	1.90%	0.215%
49	8.746	1269	1276	1278	rBV8	3400	5791	0.30%	0.034%
50	8.784	1278	1283	1290	rBV8	7587	14358	0.75%	0.085%
51	8.874	1296	1300	1304	rBV6	7158	9303	0.49%	0.055%
52	8.981	1316	1320	1322	rBV4	11398	13851	0.72%	0.082%
53	9.008	1322	1325	1330	rVB6	13157	17477	0.91%	0.104%
54	9.126	1343	1347	1355	rVB10	9995	15301	0.80%	0.091%
55	9.206	1357	1362	1370	rVB10	10884	18909	0.99%	0.112%
56	9.329	1375	1385	1403	rBV	1380569	1748749	91.44%	10.375%
57	9.451	1403	1408	1412	rVB	38223	46437	2.43%	0.276%
58	9.526	1419	1422	1424	rBV2	4820	4556	0.24%	0.027%
59	9.569	1425	1430	1432	rBV4	9522	12520	0.65%	0.074%
60	9.601	1433	1436	1440	rVB3	12315	16183	0.85%	0.096%
61	9.660	1444	1447	1450	rBV5	5284	4359	0.23%	0.026%
62	9.761	1462	1466	1472	rBV5	15716	19050	1.00%	0.113%
63	9.863	1480	1485	1490	rBV9	7478	12154	0.64%	0.072%
64	9.922	1491	1496	1503	rVB10	10923	21955	1.15%	0.130%
65	10.050	1514	1520	1526	rBV10	8954	18358	0.96%	0.109%
66	10.135	1526	1536	1548	rVV2	217023	322233	16.85%	1.912%
67	10.215	1548	1551	1555	rVV6	5214	6853	0.36%	0.041%
68	10.247	1555	1557	1562	rVB6	7287	9446	0.49%	0.056%
69	10.295	1562	1566	1569	rBV6	9372	13054	0.68%	0.077%
70	10.349	1570	1576	1582	rVV6	13486	25635	1.34%	0.152%
71	10.397	1582	1585	1589	rVB6	6317	6639	0.35%	0.039%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.450	1589	1595	1596	rBV6	4446	5143	0.27%	0.031%
73	10.477	1597	1600	1611	rVB6	6428	13369	0.70%	0.079%
74	10.589	1618	1621	1627	rVB8	6211	10332	0.54%	0.061%
75	10.685	1636	1639	1645	rVB8	6763	8455	0.44%	0.050%
76	10.867	1671	1673	1677	rVB5	5827	5107	0.27%	0.030%
77	10.915	1678	1682	1688	rVV9	11778	14199	0.74%	0.084%
78	11.006	1695	1699	1702	rBV6	4901	6599	0.35%	0.039%
79	11.059	1706	1709	1715	rVB8	6462	8686	0.45%	0.052%
80	11.134	1716	1723	1733	rVV8	8951	21216	1.11%	0.126%
81	11.337	1757	1761	1765	rVB6	9711	12717	0.66%	0.075%
82	11.465	1782	1785	1793	rVV8	7542	13124	0.69%	0.078%
83	11.524	1793	1796	1799	rVB5	6281	7029	0.37%	0.042%
84	11.562	1800	1803	1807	rBV5	5045	7727	0.40%	0.046%
85	11.642	1812	1818	1829	rBV2	1617010	1834079	95.90%	10.882%
86	11.722	1829	1833	1843	rVB8	16642	24738	1.29%	0.147%
87	11.797	1844	1847	1852	rBV	45498	51224	2.68%	0.304%
88	12.064	1892	1897	1902	rVB9	8959	13680	0.72%	0.081%
89	12.133	1904	1910	1913	rBV8	8182	16655	0.87%	0.099%
90	12.496	1975	1978	1994	rVB8	14769	35824	1.87%	0.213%
91	12.726	2018	2021	2025	rVB6	7836	7987	0.42%	0.047%
92	13.218	2107	2113	2125	rVB	178215	209813	10.97%	1.245%
93	13.378	2139	2143	2148	rVB4	34784	31047	1.62%	0.184%
94	13.709	2200	2205	2221	rVB	2074617	1912421	100.00%	11.347%
95	14.698	2386	2390	2392	rBV5	8907	10014	0.52%	0.059%
96	14.847	2412	2418	2427	rBV	1877904	1846708	96.56%	10.957%
97	14.911	2428	2430	2436	rVB2	17464	18877	0.99%	0.112%
98	15.013	2447	2449	2463	rVB5	15526	19076	1.00%	0.113%
99	16.236	2673	2678	2689	rBV2	115950	164178	8.58%	0.974%
100	16.327	2689	2695	2714	rVB	1252625	1638963	85.70%	9.724%

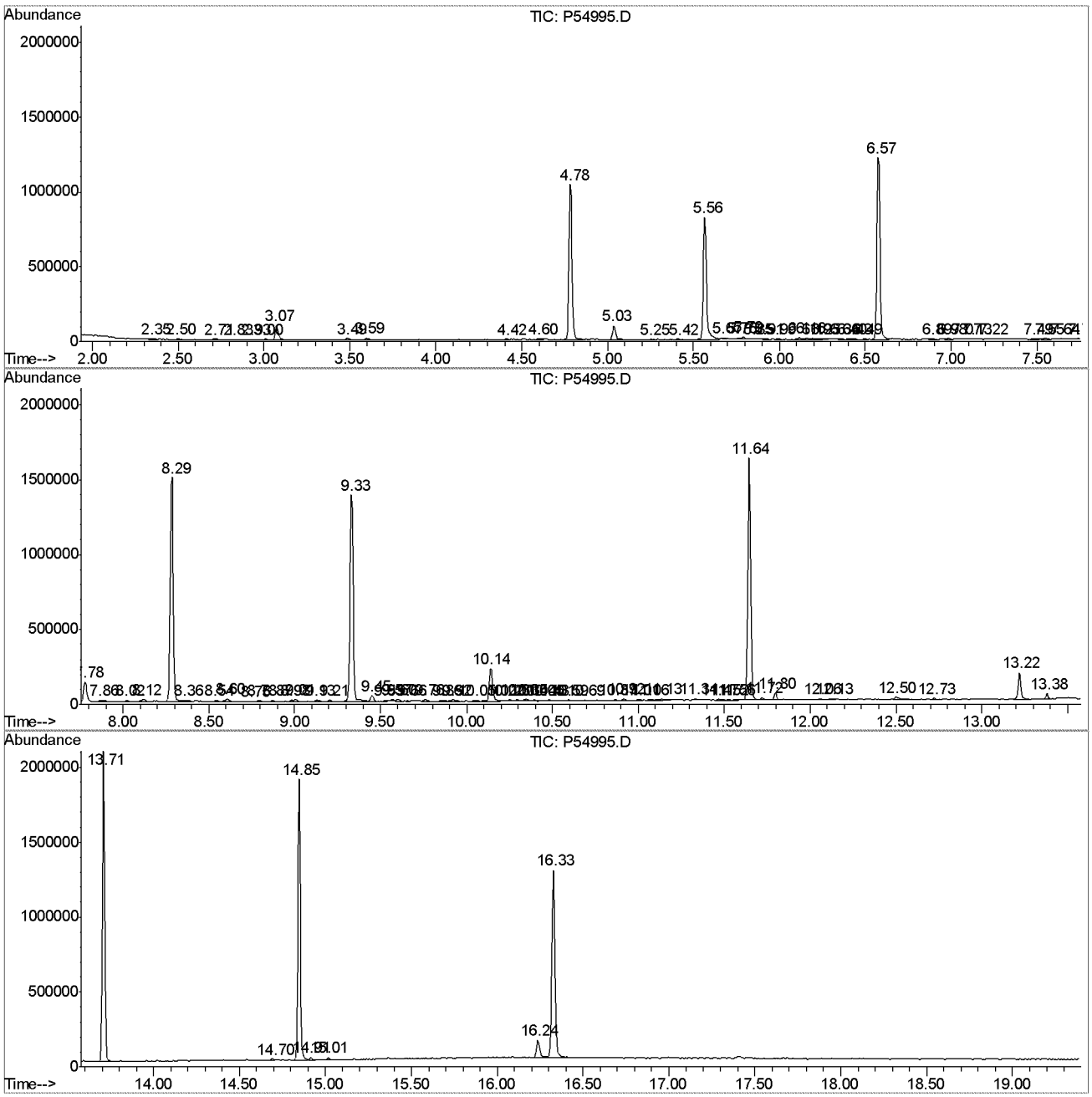
Sum of corrected areas: 16854705

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

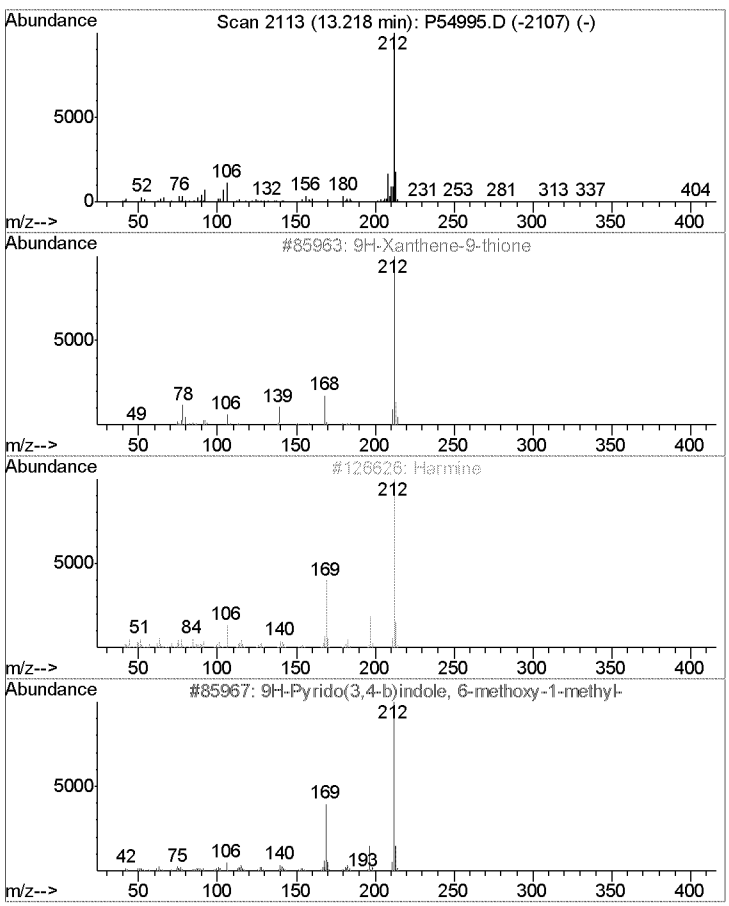
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

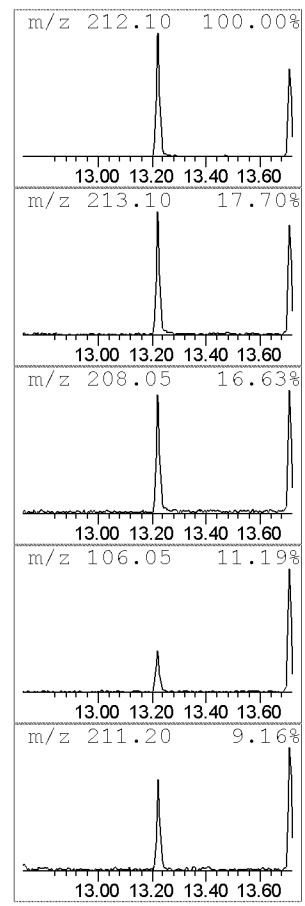
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.58 ppb	209813	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	80
2	Harmine	212	C13H12N2O	000442-51-3	72
3	9H-Pyrido(3,4-b)indole, 6-methox...	212	C13H12N2O	003589-72-8	64
4	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	64
5	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	13.22	4.6	ppb	209813	7	11.64	1834080	40.0

8.1.12
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 23 11:22:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	158740	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	558030	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	333733	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	543598	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	636496	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	548275	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	158740	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	543598	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	333733	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	636496	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	296988	42.24	ppb	-0.07
Spiked Amount 50.000			Recovery =	84.48%		
51) 2-Fluorobiphenyl	8.29	172	471262	41.12	ppb	-0.08
Spiked Amount 50.000			Recovery =	82.24%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	494447	32.88	ppb	-0.06
Spiked Amount 50.000			Recovery =	65.76%		

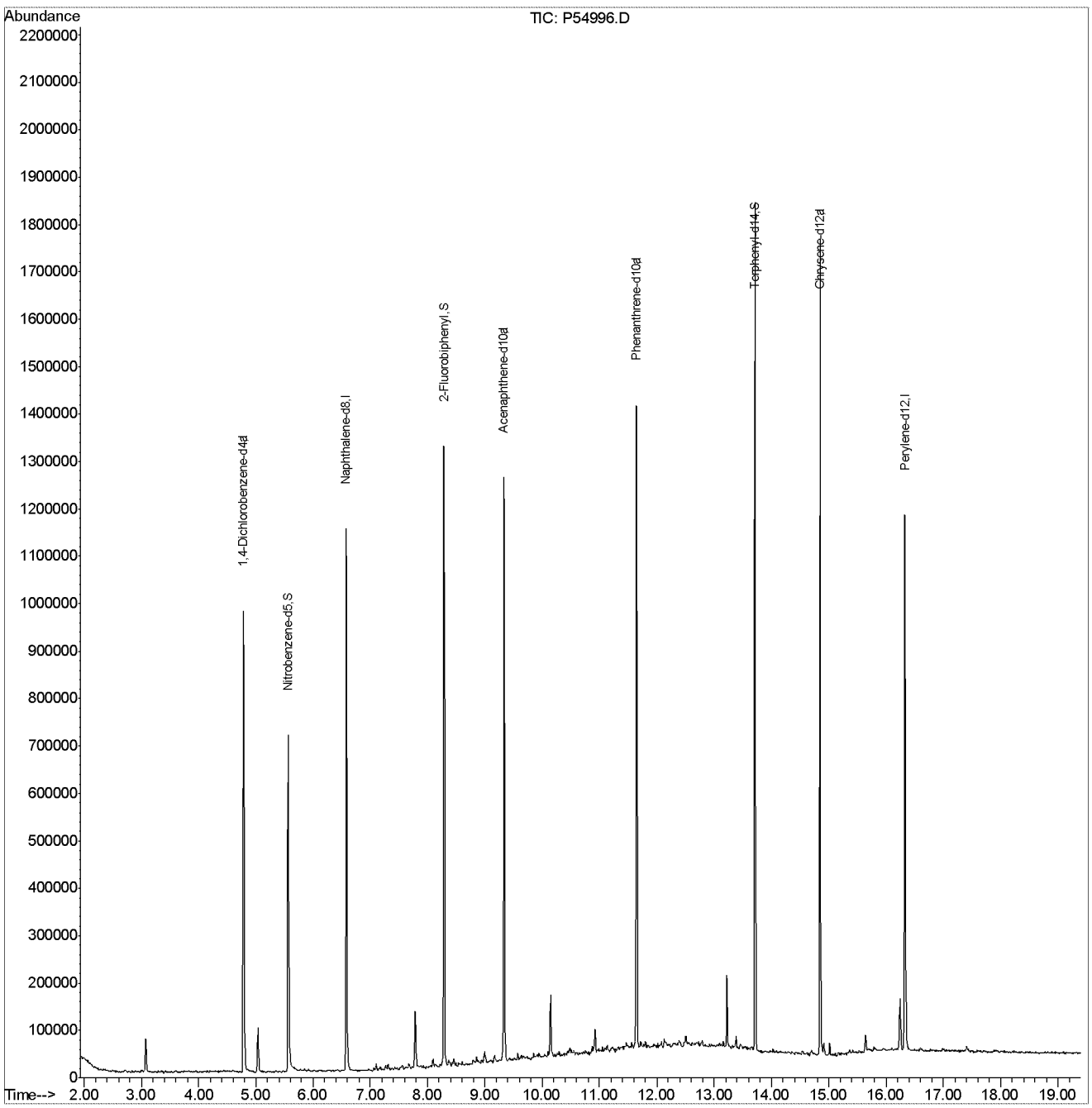
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 23 11:22:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.362	75	81	87	rVB9	4176	8794	0.50%	0.060%
2	2.720	144	148	157	rVB10	3516	6864	0.39%	0.046%
3	2.832	165	169	173	rBV6	4141	4748	0.27%	0.032%
4	2.955	187	192	194	rBV6	2346	4016	0.23%	0.027%
5	3.003	194	201	202	rBV6	3290	4312	0.25%	0.029%
6	3.073	208	214	225	rBV	71168	99603	5.67%	0.674%
7	3.297	254	256	262	rVB6	2931	4369	0.25%	0.030%
8	3.351	262	266	270	rBV6	3367	4861	0.28%	0.033%
9	3.420	274	279	282	rBV6	4012	6476	0.37%	0.044%
10	3.505	294	295	304	rBV9	2700	4852	0.28%	0.033%
11	3.949	374	378	381	rVB4	3031	3745	0.21%	0.025%
12	4.024	387	392	395	rVB6	2494	3545	0.20%	0.024%
13	4.323	443	448	451	rVB7	2142	3796	0.22%	0.026%
14	4.430	464	468	477	rBV7	3128	4793	0.27%	0.032%
15	4.601	497	500	505	rBV7	3250	4082	0.23%	0.028%
16	4.782	527	534	550	rBV	971395	1181750	67.23%	7.999%
17	5.033	573	581	594	rBV	94953	121536	6.91%	0.823%
18	5.562	673	680	700	rBV	710333	965387	54.92%	6.535%
19	5.776	717	720	727	rVB9	4098	5932	0.34%	0.040%
20	5.845	729	733	741	rVV9	4967	10451	0.59%	0.071%
21	5.915	741	746	752	rVB10	7044	12313	0.70%	0.083%
22	6.011	762	764	771	rVB7	3074	5343	0.30%	0.036%
23	6.112	778	783	788	rBV8	4051	6779	0.39%	0.046%
24	6.438	840	844	848	rVB7	4192	5690	0.32%	0.039%
25	6.572	863	869	888	rVB	1143283	1406446	80.01%	9.520%
26	6.748	899	902	906	rVB6	4405	5890	0.34%	0.040%
27	6.892	927	929	933	rVB5	3573	3938	0.22%	0.027%
28	6.930	933	936	941	rBV7	2610	4919	0.28%	0.033%
29	6.967	941	943	949	rVB7	2990	4546	0.26%	0.031%
30	7.058	954	960	963	rBV7	6774	12445	0.71%	0.084%
31	7.101	963	968	973	rVB8	14743	20156	1.15%	0.136%
32	7.176	973	982	984	rBV10	7130	11027	0.63%	0.075%
33	7.261	993	998	1002	rBV6	10334	11608	0.66%	0.079%
34	7.309	1002	1007	1016	rVB8	12814	23735	1.35%	0.161%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.379	1016	1020	1024	rBV6	5074	7621	0.43%	0.052%
36	7.421	1025	1028	1034	rBV7	4114	7080	0.40%	0.048%
37	7.555	1043	1053	1058	rVB7	9994	21617	1.23%	0.146%
38	7.619	1060	1065	1067	rBV6	4826	5591	0.32%	0.038%
39	7.667	1071	1074	1080	rVB6	10877	14943	0.85%	0.101%
40	7.726	1081	1085	1088	rBV6	4718	4810	0.27%	0.033%
41	7.779	1088	1095	1102	rBV3	120053	165551	9.42%	1.121%
42	7.982	1130	1133	1137	rBV6	3540	6019	0.34%	0.041%
43	8.089	1148	1153	1157	rBV4	17254	21759	1.24%	0.147%
44	8.132	1158	1161	1168	rVB9	6490	11355	0.65%	0.077%
45	8.217	1174	1177	1181	rBV6	5515	7114	0.40%	0.048%
46	8.281	1181	1189	1199	rVV	1307151	1586076	90.23%	10.736%
47	8.362	1200	1204	1212	rVB8	13243	28541	1.62%	0.193%
48	8.420	1212	1215	1217	rBV4	7457	8933	0.51%	0.060%
49	8.452	1217	1221	1225	rVB5	13747	18715	1.06%	0.127%
50	8.533	1234	1236	1246	rVB5	4817	9846	0.56%	0.067%
51	8.597	1246	1248	1253	rBV5	7049	7442	0.42%	0.050%
52	8.789	1282	1284	1290	rBV7	7076	12543	0.71%	0.085%
53	8.848	1291	1295	1299	rBV7	13065	16363	0.93%	0.111%
54	8.939	1309	1312	1317	rBV6	7081	10621	0.60%	0.072%
55	8.992	1317	1322	1329	rVV4	24324	38077	2.17%	0.258%
56	9.168	1350	1355	1363	rBV4	15774	24509	1.39%	0.166%
57	9.329	1377	1385	1396	rVB	1231280	1524883	86.75%	10.322%
58	9.569	1427	1430	1434	rVB	13026	13387	0.76%	0.091%
59	10.141	1532	1537	1547	rVB	130998	170387	9.69%	1.153%
60	10.482	1598	1601	1605	rBV2	12828	15393	0.88%	0.104%
61	10.867	1670	1673	1676	rBV5	10744	12864	0.73%	0.087%
62	10.915	1678	1682	1687	rVB	47129	57240	3.26%	0.387%
63	11.642	1811	1818	1828	rVB2	1353304	1548870	88.11%	10.484%
64	13.218	2109	2113	2127	rVB	154122	182450	10.38%	1.235%
65	13.378	2140	2143	2152	rVB5	27315	32913	1.87%	0.223%
66	13.709	2199	2205	2218	rVB	1791610	1757848	100.00%	11.899%
67	14.847	2413	2418	2427	rBV	1710150	1663694	94.64%	11.261%
68	14.911	2427	2430	2444	rVB	25252	34609	1.97%	0.234%
69	15.018	2447	2450	2458	rVB	26433	29242	1.66%	0.198%
70	15.638	2562	2566	2574	rBV2	36266	48763	2.77%	0.330%
71	16.241	2673	2679	2687	rVB	106951	153345	8.72%	1.038%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	16.327	2689	2695	2712	rVB	1128235	1503861	85.55%	10.179%

Sum of corrected areas: 14773622

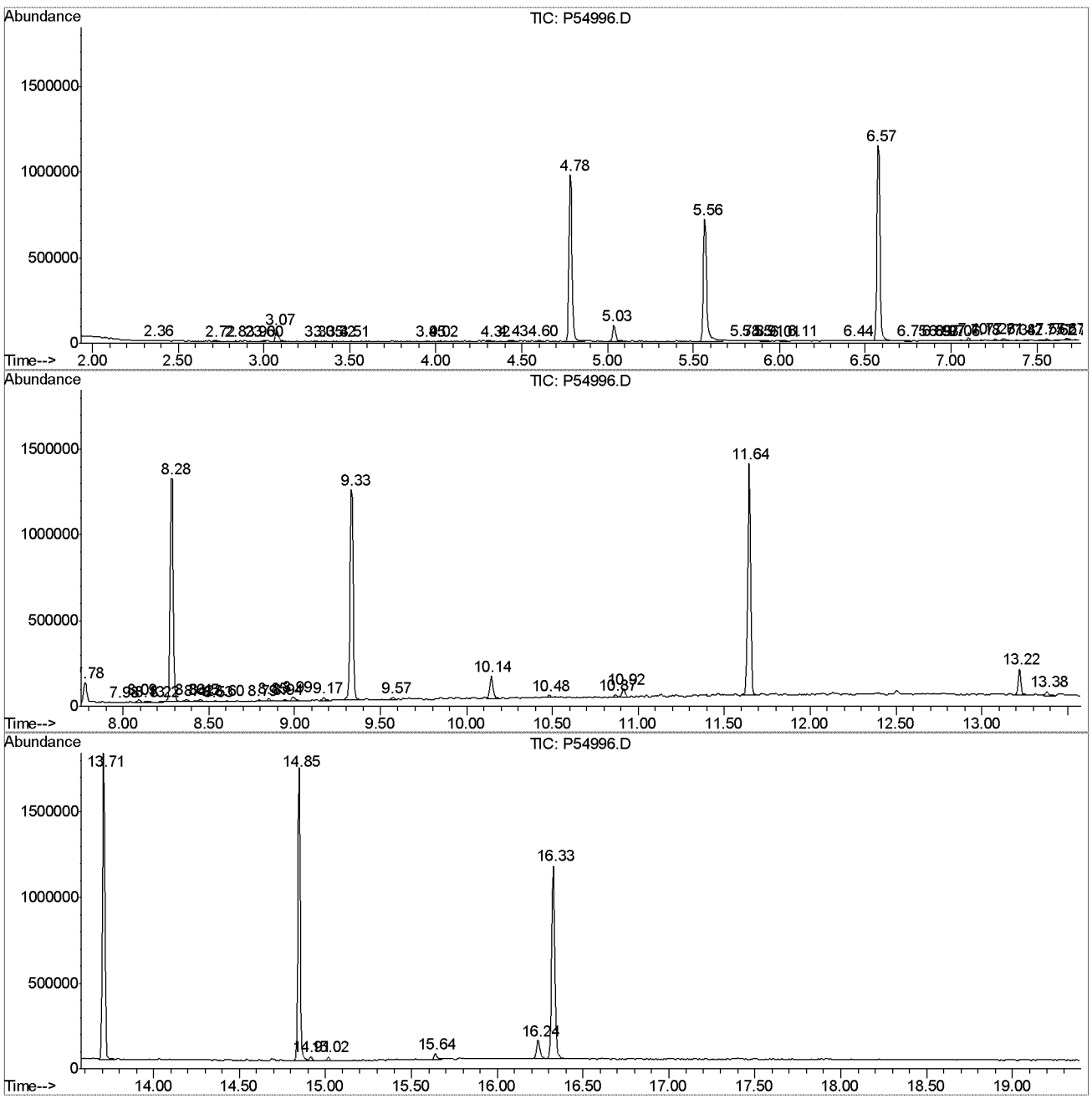
8.1.14
8

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

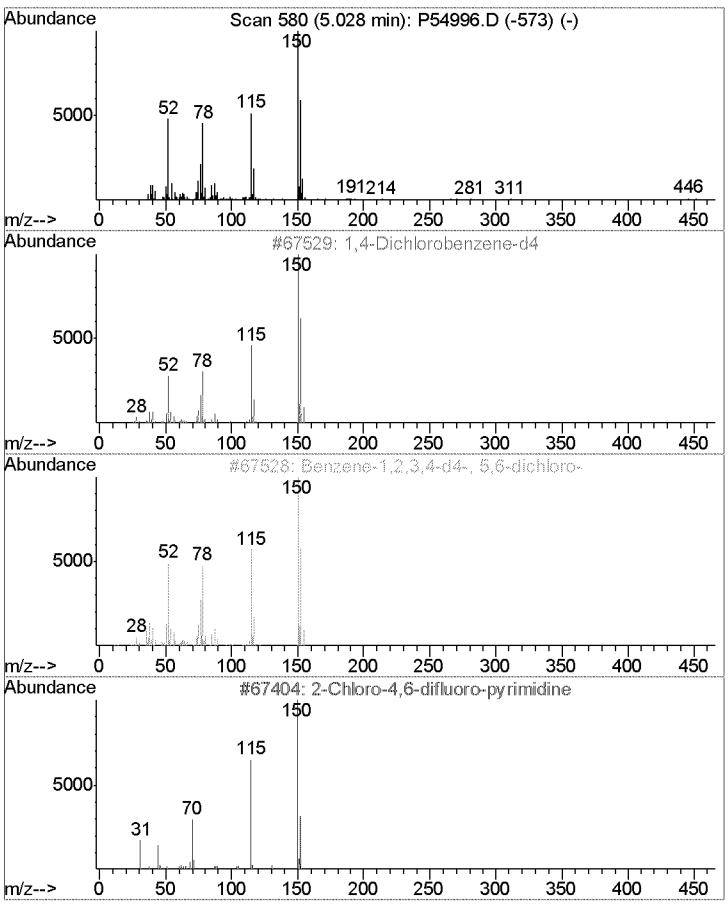
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

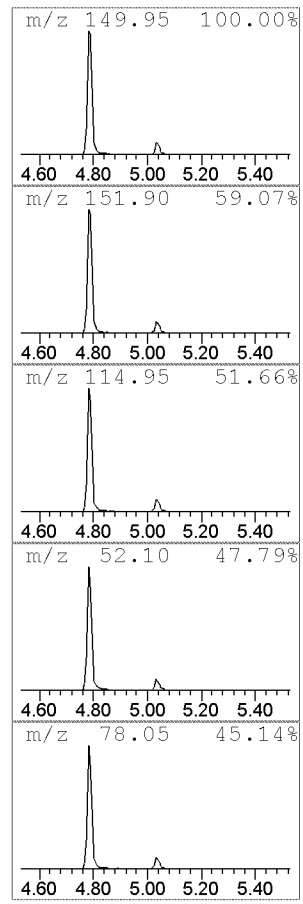
****

Peak Number 1 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.11 ppb	121536	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	94
2	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	72
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	12
4	2-Bromo-3'-nitroacetophenone	243	C8H6BrNO3	002227-64-7	10
5	Cyclobuta[1,2-A:3,4-A']diindene,...	300	C18H14Cl2	110848-73-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

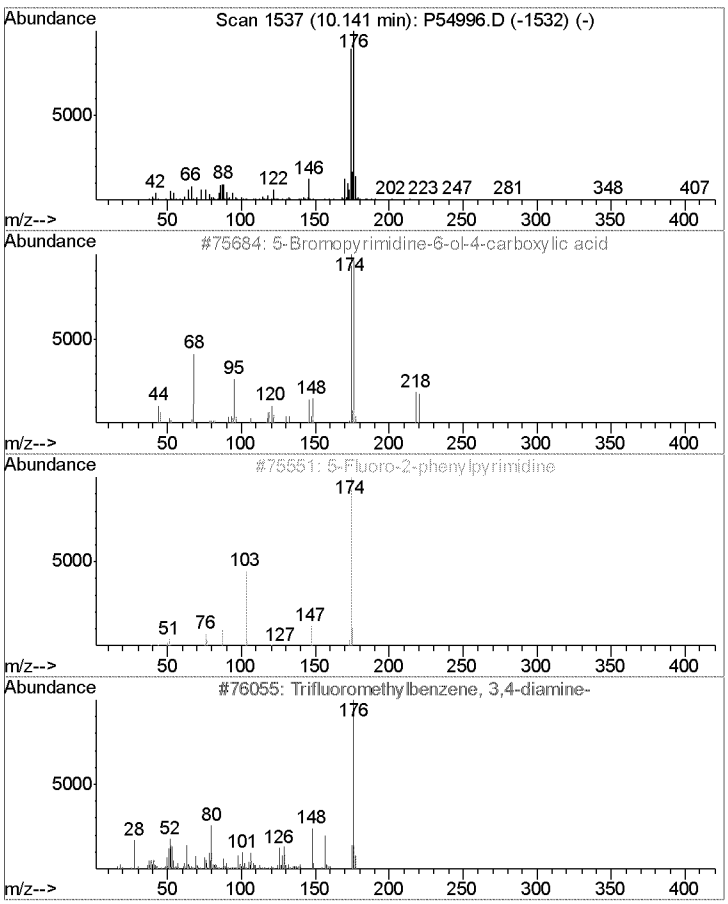
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

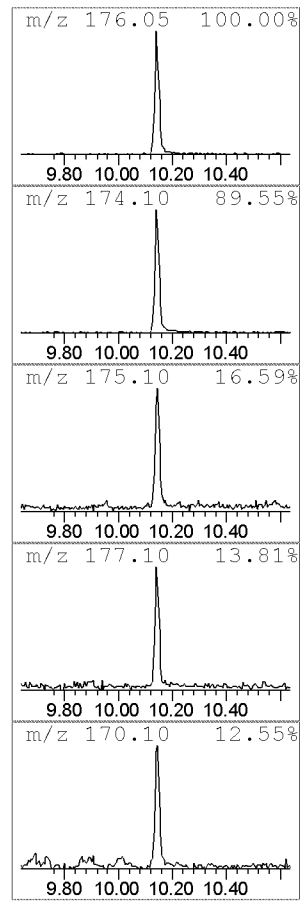
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.47 ppb	170387	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	38
2	5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	35
3	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	35
4	6-Amino-2,3-diethyl-1H-pyrrolo[2...	189	C11H15N3	055463-66-6	32
5	Benzenemethanol, .alpha.-1-penty...	174	C12H14O	108946-34-5	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

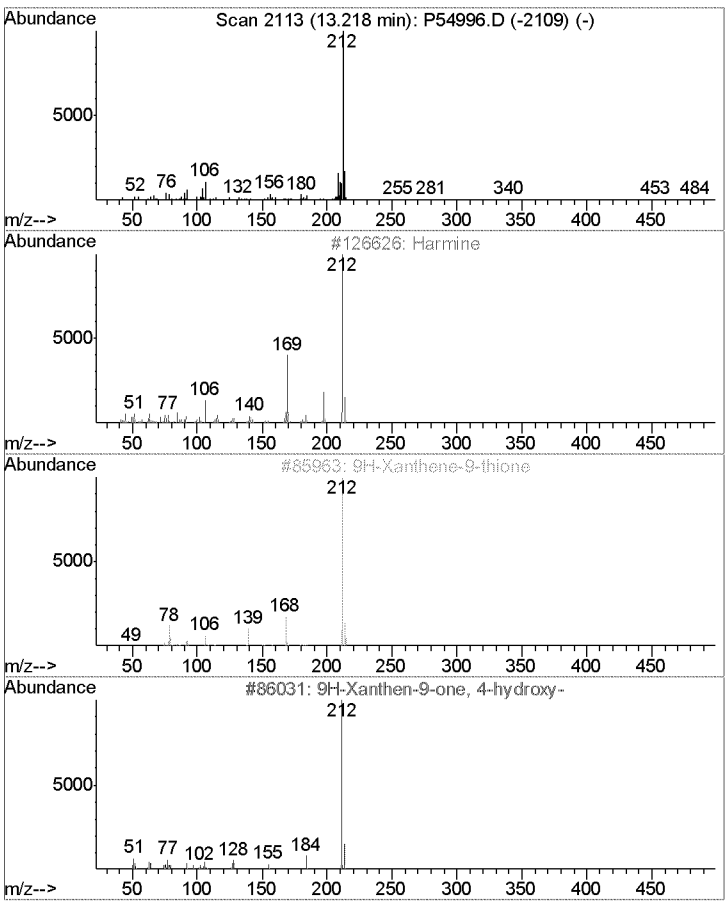
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

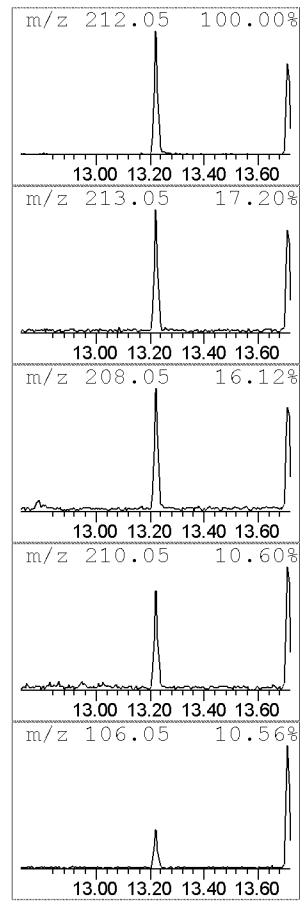
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.71 ppb	182450	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Harmine	212	C13H12N2O	000442-51-3	64
2	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	50
4	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	50
5	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	45





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

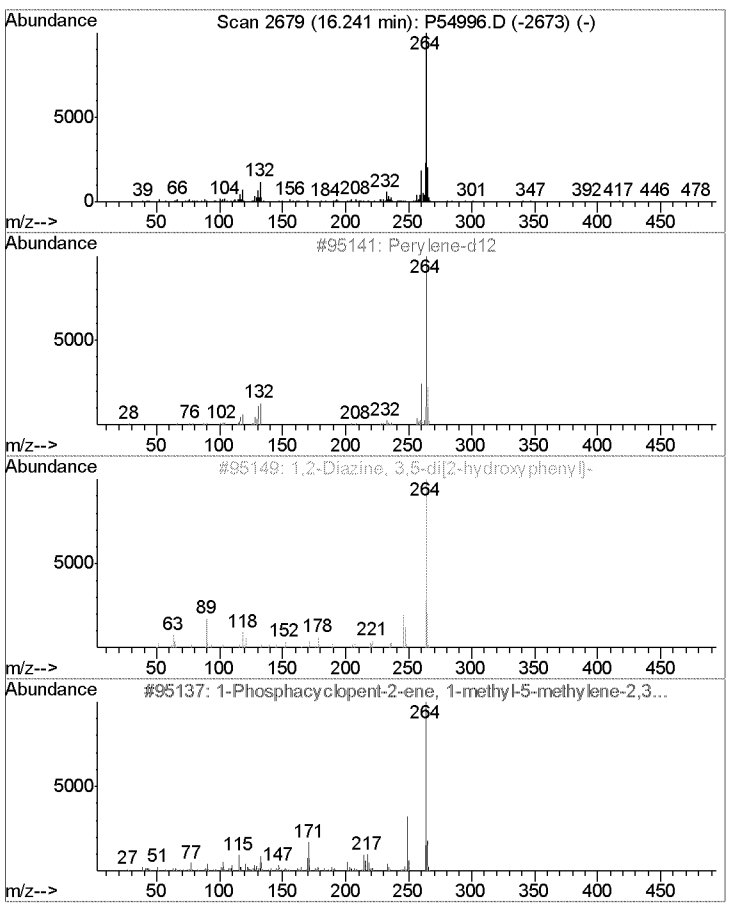
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

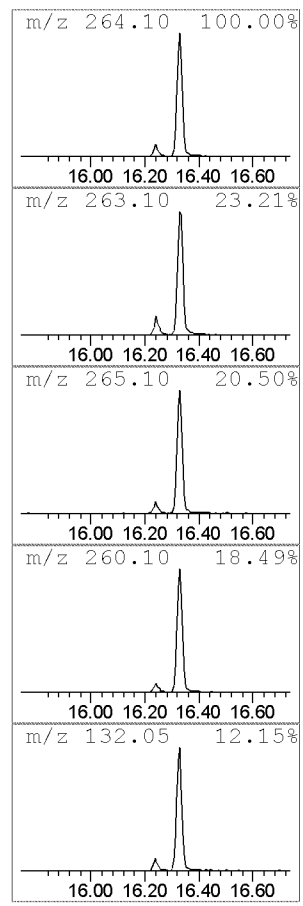
****

Peak Number 4 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.08 ppb	153345	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	94
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	59
4	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	59
5	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	53





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	5.03	4.1	ppb	121536	2	4.78	1181750	40.0
Internal standard...	10.14	4.5	ppb	170387	5	9.33	1524880	40.0
Internal standard...	13.22	4.7	ppb	182450	7	11.64	1548870	40.0
Internal standard...	16.24	4.1	ppb	153345	10	16.33	1503860	40.0

8.1.14
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 12:39:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	160648	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	557580	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	360586	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	622742	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	684669	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	571229	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	160648	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	622742	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	360586	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	684669	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	327557	46.63	ppb	-0.07
Spiked Amount 50.000			Recovery =	93.26%		
51) 2-Fluorobiphenyl	8.28	172	532909	43.04	ppb	-0.09
Spiked Amount 50.000			Recovery =	86.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	529825	32.75	ppb	-0.06
Spiked Amount 50.000			Recovery =	65.50%		

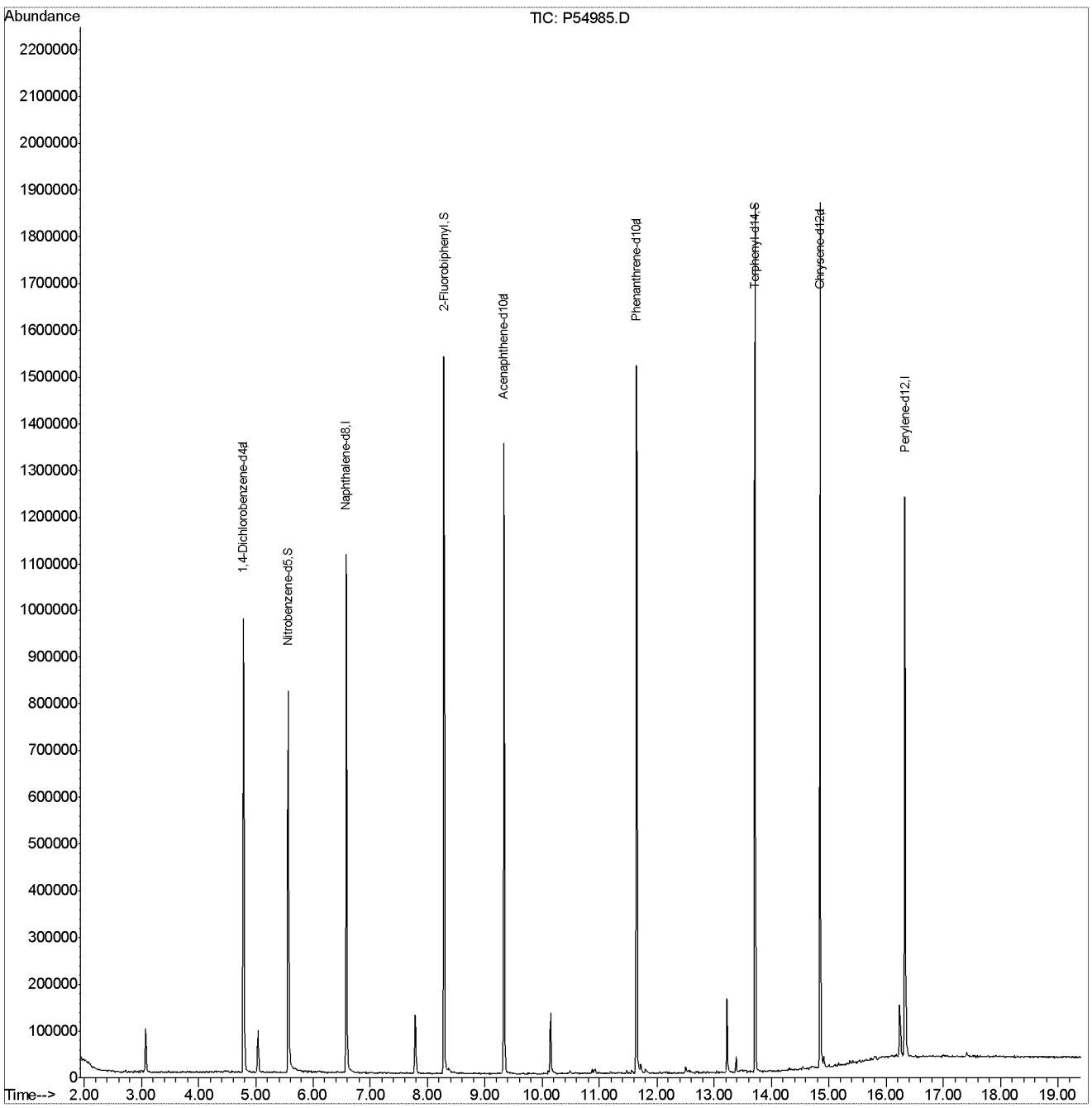
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 12:39:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.416	88	91	94	rBV5	3322	4177	0.22%	0.027%
2	2.496	104	106	114	rVB8	4757	7509	0.40%	0.049%
3	2.726	141	149	155	rBV8	5399	11693	0.62%	0.076%
4	2.886	176	179	183	rVB6	3247	4680	0.25%	0.030%
5	3.009	199	202	206	rVB6	4245	5144	0.27%	0.033%
6	3.067	208	213	226	rVB	94669	124197	6.61%	0.802%
7	3.238	241	245	251	rVB8	2377	3686	0.20%	0.024%
8	4.782	527	534	553	rBV	970941	1170438	62.32%	7.562%
9	5.033	574	581	588	rBV	89849	116878	6.22%	0.755%
10	5.333	628	637	639	rBV10	2642	4125	0.22%	0.027%
11	5.562	671	680	699	rBV	817938	1055587	56.21%	6.820%
12	5.835	730	731	737	rBV5	2720	3952	0.21%	0.026%
13	5.926	746	748	752	rBV5	3065	3695	0.20%	0.024%
14	6.572	863	869	892	rBV	1108642	1422632	75.75%	9.191%
15	6.780	906	908	913	rVB5	2770	3656	0.19%	0.024%
16	7.229	990	992	1000	rVB9	2095	3814	0.20%	0.025%
17	7.528	1044	1048	1052	rBV7	2425	4275	0.23%	0.028%
18	7.779	1087	1095	1108	rBV2	126276	177087	9.43%	1.144%
19	8.046	1141	1145	1149	rVB5	2880	3913	0.21%	0.025%
20	8.281	1181	1189	1200	rBV	1536057	1783248	94.95%	11.521%
21	8.356	1200	1203	1212	rVB7	9763	21624	1.15%	0.140%
22	8.452	1219	1221	1226	rVB6	3253	3545	0.19%	0.023%
23	8.602	1245	1249	1256	rBV10	2665	4154	0.22%	0.027%
24	8.992	1318	1322	1328	rVB9	3164	5640	0.30%	0.036%
25	9.072	1332	1337	1344	rVB10	2365	3542	0.19%	0.023%
26	9.216	1360	1364	1368	rBV7	2988	4191	0.22%	0.027%
27	9.259	1369	1372	1375	rVB5	3570	5077	0.27%	0.033%
28	9.329	1375	1385	1401	rBV	1350200	1640155	87.33%	10.597%
29	9.446	1404	1407	1413	rVB8	3705	5447	0.29%	0.035%
30	9.660	1441	1447	1452	rBV8	2963	6041	0.32%	0.039%
31	10.103	1527	1530	1532	rBV4	6915	6921	0.37%	0.045%
32	10.141	1532	1537	1550	rVB	129910	175495	9.34%	1.134%
33	10.477	1597	1600	1610	rVB10	5994	10233	0.54%	0.066%
34	10.600	1616	1623	1627	rVB9	3692	7503	0.40%	0.048%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	10.760	1649	1653	1655	rBV5	3413	3502	0.19%	0.023%
36	10.867	1669	1673	1677	rBV3	10818	12768	0.68%	0.082%
37	10.915	1677	1682	1688	rVV4	10477	17191	0.92%	0.111%
38	10.958	1688	1690	1697	rVB8	2607	4744	0.25%	0.031%
39	11.193	1731	1734	1740	rVB9	3865	4987	0.27%	0.032%
40	11.241	1740	1743	1749	rBV7	2118	3541	0.19%	0.023%
41	11.321	1756	1758	1765	rVB8	3091	4195	0.22%	0.027%
42	11.471	1775	1786	1791	rBV5	9151	18559	0.99%	0.120%
43	11.562	1799	1803	1811	rVB6	6618	8949	0.48%	0.058%
44	11.642	1811	1818	1828	rBV2	1515115	1758878	93.65%	11.364%
45	11.722	1828	1833	1843	rVV4	18120	32197	1.71%	0.208%
46	11.802	1843	1848	1861	rVB4	9876	18942	1.01%	0.122%
47	12.048	1890	1894	1901	rVB9	4721	7590	0.40%	0.049%
48	12.128	1904	1909	1912	rVB7	3009	5165	0.28%	0.033%
49	12.165	1912	1916	1920	rBV7	4017	4941	0.26%	0.032%
50	12.326	1940	1946	1950	rVB9	2906	5160	0.27%	0.033%
51	12.363	1950	1953	1956	rBV4	2483	3527	0.19%	0.023%
52	12.497	1972	1978	1986	rBV10	13019	25122	1.34%	0.162%
53	12.561	1987	1990	1996	rVB5	6775	10989	0.59%	0.071%
54	13.041	2077	2080	2084	rBV5	4767	5516	0.29%	0.036%
55	13.218	2108	2113	2125	rBV	158629	196059	10.44%	1.267%
56	13.378	2138	2143	2149	rBV3	34072	38226	2.04%	0.247%
57	13.447	2154	2156	2160	rBV5	4911	6232	0.33%	0.040%
58	13.474	2160	2161	2165	rVB4	3841	3844	0.20%	0.025%
59	13.544	2170	2174	2181	rVB10	7233	14782	0.79%	0.096%
60	13.586	2181	2182	2186	rBV3	3545	4726	0.25%	0.031%
61	13.709	2199	2205	2223	rBV	1857459	1878100	100.00%	12.134%
62	13.864	2231	2234	2238	rBV5	3049	4719	0.25%	0.030%
63	14.313	2316	2318	2321	rBV4	4468	3615	0.19%	0.023%
64	14.425	2333	2339	2343	rBV9	3635	6597	0.35%	0.043%
65	14.543	2357	2361	2367	rBV9	5945	7981	0.42%	0.052%
66	14.847	2411	2418	2428	rBV	1851905	1795283	95.59%	11.599%
67	14.917	2428	2431	2439	rVB	22246	27998	1.49%	0.181%
68	15.168	2474	2478	2489	rBV	7733	18580	0.99%	0.120%
69	15.365	2512	2515	2520	rBV7	7592	10305	0.55%	0.067%
70	16.236	2673	2678	2688	rBV	110213	156405	8.33%	1.011%
71	16.327	2688	2695	2710	rVB	1196317	1533985	81.68%	9.911%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

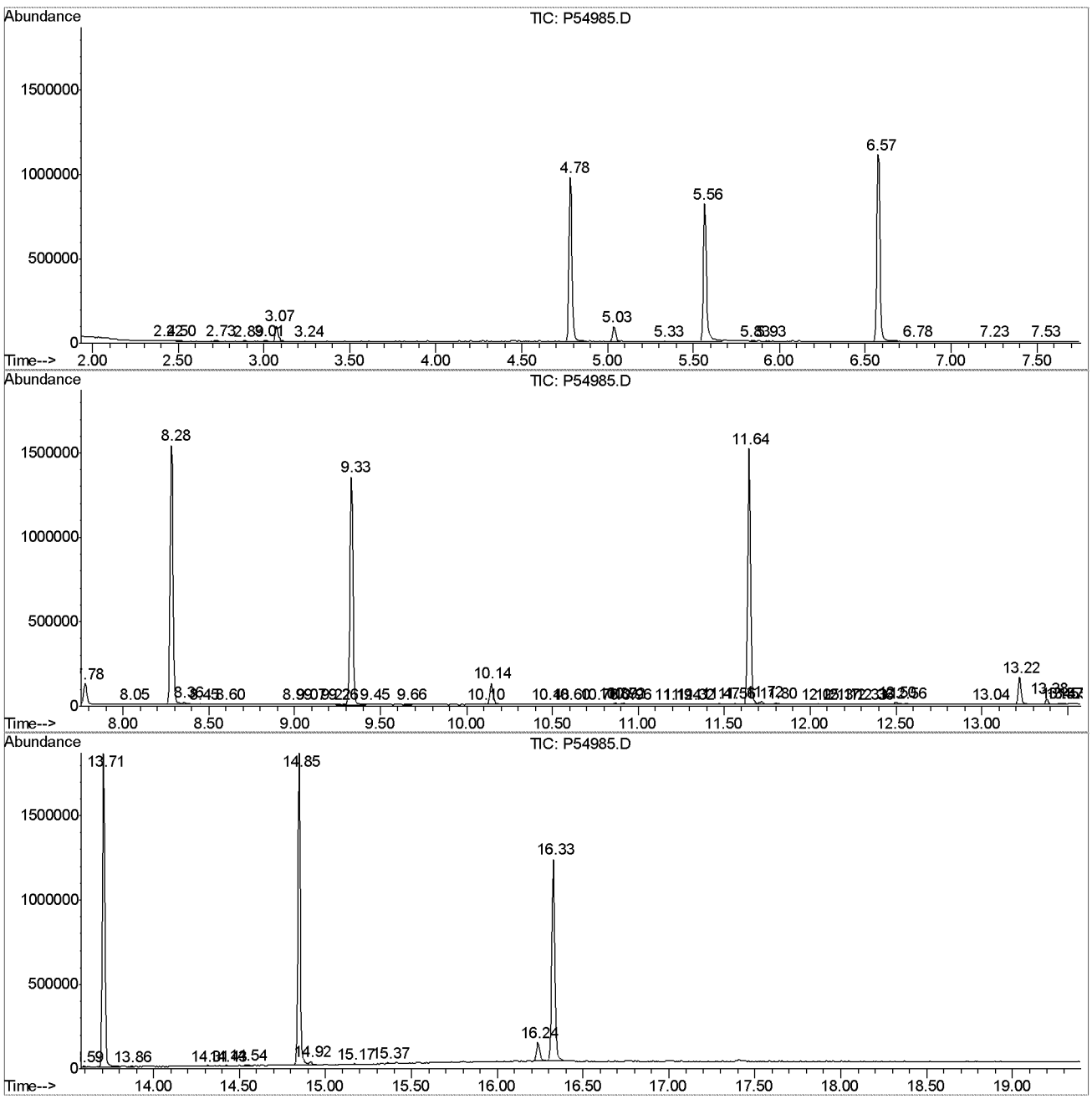
Sum of corrected areas: 15477854

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

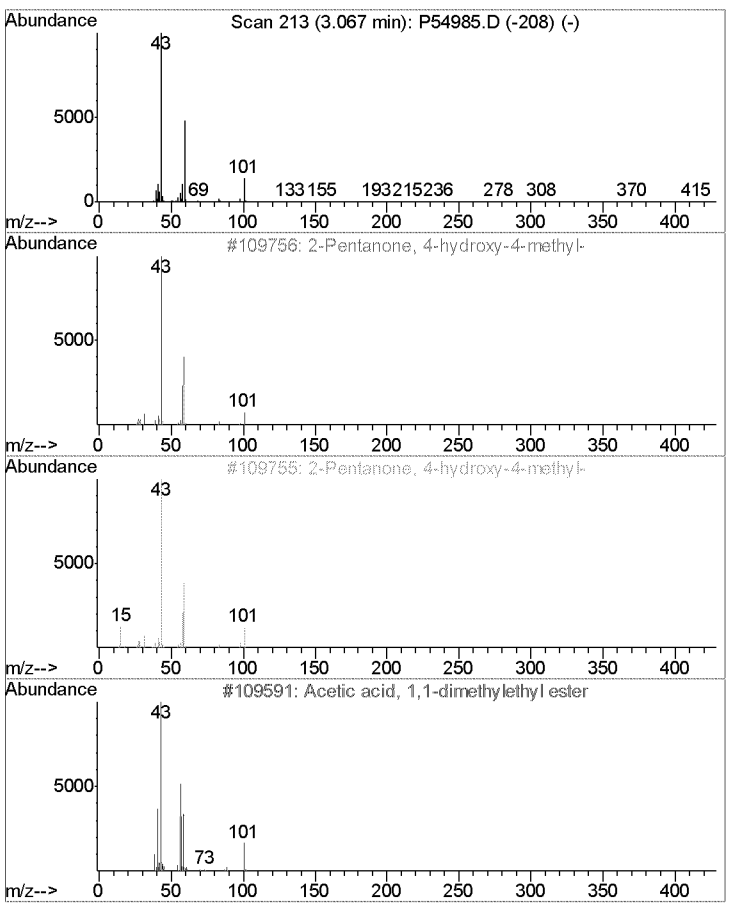
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

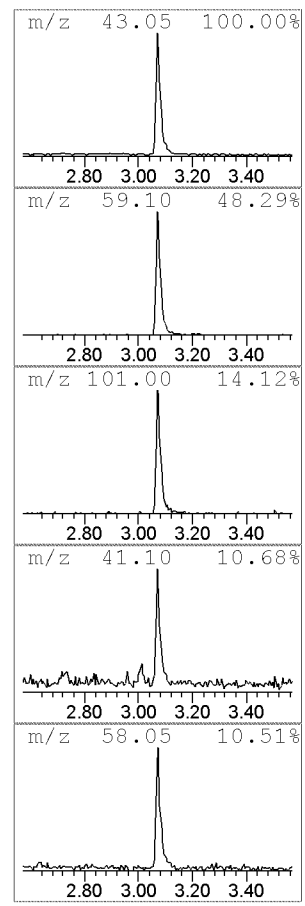
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.24 ppb	124197	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
5	Propanenitrile, 3-ethoxy-	99	C5H9NO	002141-62-0	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

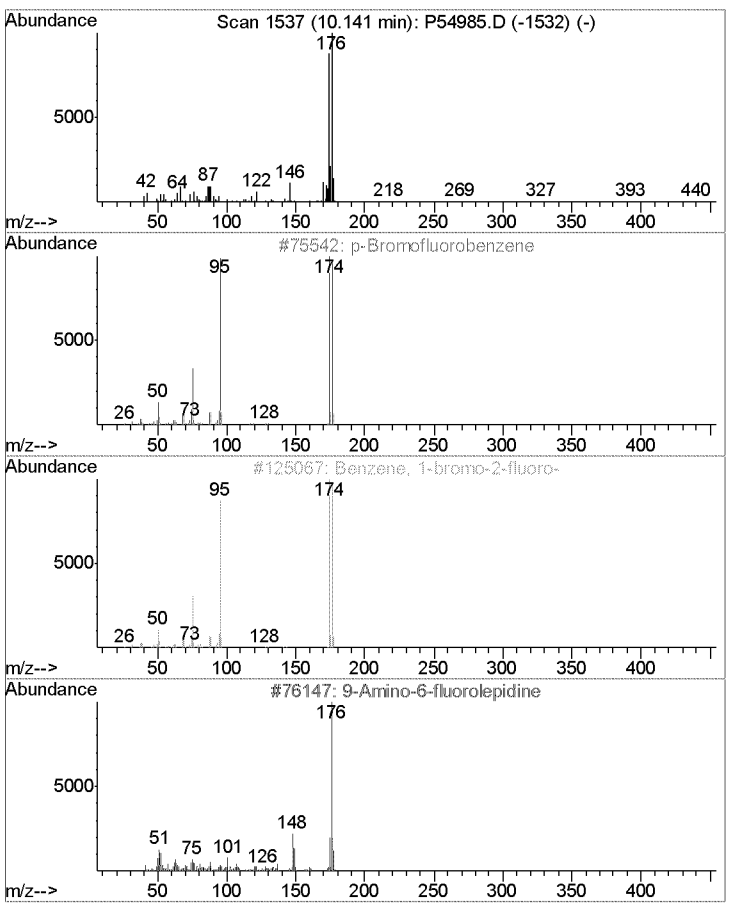
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

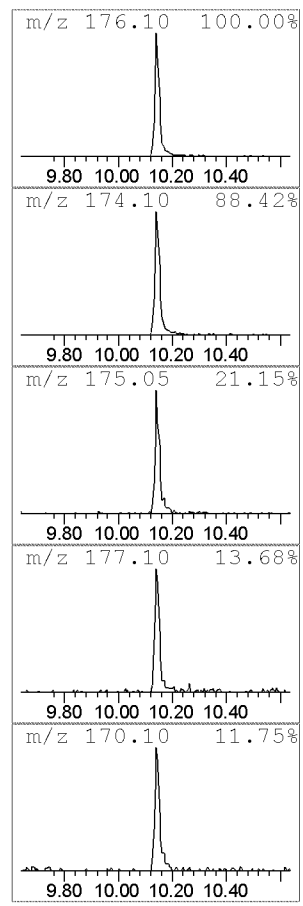
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.28 ppb	175495	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	59
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	45
3	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	30
4	Silanamine, 1,1,1-trimethyl-N-(2...	265	C14H27NSi2	058367-45-6	27
5	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

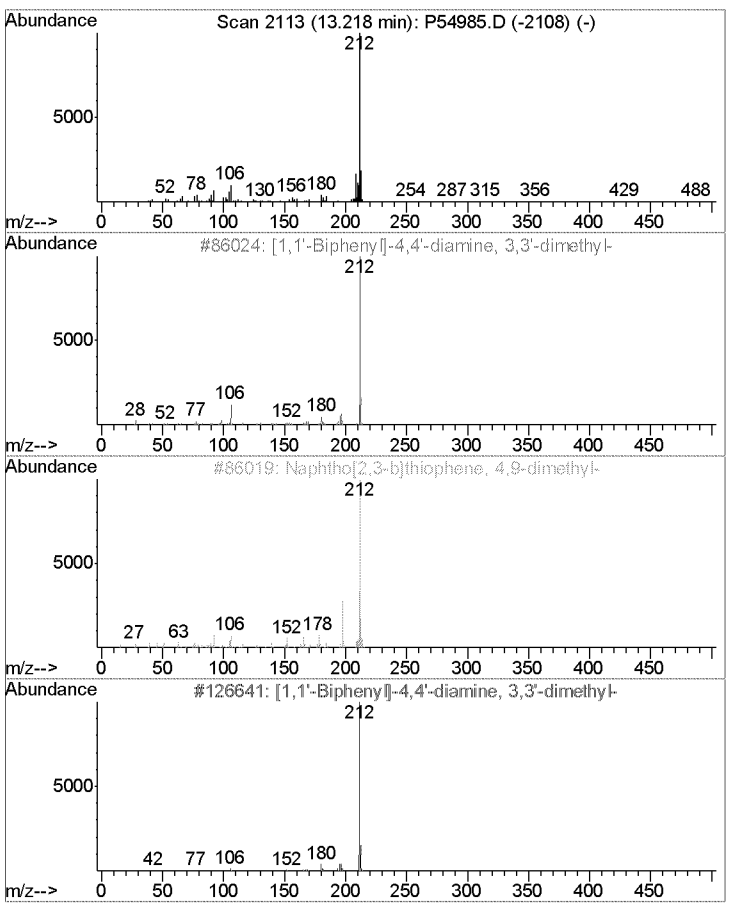
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

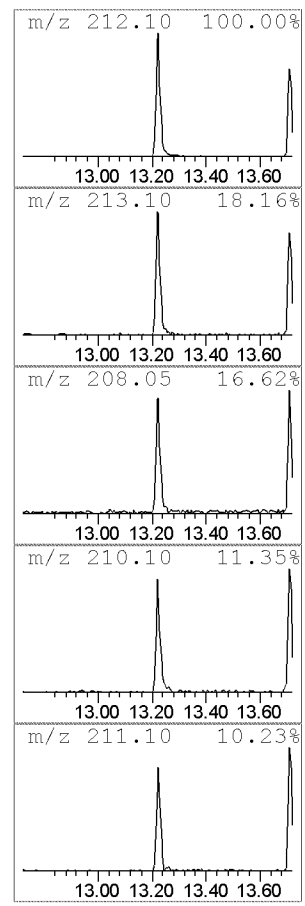
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.46 ppb	196059	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	74
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
3	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	53
5	Benzenamine, 3-methoxy-N-(3-pyri...	212	C13H12N2O	041855-70-3	52





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

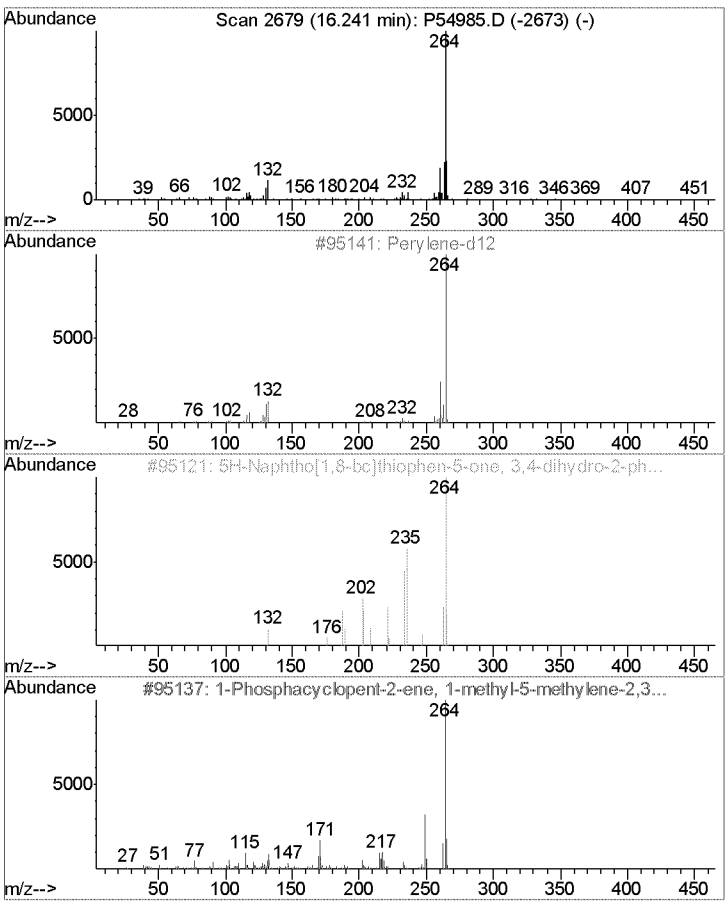
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

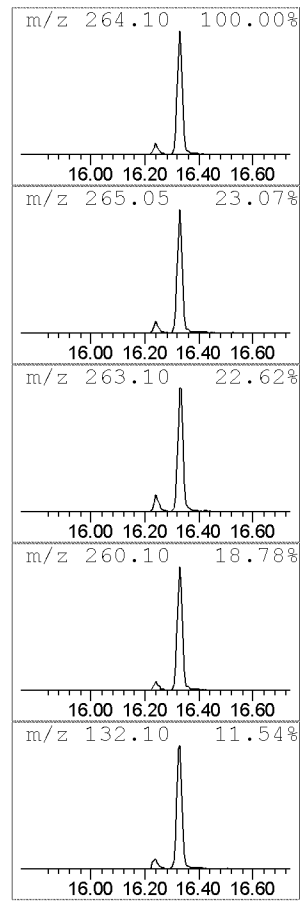
****

Peak Number 4 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.08 ppb	156405	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	81
2	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	58
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	50
5	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	50





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.2	ppb	124197	1	4.78	1170440	40.0
Internal standard...	10.14	4.3	ppb	175495	5	9.33	1640160	40.0
Internal standard...	13.22	4.5	ppb	196059	7	11.64	1758880	40.0
Internal standard...	16.24	4.1	ppb	156405	10	16.33	1533990	40.0

8.1.16
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23778.D
Acq On : 22 Feb 2011 10:05 am
Operator : ninap
Sample : ja68506-1
Misc : op48193a,e4m1040,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:39:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

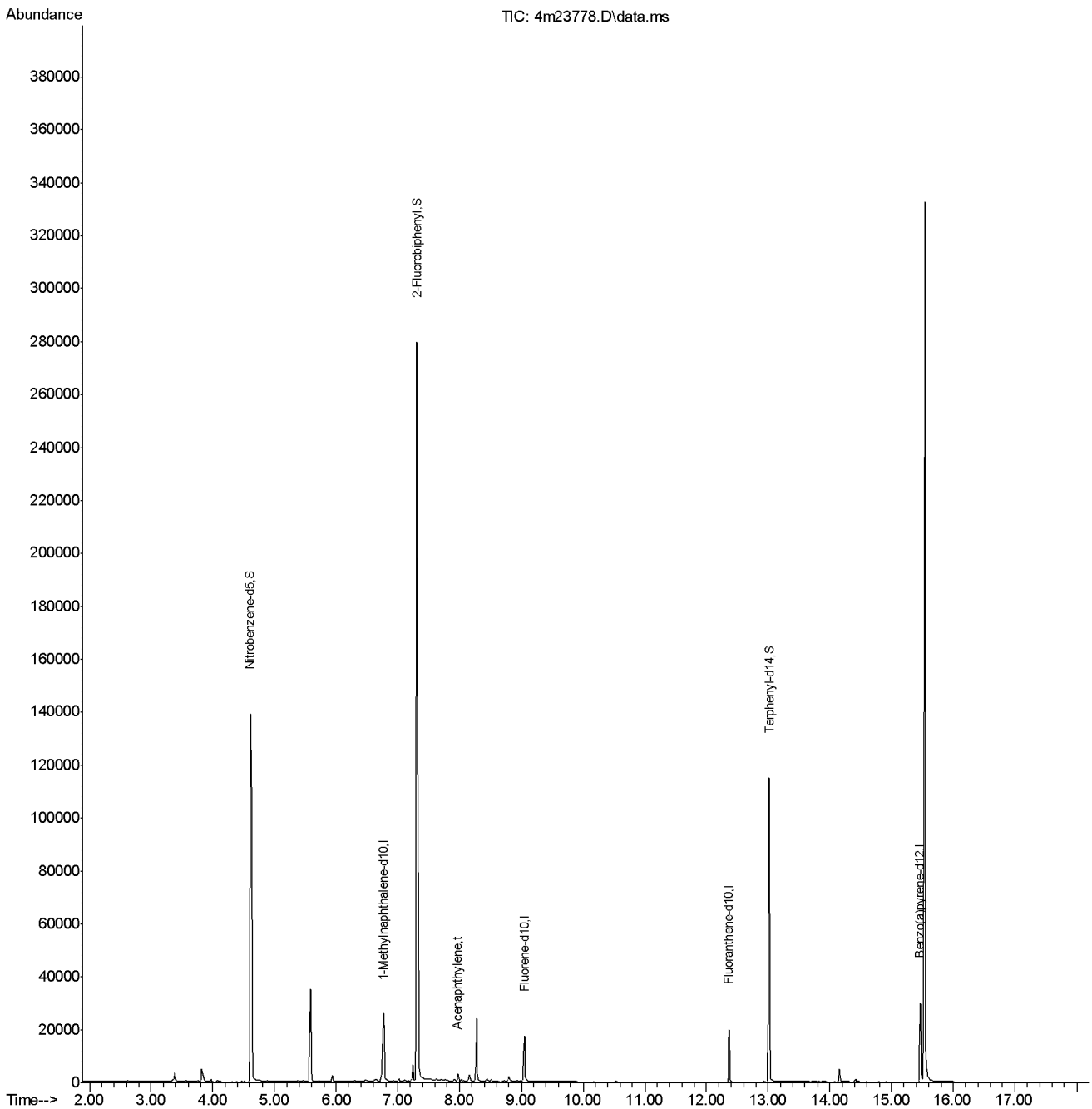
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	19324	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	12584	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22191	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	25321	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	106133	37.43	ppb	-0.01
Spiked Amount 50.000			Recovery =	74.86%		
11) 2-Fluorobiphenyl	7.304	172	246342	37.90	ppb	-0.02
Spiked Amount 50.000			Recovery =	75.80%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	82113	34.36	ppb	-0.02
Spiked Amount 50.000			Recovery =	68.72%		
Target Compounds						Qvalue
13) Acenaphthylene	7.972	152	3146	0.44	ppb	76

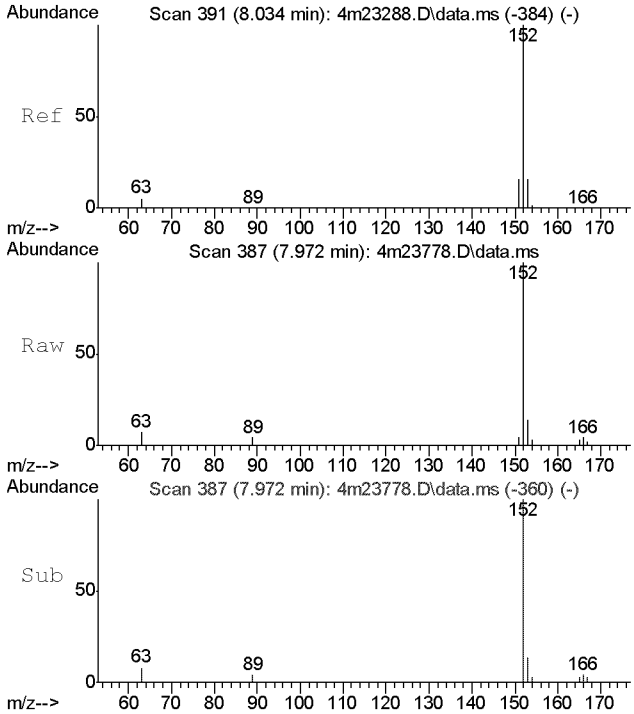
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23778.D
Acq On : 22 Feb 2011 10:05 am
Operator : ninap
Sample : ja68506-1
Misc : op48193a,e4m1040,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:39:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

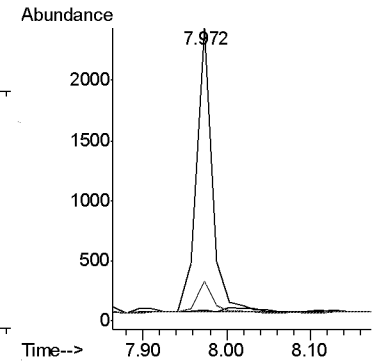




#13
Acenaphthylene
Concen: 0.44 ppb
RT: 7.972 min Scan# 387
Delta R.T. -0.062 min
Lab File: 4m23778.D
Acq: 22 Feb 2011 10:05 am

Tgt Ion:152 Resp: 3146

Ion	Ratio	Lower	Upper
152	100		
151	0.5	0.0	45.6
153	10.9	0.0	45.7



8.1.17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23779.D
Acq On : 22 Feb 2011 10:29 am
Operator : ninap
Sample : ja68506-2
Misc : op48193a,e4m1040,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:43:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

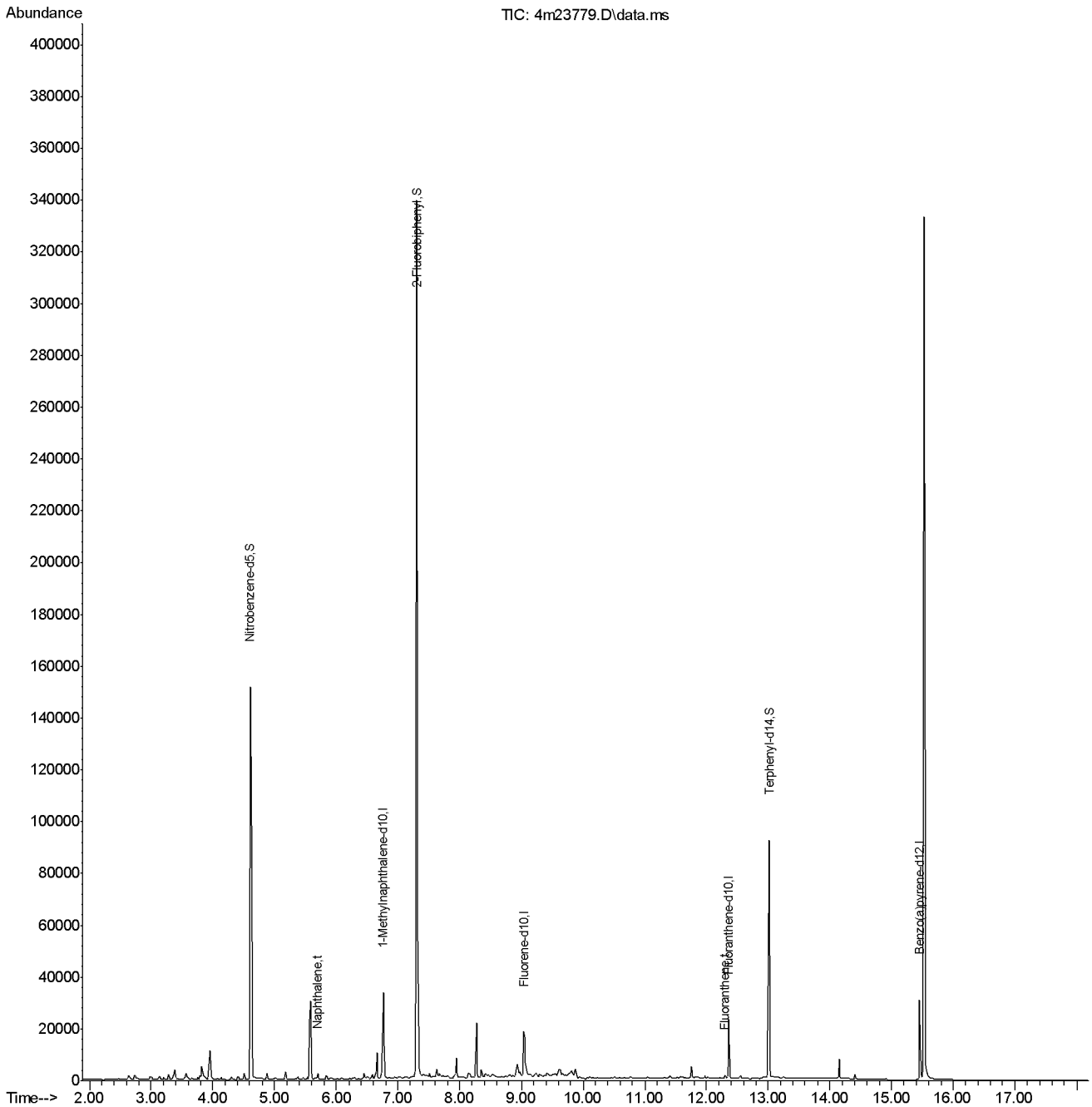
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	17238	4.00	ppb	0.00
12) Fluorene-d10	9.039	174	13210	4.00	ppb	# 0.00
23) Fluoranthene-d10	12.357	212	22959	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.452	264	25739	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	108931	43.06	ppb	0.00
Spiked Amount 50.000			Recovery =	86.12%		
11) 2-Fluorobiphenyl	7.303	172	254751	43.94	ppb	0.00
Spiked Amount 50.000			Recovery =	87.88%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	71731	29.01	ppb	0.00
Spiked Amount 50.000			Recovery =	58.02%		
Target Compounds						Qvalue
7) Naphthalene	5.694	128	2200	0.29	ppb	98
24) Fluoranthene	12.305	202	1528	0.22	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

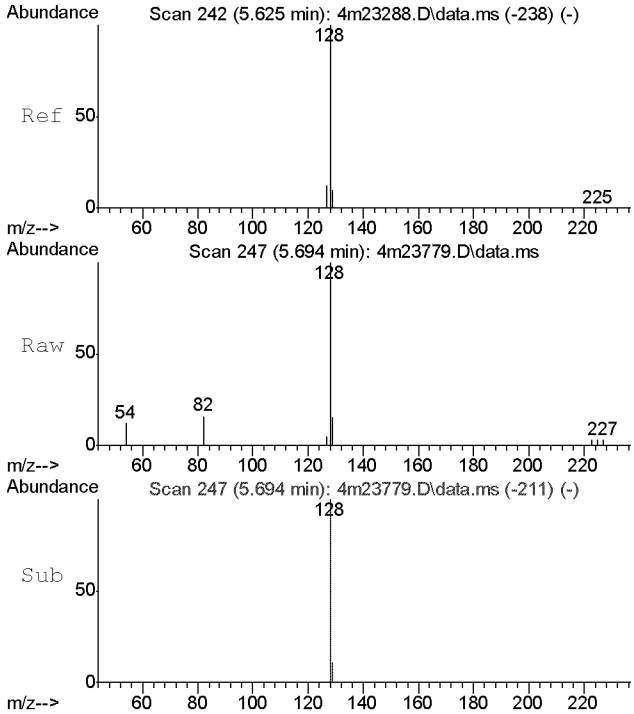
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23779.D
Acq On : 22 Feb 2011 10:29 am
Operator : ninap
Sample : ja68506-2
Misc : op48193a,e4m1040,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:43:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration



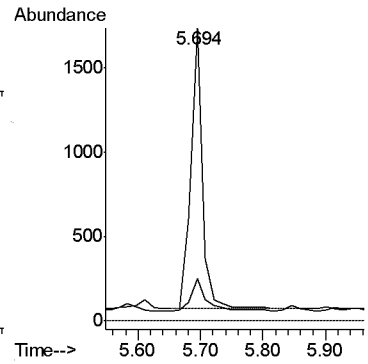
M4M1016SIM.M Tue Feb 22 14:43:57 2011 RPT1 Page: 2

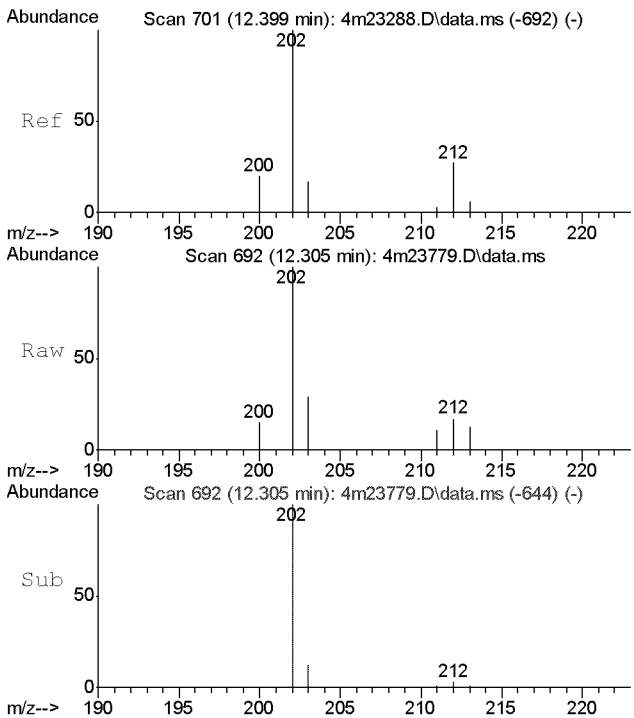


#7
Naphthalene
Concen: 0.29 ppb
RT: 5.694 min Scan# 247
Delta R.T. 0.000 min
Lab File: 4m23779.D
Acq: 22 Feb 2011 10:29 am

Tgt Ion:128 Resp: 2200

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.4
122	0.0	0.0	30.0

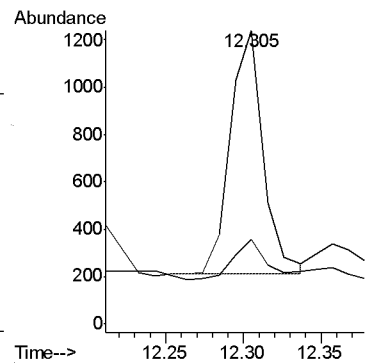




#24
Fluoranthene
Concen: 0.22 ppb
RT: 12.305 min Scan# 692
Delta R.T. 0.000 min
Lab File: 4m23779.D
Acq: 22 Feb 2011 10:29 am

Tgt Ion:202 Resp: 1528

Ion	Ratio	Lower	Upper
202	100		
203	14.1	0.0	47.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23780.D
Acq On : 22 Feb 2011 10:53 am
Operator : ninap
Sample : ja68506-3
Misc : op48193a,e4m1040,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

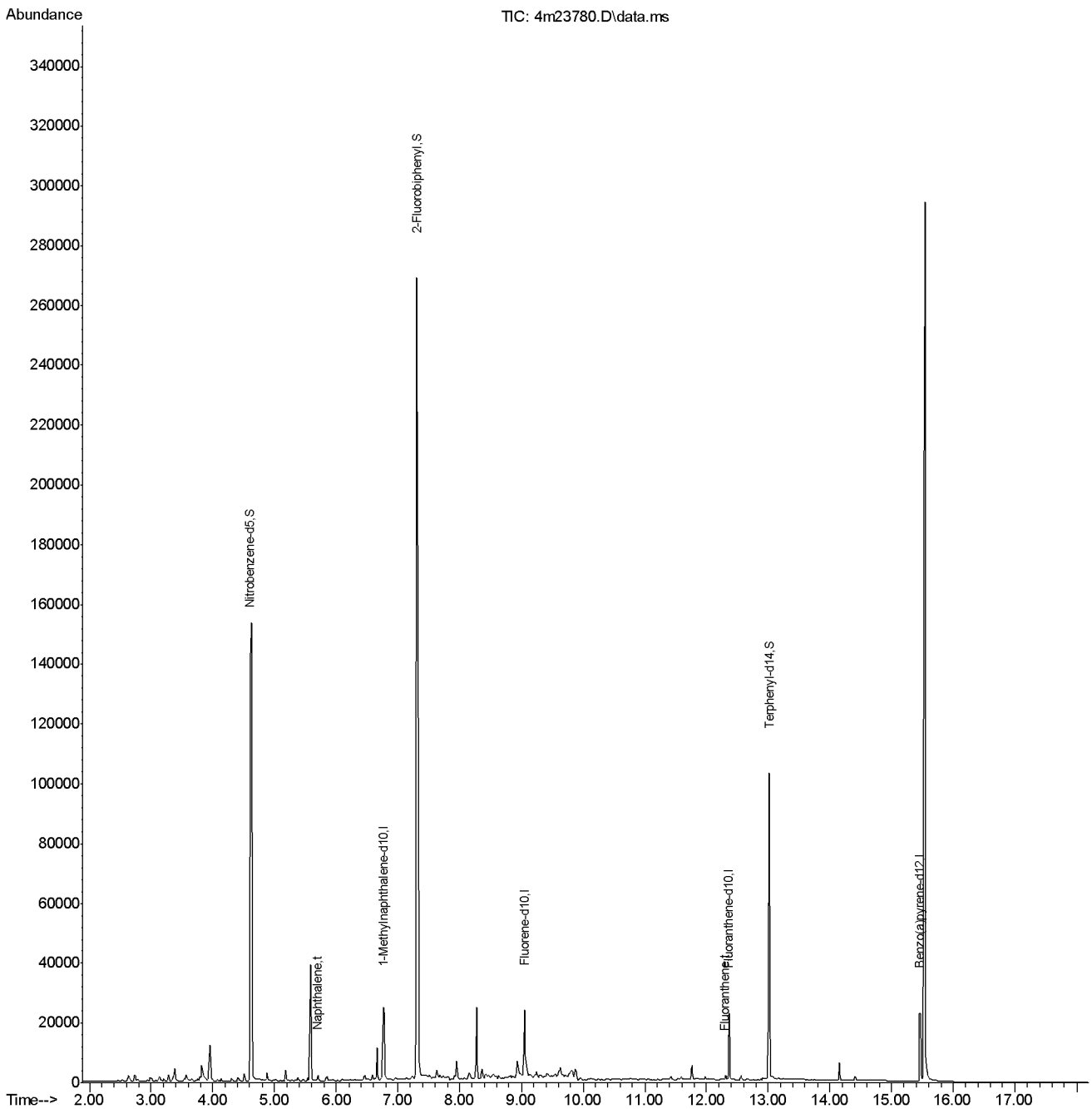
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	17113	4.00	ppb	0.02
12) Fluorene-d10	9.055	174	13034	4.00	ppb	# 0.02
23) Fluoranthene-d10	12.368	212	22864	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.452	264	25099	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	128017	50.97	ppb	0.00
Spiked Amount 50.000			Recovery =	101.94%		
11) 2-Fluorobiphenyl	7.303	172	281095	48.84	ppb	0.00
Spiked Amount 50.000			Recovery =	97.68%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	74042	30.07	ppb	0.00
Spiked Amount 50.000			Recovery =	60.14%		
Target Compounds						Qvalue
7) Naphthalene	5.694	128	1967	0.26	ppb	99
24) Fluoranthene	12.306	202	1565	0.23	ppb	86

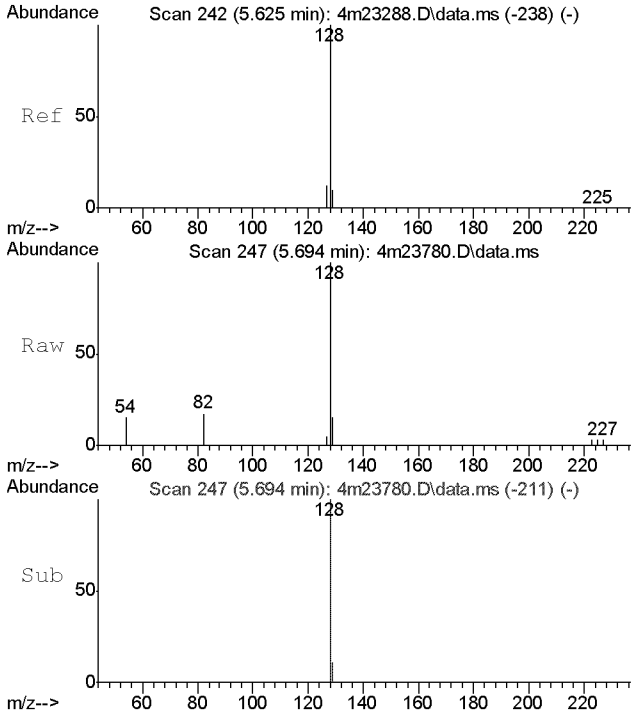
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23780.D
Acq On : 22 Feb 2011 10:53 am
Operator : ninap
Sample : ja68506-3
Misc : op48193a,e4m1040,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

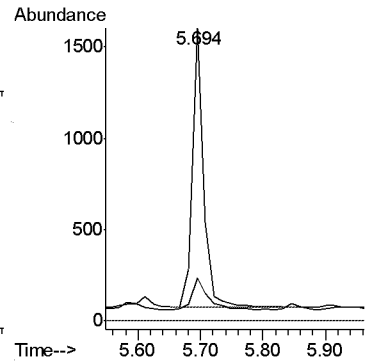


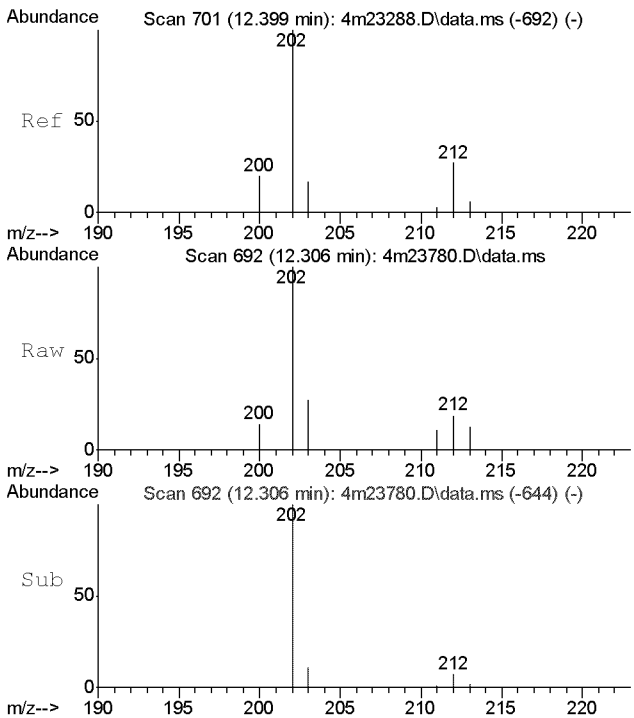


#7
Naphthalene
Concen: 0.26 ppb
RT: 5.694 min Scan# 247
Delta R.T. 0.000 min
Lab File: 4m23780.D
Acq: 22 Feb 2011 10:53 am

Tgt Ion:128 Resp: 1967

Ion	Ratio	Lower	Upper
128	100		
129	10.6	0.0	40.4
122	0.0	0.0	30.0

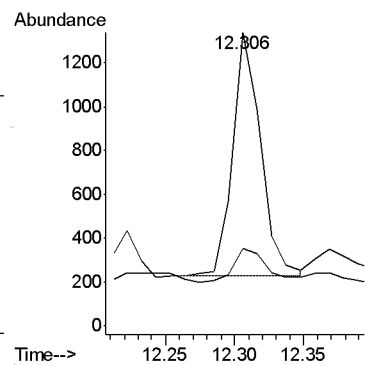




#24
Fluoranthene
Concen: 0.23 ppb
RT: 12.306 min Scan# 692
Delta R.T. 0.000 min
Lab File: 4m23780.D
Acq: 22 Feb 2011 10:53 am

Tgt Ion:202 Resp: 1565

Ion	Ratio	Lower	Upper
202	100		
203	11.2	0.0	47.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23781.D
Acq On : 22 Feb 2011 11:17 am
Operator : ninap
Sample : ja68506-4
Misc : op48193a,e4m1040,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 14:45:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

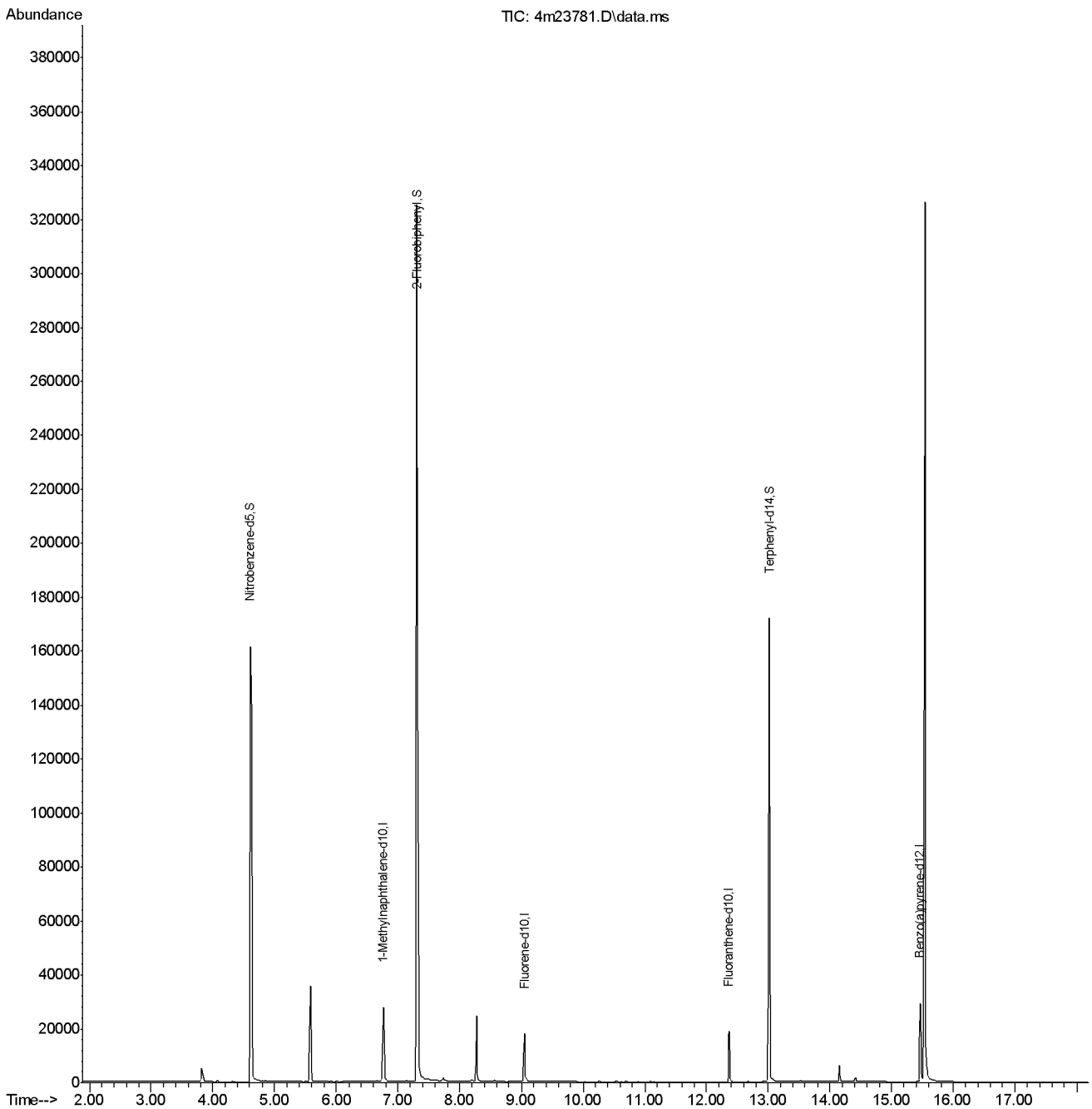
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	16866	4.00	ppb	-0.02
12) Fluorene-d10	9.055	174	13018	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22030	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	26242	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	127851	51.65	ppb	-0.01
Spiked Amount 50.000			Recovery =	103.30%		
11) 2-Fluorobiphenyl	7.303	172	283931	50.06	ppb	-0.02
Spiked Amount 50.000			Recovery =	100.12%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	124185	52.34	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.68%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23781.D
Acq On : 22 Feb 2011 11:17 am
Operator : ninap
Sample : ja68506-4
Misc : op48193a,e4m1040,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 14:45:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



M4M1016SIM.M Tue Feb 22 14:45:44 2011 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23782.D
Acq On : 22 Feb 2011 11:40 am
Operator : ninap
Sample : ja68506-5
Misc : op48193a,e4m1040,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 14:46:24 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

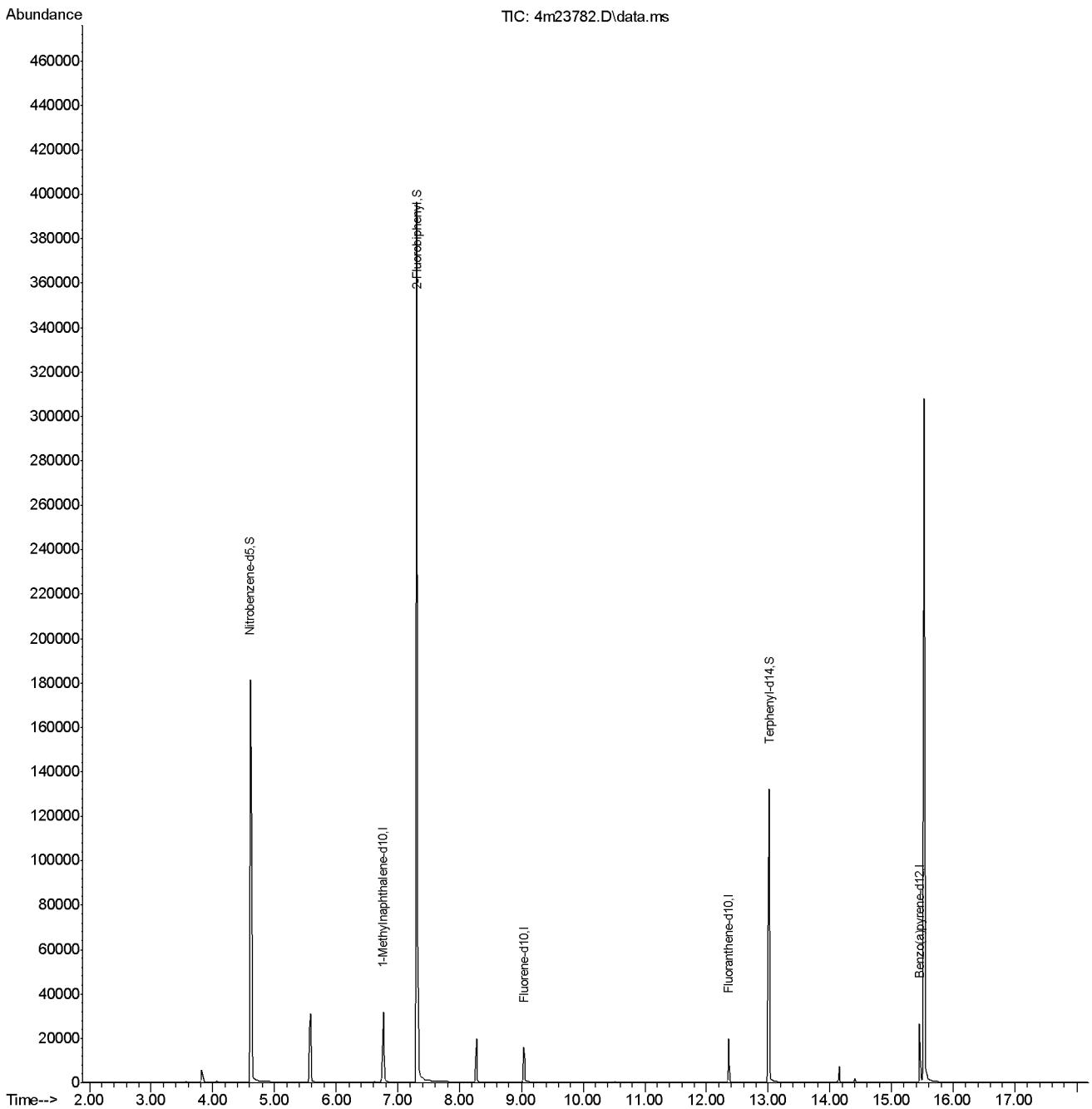
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	16782	4.00	ppb	-0.02
12) Fluorene-d10	9.039	174	12101	4.00	ppb	-0.03
23) Fluoranthene-d10	12.357	212	19877	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	22306	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	128869	52.33	ppb	-0.01
Spiked Amount 50.000			Recovery =	104.66%		
11) 2-Fluorobiphenyl	7.303	172	297895	52.78	ppb	-0.02
Spiked Amount 50.000			Recovery =	105.56%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	112201	52.41	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.82%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23782.D
Acq On : 22 Feb 2011 11:40 am
Operator : ninap
Sample : ja68506-5
Misc : op48193a,e4m1040,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 14:46:24 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23783.D
Acq On : 22 Feb 2011 12:04 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193a,e4m1040,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 25 14:24:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

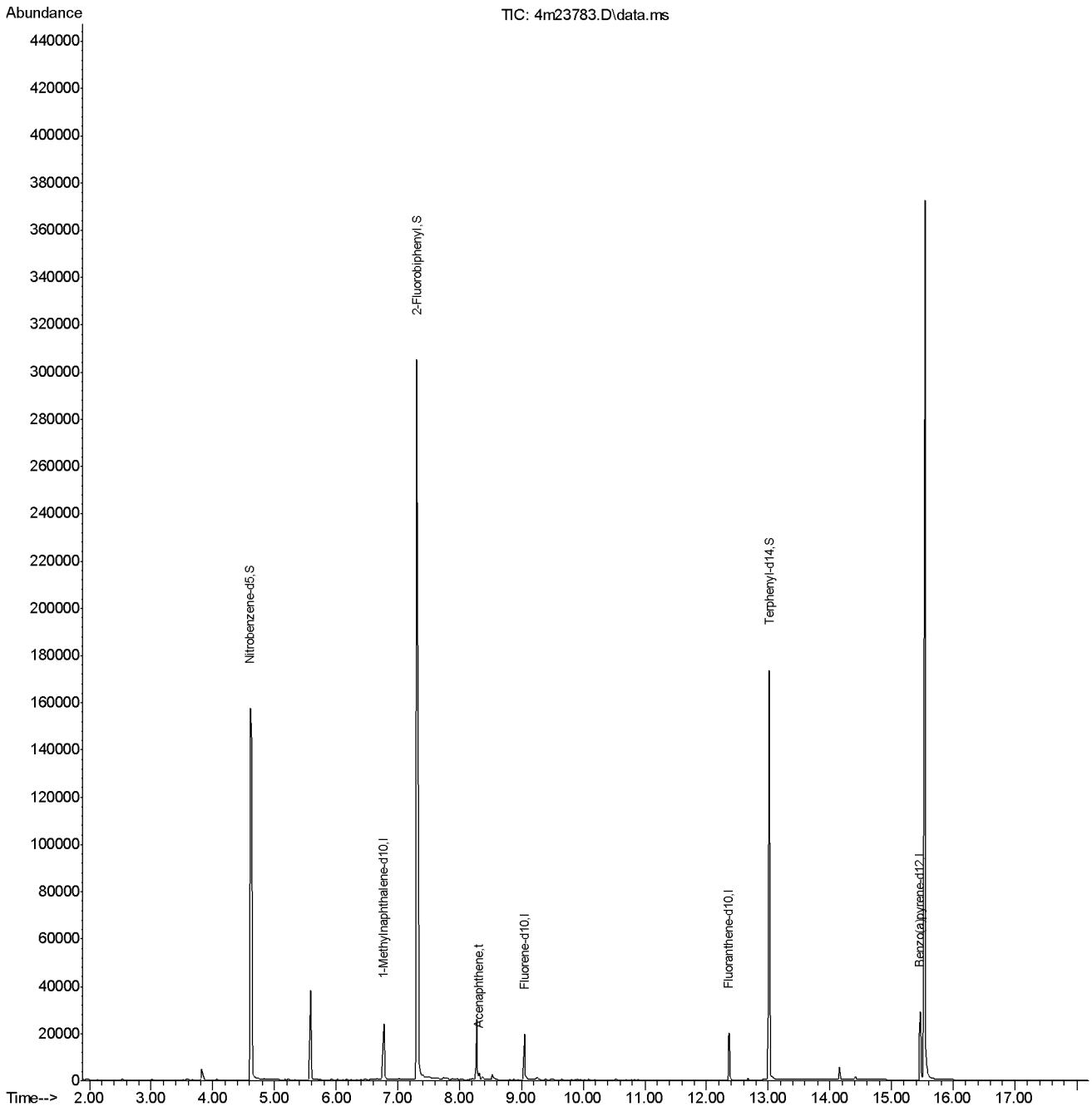
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	16649	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	13067	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22964	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.463	264	27759	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	129266	52.91	ppb	-0.01
Spiked Amount 50.000			Recovery =	105.82%		
11) 2-Fluorobiphenyl	7.304	172	303411	54.19	ppb	-0.02
Spiked Amount 50.000			Recovery =	108.38%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	122653	49.59	ppb	-0.02
Spiked Amount 50.000			Recovery =	99.18%		
Target Compounds						Qvalue
14) Acenaphthene	8.312	153	1552	0.28	ppb	95

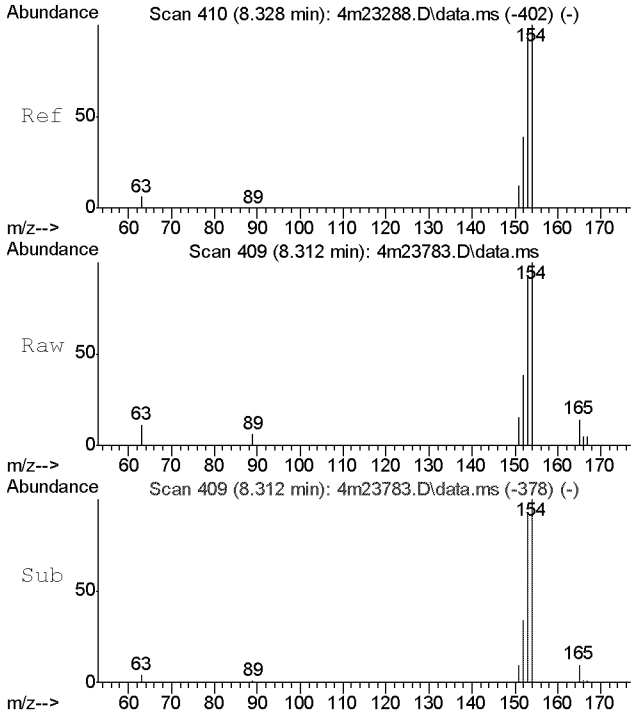
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23783.D
Acq On : 22 Feb 2011 12:04 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193a,e4m1040,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 25 14:24:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

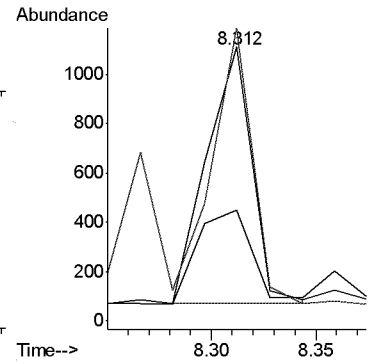




#14
Acenaphthene
Concen: 0.28 ppb
RT: 8.312 min Scan# 409
Delta R.T. -0.016 min
Lab File: 4m23783.D
Acq: 22 Feb 2011 12:04 pm

Tgt Ion:153 Resp: 1552

Ion	Ratio	Lower	Upper
153	100		
152	35.7	9.6	69.6
154	105.5	71.6	131.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23796.D
Acq On : 22 Feb 2011 5:18 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193a,e4m1040,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 10:25:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

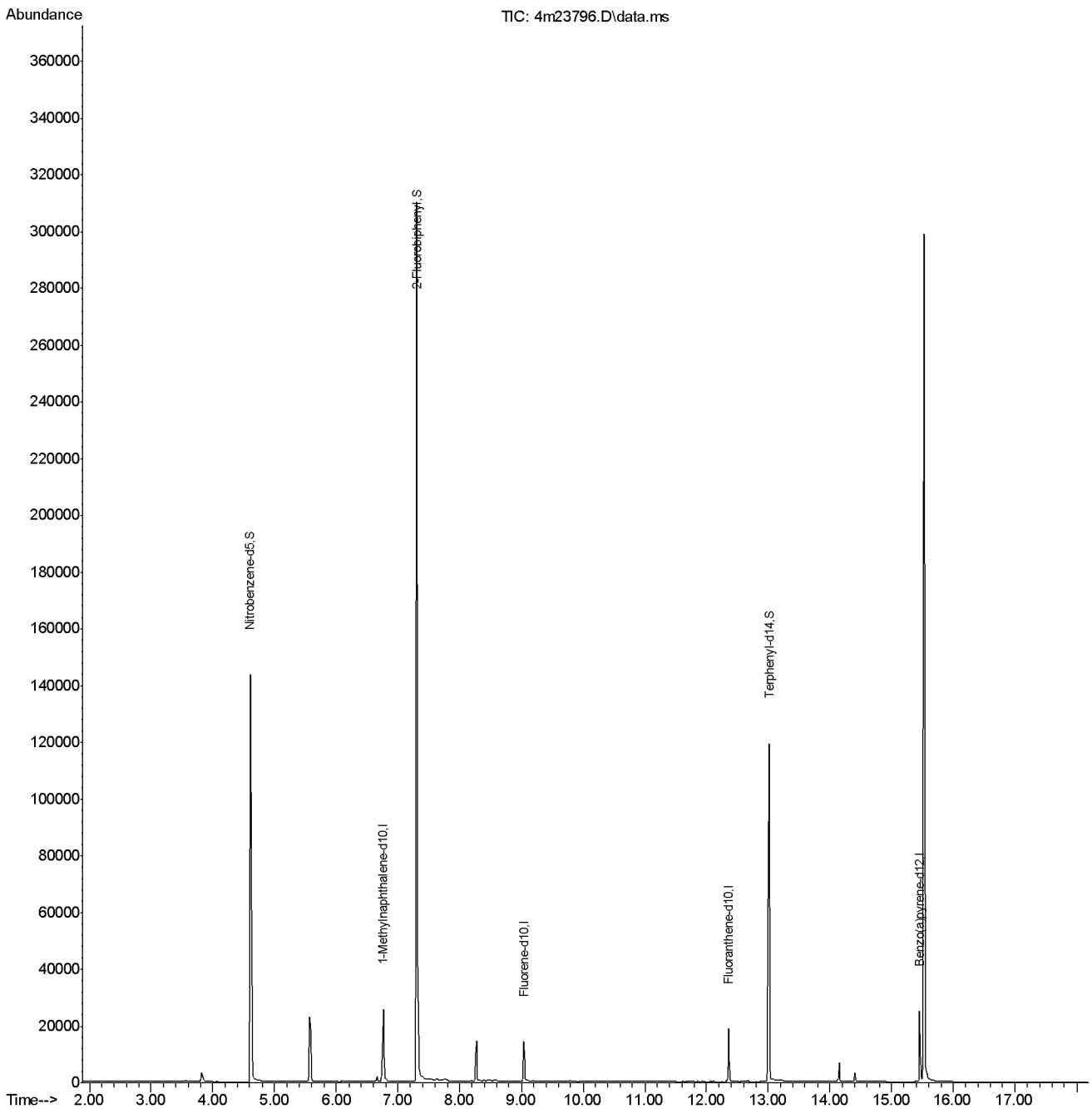
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	13339	4.00	ppb	-0.02
12) Fluorene-d10	9.039	174	10388	4.00	ppb	-0.03
23) Fluoranthene-d10	12.357	212	18708	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	22359	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	95357	48.71	ppb	-0.01
Spiked Amount 50.000			Recovery =	97.42%		
11) 2-Fluorobiphenyl	7.303	172	240215	53.55	ppb	-0.02
Spiked Amount 50.000			Recovery =	107.10%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	99033	49.15	ppb	-0.02
Spiked Amount 50.000			Recovery =	98.30%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23796.D
Acq On : 22 Feb 2011 5:18 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193a,e4m1040,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 10:25:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23785.D
Acq On : 22 Feb 2011 12:52 pm
Operator : ninap
Sample : ja68506-8
Misc : op48193a,e4m1040,1000
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:48:33 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

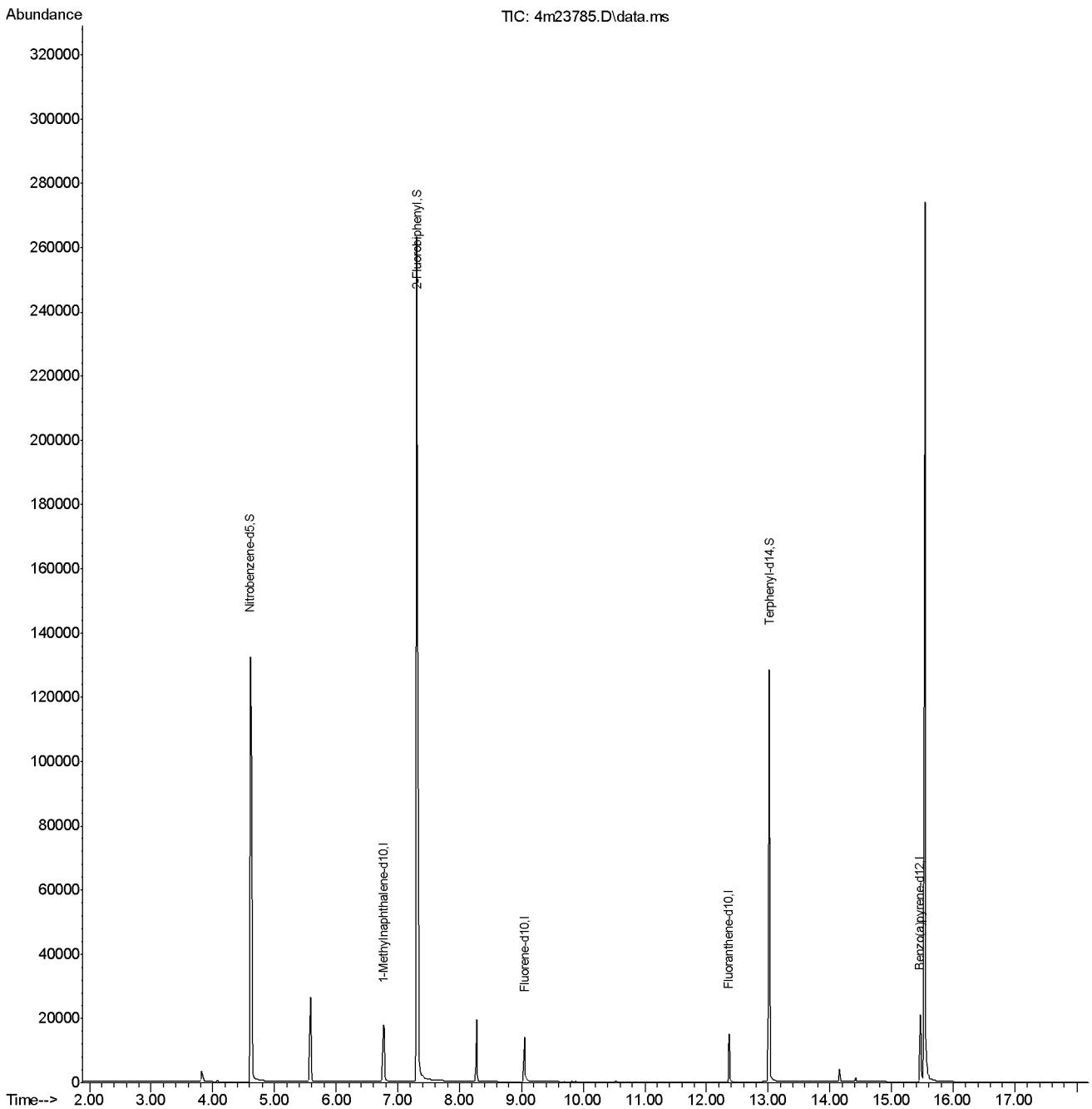
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	12931	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	9689	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	17530	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	19408	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	100605	53.02	ppb	-0.01
Spiked Amount 50.000			Recovery =	106.04%		
11) 2-Fluorobiphenyl	7.303	172	248779	57.20	ppb	-0.02
Spiked Amount 50.000			Recovery =	114.40%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	93507	49.53	ppb	-0.02
Spiked Amount 50.000			Recovery =	99.06%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23785.D
Acq On : 22 Feb 2011 12:52 pm
Operator : ninap
Sample : ja68506-8
Misc : op48193a,e4m1040,1000
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:48:33 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23774.D
Acq On : 22 Feb 2011 8:27 am
Operator : ninap
Sample : op48193a-mb1
Misc : op48193a,e4m1040,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 09:44:01 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

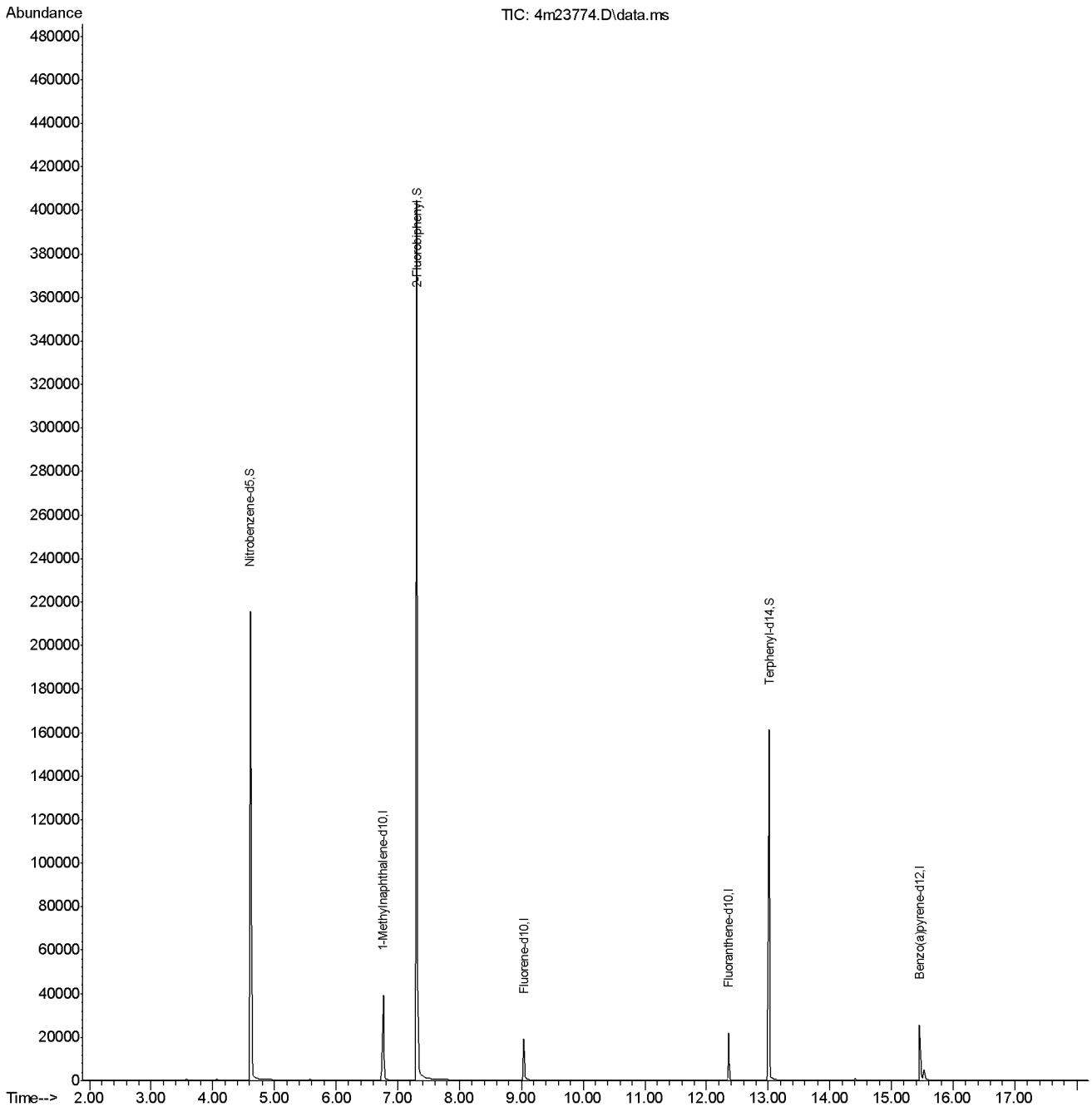
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	19201	4.00	ppb	-0.02
12) Fluorene-d10	9.040	174	12967	4.00	ppb	-0.03
23) Fluoranthene-d10	12.358	212	22653	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	23394	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	131105	46.53	ppb	-0.01
Spiked Amount 50.000			Recovery =	93.06%		
11) 2-Fluorobiphenyl	7.304	172	302519	46.85	ppb	-0.02
Spiked Amount 50.000			Recovery =	93.70%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	127724	52.35	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.70%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23774.D
Acq On : 22 Feb 2011 8:27 am
Operator : ninap
Sample : op48193a-mb1
Misc : op48193a,e4m1040,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 09:44:01 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 10:04:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	156843	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	544048	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	344454	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	607637	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	671707	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	561533	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	156843	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	607637	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	344454	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	671707	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	336734	49.13	ppb	-0.07
Spiked Amount 50.000			Recovery =	98.26%		
51) 2-Fluorobiphenyl	8.29	172	536493	45.36	ppb	-0.08
Spiked Amount 50.000			Recovery =	90.72%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	608732	38.35	ppb	-0.06
Spiked Amount 50.000			Recovery =	76.70%		

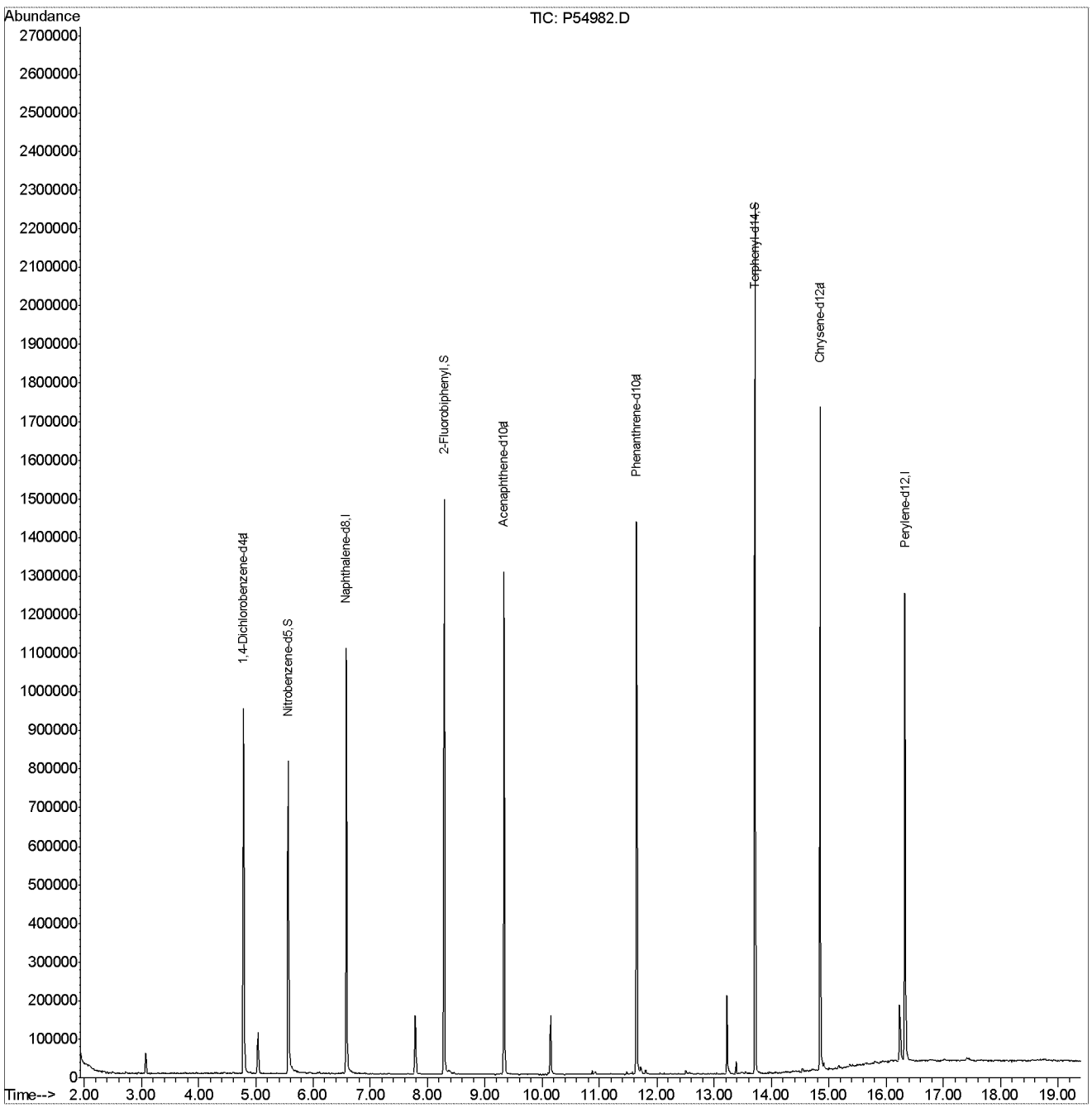
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 10:04:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



MP2364.M Tue Feb 22 10:04:40 2011 MSP Page: 2

ACCUTEST LABORATORIES JA68506

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.496	103	106	115	rVB9	4163	8053	0.37%	0.052%
2	2.725	143	149	154	rBV10	4249	7515	0.35%	0.048%
3	2.832	165	169	171	rBV5	3453	3738	0.17%	0.024%
4	2.891	177	180	185	rVB4	3932	4588	0.21%	0.029%
5	3.073	210	214	224	rBV	52168	69555	3.21%	0.445%
6	3.586	306	310	314	rVB7	2504	4432	0.20%	0.028%
7	3.837	355	357	364	rBV6	2723	4380	0.20%	0.028%
8	4.285	435	441	443	rBV7	3029	4698	0.22%	0.030%
9	4.595	495	499	504	rBV6	3583	6736	0.31%	0.043%
10	4.782	527	534	550	rBV	945457	1158558	53.50%	7.410%
11	4.905	555	557	562	rVB6	3512	3644	0.17%	0.023%
12	5.033	576	581	594	rVB	107451	140943	6.51%	0.901%
13	5.365	640	643	653	rVB	3296	6799	0.31%	0.043%
14	5.562	673	680	699	rBV	810422	1056986	48.81%	6.760%
15	6.112	779	783	787	rVB7	4761	6297	0.29%	0.040%
16	6.278	811	814	819	rVB6	3539	4563	0.21%	0.029%
17	6.492	850	854	859	rBV7	3081	6169	0.28%	0.039%
18	6.572	862	869	891	rBV	1102153	1371847	63.35%	8.774%
19	6.791	907	910	916	rBV8	2440	3527	0.16%	0.023%
20	6.898	927	930	935	rVB7	3792	5340	0.25%	0.034%
21	7.624	1062	1066	1070	rBV6	2172	3540	0.16%	0.023%
22	7.779	1084	1095	1104	rBV2	152883	218131	10.07%	1.395%
23	8.287	1181	1190	1201	rBV	1490810	1790755	82.70%	11.453%
24	8.362	1201	1204	1207	rVV4	4887	6375	0.29%	0.041%
25	8.549	1231	1239	1241	rBV9	2477	3984	0.18%	0.025%
26	9.328	1376	1385	1403	rBV	1303024	1591781	73.51%	10.180%
27	9.441	1404	1406	1411	rVV5	3845	4534	0.21%	0.029%
28	9.494	1411	1416	1421	rVB9	3147	4077	0.19%	0.026%
29	9.665	1444	1448	1458	rVB10	4198	7043	0.33%	0.045%
30	10.044	1515	1519	1524	rBV9	2466	4120	0.19%	0.026%
31	10.103	1524	1530	1532	rBV4	5786	7647	0.35%	0.049%
32	10.140	1532	1537	1554	rVB	152453	213297	9.85%	1.364%
33	10.408	1582	1587	1590	rBV7	2391	4288	0.20%	0.027%
34	10.488	1597	1602	1607	rVB6	3574	5289	0.24%	0.034%

MP2364.M Tue Feb 22 10:05:06 2011 MSP

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	10.595	1618	1622	1628	rVB8	3275	5963	0.28%	0.038%
36	10.867	1668	1673	1677	rVB4	9008	8858	0.41%	0.057%
37	10.910	1677	1681	1688	rVB5	8225	12323	0.57%	0.079%
38	11.193	1730	1734	1739	rBV8	2856	4266	0.20%	0.027%
39	11.332	1754	1760	1763	rBV7	2299	4073	0.19%	0.026%
40	11.369	1766	1767	1775	rVB8	2422	3763	0.17%	0.024%
41	11.471	1780	1786	1790	rBV2	8183	14780	0.68%	0.095%
42	11.567	1794	1804	1806	rBV7	6484	9236	0.43%	0.059%
43	11.642	1811	1818	1828	rBV2	1431138	1705146	78.75%	10.905%
44	11.722	1829	1833	1840	rVB6	15709	22927	1.06%	0.147%
45	11.802	1844	1848	1861	rVB6	10792	22552	1.04%	0.144%
46	12.053	1889	1895	1898	rBV7	3929	5618	0.26%	0.036%
47	12.502	1974	1979	1984	rBV7	8626	14532	0.67%	0.093%
48	13.127	2092	2096	2099	rBV6	2979	4396	0.20%	0.028%
49	13.223	2108	2114	2136	rVB	203239	254567	11.76%	1.628%
50	13.378	2136	2143	2148	rBV2	34178	41309	1.91%	0.264%
51	13.474	2154	2161	2171	rBV2	4860	16283	0.75%	0.104%
52	13.544	2171	2174	2179	rVB7	4028	4254	0.20%	0.027%
53	13.709	2198	2205	2217	rBV	2257409	2165395	100.00%	13.849%
54	14.238	2302	2304	2310	rBV7	2878	5002	0.23%	0.032%
55	14.366	2325	2328	2334	rBV8	3771	7049	0.33%	0.045%
56	14.537	2358	2360	2366	rBV7	7832	9868	0.46%	0.063%
57	14.708	2386	2392	2395	rBV7	4858	9461	0.44%	0.061%
58	14.847	2412	2418	2428	rBV	1717143	1765294	81.52%	11.290%
59	14.916	2428	2431	2443	rVB2	17580	25214	1.16%	0.161%
60	15.173	2474	2479	2485	rBV10	8499	14764	0.68%	0.094%
61	16.236	2673	2678	2688	rBV	145098	193251	8.92%	1.236%
62	16.327	2688	2695	2719	rVB	1213341	1542357	71.23%	9.864%

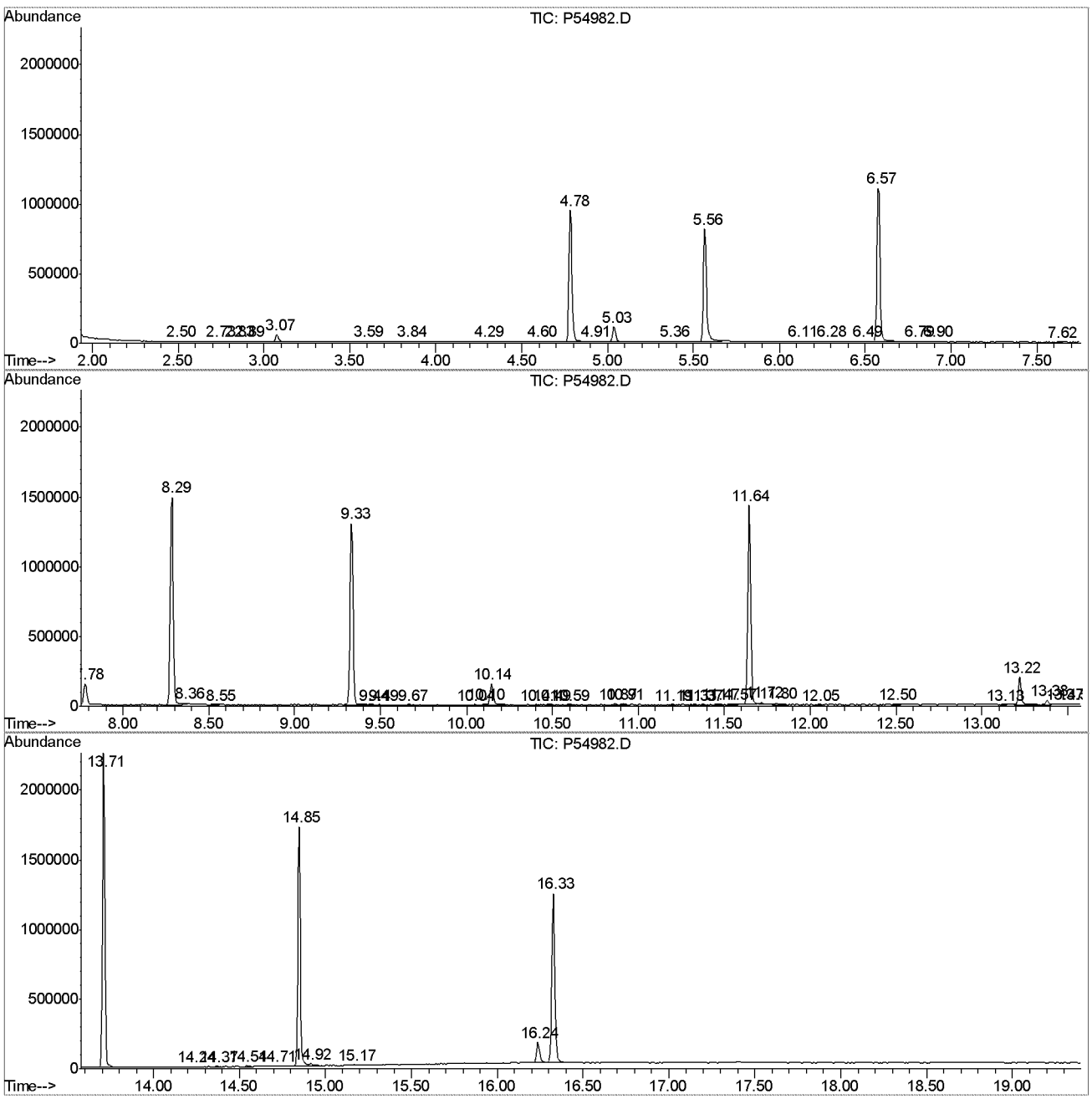
Sum of corrected areas: 15635730

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

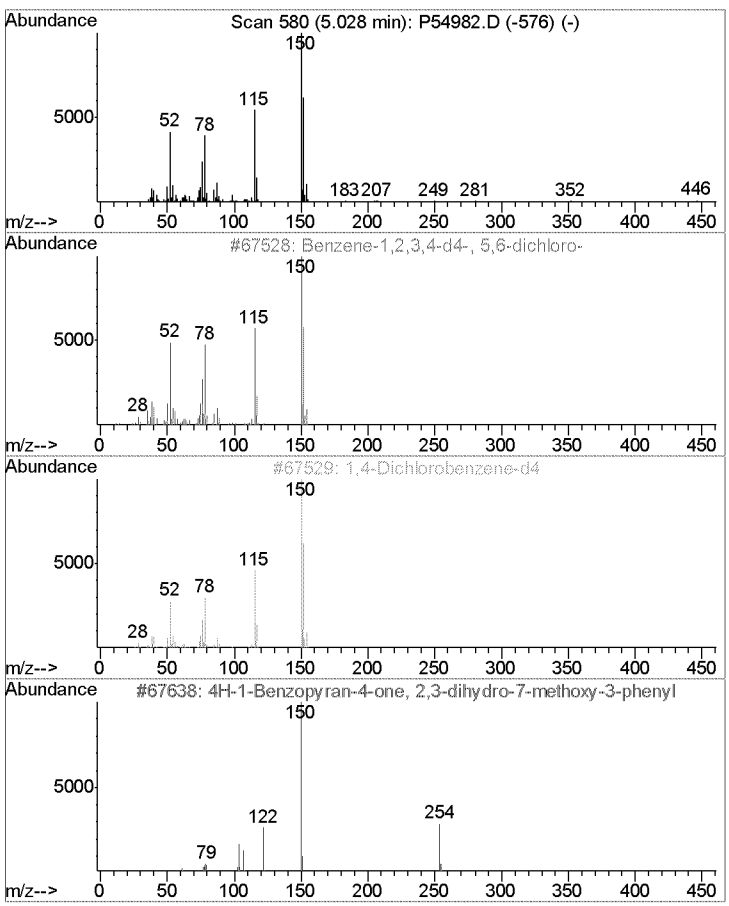
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

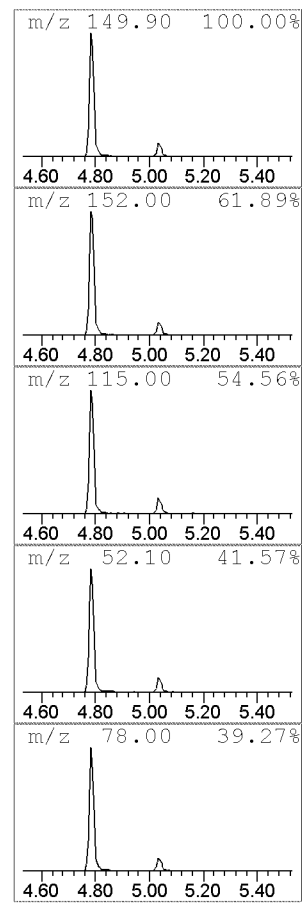
****

Peak Number 1 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.87 ppb	140943	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	95
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	4H-1-Benzopyran-4-one, 2,3-dihyd...	254	C16H14O3	005128-69-8	10
4	Ethanone, 1-(3-nitrophenyl)-	165	C8H7NO3	000121-89-1	10
5	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	9





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

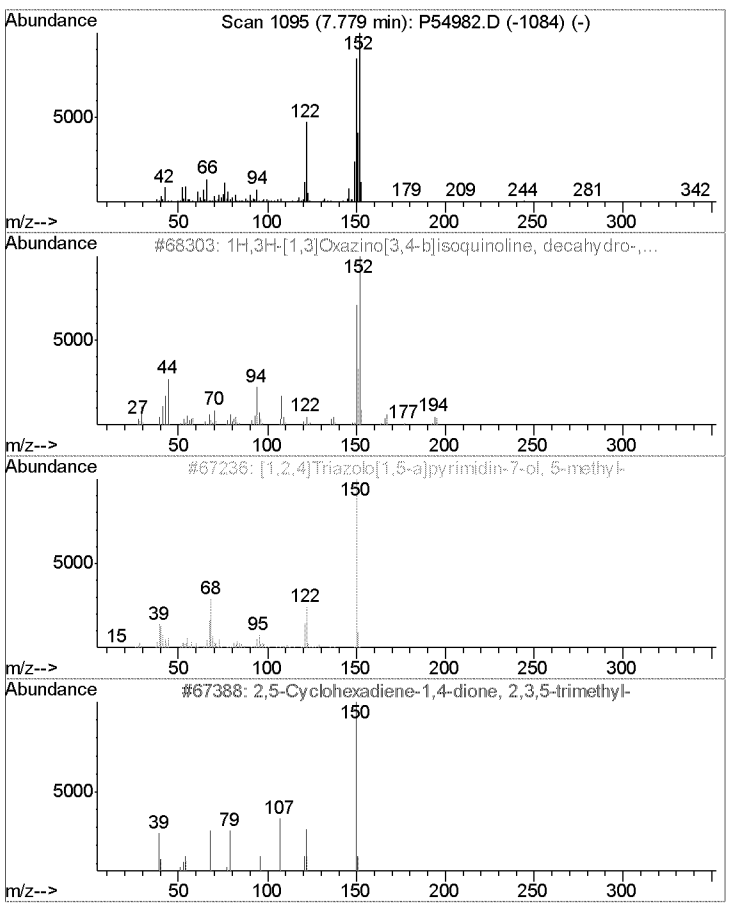
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

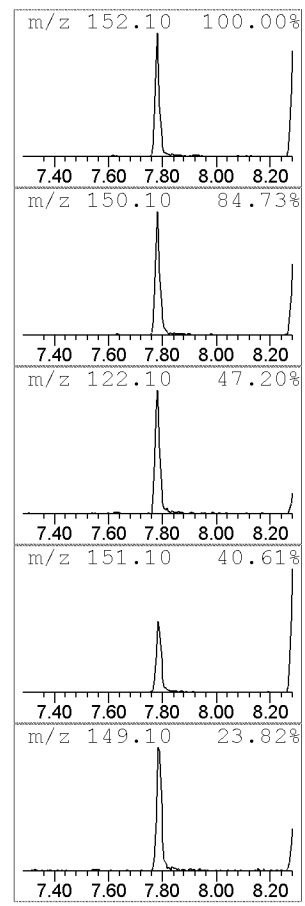
****

Peak Number 2 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.78	4.32 ppb	148162	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H,3H-[1,3]Oxazino[3,4-b]isoquin...	195	C12H21NO	076097-55-7	36
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	2,5-Cyclohexadiene-1,4-dione, 2,...	150	C9H10O2	000935-92-2	27
4	Acenaphthylene	152	C12H8	000208-96-8	25
5	Biphenylene	152	C12H8	000259-79-0	25





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

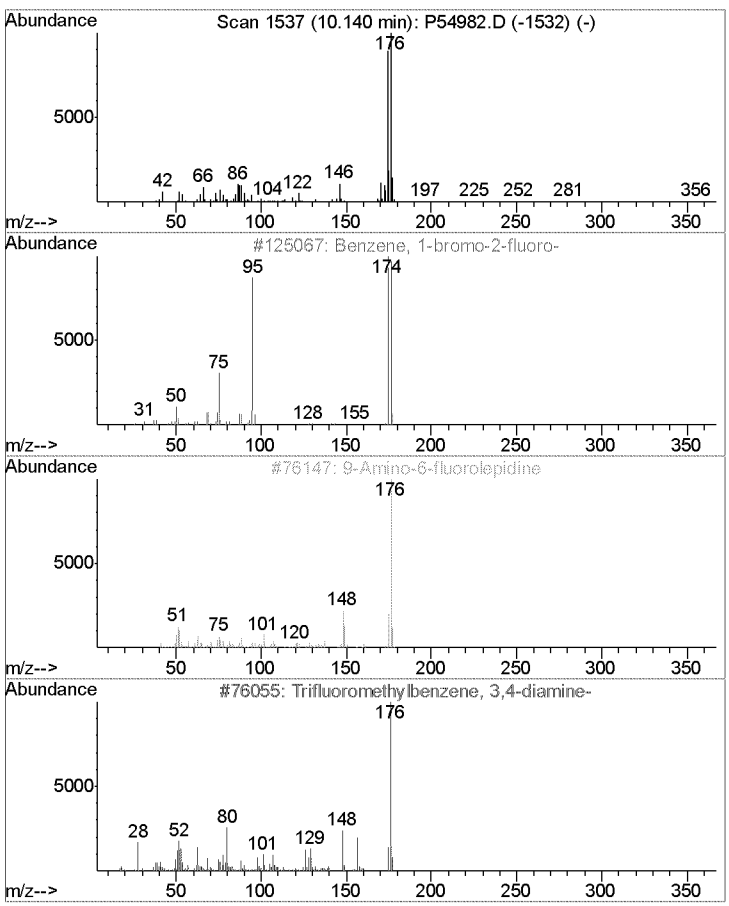
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

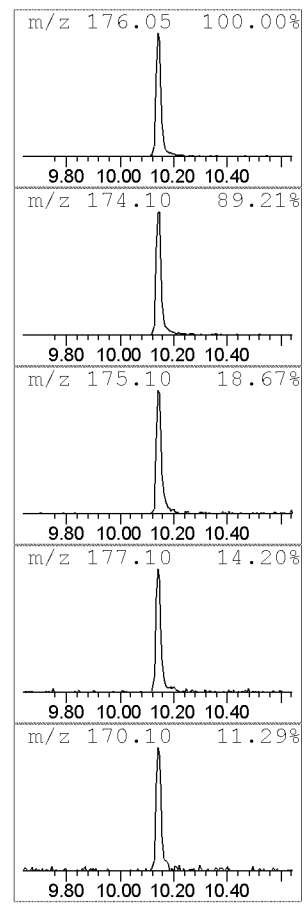
****

Peak Number 3 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.36 ppb	213297	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	64
2	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	30
3	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	25
4	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	25
5	Benzenemethanol, .alpha.-1-penty...	174	C12H14O	108946-34-5	22





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

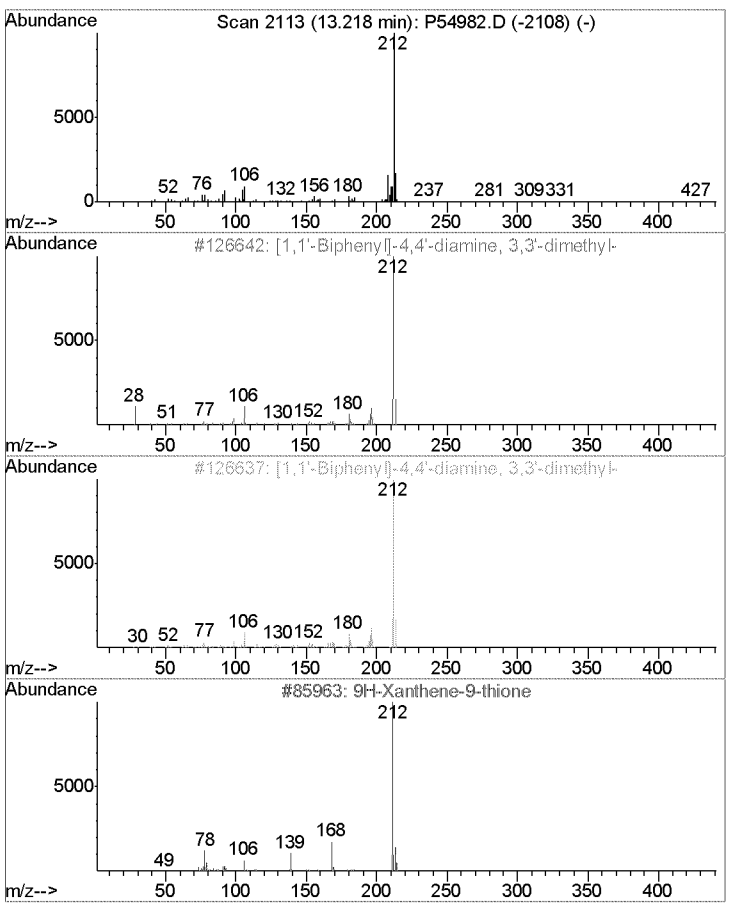
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

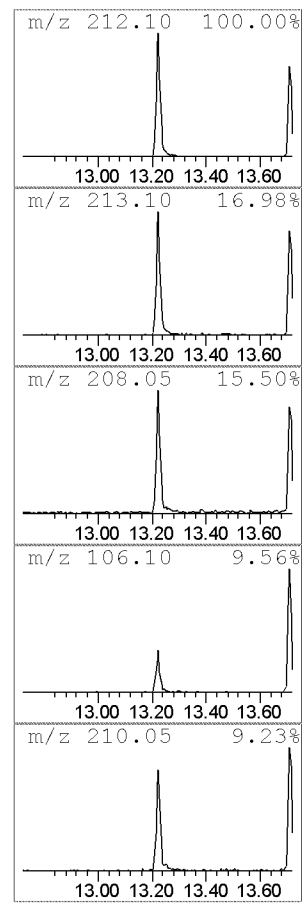
****

Peak Number 4 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.97 ppb	254567	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	53
5	2,8-Dimethyldibenzo(B,D)thiophene	212	C14H12S	001207-15-4	50





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

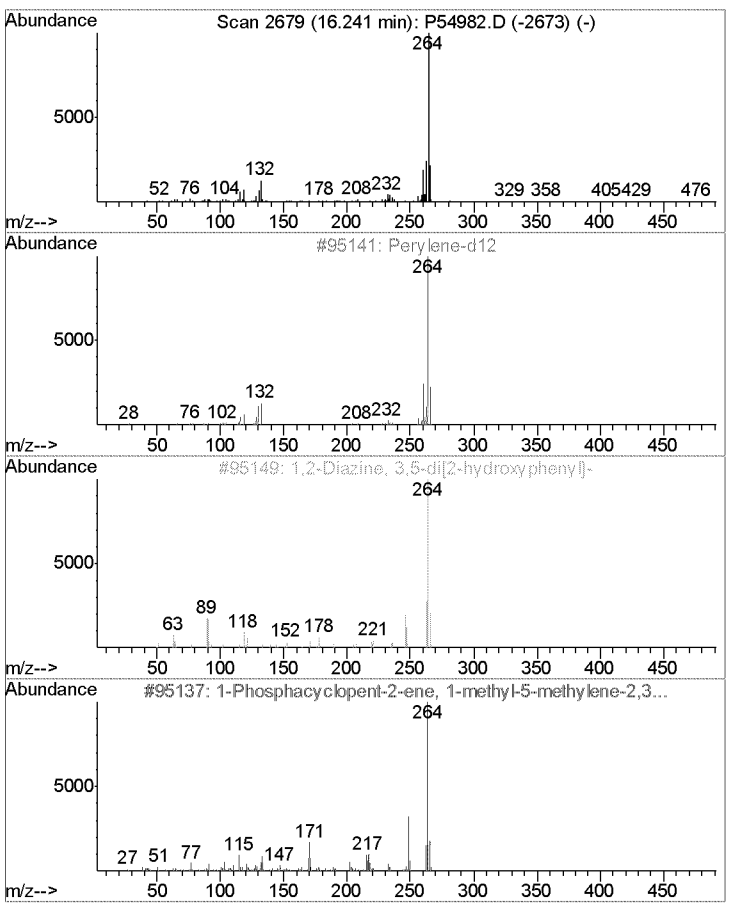
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

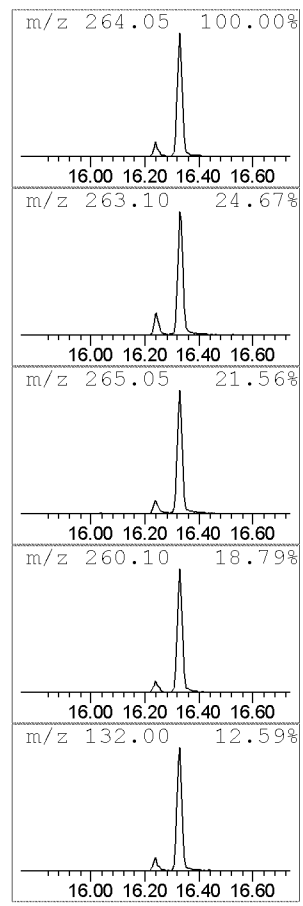
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 5 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	5.01 ppb	193251	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	95
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	72
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	64
4	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	49
5	2,4,6,8-Tetrathiatricyclo[3.3.1....	264	C10H16S4	007000-79-5	47





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	5.03	4.9	ppb	140943	2	4.78	1158560	40.0
Internal standard...	7.78	4.3	ppb	148162	3	6.57	1371850	40.0
Internal standard...	10.14	5.4	ppb	213297	5	9.33	1591780	40.0
Internal standard...	13.22	6.0	ppb	254567	7	11.64	1705150	40.0
Internal standard...	16.24	5.0	ppb	193251	10	16.33	1542360	40.0

ARCADIS

Appendix C

Well CG Monitoring Well Record, Form B, and Well Construction Diagram

New Jersey State Department of Environmental Protection
Bureau of Water Systems and Well Permitting
PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number
E201006624

MONITORING WELL RECORD

PROPERTY OWNER: JOHN SEARS

Company/Organization: PSE&G Nuclear, LLC

Address: Alloway Creek Neck Road Hancocks Bridge, New Jersey 08038

WELL LOCATION: PSE&G Nuclear Plant

Address: Alloway Creek Neck Road

County: Salem Municipality: Lower Alloways Creek Twp Lot: 4 Block: 26

Easting (X): 199559 Northing (Y): 230801
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: December 22, 2010

DATE WELL COMPLETED: December 22, 2010

WELL USE: MONITORING

Other Use(s):

Local ID: MW-CG

WELL CONSTRUCTION

Total Depth Drilled (ft.): 10 Finished Well Depth (ft.): 10 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	10	8		
Casing	0	3	4	PVC	Sch 40
Screen	3	10	4	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	2	10	4	2	38	3.5
Gravel Pack	2	10	10	4	#1 Morie		

Grouting Method: Pressure method (Tremie Pipe) Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: Yes
Static Water Level: 6 ft. below land surface
Water Level Measure Tool: M-Scope
Well Development Period: 2 hrs.
Method of Development: Pump & Surge
Pump Type:

Pump Capacity: _ gpm
Total Design Head: _ ft.
Drilling Fluid:
Drill Rig: CME-55LC
Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 10: Tan SW - Well-graded sands and gravelly sands, little or no fines

ADDITIONAL INFORMATION:

Driller of Record: Gerald Freck, MASTER LICENSE # 490750 Company: UNI-TECH DRILLING CO INC

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well MW-CG Project/No. NP000603.0010 Page 1 of 1

Site Location PSE&G Salem Diesel Unit 1 - Hancock's Bridge, New Jersey Drilling Started 12/22/2010 Drilling Completed 12/22/2010

Total Depth Drilled 10 feet Hole Diameter 8-inches Type of Sample/ Coring Device Air Knife

Length and Diameter of Coring Device NA Sampling Interval NA

Land-Surface Elev. ____ [X] Surveyed [ ] Estimated Datum Site Datum

Drilling Method Air Knife/Vac Ex Bit Size NA

Drilling Contractor Uni-Tech Drilling Company, Inc. Driller Dan Evans

Geologist Jon Shafer Hammer Weight NA Hammer Drop NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	10		0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to moist

Notes: NA-Not applicable.

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County, New Jersey

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION
Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-CG

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 10.6" Latitude: North 39° 27' 44.8"

North 230,801 East 199,559

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.23 Pvc 98.87

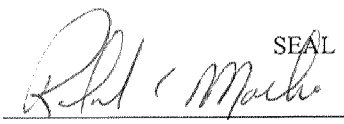
Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0 E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.



PROFESSIONAL LAND SURVEYOR'S SIGNATURE — DATE: 12/27/10

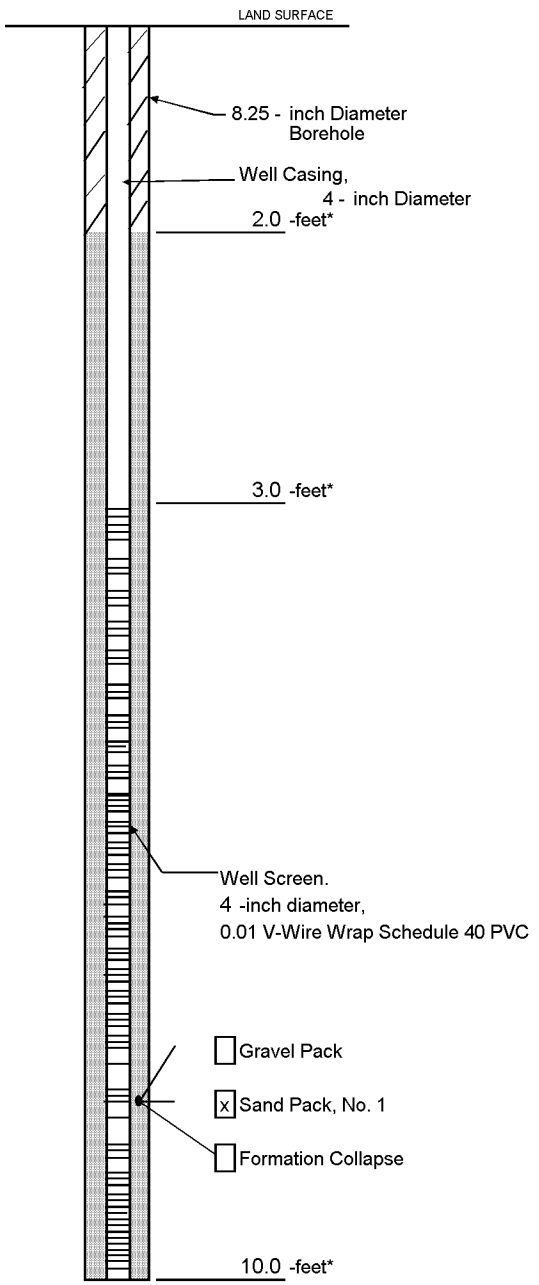
RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

ARCADIS US

Well Construction Log

(Unconsolidated)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project	NP000603.0010	Well	MW-CG
Town/City	Hancock's Bridge		
County	Salem	State	NJ
Permit No.	E201006624		

Land-Surface Elevation and Datum:

[X] Surveyed

[ ] Estimated

Installation Date(s)	12/22/2010
Drilling Method	Air Knife
Drilling Contractor	Uni-Tech Drilling Company, Inc.
Drilling Fluid	NA

Development Technique(s) and Date(s)

Pump and Surge development techniques

Water Removed During Development: NA

Static Depth to Water: 5.25 - feet below M.P.

Well Purpose: Diesel Monitoring Program

Remarks

Geologist: Jon Shafer

State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Southern Field Operations
401 East State Street
P.O. Box 420
Trenton, NJ 08625-0407
Phone #: 609-633-1475
Fax #: 609-984-6004

BOB MARTIN
Commissioner

December 16, 2011

Jeffrey Pantazes
PSE&G Nuclear, LLC
Nuclear Environmental Affairs Manager
PO Box 236
Hancocks Bridge, NJ 08038

Progress Report Approval

Re: Progress Reports – Semi-Annual Diesel Remedial Action Progress Reports - January 2010 through June 2010 & July 2010 through January 2011
Hope Creek Generating Station
Lower Alloways Creek, Salem County
SRP PI# 004157
EA ID #: SUB110001
Case # 04-08-02-2350-16
BFO File Number: 17-04-08

Dear Mr. Pantazes,

The New Jersey Department of Environmental Protection (Department) has completed review of the Progress Reports received on October 18, 2010 and November 10, 2011. The Department has determined that the Progress Reports are in compliance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E and other applicable requirements. The Department hereby approves the Progress Reports, effective the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, call Linda Range at (609) 984-6606.

Sincerely,

Lynne Mitchell, Section Chief
Bureau of Southern Field Operations

C: Bradley Pierce, Arcadis, 500 North Gulph Rd, Suite 401, King of Prussia, PA 19406
Mayor/Clerk, Lower Alloways Creek
Salem County Health Dept
File #17-04-08

APPENDIX B

Unit 2 Historical Reports and Correspondence (CD)

ARCADIS
Infrastructure, environment, buildings

Imagine the result

PSEG Nuclear, LLC

Remedial Investigation Work Plan

Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 10-0416-164911

July 2010

ARCADIS

Jonathan Shafer
Staff Scientist

Bradley D. Pierce
Project Manager

Remedial Investigation Work Plan

Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 10-0416-164911

Prepared for:
PSEG Nuclear, LLC

Prepared by:
ARCADIS U.S., Inc.
500 North Gulph Road
Suite 401
King of Prussia
Pennsylvania 19406
Tel 610.337.7601
Fax 610.337.7609

Our Ref.:
NP000603.0009

Date:
July 12, 2010

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1. Introduction

ARCADIS, on behalf of PSEG Nuclear, LLC (PSEG), has prepared this Remedial Investigation Work Plan (RIWP) for the investigation of a potential diesel-fuel discharge that occurred at the PSEG Nuclear, LLC Salem Generating Station Unit 2 (the Station) located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. **Figure 1** depicts the Station location. **Figure 2** provides the Station Layout and the location of the Unit 2 Diesel Fuel Oil system components. This work plan has been prepared in accordance with Chapter 26E - Technical Requirements for Site Remediation (Technical Requirements).

1.1 Project Background

On April 16, 2010, while completing groundwater investigation activities associated with a separate and independent investigation, PSEG personnel observed suspected diesel-related odors and staining in soil and groundwater during the opening of a temporary utility clearance, identified as TW-2 on **Figure 2**. At this time, PSEG notified the New Jersey Department of Environmental Protection (NJDEP) through its spill hotline (incident No. 10-0416-164911).

The temporary utility clearance consisted of a Schedule 40 PVC sleeve installed to an approximate depth of ten feet below ground surface (bgs) using vacuum excavation equipment. The utility clearance was installed to allow the safe advancement of direct-push borings for the collection of groundwater samples. During the advancement of the vacuum excavation, diesel fuel odors were noted and suspected petroleum hydrocarbon sheen was observed on the water once the water table was encountered. To facilitate the collection of a groundwater sample and to evaluate for the presence of separate-phase hydrocarbon (SPH) at the location of TW-2, and subsequently at the locations of TW-37 and TW-50 (see **Figure 2**), PVC well screen was installed in lieu of the solid PVC sleeve. The three locations were then identified as temporary observation point TW-2, TW-37 and TW-50. Over the next several days, the temporary observation points were evaluated for the presence of SPH and groundwater samples were collected for laboratory analysis. The details and results of these initial groundwater investigation activities are provided in Section 5.

Investigations into the source of the suspected diesel fuel revealed the presence of the following components of the Salem Unit 2 Diesel Fuel Oil System within the vicinity of TW-2:

1. Diesel fuel above ground tanks (AST);

2. Diesel fuel underground piping;

3. An emergency fill valve; and,

4. An overflow tank.

The location of these system components are identified on **Figure 2**. PSEG performed both a pressure test and a guided wave test on the underground piping and the results of the tests did not identify any integrity issues associated with the piping. Details regarding the piping integrity testing are provided in Section 5. In addition, initial soil and groundwater investigation activities were completed in association with the emergency fill valve and the overflow tank, at the three temporary observation points (TW-2, TW-37, and TW-50), and in an area that was excavated to expose the underground piping during the guided wave testing. The details and results of these investigation activities are provided in Section 5. Based on the results of these initial investigation activities, limited additional soil and groundwater investigation activities are required. Details regarding the proposed investigation activities are provided in Section 6.

1.2 Project Personnel

The primary personnel involved in the project are listed in **Table 1**. These personnel include the PSEG Project Manager, the NJDEP Case Manager, ARCADIS team members, and the project analytical laboratory (Accutest Laboratories). The PSEG Project Manager will be responsible for the overall project coordination and oversight and approval of PSEG and contractor work activities.

ARCADIS team members will be responsible for performing technical activities in accordance with the approved RIWP, supervising field subcontractors, and preparing technical reports. The ARCADIS Project Manager will be responsible for committing the necessary resources to this project, day-to-day operations, adherence to schedule, and work quality. The ARCADIS Field Team Leader will be responsible for the field implementation of the RI scope of work, and ensuring that the data collection follows the procedures outlined in the project Quality Assurance Project Plan (QAPP) provided in **Appendix A** of the RIWP for Salem Unit 1 dated January 2005. The January 2005 RIWP proposed the details of investigation activities associated with a similar diesel release at Salem Unit 1.

Accutest Laboratories (Accutest) (certification No. 12129) will be utilized for the project and is a New Jersey-certified laboratory for performing routine environmental and chemical analyses. The laboratory is responsible for providing analytical services, including

laboratory quality assurance and quality control (QA/QC). Additionally, Atlantic Product Services, Inc. (Atlantic) will be utilized for specialty laboratory services including dye and fingerprint analysis in the event that this analysis is warranted.

1.3 Work Plan Organization

This RIWP contains nine sections, including this introduction:

- **Section 2**, provides an overview of the operating history of the Station and the regulation of its operations;
- **Section 3** provides a detailed description of the Station including topography, surface water features, climate, soil, geology and hydrogeology, and a detailed description of previous investigation activities;
- **Section 4** provides details regarding the facility construction and the influence on local geology and hydrogeology;
- **Section 5** provides the details and results of initial investigation activities designed to identify potentials sources of the suspected diesel contamination and to characterize soil and groundwater quality;
- **Section 6** presents proposed investigation activities designed to delineate the extent of soil and groundwater contamination;
- **Section 7** presents information regarding the proposed receptor evaluation;
- **Section 8** presents details regarding the project schedule and required reporting; and,
- **Section 9** provides reports and publications referenced during the preparation of the RIWP.

2. Station History

The following sections provide relevant site information regarding the facility's operating history and a review of applicable regulations relating to operations at the Station.

2.1 Operating History

PSEG Nuclear LLC operates and is part owner of the Salem Generating Station located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. PSEG Nuclear LLC (57.41%) and Excelon (42.59%) jointly own the Salem Generating Station. The Salem Generating Station is situated adjacent to the Hope Creek Generating Station, also located on Artificial Island. Both the Salem and Hope Creek Generating Stations (the Stations) are located on the eastern bank of the Delaware River. The Salem Generating Station encompasses an approximate 26-acre portion of Artificial Island.

The Salem Generating Station is composed of two nuclear generating units (Units 1 and 2) and one distillate oil fueled combustion turbine unit (Unit 3). Commercial operations of Units 1 and 2 commenced in 1976 and 1981, respectively. The combustion turbine unit commenced operations in 1972. The nuclear generating units operate as base load units and the combustion turbine unit operates as a peaking unit. The Salem Generating Station has a combined generating capacity of approximately 2,400 MW. Over its operational life, the Salem Generating Station has experienced no significant changes in its operation.

2.2 Regulatory Review

Regulatory oversight for the Salem Generating Station, and other nuclear generating stations, is provided by both federal and state agencies. These agencies ensure that the stations are designed, constructed, licensed and operate in a matter that maximizes the safe containment and management of radioactive materials. These agencies also ensure that sufficient funding mechanisms have been established, are adequately funded, and will be available to decommission the nuclear generating stations at the end of their life cycle.

On the federal and state levels, the United States Nuclear Regulatory Commission (USNRC) and the New Jersey Department of Environmental Protection Bureau of Nuclear Engineering (NJDEP-BNE) conduct licensing and oversight of the Station. Oversight by the NJDEP-BNE and USNRC includes periodic inspections and conducting environmental radiological monitoring.

3. Station Description

The following sections provide information regarding the setting of the Salem Generating Station, including land use, the environmental setting, precipitation and drainage, local geology and local hydrogeology.

3.1 Land Use

PSEG Nuclear LLC owns and/or controls an approximately 740-acre area of Artificial Island that is situated adjacent to and surrounds the Salem and Hope Creek Generating Stations. This area contains administrative and support facilities used by the Stations, the Hope Creek Switch Yard, the Salem Switch Yard, and undeveloped vacant land. With the exception of the Salem Generating Stations (Units 1 through 3) and the Salem Switchyard, the remaining acreage is considered to be the Hope Creek Generating Station.

The zoning classification for the Salem Generating Station is industrial. The land adjacent to the Salem Generating Station is zoned for industrial and residential or agricultural use.

3.2 Environmental Setting

The Salem Generating Station is located on a portion of Artificial Island that borders the Delaware Estuary. The Estuary, in the location of the Salem Generating Station, is a tidal, brackish river, located in an area designated as Zone 5 by the Delaware River Basin Commission.

The United States Army Corps of Engineers, beginning in the early twentieth century, created Artificial Island by depositing hydraulic dredging spoils within a diked area established around a natural sand bar that projected into the Delaware River. Prior to construction of the Salem Generating Station, the property was vacant, undeveloped, low-lying land.

3.3 Topography and Station Drainage

The topography at the Salem Generating Station is relatively flat with limited local relief. Topographic contours for the Station are included on **Figure 3**. Stormwater is managed in accordance with the Salem Generating Station New Jersey Pollution Discharge Elimination System (NJPDES) permit and Stormwater Pollution Prevention Plan. Stormwater is collected in storm drains and routed to the Delaware River for discharge. Stormwater from the major petroleum storage handling areas is routed to the oil/water separator prior to discharge.

3.4 Climate and Precipitation

Salem County is located in southwestern New Jersey. The county's climate is considered to be humid and temperate, as the climate in this county is readily influenced by its proximity to the Delaware Bay. Coastal storms are not uncommon in this region and can

produce high winds and heavy rainfall, which can cause wind damage and flooding in low-lying areas.

Wind direction in this region is dependent upon the season; during the summer, winds are typically from the southwest while during the winter winds are commonly from the northwest. Temperatures vary by season and the maximum expected high temperature for a given year is 96 degrees Fahrenheit, while the minimum expected yearly low temperature is minus 2 degrees Fahrenheit. The average annual precipitation total is 39.9 inches.

3.5 Regional Geology

The Station is located in the Atlantic Coastal Plain Physiographic Province. This area is characterized by relatively flat to gently undulating terrain, underlain by unconsolidated sediments that increase in thickness to the southeast. These sediments range in age from Holocene to Cretaceous (0 to 146 million years old), are primarily comprised of clay, silt, sand, and gravel, and are generally classified as continental, coastal, or marine in nature. Published geologic mapping indicates that the basement rock beneath these sediments (in the area of the Station) is metamorphic schist of the Wissahickon Formation, which is Pre-Cambrian in age (570 to 900 million years old).

The unconsolidated overburden at the Salem and Hope Creek Generating Stations consists of approximately 25 to 40 feet of dredge spoils, engineered fill material (cofferdam), tidal marsh deposits and riverbed deposits. The engineered fill, composed mainly of silt, silty clay, sand, and gravel, replaced the dredge spoils within the cofferdam during the construction of the Station. Due to the composition and nature of the engineered fill, the hydraulic conductivity of this material is expected to be very low, thus limiting the extent and rate of groundwater movement. Below the engineered fill there is an approximate five-foot layer of tidal marsh deposits consisting of silty peat and organic silt and meadow mat. The tidal marsh deposits are semi-confining. Beneath the tidal marsh deposits are approximately ten feet of discontinuous Quaternary Age riverbed deposits consisting of sand and gravel. The engineered fill, the tidal marsh deposits and the riverbed deposits, combine to form the water table aquifer (see Section 3.6). Beneath the surface water aquifer, in order of increasing depth, are the following geologic formations:

Clay, Confining Unit – Beneath the shallow, riverbed and other deposits is a clay, confining unit that separates the shallow unit from the deeper Vincentown Formation. Conflicting geologic reports suggest that the clay, confining unit is either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits (USGS 1979 and 1999). Previous investigations conducted at the facility indicate that the clay, confining unit is laterally extensive beneath the Station.

Vincentown Formation – The Vincentown Formation occurs from a depth of approximately 55 feet bgs to a depth of 135 feet bgs and consists of a competent, greenish-gray, fine to medium sand with some silt, shell fragments, feldspar and glauconite.

Hornerstown Formation – The Hornerstown Formation is a highly glauconitic, clayey, dark green sand that contains small percentages of quartz grains and apatite pellets. The Hornerstown Formation unconformably overlies the Navesink Formation and is unconformably overlain by the Vincentown Formation. The Hornerstown Formation occurs from approximately 135 to 145 feet bgs.

Navesink Formation – The Navesink Formation is characteristically a glauconitic sand with varying amounts of silt and clay. It is brown or dark green to blue-black and has a shell bed at its base. The upper part of the formation is less glauconitic, more clayey, more micaceous, and lighter in color. The Navesink Formation conformably overlies the Mount Laurel Sand (USGS 1969). The contact with the overlying Hornerstown Formation is gradational. The Navesink Formation is encountered from approximately 145 to 170 feet bgs.

Mount Laurel-Wenonah Formation – The Mount Laurel-Wenonah Formation consists of a clayey, medium-grained sand with some gravel, feldspar and glauconite. In the vicinity of the Station, the Mount Laurel-Wenonah Formation is approximately 100 feet thick and occurs from 170 to 270 feet bgs.

Beneath the Mount Laurel-Wenonah Formation, more than 1,000 feet of Upper Cretaceous sediments overlie the crystalline bedrock. The Upper Cretaceous sediments include in descending order: the Marshalltown Formation (gray, fine sand); the Englishtown Formation (yellow-brown, fine sand); the Woodbury Clay (dark gray, stiff, silty clay); the Merchantville Formation (dark green clay); the Magothy Formation (coarse to fine silt with little fine sand); and the Raritan and Potomac Formations (interbedded sand, gravelly sand and clay).

3.6 Regional Hydrogeology

There are four primary water bearing formations (aquifers) underlying the Station: 1) the shallow, water table aquifer; 2) the Vincentown Formation; 3) the Mount Laurel-Wenonah Formations; and, 4) the Potomac-Raritan-Magothy Formations. The shallow, water-bearing unit, which consists of the dredge spoils, engineered fill, tidal marsh deposits and the discontinuous Quaternary riverbed deposits, occurs between approximately 10 to 40 feet bgs. In general, the dredge spoils, engineered fill and tidal marsh deposits are characterized by low permeability. Occasional lenses of sand within the dredge spoils may

contain perched water within a few feet of the ground surface. The groundwater in the water table aquifer is generally brackish, with flow to the southeast and a gradient of approximately 0.007 feet/feet.

A clay confining unit, identified as either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits, separates the shallow water-bearing unit from the deeper Vincentown Formation. As stated previously, investigations conducted at the facility indicate that the clay confining unit is laterally extensive beneath the Station.

The Vincentown Formation, which occurs from approximately 55 to 135 feet bgs, is a semi-confined to confined aquifer under artesian conditions. Groundwater in the Vincentown Formation generally flows from north to south with a gradient of approximately 0.003 feet/feet. Regionally, the Vincentown Formation is a water-producing aquifer, which supplies potable water to domestic wells in Salem County. Groundwater in the aquifer is moderately hard with high iron content. Saltwater-intrusions occur near the Delaware River, where water quality is brackish and non-potable.

The Hornerstown and Navesink confining units separate the Vincentown Formation from the Mount Laurel-Wenonah Formations. The Mount Laurel-Wenonah Formations occur from approximately 135 to 170 feet bgs. The Station has two potable and fire-water supply wells screened in this formation.

The deepest of the water bearing formations is the Potomac-Raritan-Magothy Formation. In Salem County, the Potomac-Raritan-Magothy Formation occurs at depths in excess of 500 feet bgs. This is the primary water producing aquifer for New Jersey. Four potable and fire-water supply wells at the Station are screened in the Potomac-Raritan-Magothy Formation at depths ranging from 800 to 1,100 feet bgs. The Potomac-Raritan-Magothy Formation is bounded by the Merchantville Formation above and below by the Wissahickon Schist basement rock. The crystalline basement rock of the Wissahickon Schist is not considered a productive aquifer and only locally transmits water from secondary porosity (i.e., fractures and faults).

4. Facility Construction and Local Geology and Hydrogeology

The construction of the Salem Generating Station has caused significant changes to the local geology and hydrogeology. Within the footprint of the cofferdam surrounding Units 1 and 2 (see **Figure 2**) the majority of original Artificial Island materials were removed to a depth of 70 feet bgs. The following sections, which contain information presented in a Remedial Investigation Report (RIR) previously prepared for a separate investigation conducted at the Station (ARCADIS 2004), describe the conditions at Artificial Island prior

to the construction of the Station and detail how the construction of the Station has altered the local geology.

4.1 Pre-Facility Construction

The Station is located on the southern tip of what was once a natural sand bar projecting into the Delaware River. The area between the sand bar and the mainland had been used as a dredge spoil deposit area. In 1899, a timber sheetpile wall was installed around the perimeter of the sand bar. Over the next 50 or so years the area was used as a spoil deposit area for material collected during the dredging of the Delaware River. Riprap was added to the perimeter when the timbers began to degrade. The area landward of Artificial Island has remained a tidal marsh.

4.2 Facility Construction

The construction of the Station has resulted in significant changes to the local geology. It was necessary to remove and rework much of the soil in the area of the Station in order to facilitate construction. For the purposes of this report, the description of the facility construction is limited to the area within the cofferdam; however, it should be noted that the local geology beyond the limits of the cofferdam was also significantly modified. The extent of the cofferdam is shown on **Figure 2**.

The cellular cofferdam, which encircled the excavation for all the Class I structures (e.g., containment, fuel handling, and auxiliary buildings), was constructed of interlocking sheet piling driven from an approximate depth of 23 feet below existing grade (approximately 77 feet plant datum [PD] or -12.92 feet above mean sea level [amsl NAVD 1988]). The cofferdam consists of 24 circular cells, approximately 60.5 feet in diameter with connecting arcs, that were advanced from this depth to approximately 10 feet into the Vincentown Formation to an elevation of 17 feet PD (-72.92 feet amsl). The cofferdam sections are of two different heights, 50 feet and 60 feet. The elevation of the top of the cofferdam is 77 feet PD (-12.92 feet amsl) on the north, south and west sides. The elevation of the eastern side is 67 feet PD (-22.92 feet amsl) providing access and a foundation for the return circulating water pipes and associated thrust block.

The inside area of the cofferdam sections were excavated to elevation 27 feet PD (-62.92 feet amsl). A vertical steel wall was added inside each individual cofferdam section to divide the sections approximately in half. The inner half of the individual cofferdam sections, or the section facing the building foundations, was then filled to the top with lean concrete. The area contained by the entire cofferdam structure was then excavated to the Vincentown Formation for placement of a lean concrete mat that served as the foundation for the

construction of the structures within the cofferdam. During this stage of the excavation, qualified personnel visually inspected the bottom of the excavation to verify that the excavation had reached the top of the Vincentown Formation prior to placing any lean concrete.

Prior to the completion of the excavation, at approximately elevation 45 feet PD (-44.92 feet amsl), 15 exploratory borings were drilled through the remaining Kirkwood Formation and into the underlying Vincentown to verify the depth to the formation. These additional borings showed no measurable differences from the study borings. Based on a review of available documents, the top of the Vincentown Formation in the area of the cofferdam ranges between 27 and 30 feet PD (-62.92 to –65.92 feet amsl).

When the surface of the Vincentown Formation was reached, the area was cleared of loose soil and lean concrete was poured directly onto the exposed Vincentown Formation. Because the latter stages of the excavation were performed in freezing temperatures, a layer of material was left in place to insulate the Vincentown Formation until the concrete was ready to pour. In cases where the top of the Vincentown Formation did freeze prior to pouring of the concrete, the frozen soils were excavated or thawed prior to starting the pour. The station construction drawings indicate that the base of the first lean concrete pour was at 30 feet PD (-59.92).

The cofferdam serves as a basin in which the Class I structures were constructed. Prior to construction of the primary structures, a lean concrete mat ranging in thickness from 5 to 50 feet was placed on top of the Vincentown Formation for support of the structures. Following placement of the lean concrete, the Auxiliary Building, Fuel Handling Buildings and Reactor Containment Buildings were constructed. The remainder of the excavation within the cofferdam was then backfilled with structural fill meeting the design specifications of the Station.

4.3 Local Geology and Hydrogeology

The soils removed from within the cofferdam were not used to backfill the completed structure because the hydraulically placed fill and other riverbed deposits underlying Artificial Island did not meet the building design specifications for the Station. Therefore, it was necessary to import construction or structural fill to build the facility. The structural fill was placed between and around the Auxiliary Building, Fuel Handling Buildings, Units 1 and 2, portions of the cofferdam, above the return circulating water pipes, and from the top of the clay, confining-unit to the land surface in the portions of the area between the cofferdam and the circulating water discharge pipes.

SII-SSA-0014-004151

The structural fill used at the station was obtained from a number of sources in New Jersey and Delaware. One fill source used in the area of this investigation was the Hinchner Pit. While the location of the borrow source was not identified, the material was described as yellowish-brown fine to medium sand with a trace of silt and clay.

Details of groundwater investigation activities historically completed at the facility indicate that groundwater elevations in the shallow, water-bearing unit within the limits of the cofferdam are generally higher than those outside the limits of the cofferdam. This is expected considering permeability differences that exist between the structural fill within the limits of the cofferdam and the hydraulic fill beyond the limits of the cofferdam, which result in a groundwater mound. Due to the mound, groundwater flows radially outward from the cofferdam. The observed mounding effect dissipates quickly. A groundwater elevation contour map for the shallow, water-bearing unit is presented on **Figure 3**. Beyond the limits of the cofferdam, groundwater flow is generally from the center of the island (northeast of the Salem Generating Station) towards the Delaware River.

5. Initial Investigation Activities

The following sections provide details regarding initial investigation activities completed at the Facility. These investigation activities included the following:

- Unit 2 Diesel Fuel System component inventory;
- SPH evaluation;
- Underground piping evaluation;
- Soil Sampling; and
- Groundwater Sampling.

Prior to initiating investigation activities, PSEG inventoried the Salem Unit 2 Diesel Fuel System components in the vicinity of utility clearance location TW-2 to identify potential sources of the suspected release. Temporary Observation Points TW-2, TW-37, and TW-50 were gauged using an oil/water interface probe to determine if SPH had accumulated. Subsequently, each of the diesel system components identified during the inventory were evaluated as potential sources of the suspected diesel observed at TW-2 through pressure and guided wave testing (underground piping) and soil sampling (emergency fill valve and overflow tank). To confirm the observed sheen was diesel fuel, a dye and fingerprint analysis was conducted. Additionally, groundwater samples were collected from Temporary

Observation Points TW-2, TW-37, and TW-50 to evaluate for the presence of dissolved phase constituents. The following sections include details and results of these investigation activities.

5.1 Separate-Phase Product Evaluation

Groundwater in the vicinity of utility clearance TW-2 was observed to be approximately 3-feet below ground surface (bgs). To identify if SPH existed on top of the water table, a 4-inch slotted PVC casing was installed into the temporary utility clearance TW-2 which extended to approximately 10 feet bgs. Two additional locations (TW-37 and TW-50) adjacent to TW-2 were also fitted with slotted PVC casing. The locations were then identified as temporary observation points TW-2, TW-37 and TW-50. **Figure 4** shows the location of the temporary observation points. All three points were periodically monitored for the presence of SPH with an oil-water interface probe. To identify if SPH was present between monitoring periods (and to capture any mobile SPH), a hydrophobic absorbent sock was placed in temporary observation point TW-2. During monitoring events, the absorbent sock was inspected for the accumulation of SPH.

On May 27, 2010, while excavating soil west of the Fuel Handling Building in preparation for the pressure and guided wave test (see Section 5.4), a SPH sheen was observed on the groundwater within the excavation. A sample of the groundwater that had accumulated within the excavation with an apparent sheen was collected for diesel fuel dye testing and fingerprint analysis. **Figure 2** shows the location of excavation No. 2 and the location of the soil sample FHB.

During the course of initial investigation activities, measurable SPH was not observed within the temporary observation points, nor did the absorbent sock accumulate any observable SPH. Additionally, monitoring of excavation No. 2 confirmed no additional SPH accumulated in the excavation. Analytical results from the dye analysis indicated that no dye was detected in the sheen sample. Results from fingerprint analysis confirmed the material most closely resembles weathered diesel fuel. **Appendix A** contains the laboratory analytical deliverable.

5.2 Salem Unit 2 Diesel Fuel System Inventory

A review of Salem Unit 2 Diesel System components identified four potential sources of the suspected diesel release in the vicinity of temporary utility location TW-2. **Figure 2** identifies these components which include: diesel fuel ASTs, an emergency fill valve, an above ground overflow tank and underground diesel supply piping.

The Salem Unit 2 Emergency Diesel Generator Fuel System is supplied by two 30,000 gallon ASTs located within the Auxiliary Building. The associated emergency fill valve and overflow tank are both above ground features located along the exterior wall of the Auxiliary Building. The emergency fill valve is used to fill the diesel fuel 30,000 gallon ASTs in the event the standard fill supply through the underground piping is not available. The overflow tank is an approximately 55 gallon drum and is utilized as containment for diesel fuel if the Salem Unit 2 Diesel Fuel ASTs are overfilled. The underground diesel fuel oil supply pipe in the area inspected is an approximately 4-inch carbon steel pipe which supplies fuel from the Salem Unit 20,000 barrel Fuel Oil storage tank.

Each of the Salem Unit 2 Diesel Fuel System components was investigated to identify if it was potentially the source of the release. Visual observation of the Salem Unit 2 30,000 gallon Diesel Fuel ASTs confirmed the tanks were not leaking and the secondary containment contained no apparent staining, eliminating the ASTs as potential sources. The remaining part of this section describes the investigative techniques used to characterize the remaining parts of the Salem Unit 2 Diesel Fuel System and the extent of the impacts.

5.3 Pressure Testing and Guided Wave Testing

The underground piping identified in **Figure 2** supplies diesel fuel from the Salem 20,000 barrel Fuel Oil storage tank to various loads including the Salem Units 1 and 2 Diesel Fuel 30,000 gallon ASTs, located within the Auxiliary Building, the service water furnaces and the circulating water boiler. PSEG performed a pressure test and guided wave test, to investigate the integrity of the underground piping in the vicinity of the Auxiliary Building and Unit 2 Fuel Handling Building.

Pressure testing is conducted by isolating a section of pipe and pressurizing the section. If the pipe fails to hold a positive pressure, then the pipe is known to contain a leak. This test is utilized to confirm if larger integrity concerns (i.e. a break in the pipe) are present. Guided wave testing uses low frequency ultrasound waves to identify metal loss from the pipe walls. Guided wave testing is utilized to identify smaller integrity concerns (i.e. pin holes or fractures).

In late May and early June 2010, PSEG conducted pressure testing and guided wave testing of the underground diesel system supply pipe, respectively. Results of both tests confirmed the integrity of the pipe. As such, no additional investigation of the underground diesel fuel supply pipe is proposed.

5.4 Soil Sampling

On May 4, 2010, ARCADIS advanced five soil borings to investigate soil adjacent to the emergency fill valve (EFV-W and EFV-N) and overflow tank (OFT-W, OFT-N and OFT-E). **Figure 4** shows the location of the soil boring. ARCADIS collected discrete interval soil samples from 0.0 to 0.5 feet bgs and 2.0 to 2.5 feet bgs to characterize soil in the vicinity of these potential source features. To accommodate site specific health and safety practices, a vacuum excavator was used to advance the borings prior to collecting the sample. Samples were collected using a decontaminated hand trowel and transferred directly to laboratory supplied glassware. In addition, ARCADIS collected a soil sample for TPHC analysis and 2-methylnaphthalene and naphthalene contingent analysis from immediately above the water table in excavation No. 2.

In accordance with analytical requirements for diesel fuel contained within Table 2-1 of the Technical Requirements for Site Remediation (TRSR) and the *Protocol for Addressing Extractable Hydrocarbons* (NJDEP 2010), soil samples were analyzed for TPHC via method NJDEP OQA-QAM-025. In addition, ARCADIS collected soil samples from each of the discrete intervals for contingency semi-volatile organic compound (SVOC) analysis (naphthalene and 2-methylnaphthalene if TPHC analytical results exceed 1,000 mg/kg).

Sample collection, packaging, and shipment were conducted in accordance with the NJDEP Field Sampling and Procedures Manual dated August 2005. Samples were cooled to approximately 4°C, and submitted under chain-of-custody protocols to Accutest Laboratories, Inc., a New Jersey certified laboratory for analysis on an expedited (72-hour) turn-around-time.

Analytical data presented in **Table 2** indicate one (OFT-E[0-0.5]) out of 10 samples exceeded the NJDEP soil remediation standard (SRS) for TPHC of 5,100 milligrams per kilogram (mg/kg), with a concentration of 5,510 mg/kg. Five results exceeded the contingency threshold screening criterion of 1,000 mg/kg. As such, contingency sample analyses was conducted on the highest two TPHC concentration samples (OFT-E[0-0.5] and OFT-N[0-0.5]). **Table 2** presents the analytical results for 2-methylnaphthalene and naphthalene, which did not indicate concentrations above the method detection limits. **Appendix A** contains the full analytical data deliverable in New Jersey Reduced format.

Figure 4 illustrates the sample locations and analytical data collected during the initial soil investigation. TPHC concentrations exceeded NJDEP SRS in sample OFT-E at a depth of 0.0 - 0.5 feet bgs. This exceedence was delineated vertically by a sample collected from the same boring at 2.0 – 2.5 feet bgs. This exceedence was delineated horizontally by the building wall to the south, and north and west by samples OFT-N and OFT-W, respectively.

These samples were collected at the same depth as the exceedence. Interpretation of the analytical results (decreasing concentrations with depth) confirms shallow impacts associated with a surface release. As such, PSEG proposes additional sample collection to horizontally delineate TPHC impacts in soil to the east and northeast.

5.5 Groundwater Sampling

On May 5, 2010, ARCADIS collected grab groundwater samples from temporary observation points TW-2, TW-37 and TW-50 to characterize the shallow water quality. Groundwater samples to be analyzed for TPHC were collected using laboratory-decontaminated disposable Teflon® bailers. ARCADIS transferred the samples directly from the bailers to decontaminated sample bottles supplied by Accutest.

Table 3 presents the analytical results for TPHC in groundwater samples collected from temporary observation points screened across the shallow water table. TPHC was detected in samples at concentrations ranging from 1.84 mg/L (TW-50) to 372 mg/L (TW-2). Currently there is not a Groundwater Quality Criteria (GWQC) concentration available for TPHC. However, these concentrations signify limited impacts. To further evaluate the groundwater quality within the source area, PSEG proposes installing two monitoring wells and collecting groundwater samples for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). **Figure 7** illustrates the locations of the proposed monitoring wells. One monitoring well is proposed adjacent to soil boring OFT-E and the other in the vicinity of excavation No. 2.

6. Remedial Investigation Work Plan

The following are the objectives of the remedial investigation activities proposed in this RIWP:

- Characterize the horizontal extent of diesel-related constituents in soil;
- Evaluate for the presence of SPH(as defined in *Guidance for LNAPL Free Product Initial Recovery and Interim Remedial Measures* [NJDEP 2010]) and delineate its extent, if necessary;
- Characterize dissolved-phase diesel-related constituents in shallow groundwater within the release area; and

- Determine the need for further action.

The following activities were designed to achieve these primary objectives.

6.1 Soil Investigation

In accordance with New Jersey Administrative Code (N.J.A.C.) TRSR section 7.26E-4.1(a), PSEG proposes to advance two soil borings (Borings OFT-E+5 and OFT-NE) to investigate the horizontal extent of diesel-related constituents in soil. **Figure 6** identifies location of the proposed borings.

6.1.1 Collection of Soil Samples

Soil samples will be collected to horizontally delineate TPHC impacts identified in soil sample OFT-E (0.0 – 0.5) to the east and northeast. Soil boring OFT-E+5 and OFT-NE will be located 5 feet to the east and northeast of boring OFT-E, respectively. Sample locations (OFT-E+5 and OFT-NE) will be identified by measuring from known stationary objects.

Following the removal of asphalt cover, a surface soil sample will be collected using a hand auger or equivalent device from 0.0 – 0.5 feet bgs. Soil retrieved from each boring will be visually examined by an ARCADIS geologist and field screened using a photoionization detector (PID). Soil will be described according to the Unified Soil Classification System (USCS). Soil descriptions will also include notes of other visual or olfactory observations related to diesel impacts. Relevant information collected during the advancement of soil borings will be recorded in the field book, including lithology, PID readings, and other visual observations. **Table 4** summarizes locations, depths, analysis and method for soil samples collected during RI activities.

6.1.2 Soil Sample Analysis

In accordance with NJDEP's November 12, 2009 *Protocol for Addressing Extractable Petroleum Hydrocarbon*, samples will be analyzed for TPHC via either NJDEP OQA-QAM-025 on an accelerated (1-week) turnaround time. In the event that analysis results exceed 1,000 mg/kg, 25 percent of these samples will be analyzed for naphthalene and 2-methylnaphthalene. ARCADIS will collect one blind duplicate sample and in accordance with the NJDEP Field Sampling Procedures Manual (FSPM), ARCADIS will collect one field blank and one trip blank; however, the Trip Blank will only be analyzed if the contingent naphthalene and 2-methylnaphthalene sample is released for analysis.

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6.2 Groundwater Investigation

PSEG proposes to install two monitoring wells (Well CC and Well CD) to evaluate for the presence of SPH, and characterize dissolved-phase constituents in groundwater. **Figure 7**shows the location of the proposed wells.

Monitoring well CC will be installed adjacent to where a sheen was observed in excavation No. 2. Monitoring well CD will be installed at a location where previous activities have identified TPHC concentrations exceeding NJDEP SRS of 5,100 mg/kg.

The collection of free-phase product measurements and the analysis of groundwater samples from the monitoring wells will provide data regarding the presence of SPH and dissolved-phase diesel fuel constituents in groundwater. Water-level measurements collected from monitoring wells will be evaluated to confirm the direction of groundwater flow within the area of investigation.

If field observations identify measurable thicknesses of SPH in the monitoring wells, interim product recovery efforts will be initiated and NJDEP case manager will be notified.

6.2.1 Monitoring Well Installation

Prior to commencing monitoring well installation activities, a utility locator service will identify underground utilities in the vicinity of proposed monitoring wells using ground penetrating radar (GPR) instruments. Additionally, to accommodate site specific health and safety best practices, PSEG proposes to advance the boring using vacuum excavation techniques to 10 feet bgs. The Borehole will be opened to a minimum 8 inch diameter to accommodate NJDEP regulated monitoring well annulus. Descriptions of the overburden materials, including physical characteristics, PID readings, visual evidence of staining, and odors, will be made by the ARCADIS geologist and logged in the field book.

Monitoring wells will be screened across the first water-bearing unit encountered at a depth of approximately 3 feet bgs. The monitoring wells will be constructed of 4-inch-diameter flush-joint threaded PVC risers with an 8.5-foot-length of 0.02-inch PVC well screen. A washed silica sand pack will be placed between the well string and the formation to the top of the well screen followed by a 6-inch layer of fine sand (#00) as a seal. A neat cement grout will be installed in the remaining annular space to lock the well in place. Each monitoring well will be completed as a flush-mounted well with a protective steel casing and locking well cap. **Table 5** summarizes the depth, diameter, and construction details of the wells to be installed during the RI activities.

A New Jersey licensed driller will provide oversight of installation activities to ensure monitoring wells are installed in accordance with NJAC 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001.

Upon completion, each monitoring well will be properly developed to remove fine-grained materials that may have settled in and around the monitoring well during installation, and to ensure that the monitoring well is hydraulically connected to the formation. The monitoring wells will be developed via the block and surge and overpumping method. Well development will continue until the discharge is free of turbidity.

All monitoring wells will be surveyed by a New Jersey licensed surveyor and Form B provided. Top of casing elevation will be established to within 0.01-foot relative to the 1988 North American Vertical Datum (NAVD 88). The location of each monitoring well will be established to within 0.1-foot relative to the 1983 North American Horizontal Datum (NAD 83).

6.2.2 Groundwater Sampling

Following installation, monitoring wells will be sampled to characterize water quality within the source area. The following sections provide details regarding these activities.

6.2.2.1 Water-Level and Separate-Phase Product Measurements

Prior to the collection of groundwater samples from the wells, depth-to-water and separate-phase product thickness measurements will be collected using an electronic oil/water interface probe. The measurement data will be used along with the surveyed top of casing elevation data to calculate groundwater elevations for the wells. The groundwater elevation data will be analyzed to assess groundwater flow conditions at the Station. The separate-phase product measurements will be used to delineate the extent of product on the water table. Water-level and product measurement collection procedures are addressed in the QAPP included in the RIWP for Salem Unit 1 (ARCADIS 2005).

6.2.2.2 Collection of Groundwater Samples

Following the installation and development of the wells, two-rounds of groundwater samples will be collected. The first round of groundwater sampling will be completed a minimum of two weeks following the well installation activities. Groundwater samples will only be collected from the wells that do not indicate a measurable thickness (i.e., greater than 0.01 feet) of separate-phase product. The second round of groundwater sampling will be completed one month following the initial round.

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Due to the sensitive nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples will be collected utilizing the low-flow sampling methodology. Sample collection procedures, as well as quality control/quality assurance (QA/QC) sampling requirements, are outlined in the QAPP included in the RIWP for Salem Unit 1 (ARCADIS 2005).

6.2.2.3 Groundwater Sample Analysis

In accordance with analytical requirements for diesel fuel contained within Table 2-1 of the TRSR groundwater samples will be analyzed for volatile organic compounds plus library search (VOC+10) and semi-volatile organic compounds plus library search (SVOC+15).

6.3 Data Reduction and Analysis

Following completion of the RI field activities, field and analytical data will be reduced and evaluated to: 1) identify data gaps; 2) present a clear and concise summary of the investigation results; 3) provide recommendations for further investigation and remediation, if necessary. The reduction and evaluation of the field and analytical data will involve the activities described in the following sections.

6.3.1 Geographic Information System

ARCADIS will use the EQuIS data management system to manage environmental data collected during the RI. EQuIS is a comprehensive geo-environmental data management database, designed to store analytical test data and related data obtained during environmental site investigations, routine site monitoring, and hazardous waste remediation projects. EQuIS can be used for report and chart generation and is integrated with multiple statistical, numerical modeling and data visualization tools.

Analytical data generated will be in the form of electronic data deliverables (EDD) from the analytical laboratory. Quality assurance/quality control (QA/QC) data will be entered as necessary to comply with regulatory requirements. The electronic database will not be subjected to a formal data validation process; however, the data will be reviewed for completeness and if data gaps are identified, they will be reported for discussion of how to address them.

6.3.2 Compile and Review Groundwater Analytical Data

As discussed in Section 6.3.1, the EQuIS data management system will be used to compile and manage groundwater analytical data collected at the Station. These data will be summarized and presented in table format and posted on figures as appropriate.

Historical groundwater analytical results for the monitoring wells will be evaluated to determine groundwater analytical trends for the wells.

6.4 Iterative Investigation Objective Process

As stated previously, following completion of the RI, data will be evaluated to: 1) identify data gaps; 2) present a clear and concise summary of the investigation results; 3) provide recommendations for further investigation and remediation, if necessary. Addenda to this RIWP will be prepared, accordingly, to address further investigation.

7. Receptor Evaluation

PSEG proposes to perform a receptor evaluation in accordance with the requirements specified in N.J.A.C. TRSR 7:26E1.15 through 1.19 and submit the results with the RIR.

8. Schedule and Reporting

PSEG would like to expedite the review process to ensure all regulatory deadlines are met. Therefore, PSEG proposes to arrange a meeting with NJDEP case manager to review the proposed work plan prior to initiating field activities.

Following completion of the RI, data will be evaluated to determine if additional investigation activities are necessary to characterize soil and groundwater conditions at the Station. A RIR will be prepared to present a comprehensive overview of investigation activities performed to date, and recommendations regarding future activities. A tentative schedule has been prepared that highlights some of the key project deliverables and the timeframes for their submittal as set forth in the Site Remediation Reform Act, N.J.S.A. 58:10C-1 et seq. The schedule is provided as **Figure 8**.

9. References

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United States Environmental Protection Agency (USEPA), 2000. *Guidance for the Data Quality Objective Process USEPA QA-G4.* USEPA/600/R-96/055, Quality Assurance Management Staff, Washington, D.C.

Table 1. Project Personnel, Remedial Investigation Work Plan, PSEG Nuclear, LLC, Salem Generating Station Hancock's Bridge, New Jersey.

Name and Address	Role	Phone Number
PSEG Project Personnel		
Helen Gregory PSEG Nuclear, LLC Alloway Creek Neck Rd. Hancock's Bridge, NJ 08038	Project Manager	856.339.1431
ARCADIS Project Personnel		
Bradley D. Pierce ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Project Manager	610.337.7601
Jonathan Shafer ARCADIS 6 Terry Drive, Suite 300 Newtown, PA 18940	Field Team Leader/Site Safety Officer	610.337.7601
Glenn C. Palmer ARCADIS 500 North Gulph Road, Suite 401 King of Prussia, PA 19406	Field Team Leader	267.685.1800
Project Laboratory Personnel		
Diane Komar Accutest Laboratories 2235 Route 130 Dayton, NJ 08810	Analytical Laboratory	732-329-0200

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Table 2. Initial Soil Analytical Results, Remedial Investigation Work Plan, June 2010, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

BORING ID	Residental Direct	Non-Residental Direct	Default Impact to	Total Petroleum	OFT-E(0-0.5)	OFT-E(2.0-2.5)	OFT-N(0-0.5)	OFT-N(2.0-2.5)	OFT-W(0-0.5)	DUP(2.0-2.5)OW	OFT-W(2.0-2.5)
LABORATORY ID	Contact Soil	Contact Soil	Groundwater Soil	Hydrocarbon Soil	JA45964-1R	JA45964-2	JA45964-3	JA45964-4	JA45964-5	JA45964-11	JA45964-6
SAMPLING DATE	Remediation	Remediation	Screening Levels	Remediation	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010
	µg/kg	µg/kg	µg/kg	mg/kg							
Total Petroleum Hydrocarbons	NA	NA	NA	5,100	**5,510**	338	5,000	366	2,510	19	17
2-Methylnapthalene	200	2,400	5,000	NA	75 U	NR	75 U	NR	NR	NR	NR
Napthalene	6	17	16,000	NA	38 U	NR	38 U	NR	NR	NR	NR

BORING ID	Residental Direct	Non-Residental Direct	Default Impact to	Total Petroleum	EFV-N(0-0.5)	EFV-N(2.0-2.5)	EFV-W(0-0.5)	EFV-W(2.0-2.5)	FHD(2.4-2.9)	FIELD BLANK
LABORATORY ID	Contact Soil	Contact Soil	Groundwater Soil	Hydrocarbon Soil	JA45964-7	JA45964-8	JA45964-9	JA45964-10	JA47682-1	JA45964-12
SAMPLING DATE	Remediation	Remediation	Screening Levels	Remediation	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/27/2010	5/4/2010
	µg/kg	µg/kg	µg/kg	mg/kg						
Total Petroleum Hydrocarbons	NA	NA	NA	5,100	785	1,720	22	2,520	4,380	0.02 U
2-Methylnapthalene	200	2,400	5	NA	NR	NR	NR	NR	NR	1.0 U
Napthalene	6	17	16	NA	NR	NR	NR	NR	NR	1.0 U

Notes:
1) "U" - Indicates compound not detected above stated concentration.
2) µg/kg - micrograms per kilogram
3) mg/kg - milligrams per kilogram
4) Bolded concentration exceeds soil remediation standards
5) NR - Not analyzed for this compound

Table 3. Initial Groundwater Analytical Results, Remedial Investigation Work Plan, June 2010, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

WELL ID		Groundwater Quality Standard	TW-2	TW-37	TW-50	Field Blank
LABORATORY ID			JA46106-3	JA46106-4	JA46106-5	JA46106-2
SAMPLING DATE			5/5/2010	5/5/2010	5/5/2010	5/5/2010
TPH						
Total Petroleum Hydrocarbons	mg/L	NA	372	3.42	1.84	0.020 U

Notes:
1) "U" - Indicates compound not detected above concentration.
2) mg/L - milligrams per liter
3) NA - Criteria or standard not available

Table 4. Proposed Soil Boring Details, Remedial Investigation Work Plan, June 2010, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Proposed Soil Boring Location	Proposed Sample Depth (ft bgs)	Purpose of Sample	Analytical Parameters	Sample Method
OFT-E+5	0.0-0.5	Horizontally Delineate PHC concentration observed in sample OFT-E(0.0-0.5) to the east	PHC, 2-methlynaphthalene and naphthalene[1]	Hand Trowel
OFT-NE	0.0-0.5	Horizontally Delineate PHC concentration observed in sample OFT-E(0.0-0.5) to the northeast	PHC, 2-methlynaphthalene and naphthalene[1]	Hand Trowel

Notes:
ft bgs Feet below ground surface

[1] 2-methlynaphthalene and naphthalene analyzed on a 25% contingent analysis frequencey.

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Table 5. Monitoring Well Construction, Remedial Investigation Work Plan, June 2010, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Proposed Monitoring Well	Location of Monitoring Well[3]	Purpose of Monitoring Well	Construction Material[2]	Diameter (inches)	Total Depth (ft bls)[1]	Screen length (feet)[1]
Well CC	Excavation No. 2	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40) 0.020" slot	4	10	8.5
Well CD	Soil Boring OFT-E(0-0.5)	Monitor groundwater quality and separate-phase product recovery, as necessary	PVC (Sch. 40) 0.020" slot	4	10	8.5

Notes:
ft bls Feet below land surface
PVC Polyvinyl choride

[1] Proposed total depths and screen lengths for the monitoring wells are approximate. Actual depths and screened intervals will be determined in the field based on field observations.

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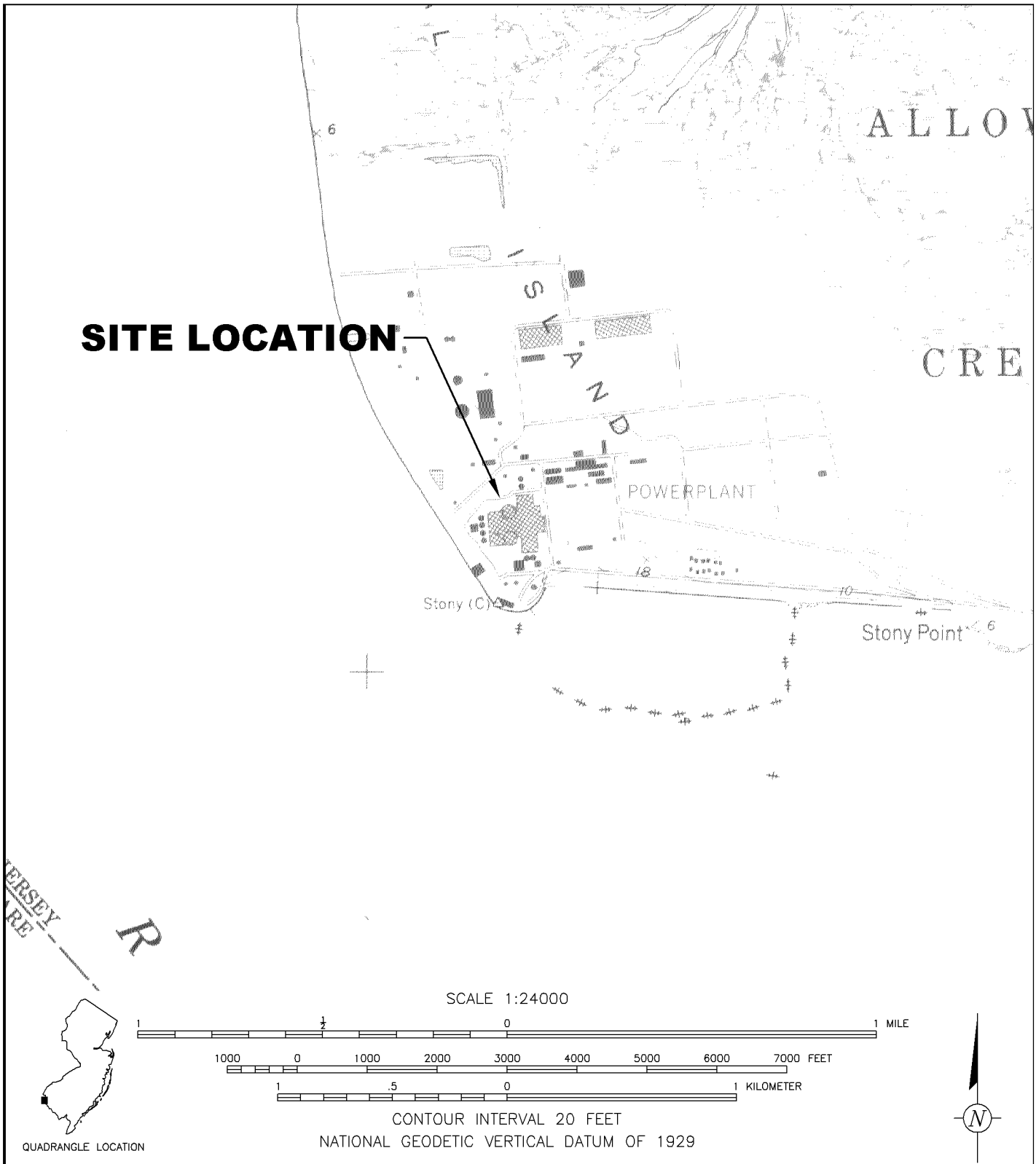

QUADRANGLE LOCATION

SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN

SITE LOCATION

ARCADIS

FIGURE
1

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\NewtownACT\NP000603\000900002\Fig-1 SITE LOCATION.dwg LAYOUT: 1 SAVED: 6/4/2010 2:20 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/4/2010 2:20 PM BY: WASILEWSKI, MATT

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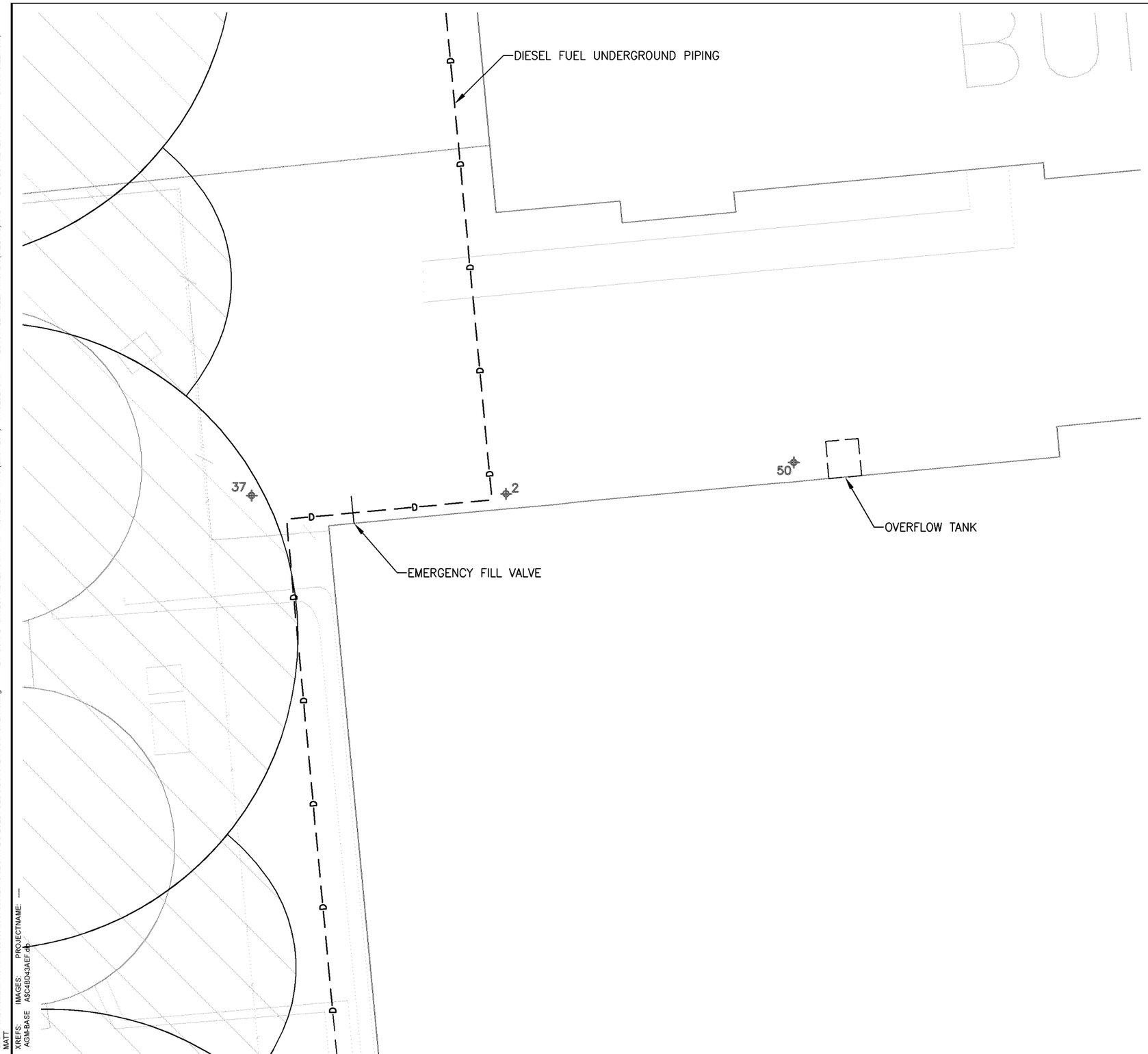
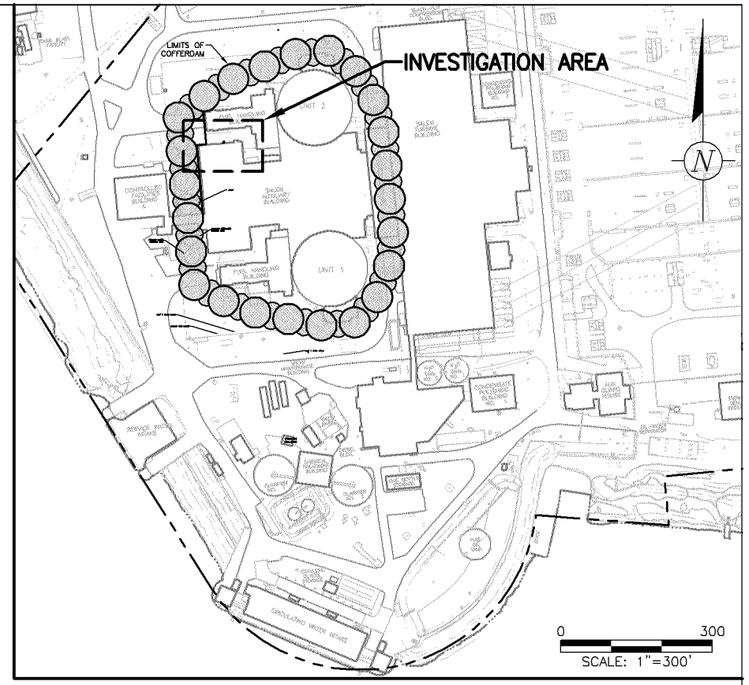
TAYLORS BRIDGE.JPG





KEYMAP
SCALE: 1"=300'

LEGEND:

- 13 — TEMPORARY UTILITY CLEARANCE
- PROPERTY BOUNDARY
- ST — STORM SEWER PIPING
- CATCH BASIN
- M — MANHOLE (STORM SEWER)
- SHEET PILE

0 10
SCALE: 1"=10'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

UNIT 2 DIESEL FUEL OIL SYSTEM COMPONENTS

ARCADIS

FIGURE
2

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCADNewtown\ACTIVE\000603\0009000021\FIG-02 UNIT 2 DIESEL FUEL OIL SYSTEM COMPONENTS.dwg LAYOUT: 2 SAVED: 6/27/2010 9:14 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/27/2010 9:14 PM BY: WASILEWSKI, MATT
XREFS: AGM-BASE IMAGES: ASC4BD43AEF.jpg PROJECTNAME: ---

LEGEND:

- CATCH BASIN
- MANHOLE (STORM SEWER)
- BL — MONITORING WELL (INSTALLED IN MAY 2006)
- WELL R — MONITORING WELL SCREENED IN THE ENGINEERED FILL WITHIN THE COFFERDAM, 20 FEET DEEP (WELLS M, N, O, R)
- WELL S — MONITORING WELL SCREENED IN THE SHALLOW, WATER TABLE AQUIFER OUTSIDE THE COFFERDAM, 35 FEET DEEP (WELLS S, T, U, W)
- WELL L — MONITORING WELL SCREENED IN THE VINCENTOWN FORMATION, 80 FEET DEEP (WELLS K, L, P, Q, V.)
- 2.46 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL, NAVD 1988)
- —2.00— CONTOUR (0.5 FOOT INTERVAL) DASHED WHERE INFERRED

NOTES:

1. THE MEAN TIDE LEVEL OF THE DELAWARE RIVER AT ARTIFICIAL ISLAND IS 0.11 FT (NAVD88)
2. WELL BF, WELL BG AND WELL BU LOCATED ON HOPE CREEK GENERATING STATION PROPERTY BUT ASSOCIATED WITH SALEM UNIT II INVESTIGATION.
3. POTENTIOMETRIC SURFACE ELEVATION DATA COLLECTED IN FEBRUARY 2007.

0 150 300 475
SCALE: 1"=150'

DELAWARE RIVER

BP 0.00 · BL 0.95 · BO 1.01 · BK 1.10 · BH 1.10 · BR 1.41 · BN · BI 1.38 · BM 0.95 · BQ · BG 1.22 · BJ 1.64 · BE 0.53 · BF 0.55 · BC −0.15 · BD 0.54 · BB 0.0 · BA 0.00 · BT 3.16 · BU 2.63

WELL L · WELL P · WELL Y −0.32 · WELL Z −0.63 · WELL AG−S/O −0.97 · WELL AO −0.22 · WELL AH−S/O 0.04 · WELL AI −3.53 · WELL AP −0.69 · WELL AA −0.98 · WELL W −0.46 · WELL AJ 0.23 · WELL AB −23.00 · WELL AR −1.54 · WELL AD −3.00 · WELL S −2.70 · WELL AM −0.48 · WELL M 2.03 · WELL R 3.22 · WELL N 2.00 · WELL AF −0.24 · WELL AN −0.93 · WELL AC 2.28 · WELL AL 0.00 · WELL AE 0.25 · WELL CB 0.34 · WELL CA · WELL K · WELL V · WELL T 1.17 · WELL U 2.60

(−0.50) (−3.00) (−2.00) (−1.00) 0.00 −0.50 −1.00 −2.00 2.50

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Newtown\ACTNP0006030009\00002\FIG-03 POTENTIOMETRIC SURFACE MAP.dwg LAYOUT: 3 SAVED: 6/4/2010 1:28 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS (SIZE C-E).CTB PLOTTED: 6/28/2010 4:52 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ----
AGM-BASE ARCADIS Color Logo.JPG
A$C4BD43AEF.dib

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

POTENTIOMETRIC SURFACE MAP

ARCADIS

FIGURE
3

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON="OFF=*REF*
G:\ENVCADNewtown\ACTNP00060300090002\FIG-04 SOIL ANALYTICAL RESULTS.dwg LAYOUT: 4 SAVED: 6/28/2010 3:06 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/28/2010 4:52 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
AGM-BASE ASC4BD43AEF.dib

DIESEL FUEL UNDERGROUND PIPING

EXCAVATION No. 2

FHD

FHD	
Depth	TPHC (mg/kg)
2 – 2.5	4,380

OFT–N			
Depth	TPHC (mg/kg)	2–METHYLNAPHTHALENE (ug/kg)	NAPHTHALENE (ug/kg)
0 – .5	5,000	<75	<38
2 – 2.5	366	NA	NA

OFT–E			
Depth	TPHC (mg/kg)	2–METHYLNAPHTHALENE (ug/kg)	NAPHTHALENE (ug/kg)
0 – .5	5,510	<75	<38
2 – 2.5	338	NA	NA

EFV–N	
Depth	TPHC (mg/kg)
0 – .5	785
2 – 2.5	1,720

EFV–W	
Depth	TPHC (mg/kg)
0 – .5	21.9
2 – 2.5	2,520

EFV–N

EFV–W

OFT–N

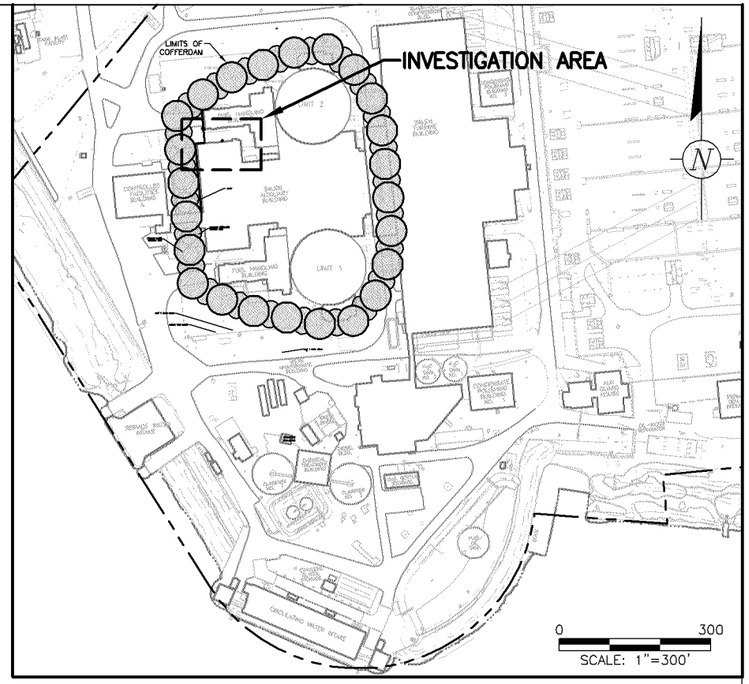
OFT–W

OFT–E

OVERFLOW TANK

EMERGENCY FILL VALVE

OFT–W	
Depth	TPHC (mg/kg)
0 – .5	2,510
2 – 2.5	16.5/19.2



KEYMAP
SCALE: 1"=300'

LEGEND:

EFV–W ● SOIL SAMPLING LOCATION POINT

PROPERTY BOUNDARY

STORM SEWER PIPING

CATCH BASIN

MANHOLE (STORM SEWER)

SHEET PILE

NRDCSRS – NON–RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

RDCSRS – RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

IGWSSL – IMPACT TO GROUNDWATER SOIL SCREENING LEVEL

0 10
SCALE: 1"=10'

Depths recorded in feet below ground surface

TPHC – Total Petroleum Hydrocarbons

mg/kg – milligrams per kilogram

ug/kg – micrograms per kilogram

5,510 Analytical Results exceed applicable New Jersey Department of Environmental Protection (NJDEP) Soil Remediation Standards (SRS) for TPHC – 5,100 mg/kg

<75 – Concentrations below method detection limit

NA – Not Analyzed

16.5/19.2 – Parent / Blind Duplicate Sample

	RDCSRS	NRDCSRS	IGWSSL
TPHC (mg/kg)	5,100	5,100	5,100
2–METHYLNAPHTHALENE (ug/kg)	200	2,400	5,000
NAPHTHALENE (ug/kg)	6	17	16,000

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

SOIL ANALYTICAL RESULTS

ARCADIS

FIGURE
4

DIESEL FUEL UNDERGROUND PIPING

EXCAVATION No. 2

TW-02
TPHC (mg/L)
372

2

37

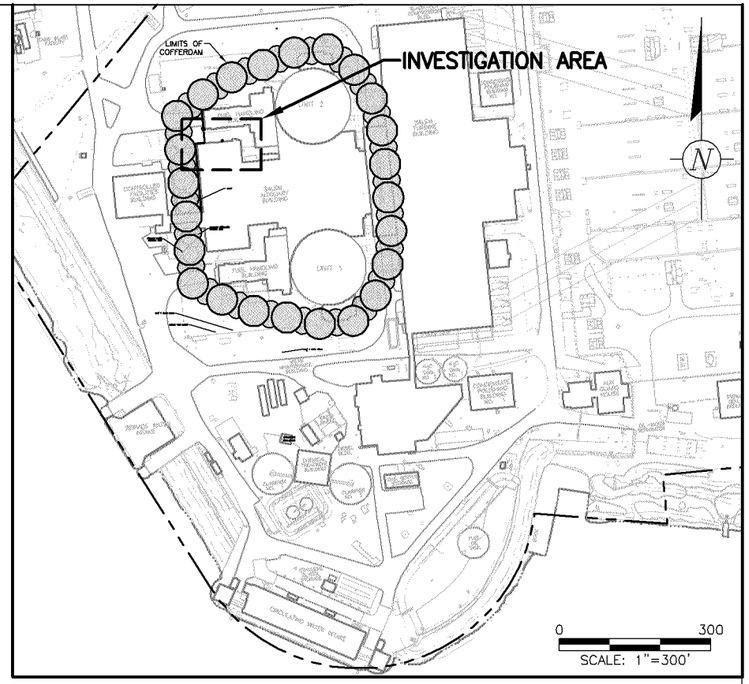
TW-37
TPHC (mg/L)
3.42

EMERGENCY FILL VALVE

50

OVERFLOW TANK

TW-50
TPHC (mg/L)
1.84



KEYMAP
SCALE: 1"=300'

LEGEND:

- 13 TEMPORARY OBSERVATION POINT
- PROPERTY BOUNDARY
- ST STORM SEWER PIPING
- CATCH BASIN
- M MANHOLE (STORM SEWER)
- SHEET PILE

TPHC – Total Petroleum Hydrocarbons
mg/L – milligrams per Liter
NA – Criteria or Standard not available
GWQC – Groundwater Quality Standard

	GWQS
TPHC (mg/L)	NA

0 10
SCALE: 1"=10'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

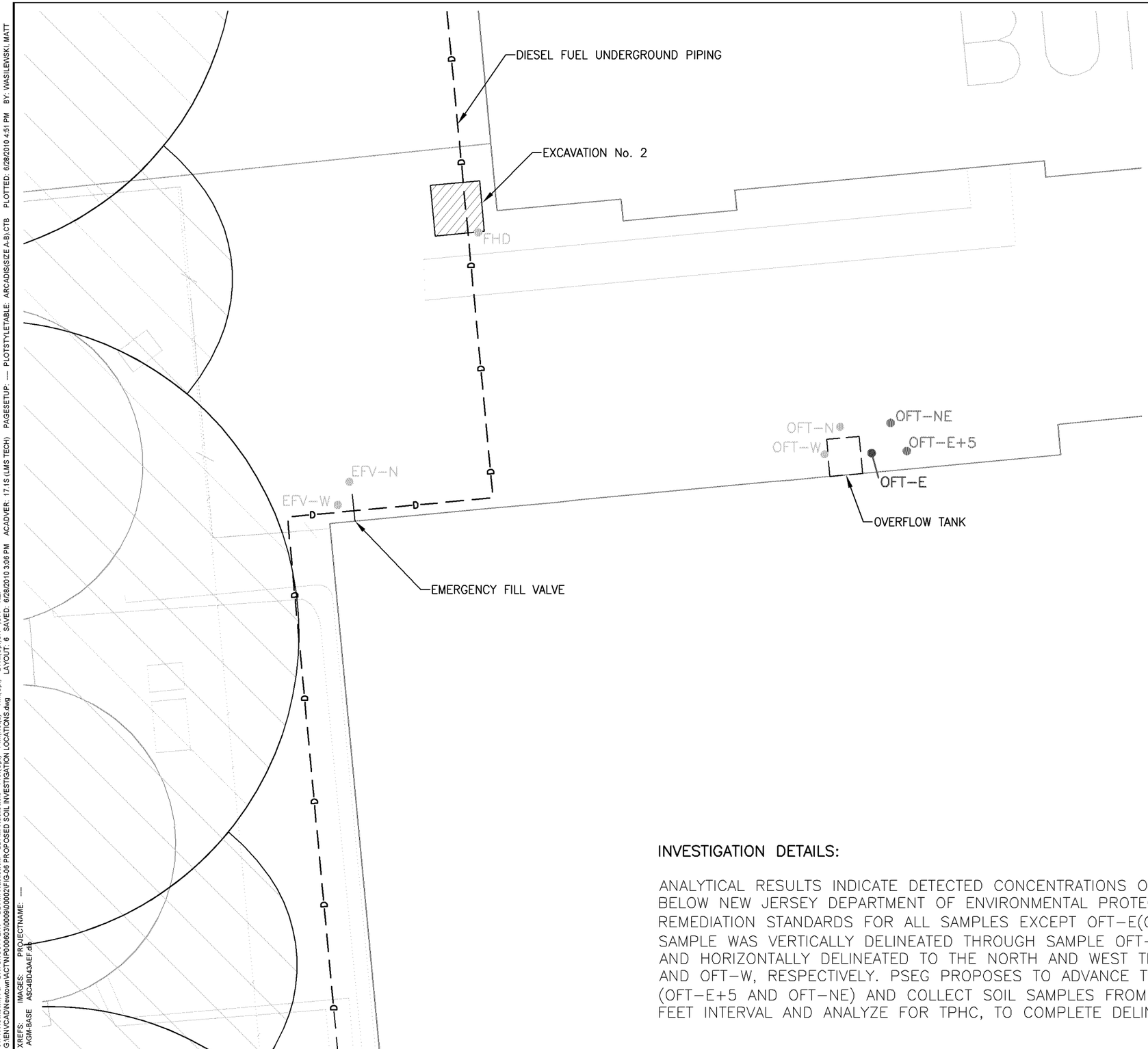
GROUNDWATER ANALYTICAL RESULTS

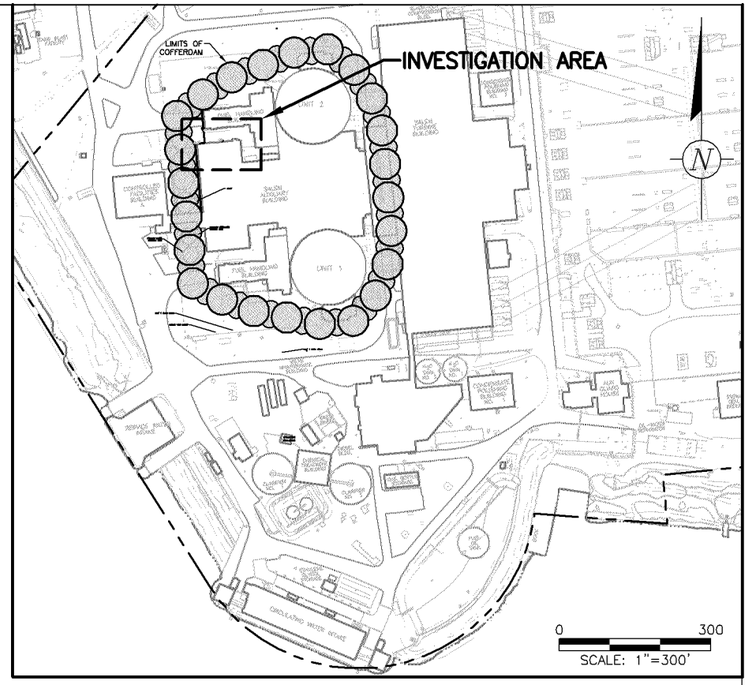
ARCADIS

FIGURE
5

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCADD\Newtown\ACTNP00060300090002\FIG-05 GROUNDWATER ANALYTICAL RESULTS.dwg LAYOUT: 5 SAVED: 6/27/2010 10:09 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/27/2010 10:09 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
AGM-BASE ASC4BD43AEF.dib

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(OptKON=*OFF=*REF*
G:\ENV\CAD\Newtown\ACTNP00060300090000\2\FIG-06 PROPOSED SOIL INVESTIGATION LOCATIONS.dwg LAYOUT: 6 SAVED: 6/28/2010 3:06 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/28/2010 4:51 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
AGM-BASE ASC-BD43AEF.dwg





KEYMAP
SCALE: 1"=300'

LEGEND:

- OFT-NE ◍ PROPOSED SOIL BORING LOCATION
- OFT-E ● SOIL SAMPLING LOCATION POINT
- PROPERTY BOUNDARY
- –ST– STORM SEWER PIPING
- CATCH BASIN
- Ⓜ MANHOLE (STORM SEWER)
- SHEET PILE
- TPHC – Total Petroleum Hydrocarbons

0 10
SCALE: 1"=10'

INVESTIGATION DETAILS:

ANALYTICAL RESULTS INDICATE DETECTED CONCENTRATIONS OF TPHC ARE BELOW NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION SOIL REMEDIATION STANDARDS FOR ALL SAMPLES EXCEPT OFT–E(0.0–0.5). THIS SAMPLE WAS VERTICALLY DELINEATED THROUGH SAMPLE OFT–E(2.0–2.5) AND HORIZONTALLY DELINEATED TO THE NORTH AND WEST THROUGH OFT–N AND OFT–W, RESPECTIVELY. PSEG PROPOSES TO ADVANCE TWO BORINGS (OFT–E+5 AND OFT–NE) AND COLLECT SOIL SAMPLES FROM THE 0.0–0.5 FEET INTERVAL AND ANALYZE FOR TPHC, TO COMPLETE DELINEATION.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

PROPOSED SOIL INVESTIGATION LOCATIONS

ARCADIS

FIGURE
6

DIESEL FUEL UNDERGROUND PIPING

EXCAVATION No. 2

MW-CC

MW-CD

OVERFLOW TANK

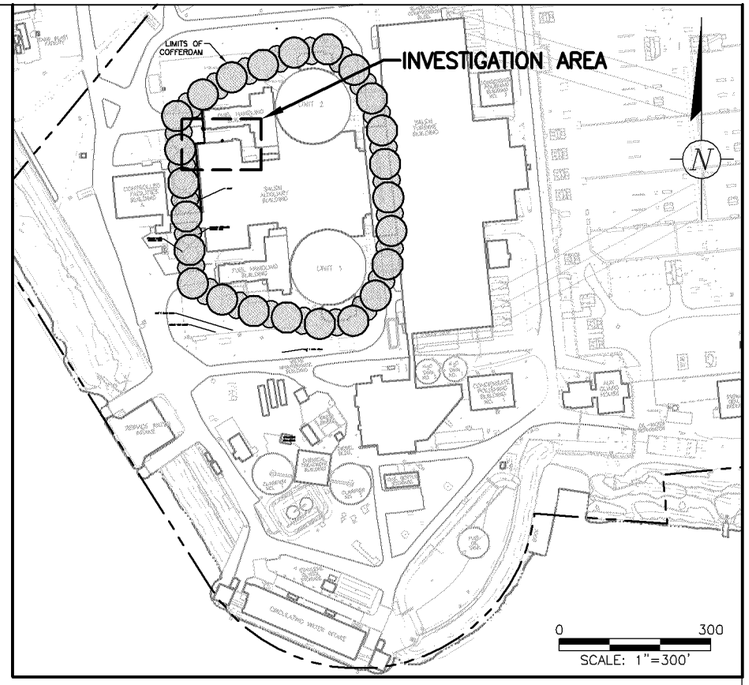
EMERGENCY FILL VALVE

37

2

50

D



KEYMAP
SCALE: 1"=300'

LEGEND:

MW-CC	PROPOSED MONITORING WELL LOCATION
13	TEMPORARY OBSERVATION POINT
	PROPERTY BOUNDARY
–ST–	STORM SEWER PIPING
	CATCH BASIN
M	MANHOLE (STORM SEWER)
	SHEET PILE

TPHC – Total Petroleum Hydrocarbons

0 10
SCALE: 1"=10'

INVESTIGATION DETAILS:

PSEG PROPOSES TO INSTALL TWO 4-INCH MONITORING WELLS SCREENED ACROSS THE WATER TABLE. MONITORING WELL MW-CC WILL BE INSTALLED WHERE A SHEEN WAS OBSERVED AND MONITORING WELL MW-CD WILL BE INSTALLED WHERE AN EXCEEDANCE OF TPHC NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION SOIL REMEDIATION STANDARDS WAS DETECTED. GROUNDWATER SAMPLES WILL BE COLLECTED AND ANALYZED FOR VOCs AND SVOCs.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

PROPOSED MONITORING WELL LOCATIONS

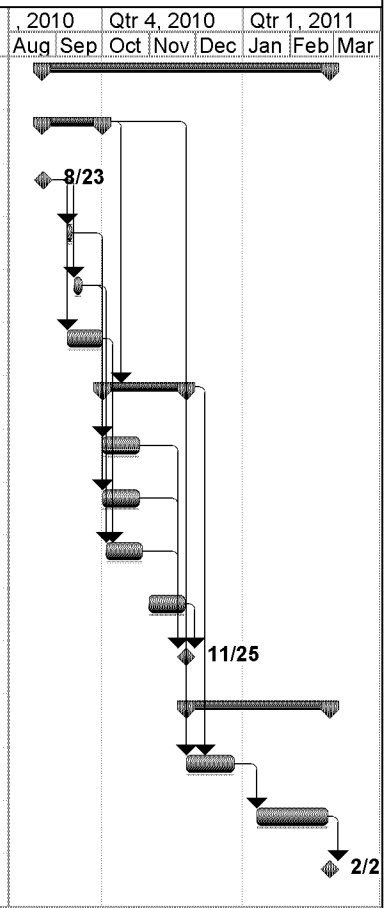
ARCADIS

FIGURE 7

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(OptION="OFF=REF"
G:\ENV\CAD\Newtown\ACTNP\00603\00900002\FIG-07 PROPOSED MONITORING WELL LOCATIONS.dwg LAYOUT: 7 SAVED: 6/28/2010 2:32 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/28/2010 4:50 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
AGM-BASE ASC-BD43AEF.dwg

Remedial Investigation Work Plan, June 2010
Salem Generating Station
Artificial Island Hancock's Bridge, New Jersey

ID	Task Name	Duration	Start	Finish	Predecessors
1	**Remedial Investigation**	**168.5 days**	**Mon 8/23/10**	**Sun 2/27/11**	
2	**Field Investigation**	**36 days**	**Mon 8/23/10**	**Fri 10/1/10**	
3	Public Notification	1 day	Mon 8/23/10	Mon 8/23/10	
4	Soil Delineation	3 days	Wed 9/8/10	Sat 9/11/10	3FS+14 days
5	Groundwater Delineation	5 days	Mon 9/13/10	Fri 9/17/10	3FS+14 days
6	LNAPL Delineation	21 days	Wed 9/8/10	Fri 10/1/10	3FS+14 days
7	**Receptor Evaluation - If Necessary**	**48.5 days**	**Fri 10/1/10**	**Thu 11/25/10**	**2**
8	Soil - Direct Contact	21 days	Fri 10/1/10	Mon 10/25/10	4
9	Groundwater - Well Search	21 days	Fri 10/1/10	Mon 10/25/10	5
10	Vapor Intrusion	21 days	Mon 10/4/10	Wed 10/27/10	5,6
11	Baseline Ecological Evaluation	21 days	Mon 11/1/10	Wed 11/24/10	
12	Submit Receptor Evaluation Form	1 day	Wed 11/24/10	Thu 11/25/10	8,9,10,11
13	**Remedial Investigation Report / Interim Remedial Action Work Plan**	**84 days**	**Thu 11/25/10**	**Sun 2/27/11**	
14	Data Reduction and Evaluation	28 days	Thu 11/25/10	Sun 12/26/10	2,7
15	Prepare Draft Work Plan	42 days	Mon 1/10/11	Fri 2/25/11	14
16	Remedial Investigation Report / Interim Remedial Action Work Plan Submittal	1 day	Sat 2/26/11	Sun 2/27/11	15



Project: Salem Unit 2 Diesel Schedule
Date: Sun 6/27/10

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

ARCADIS

Appendix A

Analytical Laboratory Data Deliverables

ATLANTIC
Product Services, Inc.
EPA RFG No. 1008 U.S. CUSTOMS APPROVED
N.Y.S. ELAP No. 10750 U.S. EPA No. NY00071

2 Terminal Road
KMI Building OB2
Carteret, New Jersey 07008
Phone (732) 969-4800
Fax (732) 969-1112
Email ops@apsinsp.com

INSPECTIONS OF QUALITY

TK / VESSEL/ UNIT :	**SUBMITTED SAMPLE FHD(GW)**	APS FILE # :	**79131**
TERMINAL NAME :	**ARCADIS**	LAB # :	**7501**
CITY, STATE :	**NEWTOWN, PA**	DATE SAMPLED :	**5/27/2010**
PRODUCT :	**OIL/WATER MIXTURE**	DATE TESTING COMPLETED :	**6/10/2010**

ON OIL/WATER MIXTURE FROM SUBMITTED SAMPLE FHD(GW)
THE FOLLOWING ANALYTICAL RESULTS WERE OBTAINED

METHOD No.	TESTS	UNITS	RESULTS
DT-100	DYE CONCENTRATION	PPM / PPTB	**0.0 / 0.0**

A GC Fingerprint was run on the sample and the fingerprint matches Diesel Fuel #2 (No. 2 Fuel Oil) and appears to be weathered. The sample did not match Ultra Low Sulfur Diesel, Diesel Fuel #6 or Hydraulic Oil.

GC-FID METHOD 310.13	GC FINGER PRINT		
	ULTRA LOW SULFUR DIESEL	MG/L	**ND**
	DIESEL FUEL #6	MG/L	**ND**
	DIESEL FUEL #2	MG/L	**158.0 ***
	HYDRAULIC OIL	MG/L	**ND**

* NOTE: THE DIESEL FUEL #2 PRESENT IN THE SAMPLE APPEARS TO BE WEATHERED.
THE DILUTION FACTOR IS 1.
ND = NOT DETECTED.

Stephen Levano
Atlantic Product Services, Inc.

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

07/09/10

Technical Report for

Arcadis

PSE&G Diesel Unit 2, Salem, NJ

NP000603.0007.00002

Accutest Job Number: JA45964

Sampling Date: 05/04/10

Report to:

Arcadis Geraghty & Miller

Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: 27

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Section 2: Case Narrative/Conformance Summary 5

Section 3: Sample Results 7

3.1: JA45964-1: OFT-E(0-0.5) 8

3.2: JA45964-1R: OFT-E(0-0.5) 9

3.3: JA45964-2: OFT-E(2.0-2.5) 10

3.4: JA45964-3: OFT-N(0-0.5) 11

3.5: JA45964-3R: OFT-N(0-0.5) 12

3.6: JA45964-4: OFT-N(2.0-2.5) 13

3.7: JA45964-5: OFT-W(0-0.5) 14

3.8: JA45964-6: OFT-W(2.0-2.5) 15

3.9: JA45964-7: EFV-N(0-0.5) 16

3.10: JA45964-8: EFV-N(2.0-2.5) 17

3.11: JA45964-9: EFV-W(0-0.5) 18

3.12: JA45964-10: EFV-W(2.0-2.5) 19

3.13: JA45964-11: DUP(2.0-2.5)OW 20

3.14: JA45964-12: FIELD BLANK 21

3.15: JA45964-12R: FIELD BLANK 22

Section 4: Misc. Forms **23**

4.1: Chain of Custody 24

Sample Summary

Arcadis

Job No: JA45964

PSE&G Diesel Unit 2, Salem, NJ
Project No: NP000603.0007.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA45964-1	05/04/10	10:00	RM	05/06/10	SO	Soil	OFT-E(0-0.5)
JA45964-1R	05/04/10	10:00	RM	05/06/10	SO	Soil	OFT-E(0-0.5)
JA45964-2	05/04/10	10:47	RM	05/06/10	SO	Soil	OFT-E(2.0-2.5)
JA45964-3	05/04/10	11:30	RM	05/06/10	SO	Soil	OFT-N(0-0.5)
JA45964-3D	05/04/10	11:30	RM	05/06/10	SO	Soil Dup/MSD	OFT-N(0-0.5)
JA45964-3R	05/04/10	11:30	RM	05/06/10	SO	Soil	OFT-N(0-0.5)
JA45964-3S	05/04/10	11:30	RM	05/06/10	SO	Soil Matrix Spike	OFT-N(0-0.5)
JA45964-4	05/04/10	11:50	RM	05/06/10	SO	Soil	OFT-N(2.0-2.5)
JA45964-5	05/04/10	13:15	RM	05/06/10	SO	Soil	OFT-W(0-0.5)
JA45964-6	05/04/10	13:30	RM	05/06/10	SO	Soil	OFT-W(2.0-2.5)
JA45964-7	05/04/10	13:45	RM	05/06/10	SO	Soil	EFV-N(0-0.5)
JA45964-8	05/04/10	13:55	RM	05/06/10	SO	Soil	EFV-N(2.0-2.5)
JA45964-9	05/04/10	14:20	RM	05/06/10	SO	Soil	EFV-W(0-0.5)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Arcadis

Job No: JA45964

PSE&G Diesel Unit 2, Salem, NJ
Project No: NP000603.0007.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA45964-10	05/04/10	14:30	RM	05/06/10	SO	Soil	EFV-W(2.0-2.5)
JA45964-11	05/04/10	00:00	RM	05/06/10	SO	Soil	DUP(2.0-2.5)OW
JA45964-12	05/04/10	13:15	RM	05/06/10	AQ	Field Blank Soil	FIELD BLANK
JA45964-12R	05/04/10	13:15	RM	05/06/10	AQ	Field Blank Soil	FIELD BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA45964
Site:	PSE&G Diesel Unit 2, Salem, NJ	**Report Date**	5/26/2010 10:21:15 A

On 05/06/2010, 11 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.2 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA45964 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP43568

- Sample(s) JA46345-1MS, JA46345-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JA45964-12R: Sample extracted outside the holding time per client's request.

Matrix: SO **Batch ID:** OP43560

- All samples were extracted within the recommended method holding time.
- Sample(s) JA46369-2MS, JA46369-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GC By Method OQA-QAM-025

Matrix: AQ	Batch ID: OP43411

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA45640-2MS, JA45640-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Total PHC are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Total PHC are outside control limits.
- OP43411-MS for Tetracosane-d50: Outside control limits due to matrix interference.
- OP43411-MSD for Tetracosane-d50: Outside control limits due to matrix interference.
- OP43411-MSD for Chlorobenzene: Outside control limits due to matrix interference.
- OP43411-MS for Chlorobenzene: Outside control limits due to matrix interference.

Matrix: SO	Batch ID: OP43484

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA45964-3MS, JA45964-3MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Total PHC are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JA45964-3 for o-Terphenyl: Outside control limits due to matrix interference and dilution.
- OP43484-MSD for o-Terphenyl: Outside control limits due to matrix interference and dilution.
- OP43484-MSD for Chlorobenzene: Outside control limits due to matrix interference and dilution.
- JA45964-7 for o-Terphenyl: Outside control limits due to matrix interference.
- OP43484-MS for o-Terphenyl: Outside control limits due to matrix interference and dilution.
- OP43484-MS for Chlorobenzene: Outside control limits due to matrix interference and dilution.

Wet Chemistry By Method SM18 2540G

Matrix: SO	Batch ID: GN37211

- The data for SM18 2540G meets quality control requirements.

Matrix: SO	Batch ID: GN37212

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	OFT-E(0-0.5)		
Lab Sample ID:	JA45964-1	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	86.7
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32541.D	10	05/10/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	5510	13	8.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	96%		50-120%
84-15-1	o-Terphenyl	60%		50-120%
16416-32-3	Tetracosane-d50	117%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OFT-E(0-0.5)		
Lab Sample ID:	JA45964-1R	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	86.7
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M19443.D	1	05/17/10	KLS	05/13/10	OP43560	E3M832
Run #2							

	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	75	21	ug/kg	
91-20-3	Naphthalene	ND	38	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		28-113%
321-60-8	2-Fluorobiphenyl	81%		38-107%
1718-51-0	Terphenyl-d14	95%		31-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OFT-E(2.0-2.5)		
Lab Sample ID:	JA45964-2	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	91.2
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32543.D	1	05/10/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	338	1.3	0.81	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	82%		50-120%
84-15-1	o-Terphenyl	76%		50-120%
16416-32-3	Tetracosane-d50	79%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OFT-N(0-0.5)		
Lab Sample ID:	JA45964-3	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	88.2
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z18076.D	20	05/11/10	DNM	05/07/10	OP43484	G2Z768
Run #2							

	Initial Weight	Final Volume
Run #1	17.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	5000	26	17	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	118%		50-120%
84-15-1	o-Terphenyl	146% [a]		50-120%
16416-32-3	Tetracosane-d50	103%		50-120%

(a) Outside control limits due to matrix interference and dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OFT-N(0-0.5)		
Lab Sample ID:	JA45964-3R	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	88.2
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M19414.D	1	05/15/10	KLS	05/13/10	OP43560	E3M831
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	75	21	ug/kg	
91-20-3	Naphthalene	ND	38	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	51%		28-113%
321-60-8	2-Fluorobiphenyl	53%		38-107%
1718-51-0	Terphenyl-d14	66%		31-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OFT-N(2.0-2.5)
Lab Sample ID: JA45964-4
Matrix: SO - Soil
Method: OQA-QAM-025 SW846 3550B
Project: PSE&G Diesel Unit 2, Salem, NJ

Date Sampled: 05/04/10
Date Received: 05/06/10
Percent Solids: 90.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32550.D	1	05/11/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	366	1.3	0.83	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	83%		50-120%
84-15-1	o-Terphenyl	74%		50-120%
16416-32-3	Tetracosane-d50	82%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OFT-W(0-0.5)
Lab Sample ID: JA45964-5
Matrix: SO - Soil
Method: OQA-QAM-025 SW846 3550B
Project: PSE&G Diesel Unit 2, Salem, NJ

Date Sampled: 05/04/10
Date Received: 05/06/10
Percent Solids: 83.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32545.D	10	05/11/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	2510	14	9.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	117%		50-120%
84-15-1	o-Terphenyl	81%		50-120%
16416-32-3	Tetracosane-d50	95%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OFT-W(2.0-2.5)		
Lab Sample ID:	JA45964-6	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	91.5
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32540.D	1	05/10/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	16.5	1.3	0.82	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	96%		50-120%
84-15-1	o-Terphenyl	85%		50-120%
16416-32-3	Tetracosane-d50	85%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EFV-N(0-0.5)
Lab Sample ID: JA45964-7
Matrix: SO - Soil
Method: OQA-QAM-025 SW846 3550B
Project: PSE&G Diesel Unit 2, Salem, NJ

Date Sampled: 05/04/10
Date Received: 05/06/10
Percent Solids: 90.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32551.D	1	05/11/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	785	1.3	0.83	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	83%		50-120%
84-15-1	o-Terphenyl	234% [a]		50-120%
16416-32-3	Tetracosane-d50	76%		50-120%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFV-N(2.0-2.5)		
Lab Sample ID:	JA45964-8	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	91.2
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32557.D	10	05/11/10	DNM	05/07/10	OP43484	G2Y1373
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	1720	13	8.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	110%		50-120%
84-15-1	o-Terphenyl	80%		50-120%
16416-32-3	Tetracosane-d50	100%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFV-W(0-0.5)		
Lab Sample ID:	JA45964-9	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	81.0
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32549.D	1	05/11/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	21.9	1.4	0.92	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	90%		50-120%
84-15-1	o-Terphenyl	83%		50-120%
16416-32-3	Tetracosane-d50	83%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFV-W(2.0-2.5)		
Lab Sample ID:	JA45964-10	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	92.2
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32542.D	10	05/10/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	2520	13	8.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	100%		50-120%
84-15-1	o-Terphenyl	75%		50-120%
16416-32-3	Tetracosane-d50	100%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP(2.0-2.5)OW		
Lab Sample ID:	JA45964-11	**Date Sampled:**	05/04/10
Matrix:	SO - Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	90.9
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32548.D	1	05/11/10	OPM	05/07/10	OP43484	G2Y1372
Run #2							

	Initial Weight	Final Volume
Run #1	17.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	19.2	1.3	0.83	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	100%		50-120%
84-15-1	o-Terphenyl	82%		50-120%
16416-32-3	Tetracosane-d50	82%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JA45964-12	**Date Sampled:**	05/04/10
Matrix:	AQ - Field Blank Soil	**Date Received:**	05/06/10
Method:	OQA-QAM-025 SW846 3510C	**Percent Solids:**	n/a
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32531.D	1	05/10/10	OPM	05/07/10	OP43411	G2Y1372
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	ND	0.020	0.016	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	94%		50-120%
84-15-1	o-Terphenyl	82%		50-120%
16416-32-3	Tetracosane-d50	80%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JA45964-12R	**Date Sampled:**	05/04/10
Matrix:	AQ - Field Blank Soil	**Date Received:**	05/06/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Z55492.D	1	05/17/10	JSE	05/13/10	OP43568	EZ2061
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
91-20-3	Naphthalene	ND	1.0	0.43	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		25-112%
321-60-8	2-Fluorobiphenyl	86%		31-106%
1718-51-0	Terphenyl-d14	84%		14-122%

(a) Sample extracted outside the holding time per client's request.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

SO FB STB N

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JA45964

Client / Reporting Information

Company Name: ARCADIS
Street Address: 500 North Gulf Rd, Suite 401
City: King of Prussia, State: PA, Zip: 19406
Project Contact: Glen Palmer, E-mail: glenn.palmer@arcadis-us.com
Phone #: 610-337-7601, Fax #:
Sampler(s) Name(s): Rob Miller, Phone #: 267-273-4552

Project Information

Project Name: PSEG Diesel Unit 2
Street:
City: Salem, State: NJ
Project #: NP000603.0007.00002
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (If different from Report to):

Company Name:
Street Address:
City, State, Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

DRO method OAM-025
Hold 2-methylnaphthalene and naphthalene method 8270 Hold
MS/MSD

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	OFT-E(0-0.5)		5/4/10	1000	RM		1									EX88
2	OFT-E(2.0-2.5)		5/4/10	1047	RM		1									EX96
3	OFT-N(0-0.5)		5/4/10	1130	RM		3									477
4	OFT-N(2.0-2.5)		5/4/10	1150	RM		1									
5	OFT-W(0-0.5)		5/4/10	1315	RM		1									
6	OFT-W(2.0-2.5)		5/4/10	1330	RM		1									
7	EFV-N(0-0.5)		5/4/10	1345	RM		1									
8	EFV-N(2.0-2.5)		5/4/10	1355	RM		1									
9	EFV-W(0-0.5)		5/4/10	1420	RM		1									
10	EFV-W(2.0-2.5)		5/4/10	1430	RM		1									
11	DUP(2.0-2.5)OW		5/4/10	—	RM		1									
12	~~Trip Blank~~ RM Field Blank		5/4/10	1315	RM		4									

Turnaround Time (Business days): ~~Trip Blank~~ 4-30-10 7:30

Data Deliverable Information

Comments / Special Instructions

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [x] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

~~TB~~ ~~Trip Blank~~ ~~Field Blank~~

OQA FAST TRACK

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/5/10 1500				
2					5/6/10 800	
3		5/6/10 1241				
4						
5	Relinquished by:			Custody Seal #	Intact / Not intact	Preserved where applicable: On Ice / Cooler Temp

24

TA

CHAIN OF CUSTODY

ACCUTEST Laboratories
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA45964

Client / Reporting Information

Company Name: ARCADIS
Street Address: 500 North Gulf Rd, Suite 401
City: King of Prussia State: PA Zip: 19406
Project Contact: Glenn Palmer E-mail: glenn.palmer@arcadis-us.com
Phone #: 610-337-7601 Fax #:
Sampler(s) Name(s): Rob Miller Phone #: 201-273-4552

Project Information

Project Name: PSEG Diesel Unit 2
Street:
City: Salem State: NJ
Project #: NP000603.0007.00002
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

DRO method GAM-025
Hold 2-methylnaphthalene and naphthalene method 8270 Hold
MS/MSD
VOA

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
-13	Trip Blank		4/30/10	0730			2									

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [x] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM) / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/5/10 1506	1	2	5/6/10 0800	2
3	Relinquished by Sampler:	Date Time: 5/6/10 1645	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:		Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.

TH

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA45964 **Client:** _____ **Immediate Client Services Action Required:** No

Date / Time Received: 5/6/2010 **Delivery Method:** _____ **Client Service Action Required at Login:** No

Project: _____ **No. Coolers:** 1 **Airbill #'s:** _____

Cooler Security	Y	N		Y	N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	Infared gun	
3. Cooler media:	Ice (bag)	

Quality Control Preservatio	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	☐
2. Trip Blank listed on COC:	☑	☐	☐
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

Job Change Order: JA45964_5/12/2010

Requested Date:	5/12/2010	**Received Date:**	5/6/2010
Account Name:	Arcadis	**Due Date:**	5/11/2010
Project Description:	PSE&G Diesel Unit 2, Salem, NJ	**Deliverable:**	REDT2
CSR:	MM	**TAT (Days):**	3

Sample #: JA45964-1, 3, 12

Change: Please relog for 8270 analysis, report only 2-Methylnapthalene and Naphthalene.

Above Changes Per: Jonathan Shafer **Date:** 5/12/2010

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

07/09/10

Technical Report for

Arcadis

PSE&G Diesel Unit 2, Salem, NJ

NP000603.0007.00002

Accutest Job Number: JA46106

Sampling Date: 05/05/10

Report to:

Arcadis Geraghty & Miller

Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: 13

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

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Sample Summary

Arcadis

Job No: JA46106

PSE&G Diesel Unit 2, Salem, NJ
Project No: NP000603.0007.00002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA46106-2	05/05/10	11:20	RM	05/07/10	AQ	Field Blank Water	FIELD BLANK
JA46106-3	05/05/10	09:30	RM	05/07/10	AQ	Ground Water	TW-2
JA46106-4	05/05/10	09:50	RM	05/07/10	AQ	Ground Water	TW-37
JA46106-5	05/05/10	09:20	RM	05/07/10	AQ	Ground Water	TW-50

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA46106
Site:	PSE&G Diesel Unit 2, Salem, NJ	**Report Date**	5/25/2010 4:03:31 PM

On 05/07/2010, 3 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.8 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA46106 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GC By Method OQA-QAM-025

Matrix AQ **Batch ID:** OP43411

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA45640-2MS, JA45640-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Total PHC are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Total PHC are outside control limits. Probable cause due to matrix interference.
- Sample(s) JA46106-3, OP43411-MS, OP43411-MSD have surrogates outside control limits. Probable cause due to matrix interference.
- JA46106-3: Diluted due to high concentration of target compound and matrix interference.
- JA46106-3 for Tetracosane-d50: Outside control limits due to dilution.
- JA46106-3 for o-Terphenyl: Outside control limits due to dilution.
- JA46106-3 for Chlorobenzene: Outside control limits due to dilution.
- OP43411-MSD for Tetracosane-d50: Outside control limits due to matrix interference.
- OP43411-MSD for Chlorobenzene: Outside control limits due to matrix interference.
- OP43411-MS for Tetracosane-d50: Outside control limits due to matrix interference.
- OP43411-MS for Chlorobenzene: Outside control limits due to matrix interference.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

SII-SSA-0014-004208

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JA46106-2	**Date Sampled:**	05/05/10
Matrix:	AQ - Field Blank Water	**Date Received:**	05/07/10
Method:	OQA-QAM-025 SW846 3510C	**Percent Solids:**	n/a
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ58852.D	1	05/11/10	DNM	05/10/10	OP43411	GZZ1945
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	ND	0.020	0.016	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	69%		50-120%
84-15-1	o-Terphenyl	77%		50-120%
16416-32-3	Tetracosane-d50	72%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-2		
Lab Sample ID:	JA46106-3	**Date Sampled:**	05/05/10
Matrix:	AQ - Ground Water	**Date Received:**	05/07/10
Method:	OQA-QAM-025 SW846 3510C	**Percent Solids:**	n/a
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	ZZ58864.D	50	05/11/10	DNM	05/10/10	OP43411	GZZ1946
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	372	1.1	0.84	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	0% [b]		50-120%
84-15-1	o-Terphenyl	0% [b]		50-120%
16416-32-3	Tetracosane-d50	0% [b]		50-120%

(a) Diluted due to high concentration of target compound and matrix interference.
(b) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-37		
Lab Sample ID:	JA46106-4	**Date Sampled:**	05/05/10
Matrix:	AQ - Ground Water	**Date Received:**	05/07/10
Method:	OQA-QAM-025 SW846 3510C	**Percent Solids:**	n/a
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ58854.D	1	05/11/10	DNM	05/10/10	OP43411	GZZ1945
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	3.42	0.021	0.017	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	74%		50-120%
84-15-1	o-Terphenyl	85%		50-120%
16416-32-3	Tetracosane-d50	75%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-50		
Lab Sample ID:	JA46106-5	**Date Sampled:**	05/05/10
Matrix:	AQ - Ground Water	**Date Received:**	05/07/10
Method:	OQA-QAM-025 SW846 3510C	**Percent Solids:**	n/a
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ58863.D	1	05/11/10	DNM	05/10/10	OP43411	GZZ1946
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	1.84	0.021	0.017	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	74%		50-120%
84-15-1	o-Terphenyl	86%		50-120%
16416-32-3	Tetracosane-d50	64%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA46106

Client / Reporting Information

Company Name: ARCADIS
Street Address: 580 North Gulf Rd., Suite 401
City / State / Zip: King of Prussia, PA 19406
Project Contact / E-mail: Glean Palmer glean.palmer@arcadis-us.com
Phone # / Fax #: 610-337-7601
Sampler(s) Name(s) / Phone #: Rob Miller 267-273-4552

Project Information

Project Name: PSE&G Diesel Unit 2
Street:
City / State: Salem NJ
Project #: NP000603.0007.00002
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

DRO method GAM-025 and Weld-2-Methylnaphthalene and Naphthalene method 8270 (WL)
VOA

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
-1	Trip Blank		5/4/10	0800		WTB	2									EK89
-2	Field Blank		5/5/10	1120	RM		4									495
-3	TW-2		5/5/10	0930	RM		4									
-4	TW-37		5/5/10	0950	RM		4									
-5	TW-50		5/5/10	0920	RM		4									

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [x] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

* correct fill time 5-7-10 TW

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
1		5/6/10 1800	1	2	5/7/10 0811	2
3	Relinquished by:	Date/Time:	Received By:	Relinquished By:	Date/Time:	Received By:
		5/7/10 1215	3	4		4
5	Relinquished By:	Date/Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.
			5				X	4.0

JA46106: Chain of Custody
Page 1 of 3

SII-SSA-0014-004215

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA46106 **Client:** ARCADIS **Immediate Client Services Action Required:** No

Date / Time Received: 5/7/2010 **Delivery Method:** Accutest Courier **Client Service Action Required at Login:** Yes

Project: PSE&G DIESEL UNIT 2 **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y	N	N/A
1. Trip Blank present / cooler:	☑	☐	☐
2. Trip Blank listed on COC:	☑	☐	☐
3. Samples preserved properly:	☐	☑	
4. VOCs headspace free:	☑	☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y	N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume recvd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☐
5. Filtering instructions clear:	☐	☐	☐

Comments

-3 1 OF 2 DRO VOLUMES REC'D UNDERPRESERVED WITH A APPROX PH PF 6 , HCL ADDED IN SM. LOT # 2001174

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

Sample Receipt Summary - Problem Resolution

Accutest Job Number: JA46106

CSR: Marie Meidhof **Response Date** 5/7/2010

Response: Ok to proceed.

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA46106: Chain of Custody
Page 3 of 3

New Jersey ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

07/09/10

Technical Report for

Arcadis

PSE&G Diesel Unit 2, Salem, NJ

NP000603.0008.00001

Accutest Job Number: JA47682

Sampling Date: 05/27/10

Report to:

Arcadis Geraghty & Miller

Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: 9

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP Ops, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Section 3: Sample Results 5
3.1: JA47682-1: FHD(2.4-2.9) 6
Section 4: Misc. Forms 7
4.1: Chain of Custody 8

Sample Summary

Arcadis

Job No: JA47682

PSE&G Diesel Unit 2, Salem, NJ
Project No: NP000603.0008.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA47682-1	05/27/10	14:30	RM	05/28/10	SO	Soil	FHD(2.4-2.9)

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA47682
Site:	PSE&G Diesel Unit 2, Salem, NJ	**Report Date**	6/9/2010 2:22:00 PM

On 05/28/2010, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 4 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA47682 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GC By Method OQA-QAM-025

Matrix SO	**Batch ID:** OP43822

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA47682-1MS, JA47682-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Total PHC are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for Total PHC are outside control limits for sample OP43822-MSD. Outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM18 2540G

Matrix SO	**Batch ID:** GN38122

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

SII-SSA-0014-004221

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	FHD(2.4-2.9)		
Lab Sample ID:	JA47682-1	**Date Sampled:**	05/27/10
Matrix:	SO - Soil	**Date Received:**	05/28/10
Method:	OQA-QAM-025 SW846 3550B	**Percent Solids:**	89.3
Project:	PSE&G Diesel Unit 2, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Y32694.D	20	06/02/10	OPM	05/29/10	OP43822	G2Y1380
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	Total PHC	4380	26	17	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
108-90-7	Chlorobenzene	56%		50-120%
84-15-1	o-Terphenyl	79%		50-120%
16416-32-3	Tetracosane-d50	97%		50-120%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

50

ACCUTEST Laboratories

CHAIN OF CUSTODY

PAGE ___ OF ___

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # JA47682

Client / Reporting Information

Company Name: ARCADIS
Street Address: 500 North Gulph Rd, Suite 401
City / State / Zip: King of Prussia, PA 19406
Project Contact / E-mail: Glenn Palmer glenn.palmer@arcadis-us.com
Phone # / Fax #: 610.337.7601
Sampler(s) Name(s) / Phone #: Rob Miller 267.273.4552

Project Information

Project Name: PSE&G Diesel Unit 2
Street: | City: Salem | State: NJ
Project #: NP000603.0008.00001
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

PHC method OAM-025 | HOLD 2-methylnaphthalene and naphthalene method 8270 HOLD

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	PHC method OAM-025	HOLD 2-methylnaphthalene and naphthalene method 8270 HOLD	LAB USE ONLY
-1	FHD (2.4-2.9)		5/27/10	1430	RM	S	2									X	X	HC30

Turnaround Time (Business days)

- [ ] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [x] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

OQA FAST TRACK

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/28/10 1414	1	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ]

On Ice [x] Cooler Temp. 4.0 TMJ

4.1 4

JA47682: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA47682 Client: Immediate Client Services Action Required: No

Date / Time Received: 5/28/2010 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

4.1

4

JA47682: Chain of Custody
Page 2 of 2

ARCADIS
Infrastructure, environment, buildings

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10 Friends Lane
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Pennsylvania 18940
Tel 267.685.1800
Fax 267.685.1801
www.arcadis-us.com

Environment

Ms. Linda S. Range
New Jersey Dept. of Environmental Protection
Southern Bureau of Field Operations
P.O. Box 407
Trenton, NJ 08625-0407

Subject:
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey, Incident No. 10-0416-164911

Date:
October 28, 2010

Contact:
Brad Pierce

Phone:
610-337-7601

Email:
Bradley.Pierce@arcadis-us.com

Our ref:
NP000603.0009

Dear Ms. Linda Range:

ARCADIS, on behalf of PSEG Nuclear, LLC (PSEG), is submitting a revised Figure 7 – Proposed Monitoring Well Locations, attached, from the July 12, 2010 Salem Unit 2 Remedial Investigation Work Plan. In response to our meeting on August 25, 2010 the attached figure was updated to incorporate comments that were received during the meeting. Monitoring well CC is being installed down-gradient of the former excavation number 2. Monitoring well CD is being installed at a location that total petroleum hydrocarbon (TPH) concentrations exceeded the New Jersey Soil Remediation Standards. Monitoring well CE is being installed along the diesel fuel line, north of the former excavation number 2. Monitoring well CF is being installed near a temporary observation point (36). These wells are proposed to be installed in accordance with NJAC 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001.

Monitoring wells will be screened across the first water-bearing unit encountered at a depth of approximately 4 feet bgs. The monitoring wells will be constructed of 4-inch-diameter flush-joint threaded PVC risers with an 7-foot-length of 0.02-inch PVC well screen. A washed silica sand pack will be placed between the well string and the formation to the top of the well screen followed by a 6-inch layer of fine sand (#00) as a seal. A neat cement grout will be installed in the remaining annular space to lock the well in place. Each monitoring well will be completed as a flush-mounted well with a protective steel casing and locking well cap

Upon completion, each monitoring well will be properly developed to remove fine-grained materials that may have settled in and around the monitoring well during installation, and to ensure that the monitoring well is hydraulically connected to the

formation. The monitoring wells will be developed via the block and surge and overpumping method. Well development will continue until the discharge is free of turbidity.

All monitoring wells will be surveyed by a New Jersey licensed surveyor and Form B provided. Top of casing elevation will be established to within 0.01-foot relative to the 1988 North American Vertical Datum (NAVD 88). The location of each monitoring well will be established to within 0.1-foot relative to the 1983 North American Horizontal Datum (NAD 83).

Sincerely,

Bradley Pierce

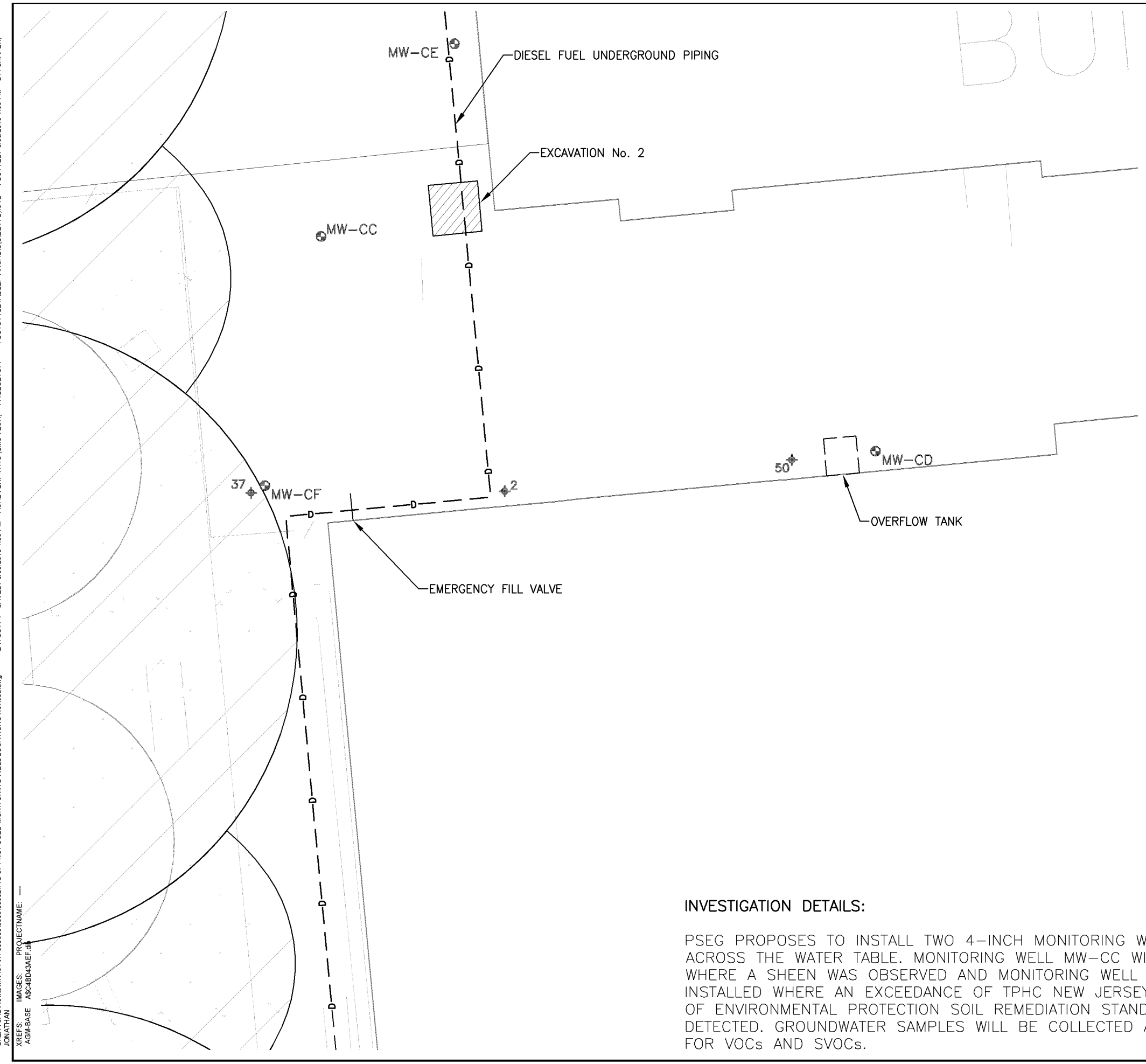
Bradley D. Pierce
Project Manager

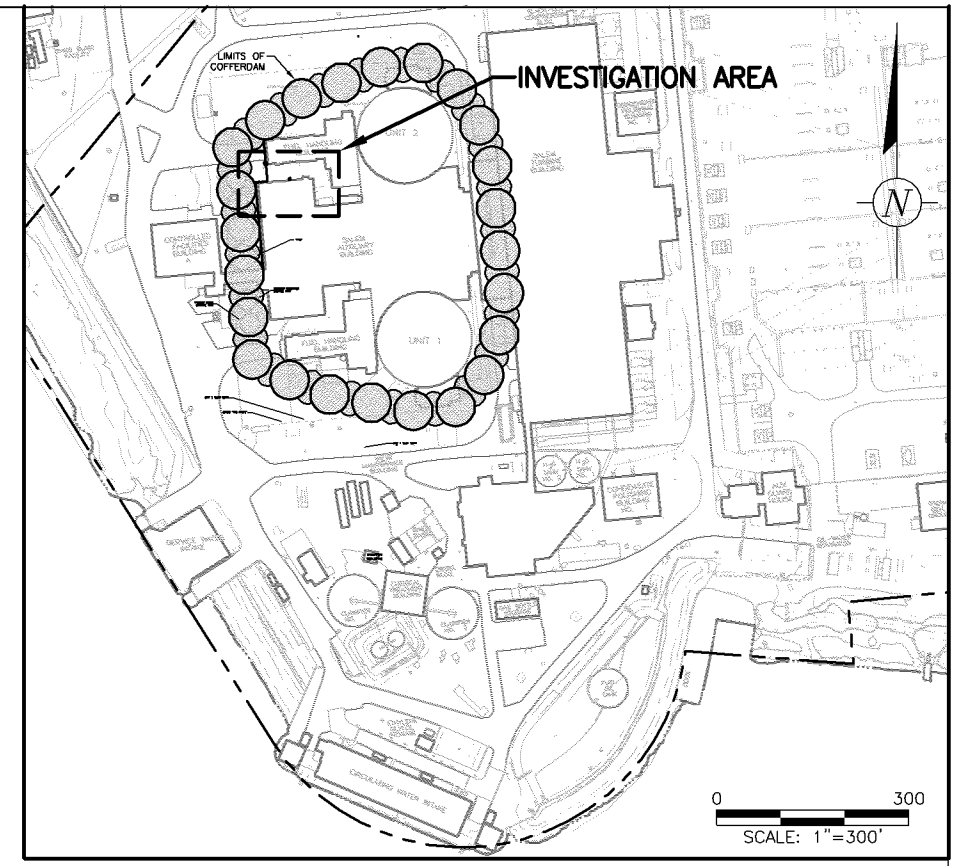
ARCADIS U.S., Inc.

Copies:

SII-SSA-0014-004229

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENV\CADD\Newtown\ACTIVE\P0006030090000002\FIG\07 PROPOSED MONITORING WELL LOCATIONS Revised.dwg LAYOUT: 7 SAVED: 8/30/2010 1:36 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 8/30/2010 1:39 PM BY: SHAFER, JONATHAN
XREFS: AGM-BASE IMAGES: ASC4BD43AEF.dib PROJECTNAME: —





KEYMAP
SCALE: 1"=300'

LEGEND:

- MW–CC — PROPOSED MONITORING WELL LOCATION
- 13 — TEMPORARY OBSERVATION POINT
- PROPERTY BOUNDARY
- –ST– STORM SEWER PIPING
- CATCH BASIN
- Ⓜ MANHOLE (STORM SEWER)
- SHEET PILE
- TPHC – Total Petroleum Hydrocarbons

0 10
SCALE: 1"=10'

INVESTIGATION DETAILS:

PSEG PROPOSES TO INSTALL TWO 4–INCH MONITORING WELLS SCREENED ACROSS THE WATER TABLE. MONITORING WELL MW–CC WILL BE INSTALLED WHERE A SHEEN WAS OBSERVED AND MONITORING WELL MW–CD WILL BE INSTALLED WHERE AN EXCEEDANCE OF TPHC NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION SOIL REMEDIATION STANDARDS WAS DETECTED. GROUNDWATER SAMPLES WILL BE COLLECTED AND ANALYZED FOR VOCs AND SVOCs.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

PROPOSED MONITORING WELL LOCATIONS

ARCADIS

FIGURE
7

ARCADIS
Infrastructure, environment, buildings

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Environment

Ms. Linda S. Range
New Jersey Dept. of Environmental Protection
Site Remediation Program
401 East State Street
Trenton, NJ 08625

Subject:
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey, Incident No. 10-0416-164911, PSEG Correspondence # LR-E11-0078

Date:
May 16, 2011

ARCADIS, on behalf of PSEG Nuclear, LLC (PSEG), is submitting a copy of the Remedial Investigation Report (RIR) for the above-referenced site. The RIR has been completed in accordance with the Remedial Investigation Work Plan that was submitted to the NJDEP on July 12, 2010.

If you have any questions, please do not hesitate to contact me at 484.688.0397.

Contact:
Brad Pierce

Phone:
484-688-0397

Email:
Bradley.Pierce@arcadis-us.com

Sincerely,

Our ref:
NP000603.0009

Bradley D. Pierce
Project Manager

ARCADIS U.S., Inc.

Copies:
Ms. Helen Gregory (PSEG)

Imagine the result

g:\aproject\pse&g\np000603 - salem - diesel\np000603.0009\rir\pseg cover letter rir.doc

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Imagine the result

PSEG Nuclear, LLC

Remedial Investigation Report

Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 10-0416-164911

May 2011

ARCADIS

Patrick W. Rohrbough, PG
Staff Geologist

Jonathan Shafer
Staff Scientist

Bradley D. Pierce
Project Manager

Remedial Investigation Report

Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 10-0416-164911

Prepared for:
PSEG Nuclear, LLC

Prepared by:
ARCADIS U.S., Inc.
640 Freedom Business Center
Suite 310
King of Prussia
Pennsylvania 19406
Tel 610.768.5813
Fax 610.768.5817

Our Ref.:
NP000603.0009

Date:
May 2011

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D Well Construction and Soil Boring Logs

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1. Introduction

ARCADIS, on behalf of PSEG Nuclear, LLC (PSEG), has prepared this Remedial Investigation Report (RIR) for the investigation of a potential diesel-fuel discharge that occurred at the PSEG Salem Generating Station Unit 2 (the Station) located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. **Figure 1** depicts the Station location. **Figure 2** provides the Station Layout and the location of the Unit 2 Diesel Fuel Oil system components. This report has been prepared in accordance with Chapter 26E - Technical Requirements for Site Remediation (Technical Requirements).

1.1 Project Background

On April 16, 2010, while completing groundwater investigation activities associated with a separate and independent investigation, PSEG personnel observed suspected diesel-related odors and staining in soil and groundwater during the opening of a temporary utility clearance, identified as TW-2 on **Figure 2**. At this time, PSEG notified the New Jersey Department of Environmental Protection (NJDEP) through its spill hotline (incident No. 10-0416-164911).

The temporary utility clearance consisted of a Schedule 40 polyvinyl chloride (PVC) sleeve installed to an approximate depth of 10-feet below ground surface (bgs) using vacuum excavation equipment. The utility clearance was installed to allow the safe advancement of direct-push borings for the collection of groundwater samples. During the advancement of the vacuum excavation, diesel fuel odors were noted and suspected petroleum hydrocarbon sheen was observed on the water once the water table was encountered. To facilitate the collection of a groundwater sample and to evaluate the presence of separate-phase hydrocarbon (SPH) at the location of TW-2, and subsequently at the locations of TW-37 and TW-50 (see **Figure 2**), PVC well screen was installed in lieu of the solid PVC sleeve. The three locations were then identified as temporary observation point TW-2, TW-37 and TW-50. Over the next several days, the temporary observation points were evaluated for the presence of SPH and groundwater samples were collected for laboratory analysis. The details and results of these initial groundwater investigation activities are provided in Section 5.

Investigations into the source of the suspected diesel fuel revealed the presence of the following components of the Salem Unit 2 Diesel Fuel Oil System within the vicinity of TW-2:

1. Diesel fuel above ground storage tanks (AST);

2. Diesel fuel underground piping;

3. An emergency fill valve; and;

4. An overflow tank.

The location of these system components are identified on **Figure 2**. PSEG performed both a pressure test and a guided wave test on the underground piping and the results of the tests did not identify any integrity issues associated with the piping. Details regarding the piping integrity testing are provided in Section 5. In addition, initial soil and groundwater investigation activities were completed in association with the emergency fill valve and the overflow tank, at the three temporary observation points (TW-2, TW-37, and TW-50), and in an area that was excavated to expose the underground piping during the guided wave testing. The details and results of these investigation activities were provided in the July 12, 2010 Site Investigation Report (SIR)/ Remedial Investigation Workplan (RIWP) and are summarized in Section 5. Based on the results of these initial investigation activities, additional soil and groundwater investigation activities were conducted in accordance with SIR/RIWP as amended in a letter dated October 28, 2010 and verbally agreed upon in meeting with NJDEP on August 25, 2010. Details regarding the remedial investigation activities are provided in Section 6.

1.2 Project Personnel

The primary personnel involved in the project are listed in **Table 1**. These personnel include the PSEG Project Manager, the NJDEP Case Manager, ARCADIS team members, and the project analytical laboratory (Accutest Laboratories). The PSEG Project Manager is responsible for the overall project coordination and oversight and approval of PSEG and contractor work activities.

ARCADIS team members are responsible for performing technical activities in accordance with the approved RIWP, supervising field subcontractors, and preparing technical reports. The ARCADIS Project Manager is responsible for committing the necessary resources to this project, day-to-day operations, adherence to schedule, and work quality. The ARCADIS Field Team Leader is responsible for the field implementation of the Remedial Investigation (RI) scope of work, and ensuring that the data collection followed the procedures outlined in the project Quality Assurance

Project Plan (QAPP) provided in the RIWP for Salem Unit 1 dated January 2005 (Appendix A). The January 2005 RIWP proposed the details of investigation activities associated with a similar diesel release at Salem Unit 1.

Accutest Laboratories (Accutest) (certification No. 12129) was utilized for the project and is a New Jersey-certified laboratory for performing routine environmental and chemical analyses. The laboratory is responsible for providing analytical services, including laboratory quality assurance and quality control (QA/QC). Additionally, Atlantic Product Services, Inc. (Atlantic) was utilized for specialty laboratory services including dye and fingerprint analysis.

1.3 Report Organization

This RIR contains nine sections, including this introduction:

- **Section 2**, provides an overview of the operating history of the Station and the regulation of its operations;
- **Section 3** provides a detailed description of the Station including topography, surface water features, climate, soil, geology and hydrogeology, and a detailed description of previous investigation activities;
- **Section 4** provides details regarding the facility construction and the influence on local geology and hydrogeology;
- **Section 5** provides the details and results of initial investigation activities designed to identify potentials sources of the suspected diesel contamination and to characterize soil and groundwater quality;
- **Section 6** presents results of investigation activities designed to delineate the extent of soil and groundwater contamination;
- **Section 7** presents information regarding the submittal of the receptor evaluation;
- **Section 8** presents details regarding the project schedule and required reporting; and,
- **Section 9** provides reports and publications referenced during the preparation of the RIR.

2. Station History

The following sections provide relevant site information regarding the facility's operating history and a review of applicable regulations relating to operations at the Station.

2.1 Operating History

PSEG Nuclear LLC operates and is part owner of the Salem Generating Station located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. PSEG Nuclear LLC (57.41%) and Exelon (42.59%) jointly own the Salem Generating Station. The Salem Generating Station is situated adjacent to the Hope Creek Generating Station, also located on Artificial Island. Both the Salem and Hope Creek Generating Stations (the Stations) are located on the eastern bank of the Delaware River. The Salem Generating Station encompasses an approximate 26-acre portion of Artificial Island.

The Salem Generating Station is composed of two nuclear generating units (Units 1 and 2) and one distillate oil fueled combustion turbine unit (Unit 3). Commercial operations of Units 1 and 2 commenced in 1976 and 1981, respectively. The combustion turbine unit commenced operations in 1972. The nuclear generating units operate as base load units and the combustion turbine unit operates as a peaking unit. The Salem Generating Station has a combined generating capacity of approximately 2,400 MW. Over its operational life, the Salem Generating Station has experienced no significant changes in its operation.

2.2 Regulatory Review

Regulatory oversight for the Salem Generating Station, and other nuclear generating stations, is provided by both federal and state agencies. These agencies ensure that the stations are designed, constructed, licensed and operate in a matter that maximizes the safe containment and management of radioactive materials. These agencies also ensure that sufficient funding mechanisms have been established, are adequately funded, and will be available to decommission the nuclear generating stations at the end of their life cycle.

On the federal and state levels, the United States Nuclear Regulatory Commission (USNRC) and the New Jersey Department of Environmental Protection Bureau of Nuclear Engineering (NJDEP-BNE) conduct licensing and oversight of the Station.

Oversight by the NJDEP-BNE and USNRC includes periodic inspections and conducting environmental radiological monitoring.

3. Station Description

The following sections provide information regarding the setting of the Station, including land use, the environmental setting, precipitation and drainage, local geology and local hydrogeology.

3.1 Land Use

PSEG owns and/or controls an approximately 740-acre area of Artificial Island that is situated adjacent to and surrounds the Salem and Hope Creek Generating Stations. This area contains administrative and support facilities used by the Stations, the Hope Creek Switch Yard, the Salem Switch Yard, and undeveloped vacant land. With the exception of the Salem Generating Stations (Units 1 through 3) and the Salem Switchyard, the remaining acreage is considered to be the Hope Creek Generating Station.

The zoning classification for the Station is industrial. The land adjacent to the Station is zoned for industrial and residential or agricultural use.

3.2 Environmental Setting

The Station is located on a portion of Artificial Island that borders the Delaware Estuary. The Estuary, in the location of the Station, is a tidal, brackish river, located in an area designated as Zone 5 by the Delaware River Basin Commission.

The United States Army Corps of Engineers, beginning in the early twentieth century, created Artificial Island by depositing hydraulic dredging spoils within a diked area established around a natural sand bar that projected into the Delaware River. Prior to construction of the Station, the property was vacant, undeveloped, low-lying land.

3.3 Topography and Station Drainage

The topography at the Station is relatively flat with limited local relief. Topographic contours for the Station are included on **Figure 2**. Stormwater is managed in accordance with the Station New Jersey Pollution Discharge Elimination System (NJPDES) permit and Stormwater Pollution Prevention Plan. Stormwater is collected in

storm drains and routed to the Delaware River for discharge. Stormwater from the major petroleum storage handling areas is routed to the oil/water separator (OWS) prior to discharge.

3.4 Climate and Precipitation

Salem County is located in southwestern New Jersey. The county's climate is considered to be humid and temperate, as the climate in this county is readily influenced by its proximity to the Delaware Bay. Coastal storms are not uncommon in this region and can produce high winds and heavy rainfall, which can cause wind damage and flooding in low-lying areas.

Wind direction in this region is dependent upon the season; during the summer, winds are typically from the southwest while during the winter winds are commonly from the northwest. Temperatures vary by season and the maximum expected high temperature for a given year is 96 degrees Fahrenheit, while the minimum expected yearly low temperature is minus 2 degrees Fahrenheit. The average annual precipitation total is 39.9 inches.

3.5 Regional Geology

The Station is located in the Atlantic Coastal Plain Physiographic Province. This area is characterized by relatively flat to gently undulating terrain, underlain by unconsolidated sediments that increase in thickness to the southeast. These sediments range in age from Holocene to Cretaceous (0 to 146 million years old), are primarily comprised of clay, silt, sand, and gravel, and are generally classified as continental, coastal, or marine in nature. Published geologic mapping indicates that the basement rock beneath these sediments (in the area of the Station) is metamorphic schist of the Wissahickon Formation, which is Pre-Cambrian in age (570 to 900 million years old).

The unconsolidated overburden at the Stations consists of approximately 25 to 40 feet of dredge spoils, engineered fill material (cofferdam), tidal marsh deposits and riverbed deposits. The engineered fill, composed mainly of silt, silty clay, sand, and gravel, replaced the dredge spoils within the cofferdam during the construction of the Station. Due to the composition and nature of the engineered fill, the hydraulic conductivity of this material is expected to be very low, thus limiting the extent and rate of groundwater movement. Below the engineered fill there is an approximate five-foot layer of tidal marsh deposits consisting of silty peat and organic silt and meadow mat. The tidal marsh deposits are semi-confining. Beneath the tidal marsh deposits are

approximately ten feet of discontinuous Quaternary Age riverbed deposits consisting of sand and gravel. The engineered fill, the tidal marsh deposits and the riverbed deposits, combine to form the water table aquifer (see Section 3.6). Beneath the surface water aquifer, in order of increasing depth, are the following geologic formations:

Clay, Confining Unit – Beneath the shallow, riverbed and other deposits is a clay confining unit that separates the shallow unit from the deeper Vincentown Formation. Conflicting geologic reports suggest that the clay confining unit is either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits (USGS 1979 and 1999). Previous investigations conducted at the facility indicate that the clay, confining unit is laterally extensive beneath the Station.

Vincentown Formation – The Vincentown Formation occurs from a depth of approximately 55 feet bgs to a depth of 135 feet bgs and consists of a competent, greenish-gray, fine to medium sand with some silt, shell fragments, feldspar and glauconite.

Hornerstown Formation – The Hornerstown Formation is a highly glauconitic, clayey, dark green sand that contains small percentages of quartz grains and apatite pellets. The Hornerstown Formation unconformably overlies the Navesink Formation and is unconformably overlain by the Vincentown Formation. The Hornerstown Formation occurs from approximately 135 to 145 feet bgs.

Navesink Formation – The Navesink Formation is characteristically a glauconitic sand with varying amounts of silt and clay. It is brown or dark green to blue-black and has a shell bed at its base. The upper part of the formation is less glauconitic, more clayey, more micaceous, and lighter in color. The Navesink Formation conformably overlies the Mount Laurel Sand (USGS 1969). The contact with the overlying Hornerstown Formation is gradational. The Navesink Formation is encountered from approximately 145 to 170 feet bgs.

Mount Laurel-Wenonah Formation – The Mount Laurel-Wenonah Formation consists of a clayey, medium-grained sand with some gravel, feldspar and glauconite. In the vicinity of the Station, the Mount Laurel-Wenonah Formation is approximately 100 feet thick and occurs from 170 to 270 feet bgs.

Beneath the Mount Laurel-Wenonah Formation, more than 1,000 feet of Upper Cretaceous sediments overlie the crystalline bedrock. The Upper Cretaceous

sediments include in descending order: the Marshalltown Formation (gray, fine sand); the Englishtown Formation (yellow-brown, fine sand); the Woodbury Clay (dark gray, stiff, silty clay); the Merchantville Formation (dark green clay); the Magothy Formation (coarse to fine silt with little fine sand); and the Raritan and Potomac Formations (interbedded sand, gravelly sand and clay).

3.6 Regional Hydrogeology

There are four primary water bearing formations (aquifers) underlying the Station: 1) the shallow, water table aquifer; 2) the Vincentown Formation; 3) the Mount Laurel-Wenonah Formations; and, 4) the Potomac-Raritan-Magothy Formations. The shallow, water-bearing unit, which consists of the dredge spoils, engineered fill, tidal marsh deposits and the discontinuous Quaternary riverbed deposits, occurs between approximately 10 to 40 feet bgs. In general, the dredge spoils, engineered fill and tidal marsh deposits are characterized by low permeability. Occasional lenses of sand within the dredge spoils may contain perched water within a few feet of the ground surface. The groundwater in the water table aquifer is generally brackish, with flow to the southeast and a gradient of approximately 0.007 feet/feet.

A clay confining unit, identified as either the Miocene Kirkwood Formation or the Pleistocene Van Sciver Lake Bed deposits, separates the shallow water-bearing unit from the deeper Vincentown Formation. As stated previously, investigations conducted at the facility indicate that the clay confining unit is laterally extensive beneath the Station.

The Vincentown Formation, which occurs from approximately 55 to 135 feet bgs, is a semi-confined to confined aquifer under artesian conditions. Groundwater in the Vincentown Formation generally flows from north to south with a gradient of approximately 0.003 feet/feet. Regionally, the Vincentown Formation is a water-producing aquifer, which supplies potable water to domestic wells in Salem County. Groundwater in the aquifer is moderately hard with high iron content. Saltwater-intrusions occur near the Delaware River, where water quality is brackish and non-potable.

The Hornerstown and Navesink confining units separate the Vincentown Formation from the Mount Laurel-Wenonah Formations. The Mount Laurel-Wenonah Formations occur from approximately 135 to 170 feet bgs. The Station has two potable and fire-water supply wells screened in this formation.

The deepest of the water bearing formations is the Potomac-Raritan-Magothy Formation. In Salem County, the Potomac-Raritan-Magothy Formation occurs at depths in excess of 500 feet bgs. This is the primary water producing aquifer for New Jersey. Four potable and fire-water supply wells at the Station are screened in the Potomac-Raritan-Magothy Formation at depths ranging from 800 to 1,100 feet bgs. The Potomac-Raritan-Magothy Formation is bounded by the Merchantville Formation above and below by the Wissahickon Schist basement rock. The crystalline basement rock of the Wissahickon Schist is not considered a productive aquifer and only locally transmits water from secondary porosity (i.e., fractures and faults).

4. Facility Construction and Local Geology and Hydrogeology

The construction of the Station has caused significant changes to the local geology and hydrogeology. Within the footprint of the cofferdam surrounding Units 1 and 2 (see **Figure 2**) the majority of original Artificial Island materials were removed to a depth of 70 feet bgs. The following sections, which contain information presented in a Remedial Investigation Report (RIR) previously prepared for a separate investigation conducted at the Station (ARCADIS 2004), describe the conditions at Artificial Island prior to the construction of the Station and detail how the construction of the Station has altered the local geology.

4.1 Pre-Facility Construction

The Station is located on the southern tip of what was once a natural sand bar projecting into the Delaware River. The area between the sand bar and the mainland had been used as a dredge spoil deposit area. In 1899, a timber sheet pile wall was installed around the perimeter of the sand bar. Over the next 50 or so years the area was used as a spoil deposit area for material collected during the dredging of the Delaware River. Riprap was added to the perimeter when the timbers began to degrade. The area landward of Artificial Island has remained a tidal marsh.

4.2 Facility Construction

The construction of the Station has resulted in significant changes to the local geology. It was necessary to remove and rework much of the soil in the area of the Station in order to facilitate construction. For the purposes of this report, the description of the facility construction is limited to the area within the cofferdam; however, it should be noted that the local geology beyond the limits of the cofferdam was also significantly modified. The extent of the cofferdam is shown on **Figure 2**.

The cellular cofferdam, which encircled the excavation for all the Class I structures (e.g., containment, fuel handling, and auxiliary buildings), was constructed of interlocking sheet piling driven from an approximate depth of 23 feet below existing grade (approximately 77 feet plant datum [PD] or -12.92 feet above mean sea level [amsl NAVD 1988]). The cofferdam consists of 24 circular cells, approximately 60.5 feet in diameter with connecting arcs, that were advanced from this depth to approximately 10 feet into the Vincentown Formation to an elevation of 17 feet PD (-72.92 feet amsl). The cofferdam sections are of two different heights, 50 feet and 60 feet. The elevation of the top of the cofferdam is 77 feet PD (-12.92 feet amsl) on the north, south and west sides. The elevation of the eastern side is 67 feet PD (-22.92 feet amsl) providing access and a foundation for the return circulating water pipes and associated thrust block.

The inside area of the cofferdam sections were excavated to elevation 27 feet PD (-62.92 feet amsl). A vertical steel wall was added inside each individual cofferdam section to divide the sections approximately in half. The inner half of the individual cofferdam sections, or the section facing the building foundations, was then filled to the top with lean concrete. The area contained by the entire cofferdam structure was then excavated to the Vincentown Formation for placement of a lean concrete mat that served as the foundation for the construction of the structures within the cofferdam. During this stage of the excavation, qualified personnel visually inspected the bottom of the excavation to verify that the excavation had reached the top of the Vincentown Formation prior to placing any lean concrete.

Prior to the completion of the excavation, at approximately elevation 45 feet PD (-44.92 feet amsl), 15 exploratory borings were drilled through the remaining Kirkwood Formation and into the underlying Vincentown to verify the depth to the formation. These additional borings showed no measurable differences from the study borings. Based on a review of available documents, the top of the Vincentown Formation in the area of the cofferdam ranges between 27 and 30 feet PD (-62.92 to –65.92 feet amsl).

When the surface of the Vincentown Formation was reached, the area was cleared of loose soil and lean concrete was poured directly onto the exposed Vincentown Formation. Because the latter stages of the excavation were performed in freezing temperatures, a layer of material was left in place to insulate the Vincentown Formation until the concrete was ready to pour. In cases where the top of the Vincentown Formation did freeze prior to pouring of the concrete, the frozen soils were excavated or thawed prior to starting the pour. The station construction drawings indicate that the base of the first lean concrete pour was at 30 feet PD (-59.92).

The cofferdam serves as a basin in which the Class I structures were constructed. Prior to construction of the primary structures, a lean concrete mat ranging in thickness from 5 to 50 feet was placed on top of the Vincentown Formation for support of the structures. Following placement of the lean concrete, the Auxiliary Building, Fuel Handling Buildings and Reactor Containment Buildings were constructed. The remainder of the excavation within the cofferdam was then backfilled with structural fill meeting the design specifications of the Station.

4.3 Local Geology and Hydrogeology

The soils removed from within the cofferdam were not used to backfill the completed structure because the hydraulically placed fill and other riverbed deposits underlying Artificial Island did not meet the building design specifications for the Station. Therefore, it was necessary to import construction or structural fill to build the facility. The structural fill was placed between and around the Auxiliary Building, Fuel Handling Buildings, Units 1 and 2, portions of the cofferdam, above the return circulating water pipes, and from the top of the clay, confining-unit to the land surface in the portions of the area between the cofferdam and the circulating water discharge pipes.

The structural fill used at the station was obtained from a number of sources in New Jersey and Delaware. One fill source used in the area of this investigation was the Hinchner Pit. While the location of the borrow source was not identified, the material was described as yellowish-brown fine to medium sand with a trace of silt and clay.

Details of groundwater investigation activities historically completed at the facility indicate that groundwater elevations in the shallow, water-bearing unit within the limits of the cofferdam are generally higher than those outside the limits of the cofferdam. This is expected considering permeability differences that exist between the structural fill within the limits of the cofferdam and the hydraulic fill beyond the limits of the cofferdam, which result in a groundwater mound. Due to the mound, groundwater flows radially outward from the cofferdam. The observed mounding effect dissipates quickly. A groundwater elevation contour map for the shallow, water-bearing unit is presented on **Figure 3**. Beyond the limits of the cofferdam, groundwater flow is generally from the center of the island (northeast of the Salem Generating Station) towards the Delaware River.

5. Initial Investigation Activities

The following sections provide details regarding initial investigation activities completed at the Station and submitted with the SIR/RIWP. These investigation activities included the following:

- Unit 2 Diesel Fuel System component inventory;
- SPH evaluation;
- Underground piping evaluation;
- Soil Sampling; and
- Groundwater Sampling.

Prior to initiating investigation activities, PSEG inventoried the Salem Unit 2 Diesel Fuel System components in the vicinity of utility clearance location TW-2 to identify potential sources of the suspected release. Temporary Observation Points TW-2, TW-37, and TW-50 were gauged using an oil/water interface probe to determine if SPH had accumulated. Subsequently, each of the diesel system components identified during the inventory were evaluated as potential sources of the suspected diesel observed at TW-2 through pressure and guided wave testing (underground piping) and soil sampling (emergency fill valve and overflow tank). To confirm the observed sheen was diesel fuel, a dye and fingerprint analysis was conducted. Additionally, groundwater samples were collected from Temporary Observation Points TW-2, TW-37, and TW-50 to evaluate for the presence of dissolved phase constituents. The following sections include details and results of these initial investigation activities.

5.1 Separate-Phase Product Evaluation

Groundwater in the vicinity of utility clearance TW-2 was observed to be approximately 3-feet below ground surface (bgs). To identify if SPH existed on top of the water table, a 4-inch slotted PVC casing was installed into the temporary utility clearance TW-2 which extended to approximately 10 feet bgs. Two additional locations (TW-37 and TW-50) adjacent to TW-2 were also fitted with slotted PVC casing. The locations were then identified as temporary observation points TW-2, TW-37 and TW-50 (**Figure 2**). All three points were periodically monitored for the presence of SPH with an oil-water interface probe. To identify if SPH was present between monitoring periods (and to

capture any mobile SPH), a hydrophobic absorbent sock was placed in temporary observation point TW-2. During monitoring events, the absorbent sock was inspected for the accumulation of SPH.

On May 27, 2010, while excavating soil west of the Fuel Handling Building (FHB) in preparation for the pressure and guided wave test (see Section 5.4), a SPH sheen was observed on the groundwater within the excavation. A sample of the groundwater that had accumulated within the excavation with an apparent sheen was collected for diesel fuel dye testing and fingerprint analysis.

During the course of initial investigation activities, measurable SPH was not observed within the temporary observation points, nor did the absorbent sock accumulate any observable SPH. Additionally, monitoring of excavation No. 2 confirmed no additional SPH accumulated in the excavation. Analytical results from the dye analysis indicated that no dye was detected in the sheen sample. Results from fingerprint analysis confirmed the material most closely resembles weathered diesel fuel. The laboratory analytical data deliverable was provided as an appendix in the RIWP (Appendix A).

5.2 Salem Unit 2 Diesel Fuel System Inventory

A review of Salem Unit 2 Diesel System components identified four potential sources of the suspected diesel release in the vicinity of temporary utility location TW-2. **Figure 2** identifies these components which include: diesel fuel ASTs, an emergency fill valve, an above ground overflow tank and underground diesel supply piping.

The Salem Unit 2 Emergency Diesel Generator Fuel System is supplied by two 30,000 gallon ASTs located within the Auxiliary Building. The associated emergency fill valve and overflow tank are both above ground features located along the exterior wall of the Auxiliary Building. The emergency fill valve is used to fill the diesel fuel 30,000 gallon ASTs in the event the standard fill supply through the underground piping is not available. The overflow tank is an approximately 55 gallon drum and is utilized as containment for diesel fuel if the Salem Unit 2 Diesel Fuel ASTs are overfilled. The underground diesel fuel oil supply pipe in the area inspected is an approximately 4-inch diameter carbon steel pipe which supplies fuel from the Salem Unit 20,000 barrel Fuel Oil storage tank.

Each of the Salem Unit 2 Diesel Fuel System components was investigated to identify if it was potentially the source of the release. Visual observation of the Salem Unit 2 30,000 gallon Diesel Fuel ASTs confirmed the tanks were not leaking and the

secondary containment contained no apparent staining, eliminating the ASTs as potential sources. The remaining part of this section describes the investigative techniques used to characterize the remaining parts of the Salem Unit 2 Diesel Fuel System and the extent of the impacts.

5.3 Pressure Testing and Guided Wave Testing

The underground piping identified in **Figure 2** supplies diesel fuel from the Salem 20,000 barrel Fuel Oil storage tank to various loads including the Salem Units 1 and 2 Diesel Fuel 30,000 gallon ASTs, located within the Auxiliary Building, the service water furnaces and the circulating water boiler. PSEG performed a pressure test and guided wave test, to investigate the integrity of the underground piping in the vicinity of the Auxiliary Building and Unit 2 Fuel Handling Building.

Pressure testing is conducted by isolating a section of pipe and pressurizing the section. If the pipe fails to hold a positive pressure, then the pipe is known to contain a leak. This test is utilized to confirm if larger integrity concerns (i.e. a break in the pipe) are present. Guided wave testing uses low frequency ultrasound waves to identify metal loss from the pipe walls. Guided wave testing is utilized to identify smaller integrity concerns (i.e. pin holes or fractures).

In late May and early June 2010, PSEG conducted pressure testing and guided wave testing of the underground diesel system supply pipe, respectively. Results of both tests confirmed the integrity of the pipe. As such, no additional investigation of the underground diesel fuel supply pipe was proposed.

5.4 Soil Sampling

On May 4, 2010, ARCADIS advanced five soil borings, **Appendix D**, to investigate soil adjacent to the emergency fill valve (EFV-W and EFV-N) and overflow tank (OFT-W, OFT-N and OFT-E). ARCADIS collected discrete interval soil samples from 0.0 to 0.5 feet bgs and 2.0 to 2.5 feet bgs to characterize soil in the vicinity of these potential source features. To accommodate site specific health and safety practices, a vacuum excavator was used to advance the borings prior to collecting the sample. Samples were collected using a decontaminated hand trowel and transferred directly to laboratory supplied glassware. In addition, ARCADIS collected a soil sample for total petroleum hydrocarbons (TPHC) analysis and 2-methylnaphthalene and naphthalene contingent analyses from immediately above the water table in excavation No. 2.

In accordance with analytical requirements for diesel fuel contained within Table 2-1 of the Technical Requirements for Site Remediation (TRSR) and the *Protocol for Addressing Extractable Hydrocarbons* (NJDEP 2010), soil samples were analyzed for TPHC via method NJDEP OQA-QAM-025. In addition, ARCADIS collected soil samples from each of the discrete intervals for contingency semi-volatile organic compound (SVOC) analysis (naphthalene and 2-methylnaphthalene if TPHC analytical results exceeded 1,000 mg/kg).

Sample collection, packaging, and shipment were conducted in accordance with the NJDEP Field Sampling and Procedures Manual dated August 2005. Samples were cooled to approximately 4°C, and submitted under chain-of-custody protocols to Accutest Laboratories, Inc., a New Jersey certified laboratory for analysis on an expedited (72-hour) turn-around-time.

Analytical data presented in **Table 2** indicate one (OFT-E[0-0.5]) out of 10 samples exceeded the NJDEP soil remediation standard (SRS) for TPHC of 5,100 milligrams per kilogram (mg/kg), with a concentration of 5,510 mg/kg. Five results exceeded the contingency threshold screening criterion of 1,000 mg/kg. As such, contingency sample analyses was conducted on the highest two TPHC concentration samples (OFT-E[0-0.5] and OFT-N[0-0.5]). **Table 2** presents the analytical results for 2-methylnaphthalene and naphthalene, which did not indicate concentrations above the method detection limits.

Figure 4 illustrates the sample locations and analytical data collected during the initial soil investigation. TPHC concentrations exceeded the NJDEP SRS in sample OFT-E at a depth of 0.0 - 0.5 feet bgs. This exceedence was delineated vertically by a sample collected from the same boring at 2.0 – 2.5 feet bgs. This exceedence was delineated horizontally by the building wall to the south, and north and west by samples OFT-N and OFT-W, respectively. These samples were collected at the same depth as the exceedence. Interpretation of the analytical results (decreasing concentrations with depth) confirms shallow impacts associated with a surface release. As such, PSEG proposed additional sample collection to horizontally delineate TPHC impacts in soil to the east and northeast in the SIR/RIWP.

5.5 Groundwater Sampling

On May 5, 2010, ARCADIS collected grab groundwater samples from temporary observation points TW-2, TW-37 and TW-50 to characterize the shallow water quality. Groundwater samples to be analyzed for TPHC were collected using laboratory-

decontaminated disposable Teflon® bailers. ARCADIS transferred the samples directly from the bailers to decontaminated sample bottles supplied by Accutest.

The analytical results for TPHC in groundwater samples collected from the temporary observation points (TW-2, TW-37 and TW-50) screened across the shallow water table are summarized in **Table 3**. TPHC was detected in samples at concentrations ranging from 1.84 milligrams per liter (mg/L) in TW-50 to 372 mg/L in TW-2. Currently there is no groundwater quality criterion (GWQC) available for TPHC. However, these concentrations signify limited impacts.

To further evaluate groundwater quality within the source area, PSEG proposed the installation of two monitoring wells and subsequent collection of groundwater samples for analysis of volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). One monitoring well (MW-CD) was proposed adjacent to soil boring OFT-E and the other (MW-CC) in the vicinity of excavation No. 2. On August 25, 2010, ARCADIS, on behalf of PSEG, met with representatives of the NJDEP to discuss the proposed RIWP. At the request of the NJDEP, two addtional monitoring wells were added to the work plan to further delineate groundwater impacts; one well (MW-CE) was proposed along the diesel fuel line north of the former excavation No. 2 and one well (MW-CF) was proposed proximal to temporary observation point TW-37. Documentation of the August 2010 NJDEP meeting is provided in **Appendix A**.

6. Remedial Investigation Results

The following objectives of the remedial investigation were proposed in the July 2010 RIWP:

- Characterize the horizontal extent of diesel-related constituents in soil;
- Evaluate for the presence of SPH (as defined in *Guidance for LNAPL Free Product Initial Recovery and Interim Remedial Measures* [NJDEP 2010]) and delineate its extent, if necessary;
- Characterize dissolved-phase diesel-related constituents in shallow groundwater within the release area; and
- Determine the need for further action.

The following sections provide details regarding the remdial investigation activities completed at the Station. These investigation activities, designed to achieve the primary objectives listed above, include the following:

- Advancement of two soil boring to north and east of OFT-E, and;
- Install four monitoring wells for groundwater sampling and separate phase product evaluation.

6.1 Soil Investigation

In accordance with New Jersey Administrative Code (N.J.A.C.) TRSR section 7.26E-4.1(a), PSEG advanced two soil borings (OFT-E+5 and OFT-NE) to investigate the horizontal extent of diesel-related constituents in soil. **Figure 4** illustrates the locations of the soil borings.

6.1.1 Collection of Soil Samples

Soil samples were collected to horizontally delineate TPHC impacts identified in soil sample OFT-E (0.0 – 0.5) to the east and northeast. Soil boring OFT-E+5 and OFT-NE are located 5 feet to the east and northeast of boring OFT-E, respectively. Sample locations (OFT-E+5 and OFT-NE) were identified by measuring from known stationary objects.

Following the removal of asphalt cover, a surface soil sample was collected using a hand auger or equivalent device from 0.0 – 0.5 feet bgs. Soil retrieved from each boring was visually examined by an ARCADIS geologist and field screened using a photoionization detector (PID). Soil was described according to the Unified Soil Classification System (USCS). Soil descriptions also include notes of other visual or olfactory observations related to diesel impacts. Relevant information collected during the advancement of soil borings was recorded in the field book, including lithology, PID readings, and other visual observations. Soil boring logs are presented in **Appendix D**.

6.1.2 Soil Sample Analysis and results

In accordance with NJDEP's August 9, 2010 *Protocol for Addressing Extractable Petroleum Hydrocarbons*, samples were analyzed for extractable petroleum hydrocarbons (EPH) via NJDEP EPH Method Revision 3 on an accelerated (1-week)

turnaround time. ARCADIS collected one blind duplicate sample and in accordance with the NJDEP field sampling procedures manual (FSPM), ARCADIS collected one field blank and one trip blank.

Both soil samples OFT-E+5 and OFT-NE had concentrations of EPH below the standard of 5,100, 536 and 1,350 mg/kg respectively. Analytical results of these indicate that soil delineation is complete.

A summary of the soil analytical results is provided in **Table 2** and illustrated on **Figure 4**. The full analytical data deliverable in New Jersey Reduced format is provided in **Appendix B**.

6.2 Groundwater Investigation

In November 2010, PSEG installed four monitoring wells (Well CC, CD, CE and CF) to evaluate for the presence of SPH, and characterize dissolved-phase constituents in groundwater. **Figure 5** shows the locations of the monitoring wells.

Monitoring well CC was installed adjacent to where a sheen was observed in excavation No. 2. Monitoring well CD was installed at a location where previous activities have identified TPHC concentrations exceeding NJDEP SRS of 5,100 mg/kg. Monitoring well CE was installed along the diesel fuel line, north of the former excavation number 2. Monitoring well CF was installed near temporary observation point (37).

6.2.1 Monitoring Well Installation

Prior to commencing monitoring well installation activities, a utility locator service identified underground utilities in the vicinity of proposed monitoring wells using ground penetrating radar (GPR) instruments. Additionally, to accommodate site specific health and safety best practices, PSEG advanced the boring using vacuum excavation techniques to 10 feet bgs. The Borehole was opened to a minimum 8 inch diameter to accommodate NJDEP regulated monitoring well annulus. Descriptions of the overburden materials, including physical characteristics, PID readings, visual evidence of staining, and odors, were recorded by the ARCADIS geologist and logged in the field book and presented in **Appendix D**. During well installation no staining was observed on the soil and there were no PID readings above background concentrations in the soil. No evidence of separate phase product was identified during well installation.

Monitoring wells were screened across the first water-bearing unit encountered at a depth of approximately 3 feet bgs. The monitoring wells were constructed of 4-inch-diameter flush-joint threaded PVC risers with an 8.0-foot-length of 0.02-inch PVC V-wire wrap well screen. A washed silica sand pack was placed between the well string and the formation to the top of the well screen followed by a 6-inch layer of fine sand (#00) as a seal. A neat cement grout was installed in the remaining annular space to lock the well in place. Each monitoring well was completed as a flush-mounted well with a protective steel casing and locking well cap. Details of the well construction can be found on **Table 5**.

A New Jersey licensed driller provided oversight of installation activities to ensure monitoring wells were installed in accordance with NJAC 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001.

Upon completion, each monitoring well was properly developed to remove fine-grained materials that may have settled in and around the monitoring well during installation, and to ensure that the monitoring well is hydraulically connected to the formation. The monitoring wells were developed via the block and surge and over-pumping method. Well development continued until the discharge was free of turbidity to the extent practical.

All monitoring wells were surveyed by a New Jersey licensed surveyor and the Form B for each well is provided in **Appendix C**. Top of casing elevation were established to within 0.01-foot relative to the 1988 North American Vertical Datum (NAVD 88). The location of each monitoring well was established to within 0.1-foot relative to the 1983 North American Horizontal Datum (NAD 83).

6.2.2 Groundwater Sampling

Following installation, monitoring wells were sampled to characterize water quality within the source area. The following sections provide details regarding these activities.

6.2.2.1 Water-Level and Separate-Phase Product Measurements

Prior to the collection of groundwater samples from the wells (see Section 6.2.2.2), depth-to-water and separate-phase product thickness measurements were collected using an electronic oil/water interface probe. The measurement data was used along with the surveyed top of casing elevation data to calculate groundwater elevations for the wells, **Table 3**. The groundwater elevation data was analyzed to assess

groundwater flow conditions at the Station. **Table 3** shows that during both gauging events separate-phase product was not detected.

6.2.2.2 Collection of Groundwater Samples

Following the installation and development of the wells, two-rounds of groundwater samples were collected. The first round of groundwater sampling was conducted in December 2010 and January 2011. The second round of groundwater sampling was completed in February 2011, approximately one month following the initial round.

Due to the sensitive nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples were collected utilizing low-flow sampling methodology. Sample collection procedures, as well as QA/QC sampling requirements, are outlined in the QAPP included in the RIWP for Salem Unit 1 (ARCADIS 2005).

6.2.2.3 Groundwater Sample Analysis and results

In accordance with analytical requirements for diesel fuel contained within Table 2-1 of the TRSR groundwater samples were analyzed for volatile organic compounds plus library search (VOC+10) and semi-volatile organic compounds plus library search (SVOC+15). ARCADIS collected one blind duplicate sample per groundwater sampling event and in accordance with the NJDEP field sampling procedures manual (FSPM), ARCADIS collected field blanks and trip blanks.

The groundwater sampling results, from both events,did not indicate concentrations of constituents of concern above the groundwater quality standards. The groundwater analytical results are summarized in **Tables 4A** and **4B**. Based on the results, no further groundwater investigation is proposed.

7. Receptor Evaluation

PSEG performed a receptor evaluation in accordance with the requirements specified in N.J.A.C. TRSR 7:26E1.15 through 1.19. The receptor evaluation report was submitted to the NJDEP on February 28, 2011. The receptor evaluation concluded that while there are environmentally sensitive areas near the project area, none are located within the project area.

8. Conclusions and Next Steps

Based on the results of investigation activities completed to date in association with incident No. 10-0416-164911, no additional soil and/or groundwater investigation is warranted. PSEG will prepare and submit a Remedial Action Workplan (RAWP) to address the TPH impacts in soil. The RAWP will be submitted August 2011..

9. References

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Table 1. Project Personnel, Remedial Investigation Report, PSEG Nuclear, LLC, Salem Generating Station Hancock's Bridge, New Jersey.

Name and Address	Role	Phone Number
PSEG Project Personnel		
Helen Gregory PSEG Nuclear, LLC Alloway Creek Neck Rd. Hancock's Bridge, NJ 08038	Project Manager	856.339.1431
ARCADIS Project Personnel		
Bradley D. Pierce ARCADIS 500 North Gulph Road, Suite 401 King of Prussia, PA 19406	Project Manager	610.337.7601
Jonathan Shafer ARCADIS 10 Friends Lane, Suite 200 Newtown, PA 18940	Field Team Leader/Site Safety Officer	267.685.1800
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Project Laboratory Personnel		
Diane Komar Accutest Laboratories 2235 Route 130 Dayton, NJ 08810	Analytical Laboratory	732-329-0200

SII-SSA-0014-004258

Table 2. Summary of Soil Analytical Results, Category 1 Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey

				Sample ID	EFV-N	EFV-W	EFV-W	FHD	OFT-E	OFT-E+5	OFT-N	OFT-NE	OFT-NE	OFT-W	OFT-W	OFT-W
				Sample Type Code	N	N	N	N	N	N	N	N	FD	JA45964-5	N	FD
				Sample Date	5/4/2010	5/4/2010	5/4/2010	5/27/2010	5/4/2010	11/11/2010	5/4/2010	11/11/2010	11/11/2010	5/4/2010	5/4/2010	5/4/2010
				Depth Interval (ft bgs)	2 - 2.5	0 - .5	2 - 2.5	2.4 - 2.9	0 - .5	0 - .5	2 - 2.5	0 - .5	0 - .5	0 - .5	2 - 2.5	2 - 2.5
		Action Level														
Chemical Name	Unit	RDCSRS	NRDCSRS	IGWSSL												
Solids, Percent	%	--	--	--	**91.2**	**81**	**92.2**	**89.3**	**86.7**	**84.9**	**90.7**	**92.6**	**92.7**	**83.4**	**91.5**	**90.9**
Naphthalene	mg/kg	6	17	16	< 0.038 U	--	--	--	< 0.038 U	--	--	**--**	**--**	--	--	--
2-Methylnaphthalene	mg/kg	230	2400	5	< 0.075 U	--	--	--	< 0.075 U	--	--	**--**	**--**	--	--	--
EPH (>C28-C40)	mg/kg	--	--	--	--	--	--	--	--	**31.9**	--	**85.9**	**126**	--	--	--
EPH (C9-C28)	mg/kg	--	--	--	--	--	--	--	--	**506**	--	**986**	***1230***	--	--	--
Total EPH (C9-C40)	mg/kg	--	--	--	--	--	--	--	--	**538**	--	***1070***	***1350***	--	--	--
Total PHC	mg/kg	5100	5100	5100	**5000**	**21.9**	**2520**	**4380**	**5510**	--	**366**	--	--	**2510**	**16.5**	**19.2**

Notes:
All concentrations detected above the laboratory detection limit are boldfaced.
Concentrations above the IGWSSL are shaded in gray.
Concentrations above the contingent trigger threshhold for total EPH (1,000 mg/kg) for analysis of naphthalene and 2-methylnaphthalene are shown in bold italics.
Concentrations shown in brackets represent duplicate samples values.
"U" indicates constituent was not detected above the laboratory detection limit.
mg/kg = milligrams per kilogram
EPH = extractable petroleum hydrocarbons
PHC = petroleum hydrocarbons
[1]The parent sample of the blind duplicate (DUP-20101111) is OFT-NE. Contingent analyses of 2-methylnaphthalene and naphthalene are represented by this sample.
RDCSRS = Residential Direct Contact Soil Remediation Standard
NRDCSRS = Non-Residential Direct Contact Soil Remediation Stan
IGWSSL = Impact to Groundwater Soil Screening Level
ft bgs = feet below ground surface

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well CC	01/20/11	9.16	--	4.51	--	4.65	--
	02/17/11	9.16	--	4.15	--	5.01	--
Well CD	01/20/11	9.02	--	3.86	--	5.16	--
	02/17/11	9.02	--	3.65	--	5.37	--
Well CE	12/16/10	8.92	--	4.15	--	4.77	--
	02/17/11	8.92	--	4.12	--	4.80	--
Well CF	01/20/11	8.88	--	4.60	--	4.28	--
	02/17/11	8.88	--	4.37	--	4.51	--

Notes

--	Separate-phase product was not detected in well at time of measurement.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).

Table 4A. Summary of Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey

	Well ID	MW-CC		MW-CD			MW-CE		MW-CF	
	Sample Date	1/20/2011	2/18/2011	1/20/2011	2/17/2011	2/17/2011	12/16/2010	2/17/2011	1/21/2011	2/18/2011
	Sample Type Code	N	N	N	FD	N	N	N	N	N
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	GWQC									
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,3-Trichlorobenzene	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2,4-Trichlorobenzene	9	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2-Dichlorobenzene	600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	**3.1 J**	**25**	< 10 U	**5.6 J**	< 10 U	< 10 U	**9.6 J**	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromochloromethane	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
CFC-11	2000	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
CFC-12	1000	< 5 U	< 5 U	**17.1**	**4.1 J**	**2.2 J**	< 5 U	< 5 U	< 5 U	< 5 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Cyclohexane	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Freon 113	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Isopropylbenzene	700	< 2 U	< 2 U	**0.9 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
m,p-Xylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
METHYL ACETATE	7000	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Methyl tertiary butyl ether (MTBE)	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylcyclohexane	---	< 5 U	< 5 U	**0.86 J**	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
o-Xylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:
GWQC = New Jersey Groundwater Quality Criteria for Class IIA aquifers
µg/L = micrograms per liter (equivalent to parts per billion)
Bold value indicates concentration was detected above the method detection limit.
Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U = The compound was not detected at the indicated concentration.
J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero; concentration given is an approximate value.

Table 4B. Summary of Groundwater Analytical Results, Semi Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey

	Well ID	MW-CC		MW-CD			MW-CE		MW-CF	
	Sample Date	1/20/2011	2/18/2011	1/20/2011	2/17/2011	2/17/2011	12/16/2010	2/17/2011	1/21/2011	2/18/2011
	Sample Type Code	N	N	N	FD	N	N	N	N	N
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	GWQC									
1,1'-Biphenyl	400	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4,5-Tetrachlorobenzene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2,4-Dinitrotoluene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2,6-Dinitrotoluene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2-Methylnaphthalene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
4-Chloroaniline	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acenaphthene	400	**0.844**	**0.281**	**0.362**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Acenaphthylene	---	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
ACETOPHENONE	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Anthracene	2000	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
ATRAZINE	3	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzaldehyde	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzo(a)anthracene	0.1	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(a)pyrene	0.1	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(b)fluoranthene	0.2	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(g,h,i)perylene	---	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(k)fluoranthene	0.5	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Caprolactam	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbazole	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chrysene	5	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Dibenzo(a,h)anthracene	0.3	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Dibenzofuran	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Dimethyl phthalate	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Fluoranthene	300	**0.131**	< 0.1 U	< 0.1 U	**0.229**	**0.223**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Fluorene	300	< 0.1 U	< 0.1 U	**0.687**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Hexachlorobenzene	0.02	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U
Hexachlorobutadiene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
Hexachloroethane	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Isophorone	40	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Naphthalene	300	< 0.1 U	< 0.1 U	**1.54**	**0.258**	**0.287**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Phenanthrene	---	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Pyrene	200	**0.111**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U

Notes:
GWQC = New Jersey Groundwater Quality Criteria for Class IIA aquifers
µg/L = micrograms per liter (equivalent to parts per billion)
Bold value indicates concentration was detected above the method detection limit.
Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U = The compound was not detected at the indicated concentration.
J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero; concentration given is an approximate value.

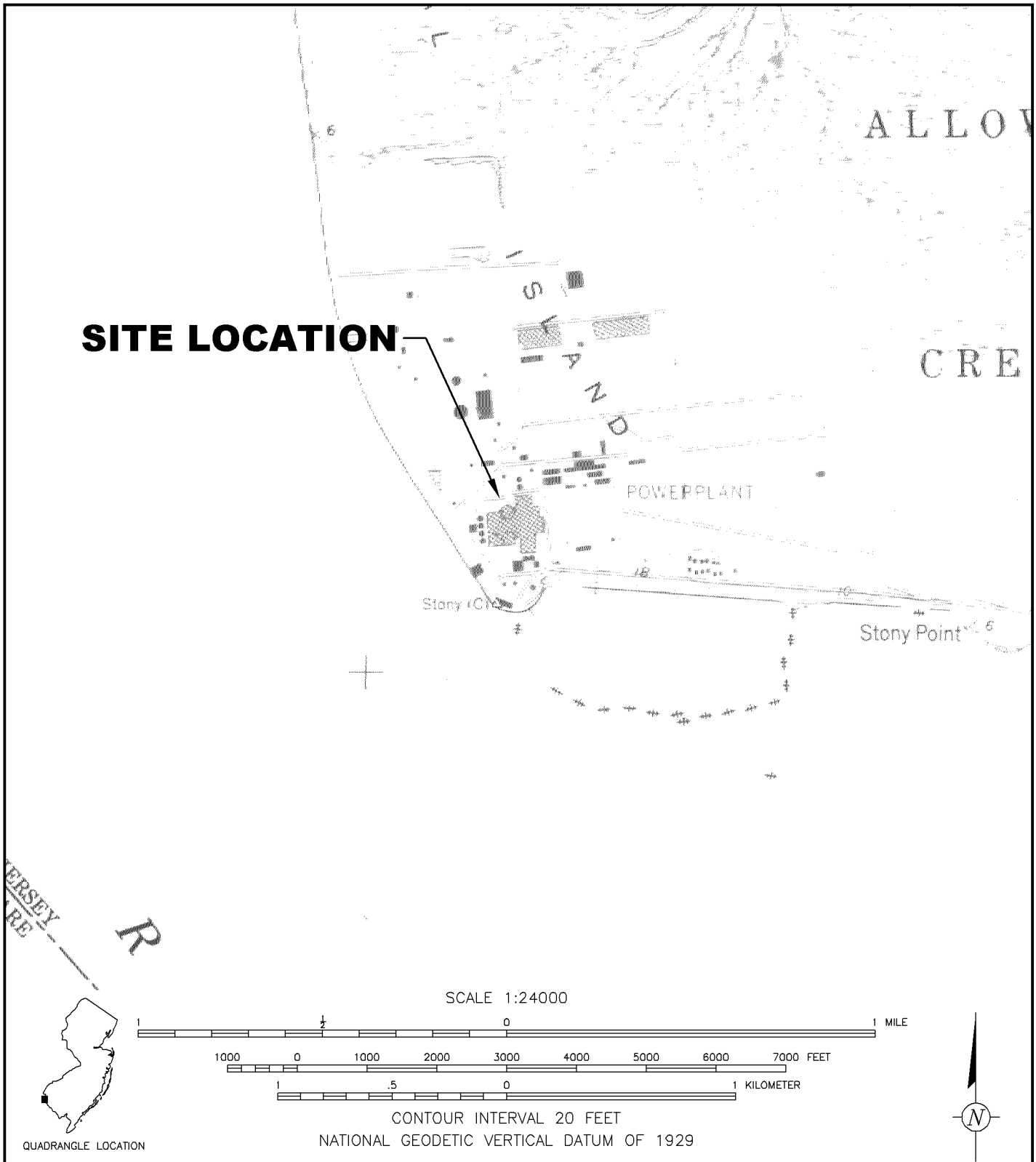
Table 05. Well Construction Details, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well ID	Installation Date	Well Permit Number	Well Purpose	Construction Materials	Diameter (inches)	GS Elevation (feet amsl)	MP Elevation (feet amsl)	Northing (NAD 83)	Easting (NAD 83)	Total Depth (feet bgs)	Monitoring Interval (feet bgs)	Monitoring Interval (feet amsl)
Well CC	11/04/10	E201006621	Monitoring	Sch-40 PVC	4.0	9.45	9.16	231,116	199,495	9.55	9.55 to 3.55	-0.1 to 5.9
Well CD	11/03/10	E201006623	Monitoring	Sch-40 PVC	4.0	9.4	9.02	231,092	199,562	8.33	8.33 to 1.83	1.1 to 7.6
Well CE	11/01/10	E201006622	Monitoring	Sch-40 PVC	4.0	9.34	8.92	231,147	199,512	6.22	6.22 to 3.22	3.1 to 6.1
Well CF	11/02/10	E201006620	Monitoring	Sch-40 PVC	4.0	9.36	8.88	231,085	199,497	9.55	9.55 to 1.55	-0.2 to 7.8

Notes:

GS	Ground Surface
MP	Measuring Point
bgs	Below ground surface
amsl	Feet above mean sea level (NAVD88)

SII-SSA-0014-004263



SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

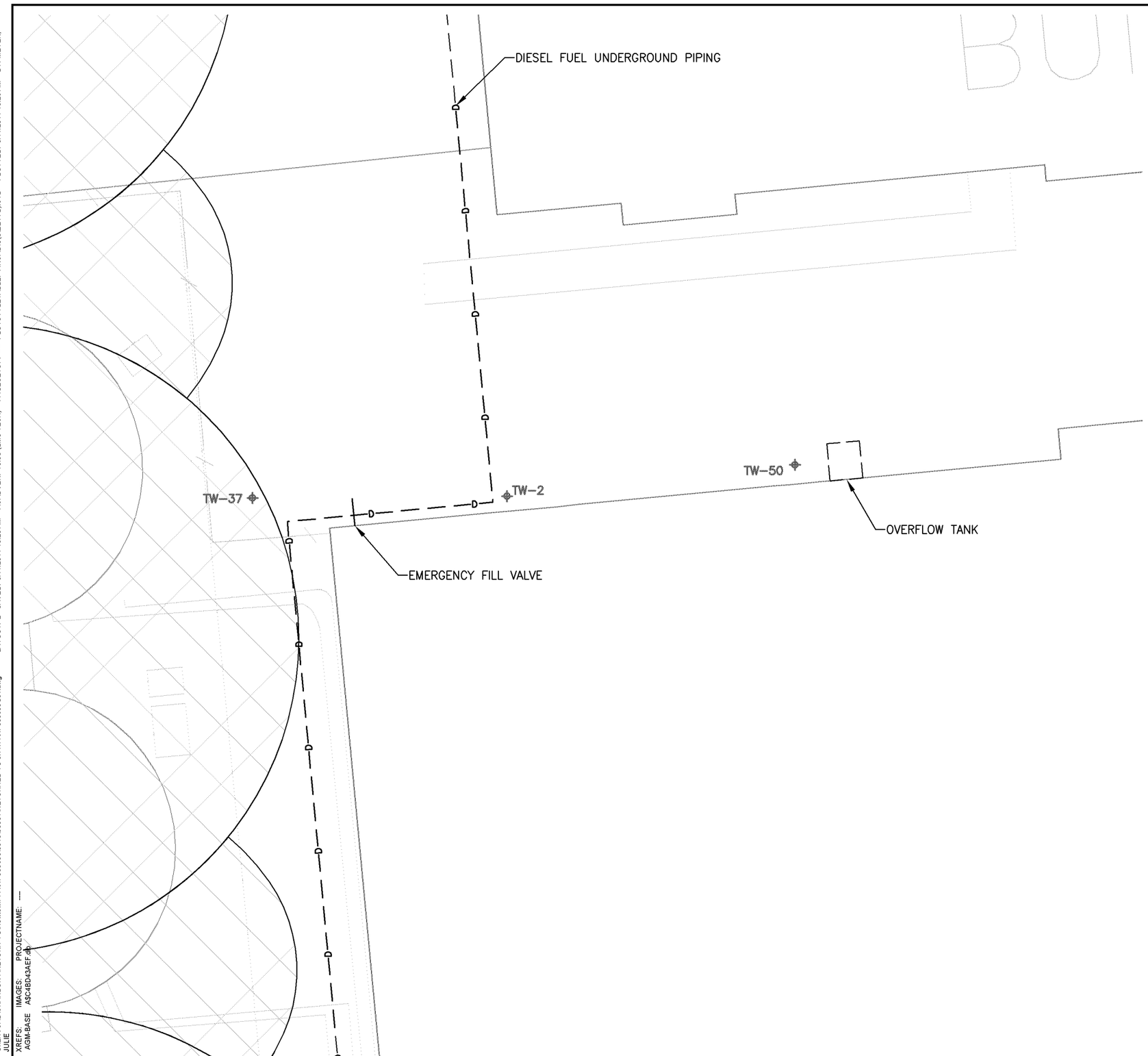
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

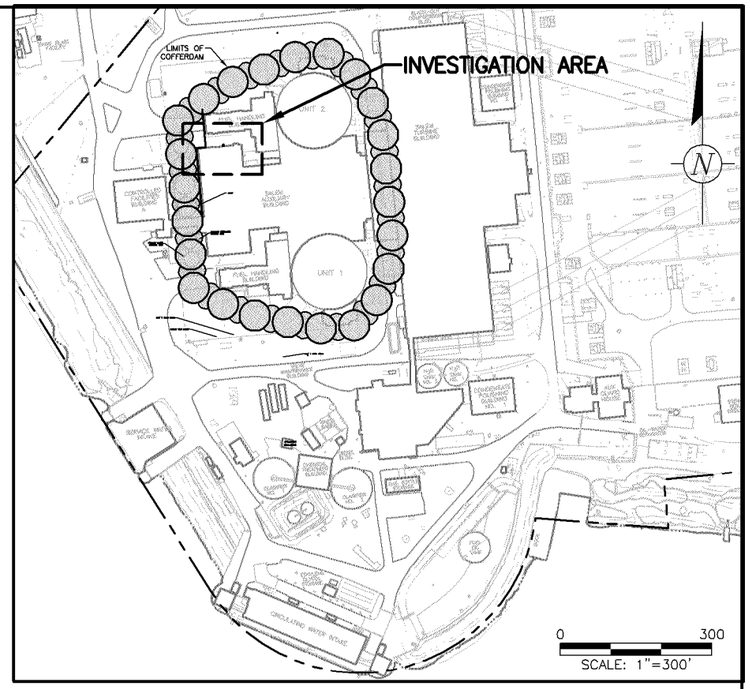
SITE LOCATION

ARCADIS

FIGURE
1

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski, J.MEYER LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\CRANBURY\RETURN-TON\newtown-PA\NP000603\001\000001\RETURNED-TO 3.11.11\NP000603N01.dwg LAYOUT: 1 SAVED: 3/11/2011 10:11 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 3/11/2011 10:12 AM BY: MEYER, JULIE
XREFS: IMAGES: PROJECTNAME: ---
NP000603X01.jpg





KEYMAP
SCALE: 1"=300'

LEGEND:

- TW-13 — TEMPORARY OBSERVATION POINT
- PROPERTY BOUNDARY
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE

0 10
SCALE: 1"=10'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

UNIT 2 DIESEL FUEL OIL SYSTEM COMPONENTS

ARCADIS

FIGURE
2

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski, JMEYER LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\CRANBURY\RETURN-TO\Newtown-PA\NP000603\0100\0001\RETURNED-TO 3.11.11\WP000603G01.dwg ACADVER: 18.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 3/11/2011 10:26 AM BY: MEYER, JULIE
XREFS: AGM-BASE IMAGES: ASC4BD43AEF.dib PROJECTNAME: ---
LAYOUT: 2 SAVED: 3/11/2011 10:23 AM

LEGEND:

- CATCH BASIN
- MANHOLE (STORM SEWER)
- BL — MONITORING WELL (INSTALLED IN MAY 2006)
- WELL R — MONITORING WELL SCREENED IN THE ENGINEERED FILL WITHIN THE COFFERDAM, 20 FEET DEEP (WELLS M, N, O, R)
- WELL S — MONITORING WELL SCREENED IN THE SHALLOW, WATER TABLE AQUIFER OUTSIDE THE COFFERDAM, 35 FEET DEEP (WELLS S, T, U, W)
- WELL L — MONITORING WELL SCREENED IN THE VINCENTOWN FORMATION, 80 FEET DEEP (WELLS K, L, P, Q, V.)
- MW-CD — PROPOSED MONITORING WELL LOCATION
- 2.46 — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL, NAVD 1988)
- —2.00— CONTOUR (0.5 FOOT INTERVAL) DASHED WHERE INFERRED

NOTES:

1. THE MEAN TIDE LEVEL OF THE DELAWARE RIVER AT ARTIFICIAL ISLAND IS 0.11 FT (NAVD88)
2. WELL BF, WELL BG AND WELL BU LOCATED ON HOPE CREEK GENERATING STATION PROPERTY BUT ASSOCIATED WITH SALEM UNIT II INVESTIGATION.
3. POTENTIOMETRIC SURFACE ELEVATION DATA COLLECTED IN FEBRUARY 2007.

0 150 300 475
SCALE: 1"=150'

DELAWARE RIVER

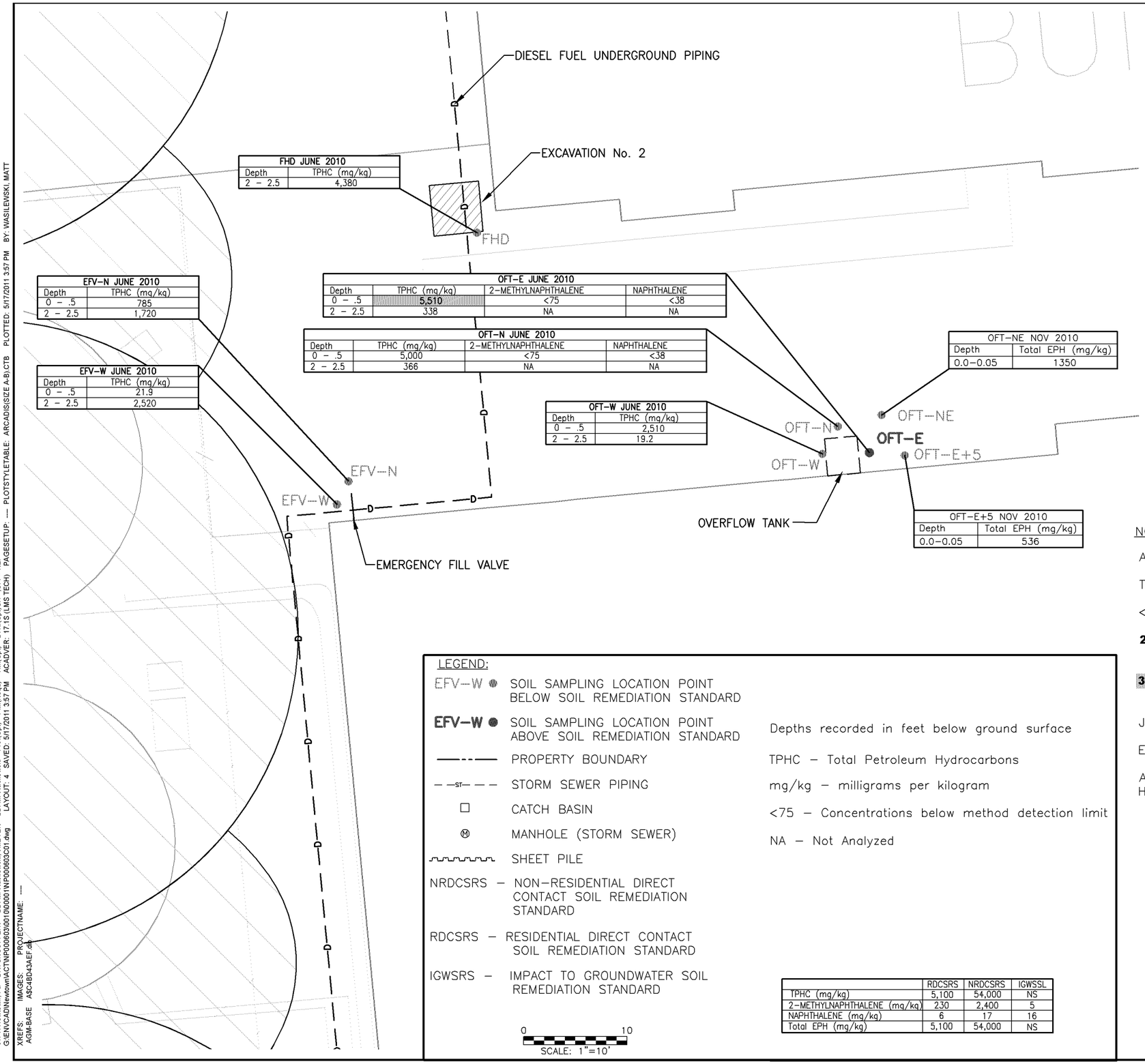
PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

POTENTIOMETRIC SURFACE MAP

ARCADIS

FIGURE 3

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Waslewski, JMEYER LD: M. Waslewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\CRANBURY\RETURN-TO\Newtown-PA\NP000603\001\000001\RETURNED-TO 3.11.11\NP000603T01.dwg LAYOUT: 3 SAVED: 3/11/2011 10:52 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: CRAN-LD2B-PDF PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/11/2011 10:53 AM BY: MEYER, JULIE
XREFS: AGM-BASE IMAGES: A$C4BD43AEF.db PROJECTNAME: ---



FHD JUNE 2010	
Depth	TPHC (mg/kg)
2 – 2.5	4,380

EFV–N JUNE 2010	
Depth	TPHC (mg/kg)
0 – .5	785
2 – 2.5	1,720

EFV–W JUNE 2010	
Depth	TPHC (mg/kg)
0 – .5	21.9
2 – 2.5	2,520

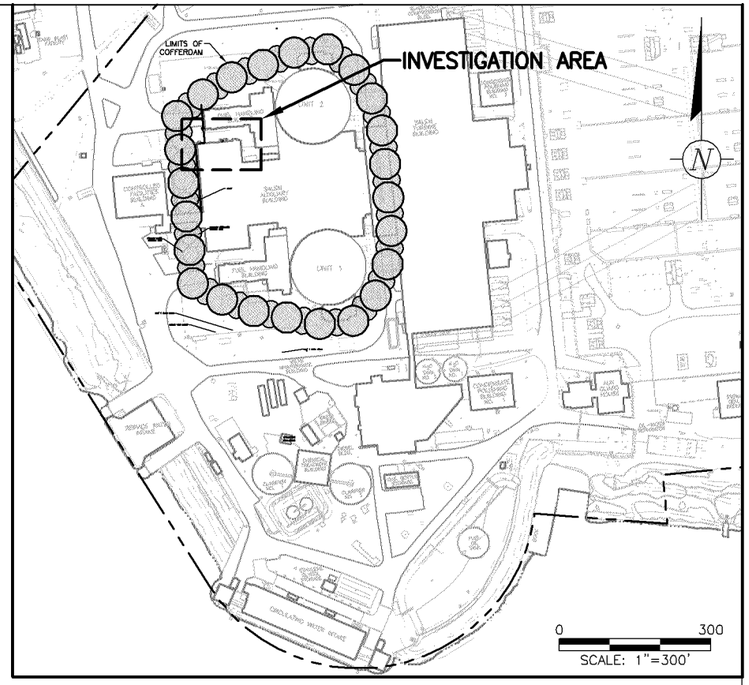
OFT–E JUNE 2010			
Depth	TPHC (mg/kg)	2–METHYLNAPHTHALENE	NAPHTHALENE
0 – .5	**5,510**	<75	<38
2 – 2.5	338	NA	NA

OFT–N JUNE 2010			
Depth	TPHC (mg/kg)	2–METHYLNAPHTHALENE	NAPHTHALENE
0 – .5	5,000	<75	<38
2 – 2.5	366	NA	NA

OFT–W JUNE 2010	
Depth	TPHC (mg/kg)
0 – .5	2,510
2 – 2.5	19.2

OFT–NE NOV 2010	
Depth	Total EPH (mg/kg)
0.0–0.05	1350

OFT–E+5 NOV 2010	
Depth	Total EPH (mg/kg)
0.0–0.05	536



KEYMAP
SCALE: 1"=300'

LEGEND:

EFV–W ● SOIL SAMPLING LOCATION POINT BELOW SOIL REMEDIATION STANDARD

EFV–W ● SOIL SAMPLING LOCATION POINT ABOVE SOIL REMEDIATION STANDARD

PROPERTY BOUNDARY

STORM SEWER PIPING

CATCH BASIN

MANHOLE (STORM SEWER)

SHEET PILE

NRDCSRS – NON–RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

RDCSRS – RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

IGWSRS – IMPACT TO GROUNDWATER SOIL REMEDIATION STANDARD

Depths recorded in feet below ground surface

TPHC – Total Petroleum Hydrocarbons

mg/kg – milligrams per kilogram

<75 – Concentrations below method detection limit

NA – Not Analyzed

0 10
SCALE: 1"=10'

	RDCSRS	NRDCSRS	IGWSSL
TPHC (mg/kg)	5,100	54,000	NS
2–METHYLNAPHTHALENE (mg/kg)	230	2,400	5
NAPHTHALENE (mg/kg)	6	17	16
Total EPH (mg/kg)	5,100	54,000	NS

NOTES:

ALL RESULTS ARE SHOWN IN ug/L, UNLESS OTHERWISE NOTED.

THE HIGH CONCENTRATION OF THE PARENT AND THE DUPLICATE IS SHOWN.

<10 U CONCENTRATION IS BELOW DETECTION LIMITS

2.72 **BOLD** VALUES INDICATE CONCENTRATIONS THAT WERE ABOVE THE METHOD OF DETECTION LIMIT.

37.8 **BOLD AND SHADED** VALUES INDICATE CONCENTRATIONS ABOVE THEIR GROUNDWATER QUALITY CRITERIA

J CONCENTRATION GIVE IS AN APPROXIMATE VALUE

EPH EXTRACTABLE HYDROCARBONS

ALL SAMPLES COLLECTED IN NOVEMBER 2010 ANALYZED VIA THE EXTRABLE HYDROCARBON METHOD

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

SOIL ANALYTICAL RESULTS

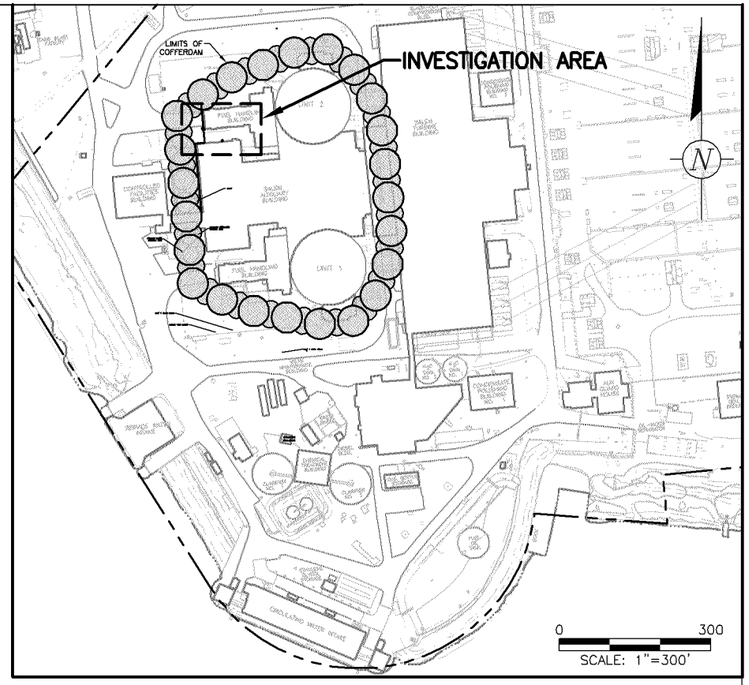
ARCADIS

FIGURE
4

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski, JMEYER LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENV\CAD\Newtown\ACTVNP000603\0010\0001\NP000603C01.dwg LAYOUT: 4 SAVED: 5/17/2011 3:57 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 5/17/2011 3:57 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: —
AGM-BASE ASC48D43AEF.dwl

Well CE		
Date	12/16/2011	2/17/2011
Compound		
Acetone	<10 U	**9.6 J**

GWQC	
Acetone	6000
Acenaphthene	400
Flouranthene	300
Pyrene	200
CFC–12	1000
Isopropylbenzene	700
Methylcyclohexane	NS
Flourene	300
Naphthalene	300
TPHC (mg/L)	NS



KEYMAP
SCALE: 1"=300'

Well CC		
Date	1/20/2011	2/18/2011
Compound		
Acetone	**3.1 J**	**25**
Acenaphthene	**0.8440**	**0.2810**
Flouranthene	**0.1310**	<0.1 U
Pyrene	**0.1110**	<0.1 U

MW–CE

DIESEL FUEL UNDERGROUND PIPING

EXCAVATION No. 2

MW–CC

Well CD		
Date	1/20/2011	2/17/2011
Compound		
Acetone	<10 U	**5.6 J**
Isopropylbenzene	**0.9 J**	<2 U
Methylcyclohexane	**0.86 J**	<5 U
CFC–12	**17.1**	**4.1 J**
Acenaphthene	**0.632**	<1.0 U
Flouranthene	<0.1 U	**0.229**
Flourene	**0.6870**	<0.1 U
Naphthalene	**1.54**	**0.287**

TW–02 JUNE 2010
TPHC (mg/L)
372

TW–50 JUNE 2010
TPHC (mg/L)
1.84

OVERFLOW TANK

MW–CD

TW–50

TW–37

MW–CF

TW–2

EMERGENCY FILL VALVE

TW–37 JUNE 2010
TPHC (mg/L)
3.42

Well CF		
Date	1/21/2011	2/18/2011
Compound		
All Compounds Below Method Detection Limits		

LEGEND:

- MW–CF ⊙ MONITORING WELL
- TW–13 ⊕ TEMPORARY OBSERVATION POINT
- PROPERTY BOUNDARY
- –sr– STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE

TPHC – Total Petroleum Hydrocarbons

mg/L – milligrams per Liter

NS – Criteria or Standard not available

GWQC – Groundwater Quality Criteria

0 10
SCALE: 1"=10'

NOTES:

ALL RESULTS ARE SHOWN IN ug/L, UNLESS OTHERWISE NOTED.

THE HIGH CONCENTRATION OF THE PARENT AND THE DUPLICATE IS SHOWN.

<10 U CONCENTRATION IS BELOW DETECTION LIMITS

2.72 **BOLD** VALUES INDICATE CONCENTRATIONS THAT WERE ABOVE THE METHOD OF DETECTION LIMIT.

37.8 **BOLD AND SHADED** VALUES INDICATE CONCENTRATIONS ABOVE THEIR GROUNDWATER QUALITY CRITERIA

J CONCENTRATION GIVE IS AN APPROXIMATE VALUE

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION REPORT

GROUNDWATER ANALYTICAL RESULTS

ARCADIS

FIGURE
5

CITY: Newtown, Pa DIV/GROUP: ENV DB: M.Wasilewski.JMEYER LD: M.Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCADNewtown\ACTIVE\PG006030010000001\NP000603C02.dwg LAYOUT: 5 SAVED: 5/17/2011 3:42 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: —
XREFS: IMAGES: PROJECTNAME: —
AGM-BASE ASC4BD43AEF.dib PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 5/17/2011 4:00 PM BY: WASILEWSKI, MATT

ARCADIS

Appendix A

NJDEP Meeting Documentation

ARCADIS
Infrastructure, environment, buildings

ARCADIS U.S., Inc.
10 Friends Lane
Suite 200
Newtown
Pennsylvania 18940
Tel 267.685.1800
Fax 267.685.1801
www.arcadis-us.com

Environment

Ms. Linda S. Range
New Jersey Dept. of Environmental Protection
Southern Bureau of Field Operations
P.O. Box 407
Trenton, NJ 08625-0407

Subject:
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey, Incident No. 10-0416-164911

Date:
October 28, 2010

Contact:
Brad Pierce

Phone:
610-337-7601

Email:
Bradley.Pierce@arcadis-us.com

Our ref:
NP000603.0009

Dear Ms. Linda Range:

ARCADIS, on behalf of PSEG Nuclear, LLC (PSEG), is submitting a revised Figure 7 – Proposed Monitoring Well Locations, attached, from the July 12, 2010 Salem Unit 2 Remedial Investigation Work Plan. In response to our meeting on August 25, 2010 the attached figure was updated to incorporate comments that were received during the meeting. Monitoring well CC is being installed down-gradient of the former excavation number 2. Monitoring well CD is being installed at a location that total petroleum hydrocarbon (TPH) concentrations exceeded the New Jersey Soil Remediation Standards. Monitoring well CE is being installed along the diesel fuel line, north of the former excavation number 2. Monitoring well CF is being installed near a temporary observation point (36). These wells are proposed to be installed in accordance with NJAC 7:9D, Well Construction; Maintenance and Sealing of Abandoned Wells, October 4, 2001.

Monitoring wells will be screened across the first water-bearing unit encountered at a depth of approximately 4 feet bgs. The monitoring wells will be constructed of 4-inch-diameter flush-joint threaded PVC risers with an 7-foot-length of 0.02-inch PVC well screen. A washed silica sand pack will be placed between the well string and the formation to the top of the well screen followed by a 6-inch layer of fine sand (#00) as a seal. A neat cement grout will be installed in the remaining annular space to lock the well in place. Each monitoring well will be completed as a flush-mounted well with a protective steel casing and locking well cap

Upon completion, each monitoring well will be properly developed to remove fine-grained materials that may have settled in and around the monitoring well during installation, and to ensure that the monitoring well is hydraulically connected to the

formation. The monitoring wells will be developed via the block and surge and overpumping method. Well development will continue until the discharge is free of turbidity.

All monitoring wells will be surveyed by a New Jersey licensed surveyor and Form B provided. Top of casing elevation will be established to within 0.01-foot relative to the 1988 North American Vertical Datum (NAVD 88). The location of each monitoring well will be established to within 0.1-foot relative to the 1983 North American Horizontal Datum (NAD 83).

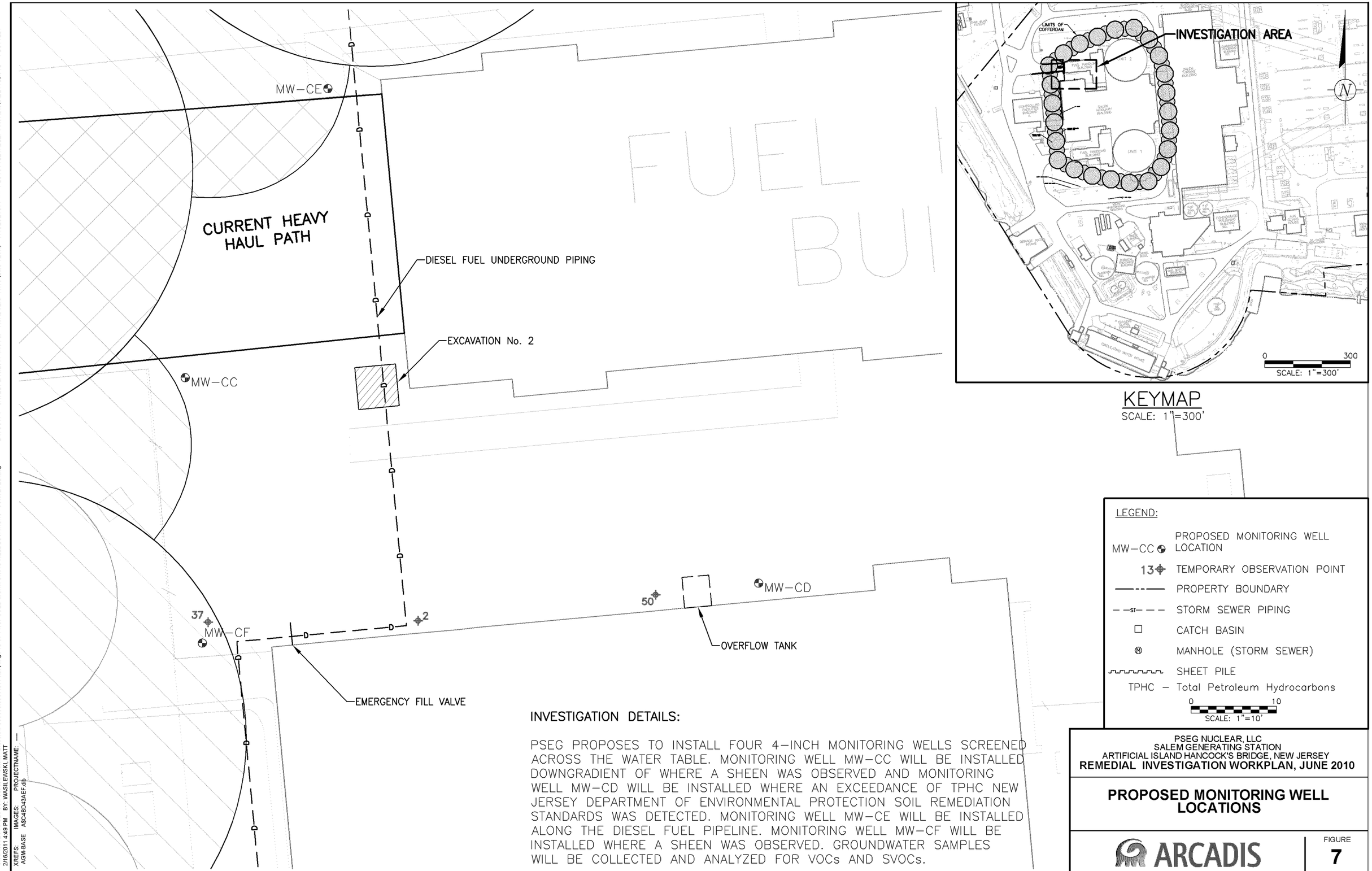
Sincerely,

Bradley Pierce

Bradley D. Pierce
Project Manager

ARCADIS U.S., Inc.

Copies:



KEYMAP
SCALE: 1"=300'

LEGEND:

MW-CC	PROPOSED MONITORING WELL LOCATION
13	TEMPORARY OBSERVATION POINT
	PROPERTY BOUNDARY
-ST-	STORM SEWER PIPING
	CATCH BASIN
Ⓜ	MANHOLE (STORM SEWER)
	SHEET PILE
TPHC	Total Petroleum Hydrocarbons

0 10
SCALE: 1"=10'

INVESTIGATION DETAILS:

PSEG PROPOSES TO INSTALL FOUR 4-INCH MONITORING WELLS SCREENED ACROSS THE WATER TABLE. MONITORING WELL MW-CC WILL BE INSTALLED DOWNGRADIENT OF WHERE A SHEEN WAS OBSERVED AND MONITORING WELL MW-CD WILL BE INSTALLED WHERE AN EXCEEDANCE OF TPHC NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION SOIL REMEDIATION STANDARDS WAS DETECTED. MONITORING WELL MW-CE WILL BE INSTALLED ALONG THE DIESEL FUEL PIPELINE. MONITORING WELL MW-CF WILL BE INSTALLED WHERE A SHEEN WAS OBSERVED. GROUNDWATER SAMPLES WILL BE COLLECTED AND ANALYZED FOR VOCs AND SVOCs.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL INVESTIGATION WORKPLAN, JUNE 2010

PROPOSED MONITORING WELL LOCATIONS

ARCADIS

FIGURE
7

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON="OFF=REF*
G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0009\GW sampling\F\G-07 PROPOSED MONITORING WELL LOCATIONS - SURVEYED.dwg
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XREFS: IMAGES: PROJECTNAME: --
AGM-BASE ASC48D43AEF.dib

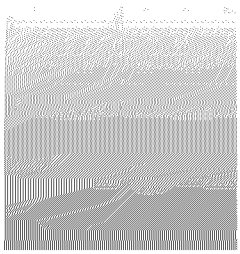
ARCADIS

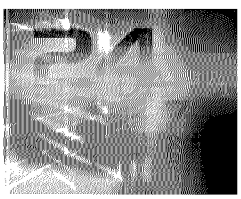
Appendix B

Laboratory Analytical Data
Deliverables – Soil and Groundwater

New Jersey
ACCUTEST
LABORATORIES

12/12/10





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

NP000603.0007

Accutest Job Number: JA61582

Sampling Date: 11/11/10

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **431**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JA61582

PSEG-Diesel, Salem, NJ
Project No: NP000603.0007

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA61582-1	11/11/10	10:45	RM	11/12/10	SO	Soil	OFT-E+ 5
JA61582-2	11/11/10	10:50	RM	11/12/10	SO	Soil	OFT-NE
JA61582-2D	11/11/10	10:50	RM	11/12/10	SO	Soil Dup/MSD	OFT-NE
JA61582-2S	11/11/10	10:50	RM	11/12/10	SO	Soil Matrix Spike	OFT-NE
JA61582-3	11/11/10	00:00	RM	11/12/10	SO	Soil	DUP
JA61582-3R	11/11/10	00:00	RM	11/12/10	SO	Soil	DUP
JA61582-4	11/11/10	10:30	RM	11/12/10	AQ	Field Blank Soil	FIELD BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis **Job No:** JA61582

Site: PSEG-Diesel, Salem, NJ **Report Date** 12/12/2010 10:10:59 A

On 11/12/2010, 3 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 6 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA61582 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Extractables by GCMS By Method SW846 8270C

Matrix: SO **Batch ID:** OP46916

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA61651-1MS, JA61651-1MSD were used as the QC samples indicated.

Extractables by GC By Method NJDEP EPH

Matrix: AQ **Batch ID:** OP46776

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA61635-2MS, JA61635-2MSD, JA61635-3DUP were used as the QC samples indicated.
- Matrix Spike Recovery(s) for EPH (C9-C28), Total EPH (C9-C40) are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: SO **Batch ID:** OP46762

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA61561-8DUP, JA61582-2MS, JA61582-2MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for EPH (>C28-C40) are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for EPH (>C28-C40) are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Recovery(s) for EPH (C9-C28), Total EPH (C9-C40) are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MSD for EPH (>C28-C40) are outside control limits for sample OP46762-MSD. Probable cause due to sample homogeneity.

Wet Chemistry By Method SM18 2540G

Matrix: SO **Batch ID:** GN44749

- The data for SM18 2540G meets quality control requirements.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

New Jersey ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	OFT-E+ 5		
Lab Sample ID:	JA61582-1	**Date Sampled:**	11/11/10
Matrix:	SO - Soil	**Date Received:**	11/12/10
Method:	NJDEP EPH SW846 3545	**Percent Solids:**	84.9
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y1352.D	1	11/16/10	OPM	11/16/10	OP46762	G4Y41
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	Units	Q
	EPH (C9-C28)	506	5.5	mg/kg	
	EPH (> C28-C40)	31.9	5.5	mg/kg	
	Total EPH (C9-C40)	538	5.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	88%		40-140%
3386-33-2	1-Chlorooctadecane	86%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	OFT-NE		
Lab Sample ID:	JA61582-2	**Date Sampled:**	11/11/10
Matrix:	SO - Soil	**Date Received:**	11/12/10
Method:	NJDEP EPH SW846 3545	**Percent Solids:**	92.6
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y1353.D	1	11/16/10	OPM	11/16/10	OP46762	G4Y41
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	Units	Q
	EPH (C9-C28)	986	5.1	mg/kg	
	EPH (> C28-C40)	85.9	5.1	mg/kg	
	Total EPH (C9-C40)	1070	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	87%		40-140%
3386-33-2	1-Chlorooctadecane	86%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	JA61582-3	**Date Sampled:**	11/11/10
Matrix:	SO - Soil	**Date Received:**	11/12/10
Method:	NJDEP EPH SW846 3545	**Percent Solids:**	92.7
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y1354.D	1	11/16/10	OPM	11/16/10	OP46762	G4Y41
Run #2							

	Initial Weight	Final Volume
Run #1	17.0 g	2.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	Units	Q
	EPH (C9-C28)	1230	5.1	mg/kg	
	EPH (> C28-C40)	126	5.1	mg/kg	
	Total EPH (C9-C40)	1350	5.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		40-140%
3386-33-2	1-Chlorooctadecane	89%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	JA61582-3R	**Date Sampled:**	11/11/10
Matrix:	SO - Soil	**Date Received:**	11/12/10
Method:	SW846 8270C SW846 3550B	**Percent Solids:**	92.7
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z60027.D	1	12/06/10	NAP	11/24/10	OP46916	EZ3191
Run #2							

	Initial Weight	Final Volume
Run #1	35.2 g	1.0 ml
Run #2		

BN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	436	61	17	ug/kg	
91-20-3	Naphthalene	78.5	31	8.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		28-113%
321-60-8	2-Fluorobiphenyl	73%		38-107%
1718-51-0	Terphenyl-d14	77%		31-116%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JA61582-4	**Date Sampled:**	11/11/10
Matrix:	AQ - Field Blank Soil	**Date Received:**	11/12/10
Method:	NJDEP EPH SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Y1414.D	1	11/18/10	DNM	11/16/10	OP46776	G4Y43
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

NJDEP EPH List

CAS No.	Compound	Result	RL	Units	Q
	EPH (C9-C28)	ND	0.040	mg/l	
	EPH (> C28-C40)	ND	0.040	mg/l	
	Total EPH (C9-C40)	ND	0.040	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		40-140%
3386-33-2	1-Chlorooctadecane	79%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

SO
FB

CHAIN OF CUSTODY

PAGE 1 OF 1

2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #: MM-11A/2010-14
Accutest Quote #:
Accutest Job #: JA61582

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 Friends Ln. suite 200
City: Newtown State: PA Zip: 18940
Project Contact: ~~Eric~~ John Sefer jshafer E-mail:
Phone #: Fax #:
Sampler(s) Name(s): R. Miller Phone #:

Project Information

Project Name: PSEG Salem ~~Fuels~~
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager: Brad Peirce

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Wate; GW - Ground Wate; WW - Water; SW - Surface Wate; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blan; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Category 1 Diesel	Hold SVOC, Naphthalene 2-methylnaphthalene	H2S	MSD	LAB USE ONLY
1	OFT-E+5		11/11/10	1045	RM	~~SO~~	1									X	X			UTC40
2	OFT-NE		11/11/10	1050	RM	~~SO~~	3									X	X	X	X	UTC19
3	DUP		11/11/10	—	RM	S	1									X	X			
4	Field Blanks		11/11/10	1030	RM	S	4	2								X	X			
	~~Equip Blank~~																			

EPH FAST TRACK

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ Std. 10 Business Days (by Contract only)
- ☐ 10 Day *RUSH*
- ☒ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

See notes for lab

Rec'd at Exton Service Center
11/12/10 @ 1800

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:
1		11/12/10 1751	1
2		11/12/10 1800	2
3	Relinquished by Sampler:	Date Time: 11/12/10 2130	Received By: 3
4	Relinquished By:	Date Time:	Received By: 4
5	Relinquished By:	Date Time:	Received By: 5

Custody Seal # 220 ☒ Intact ☐ Not Intact
Preserved where applicable: AV
On Ice: X
Cooler Temp: 6°C

4.1

Job Change Order: JA61582_11/23/2010

Requested Date:	11/23/2010	**Received Date:**	11/12/2010
Account Name:	Arcadis	**Due Date:**	11/19/2010
Project Description:	PSEG-Diesel, Salem, NJ	**Deliverable:**	FULT1
CSR:	MM	**TAT (Days):**	14

Sample #:
JA61582-3

Change: Please login for B8270MNAP + NAP.

DUP

Above Changes Per: Glenn Palmer **Date:** 11/23/2010

JA61582: Chain of Custody
Page 2 of 2

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

Internal Sample Tracking Chronicle

Arcadis

Job No: JA61582

PSEG-Diesel, Salem, NJ
Project No: NP000603.0007

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA61582-1	Collected: 11-NOV-10 10:45 By: RM		Received: 12-NOV-10 By: MPC			
OFT-E+ 5						
JA61582-1	SM18 2540G	16-NOV-10	KH			%SOLFT
JA61582-1	NJDEP EPH	16-NOV-10 21:48	OPM	16-NOV-10	GAD	BNJEPHCAT1
JA61582-2	Collected: 11-NOV-10 10:50 By: RM		Received: 12-NOV-10 By: MPC			
OFT-NE						
JA61582-2	SM18 2540G	16-NOV-10	KH			%SOLFT
JA61582-2	NJDEP EPH	16-NOV-10 22:24	OPM	16-NOV-10	GAD	BNJEPHCAT1
JA61582-3	Collected: 11-NOV-10 00:00 By: RM		Received: 12-NOV-10 By: MPC			
DUP						
JA61582-3	SM18 2540G	16-NOV-10	KH			%SOLFT
JA61582-3	NJDEP EPH	16-NOV-10 23:00	OPM	16-NOV-10	GAD	BNJEPHCAT1
JA61582-4	Collected: 11-NOV-10 10:30 By: RM		Received: 12-NOV-10 By: MPC			
FIELD BLANK						
JA61582-4	NJDEP EPH	18-NOV-10 13:23	DNM	16-NOV-10	GGP	BNJEPHCAT1
JA61582-3R	Collected: 11-NOV-10 00:00 By: RM		Received: 12-NOV-10 By: MPC			
DUP						
JA61582-3R	SW846 8270C	06-DEC-10 17:48	NAP	24-NOV-10	DB	B8270NAP+ 2MNAP

Accutest Internal Chain of Custody

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 11/12/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA61582-1.1	Secured Storage	Zethan Reyes	11/15/10 14:04	Retrieve from Storage
JA61582-1.1	Zethan Reyes	Daniel Klawunn	11/15/10 14:18	Custody Transfer
JA61582-1.1	Daniel Klawunn	Secured Storage	11/15/10 16:01	Return to Storage
JA61582-1.1	Secured Storage	Gwendolyn Dymowski	11/16/10 06:34	Retrieve from Storage
JA61582-1.1	Gwendolyn Dymowski	Kari Hullen	11/16/10 10:25	Custody Transfer
JA61582-1.1	Kari Hullen	Secured Storage	11/16/10 11:08	Return to Storage
JA61582-1.1.1	Gwendolyn Dymowski	Organics Prep	11/16/10 06:40	Extract from JA61582-1.1
JA61582-1.1.1	Organics Prep	Gwendolyn Dymowski	11/16/10 13:01	Extract from JA61582-1.1
JA61582-1.1.1	Gwendolyn Dymowski	Extract Storage	11/16/10 13:01	Return to Storage
JA61582-1.1.1	Extract Storage	Owen McKenna	11/16/10 15:53	Retrieve from Storage
JA61582-1.1.1	Owen McKenna	GC4Y	11/16/10 15:53	Load on Instrument
JA61582-1.1.1	GC4Y	Diaa Nimer	12/09/10 17:49	Unload from Instrument
JA61582-1.1.1	Diaa Nimer	Extract Freezer	12/09/10 17:49	Return to Storage
JA61582-2.1	Secured Storage	Gwendolyn Dymowski	11/16/10 06:34	Retrieve from Storage
JA61582-2.1	Gwendolyn Dymowski	Kari Hullen	11/16/10 10:25	Custody Transfer
JA61582-2.1	Kari Hullen	Secured Storage	11/16/10 11:08	Return to Storage
JA61582-2.1.1	Gwendolyn Dymowski	Organics Prep	11/16/10 06:40	Extract from JA61582-2.1
JA61582-2.1.1	Organics Prep	Gwendolyn Dymowski	11/16/10 13:01	Extract from JA61582-2.1
JA61582-2.1.1	Gwendolyn Dymowski	Extract Storage	11/16/10 13:01	Return to Storage
JA61582-2.1.1	Extract Storage	Owen McKenna	11/16/10 15:53	Retrieve from Storage
JA61582-2.1.1	Owen McKenna	GC4Y	11/16/10 15:53	Load on Instrument
JA61582-2.1.1	GC4Y	Diaa Nimer	12/09/10 17:49	Unload from Instrument
JA61582-2.1.1	Diaa Nimer	Extract Freezer	12/09/10 17:49	Return to Storage
JA61582-2.2	Secured Storage	Gwendolyn Dymowski	11/16/10 06:34	Retrieve from Storage
JA61582-2.2	Gwendolyn Dymowski	Secured Storage	11/16/10 12:57	Return to Storage
JA61582-2.3	Secured Storage	Zethan Reyes	11/15/10 14:04	Retrieve from Storage
JA61582-2.3	Zethan Reyes	Daniel Klawunn	11/15/10 14:18	Custody Transfer
JA61582-2.3	Daniel Klawunn	Secured Storage	11/15/10 16:01	Return to Storage
JA61582-3.1	Secured Storage	Zethan Reyes	11/15/10 14:04	Retrieve from Storage
JA61582-3.1	Zethan Reyes	Daniel Klawunn	11/15/10 14:18	Custody Transfer
JA61582-3.1	Daniel Klawunn	Secured Storage	11/15/10 16:01	Return to Storage
JA61582-3.1	Secured Storage	Gwendolyn Dymowski	11/16/10 06:34	Retrieve from Storage
JA61582-3.1	Gwendolyn Dymowski	Kari Hullen	11/16/10 10:25	Custody Transfer
JA61582-3.1	Kari Hullen	Secured Storage	11/16/10 11:08	Return to Storage
JA61582-3.1	Secured Storage	Denise Balili	11/24/10 08:30	Retrieve from Storage
JA61582-3.1	Denise Balili	Secured Storage	11/24/10 18:22	Return to Storage
JA61582-3.1.1	Gwendolyn Dymowski	Organics Prep	11/16/10 06:40	Extract from JA61582-3.1

Accutest Internal Chain of Custody

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 11/12/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA61582-3.1.1	Organics Prep	Gwendolyn Dymowski	11/16/10 13:01	Extract from JA61582-3.1
JA61582-3.1.1	Gwendolyn Dymowski	Extract Storage	11/16/10 13:01	Return to Storage
JA61582-3.1.1	Extract Storage	Owen McKenna	11/16/10 15:53	Retrieve from Storage
JA61582-3.1.1	Owen McKenna	GC4Y	11/16/10 15:53	Load on Instrument
JA61582-3.1.1	GC4Y	Diaa Nimer	12/09/10 17:49	Unload from Instrument
JA61582-3.1.1	Diaa Nimer	Extract Freezer	12/09/10 17:49	Return to Storage
JA61582-3.1.2	Denise Balili	Organics Prep	11/24/10 08:36	Extract from JA61582-3.1
JA61582-3.1.2	Organics Prep	Denise Balili	11/24/10 17:20	Extract from JA61582-3.1
JA61582-3.1.2	Denise Balili	Extract Storage	11/24/10 17:20	Return to Storage
JA61582-3.1.2	Extract Storage	Larisa Pejdah	12/06/10 14:22	Retrieve from Storage
JA61582-3.1.2	Larisa Pejdah	GCMSZ	12/06/10 14:22	Load on Instrument
JA61582-3.1.2	GCMSZ	Krutika Patel	12/07/10 10:06	Unload from Instrument
JA61582-3.1.2	Krutika Patel	Extract Freezer	12/07/10 10:06	Return to Storage
JA61582-4.2	Secured Storage	George Paunovski	11/16/10 15:57	Retrieve from Storage
JA61582-4.2	George Paunovski		11/16/10 23:26	Depleted
JA61582-4.2.1	George Paunovski	Organics Prep	11/16/10 15:59	Extract from JA61582-4.2
JA61582-4.2.1	Organics Prep	George Paunovski	11/16/10 23:26	Extract from JA61582-4.2
JA61582-4.2.1	George Paunovski	Extract Storage	11/16/10 23:26	Return to Storage
JA61582-4.2.1	Extract Storage	Diaa Nimer	11/18/10 17:37	Retrieve from Storage
JA61582-4.2.1	Diaa Nimer	GC4Y	11/18/10 17:38	Load on Instrument
JA61582-4.2.1	GC4Y	Diaa Nimer	12/09/10 17:49	Unload from Instrument
JA61582-4.2.1	Diaa Nimer	Extract Freezer	12/09/10 17:49	Return to Storage
JA61582-4.3	Secured Storage	Kanwar Sodhi	11/15/10 08:37	Retrieve from Storage
JA61582-4.3	Kanwar Sodhi		11/15/10 16:30	Depleted
JA61582-4.3.1	Kanwar Sodhi	Organics Prep	11/15/10 08:37	Extract from JA61582-4.3
JA61582-4.3.1	Organics Prep	Kanwar Sodhi	11/15/10 16:30	Extract from JA61582-4.3
JA61582-4.3.1	Kanwar Sodhi	Extract Storage	11/15/10 16:30	Return to Storage
JA61582-4.3.1	Extract Storage	Krutika Patel	11/16/10 16:27	Retrieve from Storage
JA61582-4.3.1	Krutika Patel	GCMS2P	11/16/10 16:27	Load on Instrument
JA61582-4.3.1	GCMS2P	Krutika Patel	11/17/10 13:27	Unload from Instrument
JA61582-4.3.1	Krutika Patel	Extract Freezer	11/17/10 13:27	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46916-MB1	M77594.D	1	11/29/10	OYA	11/24/10	OP46916	EM3023

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA61582-3R

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	57	16	ug/kg	
91-20-3	Naphthalene	ND	29	7.8	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	82%	30-109%
4165-62-2	Phenol-d5	82%	28-108%
118-79-6	2,4,6-Tribromophenol	113%	28-125%
4165-60-0	Nitrobenzene-d5	95%	28-113%
321-60-8	2-Fluorobiphenyl	85%	38-107%
1718-51-0	Terphenyl-d14	94%	31-116%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.14	170	ug/kg	J
	system artifact	3.20	250	ug/kg	J
	system artifact/aldol-condensation	3.45	8400	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46916-MB1	Z59886.D	1	11/29/10	LP	11/24/10	OP46916	EZ3182

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA61582-3R

CAS No.	Compound	Result	RL	MDL	Units	Q
91-57-6	2-Methylnaphthalene	ND	57	16	ug/kg	
91-20-3	Naphthalene	ND	29	7.8	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	79%	30-109%
4165-62-2	Phenol-d5	74%	28-108%
118-79-6	2,4,6-Tribromophenol	86%	28-125%
4165-60-0	Nitrobenzene-d5	91%	28-113%
321-60-8	2-Fluorobiphenyl	84%	38-107%
1718-51-0	Terphenyl-d14	92%	31-116%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.97	150	ug/kg	J
	system artifact/aldol-condensation	3.10	12000	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Blank Spike Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46916-BS1	M77595.D	1	11/29/10	OYA	11/24/10	OP46916	EM3023

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA61582-3R

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
91-57-6	2-Methylnaphthalene	1430	1140	80	44-127
91-20-3	Naphthalene	1430	1190	83	49-112

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	84%	30-109%
4165-62-2	Phenol-d5	87%	28-108%
118-79-6	2,4,6-Tribromophenol	123%	28-125%
4165-60-0	Nitrobenzene-d5	94%	28-113%
321-60-8	2-Fluorobiphenyl	75%	38-107%
1718-51-0	Terphenyl-d14	94%	31-116%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46916-MS	M77602.D	1	11/29/10	OYA	11/24/10	OP46916	EM3023
OP46916-MSD	M77603.D	1	11/29/10	OYA	11/24/10	OP46916	EM3023
JA61651-1	M77597.D	1	11/29/10	OYA	11/24/10	OP46916	EM3023

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA61582-3R

CAS No.	Compound	JA61651-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
91-57-6	2-Methylnaphthalene	ND		1580	1030	65	1120	71	8	29-130/28
91-20-3	Naphthalene	ND		1580	1050	66	1120	71	6	32-116/28

CAS No.	Surrogate Recoveries	MS	MSD	JA61651-1	Limits
367-12-4	2-Fluorophenol	67%	72%	62%	30-109%
4165-62-2	Phenol-d5	72%	78%	62%	28-108%
118-79-6	2,4,6-Tribromophenol	97%	100%	89%	28-125%
4165-60-0	Nitrobenzene-d5	73%	77%	73%	28-113%
321-60-8	2-Fluorobiphenyl	59%	61%	64%	38-107%
1718-51-0	Terphenyl-d14	91%	93%	75%	31-116%

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EM3014-DFTPP	**Injection Date:**	11/18/10
Lab File ID:	M77423.D	**Injection Time:**	10:14
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	7874	51.9		Pass
68	Less than 2.0% of mass 69	43	0.28	(0.76) [a]	Pass
69	Mass 69 relative abundance	5624	37.1		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	6947	45.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	15170	100.0		Pass
199	5.0 - 9.0% of mass 198	1096	7.22		Pass
275	10.0 - 30.0% of mass 198	2998	19.8		Pass
365	1.0 - 100.0% of mass 198	223	1.47		Pass
441	Present, but less than mass 443	1216	8.02	(86.5) [b]	Pass
442	40.0 - 100.0% of mass 198	7207	47.5		Pass
443	17.0 - 23.0% of mass 442	1405	9.26	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM3014-ICC3014	M77424.D	11/18/10	10:27	00:13	Initial cal 50
EM3014-IC3014	M77425.D	11/18/10	11:00	00:46	Initial cal 100
EM3014-IC3014	M77426.D	11/18/10	11:38	01:24	Initial cal 1
EM3014-IC3014	M77427.D	11/18/10	12:09	01:55	Initial cal 2
EM3014-IC3014	M77428.D	11/18/10	12:41	02:27	Initial cal 5
EM3014-IC3014	M77429.D	11/18/10	13:13	02:59	Initial cal 10
EM3014-IC3014	M77430.D	11/18/10	13:44	03:30	Initial cal 25
EM3014-IC3014	M77431.D	11/18/10	14:16	04:02	Initial cal 80

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EM3015-DFTPP	**Injection Date:**	11/18/10
Lab File ID:	M77432.D	**Injection Time:**	14:45
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	9336	46.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	6933	34.3		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	8950	44.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	20232	100.0		Pass
199	5.0 - 9.0% of mass 198	1314	6.49		Pass
275	10.0 - 30.0% of mass 198	3896	19.3		Pass
365	1.0 - 100.0% of mass 198	300	1.48		Pass
441	Present, but less than mass 443	1493	7.38	(82.9) [b]	Pass
442	40.0 - 100.0% of mass 198	9126	45.1		Pass
443	17.0 - 23.0% of mass 442	1800	8.90	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM3015-IC3015	M77433.D	11/18/10	15:02	00:17	Initial cal 100
EM3015-IC3015	M77434.D	11/18/10	15:33	00:48	Initial cal 80
EM3015-ICC3015	M77435.D	11/18/10	16:44	01:59	Initial cal 50
EM3015-IC3015	M77436.D	11/18/10	17:16	02:31	Initial cal 25
EM3015-IC3015	M77437.D	11/18/10	17:47	03:02	Initial cal 10
EM3015-IC3015	M77438.D	11/18/10	18:19	03:34	Initial cal 5
EM3015-IC3015	M77439.D	11/18/10	18:50	04:05	Initial cal 2
EM3015-IC3015	M77440.D	11/18/10	19:21	04:36	Initial cal 1
EM3015-ICV3015	M77442.D	11/18/10	20:25	05:40	Initial cal verification 50
EM3015-ICV3014	M77443.D	11/18/10	20:56	06:11	Initial cal verification 50
EM3015-ICV3015	M77443A.D	11/18/10	20:56	06:11	Initial cal verification 50
EM3015-ICV3015	M77445.D	11/18/10	21:59	07:14	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EM3023-DFTPP	**Injection Date:**	11/29/10
Lab File ID:	M77591.D	**Injection Time:**	08:53
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	38018	46.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	35456	43.2		Pass
70	Less than 2.0% of mass 69	126	0.15	(0.36) [a]	Pass
127	40.0 - 60.0% of mass 198	40124	48.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	82032	100.0		Pass
199	5.0 - 9.0% of mass 198	5647	6.88		Pass
275	10.0 - 30.0% of mass 198	20791	25.3		Pass
365	1.0 - 100.0% of mass 198	1884	2.30		Pass
441	Present, but less than mass 443	7943	9.68	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	48573	59.2		Pass
443	17.0 - 23.0% of mass 442	9386	11.4	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM3023-CC3014	M77592.D	11/29/10	09:06	00:13	Continuing cal 25
EM3023-CC3015	M77593.D	11/29/10	09:38	00:45	Continuing cal 50
OP46916-MB1	M77594.D	11/29/10	10:09	01:16	Method Blank
OP46916-BS1	M77595.D	11/29/10	10:41	01:48	Blank Spike
ZZZZZZ	M77596.D	11/29/10	11:12	02:19	(unrelated sample)
JA61651-1	M77597.D	11/29/10	11:44	02:51	(used for QC only; not part of job JA61582)
ZZZZZZ	M77598.D	11/29/10	12:15	03:22	(unrelated sample)
ZZZZZZ	M77599.D	11/29/10	12:47	03:54	(unrelated sample)
ZZZZZZ	M77600.D	11/29/10	13:18	04:25	(unrelated sample)
ZZZZZZ	M77601.D	11/29/10	13:49	04:56	(unrelated sample)
OP46916-MS	M77602.D	11/29/10	14:20	05:27	Matrix Spike
OP46916-MSD	M77603.D	11/29/10	14:51	05:58	Matrix Spike Duplicate
ZZZZZZ	M77604.D	11/29/10	15:23	06:30	(unrelated sample)
ZZZZZZ	M77605.D	11/29/10	15:55	07:02	(unrelated sample)
ZZZZZZ	M77606.D	11/29/10	16:26	07:33	(unrelated sample)
ZZZZZZ	M77607.D	11/29/10	16:57	08:04	(unrelated sample)
ZZZZZZ	M77608.D	11/29/10	17:29	08:36	(unrelated sample)
ZZZZZZ	M77612.D	11/29/10	18:05	09:12	(unrelated sample)
ZZZZZZ	M77610.D	11/29/10	19:08	10:15	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EZ3145-DFTPP	**Injection Date:**	11/01/10
Lab File ID:	Z59098.D	**Injection Time:**	17:13
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18057	32.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25163	45.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	30552	55.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	55261	100.0		Pass
199	5.0 - 9.0% of mass 198	3644	6.59		Pass
275	10.0 - 30.0% of mass 198	11957	21.6		Pass
365	1.0 - 100.0% of mass 198	1420	2.57		Pass
441	Present, but less than mass 443	6657	12.0	(80.6) [b]	Pass
442	40.0 - 100.0% of mass 198	42834	77.5		Pass
443	17.0 - 23.0% of mass 442	8262	15.0	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ3145-IC3145	Z59101.D	11/01/10	17:36	00:23	Initial cal 5
EZ3145-IC3145	Z59099.D	11/01/10	18:05	00:52	Initial cal 100
EZ3145-IC3145	Z59100.D	11/01/10	18:33	01:20	Initial cal 10
EZ3145-IC3145	Z59102.D	11/01/10	19:02	01:49	Initial cal 2
EZ3145-ICC3145	Z59104.D	11/01/10	19:59	02:46	Initial cal 50
EZ3145-IC3145	Z59105.D	11/01/10	20:27	03:14	Initial cal 80
EZ3145-IC3145	Z59103.D	11/01/10	21:20	04:07	Initial cal 1
EZ3145-IC3145	Z59106.D	11/01/10	22:46	05:33	Initial cal 25

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EZ3146-DFTPP	**Injection Date:**	11/01/10
Lab File ID:	Z59107.D	**Injection Time:**	23:17
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18769	33.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25828	45.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	30449	53.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	56760	100.0		Pass
199	5.0 - 9.0% of mass 198	3982	7.02		Pass
275	10.0 - 30.0% of mass 198	12799	22.5		Pass
365	1.0 - 100.0% of mass 198	1504	2.65		Pass
441	Present, but less than mass 443	6971	12.3	(79.5) [b]	Pass
442	40.0 - 100.0% of mass 198	44792	78.9		Pass
443	17.0 - 23.0% of mass 442	8771	15.5	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ3146-IC3146	Z59108.D	11/01/10	23:32	00:15	Initial cal 100
EZ3146-IC3146	Z59109.D	11/02/10	00:01	00:44	Initial cal 80
EZ3146-ICC3146	Z59110.D	11/02/10	00:29	01:12	Initial cal 50
EZ3146-IC3146	Z59111.D	11/02/10	00:58	01:41	Initial cal 25
EZ3146-IC3146	Z59112.D	11/02/10	01:26	02:09	Initial cal 10
EZ3146-IC3146	Z59113.D	11/02/10	01:55	02:38	Initial cal 5
EZ3146-IC3146	Z59114.D	11/02/10	02:23	03:06	Initial cal 2
EZ3146-IC3146	Z59115.D	11/02/10	02:52	03:35	Initial cal 1
EZ3146-ICV3145	Z59116.D	11/02/10	03:21	04:04	Initial cal verification 50
EZ3146-ICV3145	Z59117.D	11/02/10	03:49	04:32	Initial cal verification 50
EZ3146-ICV3146	Z59117A.D	11/02/10	03:49	04:32	Initial cal verification 50
EZ3146-ICV3145	Z59118.D	11/02/10	04:17	05:00	Initial cal verification 50
EZ3146-ICV3146	Z59118A.D	11/02/10	04:17	05:00	Initial cal verification 50
EZ3146-ICV3145	Z59119.D	11/02/10	04:45	05:28	Initial cal verification 50
EZ3146-ICV3145	Z59120.D	11/02/10	05:14	05:57	Initial cal verification 50
EZ3146-ICV3146	Z59120A.D	11/02/10	05:14	05:57	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EZ3182-DFTPP	**Injection Date:**	11/29/10
Lab File ID:	Z59882.D	**Injection Time:**	09:18
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	14244	40.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	16658	47.6		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	17508	50.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	34997	100.0		Pass
199	5.0 - 9.0% of mass 198	2511	7.17		Pass
275	10.0 - 30.0% of mass 198	9263	26.5		Pass
365	1.0 - 100.0% of mass 198	1090	3.11		Pass
441	Present, but less than mass 443	4715	13.5	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	30766	87.9		Pass
443	17.0 - 23.0% of mass 442	5694	16.3	(18.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ3182-CC3145	Z59883.D	11/29/10	09:42	00:24	Continuing cal 50
EZ3182-CC3146	Z59884.D	11/29/10	10:50	01:32	Continuing cal 25
OP46854-MB1	Z59885.D	11/29/10	11:19	02:01	Method Blank
OP46916-MB1	Z59886.D	11/29/10	11:49	02:31	Method Blank
ZZZZZZ	Z59887.D	11/29/10	12:18	03:00	(unrelated sample)
ZZZZZZ	Z59888.D	11/29/10	12:46	03:28	(unrelated sample)
ZZZZZZ	Z59889.D	11/29/10	13:15	03:57	(unrelated sample)
ZZZZZZ	Z59890.D	11/29/10	13:47	04:29	(unrelated sample)
ZZZZZZ	Z59891.D	11/29/10	14:15	04:57	(unrelated sample)
ZZZZZZ	Z59897.D	11/29/10	15:22	06:04	(unrelated sample)
ZZZZZZ	Z59898.D	11/29/10	15:50	06:32	(unrelated sample)
ZZZZZZ	Z59892.D	11/29/10	16:19	07:01	(unrelated sample)
ZZZZZZ	Z59893.D	11/29/10	16:48	07:30	(unrelated sample)
ZZZZZZ	Z59894.D	11/29/10	17:17	07:59	(unrelated sample)
ZZZZZZ	Z59895.D	11/29/10	17:46	08:28	(unrelated sample)
ZZZZZZ	Z59899.D	11/29/10	18:15	08:57	(unrelated sample)
OP46986-MB1	Z59900.D	11/29/10	19:20	10:02	Method Blank

Instrument Performance Check (DFTPP)

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EZ3191-DFTPP	**Injection Date:**	12/06/10
Lab File ID:	Z60010.D	**Injection Time:**	08:59
Instrument ID:	GCMSZ		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22786	33.8		Pass
68	Less than 2.0% of mass 69	314	0.47	(0.94) [a]	Pass
69	Mass 69 relative abundance	33456	49.6		Pass
70	Less than 2.0% of mass 69	127	0.19	(0.38) [a]	Pass
127	40.0 - 60.0% of mass 198	35521	52.7		Pass
197	Less than 1.0% of mass 198	248	0.37		Pass
198	Base peak, 100% relative abundance	67416	100.0		Pass
199	5.0 - 9.0% of mass 198	4975	7.38		Pass
275	10.0 - 30.0% of mass 198	17082	25.3		Pass
365	1.0 - 100.0% of mass 198	2409	3.57		Pass
441	Present, but less than mass 443	8182	12.1	(74.7) [b]	Pass
442	40.0 - 100.0% of mass 198	53309	79.1		Pass
443	17.0 - 23.0% of mass 442	10953	16.2	(20.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ3191-CC3145	Z60011.D	12/06/10	09:23	00:24	Continuing cal 25
OP47064-MB1	Z60012.D	12/06/10	10:28	01:29	Method Blank
ZZZZZZ	Z60013.D	12/06/10	10:57	01:58	(unrelated sample)
ZZZZZZ	Z60014.D	12/06/10	11:26	02:27	(unrelated sample)
ZZZZZZ	Z60015.D	12/06/10	11:56	02:57	(unrelated sample)
ZZZZZZ	Z60016.D	12/06/10	12:25	03:26	(unrelated sample)
ZZZZZZ	Z60017.D	12/06/10	12:55	03:56	(unrelated sample)
ZZZZZZ	Z60018.D	12/06/10	13:24	04:25	(unrelated sample)
ZZZZZZ	Z60019.D	12/06/10	13:54	04:55	(unrelated sample)
ZZZZZZ	Z60020.D	12/06/10	14:23	05:24	(unrelated sample)
ZZZZZZ	Z60021.D	12/06/10	14:52	05:53	(unrelated sample)
ZZZZZZ	Z60022.D	12/06/10	15:21	06:22	(unrelated sample)
ZZZZZZ	Z60023.D	12/06/10	15:51	06:52	(unrelated sample)
ZZZZZZ	Z60024.D	12/06/10	16:20	07:21	(unrelated sample)
ZZZZZZ	Z60025.D	12/06/10	16:49	07:50	(unrelated sample)
ZZZZZZ	Z60026.D	12/06/10	17:19	08:20	(unrelated sample)
JA61582-3R	Z60027.D	12/06/10	17:48	08:49	DUP
ZZZZZZ	Z60028.D	12/06/10	18:17	09:18	(unrelated sample)
ZZZZZZ	Z60029.D	12/06/10	18:45	09:46	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	EM3023-CC3014	**Injection Date:**	11/29/10
Lab File ID:	M77592.D	**Injection Time:**	09:06
Instrument ID:	GCMSM	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	282597	5.48	897387	7.68	601994	11.10	975792	14.01	929633	18.38	757109	20.16
Upper Limit [a]	565194	5.98	1794774	8.18	1203988	11.60	1951584	14.51	1859266	18.88	1514218	20.66
Lower Limit [b]	141299	4.98	448694	7.18	300997	10.60	487896	13.51	464817	17.88	378555	19.66
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP46916-MB1	294463	5.48	927200	7.68	583700	11.10	980579	14.01	918642	18.38	684749	20.16
OP46916-BS1	288473	5.48	875577	7.68	586148	11.10	861357	14.01	805632	18.38	682885	20.16
ZZZZZZ	256139	5.48	810188	7.68	507005	11.10	782150	14.01	666275	18.38	489434	20.16
JA61651-1	292395	5.48	924166	7.68	586689	11.10	904796	14.01	714828	18.38	540991	20.16
ZZZZZZ	325536	5.48	929164	7.68	542568	11.11	747725	14.02	587254	18.40	505962	20.18
ZZZZZZ	297902	5.50	916570	7.68	591839	11.10	890806	14.01	576234	18.38	476635	20.18
ZZZZZZ	290529	5.49	954644	7.68	550289	11.11	758346	14.03	465635	18.39	310047*	20.17
ZZZZZZ	238971	5.49	776044	7.69	520438	11.12	822432	14.03	729628	18.41	501983	20.20
OP46916-MS	268166	5.49	866569	7.68	580697	11.11	859000	14.02	545822	18.39	444995	20.17
OP46916-MSD	259167	5.49	854212	7.68	590004	11.11	906030	14.02	631643	18.40	468661	20.18
ZZZZZZ	236220	5.49	714247	7.68	526377	11.10	951904	14.01	658390	18.39	429220	20.17
ZZZZZZ	238385	5.49	623694	7.68	501892	11.10	932838	14.01	734296	18.39	427993	20.16
ZZZZZZ	261277	5.48	894595	7.69	592545	11.10	939790	14.02	739715	18.40	525000	20.19
ZZZZZZ	213531	5.49	816532	7.68	560293	11.11	913383	14.02	679536	18.40	513242	20.20
ZZZZZZ	325431	5.51	983858	7.73	659168	11.37	804135	14.29	641579	18.43	605813	20.32
ZZZZZZ	207100	5.49	687195	7.68	423692	11.11	642687	14.03	437277*	18.39	285109*	20.17
ZZZZZZ	218981	5.48	730423	7.68	444406	11.10	686848	14.02	488436	18.40	394057	20.18

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	EZ3182-CC3145	**Injection Date:**	11/29/10
Lab File ID:	Z59883.D	**Injection Time:**	09:42
Instrument ID:	GCMSZ	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	80783	4.81	289409	6.60	174207	9.35	275221	11.70	275789	15.10	251333	16.61
Upper Limit [a]	161566	5.31	578818	7.10	348414	9.85	550442	12.20	551578	15.60	502666	17.11
Lower Limit [b]	40392	4.31	144705	6.10	87104	8.85	137611	11.20	137895	14.60	125667	16.11

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP46854-MB1	64743	4.81	234610	6.60	130704	9.35	207155	11.71	198785	15.11	167952	16.61
OP46916-MB1	66213	4.81	233427	6.60	129684	9.35	201525	11.71	190611	15.11	163542	16.61
ZZZZZZ	70200	4.81	249657	6.60	139727	9.35	215213	11.71	208141	15.10	193316	16.61
ZZZZZZ	73436	4.81	250807	6.60	136694	9.35	202777	11.70	196581	15.10	192632	16.61
ZZZZZZ	76735	4.80	269413	6.60	143942	9.35	215196	11.70	214104	15.10	217520	16.61
ZZZZZZ	75277	4.80	261273	6.59	142530	9.35	217559	11.70	214892	15.10	210724	16.61
ZZZZZZ	66669	4.80	225451	6.60	150630	9.36	240525	11.72	244911	15.10	227544	16.61
ZZZZZZ	84179	4.80	293913	6.59	160114	9.35	244287	11.70	225518	15.10	200683	16.61
ZZZZZZ	81601	4.80	281213	6.59	151408	9.35	224832	11.70	227708	15.10	223731	16.61
ZZZZZZ	77264	4.80	261305	6.60	140956	9.35	208235	11.70	204331	15.10	202371	16.61
ZZZZZZ	70308	4.80	240709	6.60	127934	9.35	188472	11.70	185153	15.10	184445	16.61
ZZZZZZ	60521	4.81	190600	6.60	113381	9.35	181136	11.70	183220	15.10	175230	16.61
ZZZZZZ	66169	4.80	213071	6.60	116067	9.35	182437	11.70	184815	15.10	176304	16.61
ZZZZZZ	84560	4.81	298198	6.60	171108	9.35	272625	11.70	253124	15.10	230021	16.61
OP46986-MB1	75788	4.80	252625	6.59	131540	9.35	196474	11.70	187560	15.10	182632	16.60

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	EZ3191-CC3145	**Injection Date:**	12/06/10
Lab File ID:	Z60011.D	**Injection Time:**	09:23
Instrument ID:	GCMSZ	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	71231	4.76	255441	6.54	149006	9.30	255275	11.65	269738	15.06	224799	16.57
Upper Limit [a]	142462	5.26	510882	7.04	298012	9.80	510550	12.15	539476	15.56	449598	17.07
Lower Limit [b]	35616	4.26	127721	6.04	74503	8.80	127638	11.15	134869	14.56	112400	16.07
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP47064-MB1	55147	4.76	200173	6.54	113720	9.30	174439	11.65	139415	15.07	119573	16.58
ZZZZZZ	59275	4.76	213625	6.55	128249	9.30	183303	11.65	180851	15.07	142635	16.58
ZZZZZZ	59099	4.78	219206	6.55	129524	9.30	200553	11.66	189429	15.07	156738	16.58
ZZZZZZ	44441	4.76	182267	6.55	93966	9.30	146658	11.66	161897	15.07	131237	16.58
ZZZZZZ	52925	4.76	193593	6.55	112381	9.30	163458	11.66	163650	15.07	122974	16.58
ZZZZZZ	51061	4.76	168054	6.55	105114	9.30	151514	11.66	139051	15.07	126285	16.58
ZZZZZZ	54797	4.76	187284	6.55	107607	9.30	153513	11.66	143429	15.07	126451	16.58
ZZZZZZ	57362	4.76	173867	6.55	104573	9.31	144243	11.66	159651	15.07	148699	16.57
ZZZZZZ	61150	4.76	206914	6.54	108068	9.29	161421	11.65	158872	15.07	156379	16.58
ZZZZZZ	45555	4.76	151283	6.54	90792	9.30	147833	11.65	149755	15.06	149781	16.58
ZZZZZZ	56316	4.75	187336	6.54	107924	9.30	163296	11.65	157943	15.06	158695	16.57
ZZZZZZ	59541	4.75	198449	6.54	113690	9.30	166873	11.65	145332	15.07	140500	16.58
ZZZZZZ	60835	4.75	198699	6.54	102540	9.29	163368	11.65	141664	15.07	149359	16.58
ZZZZZZ	55446	4.75	194705	6.54	111796	9.29	161695	11.65	144984	15.07	134810	16.57
ZZZZZZ	43703	4.76	144980	6.54	86006	9.30	121234*	11.65	131328*	15.07	135431	16.58
JA61582-3R	55186	4.76	171485	6.55	97986	9.31	154719	11.66	174467	15.07	161681	16.58
ZZZZZZ	52080	4.76	166278	6.55	92864	9.31	147910	11.66	165660	15.07	154238	16.58
ZZZZZZ	45962	4.76	148284	6.55	74474*	9.30	109632*	11.65	124112*	15.07	137809	16.58

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA61582-3R	Z60027.D	86.0	73.0	77.0
OP46916-BS1	M77595.D	94.0	75.0	94.0
OP46916-MB1	M77594.D	95.0	85.0	94.0
OP46916-MB1	Z59886.D	91.0	84.0	92.0
OP46916-MS	M77602.D	73.0	59.0	91.0
OP46916-MSD	M77603.D	77.0	61.0	93.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	28-113%
S2 = 2-Fluorobiphenyl	38-107%
S3 = Terphenyl-d14	31-116%

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3014-ICC3014
Lab FileID: M77424.D

Response Factor Report MSM

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration

Calibration Files
2 =M77427.D 5 =M77428.D 100 =M77425.D 50 =M77424.D
1 =M77426.D 10 =M77429.D 80 =M77431.D 25 =M77430.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.620	0.657	0.590	0.620	0.802	0.638	0.598	0.650	0.647	10.33
3) Pyridine	1.371	1.466	1.411	1.417	1.686	1.448	1.355	1.591	1.468	7.76
4) N-Nitrosodim	1.027	0.971	0.930	1.060		1.019	0.880	0.987	0.982	6.27
5) 2-Fluorophen	1.091	1.214	1.221	1.276	1.210	1.250	1.236	1.290	1.223	4.96
6) Indene	1.743	1.888	1.682	1.840	1.955	1.902	1.666	1.897	1.822	6.04
7) Cumene	2.502	2.748	2.383	2.708	2.904	2.793	2.394	2.762	2.649	7.40
8) Phenol-d5	1.115	1.350	1.463	1.529	1.179	1.507	1.479	1.547	1.396	11.87
9) Phenol	1.241	1.520	1.631	1.760	1.378	1.614	1.620	1.654	1.552	10.80
10) Aniline	1.752	1.944	1.643	1.845	1.974	1.991	1.611	1.942	1.838	8.25
11) bis(2-Chloro	1.113	1.240	1.160	1.256	1.250	1.270	1.133	1.276	1.212	5.43
12) 2-Chlorophen	1.156	1.366	1.254	1.351	1.270	1.397	1.222	1.388	1.301	6.74
13) Decane	2.386	2.392	1.845	2.254	2.763	2.259	1.728	2.121	2.219	14.72
14) 1,3-Dichloro	1.514	1.674	1.453	1.597	1.742	1.694	1.460	1.682	1.602	7.08
15) 1,4-Dichloro	1.538	1.637	1.408	1.560	1.743	1.629	1.405	1.623	1.568	7.46
16) Benzyl alcoh	0.658	0.767	0.893	0.927	0.710	0.873	0.879	0.910	0.827	12.24
17) 1,2-Dichloro	1.436	1.592	1.302	1.459	1.616	1.588	1.301	1.546	1.480	8.58
18) Acetophenone	1.492	1.696	1.578	1.757	1.708	1.753	1.529	1.725	1.655	6.37
19) 2-Methylphen	0.760	0.889	0.859	0.941	0.814	0.936	0.842	0.939	0.872	7.58
20) 2,2'-oxybis(	0.409	0.434	0.430	0.461	0.469	0.465	0.423	0.459	0.444	5.13
21) 3&4-Methylph	0.738	0.930	0.937	1.018	0.802	0.993	0.931	0.994	0.918	10.72
22) n-Nitroso-di	0.828	0.849	0.836	0.899	0.943	0.884	0.795	0.861	0.862	5.35
23) Hexachloroet	0.487	0.563	0.520	0.562	0.583	0.590	0.531	0.594	0.554	6.85
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.311	0.362	0.370	0.392	0.361	0.387	0.362	0.384	0.366	6.97
26) Nitrobenzene	0.170	0.202	0.192	0.200	0.218	0.204	0.196	0.206	0.198	6.92
27) Quinoline	0.573	0.679	0.660	0.692	0.676	0.719	0.677	0.721	0.675	6.85
28) Isophorone	0.585	0.652	0.638	0.695	0.680	0.700	0.643	0.698	0.661	6.03
29) 2-Nitropheno	0.159	0.193	0.209	0.215	0.178	0.210	0.211	0.225	0.200	11.04
30) 2,4-Dimethyl	0.282	0.318	0.332	0.342	0.322	0.338	0.327	0.338	0.325	5.91
31) Benzoic acid			0.251	0.231		0.170	0.241	0.208	0.220	14.66
32) bis(2-Chloro	0.366	0.409	0.399	0.420	0.446	0.437	0.398	0.433	0.414	6.30
33) 2,4-Dichloro	0.247	0.311	0.323	0.342	0.293	0.346	0.334	0.355	0.319	11.10
34) 2,6-Dichloro	0.278	0.314	0.305	0.320	0.338	0.341	0.317	0.343	0.319	6.81
35) 1,3,5-Trichl	0.392	0.444	0.356	0.393	0.440	0.441	0.373	0.430	0.409	8.44
36) 1,2,4-Trichl	0.373	0.405	0.355	0.376	0.399	0.415	0.371	0.411	0.388	5.68
37) 1,2,3-Trichl	0.367	0.397	0.340	0.373	0.396	0.415	0.357	0.406	0.381	6.86
38) Naphthalene	1.025	1.131	0.929	1.038	1.185	1.146	0.958	1.112	1.066	8.67
39) 4-Chloroanil	0.404	0.487	0.439	0.488	0.431	0.514	0.448	0.508	0.465	8.57
40) 2,3-Dichloro	0.362	0.412	0.348	0.373	0.414	0.420	0.358	0.398	0.386	7.42
41) Caprolactam	0.196	0.222	0.277	0.272	0.206	0.243	0.255	0.240	0.239	12.27
42) Hexachlorobu	0.204	0.222		0.206	0.217	0.220	0.198	0.220	0.212	4.52
43) 4-Chloro-3-m	0.235	0.286	0.314	0.327	0.262	0.312	0.312	0.326	0.297	11.16
44) 2-Methylnaph	0.750	0.842	0.712	0.785	0.831	0.871	0.737	0.833	0.795	7.24
45) 1-Methylnaph	0.717	0.793	0.679	0.734	0.813	0.817	0.704	0.788	0.755	7.07

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3014-ICC3014
Lab FileID: M77424.D

46)	Dimethylnaph	0.615	0.690	0.597	0.649	0.684	0.726	0.617	0.698	0.660	7.07
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.239	0.280	0.282	0.309	0.268	0.301	0.284	0.308	0.284	8.22
49)	2,4,6-Trichl	0.326	0.393	0.378	0.414	0.385	0.426	0.386	0.420	0.391	8.08
50)	2,4,5-Trichl	0.276	0.340	0.337	0.356	0.304	0.367	0.338	0.349	0.333	8.87
51)	2-Fluorobiph	1.355	1.456	1.208	1.339	1.498	1.499	1.240	1.396	1.374	8.04
52)	2-Chloronaph	1.108	1.243	1.028	1.153	1.261	1.266	1.039	1.197	1.162	8.25
53)	Biphenyl	1.386	1.562	1.194	1.386	1.642	1.587	1.212	1.459	1.428	11.69
54)	2-Nitroanili	0.243	0.306	0.338	0.380	0.281	0.352	0.315	0.339	0.319	13.44
55)	Dimethylphth	1.209	1.333		1.316	1.354	1.398	1.232	1.353	1.314	5.23
56)	Acenaphthyle	1.655	1.877	1.555	1.793	1.893	2.018	1.602	1.894	1.786	9.21
57)	2,6-Dinitrot	0.224	0.264	0.296	0.304	0.231	0.294	0.293	0.289	0.274	11.38
58)	3-Nitroanili	0.244	0.302	0.353	0.362	0.272	0.346	0.346	0.337	0.320	13.39
59)	Acenaphthene	1.063	1.178	1.012	1.134	1.269	1.249	1.018	1.172	1.137	8.67
60)	2,4-Dinitrop		0.075	0.191	0.178		0.112	0.180	0.144	0.147	31.09
	----- Linear regression ----- Coefficient = 0.9981										
	Response Ratio = -0.04624 + 0.19665 *A										
61)	4-Nitropheno	0.064	0.113	0.154	0.167		0.128	0.144	0.144	0.131	26.14
	----- Linear regression ----- Coefficient = 0.9948										
	Response Ratio = -0.00358 + 0.15388 *A										
62)	Dibenzofuran	1.580	1.718	1.406	1.619	1.790	1.811	1.444	1.707	1.634	9.24
63)	2,4-Dinitrot	0.270	0.351	0.409	0.424		0.385	0.405	0.406	0.379	14.12
64)	2,3,4,6-Tetr	0.278	0.318	0.346	0.361	0.300	0.364	0.349	0.364	0.335	9.73
65)	Diethylphtha	1.152	1.294	1.091	1.239	1.371	1.341	1.070	1.252	1.226	9.12
66)	Fluorene	1.217	1.360	1.166	1.308	1.398	1.446	1.186	1.365	1.306	8.01
67)	4-Chlorophen	0.641	0.727	0.605	0.666	0.749	0.746	0.619	0.696	0.681	8.36
68)	4-Nitroanili	0.242	0.320	0.368	0.378		0.353	0.361	0.359	0.340	13.80
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-		0.089	0.168	0.162		0.125	0.168	0.143	0.142	21.95
	----- Linear regression ----- Coefficient = 0.9996										
	Response Ratio = -0.01380 + 0.17389 *A										
71)	n-Nitrosodip	0.488	0.556	0.511	0.551	0.590	0.597	0.526	0.583	0.550	7.17
72)	1,2-Diphenyl	0.649	0.668	0.666	0.745	0.691	0.696	0.647	0.661	0.678	4.78
73)	2,4,6-Tribro	0.058	0.065	0.079	0.082		0.072	0.078	0.077	0.073	11.59
74)	4-Bromopheny	0.188	0.216	0.211	0.224	0.219	0.235	0.222	0.231	0.218	6.69
75)	Hexachlorobe	0.190	0.192	0.195	0.206	0.222	0.217	0.199	0.209	0.204	5.79
76)	Pentachlorop	0.097	0.127	0.140	0.147	0.107	0.143	0.142	0.150	0.132	14.97
77)	Phenanthrene	1.058	1.146	0.957	1.070	1.266	1.168	0.975	1.116	1.094	9.33
78)	Anthracene	1.006	1.125	0.989	1.113	1.151	1.224	1.003	1.148	1.095	7.82
79)	Carbazole	0.905	1.016	0.948	1.040	1.064	1.118	0.964	1.084	1.017	7.22
80)	Di-n-butylph	1.033	1.229		1.284	1.183	1.327	1.144	1.303	1.215	8.54
81)	Fluoranthene	1.176	1.317	1.114	1.255	1.371	1.402	1.152	1.345	1.267	8.57
82)	Octadecane	0.626	0.625	0.564	0.646	0.848	0.621	0.547	0.600	0.635	14.58
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.185	1.371	1.135	1.276	1.400	1.476	1.188	1.382	1.302	9.48
85)	Butyl steara	0.471	0.440	0.400	0.475	0.588	0.453	0.407	0.438	0.459	12.80
86)	Terphenyl-d1	0.685	0.795	0.726	0.781	0.787	0.842	0.773	0.831	0.778	6.63
87)	Butylbenzylp	0.410	0.503		0.603	0.457	0.580	0.572	0.580	0.529	13.94
88)	Benzo[a]anth	1.152	1.263	1.058	1.203	1.376	1.353	1.114	1.285	1.226	9.27
89)	3,3'-Dichlor	0.317	0.385	0.392	0.425	0.361	0.447	0.408	0.444	0.397	11.03
90)	Chrysene	1.038	1.166	0.995	1.100	1.227	1.204	1.027	1.163	1.115	7.85
91)	bis(2-Ethylh	0.567	0.677		0.777	0.655	0.771	0.721	0.761	0.704	10.86
92)	I Perylene-d12	ISTD									

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3014-ICC3014
Lab FileID: M77424.D

93)	Di-n-octylph	1.111	1.358		1.497	1.284	1.540	1.348	1.523	1.380	11.18
94)	Benzo[b]fluo	1.175	1.640	1.159	1.279	1.295	1.784	1.223	1.506	1.383	16.85

----- Linear regression ----- Coefficient = 0.9943

Response Ratio = 0.08741 + 1.16161 *A

95)	Benzo[k]fluo	1.255	1.142	0.984	1.112	1.495	1.073	0.974	1.129	1.145	14.61
96)	Benzo[a]pyre	1.119	1.249	1.081	1.214	1.256	1.331	1.119	1.297	1.208	7.61
97)	Indeno[1,2,3	1.129	1.335	1.145	1.346	1.360	1.423	1.178	1.378	1.287	9.05
98)	Dibenz(a,h)a	0.772	0.932	0.877	1.000	0.915	1.022	0.915	1.011	0.930	8.93
99)	Dibenz[a,h]a	0.927	1.080	0.887	1.071	1.041	1.124	0.914	1.085	1.016	9.03
100)	7,12-Dimethy	0.418	0.451	0.498	0.521	0.488	0.514	0.500	0.556	0.493	8.63
101)	Benzo[g,h,i]	0.989	1.127	0.980	1.178	1.123	1.199	1.014	1.166	1.097	8.12

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM3014.M Mon Nov 22 10:45:52 2010 GCMSM

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3015-ICC3015
Lab FileID: M77435.D

Response Factor Report MSM

Method : C:\HPCHEM\1\METHODS\MM3015.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Initial Calibration

Calibration Files
2 =M77439.D 5 =M77438.D 100 =M77433.D 50 =M77435.D
1 =M77440.D 10 =M77437.D 80 =M77434.D 25 =M77436.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	1.021	0.999	0.562	0.633	0.779	0.929	0.645	0.633	0.775	23.73
----- Linear regression ----- Coefficient = 0.9909										
Response Ratio = 0.04636 + 0.57740 *A										
104) I Acenaphthene-d10a	ISTD									
105) 1,2,4,5-Tetr	0.689	0.662	0.489	0.599	0.487	0.633	0.557	0.617	0.592	12.69
106) I Phenanthrene-d10a	ISTD									
107) Atrazine	0.128	0.122	0.108	0.126	0.086	0.123	0.121	0.128	0.118	12.06
108) Methyl parat	0.090	0.116	0.186	0.200		0.150	0.203	0.176	0.160	26.99
----- Linear regression ----- Coefficient = 0.9957										
Response Ratio = -0.00708 + 0.19658 *A										
109) Parathion		0.086	0.115	0.127		0.098	0.125	0.116	0.111	14.22
110) I Chrysene-d12a	ISTD									
111) Benzidine	0.542	0.647	0.419	0.190	0.295	0.673	0.441	0.098	0.413	50.34

(#) = Out of Range ### Number of calibration levels exceeded format ###

MM3014.M Fri Nov 19 13:02:26 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3015-ICV3015
Lab FileID: M77442.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77442.D Vial: 11
Acq On : 18 Nov 2010 8:25 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104 I	Acenaphthene-d10a	1.000	1.000	0.0	119	0.00	11.11
105 I	1,2,4,5-Tetrachlorobenzen	0.592	0.566	4.4	112	0.00	9.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Fri Nov 19 13:07:07 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3015-ICV3014
Lab FileID: M77443.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77443.D Vial: 12
Acq On : 18 Nov 2010 8:56 pm Operator: olgaa
Sample : icV3014-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 16:00:33 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	168	0.00	5.50
2	t	1,4-Dioxane	0.647	0.552	14.7	150	0.00	2.31
6	t	Indene	1.822	1.705	6.4	156	0.00	5.94
7	t	Cumene	2.649	2.176	17.9	135	0.00	4.41
13	t	Decane	2.219	1.739	21.6#	130	0.00	5.28
18	t	Acetophenone	1.655	1.645	0.6	157	0.00	6.20
24	I	Naphthalene-d8	1.000	1.000	0.0	165	0.00	7.69
27	t	Quinoline	0.675	0.679	-0.6	162	-0.02	8.37
40	t	2,3-Dichloroaniline	0.386	0.347	10.1	154	0.00	9.67
41	t	Caprolactam	0.239	0.203	15.1	123	-0.03	8.50
45	t	1-Methylnaphthalene	0.755	0.687	9.0	155	0.00	9.25
46	t	Dimethylnaphthalene	0.660	0.603	8.6	154	0.00	10.27
47	I	Acenaphthene-d10	1.000	1.000	0.0	164	-0.01	11.10
53	t	Biphenyl	1.428	1.351	5.4	160	-0.01	9.98
69	I	Phenanthrene-d10	1.000	1.000	0.0	150	0.00	14.01
82	t	Octadecane	0.635	0.574	9.6	133	0.00	13.97
83	I	Chrysene-d12	1.000	1.000	0.0	165	0.00	18.37
92	I	Perylene-d12	1.000	1.000	0.0	129	0.00	20.14
100	t	7,12-Dimethylbenz(a)anthr	0.493	0.384	22.1#	95	0.00	19.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Fri Nov 19 16:21:13 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3015-ICV3015
Lab FileID: M77443A.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77443A.D Vial: 12
Acq On : 18 Nov 2010 8:56 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	115	0.00	5.50
		True	Calc.	% Drift			
103 t	Benzaldehyde	50.000	63.434	-26.9#	179	0.00	4.87
106 I	Phenanthrene-d10a	1.000	1.000	0.0	103	0.00	14.01
107 t	Atrazine	0.118	0.138	-16.9	113	0.00	13.65

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Mon Nov 22 13:42:53 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3015-ICV3015
Lab FileID: M77445.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77445.D Vial: 14
Acq On : 18 Nov 2010 9:59 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
110 I	Chrysene-d12a	1.000	1.000	0.0	128	0.00	18.37
111 t	Benzidine	0.413	0.443	-7.3	136	0.00	16.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77433.D MM3014.M Wed Nov 24 10:03:56 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3017-ICV3014
Lab FileID: M77469.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77469.D Vial: 4
Acq On : 19 Nov 2010 3:30 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 16:00:33 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	138	0.00	5.49
3	t	Pyridine	1.468	1.317	10.3	128	0.00	2.58
4	t	N-Nitrosodimethylamine	0.982	0.789	19.7	103	0.00	2.55
11	t	bis(2-Chloroethyl)ether	1.212	1.249	-3.1	137	0.00	5.15
14	t	1,3-Dichlorobenzene	1.602	1.476	7.9	127	0.00	5.44
15	t	1,4-Dichlorobenzene	1.568	1.378	12.1	122	0.00	5.52
16	t	Benzyl alcohol	0.827	0.849	-2.7	126	0.00	5.75
17	t	1,2-Dichlorobenzene	1.480	1.336	9.7	126	0.00	5.81
20	t	2,2'-oxybis(1-Chloropropa	0.444	0.432	2.7	129	0.00	6.02
22	t	n-Nitroso-di-n-propylamin	0.862	0.808	6.3	124	0.00	6.26
23	t	Hexachloroethane	0.554	0.505	8.8	124	0.00	6.32
24	I	Naphthalene-d8	1.000	1.000	0.0	134	0.00	7.70
26	t	Nitrobenzene	0.198	0.185	6.6	124	0.00	6.48
28	t	Isophorone	0.661	0.621	6.1	120	0.00	6.90
32	t	bis(2-Chloroethoxy)methan	0.414	0.427	-3.1	136	0.00	7.34
36	t	1,2,4-Trichlorobenzene	0.388	0.356	8.2	127	0.00	7.62
38	t	Naphthalene	1.066	0.930	12.8	120	0.00	7.73
42	t	Hexachlorobutadiene	0.212	0.192	9.4	125	0.00	8.10
44	t	2-Methylnaphthalene	0.795	0.675	15.1	115	0.00	9.04
47	I	Acenaphthene-d10	1.000	1.000	0.0	130	0.00	11.11
48	t	Hexachlorocyclopentadiene	0.284	0.312	-9.9	132	0.00	9.50
52	t	2-Chloronaphthalene	1.162	1.089	6.3	123	0.00	9.97
54	t	2-Nitroaniline	0.319	0.310	2.8	106	0.00	10.27
55	t	Dimethylphthalate	1.314	1.157	11.9	114	0.00	10.75
56	t	Acenaphthylene	1.786	1.489	16.6	108	0.00	10.79
57	t	2,6-Dinitrotoluene	0.274	0.261	4.7	112	0.00	10.86
58	t	3-Nitroaniline	0.320	0.284	11.3	102	0.00	11.10
59	t	Acenaphthene	1.137	0.991	12.8	113	0.00	11.17
62	t	Dibenzofuran	1.634	1.482	9.3	119	0.00	11.48
63	t	2,4-Dinitrotoluene	0.379	0.329	13.2	101	0.00	11.62
65	t	Diethylphthalate	1.226	0.992	19.1	104	0.00	12.17
66	t	Fluorene	1.306	1.146	12.3	114	0.00	12.17
67	t	4-Chlorophenyl-phenylethe	0.681	0.566	16.9	110	0.00	12.22
68	t	4-Nitroaniline	0.340	0.313	7.9	107	0.00	12.32
69	I	Phenanthrene-d10	1.000	1.000	0.0	131	0.00	14.01
71	t	n-Nitrosodiphenylamine	0.550	0.465	15.5	110	0.00	12.48

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3017-ICV3014
Lab FileID: M77469.D

72	t	1,2-Diphenylhydrazine	0.678	0.620	8.6	109	0.00	12.52
74	t	4-Bromophenyl-phenylether	0.218	0.189	13.3	111	0.00	13.17
75	t	Hexachlorobenzene	0.204	0.173	15.2	110	0.00	13.42
77	t	Phenanthrene	1.094	0.914	16.5	112	0.00	14.05
78	t	Anthracene	1.095	0.922	15.8	108	0.00	14.14
79	t	Carbazole	1.017	0.893	12.2	112	0.00	14.51
80	t	Di-n-butylphthalate	1.215	1.047	13.8	107	0.00	15.39
81	t	Fluoranthene	1.267	1.029	18.8	107	0.00	16.24
83	I	Chrysene-d12	1.000	1.000	0.0	108	0.00	18.38
84	t	Pyrene	1.302	1.237	5.0	105	0.00	16.59
87	t	Butylbenzylphthalate	0.529	0.553	-4.5	99	0.00	17.71
88	t	Benzo[a]anthracene	1.226	1.102	10.1	99	0.00	18.36
90	t	Chrysene	1.115	0.990	11.2	97	0.00	18.41
91	t	bis(2-Ethylhexyl)phthalat	0.704	0.709	-0.7	99	0.00	18.55
92	I	Perylene-d12	1.000	1.000	0.0	102	0.00	20.15
93	t	Di-n-octylphthalate	1.380	1.450	-5.1	99	0.00	19.30
			True	Calc.	% Drift			
94	t	Benzo[b]fluoranthene	50.000	50.872	-1.7	100	0.00	19.70
			AvgRF	CCRF	% Dev			
95	t	Benzo[k]fluoranthene	1.145	1.002	12.5	92	0.00	19.73
96	t	Benzo[a]pyrene	1.208	1.117	7.5	94	0.00	20.08
97	t	Indeno[1,2,3-cd]pyrene	1.287	1.214	5.7	92	0.00	21.60
99	t	Dibenz[a,h]anthracene	1.016	0.957	5.8	91	0.00	21.62
101	t	Benzo[g,h,i]perylene	1.097	1.049	4.4	91	0.00	22.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Fri Nov 19 16:01:41 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3017-ICV3014
Lab FileID: M77470.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77470.D Vial: 5
Acq On : 19 Nov 2010 4:01 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	181	0.00	5.50
10	t	Aniline	1.838	1.801	2.0	176	-0.01	5.05
24	I	Naphthalene-d8	1.000	1.000	0.0	175	0.00	7.69
39	t	4-Chloroaniline	0.465	0.437	6.0	157	0.00	7.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Mon Nov 22 12:56:02 2010 GCMSM

5.7.8

5

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3017-ICV3014
Lab FileID: M77471.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77471.D Vial: 6
Acq On : 19 Nov 2010 4:34 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	179	-0.01	5.49
9	t	Phenol	1.552	1.528	1.5	155	0.00	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	163	0.00	7.69
29	t	2-Nitrophenol	0.200	0.218	-9.0	166	0.00	7.05
30	t	2,4-Dimethylphenol	0.325	0.332	-2.2	158	0.00	7.15
31	t	Benzoic acid	0.220	0.256	-16.4	181	0.02	7.38
33	t	2,4-Dichlorophenol	0.319	0.314	1.6	150	0.00	7.46
34	t	2,6-Dichlorophenol	0.319	0.315	1.3	160	0.00	7.90
43	t	4-Chloro-3-methylphenol	0.297	0.289	2.7	144	-0.01	8.85
47	I	Acenaphthene-d10	1.000	1.000	0.0	171	-0.01	11.10
49	t	2,4,6-Trichlorophenol	0.391	0.382	2.3	157	-0.01	9.66
50	t	2,4,5-Trichlorophenol	0.333	0.391	-17.4	187	-0.01	9.72
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	86.132	13.9	126	0.00	11.30
61	t	4-Nitrophenol	50.000	41.829	16.3	112	0.00	11.48
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.335	0.281	16.1	133	0.00	11.83
69	I	Phenanthrene-d10	1.000	1.000	0.0	157	0.00	14.01
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	42.325	15.3	133	-0.01	12.40
		----------	AvgRF	CCRF	% Dev	----------		
76	t	Pentachlorophenol	0.132	0.136	-3.0	146	0.00	13.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Mon Nov 22 12:59:39 2010 GCMSM

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3017-ICV3014
Lab FileID: M77490.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77490.D Vial: 6
Acq On : 19 Nov 2010 5:15 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	166	-0.01	5.49
19	t	2-Methylphenol	0.872	0.935	-7.2	165	0.00	5.96
21	t	3&4-Methylphenol	0.918	0.966	-5.2	158	-0.01	6.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Mon Nov 22 13:07:14 2010 GCMSM

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3023-CC3014
Lab FileID: M77592.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	182	-0.02	5.48
2	t	1,4-Dioxane	0.647	0.528	18.4	148	-0.01	2.30
3	t	Pyridine	1.468	1.200	18.3	137	-0.01	2.58
4	t	N-Nitrosodimethylamine	0.982	0.867	11.7	160	-0.01	2.54
5	S	2-Fluorophenol	1.223	1.150	6.0	162	0.00	3.78
6	t	Indene	1.822	1.755	3.7	169	-0.01	5.93
7	t	Cumene	2.649	2.478	6.5	163	-0.02	4.39
8	S	Phenol-d5	1.396	1.414	-1.3	167	0.00	5.00
9	t	Phenol	1.552	1.559	-0.5	172	0.00	5.02
10	t	Aniline	1.838	1.487	19.1	139	-0.02	5.04
11	t	bis(2-Chloroethyl)ether	1.212	1.120	7.6	160	-0.02	5.14
12	t	2-Chlorophenol	1.301	1.278	1.8	168	-0.01	5.21
13	t	Decane	2.219	1.469	33.8#	126	-0.02	5.26
14	t	1,3-Dichlorobenzene	1.602	1.538	4.0	167	-0.01	5.43
15	t	1,4-Dichlorobenzene	1.568	1.447	7.7	162	-0.01	5.51
16	t	Benzyl alcohol	0.827	0.836	-1.1	167	-0.01	5.75
17	t	1,2-Dichlorobenzene	1.480	1.406	5.0	166	-0.02	5.80
18	t	Acetophenone	1.655	1.644	0.7	174	-0.01	6.19
19	t	2-Methylphenol	0.872	0.856	1.8	166	0.00	5.97
20	t	2,2'-oxybis(1-Chloropropa	0.444	0.406	8.6	161	-0.02	6.01
21	t	3&4-Methylphenol	0.918	0.917	0.1	168	0.00	6.22
22	t	n-Nitroso-di-n-propylamin	0.862	0.802	7.0	170	-0.02	6.24
23	t	Hexachloroethane	0.554	0.508	8.3	156	-0.02	6.31
24	I	Naphthalene-d8	1.000	1.000	0.0	169	-0.01	7.68
25	S	Nitrobenzene-d5	0.366	0.404	-10.4	178	-0.02	6.44
26	t	Nitrobenzene	0.198	0.202	-2.0	166	-0.02	6.47
27	t	Quinoline	0.675	0.678	-0.4	159	-0.02	8.37
28	t	Isophorone	0.661	0.629	4.8	152	-0.01	6.90
29	t	2-Nitrophenol	0.200	0.234	-17.0	175	-0.01	7.04
30	t	2,4-Dimethylphenol	0.325	0.340	-4.6	170	0.00	7.15
31	t	Benzoic acid	0.220	0.223	-1.4	181	0.00	7.36
32	t	bis(2-Chloroethoxy)methan	0.414	0.415	-0.2	162	-0.02	7.32
33	t	2,4-Dichlorophenol	0.319	0.364	-14.1	173	0.00	7.47
34	t	2,6-Dichlorophenol	0.319	0.350	-9.7	173	0.00	7.90
35	t	1,3,5-Trichlorobenzene	0.409	0.404	1.2	159	-0.01	7.05
36	t	1,2,4-Trichlorobenzene	0.388	0.386	0.5	159	-0.01	7.62
37	t	1,2,3-Trichlorobenzene	0.381	0.374	1.8	156	-0.01	8.06
38	t	Naphthalene	1.066	1.041	2.3	158	-0.01	7.71
39	t	4-Chloroaniline	0.465	0.471	-1.3	157	-0.01	7.89
40	t	2,3-Dichloroaniline	0.386	0.405	-4.9	172	0.00	9.67
41	t	Caprolactam	0.239	0.195	18.4	137	-0.02	8.51

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3023-CC3014
Lab FileID: M77592.D

42	t	Hexachlorobutadiene	0.212	0.214	-0.9	165	-0.02	8.08
43	t	4-Chloro-3-methylphenol	0.297	0.343	-15.5	178	0.00	8.87
44	t	2-Methylnaphthalene	0.795	0.816	-2.6	165	-0.01	9.03
45	t	1-Methylnaphthalene	0.755	0.775	-2.6	166	-0.01	9.23
46	t	Dimethylnaphthalene	0.660	0.698	-5.8	169	-0.01	10.26
47	I	Acenaphthene-d10	1.000	1.000	0.0	178	-0.01	11.10
48	t	Hexachlorocyclopentadiene	0.284	0.250	12.0	145	-0.02	9.48
49	t	2,4,6-Trichlorophenol	0.391	0.369	5.6	156	0.00	9.67
50	t	2,4,5-Trichlorophenol	0.333	0.339	-1.8	173	0.02	9.75
51	S	2-Fluorobiphenyl	1.374	1.292	6.0	165	-0.01	9.81
52	t	2-Chloronaphthalene	1.162	1.081	7.0	161	-0.01	9.97
53	t	Biphenyl	1.428	1.320	7.6	161	-0.02	9.97
54	t	2-Nitroaniline	0.319	0.341	-6.9	179	0.00	10.28
55	t	Dimethylphthalate	1.314	1.230	6.4	162	-0.01	10.74
56	t	Acenaphthylene	1.786	1.706	4.5	160	-0.01	10.79
57	t	2,6-Dinitrotoluene	0.274	0.295	-7.7	182	-0.01	10.85
58	t	3-Nitroaniline	0.320	0.302	5.6	160	0.00	11.11
59	t	Acenaphthene	1.137	1.035	9.0	157	-0.01	11.16
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	46.685	6.6	181	0.02	11.33
61	t	4-Nitrophenol	25.000	24.988	0.0	183	0.09	11.57
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.634	1.563	4.3	163	0.00	11.48
63	t	2,4-Dinitrotoluene	0.379	0.404	-6.6	177	0.00	11.63
64		2,3,4,6-Tetrachlorophenol	0.335	0.350	-4.5	171	0.00	11.84
65	t	Diethylphthalate	1.226	1.166	4.9	166	-0.02	12.15
66	t	Fluorene	1.306	1.234	5.5	161	-0.01	12.15
67	t	4-Chlorophenyl-phenylethe	0.681	0.605	11.2	155	-0.01	12.20
68	t	4-Nitroaniline	0.340	0.343	-0.9	170	0.00	12.34
69	I	Phenanthrene-d10	1.000	1.000	0.0	168	0.00	14.01
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	25.000	23.621	5.5	167	0.00	12.42
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.550	0.571	-3.8	164	-0.01	12.46
72	t	1,2-Diphenylhydrazine	0.678	0.717	-5.8	182	-0.01	12.51
73	S	2,4,6-Tribromophenol	0.073	0.090	-23.3#	194	0.00	12.69
74	t	4-Bromophenyl-phenylether	0.218	0.224	-2.8	163	0.00	13.17
75	t	Hexachlorobenzene	0.204	0.221	-8.3	177	0.00	13.42
76	t	Pentachlorophenol	0.132	0.142	-7.6	160	0.00	13.80
77	t	Phenanthrene	1.094	1.001	8.5	150	0.00	14.05
78	t	Anthracene	1.095	1.106	-1.0	161	0.00	14.14
79	t	Carbazole	1.017	1.067	-4.9	165	0.00	14.51
80	t	Di-n-butylphthalate	1.215	1.233	-1.5	159	-0.01	15.37
81	t	Fluoranthene	1.267	1.210	4.5	151	0.00	16.24
82	t	Octadecane	0.635	0.514	19.1	144	-0.01	13.95
83	I	Chrysene-d12	1.000	1.000	0.0	162	0.00	18.38
84	t	Pyrene	1.302	1.299	0.2	152	0.00	16.59
85		Butyl stearate	0.459	0.365	20.5#	135	-0.01	17.77
86	S	Terphenyl-d14	0.778	0.851	-9.4	166	0.00	16.91
87	t	Butylbenzylphthalate	0.529	0.587	-11.0	164	0.00	17.71
88	t	Benzo[a]anthracene	1.226	1.178	3.9	148	0.00	18.36
89	t	3,3'-Dichlorobenzidine	0.397	0.379	4.5	138	0.00	18.37
90	t	Chrysene	1.115	1.074	3.7	149	0.00	18.42

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3023-CC3014
Lab FileID: M77592.D

91	t	bis(2-Ethylhexyl)phthalat	0.704	0.834	-18.5	177	-0.01	18.54
92	I	Perylene-d12	1.000	1.000	0.0	151	0.02	20.16
93	t	Di-n-octylphthalate	1.380	1.579	-14.4	157	0.00	19.29
			True	Calc.	% Drift			
94	t	Benzo[b]fluoranthene	25.000	26.054	-4.2	135	0.00	19.71
			AvgRF	CCRF	% Dev			
95	t	Benzo[k]fluoranthene	1.145	1.125	1.7	150	0.00	19.73
96	t	Benzo[a]pyrene	1.208	1.199	0.7	140	0.00	20.09
97	t	Indeno[1,2,3-cd]pyrene	1.287	1.163	9.6	127	0.00	21.61
98	t	Dibenz(a,h)acridine	0.930	0.920	1.1	137	0.02	21.28
99	t	Dibenz[a,h]anthracene	1.016	1.006	1.0	140	0.00	21.63
100	t	7,12-Dimethylbenz(a)anthr	0.493	0.563	-14.2	153	0.00	19.72
101	t	Benzo[g,h,i]perylene	1.097	0.994	9.4	129	0.00	22.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77436.D MM3014.M Sat Dec 04 09:54:27 2010 GCMSM

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EM3023-CC3015
Lab FileID: M77593.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77593.D Vial: 3
Acq On : 29 Nov 2010 9:38 am Operator: olgaa
Sample : cc3015-50 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration

Min. RRF : 0.049 Min. Rel. Area : 49% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	165	-0.02	5.48
		True	Calc.	% Drift			
103 t	Benzaldehyde	50.000	50.393	-0.8	161	-0.02	4.85
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	162	-0.01	11.10
105 I	1,2,4,5-Tetrachlorobenzen	0.592	0.563	4.9	153	-0.01	9.44
106 I	Phenanthrene-d10a	1.000	1.000	0.0	165	0.00	14.01
107 t	Atrazine	0.118	0.124	-5.1	162	0.00	13.65
110 I	Chrysene-d12a	1.000	1.000	0.0	149	0.00	18.38
111 t	Benzidine	0.413	0.187	54.7#	148	0.02	16.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M77435.D MM3014.M Sat Dec 04 09:57:28 2010 GCMSM

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3145-ICC3145
Lab FileID: Z59104.D

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:13:16 2010
Response via : Initial Calibration

Calibration Files
100 =Z59099.D 80 =Z59105.D 50 =Z59104.D 25 =Z59106.D
10 =Z59100.D 5 =Z59101.D 2 =Z59102.D 1 =Z59103.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.739	0.752	0.751	0.749	0.713	0.701	0.737	0.758	0.737	2.75
3) Pyridine	1.799	1.815	1.869	1.886	1.894	1.752	1.898	1.970	1.860	3.68
4) N-Nitrosodim	1.146	1.154	1.164	1.175	1.174	1.065	1.147	1.153	1.147	3.05
5) 2-Fluorophen	1.401	1.430	1.454	1.445	1.462	1.376	1.435	1.541	1.443	3.38
6) Indene	1.755	1.802	1.926	2.006	2.090	2.058	2.140	2.218	2.000	8.09
7) Cumene	2.817	2.951	3.080	3.207	3.224	3.204	3.398	3.602	3.185	7.71
8) Phenol-d5	1.834	1.879	1.923	1.947	1.980	1.850	1.871	2.112	1.925	4.71
9) Phenol	1.809	1.865	1.949	2.041	2.159	1.961	2.217	2.243	2.031	7.98
10) Aniline	2.250	2.340	2.444	2.549	2.649	2.535	2.756	2.841	2.546	7.89
11) bis(2-Chloro	1.312	1.334	1.406	1.466	1.506	1.482	1.539	1.654	1.462	7.64
12) 2-Chlorophen	1.300	1.351	1.408	1.461	1.570	1.475	1.546	1.796	1.488	10.36
13) Decane	1.061	1.101	1.173	1.240	1.338	1.260	1.431	1.524	1.266	12.57
14) 1,3-Dichloro	1.457	1.505	1.570	1.645	1.716	1.655	1.796	1.950	1.662	9.64
15) 1,4-Dichloro	1.418	1.455	1.500	1.577	1.614	1.623	1.722	1.853	1.595	9.00
16) Benzyl alcoh	1.004	1.009	1.029	1.021	1.033	0.979	0.981	1.119	1.022	4.31
17) 1,2-Dichloro	1.295	1.348	1.416	1.502	1.597	1.540	1.701	1.770	1.521	10.91
18) Acetophenone	1.657	1.696	1.790	1.883	1.986	1.901	1.990	2.308	1.901	10.80
19) 2-Methylphen		1.006	1.058	1.101	1.148	1.068	1.144	1.199	1.104	5.90
20) 2,2'-oxybis(	0.419	0.429	0.444	0.457	0.459	0.433	0.430	0.397	0.434	4.66
21) 3&4-Methylph	1.071	1.091	1.134	1.176	1.203	1.089	1.179	1.304	1.156	6.65
22) n-Nitroso-di	0.982	0.986	1.020	1.046	1.086	1.042	1.073	1.271	1.063	8.65
23) Hexachloroet	0.450	0.451	0.455	0.465	0.502	0.460	0.480	0.531	0.474	6.11
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.393	0.403	0.408	0.420	0.428	0.393	0.430	0.455	0.416	5.13
26) Nitrobenzene	0.181	0.188	0.189	0.198	0.200	0.188	0.189	0.201	0.192	3.83
27) Quinoline	0.662	0.674	0.698	0.711	0.719	0.689	0.737	0.782	0.709	5.39
28) Isophorone	0.712	0.734	0.764	0.777	0.796	0.761	0.787	0.835	0.771	4.93
29) 2-Nitropheno	0.194	0.203	0.197	0.193	0.189	0.157	0.158	0.170	0.183	9.90
30) 2,4-Dimethyl	0.346	0.355	0.369	0.387	0.405	0.381	0.398	0.395	0.380	5.58
31) Benzoic Acid	0.194	0.176	0.162	0.128	0.100				0.152	24.78
----- Linear regression ----- Coefficient = 0.9942										
Response Ratio = -0.04037 + 0.20319 *A										
32) bis(2-Chloro	0.419	0.431	0.444	0.469	0.479	0.454	0.507	0.569	0.471	10.21
33) 2,4-Dichloro	0.301	0.310	0.313	0.320	0.326	0.305	0.297	0.332	0.313	3.86
34) 2,6-Dichloro	0.276	0.285	0.293	0.301	0.310	0.299	0.301	0.290	0.294	3.64
35) 1,3,5-Trichl	0.302	0.318	0.332	0.353	0.377	0.360	0.390	0.437	0.359	12.05
36) 1,2,4-Trichl	0.305	0.319	0.324	0.334	0.354	0.348	0.384	0.416	0.348	10.54
37) 1,2,3-Trichl	0.282	0.294	0.307	0.324	0.342	0.323	0.354	0.404	0.329	11.75
38) Naphthalene	0.947	1.002	1.057	1.118	1.160	1.146	1.261	1.357	1.131	11.83
39) 4-Chloroanil	0.449	0.463	0.487	0.516	0.529	0.508	0.557	0.598	0.514	9.56
40) 2,3-Dichloro	0.315	0.328	0.346	0.367	0.393	0.371	0.381	0.420	0.365	9.44
41) Caprolactam	0.157	0.158	0.159	0.159	0.153	0.148	0.136	0.126	0.149	8.34
42) Hexachlorobu	0.134	0.140	0.146	0.153	0.161	0.151	0.155	0.186	0.153	10.36

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3145-ICC3145
Lab FileID: Z59104.D

43)	4-Chloro-3-m	0.325	0.329	0.335	0.341	0.332	0.311	0.291	0.311	0.322	5.12
44)	2-Methylnaph	0.715	0.750	0.780	0.825	0.838	0.815	0.841	0.938	0.813	8.30
45)	1-Methylnaph	0.679	0.710	0.735	0.776	0.790	0.779	0.836	0.838	0.768	7.41
46)	Dimethylnaph	0.560	0.582	0.620	0.662	0.678	0.664	0.704	0.748	0.652	9.58
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.240	0.247	0.245	0.251	0.259	0.228	0.227	0.232	0.241	4.73
49)	2,4,6-Trichl	0.323	0.339	0.344	0.355	0.359	0.320	0.262	0.266	0.321	11.74
50)	2,4,5-Trichl	0.300	0.307	0.299	0.306	0.314	0.273	0.243		0.292	8.62
51)	2-Fluorobiph	1.231	1.287	1.329	1.441	1.523	1.454	1.606	1.813	1.460	12.94
52)	2-Chloronaph		1.011	1.067	1.168	1.254	1.249	1.389	1.542	1.240	14.77
53)	Biphenyl		1.323	1.414	1.567	1.650	1.646	1.870	1.991	1.637	14.39
54)	2-Nitroanili	0.333	0.351	0.353	0.368	0.355	0.298	0.279	0.294	0.329	10.20
55)	Dimethylphth	1.247	1.299	1.296	1.366	1.394	1.359	1.440	1.558	1.370	7.13
56)	Acenaphthyle	1.716	1.798	1.880	2.048	2.115	1.976	2.113	2.253	1.987	9.08
57)	2,6-Dinitrot	0.261	0.273	0.265	0.277	0.260	0.197	0.190		0.246	14.93
58)	3-Nitroanili	0.381	0.387	0.383	0.385	0.371	0.318	0.280	0.295	0.350	12.87
59)	Acenaphthene	1.058	1.095	1.119	1.187	1.250	1.197	1.280	1.410	1.199	9.50
60)	2,4-Dinitrop	0.126	0.127	0.096	0.069	0.049	0.026			0.082	50.35
	----- Quadratic regression ----- Coefficient = 0.9950										
	Response Ratio = -0.02374 + 0.08631 *A + 0.00965 *A^2										
61)	4-Nitropheno	0.166	0.167	0.156	0.152	0.142	0.106			0.148	15.27
	----- Linear regression ----- Coefficient = 0.9994										
	Response Ratio = -0.00949 + 0.16951 *A										
62)	Dibenzofuran	1.491	1.570	1.609	1.749	1.810	1.768	1.874	2.050	1.740	10.36
63)	2,4-Dinitrot	0.386	0.396	0.374	0.379	0.350	0.259	0.213		0.337	21.19
	----- Linear regression ----- Coefficient = 0.9994										
	Response Ratio = -0.01261 + 0.39428 *A										
64)	2,3,4,6-Tetr	0.291	0.297	0.289	0.279	0.260	0.210	0.169		0.256	18.97
	----- Linear regression ----- Coefficient = 0.9998										
	Response Ratio = -0.00896 + 0.29684 *A										
65)	Diethylphtha	1.255	1.273	1.292	1.366	1.412	1.306	1.331	1.453	1.336	5.20
66)	Fluorene	1.177	1.234	1.271	1.380	1.463	1.402	1.422	1.584	1.367	9.73
67)	4-Chlorophen	0.514	0.533	0.547	0.596	0.641	0.644	0.681	0.754	0.614	13.36
68)	4-Nitroanili	0.379	0.385	0.373	0.386	0.377	0.328	0.275	0.317	0.353	11.72
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-	0.126	0.129	0.108	0.087	0.060				0.102	27.92
	----- Linear regression ----- Coefficient = 0.9960										
	Response Ratio = -0.02633 + 0.13700 *A										
71)	n-Nitrosodip	0.556	0.586	0.612	0.642	0.676	0.629	0.658	0.722	0.635	8.20
72)	1,2-Diphenyl	0.769	0.809	0.856	0.907	0.958	0.912	0.950	0.978	0.892	8.36
73)	2,4,6-Tribro	0.092	0.093	0.093	0.090	0.091	0.071			0.088	9.84
74)	4-Bromopheny	0.202	0.209	0.214	0.221	0.221	0.208	0.206	0.230	0.214	4.33
75)	Hexachlorobe	0.202	0.214	0.220	0.234	0.242	0.230	0.234	0.248	0.228	6.65
76)	Pentachlorop	0.132	0.137	0.138	0.132	0.118	0.094			0.125	13.67
77)	Phenanthrene	0.995	1.048	1.101	1.176	1.266	1.217	1.326	1.428	1.194	12.16
78)	Anthracene	1.022	1.067	1.138	1.233	1.296	1.198	1.264	1.465	1.210	11.57
79)	Carbazole	1.042	1.106	1.144	1.223	1.270	1.196	1.225	1.304	1.189	7.30
80)	Di-n-butylph	1.266	1.348	1.431	1.502	1.505	1.372	1.275	1.255	1.369	7.46
81)	Fluoranthene	1.107	1.165	1.240	1.315	1.366	1.255	1.221	1.459	1.266	8.87
82)	Octadecane	0.436	0.460	0.488	0.528	0.536	0.495	0.444	0.476	0.483	7.58
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.190	1.255	1.318	1.407	1.455	1.467	1.489	1.709	1.411	11.42

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3145-ICC3145
Lab FileID: Z59104.D

85)	Butyl steara	0.317	0.330	0.349	0.363	0.364	0.339	0.265	0.307	0.329	10.02
86)	Terphenyl-d1	0.738	0.755	0.794	0.820	0.841	0.823	0.843	0.931	0.818	7.28
87)	Butylbenzylp	0.652	0.679	0.697	0.695	0.676	0.605	0.534	0.618	0.644	8.70
88)	Benzo[a]anth	0.975	1.023	1.098	1.194	1.252	1.216	1.248	1.445	1.181	12.60
89)	3,3'-Dichlor	0.406	0.430	0.443	0.449	0.446	0.406	0.355	0.412	0.418	7.42
90)	Chrysene	0.938	0.989	1.031	1.112	1.151	1.100	1.171	1.334	1.103	11.15
91)	bis(2-Ethylh	0.793	0.832	0.860	0.899	0.864	0.793	0.700	0.770	0.814	7.74
92)	I Perylene-d12	ISTD									
93)	Di-n-octylph	1.537	1.600	1.693	1.712	1.673	1.454	1.104		1.539	13.82
94)	Benzo[b]fluo	1.153	1.185	1.223	1.401	1.362	1.326	1.362	1.513	1.316	9.20
95)	Benzo[k]fluo	0.919	1.007	1.119	1.112	1.297	1.262	1.252	1.236	1.151	11.75
96)	Benzo[a]pyre	1.088	1.142	1.175	1.224	1.258	1.166	1.111	1.154	1.165	4.78
97)	Indeno[1,2,3	1.209	1.262	1.310	1.375	1.391	1.277	1.210	1.257	1.286	5.31
98)	Dibenz(a,h)a	0.978	1.020	1.037	1.033	1.027	0.910	0.821	0.870	0.962	8.76
99)	Dibenz[a,h]a	0.957	1.022	1.071	1.142	1.150	1.068	0.980	0.993	1.048	6.90
100)	7,12-Dimethy	0.456	0.488	0.526	0.564	0.598	0.574	0.565	0.575	0.543	8.99
101)	Benzo[g,h,i]	1.095	1.151	1.165	1.166	1.164	1.076	1.061	1.059	1.117	4.36

(#) = Out of Range ### Number of calibration levels exceeded format ###

MZ3145.M Tue Nov 02 14:21:07 2010 RPT1

SII-SSA-0014-004327

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICC3146
Lab FileID: Z59110.D

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration

Calibration Files
100 =Z59108.D 80 =Z59109.D 50 =Z59110.D 25 =Z59111.D
10 =Z59112.D 5 =Z59113.D 2 =Z59114.D 1 =Z59115.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
102) 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	0.785	0.885	1.106	1.093	1.158	1.149			1.029	15.14
----- Quadratic regression ----- Coefficient = 0.9979										
Response Ratio = 0.00994 + 1.12654 *A + -0.17590 *A^2										
104) Phenanthrene-d10a	ISTD									
105) Atrazine	0.098	0.106	0.110	0.109	0.098	0.088			0.102	8.31
106) Methyl Parat	0.204	0.222	0.215	0.181	0.117	0.080	0.057		0.154	44.19
----- Linear regression ----- Coefficient = 0.9951										
Response Ratio = -0.01497 + 0.21798 *A										
107) Parathion	0.127	0.141	0.138	0.124	0.084	0.063	0.033		0.101	41.43
----- Linear regression ----- Coefficient = 0.9936										
Response Ratio = -0.00639 + 0.13601 *A										
108) Chrysene-d12a	ISTD									
109) Benzidine	0.376	0.415	0.570	0.749	0.754	0.688	0.529		0.583	26.36
----- Quadratic regression ----- Coefficient = 0.9915										
Response Ratio = 0.00518 + 0.76557 *A + -0.16201 *A^2										
110) Acenaphthene-d10a	ISTD									
111) 1,2,4,5-Tetr	0.436	0.482	0.493	0.528	0.516	0.556	0.559	0.462	0.504	8.69

(#) = Out of Range ### Number of calibration levels exceeded format ###

MZ3145.M Tue Nov 02 16:11:27 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59116.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59116.D Vial: 18
Acq On : 2 Nov 2010 3:21 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,acid Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	4.99
9	t	Phenol	2.031	1.919	5.5	110	0.00	4.57
12	t	2-Chlorophenol	1.488	1.416	4.8	112	0.00	4.76
19	t	2-Methylphenol	1.104	1.313	-18.9	138	0.00	5.35
21	t	3&4-Methylphenol	1.156	1.362	-17.8	134	0.00	5.55
24	I	Naphthalene-d8	1.000	1.000	0.0	104	0.00	6.79
29	t	2-Nitrophenol	0.183	0.185	-1.1	98	0.00	6.26
30	t	2,4-Dimethylphenol	0.380	0.377	0.8	107	0.00	6.32
		----------	True	Calc.	% Drift	----------		
31		Benzoic Acid	50.000	49.878	0.2	110	0.00	6.48
33	t	2,4-Dichlorophenol	0.313	0.302	3.5	101	0.00	6.60
34		2,6-Dichlorophenol	0.294	0.297	-1.0	106	0.00	6.95
43	t	4-Chloro-3-methylphenol	0.322	0.317	1.6	99	-0.01	7.70
47	I	Acenaphthene-d10	1.000	1.000	0.0	104	0.00	9.56
49	t	2,4,6-Trichlorophenol	0.321	0.328	-2.2	100	0.00	8.38
50	t	2,4,5-Trichlorophenol	0.292	0.340	-16.4	119	0.00	8.43
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	83.932	16.1	56	0.00	9.69
61	t	4-Nitrophenol	50.000	43.608	12.8	94	0.00	9.81
64		2,3,4,6-Tetrachlorophenol	50.000	41.220	17.6	86	0.00	10.14
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	41.712	16.6	79	-0.01	10.58
76	t	Pentachlorophenol	0.125	0.122	2.4	90	0.00	11.71

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59116.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 16:13:33 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59117.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59117.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	4.99
3	t	Pyridine	1.860	1.578	15.2	93	0.00	2.48
4	t	N-Nitrosodimethylamine	1.147	0.922	19.6	87	0.00	2.45
11	t	bis(2-Chloroethyl)ether	1.462	1.322	9.6	103	0.00	4.68
14	t	1,3-Dichlorobenzene	1.662	1.463	12.0	102	0.00	4.95
15	t	1,4-Dichlorobenzene	1.595	1.384	13.2	101	0.00	5.01
16	t	Benzyl alcohol	1.022	0.928	9.2	99	0.00	5.19
17	t	1,2-Dichlorobenzene	1.521	1.307	14.1	102	0.00	5.26
20	t	2,2'-oxybis(1-Chloropropa	0.434	0.418	3.7	103	0.00	5.41
22	t	n-Nitroso-di-n-propylamin	1.063	0.935	12.0	101	-0.01	5.59
23	t	Hexachloroethane	0.474	0.418	11.8	101	0.00	5.68
24	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00	6.79
26	t	Nitrobenzene	0.192	0.172	10.4	97	0.00	5.80
28	t	Isophorone	0.771	0.688	10.8	96	0.00	6.13
		----------	AvgRF	CCRF	% Dev		----------	
32	t	bis(2-Chloroethoxy)methan	0.471	0.441	6.4	106	0.00	6.47
36	t	1,2,4-Trichlorobenzene	0.348	0.309	11.2	102	0.00	6.74
38	t	Naphthalene	1.131	0.982	13.2	99	0.00	6.83
42	t	Hexachlorobutadiene	0.153	0.142	7.2	104	0.00	7.12
44	t	2-Methylnaphthalene	0.813	0.683	16.0	93	0.00	7.89
47	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00	9.56
48	t	Hexachlorocyclopentadiene	0.241	0.256	-5.9	106	0.00	8.25
52	t	2-Chloronaphthalene	1.240	1.096	11.6	106	0.00	8.64
54	t	2-Nitroaniline	0.329	0.310	5.8	90	0.00	8.87
55	t	Dimethylphthalate	1.370	1.204	12.1	96	0.00	9.23
56	t	Acenaphthylene	1.987	1.599	19.5	87	0.00	9.31
57	t	2,6-Dinitrotoluene	0.246	0.239	2.8	93	0.00	9.32
58	t	3-Nitroaniline	0.350	0.295	15.7	79	0.00	9.53
59	t	Acenaphthene	1.199	1.042	13.1	96	0.00	9.61
		----------	AvgRF	CCRF	% Dev		----------	

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59117.D

			True	Calc.	% Drift			
62	t	Dibenzofuran	1.740	1.529	12.1	98	0.00	9.87
63	t	2,4-Dinitrotoluene	50.000	44.272	11.5	82	0.00	9.94
65	t	Diethylphthalate	1.336	1.176	12.0	94	0.00	10.37
66	t	Fluorene	1.367	1.205	11.9	97	0.00	10.42
67	t	4-Chlorophenyl-phenylethe	0.614	0.506	17.6	95	0.00	10.43
68	t	4-Nitroaniline	0.353	0.322	8.8	89	0.00	10.51
69	I	Phenanthrene-d10	1.000	1.000	0.0	108	0.00	11.90
71	t	n-Nitrosodiphenylamine	0.635	0.516	18.7	91	0.00	10.64
72	t	1,2-Diphenylhydrazine	0.892	0.759	14.9	96	0.00	10.68
74	t	4-Bromophenyl-phenylether	0.214	0.187	12.6	94	0.00	11.21
75	t	Hexachlorobenzene	0.228	0.190	16.7	94	0.00	11.43
77	t	Phenanthrene	1.194	1.006	15.7	99	0.00	11.93
78	t	Anthracene	1.210	0.995	17.8	95	0.00	12.00
79	t	Carbazole	1.189	1.016	14.6	96	0.00	12.26
80	t	Di-n-butylphthalate	1.369	1.193	12.9	90	0.00	12.88
81	t	Fluoranthene	1.266	1.054	16.7	92	0.00	13.59
83	I	Chrysene-d12	1.000	1.000	0.0	100	0.00	15.25
84	t	Pyrene	1.411	1.240	12.1	94	0.00	13.86
87	t	Butylbenzylphthalate	0.644	0.608	5.6	88	0.00	14.69
88	t	Benzo[a]anthracene	1.181	1.021	13.5	93	0.00	15.23
90	t	Chrysene	1.103	0.951	13.8	93	0.00	15.28
91	t	bis(2-Ethylhexyl)phthalat	0.814	0.768	5.7	90	0.00	15.33
92	I	Perylene-d12	1.000	1.000	0.0	97	0.00	16.79
93	t	Di-n-octylphthalate	1.539	1.514	1.6	87	0.00	15.93
94	t	Benzo[b]fluoranthene	1.316	1.150	12.6	92	0.00	16.36
95	t	Benzo[k]fluoranthene	1.151	1.022	11.2	89	0.00	16.38
96	t	Benzo[a]pyrene	1.165	1.035	11.2	86	0.00	16.73
97	t	Indeno[1,2,3-cd]pyrene	1.286	1.220	5.1	91	0.00	18.22
99	t	Dibenz[a,h]anthracene	1.048	0.994	5.2	91	0.00	18.23
101	t	Benzo[g,h,i]perylene	1.117	1.049	6.1	88	0.00	18.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 15:52:41 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3146
Lab FileID: Z59117A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\Z59117A.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:07:50 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
110	Acenaphthene-d10a	1.000	1.000	0.0	84	0.00	9.56
111	1,2,4,5-Tetrachlorobenzen	0.504	0.473	6.2	80	0.00	8.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 15:15:24 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59118.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59118.D Vial: 20
Acq On : 2 Nov 2010 4:17 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	4.99
2		1,4-Dioxane	0.737	0.641	13.0	93	0.00	2.24
6	t	Indene	2.000	1.926	3.7	108	0.00	5.36
7	t	Cumene	3.185	2.549	20.0	90	0.00	4.08
13	t	Decane	1.266	1.103	12.9	102	0.00	4.80
18	t	Acetophenone	1.901	1.896	0.3	115	0.00	5.56
24	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00	6.79
27	t	Quinoline	0.709	0.690	2.7	109	0.00	7.33
40	t	2,3-Dichloroaniline	0.365	0.298	18.4	95	0.00	8.39
41	t	Caprolactam	0.149	0.129	13.4	90	-0.02	7.39
45	t	1-Methylnaphthalene	0.768	0.666	13.3	100	0.00	8.06
46	t	Dimethylnaphthalene	0.652	0.568	12.9	101	0.00	8.88
47	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00	9.56
53	t	Biphenyl	1.637	1.497	8.6	107	0.00	8.64
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	0.00	11.90
82	t	Octadecane	0.483	0.491	-1.7	100	0.00	11.81
92	I	Perylene-d12	1.000	1.000	0.0	89	0.00	16.79
100	t	7,12-Dimethylbenz(a)anthr	0.543	0.462	14.9	78	-0.01	16.37

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 16:21:29 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3146
Lab FileID: Z59118A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\Z59118A.D Vial: 20
Acq On : 2 Nov 2010 4:17 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	85	0.00	4.99
		True	Calc.	% Drift			
103	Benzaldehyde	50.000	53.594	-7.2	107	0.00	4.45
		AvgRF	CCRF	% Dev			
104	Phenanthrene-d10a	1.000	1.000	0.0	80	0.00	11.90
105	Atrazine	0.102	0.118	-15.7	86	-0.01	11.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 16:22:20 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59119.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59119.D Vial: 21
Acq On : 2 Nov 2010 4:45 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,3rd source Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	177	0.00	4.99
10	t	Aniline	2.546	2.141	15.9	155	0.00	4.62
24	I	Naphthalene-d8	1.000	1.000	0.0	168	0.00	6.79
39	t	4-Chloroaniline	0.514	0.433	15.8	149	0.00	6.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 15:50:05 2010 RPT1

5.7.20

5

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3145
Lab FileID: Z59120.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59120.D Vial: 22
Acq On : 2 Nov 2010 5:14 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,benzidine Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	109	0.00	15.25
89 t	3,3'-Dichlorobenzidine	0.418	0.393	6.0	97	0.00	15.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Tue Nov 02 16:23:36 2010 RPT1

5.7.21

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3146-ICV3146
Lab FileID: Z59120A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\Z59120A.D Vial: 22
Acq On : 2 Nov 2010 5:14 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,benzidine Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
108	Chrysene-d12a	1.000	1.000	0.0	86	0.00	15.25
		True	Calc.	% Drift			
109	Benzidine	50.000	78.697	-57.4#	138	0.00	13.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59110.D MZ3145.M Thu Nov 04 14:59:43 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3182-CC3145
Lab FileID: Z59883.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59883.D Vial: 2
Acq On : 29 Nov 2010 9:42 am Operator: ninap
Sample : cc3145-50 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	125	-0.05	4.81
2		1,4-Dioxane	0.737	0.632	14.2	105	-0.04	2.11
3	t	Pyridine	1.860	1.583	14.9	106	-0.04	2.36
4	t	N-Nitrosodimethylamine	1.147	0.961	16.2	103	-0.03	2.34
5	S	2-Fluorophenol	1.443	1.321	8.5	113	-0.03	3.45
6	t	Indene	2.000	1.859	7.1	120	-0.06	5.18
7	t	Cumene	3.185	3.072	3.5	124	-0.05	3.90
8	S	Phenol-d5	1.925	1.649	14.3	107	-0.05	4.44
9	t	Phenol	2.031	1.999	1.6	128	-0.05	4.46
10	t	Aniline	2.546	1.684	33.9#	86	-0.05	4.47
11	t	bis(2-Chloroethyl)ether	1.462	1.279	12.5	113	-0.05	4.51
12	t	2-Chlorophenol	1.488	1.323	11.1	117	-0.05	4.60
13	t	Decane	1.266	1.202	5.1	128	-0.06	4.61
14	t	1,3-Dichlorobenzene	1.662	1.515	8.8	120	-0.05	4.76
15	t	1,4-Dichlorobenzene	1.595	1.508	5.5	125	-0.05	4.83
16	t	Benzyl alcohol	1.022	0.860	15.9	104	-0.04	5.05
17	t	1,2-Dichlorobenzene	1.521	1.414	7.0	125	-0.05	5.08
18	t	Acetophenone	1.901	1.800	5.3	125	-0.05	5.40
19	t	2-Methylphenol	1.104	0.931	15.7	110	-0.05	5.23
20	t	2,2'-oxybis(1-Chloropropa	0.434	0.416	4.1	117	-0.06	5.22
21	t	3&4-Methylphenol	1.156	1.065	7.9	117	-0.04	5.45
22	t	n-Nitroso-di-n-propylamin	1.063	0.981	7.7	120	-0.05	5.42
23	t	Hexachloroethane	0.474	0.469	1.1	128	-0.06	5.48
24	I	Naphthalene-d8	1.000	1.000	0.0	124	-0.06	6.60
25	S	Nitrobenzene-d5	0.416	0.425	-2.2	129	-0.05	5.60
26	t	Nitrobenzene	0.192	0.180	6.3	118	-0.05	5.64
27	t	Quinoline	0.709	0.607	14.4	108	-0.05	7.18
28	t	Isophorone	0.771	0.710	7.9	115	-0.06	5.96
29	t	2-Nitrophenol	0.183	0.193	-5.5	122	-0.04	6.10
30	t	2,4-Dimethylphenol	0.380	0.356	6.3	120	-0.05	6.18
		----------	True	Calc.	% Drift	----------		
31		Benzoic Acid	50.000	48.882	2.2	127	0.01	6.60
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.471	0.415	11.9	116	-0.06	6.29
33	t	2,4-Dichlorophenol	0.313	0.297	5.1	118	-0.04	6.49
34		2,6-Dichlorophenol	0.294	0.294	0.0	124	-0.06	6.78
35	t	1,3,5-Trichlorobenzene	0.359	0.341	5.0	127	-0.06	6.08
36	t	1,2,4-Trichlorobenzene	0.348	0.322	7.5	123	-0.05	6.55
37	t	1,2,3-Trichlorobenzene	0.329	0.309	6.1	125	-0.06	6.91

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3182-CC3145
Lab FileID: Z59883.D

38	t	Naphthalene	1.131	1.023	9.5	120	-0.06	6.63
39	t	4-Chloroaniline	0.514	0.432	16.0	110	-0.05	6.78
40	t	2,3-Dichloroaniline	0.365	0.351	3.8	126	-0.05	8.21
41	t	Caprolactam	0.149	0.143	4.0	112	-0.05	7.31
42	t	Hexachlorobutadiene	0.153	0.170	-11.1	145	-0.06	6.90
43	t	4-Chloro-3-methylphenol	0.322	0.358	-11.2	133	-0.04	7.60
44	t	2-Methylnaphthalene	0.813	0.803	1.2	128	-0.06	7.69
45	t	1-Methylnaphthalene	0.768	0.720	6.3	122	-0.06	7.86
46	t	Dimethylnaphthalene	0.652	0.623	4.4	125	-0.06	8.68
47	I	Acenaphthene-d10	1.000	1.000	0.0	129	-0.06	9.35
48	t	Hexachlorocyclopentadiene	0.241	0.014#	94.2#	7#	-0.06	8.04
49	t	2,4,6-Trichlorophenol	0.321	0.312	2.8	117	-0.05	8.23
50	t	2,4,5-Trichlorophenol	0.292	0.253	13.4	109	-0.03	8.35
51	S	2-Fluorobiphenyl	1.460	1.295	11.3	126	-0.06	8.31
52	t	2-Chloronaphthalene	1.240	1.049	15.4	127	-0.06	8.45
53	t	Biphenyl	1.637	1.398	14.6	128	-0.06	8.44
54	t	2-Nitroaniline	0.329	0.361	-9.7	132	-0.05	8.72
55	t	Dimethylphthalate	1.370	1.254	8.5	125	-0.06	9.04
56	t	Acenaphthylene	1.987	1.750	11.9	120	-0.06	9.11
57	t	2,6-Dinitrotoluene	0.246	0.270	-9.8	132	-0.05	9.15
58	t	3-Nitroaniline	0.350	0.309	11.7	104	-0.05	9.40
59	t	Acenaphthene	1.199	1.079	10.0	125	-0.06	9.40
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	85.832	14.2	111	-0.03	9.65
61	t	4-Nitrophenol	50.000	19.773	60.5#	49	-0.04	9.87
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.740	1.598	8.2	128	-0.06	9.66
			True	Calc.	% Drift			
63	t	2,4-Dinitrotoluene	50.000	50.304	-0.6	134	-0.04	9.80
64		2,3,4,6-Tetrachlorophenol	50.000	37.267	25.5#	96	-0.05	9.99
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.336	1.217	8.9	122	-0.06	10.17
66	t	Fluorene	1.367	1.214	11.2	124	-0.06	10.21
67	t	4-Chlorophenyl-phenylethe	0.614	0.561	8.6	133	-0.07	10.22
68	t	4-Nitroaniline	0.353	0.315	10.8	109	-0.04	10.40
69	I	Phenanthrene-d10	1.000	1.000	0.0	131	-0.06	11.70
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylpheno	50.000	47.802	4.4	133	-0.04	10.47
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.635	0.581	8.5	124	-0.06	10.44
72	t	1,2-Diphenylhydrazine	0.892	0.829	7.1	127	-0.07	10.48
73	S	2,4,6-Tribromophenol	0.088	0.090	-2.3	125	-0.06	10.65
74	t	4-Bromophenyl-phenylether	0.214	0.212	0.9	129	-0.06	11.00
75	t	Hexachlorobenzene	0.228	0.218	4.4	129	-0.06	11.23
76	t	Pentachlorophenol	0.125	0.088	29.6#	83	-0.07	11.56
77	t	Phenanthrene	1.194	1.048	12.2	124	-0.06	11.74
78	t	Anthracene	1.210	1.076	11.1	124	-0.06	11.82
79	t	Carbazole	1.189	1.064	10.5	121	-0.05	12.10
80	t	Di-n-butylphthalate	1.369	1.317	3.8	120	-0.06	12.69
81	t	Fluoranthene	1.266	1.186	6.3	125	-0.05	13.43
82	t	Octadecane	0.483	0.473	2.1	127	-0.07	11.59

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3182-CC3145
Lab FileID: Z59883.D

83	I	Chrysene-d12	1.000	1.000	0.0	141	-0.05	15.10
84	t	Pyrene	1.411	1.209	14.3	129	-0.06	13.70
85		Butyl stearate	0.329	0.337	-2.4	136	-0.05	14.54
86	S	Terphenyl-d14	0.818	0.759	7.2	135	-0.06	13.91
87	t	Butylbenzylphthalate	0.644	0.589	8.5	119	-0.06	14.51
88	t	Benzo[a]anthracene	1.181	1.043	11.7	134	-0.05	15.09
89	t	3,3'-Dichlorobenzidine	0.418	0.400	4.3	127	-0.05	15.08
90	t	Chrysene	1.103	0.997	9.6	136	-0.05	15.13
91	t	bis(2-Ethylhexyl)phthalat	0.814	0.753	7.5	123	-0.06	15.16
92	I	Perylene-d12	1.000	1.000	0.0	135	-0.07	16.61
93	t	Di-n-octylphthalate	1.539	1.464	4.9	117	-0.06	15.75
94	t	Benzo[b]fluoranthene	1.316	1.199	8.9	133	-0.06	16.20
95	t	Benzo[k]fluoranthene	1.151	1.118	2.9	135	-0.06	16.22
96	t	Benzo[a]pyrene	1.165	1.123	3.6	130	-0.07	16.55
97	t	Indeno[1,2,3-cd]pyrene	1.286	1.305	-1.5	135	-0.11	17.98
98	t	Dibenz(a,h)acridine	0.962	1.002	-4.2	131	-0.10	17.64
99	t	Dibenz[a,h]anthracene	1.048	1.129	-7.7	143	-0.11	17.98
100	t	7,12-Dimethylbenz(a)anthr	0.543	0.516	5.0	133	-0.07	16.19
101	t	Benzo[g,h,i]perylene	1.117	1.137	-1.8	132	-0.11	18.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59765.D MZ3145.M Mon Nov 29 15:20:41 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3182-CC3146
Lab FileID: Z59884.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59884.D Vial: 3
Acq On : 29 Nov 2010 10:50 am Operator: krutikap
Sample : cc3146-25 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	118	-0.05	4.81
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	20.230	19.1	91	-0.30	4.33
		AvgRF	CCRF	% Dev			
104	Phenanthrene-d10a	1.000	1.000	0.0	113	-0.06	11.70
105	Atrazine	0.102	0.113	-10.8	117	-0.05	11.37
		True	Calc.	% Drift			
106	Methyl Parathion	25.000	20.064	19.7	94	-0.17	12.39
107	Parathion	25.000	26.903	-7.6	124	-0.18	12.93
		AvgRF	CCRF	% Dev			
108	Chrysene-d12a	1.000	1.000	0.0	122	-0.05	15.10
		True	Calc.	% Drift			
109	Benzidine	25.000	16.141	35.4#	75	-0.13	13.64
		AvgRF	CCRF	% Dev			
110	Acenaphthene-d10a	1.000	1.000	0.0	114	-0.07	9.35
111	1,2,4,5-Tetrachlorobenzen	0.504	0.536	-6.3	116	-0.20	8.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59111.D MZ3145.M Mon Nov 29 15:22:50 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3191-CC3145
Lab FileID: Z60011.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60011.D Vial: 2
Acq On : 6 Dec 2010 9:23 am Operator: ninap
Sample : cc3145-25 Inst : MSZ
Misc : op46867,EZ3191 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 202%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	-0.10	4.76
2		1,4-Dioxane	0.737	0.467	36.6#	64	-0.07	2.07
3	t	Pyridine	1.860	1.252	32.7#	69	-0.08	2.32
4	t	N-Nitrosodimethylamine	1.147	0.661	42.4#	58	-0.06	2.31
5	S	2-Fluorophenol	1.443	1.106	23.4#	79	-0.06	3.42
6	t	Indene	2.000	1.862	6.9	96	-0.11	5.13
7	t	Cumene	3.185	2.822	11.4	91	-0.10	3.86
8	S	Phenol-d5	1.925	1.589	17.5	84	-0.09	4.40
9	t	Phenol	2.031	1.910	6.0	97	-0.09	4.42
10	t	Aniline	2.546	1.691	33.6#	69	-0.10	4.42
11	t	bis(2-Chloroethyl)ether	1.462	1.256	14.1	88	-0.10	4.47
12	t	2-Chlorophenol	1.488	1.311	11.9	93	-0.10	4.56
13	t	Decane	1.266	0.975	23.0#	81	-0.11	4.56
14	t	1,3-Dichlorobenzene	1.662	1.500	9.7	94	-0.10	4.72
15	t	1,4-Dichlorobenzene	1.595	1.536	3.7	101	-0.10	4.78
16	t	Benzyl alcohol	1.022	0.816	20.2#	83	-0.09	5.01
17	t	1,2-Dichlorobenzene	1.521	1.451	4.6	100	-0.11	5.03
18	t	Acetophenone	1.901	1.855	2.4	102	-0.10	5.34
19	t	2-Methylphenol	1.104	1.019	7.7	96	-0.10	5.18
20	t	2,2'-oxybis(1-Chloropropa	0.434	0.411	5.3	93	-0.11	5.17
21	t	3&4-Methylphenol	1.156	1.057	8.6	93	-0.08	5.41
22	t	n-Nitroso-di-n-propylamin	1.063	1.031	3.0	102	-0.11	5.37
23	t	Hexachloroethane	0.474	0.538	-13.5	119	-0.11	5.43
24	I	Naphthalene-d8	1.000	1.000	0.0	104	-0.12	6.54
25	S	Nitrobenzene-d5	0.416	0.445	-7.0	110	-0.10	5.56
26	t	Nitrobenzene	0.192	0.182	5.2	95	-0.10	5.58
27	t	Quinoline	0.709	0.633	10.7	92	-0.10	7.13
28	t	Isophorone	0.771	0.756	1.9	101	-0.11	5.90
29	t	2-Nitrophenol	0.183	0.203	-10.9	109	-0.10	6.05
30	t	2,4-Dimethylphenol	0.380	0.337	11.3	90	-0.10	6.13
			True	Calc.	% Drift			
31		Benzoic Acid	25.000	30.243	-21.0#	147	-0.11	6.48
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.471	0.413	12.3	92	-0.11	6.24
33	t	2,4-Dichlorophenol	0.313	0.309	1.3	100	-0.09	6.44
34		2,6-Dichlorophenol	0.294	0.303	-3.1	104	-0.11	6.74
35	t	1,3,5-Trichlorobenzene	0.359	0.354	1.4	104	-0.11	6.04
36	t	1,2,4-Trichlorobenzene	0.348	0.333	4.3	103	-0.11	6.50
37	t	1,2,3-Trichlorobenzene	0.329	0.324	1.5	104	-0.12	6.85

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3191-CC3145
Lab FileID: Z60011.D

38	t	Naphthalene	1.131	1.030	8.9	96	-0.11	6.58
39	t	4-Chloroaniline	0.514	0.427	16.9	86	-0.10	6.74
40	t	2,3-Dichloroaniline	0.365	0.317	13.2	90	-0.11	8.16
41	t	Caprolactam	0.149	0.116	22.1#	76	-0.12	7.24
42	t	Hexachlorobutadiene	0.153	0.198	-29.4#	134	-0.11	6.85
43	t	4-Chloro-3-methylphenol	0.322	0.355	-10.2	108	-0.09	7.55
44	t	2-Methylnaphthalene	0.813	0.798	1.8	100	-0.11	7.64
45	t	1-Methylnaphthalene	0.768	0.673	12.4	90	-0.11	7.80
46	t	Dimethylnaphthalene	0.652	0.624	4.3	98	-0.12	8.63
47	I	Acenaphthene-d10	1.000	1.000	0.0	107	-0.12	9.30
48	t	Hexachlorocyclopentadiene		----------NA----------				
49	t	2,4,6-Trichlorophenol	0.321	0.315	1.9	94	-0.10	8.18
50	t	2,4,5-Trichlorophenol	0.292	0.257	12.0	90	-0.09	8.30
51	S	2-Fluorobiphenyl	1.460	1.294	11.4	96	-0.11	8.25
52	t	2-Chloronaphthalene	1.240	1.076	13.2	98	-0.12	8.40
53	t	Biphenyl	1.637	1.385	15.4	94	-0.12	8.39
54	t	2-Nitroaniline	0.329	0.368	-11.9	107	-0.10	8.68
55	t	Dimethylphthalate	1.370	1.366	0.3	107	-0.11	8.98
56	t	Acenaphthylene	1.987	1.848	7.0	96	-0.12	9.06
57	t	2,6-Dinitrotoluene	0.246	0.305	-24.0#	118	-0.10	9.10
58	t	3-Nitroaniline	0.350	0.310	11.4	86	-0.09	9.35
59	t	Acenaphthene	1.199	1.110	7.4	100	-0.12	9.35
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	37.027	25.9#	80	-0.06	9.62
61	t	4-Nitrophenol	25.000	7.496	70.0#	25	-0.04	9.87
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.740	1.597	8.2	97	-0.12	9.61
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	25.000	25.808	-3.2	109	-0.09	9.76
64		2,3,4,6-Tetrachlorophenol	25.000	17.684	29.3#	75	-0.11	9.94
		----------	AvgRF	CCRF	% Dev	----------		
65	t	Diethylphthalate	1.336	1.361	-1.9	106	-0.12	10.11
66	t	Fluorene	1.367	1.352	1.1	104	-0.12	10.16
67	t	4-Chlorophenyl-phenylethe	0.614	0.617	-0.5	110	-0.12	10.18
68	t	4-Nitroaniline	0.353	0.306	13.3	84	-0.09	10.36
69	I	Phenanthrene-d10	1.000	1.000	0.0	115	-0.12	11.65
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	24.651	1.4	122	-0.07	10.44
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.635	0.571	10.1	102	-0.12	10.38
72	t	1,2-Diphenylhydrazine	0.892	0.861	3.5	109	-0.12	10.42
73	S	2,4,6-Tribromophenol	0.088	0.089	-1.1	113	-0.12	10.59
74	t	4-Bromophenyl-phenylether	0.214	0.217	-1.4	113	-0.12	10.95
75	t	Hexachlorobenzene	0.228	0.216	5.3	106	-0.12	11.18
76	t	Pentachlorophenol	0.125	0.051	59.2#	44#	-0.11	11.52
77	t	Phenanthrene	1.194	1.094	8.4	107	-0.12	11.69
78	t	Anthracene	1.210	1.107	8.5	103	-0.11	11.76
79	t	Carbazole	1.189	1.083	8.9	102	-0.10	12.06
80	t	Di-n-butylphthalate	1.369	1.393	-1.8	107	-0.10	12.65
81	t	Fluoranthene	1.266	1.292	-2.1	113	-0.10	13.39
82	t	Octadecane	0.483	0.350	27.5#	76	-0.12	11.54

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EZ3191-CC3145
Lab FileID: Z60011.D

83	I	Chrysene-d12	1.000	1.000	0.0	127	-0.09	15.06
84	t	Pyrene	1.411	1.249	11.5	113	-0.10	13.66
85		Butyl stearate	0.329	0.264	19.8	92	-0.09	14.50
86	S	Terphenyl-d14	0.818	0.803	1.8	124	-0.10	13.87
87	t	Butylbenzylphthalate	0.644	0.587	8.9	107	-0.10	14.48
88	t	Benzo[a]anthracene	1.181	1.109	6.1	118	-0.09	15.05
89	t	3,3'-Dichlorobenzidine	0.418	0.427	-2.2	121	-0.09	15.04
90	t	Chrysene	1.103	1.002	9.2	114	-0.09	15.10
91	t	bis(2-Ethylhexyl)phthalat	0.814	0.743	8.7	105	-0.10	15.12
92	I	Perylene-d12	1.000	1.000	0.0	114	-0.11	16.57
93	t	Di-n-octylphthalate	1.539	1.583	-2.9	105	-0.10	15.72
94	t	Benzo[b]fluoranthene	1.316	1.352	-2.7	110	-0.10	16.16
95	t	Benzo[k]fluoranthene	1.151	1.152	-0.1	118	-0.10	16.19
96	t	Benzo[a]pyrene	1.165	1.147	1.5	106	-0.10	16.52
97	t	Indeno[1,2,3-cd]pyrene	1.286	1.268	1.4	105	-0.14	17.94
98	t	Dibenz(a,h)acridine	0.962	0.973	-1.1	107	-0.13	17.61
99	t	Dibenz[a,h]anthracene	1.048	1.098	-4.8	109	-0.15	17.94
100	t	7,12-Dimethylbenz(a)anthr	0.543	0.481	11.4	97	-0.11	16.15
101	t	Benzo[g,h,i]perylene	1.117	1.062	4.9	103	-0.15	18.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z59111.D MZ3145.M Mon Dec 06 15:50:18 2010 RPT1

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60027.D Vial: 18
Acq On : 6 Dec 2010 5:48 pm Operator: ninap
Sample : ja61582-3r Inst : MSZ
Misc : op46916,EZ3191,35.2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 06 18:08:21 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

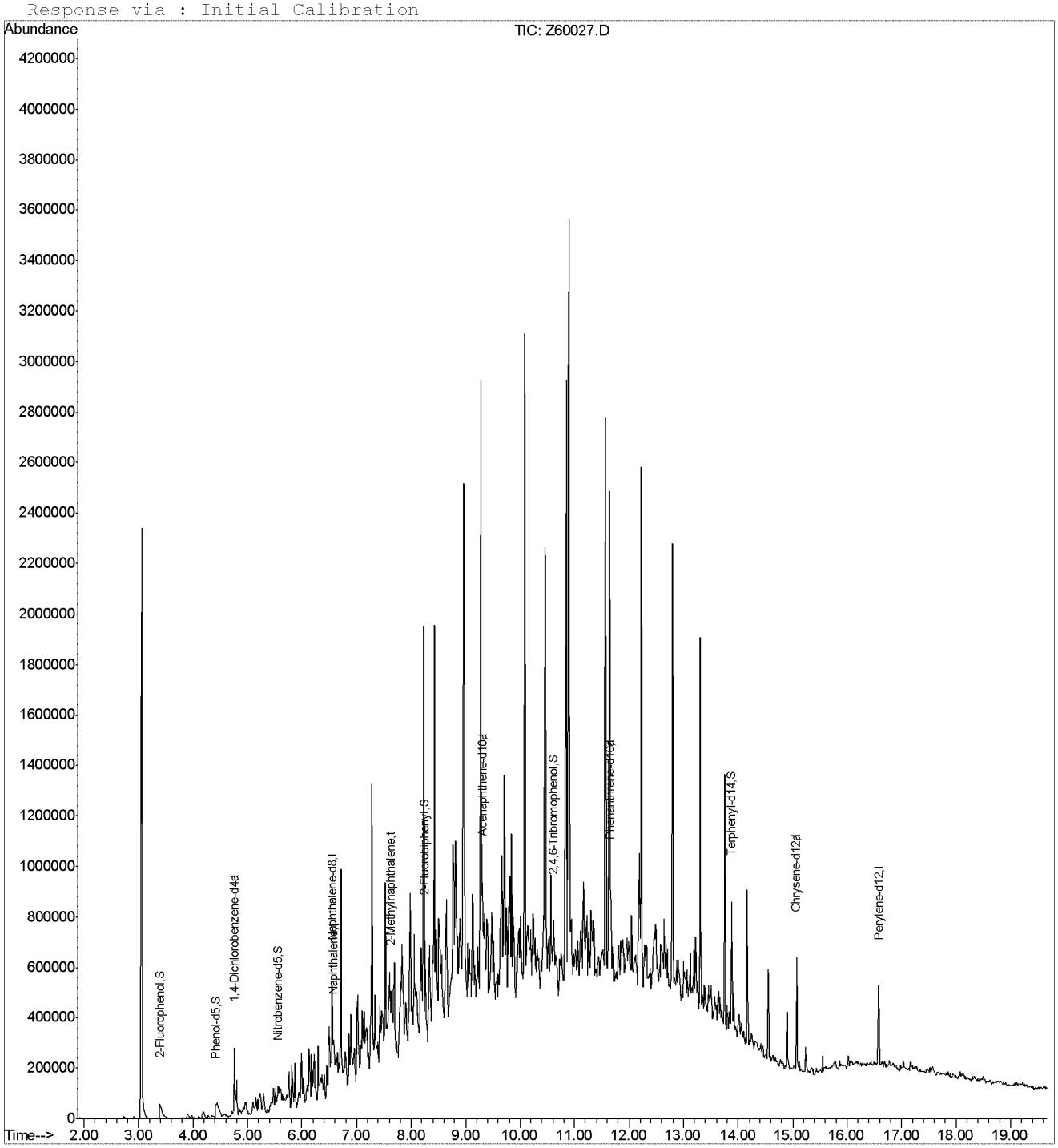
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.76	152	55186	40.00	ppb	-0.10
24) Naphthalene-d8	6.55	136	171485	40.00	ppb	-0.11
47) Acenaphthene-d10	9.31	164	97986	40.00	ppb	-0.11
69) Phenanthrene-d10	11.66	188	154719	40.00	ppb	-0.11
83) Chrysene-d12	15.07	240	174467	40.00	ppb	-0.09
92) Perylene-d12	16.58	264	161681	40.00	ppb	-0.11
102) 1,4-Dichlorobenzene-d4a	4.76	152	55186	40.00	ppb	-0.10
104) Phenanthrene-d10a	11.66	188	154719	40.00	ppb	-0.11
108) Chrysene-d12a	15.07	240	174467	40.00	ppb	-0.09
110) Acenaphthene-d10a	9.31	164	97986	40.00	ppb	-0.11
System Monitoring Compounds						
5) 2-Fluorophenol	3.40	112	51484	25.86	ppb	-0.09
Spiked Amount 50.000			Recovery = 51.72%			
8) Phenol-d5	4.42	99	60120	22.64	ppb	-0.07
Spiked Amount 50.000			Recovery = 45.28%			
25) Nitrobenzene-d5	5.56	82	76408	42.82	ppb	-0.10
Spiked Amount 50.000			Recovery = 85.64%			
51) 2-Fluorobiphenyl	8.26	172	131287	36.70	ppb	-0.11
Spiked Amount 50.000			Recovery = 73.40%			
73) 2,4,6-Tribromophenol	10.61	330	14608	42.72	ppb	-0.10
Spiked Amount 50.000			Recovery = 85.44%			
86) Terphenyl-d14	13.88	244	137512	38.54	ppb	-0.09
Spiked Amount 50.000			Recovery = 77.08%			
Target Compounds						Qvalue
38) Naphthalene	6.58	128	12424	2.56	ppb	56
44) 2-Methylnaphthalene	7.64	142	49513	14.21	ppb	97

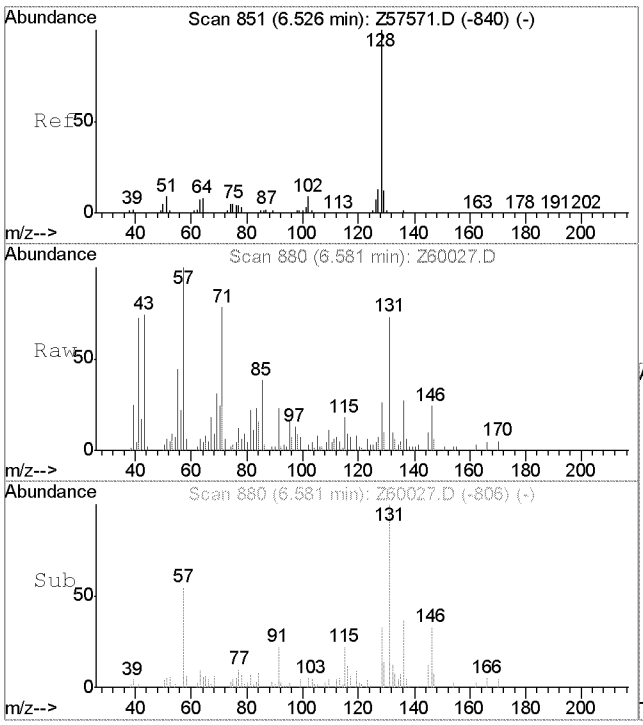
(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z60027.D MZ3145.M Mon Dec 06 18:27:17 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60027.D Vial: 18
Acq On : 6 Dec 2010 5:48 pm Operator: ninap
Sample : ja61582-3r Inst : MSZ
Misc : op46916,EZ3191,35.2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 6 18:26 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration

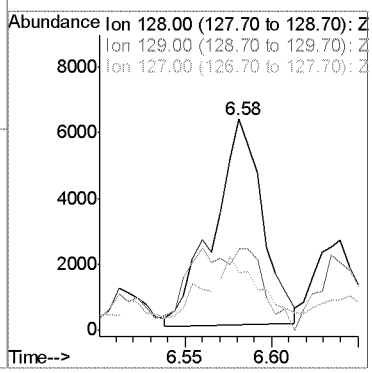


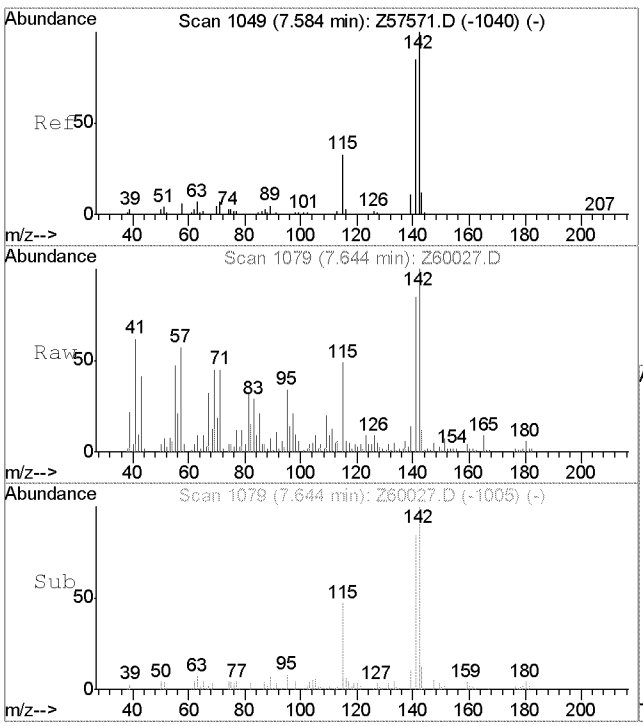


#38
Naphthalene
Concen: 2.56 ppb
RT: 6.58 min Scan# 880
Delta R.T. -0.11 min
Lab File: Z60027.D
Acq: 6 Dec 2010 5:48 pm

Tgt Ion:128 Resp: 12424

Ion	Ratio	Lower	Upper
128	100		
129	38.4	0.0	41.7
127	22.1	0.0	43.3

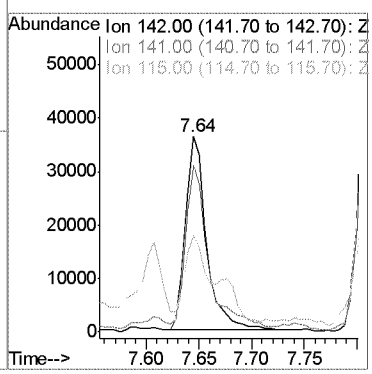




#44
2-Methylnaphthalene
Concen: 14.21 ppb
RT: 7.64 min Scan# 1079
Delta R.T. -0.11 min
Lab File: Z60027.D
Acq: 6 Dec 2010 5:48 pm

Tgt Ion:142 Resp: 49513

Ion	Ratio	Lower	Upper
142	100		
141	81.8	52.8	112.8
115	35.9	0.8	60.8



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77594.D Vial: 4
Acq On : 29 Nov 2010 10:09 am Operator: olgaa
Sample : op46916-mb1 Inst : MSM
Misc : op46916,em3023,35.0 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 13:50 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

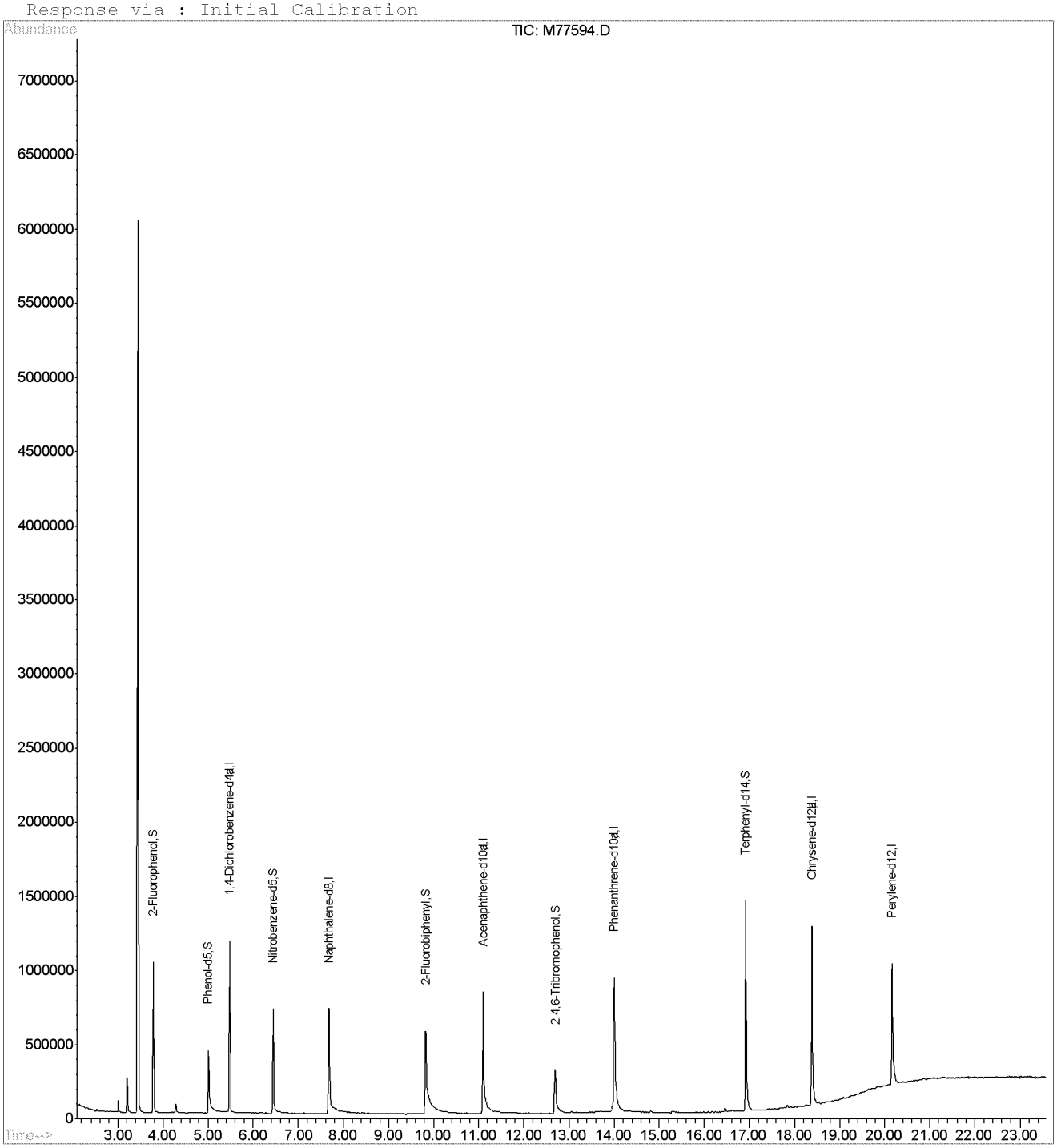
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.48	152	294463	40.00	ppb	-0.02
24) Naphthalene-d8	7.68	136	927200	40.00	ppb	-0.01
47) Acenaphthene-d10	11.10	164	583700	40.00	ppb	-0.01
69) Phenanthrene-d10	14.01	188	980579	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	918642	40.00	ppb	0.00
92) Perylene-d12	20.16	264	684749	40.00	ppb	0.02
102) 1,4-Dichlorobenzene-d4a	5.48	152	294463	40.00	ppb	-0.02
104) Acenaphthene-d10a	11.10	164	578991	40.00	ppb	-0.01
106) Phenanthrene-d10a	14.01	188	980579	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	918642	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	918642	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	369501	41.03	ppb	0.00
Spiked Amount 50.000			Recovery =	82.06%		
8) Phenol-d5	5.00	99	422045	41.06	ppb	0.00
Spiked Amount 50.000			Recovery =	82.12%		
25) Nitrobenzene-d5	6.44	82	403572	47.56	ppb	-0.02
Spiked Amount 50.000			Recovery =	95.12%		
51) 2-Fluorobiphenyl	9.81	172	856563	42.73	ppb	-0.01
Spiked Amount 50.000			Recovery =	85.46%		
73) 2,4,6-Tribromophenol	12.69	330	101571	56.69	ppb	0.00
Spiked Amount 50.000			Recovery =	113.38%		
86) Terphenyl-d14	16.91	244	839339	47.00	ppb	0.00
Spiked Amount 50.000			Recovery =	94.00%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
M77594.D MM3014.M Mon Nov 29 13:51:08 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77594.D Vial: 4
Acq On : 29 Nov 2010 10:09 am Operator: olgaa
Sample : op46916-mb1 Inst : MSM
Misc : op46916,em3023,35.0 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 13:50 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 09:20:25 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59886.D Vial: 5
Acq On : 29 Nov 2010 11:49 am Operator: krutikap
Sample : op46916-mb1 Inst : MSZ
Misc : op46916,,EZ3182,35.0 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 12:08:47 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

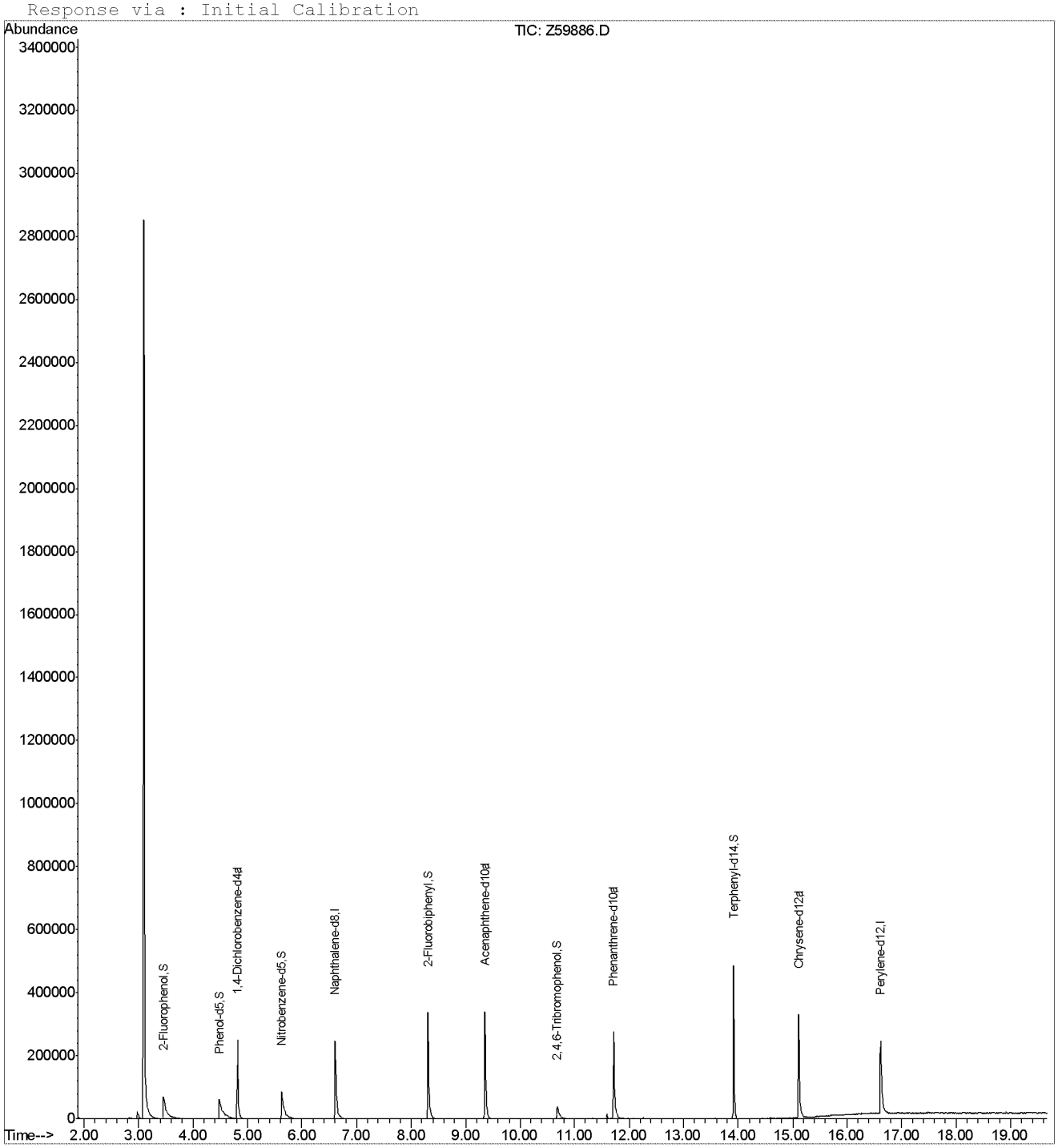
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.81	152	66213	40.00	ppb	-0.05
24) Naphthalene-d8	6.60	136	233427	40.00	ppb	-0.06
47) Acenaphthene-d10	9.35	164	129684	40.00	ppb	-0.06
69) Phenanthrene-d10	11.71	188	201525	40.00	ppb	-0.06
83) Chrysene-d12	15.11	240	190611	40.00	ppb	-0.05
92) Perylene-d12	16.61	264	163542	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.81	152	66213	40.00	ppb	-0.05
104) Phenanthrene-d10a	11.71	188	201525	40.00	ppb	-0.06
108) Chrysene-d12a	15.11	240	190611	40.00	ppb	-0.05
110) Acenaphthene-d10a	9.35	164	129684	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.46	112	93832	39.29	ppb	-0.03
Spiked Amount 50.000			Recovery = 78.58%			
8) Phenol-d5	4.48	99	117777	36.97	ppb	-0.01
Spiked Amount 50.000			Recovery = 73.94%			
25) Nitrobenzene-d5	5.62	82	109939	45.26	ppb	-0.03
Spiked Amount 50.000			Recovery = 90.52%			
51) 2-Fluorobiphenyl	8.31	172	199384	42.11	ppb	-0.05
Spiked Amount 50.000			Recovery = 84.22%			
73) 2,4,6-Tribromophenol	10.68	330	19073	42.82	ppb	-0.03
Spiked Amount 50.000			Recovery = 85.64%			
86) Terphenyl-d14	13.92	244	180003	46.18	ppb	-0.05
Spiked Amount 50.000			Recovery = 92.36%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59886.D MZ3145.M Mon Nov 29 15:33:32 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59886.D Vial: 5
Acq On : 29 Nov 2010 11:49 am Operator: krutikap
Sample : op46916-mb1 Inst : MSZ
Misc : op46916,,EZ3182,35.0 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 15:33 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 15:21:35 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/30/10 10:12

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77595.D Vial: 5
Acq On : 29 Nov 2010 10:41 am Operator: olgaa
Sample : op46916-bs1 Inst : MSM
Misc : op46916,em3023,35.0 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 13:53 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 13:52:35 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.48	152	288473	40.00	ppb		0.00
24) Naphthalene-d8	7.68	136	875577	40.00	ppb		0.00
47) Acenaphthene-d10	11.10	164	586148	40.00	ppb		0.00
69) Phenanthrene-d10	14.01	188	861357	40.00	ppb		0.00
83) Chrysene-d12	18.38	240	805632	40.00	ppb		0.00
92) Perylene-d12	20.16	264	682885	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	5.48	152	288473	40.00	ppb		0.00
104) Acenaphthene-d10a	11.10	164	586148	40.00	ppb		0.00
106) Phenanthrene-d10a	14.01	188	861357	40.00	ppb		0.00
110) Chrysene-d12a	18.38	240	805632	40.00	ppb		0.00
112) Chrysene-d12b	18.38	240	805632	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.78	112	371428	42.10	ppb		0.00
Spiked Amount 50.000			Recovery = 84.20%				
8) Phenol-d5	5.00	99	438326	43.53	ppb		0.00
Spiked Amount 50.000			Recovery = 87.06%				
25) Nitrobenzene-d5	6.44	82	375571	46.87	ppb		0.00
Spiked Amount 50.000			Recovery = 93.74%				
51) 2-Fluorobiphenyl	9.81	172	758016	37.65	ppb		0.00
Spiked Amount 50.000			Recovery = 75.30%				
73) 2,4,6-Tribromophenol	12.69	330	96652	61.41	ppb		0.00
Spiked Amount 50.000			Recovery = 122.82%				
86) Terphenyl-d14	16.91	244	739808	47.24	ppb		0.00
Spiked Amount 50.000			Recovery = 94.48%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.31	88	92610	19.85	ppb		85
3) Pyridine	2.58	79	284324	26.85	ppb		85
4) N-Nitrosodimethylamine	2.55	42	251001	35.44	ppb		84
6) Indene	5.93	116	635423	48.37	ppb		92
7) Cumene	4.39	105	762973	39.94	ppb		95
9) Phenol	5.02	94	440527	39.35	ppb		96
10) Aniline	5.04	93	336155	25.36	ppb		98
11) bis(2-Chloroethyl)ether	5.14	93	345275	39.49	ppb		98
12) 2-Chlorophenol	5.21	128	393895	41.99	ppb		98
13) Decane	5.26	43	402127	25.13	ppb		88
14) 1,3-Dichlorobenzene	5.43	146	457956	39.64	ppb		96
15) 1,4-Dichlorobenzene	5.51	146	444314	39.30	ppb		97
16) Benzyl alcohol	5.75	108	254064	42.58	ppb		98
17) 1,2-Dichlorobenzene	5.81	146	439031	41.13	ppb		97
18) Acetophenone	6.19	105	487514	40.85	ppb		89
19) 2-Methylphenol	5.97	108	313902	49.89	ppb		98
20) 2,2'-oxybis(1-Chloropropan	6.01	121	130381	40.74	ppb	#	45
21) 3&4-Methylphenol	6.22	108	330856	49.99	ppb	#	62
22) n-Nitroso-di-n-propylamine	6.24	70	242710	39.04	ppb		85
23) Hexachloroethane	6.31	201	163346	40.91	ppb		96
26) Nitrobenzene	6.48	123	198084	45.62	ppb		95
27) Quinoline	8.36	129	735342	49.80	ppb		98
28) Isophorone	6.90	82	682400	47.13	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77595.D Vial: 5
Acq On : 29 Nov 2010 10:41 am Operator: olgaa
Sample : op46916-bs1 Inst : MSM
Misc : op46916,em3023,35.0 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 13:53 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 13:52:35 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.04	139	223832	51.15	ppb		84
30)	2,4-Dimethylphenol	7.15	107	347602	48.87	ppb		98
31)	Benzoic acid	7.40	105	273992	56.81	ppb		97
32)	bis(2-Chloroethoxy)methane	7.33	93	426701	47.14	ppb		97
33)	2,4-Dichlorophenol	7.47	162	340145	48.75	ppb		98
34)	2,6-Dichlorophenol	7.90	162	330895	47.34	ppb		96
36)	1,2,4-Trichlorobenzene	7.62	180	374210	44.05	ppb		99
38)	Naphthalene	7.71	128	974556	41.78	ppb		97
39)	4-Chloroaniline	7.89	127	300707	29.56	ppb		99
40)	2,3-Dichloroaniline	9.67	161	369418	43.77	ppb		95
41)	Caprolactam	8.53	55	199755	38.20	ppb		85
42)	Hexachlorobutadiene	8.08	225	224032	48.20	ppb		98
43)	4-Chloro-3-methylphenol	8.88	107	302411	46.55	ppb		92
44)	2-Methylnaphthalene	9.04	142	691752	39.74	ppb		96
45)	1-Methylnaphthalene	9.23	142	719130	43.49	ppb		96
46)	Dimethylnaphthalene	10.27	156	656696	45.49	ppb		95
48)	Hexachlorocyclopentadiene	9.48	237	434412	104.40	ppb		98
49)	2,4,6-Trichlorophenol	9.67	196	228859	39.93	ppb		99
50)	2,4,5-Trichlorophenol	9.75	196	257883	52.80	ppb		97
52)	2-Chloronaphthalene	9.97	162	671133	39.42	ppb		96
53)	Biphenyl	9.98	154	795119	37.99	ppb		98
54)	2-Nitroaniline	10.28	65	207911	44.43	ppb		97
55)	Dimethylphthalate	10.74	163	764877	39.74	ppb		99
56)	Acenaphthylene	10.79	152	976921	37.33	ppb		98
57)	2,6-Dinitrotoluene	10.86	165	185303	46.11	ppb		92
58)	3-Nitroaniline	11.11	138	158103	33.70	ppb		97
59)	Acenaphthene	11.16	153	643185	38.60	ppb		94
60)	2,4-Dinitrophenol	11.33	184	206623	81.11	ppb		86
61)	4-Nitrophenol	11.55	109	82669	37.59	ppb	#	1
62)	Dibenzofuran	11.48	168	926205	38.68	ppb		79
63)	2,4-Dinitrotoluene	11.63	165	239264	43.13	ppb		94
64)	2,3,4,6-Tetrachlorophenol	11.84	232	195361	39.77	ppb		96
65)	Diethylphthalate	12.15	149	685673	38.16	ppb		94
66)	Fluorene	12.16	166	758896	39.66	ppb		97
67)	4-Chlorophenyl-phenylether	12.20	204	370386	37.12	ppb		97
68)	4-Nitroaniline	12.34	138	207516	41.63	ppb		94
70)	4,6-Dinitro-2-methylphenol	12.43	198	145569	42.05	ppb		97
71)	n-Nitrosodiphenylamine	12.46	169	558950	47.17	ppb		94
72)	1,2-Diphenylhydrazine	12.52	77	733198	50.22	ppb		90
74)	4-Bromophenyl-phenylether	13.17	248	226229	48.15	ppb		92
75)	Hexachlorobenzene	13.42	284	220322	50.20	ppb		96
76)	Pentachlorophenol	13.81	266	130617	46.12	ppb		96
77)	Phenanthrene	14.05	178	1000766	42.46	ppb		98
78)	Anthracene	14.14	178	1067837	45.30	ppb		97
79)	Carbazole	14.51	167	1021716	46.64	ppb		99
80)	Di-n-butylphthalate	15.38	149	1179651	45.09	ppb		99
81)	Fluoranthene	16.25	202	1122817	41.17	ppb		98
82)	Octadecane	13.95	57	549364	40.20	ppb		91
84)	Pyrene	16.59	202	1130316	43.12	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77595.D Vial: 5
Acq On : 29 Nov 2010 10:41 am Operator: olgaa
Sample : op46916-bs1 Inst : MSM
Misc : op46916,em3023,35.0 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 13:53 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 13:52:35 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

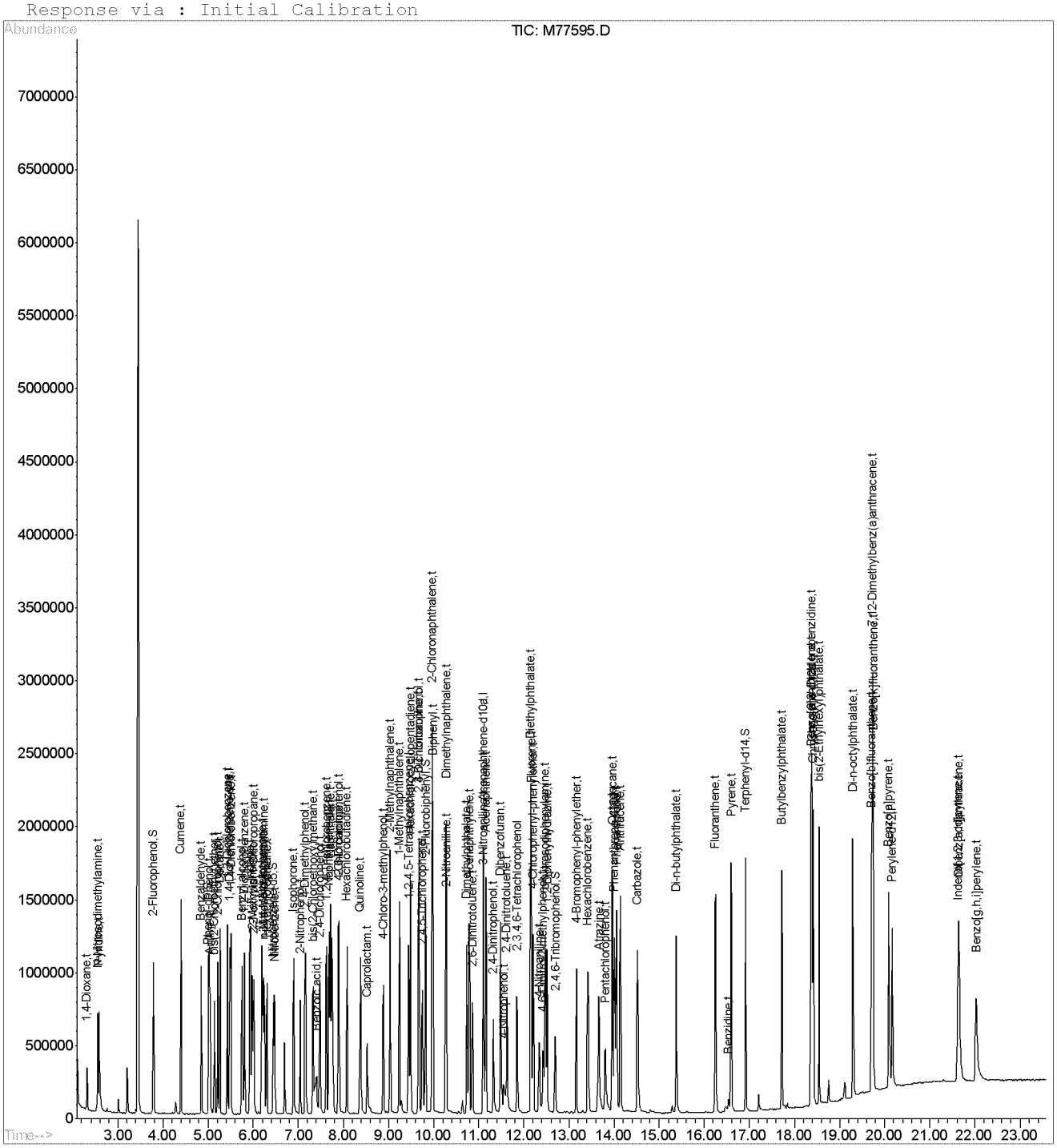
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	Butylbenzylphthalate	17.71	149	532863	49.99	ppb	93
88)	Benzo[a]anthracene	18.36	228	997384	40.41	ppb	98
89)	3,3'-Dichlorobenzidine	18.37	252	305715	38.21	ppb	94
90)	Chrysene	18.41	228	921986	41.05	ppb	97
91)	bis(2-Ethylhexyl)phthalate	18.54	149	651357	45.93	ppb	98
93)	Di-n-octylphthalate	19.29	149	1102583	46.80	ppb	93
94)	Benzo[b]fluoranthene	19.71	252	835010m	39.10	ppb	
95)	Benzo[k]fluoranthene	19.74	252	913805m	46.73	ppb	
96)	Benzo[a]pyrene	20.09	252	859043	41.65	ppb	96
97)	Indeno[1,2,3-cd]pyrene	21.62	276	884320	40.26	ppb	96
99)	Dibenz[a,h]anthracene	21.64	278	768697	44.31	ppb	99
100)	7,12-Dimethylbenz(a)anthra	19.73	256	513580	61.01	ppb	90
101)	Benzo[g,h,i]perylene	22.03	276	751390	40.12	ppb	98
103)	Benzaldehyde	4.85	105	273672	62.51	ppb	95
105)	1,2,4,5-Tetrachlorobenzene	9.44	216	346963	40.03	ppb	99
107)	Atrazine	13.65	215	123468	48.65	ppb	90
111)	Benzidine	16.53	184	90797	10.91	ppb	98

(#) = qualifier out of range (m) = manual integration
M77595.D MM3014.M Mon Nov 29 13:53:36 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77595.D Vial: 5
Acq On : 29 Nov 2010 10:41 am Operator: olgaa
Sample : op46916-bs1 Inst : MSM
Misc : op46916,em3023,35.0 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 13:53 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 13:52:35 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

Manual Integration Approval Summary

Sample Number: OP46916-BS1
Lab FileID: M77595.D
Injection Time: 11/29/10 10:41
Method: SW846 8270C
Analyst approved: 11/29/10 14:20 Olga Azarihn
Supervisor approved: 11/30/10 10:12 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.71	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.74	Overlapping peak

Manual Integrations APPROVED (compounds with "m" flag)
Wendy Sherwood 12/04/10 18:33

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77602.D Vial: 12
Acq On : 29 Nov 2010 2:20 pm Operator: olgaa
Sample : op46916-ms Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:18 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.49	152	268166	40.00	ppb	0.01
24) Naphthalene-d8	7.68	136	866569	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	580697	40.00	ppb	0.01
69) Phenanthrene-d10	14.02	188	859000	40.00	ppb	0.01
83) Chrysene-d12	18.39	240	545822	40.00	ppb	0.01
92) Perylene-d12	20.17	264	444995	40.00	ppb	0.01
102) 1,4-Dichlorobenzene-d4a	5.49	152	268166	40.00	ppb	0.01
104) Acenaphthene-d10a	11.11	164	580697	40.00	ppb	0.01
106) Phenanthrene-d10a	14.02	188	859000	40.00	ppb	0.01
110) Chrysene-d12a	18.39	240	545822	40.00	ppb	0.01
112) Chrysene-d12b	18.39	240	545822	40.00	ppb	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.79	112	274931	33.52	ppb	0.01
Spiked Amount 50.000			Recovery =	67.04%		
8) Phenol-d5	5.01	99	335946	35.89	ppb	0.01
Spiked Amount 50.000			Recovery =	71.78%		
25) Nitrobenzene-d5	6.45	82	291455	36.75	ppb	0.01
Spiked Amount 50.000			Recovery =	73.50%		
51) 2-Fluorobiphenyl	9.82	172	590178	29.59	ppb	0.01
Spiked Amount 50.000			Recovery =	59.18%		
73) 2,4,6-Tribromophenol	12.70	330	75784	48.29	ppb	0.01
Spiked Amount 50.000			Recovery =	96.58%		
86) Terphenyl-d14	16.93	244	480484	45.28	ppb	0.01
Spiked Amount 50.000			Recovery =	90.56%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.30	88	60397	13.93	ppb	94
3) Pyridine	2.58	79	206058	20.93	ppb	90
4) N-Nitrosodimethylamine	2.55	42	200532	30.46	ppb	93
6) Indene	5.93	116	480294	39.33	ppb	95
7) Cumene	4.39	105	566418	31.89	ppb	99
9) Phenol	5.03	94	354562	34.07	ppb	92
10) Aniline	5.05	93	289851	23.53	ppb	88
11) bis(2-Chloroethyl)ether	5.14	93	261978	32.24	ppb	96
12) 2-Chlorophenol	5.22	128	301494	34.58	ppb	98
13) Decane	5.27	43	303982	20.44	ppb	85
14) 1,3-Dichlorobenzene	5.43	146	334528	31.15	ppb	98
15) 1,4-Dichlorobenzene	5.51	146	319188	30.37	ppb	98
16) Benzyl alcohol	5.76	108	198834	35.85	ppb	98
17) 1,2-Dichlorobenzene	5.81	146	318448	32.09	ppb	99
18) Acetophenone	6.19	105	390260	35.18	ppb	92
19) 2-Methylphenol	5.97	108	250902	42.89	ppb	98
20) 2,2'-oxybis(1-Chloropropan	6.02	121	95747	32.18	ppb #	53
21) 3&4-Methylphenol	6.22	108	269681	43.83	ppb #	66
22) n-Nitroso-di-n-propylamine	6.25	70	192522	33.32	ppb	85
23) Hexachloroethane	6.31	201	103287	27.83	ppb	93
26) Nitrobenzene	6.48	123	149688	34.83	ppb	93
27) Quinoline	8.38	129	573670	39.26	ppb	97
28) Isophorone	6.90	82	555534	38.77	ppb	97

(#) = qualifier out of range (m) = manual integration
M77602.D MM3014.M Thu Dec 02 12:18:46 2010 GCMSM Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77602.D Vial: 12
Acq On : 29 Nov 2010 2:20 pm Operator: olgaa
Sample : op46916-ms Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:18 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.05	139	154261	35.62	ppb		84
30)	2,4-Dimethylphenol	7.15	107	291027	41.34	ppb		97
31)	Benzoic acid	7.41	105	233837	48.99	ppb		97
32)	bis(2-Chloroethoxy)methane	7.33	93	337685	37.69	ppb		97
33)	2,4-Dichlorophenol	7.49	162	265217	38.41	ppb		97
34)	2,6-Dichlorophenol	7.90	162	258918	37.43	ppb		100
36)	1,2,4-Trichlorobenzene	7.62	180	284220	33.81	ppb		97
38)	Naphthalene	7.72	128	768084	33.27	ppb		99
39)	4-Chloroaniline	7.90	127	268359	26.66	ppb		99
40)	2,3-Dichloroaniline	9.67	161	305899	36.62	ppb		98
41)	Caprolactam	8.54	55	163927	31.68	ppb		89
42)	Hexachlorobutadiene	8.09	225	164645	35.79	ppb		99
43)	4-Chloro-3-methylphenol	8.88	107	257744	40.09	ppb		98
44)	2-Methylnaphthalene	9.04	142	560656	32.54	ppb		98
45)	1-Methylnaphthalene	9.25	142	577649	35.30	ppb		97
46)	Dimethylnaphthalene	10.27	156	529398	37.05	ppb		98
48)	Hexachlorocyclopentadiene	9.49	237	168207	40.80	ppb		98
49)	2,4,6-Trichlorophenol	9.68	196	186991	32.93	ppb		100
50)	2,4,5-Trichlorophenol	9.76	196	203220	42.00	ppb		96
52)	2-Chloronaphthalene	9.98	162	531110	31.48	ppb		97
53)	Biphenyl	9.98	154	648777	31.29	ppb		98
54)	2-Nitroaniline	10.28	65	169892	36.64	ppb		94
55)	Dimethylphthalate	10.75	163	668665	35.06	ppb		99
56)	Acenaphthylene	10.80	152	803614	31.00	ppb		97
57)	2,6-Dinitrotoluene	10.86	165	143282	35.99	ppb		96
58)	3-Nitroaniline	11.12	138	117265	25.23	ppb		97
59)	Acenaphthene	11.17	153	537159	32.54	ppb		92
60)	2,4-Dinitrophenol	11.34	184	34131	21.36	ppb	#	72
61)	4-Nitrophenol	11.55	109	66315	30.62	ppb	#	1
62)	Dibenzofuran	11.48	168	749868	31.61	ppb		80
63)	2,4-Dinitrotoluene	11.64	165	181253	32.98	ppb		91
64)	2,3,4,6-Tetrachlorophenol	11.85	232	157411	32.35	ppb		96
65)	Diethylphthalate	12.16	149	592373	33.27	ppb		96
66)	Fluorene	12.17	166	623446	32.89	ppb		98
67)	4-Chlorophenyl-phenylether	12.22	204	301299	30.48	ppb		97
68)	4-Nitroaniline	12.34	138	132212	26.77	ppb		88
70)	4,6-Dinitro-2-methylphenol	12.44	198	32144	11.78	ppb		93
71)	n-Nitrosodiphenylamine	12.47	169	473346	40.06	ppb		96
72)	1,2-Diphenylhydrazine	12.52	77	622091	42.72	ppb		99
74)	4-Bromophenyl-phenylether	13.17	248	181155	38.66	ppb		95
75)	Hexachlorobenzene	13.43	284	172562	39.43	ppb		98
76)	Pentachlorophenol	13.82	266	106449	37.69	ppb		97
77)	Phenanthrene	14.06	178	828711	35.26	ppb		99
78)	Anthracene	14.15	178	866256	36.85	ppb		98
79)	Carbazole	14.52	167	801976	36.71	ppb		99
80)	Di-n-butylphthalate	15.38	149	932598	35.75	ppb		98
81)	Fluoranthene	16.25	202	858346	31.56	ppb		97
82)	Octadecane	13.96	57	501039	36.77	ppb		92
84)	Pyrene	16.60	202	822202	46.29	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77602.D Vial: 12
Acq On : 29 Nov 2010 2:20 pm Operator: olgaa
Sample : op46916-ms Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:18 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

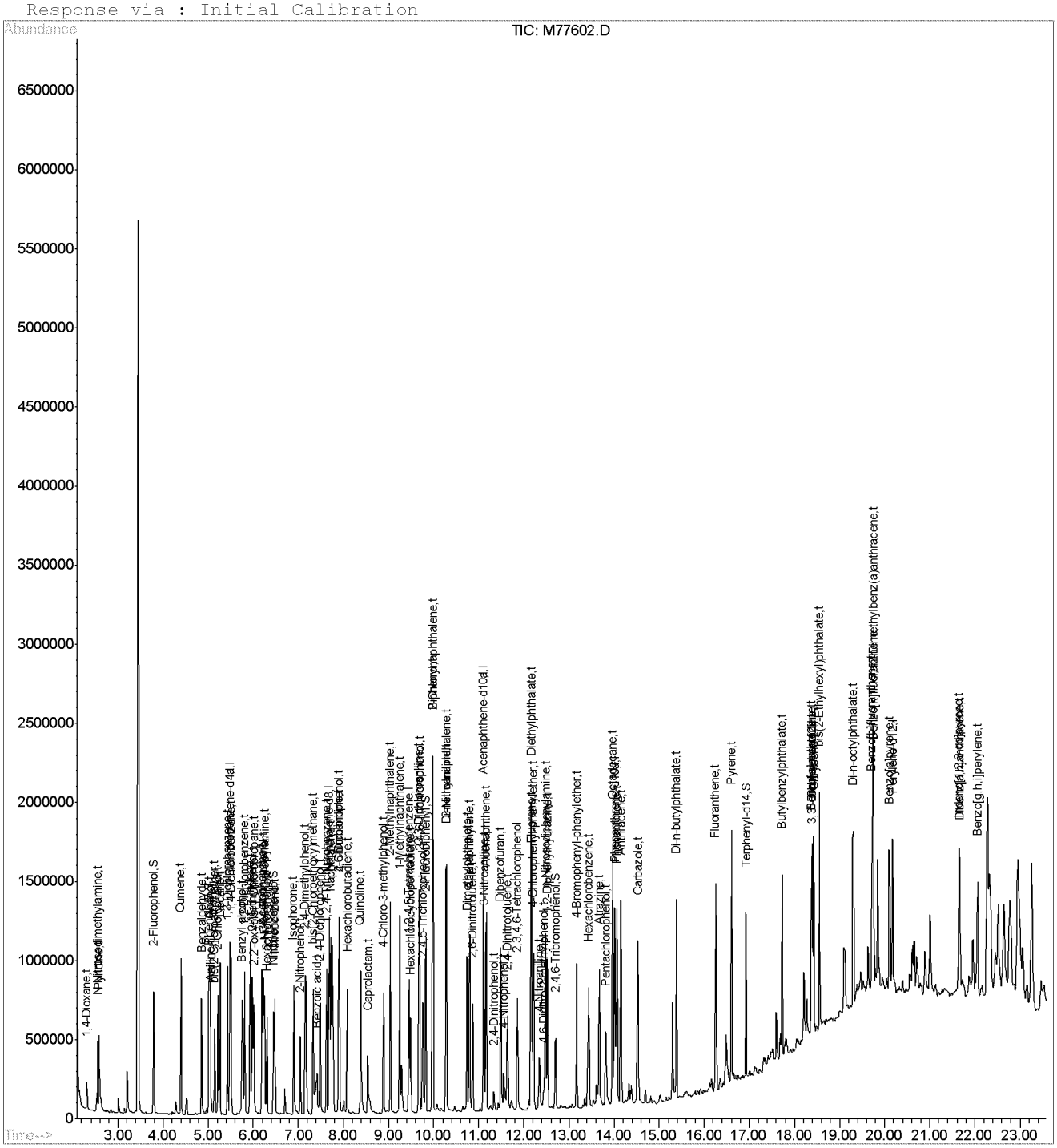
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	Butylbenzylphthalate	17.72	149	334778	46.36	ppb	95
88)	Benzo[a]anthracene	18.37	228	573085	34.27	ppb	99
89)	3,3'-Dichlorobenzidine	18.38	252	28583	5.27	ppb	88
90)	Chrysene	18.43	228	546015	35.89	ppb	99
91)	bis(2-Ethylhexyl)phthalate	18.55	149	444741	46.29	ppb	100
93)	Di-n-octylphthalate	19.31	149	677953	44.16	ppb	94
94)	Benzo[b]fluoranthene	19.72	252	683682m	49.90	ppb	
95)	Benzo[k]fluoranthene	19.75	252	366467m	28.76	ppb	
96)	Benzo[a]pyrene	20.10	252	491933	36.60	ppb	98
97)	Indeno[1,2,3-cd]pyrene	21.64	276	538154	37.59	ppb	96
99)	Dibenz[a,h]anthracene	21.67	278	458092	40.52	ppb	97
100)	7,12-Dimethylbenz(a)anthra	19.74	256	250850	45.73	ppb	94
101)	Benzo[g,h,i]perylene	22.06	276	455184	37.30	ppb	97
103)	Benzaldehyde	4.86	105	217673	53.02	ppb	96
105)	1,2,4,5-Tetrachlorobenzene	9.45	216	261008	30.39	ppb	99
107)	Atrazine	13.66	215	102365	40.45	ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77602.D Vial: 12
Acq On : 29 Nov 2010 2:20 pm Operator: olgaa
Sample : op46916-ms Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:18 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

Manual Integration Approval Summary

Sample Number: OP46916-MS
Lab FileID: M77602.D
Injection Time: 11/29/10 14:20

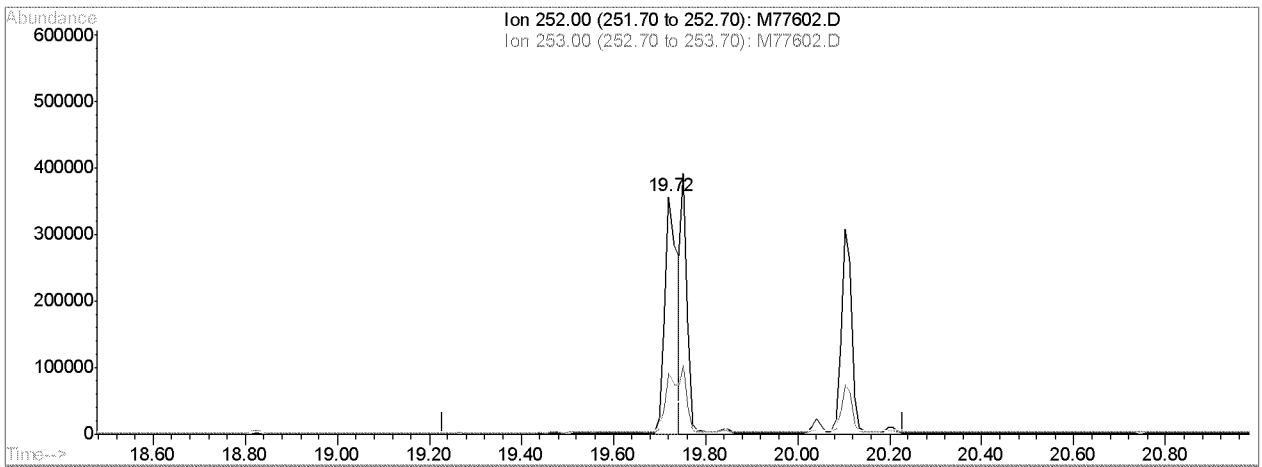
Method: SW846 8270C
Analyst approved: 12/02/10 12:09 Olga Azarihn
Supervisor approved: 12/04/10 18:33 Wendy Sherwood

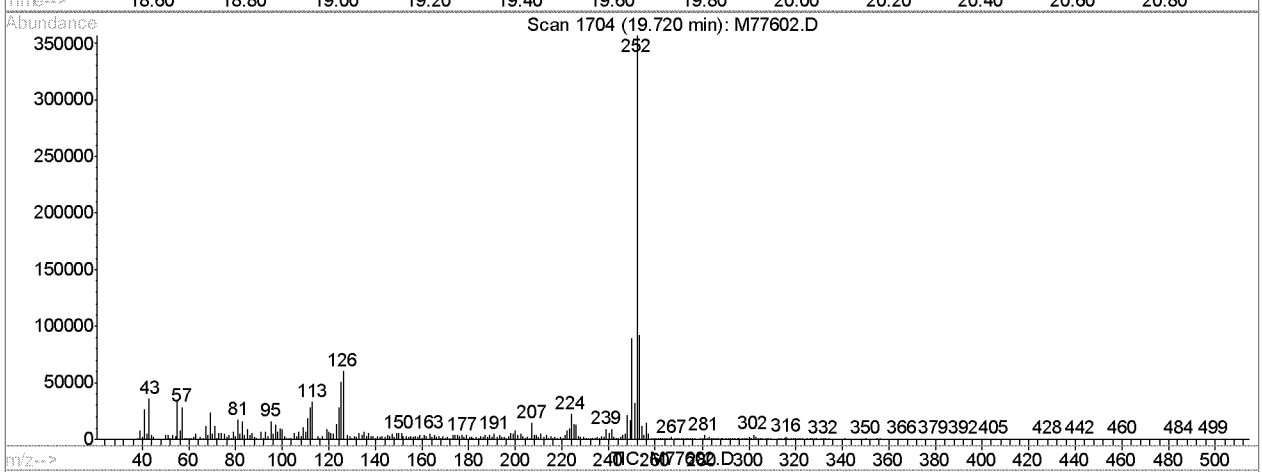
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.72	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.75	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77602.D Vial: 12
Acq On : 29 Nov 2010 2:20 pm Operator: olgaa
Sample : op46916-ms Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:18 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.72min 49.90ppb m

response 683682

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	25.77
125.00	10.90	14.31
0.00	0.00	0.00

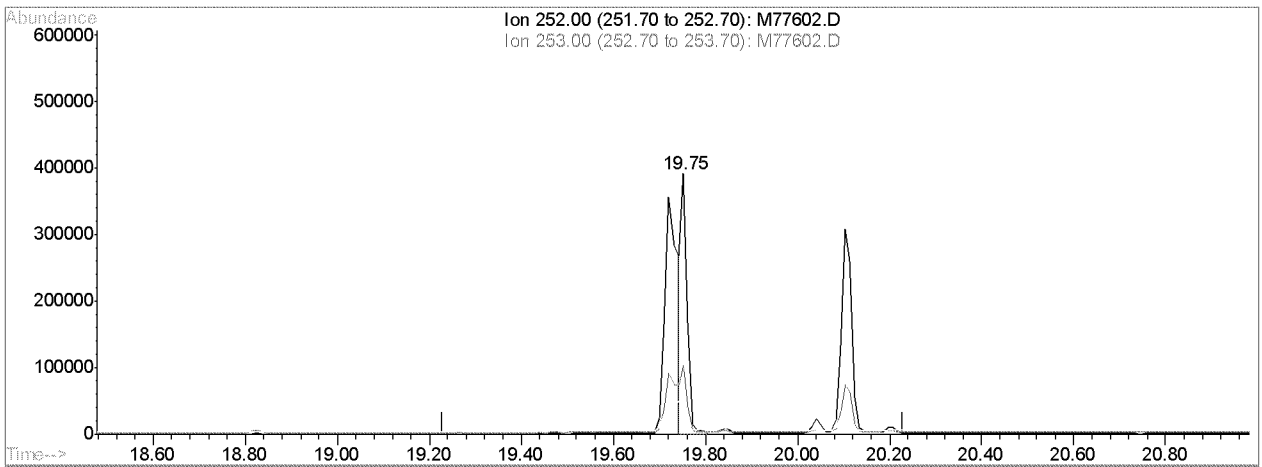
M77602.D MM3014.M Thu Dec 02 12:19:04 2010 GCMSM

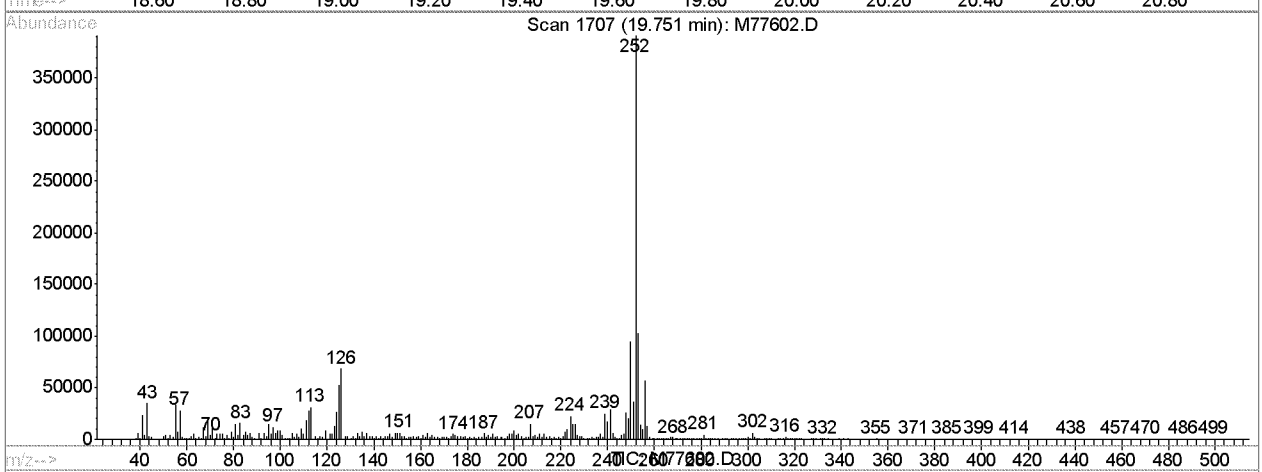
M77602.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77602.D Vial: 12
Acq On : 29 Nov 2010 2:20 pm Operator: olgaa
Sample : op46916-ms Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:18 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.75min 28.76ppb m

response 366467

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	26.31
125.00	12.20	13.42
0.00	0.00	0.00

M77602.D MM3014.M Thu Dec 02 12:19:08 2010 GCMSM

Manual Integrations APPROVED (compounds with "m" flag)
Wendy Sherwood 12/04/10 18:33

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77603.D Vial: 13
Acq On : 29 Nov 2010 2:51 pm Operator: olgaa
Sample : op46916-msd Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:19 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.49	152	259167	40.00	ppb		0.01
24) Naphthalene-d8	7.68	136	854212	40.00	ppb		0.00
47) Acenaphthene-d10	11.11	164	590004	40.00	ppb		0.01
69) Phenanthrene-d10	14.02	188	906030	40.00	ppb		0.01
83) Chrysene-d12	18.40	240	631643	40.00	ppb		0.01
92) Perylene-d12	20.18	264	468661	40.00	ppb		0.01
102) 1,4-Dichlorobenzene-d4a	5.49	152	259167	40.00	ppb		0.01
104) Acenaphthene-d10a	11.11	164	590004	40.00	ppb		0.01
106) Phenanthrene-d10a	14.02	188	906030	40.00	ppb		0.01
110) Chrysene-d12a	18.40	240	631643	40.00	ppb		0.01
112) Chrysene-d12b	18.40	240	631643	40.00	ppb		0.01
System Monitoring Compounds							
5) 2-Fluorophenol	3.79	112	287113	36.22	ppb		0.01
Spiked Amount 50.000			Recovery =	72.44%			
8) Phenol-d5	5.01	99	354546	39.19	ppb		0.01
Spiked Amount 50.000			Recovery =	78.38%			
25) Nitrobenzene-d5	6.45	82	301818	38.61	ppb		0.01
Spiked Amount 50.000			Recovery =	77.22%			
51) 2-Fluorobiphenyl	9.83	172	613275	30.26	ppb		0.01
Spiked Amount 50.000			Recovery =	60.52%			
73) 2,4,6-Tribromophenol	12.70	330	82743	49.98	ppb		0.01
Spiked Amount 50.000			Recovery =	99.96%			
86) Terphenyl-d14	16.93	244	568733	46.32	ppb		0.01
Spiked Amount 50.000			Recovery =	92.64%			
Target Compounds							Qvalue
2) 1,4-Dioxane	2.30	88	60107	14.34	ppb		92
3) Pyridine	2.57	79	226313	23.79	ppb		94
4) N-Nitrosodimethylamine	2.54	42	205575	32.31	ppb		100
6) Indene	5.93	116	491944	41.68	ppb		96
7) Cumene	4.39	105	565771	32.96	ppb		98
9) Phenol	5.03	94	367542	36.54	ppb		90
10) Aniline	5.05	93	292421	24.56	ppb		84
11) bis(2-Chloroethyl)ether	5.14	93	272981	34.76	ppb		96
12) 2-Chlorophenol	5.22	128	315273	37.41	ppb		96
13) Decane	5.26	43	298160	20.74	ppb		92
14) 1,3-Dichlorobenzene	5.43	146	339906	32.75	ppb		98
15) 1,4-Dichlorobenzene	5.51	146	330568	32.54	ppb		98
16) Benzyl alcohol	5.76	108	212376	39.62	ppb		99
17) 1,2-Dichlorobenzene	5.81	146	324974	33.89	ppb		98
18) Acetophenone	6.19	105	403710	37.65	ppb		92
19) 2-Methylphenol	5.98	108	267314	47.29	ppb		99
20) 2,2'-oxybis(1-Chloropropan	6.01	121	100560	34.97	ppb	#	65
21) 3&4-Methylphenol	6.22	108	280737	47.21	ppb	#	68
22) n-Nitroso-di-n-propylamine	6.25	70	199742	35.77	ppb		84
23) Hexachloroethane	6.31	201	102795	28.66	ppb		93
26) Nitrobenzene	6.48	123	158462	37.41	ppb		95
27) Quinoline	8.38	129	613301	42.57	ppb		97
28) Isophorone	6.90	82	584383	41.37	ppb		97

(#) = qualifier out of range (m) = manual integration
M77603.D MM3014.M Thu Dec 02 12:20:00 2010 GCMSM

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77603.D Vial: 13
Acq On : 29 Nov 2010 2:51 pm Operator: olgaa
Sample : op46916-msd Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:19 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.05	139	160130	37.51	ppb		81
30)	2,4-Dimethylphenol	7.17	107	306031	44.10	ppb		97
31)	Benzoic acid	7.42	105	258570	54.95	ppb		99
32)	bis(2-Chloroethoxy)methane	7.33	93	354116	40.10	ppb		98
33)	2,4-Dichlorophenol	7.49	162	276368	40.60	ppb		97
34)	2,6-Dichlorophenol	7.90	162	272173	39.91	ppb		100
36)	1,2,4-Trichlorobenzene	7.62	180	296799	35.81	ppb		96
38)	Naphthalene	7.72	128	805100	35.38	ppb		98
39)	4-Chloroaniline	7.90	127	276434	27.86	ppb		99
40)	2,3-Dichloroaniline	9.67	161	320951	38.98	ppb		98
41)	Caprolactam	8.54	55	175196	34.34	ppb		91
42)	Hexachlorobutadiene	8.08	225	167625	36.97	ppb		98
43)	4-Chloro-3-methylphenol	8.88	107	265449	41.88	ppb	#	35
44)	2-Methylnaphthalene	9.04	142	599597	35.31	ppb		99
45)	1-Methylnaphthalene	9.25	142	614890	38.12	ppb		97
46)	Dimethylnaphthalene	10.27	156	565942	40.18	ppb		98
48)	Hexachlorocyclopentadiene	9.49	237	151705	36.22	ppb		98
49)	2,4,6-Trichlorophenol	9.68	196	197352	34.21	ppb		100
50)	2,4,5-Trichlorophenol	9.76	196	217437	44.23	ppb		97
52)	2-Chloronaphthalene	9.98	162	568722	33.18	ppb		98
53)	Biphenyl	9.98	154	686674	32.59	ppb		98
54)	2-Nitroaniline	10.28	65	179648	38.14	ppb		91
55)	Dimethylphthalate	10.75	163	710716	36.68	ppb		99
56)	Acenaphthylene	10.80	152	857792	32.56	ppb		97
57)	2,6-Dinitrotoluene	10.86	165	150319	37.16	ppb		96
58)	3-Nitroaniline	11.12	138	118541	25.10	ppb		98
59)	Acenaphthene	11.17	153	558789	33.32	ppb		91
60)	2,4-Dinitrophenol	11.34	184	25703	18.27	ppb		92
61)	4-Nitrophenol	11.55	109	76072	34.45	ppb	#	1
62)	Dibenzofuran	11.48	168	802022	33.27	ppb		81
63)	2,4-Dinitrotoluene	11.64	165	190777	34.16	ppb		92
64)	2,3,4,6-Tetrachlorophenol	11.85	232	170219	34.43	ppb		95
65)	Diethylphthalate	12.16	149	614725	33.98	ppb		96
66)	Fluorene	12.16	166	663734	34.46	ppb		97
67)	4-Chlorophenyl-phenylether	12.22	204	322405	32.10	ppb		97
68)	4-Nitroaniline	12.34	138	133955	26.70	ppb		88
70)	4,6-Dinitro-2-methylphenol	12.44	198	24073	9.29	ppb		90
71)	n-Nitrosodiphenylamine	12.48	169	503525	40.40	ppb		96
72)	1,2-Diphenylhydrazine	12.52	77	660416	43.00	ppb		98
74)	4-Bromophenyl-phenylether	13.17	248	194492	39.36	ppb		96
75)	Hexachlorobenzene	13.43	284	189905	41.14	ppb		99
76)	Pentachlorophenol	13.82	266	121475	40.77	ppb		98
77)	Phenanthrene	14.06	178	914028	36.87	ppb		99
78)	Anthracene	14.15	178	941306	37.96	ppb		98
79)	Carbazole	14.52	167	892039	38.71	ppb		100
80)	Di-n-butylphthalate	15.38	149	1001947	36.41	ppb		98
81)	Fluoranthene	16.25	202	1020049	35.56	ppb		96
82)	Octadecane	13.97	57	517589	36.01	ppb		91
84)	Pyrene	16.60	202	981953	47.78	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77603.D Vial: 13
Acq On : 29 Nov 2010 2:51 pm Operator: olgaa
Sample : op46916-msd Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:19 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

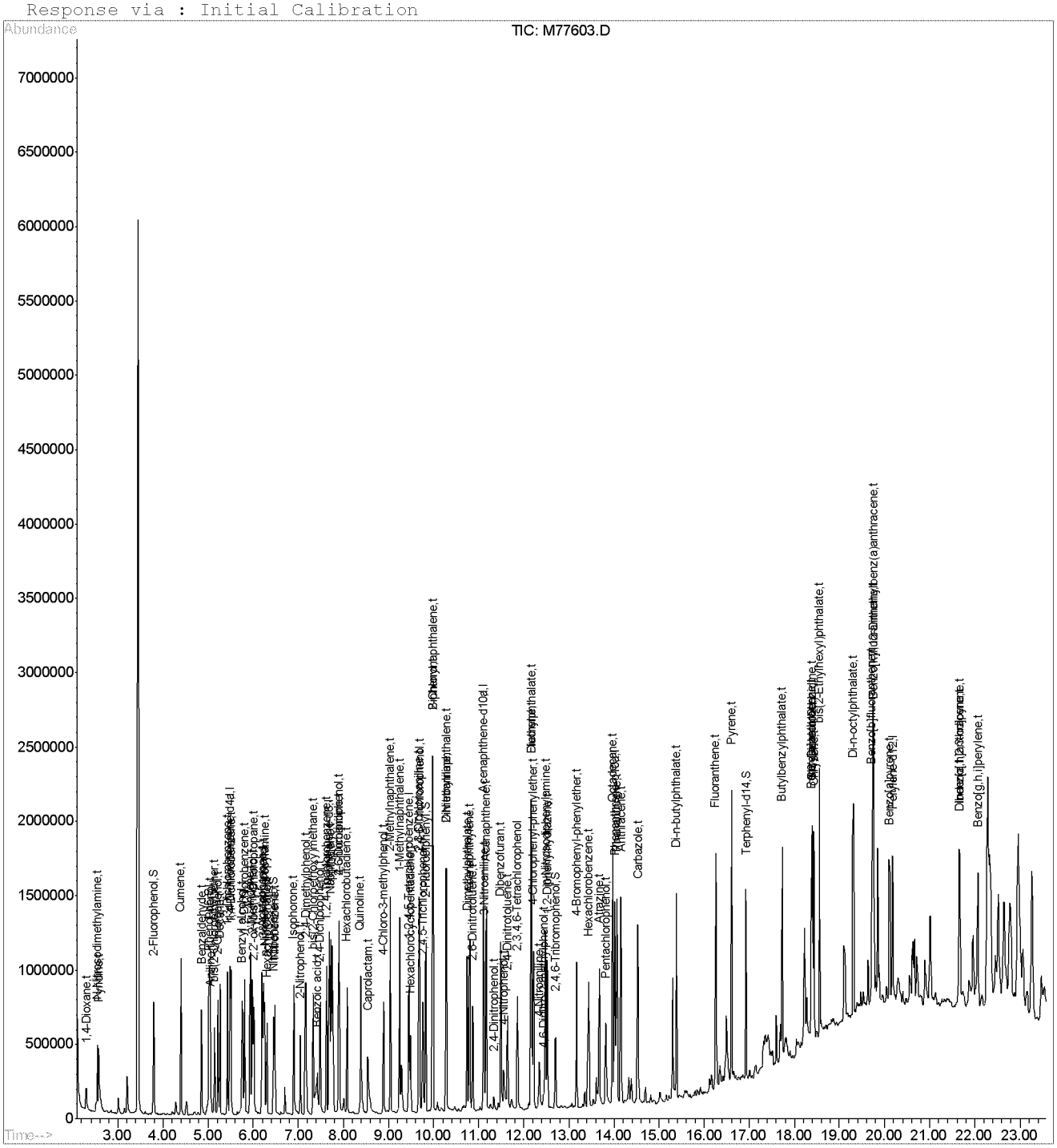
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	Butylbenzylphthalate	17.72	149	418122	50.03	ppb	95
88)	Benzo[a]anthracene	18.37	228	707323	36.55	ppb	99
89)	3,3'-Dichlorobenzidine	18.40	252	23808	3.80	ppb	87
90)	Chrysene	18.43	228	671331	38.13	ppb	99
91)	bis(2-Ethylhexyl)phthalate	18.55	149	534195	48.05	ppb	99
93)	Di-n-octylphthalate	19.31	149	813585	50.32	ppb	95
94)	Benzo[b]fluoranthene	19.72	252	735490m	51.03	ppb	
95)	Benzo[k]fluoranthene	19.75	252	469798m	35.00	ppb	
96)	Benzo[a]pyrene	20.11	252	549910	38.85	ppb	98
97)	Indeno[1,2,3-cd]pyrene	21.66	276	582001	38.60	ppb	98
99)	Dibenz[a,h]anthracene	21.67	278	487639	40.96	ppb	98
100)	7,12-Dimethylbenz(a)anthra	19.74	256	290416	50.27	ppb	94
101)	Benzo[g,h,i]perylene	22.07	276	490787	38.19	ppb	96
103)	Benzaldehyde	4.86	105	226937	57.45	ppb	96
105)	1,2,4,5-Tetrachlorobenzene	9.45	216	279834	32.07	ppb	99
107)	Atrazine	13.67	215	111499	41.77	ppb	97

(#) = qualifier out of range (m) = manual integration
M77603.D MM3014.M Thu Dec 02 12:20:01 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77603.D Vial: 13
Acq On : 29 Nov 2010 2:51 pm Operator: olgaa
Sample : op46916-msd Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:19 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

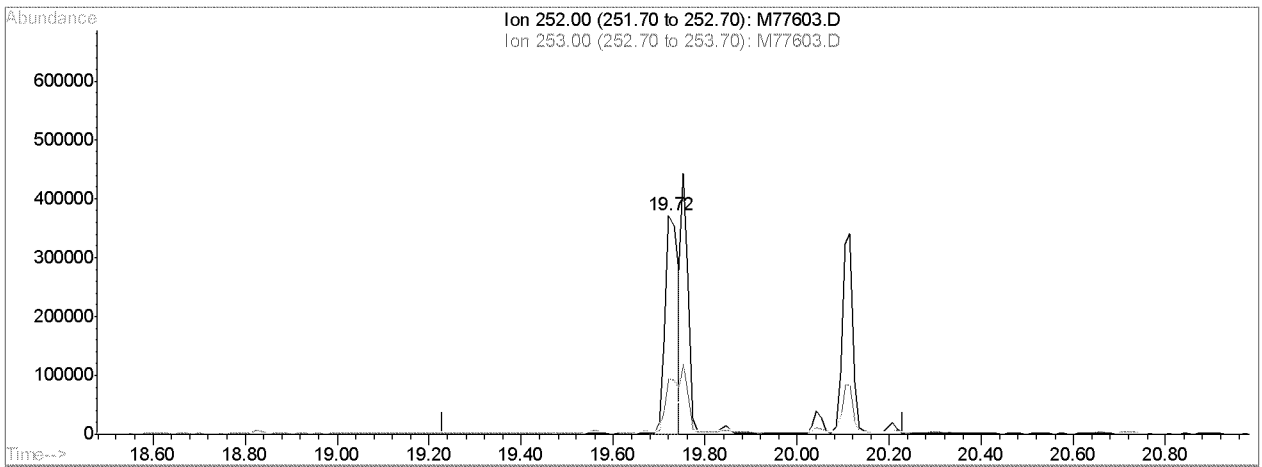
Sample Number: OP46916-MSD
Lab FileID: M77603.D
Injection Time: 11/29/10 14:51
Method: SW846 8270C
Analyst approved: 12/02/10 12:09 Olga Azarihn
Supervisor approved: 12/04/10 18:33 Wendy Sherwood

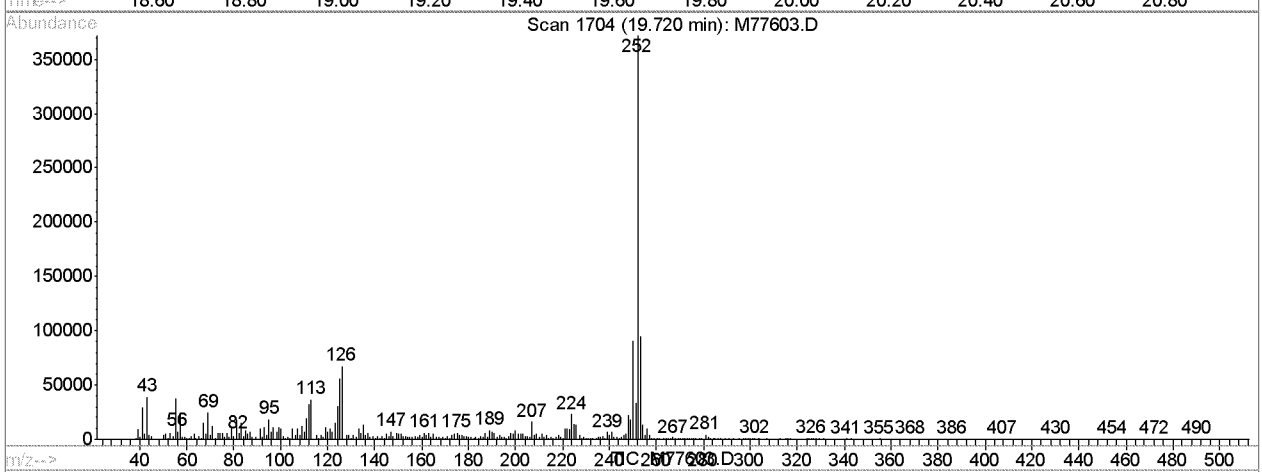
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.72	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.75	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77603.D Vial: 13
Acq On : 29 Nov 2010 2:51 pm Operator: olgaa
Sample : op46916-msd Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:19 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.72min 51.03ppb m

response 735490

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	25.49
125.00	10.90	14.99
0.00	0.00	0.00

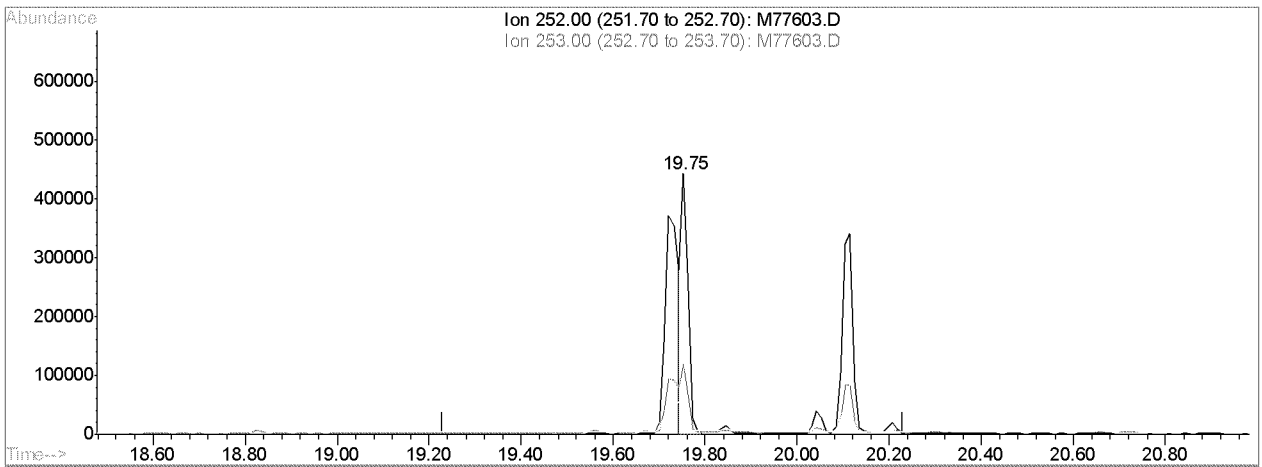
M77603.D MM3014.M Thu Dec 02 12:20:18 2010 GCMSM

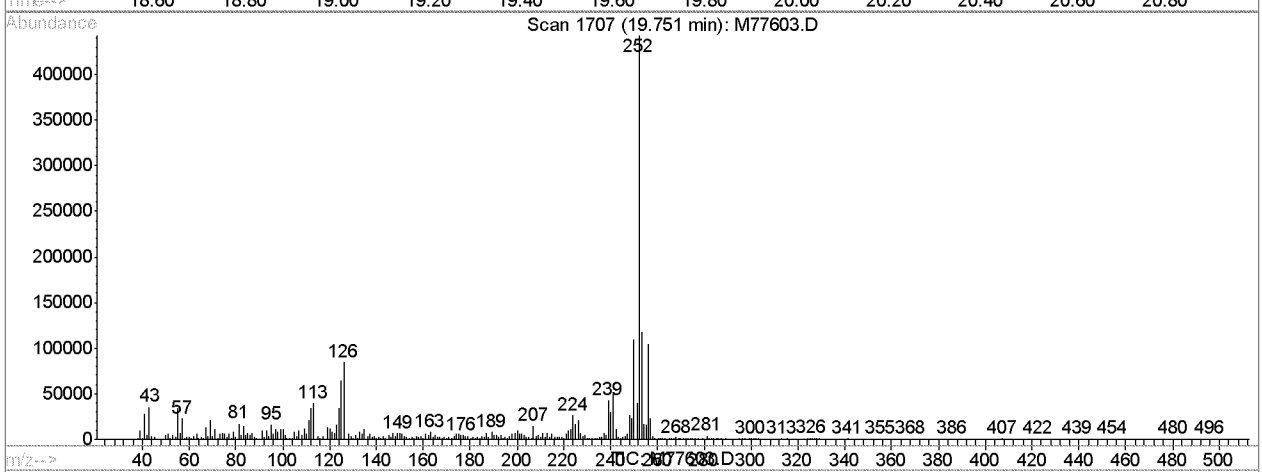
M77603.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77603.D Vial: 13
Acq On : 29 Nov 2010 2:51 pm Operator: olgaa
Sample : op46916-msd Inst : MSM
Misc : op46916,em3023,35.2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 2 12:19 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Dec 02 12:17:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.75min 35.00ppb m

response 469798

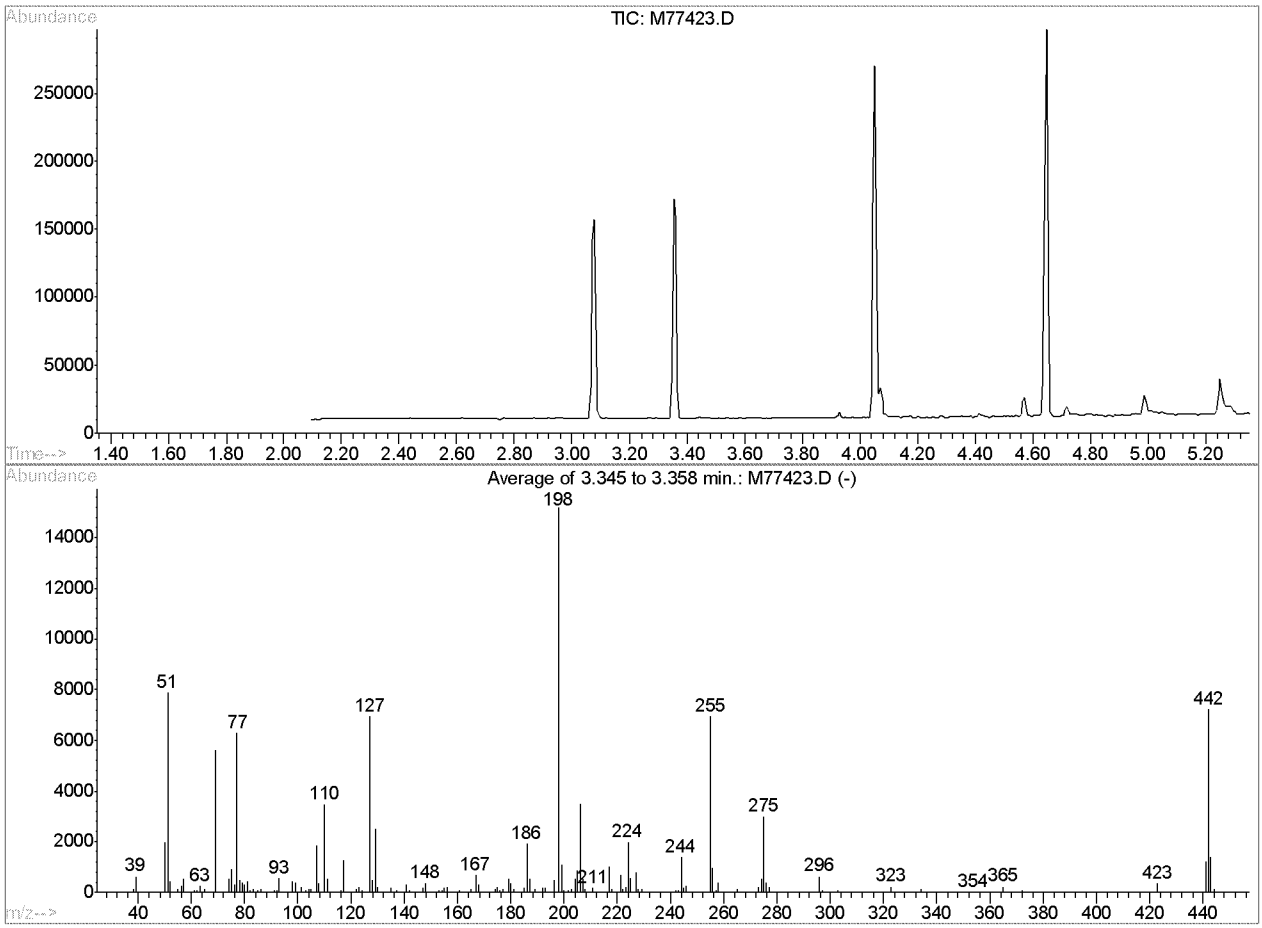
Ion	Exp%	Act%
252.00	100	100
253.00	26.10	26.66
125.00	12.20	14.70
0.00	0.00	0.00

M77603.D MM3014.M Thu Dec 02 12:20:22 2010 GCMSM

M77603.D edits: Benzo[k]fluoranthene

DFTPP

Data File : C:\HPCHEM\1\DATA\EM3014\M77423.D Vial: 1
Acq On : 18 Nov 2010 10:14 am Operator: olgaa
Sample : dftpp Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : DFTPP, HP-5MS 30m x .25mm x .25um



AutoFind: Scans 196, 197, 198; Background Corrected with Scan 193

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.9	7874	PASS
68	69	0.00	2	0.8	43	PASS
69	198	0.00	100	37.1	5624	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	45.8	6947	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	15170	PASS
199	198	5	9	7.2	1096	PASS
275	198	10	30	19.8	2998	PASS
365	198	1	100	1.5	223	PASS
441	443	0.10	100	86.5	1216	PASS
442	198	40	100	47.5	7207	PASS
443	442	17	23	19.5	1405	PASS

M77423.D DFTPPM.M Fri Nov 19 12:24:09 2010 GCMSM

Average of 3.345 to 3.358 min.: M77423.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	146	61.90	98	79.90	326	97.90	419
39.00	632	63.00	245	81.00	434	98.90	405
41.00	1	65.00	123	81.95	83	100.95	220
50.00	1982	68.00	43	83.00	120	102.95	81
51.00	7874	68.90	5624	84.90	88	103.90	123
52.00	440	74.00	527	86.00	116	104.95	127
53.00	37	75.00	918	87.00	34	106.10	44
55.00	136	76.00	310	91.00	85	107.00	1845
56.00	282	77.00	6292	91.90	103	107.95	336
57.00	509	78.00	465	92.95	560	108.90	36
60.95	86	78.95	396	94.00	34	110.00	3479

Average of 3.345 to 3.358 min.: M77423.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
110.95	541	129.90	203	152.90	96	172.00	35
115.95	105	133.90	33	153.90	91	172.80	38
116.90	1291	134.90	193	154.95	180	173.95	134
117.90	60	135.90	45	155.95	240	174.95	214
121.90	136	136.90	103	156.80	41	175.85	86
122.90	200	140.90	290	160.00	39	176.85	133
123.85	84	141.95	97	160.85	96	178.00	34
124.90	40	142.90	48	164.90	143	178.90	518
127.00	6947	146.95	166	166.00	48	179.90	351
127.95	486	147.90	352	166.95	690	181.00	153
128.90	2508	148.90	37	167.90	311	184.95	198

Average of 3.345 to 3.358 min.: M77423.D
dftpp
Modified:subtracted

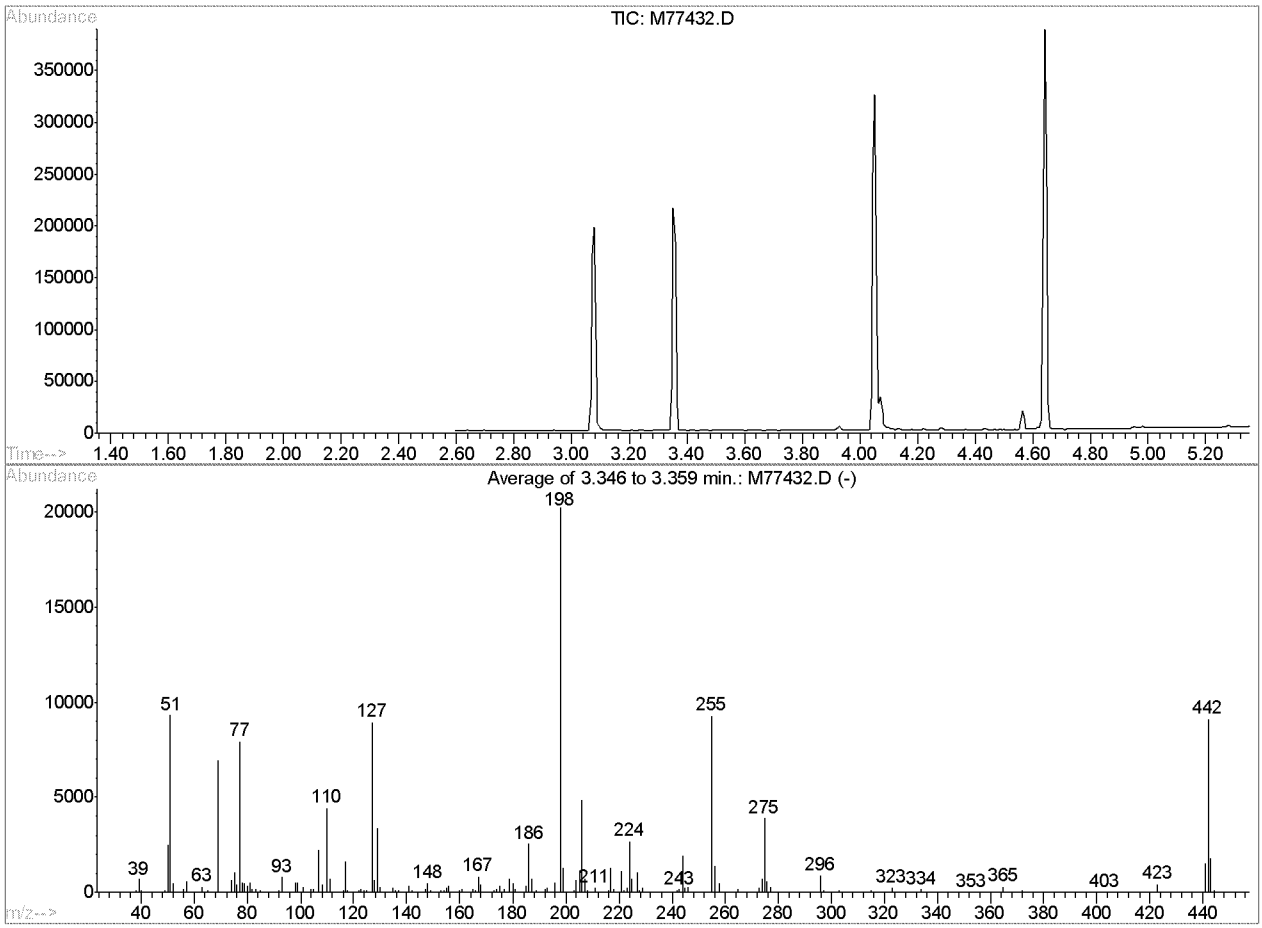
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.00	1912	202.90	127	220.95	688	236.90	34
186.95	525	203.90	540	221.75	144	241.90	107
187.90	35	204.95	871	223.00	224	242.95	92
188.90	111	206.00	3491	223.90	1991	244.00	1388
191.90	172	207.00	505	224.95	560	244.95	196
192.95	155	207.90	130	226.00	38	245.90	244
195.95	485	210.00	37	226.90	775	249.00	35
197.90	15170	210.90	170	227.90	133	254.90	6951
198.90	1096	215.80	41	228.90	135	255.90	958
199.95	81	216.90	994	230.90	41	256.95	80
201.35	86	217.95	132	234.90	36	257.90	375

Average of 3.345 to 3.358 min.: M77423.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
264.90	148	333.95	139	443.00	1405		
272.90	224	351.90	39	443.90	146		
273.95	536	353.10	34				
274.90	2998	354.00	43				
275.90	375	364.90	223				
276.90	211	371.90	107				
295.90	623	421.90	44				
296.95	79	422.95	348				
302.95	89	423.90	45				
316.00	35	441.00	1216				
323.00	230	442.00	7207				

DFTPP

Data File : C:\HPCHEM\1\DATA\EM3015\M77432.D Vial: 1
Acq On : 18 Nov 2010 2:45 pm Operator: olgaa
Sample : dftpp Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : DFTPP, HP-5MS 30m x .25mm x .25um



AutoFind: Scans 118, 119, 120; Background Corrected with Scan 114

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.1	9336	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.3	6933	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	44.2	8950	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	20232	PASS
199	198	5	9	6.5	1314	PASS
275	198	10	30	19.3	3896	PASS
365	198	1	100	1.5	300	PASS
441	443	0.10	100	82.9	1493	PASS
442	198	40	100	45.1	9126	PASS
443	442	17	23	19.7	1800	PASS

M77432.D DFTPPM.M Fri Nov 19 12:23:31 2010 GCMSM

Average of 3.346 to 3.359 min.: M77432.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	34	57.00	597	78.00	534	92.95	790
38.00	132	60.90	46	79.00	450	95.90	34
39.00	690	62.00	78	79.95	365	97.95	512
40.00	145	63.00	307	81.00	509	98.95	538
41.00	22	64.00	34	82.00	150	100.95	274
42.00	71	65.00	120	83.05	177	102.90	88
48.95	127	68.90	6933	84.90	93	103.90	176
50.00	2521	74.00	637	85.95	66	104.90	160
51.00	9336	75.00	1064	86.80	45	106.95	2238
52.00	466	76.00	406	90.90	62	107.95	415
56.00	206	77.00	7958	91.95	99	109.90	4445

Average of 3.346 to 3.359 min.: M77432.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
110.90	674	128.90	3378	146.90	182	161.90	68
111.90	61	129.90	269	147.90	475	164.90	149
115.90	116	133.90	53	148.90	112	165.90	112
116.90	1612	134.95	241	152.95	99	166.90	820
117.90	141	135.90	92	153.90	101	167.90	413
121.95	143	136.95	116	155.00	228	168.95	82
122.90	179	140.70	42	155.95	340	172.95	109
123.90	100	140.90	360	156.85	81	173.90	148
124.95	112	141.90	119	157.90	36	174.95	323
127.00	8950	142.80	77	159.85	112	176.00	79
127.95	663	145.90	40	160.90	171	176.85	157

Average of 3.346 to 3.359 min.: M77432.D
dftpp
Modified:subtracted

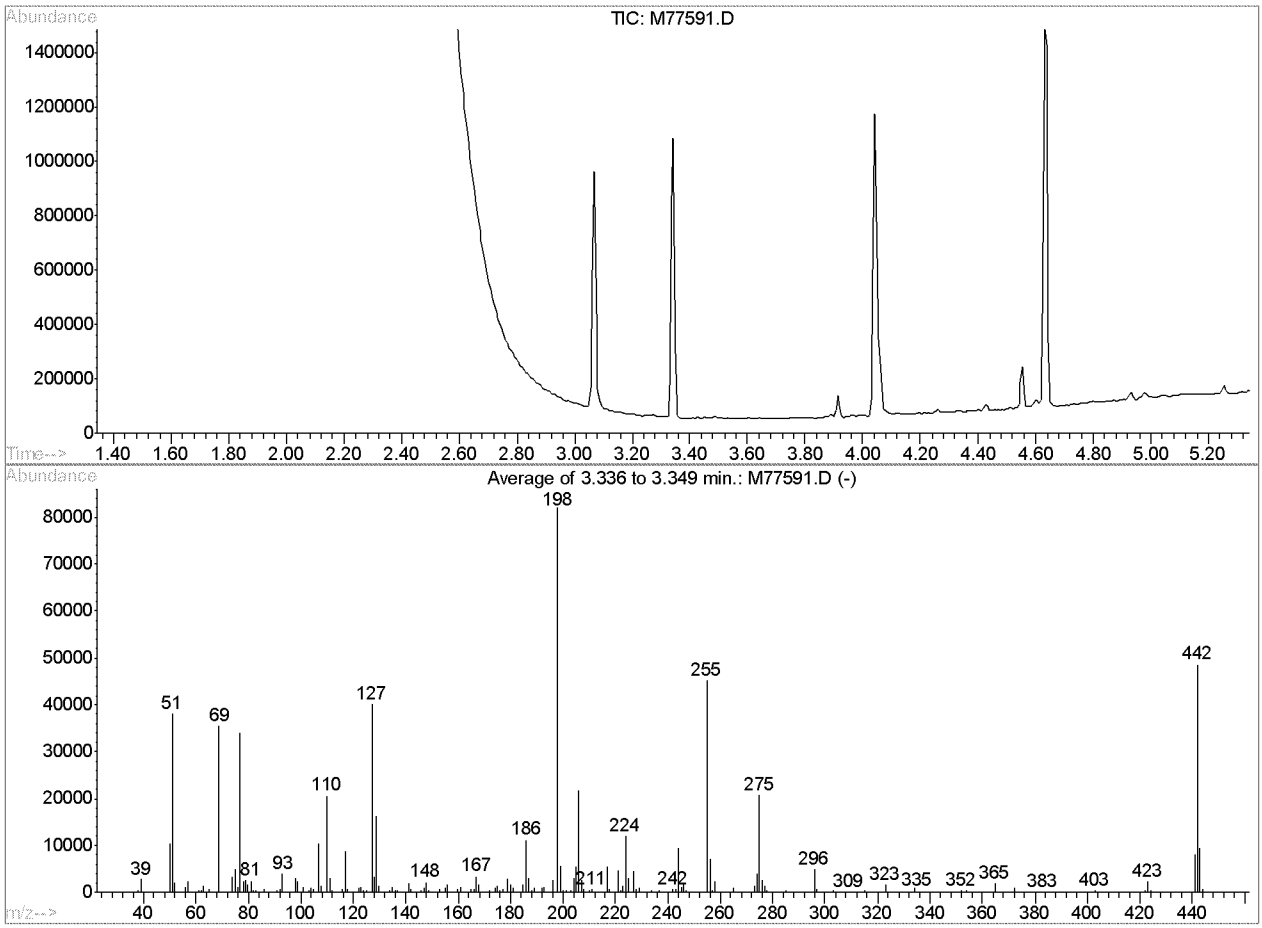
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.70	34	190.90	38	204.90	1159	221.80	96
178.00	37	191.95	183	205.95	4865	222.90	257
178.90	690	192.90	220	207.00	679	223.95	2711
179.90	492	195.90	538	207.85	106	224.90	696
180.90	181	197.90	20232	209.90	49	225.95	81
183.90	43	198.90	1314	210.20	49	226.90	1035
184.90	323	200.00	61	210.90	238	227.85	136
185.95	2546	201.45	85	216.00	108	228.90	209
186.95	709	202.80	115	216.90	1286	231.00	49
187.90	50	203.70	38	217.90	180	234.95	80
188.90	138	203.95	666	220.95	1139	237.00	56

Average of 3.346 to 3.359 min.: M77432.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.85	129	257.90	440	296.90	142	421.00	43
242.90	148	264.85	182	302.95	112	421.85	78
244.00	1908	272.85	228	314.90	93	422.90	422
244.95	236	273.90	695	315.90	38	423.90	52
245.90	295	274.90	3896	322.95	260	441.00	1493
246.90	38	275.90	580	334.00	163	442.00	9126
248.90	77	276.90	265	352.90	38	443.00	1800
252.70	34	278.00	45	353.90	53	444.00	120
254.90	9294	284.90	39	364.90	300		
255.90	1374	293.00	41	371.95	125		
256.90	40	295.90	894	403.10	43		

DFTPP

Data File : C:\HPCHEM\1\DATA\EM3023\M77591.D Vial: 1
Acq On : 29 Nov 2010 8:53 am Operator: olgaa
Sample : dftpp Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\HPCHEM\1\METHODS\DFTPPM.M (RTE Integrator)
Title : DFTPP, HP-5MS 30m x .25mm x .25um



AutoFind: Scans 117, 118, 119; Background Corrected with Scan 112

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.3	38018	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.2	35456	PASS
70	69	0.00	2	0.4	126	PASS
127	198	40	60	48.9	40124	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	82032	PASS
199	198	5	9	6.9	5647	PASS
275	198	10	30	25.3	20791	PASS
365	198	1	100	2.3	1884	PASS
441	443	0.10	100	84.6	7943	PASS
442	198	40	100	59.2	48573	PASS
443	442	17	23	19.3	9386	PASS

M77591.D DFTPPM.M Sat Dec 04 09:52:57 2010 GCMSM

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	36	54.00	63	67.00	12	78.95	2614
36.95	190	56.00	1131	68.90	35456	79.90	1652
38.00	398	57.00	2421	69.95	126	80.95	2462
39.00	2733	57.95	49	71.00	84	81.95	583
39.95	231	59.00	48	71.80	37	82.95	565
42.00	114	59.95	52	73.00	168	83.95	165
43.95	32	61.00	588	74.00	3329	85.00	226
45.00	92	61.95	581	74.95	4901	85.95	828
49.95	10361	63.00	1382	76.10	1196	86.95	203
51.00	38018	65.00	739	77.00	34198	87.90	41
52.00	2080	66.00	76	77.95	2403	88.85	154

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.00	40	102.90	492	114.95	120	124.95	597
90.95	430	103.90	949	115.90	660	127.00	40124
91.95	618	104.90	693	116.90	8648	127.95	3222
92.95	4015	105.80	52	117.90	636	128.90	16309
93.90	344	106.90	10461	119.00	24	129.90	1410
95.95	250	107.90	1413	119.90	186	131.00	162
97.90	3060	109.90	20699	120.10	76	131.90	131
98.90	2394	110.95	3037	121.00	43	132.95	45
99.95	292	111.90	535	121.95	888	133.90	397
100.85	1216	112.95	208	122.95	1197	134.90	1198
102.00	18	113.85	20	123.90	420	136.00	594

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.90	560	148.90	556	158.95	230	168.95	233
137.90	74	149.90	185	159.95	681	170.00	125
140.05	282	150.95	296	160.85	1118	170.95	168
140.95	2013	151.55	156	161.70	174	171.90	459
141.95	671	151.90	181	162.00	290	172.95	257
142.90	309	152.95	626	162.95	71	173.95	839
143.95	35	153.85	338	163.90	130	175.00	1406
144.95	68	154.95	950	164.90	737	176.00	486
145.90	453	155.90	1600	166.00	717	176.90	602
146.95	978	156.95	350	166.95	3351	178.00	213
147.90	2214	157.85	319	167.90	1557	178.90	2902

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
179.95	1750	190.90	247	202.95	437	214.00	51
180.95	1034	191.95	1009	204.00	3181	215.00	254
182.10	201	192.95	1251	204.95	5376	215.90	250
183.00	128	193.95	302	206.00	21745	216.90	5420
184.00	307	194.80	100	207.00	2687	217.90	832
184.90	1596	196.00	2603	207.95	750	218.90	79
186.00	11144	197.90	82032	208.90	104	220.95	4640
186.90	3173	198.90	5647	210.05	401	221.80	323
188.00	397	199.90	489	210.95	653	222.00	457
188.95	942	201.35	484	211.60	134	222.90	1462
190.00	68	201.70	123	212.95	33	224.00	12050

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.00	3048	234.95	245	245.00	1256	254.90	45160
225.95	325	235.60	63	245.95	1652	256.00	7033
226.90	4608	235.90	268	246.90	504	256.95	596
227.95	608	236.95	475	247.70	60	257.95	2462

228.95	1061	238.00	42	248.15	109	258.90	361
229.95	123	239.00	182	248.90	225	260.00	36
231.00	250	239.95	156	249.95	157	260.95	127
231.60	35	240.95	347	250.80	50	262.15	72
231.95	169	242.00	671	251.05	134	263.00	42
232.85	171	243.10	601	252.00	202	263.90	130
233.95	392	244.00	9548	253.00	320	264.90	975

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

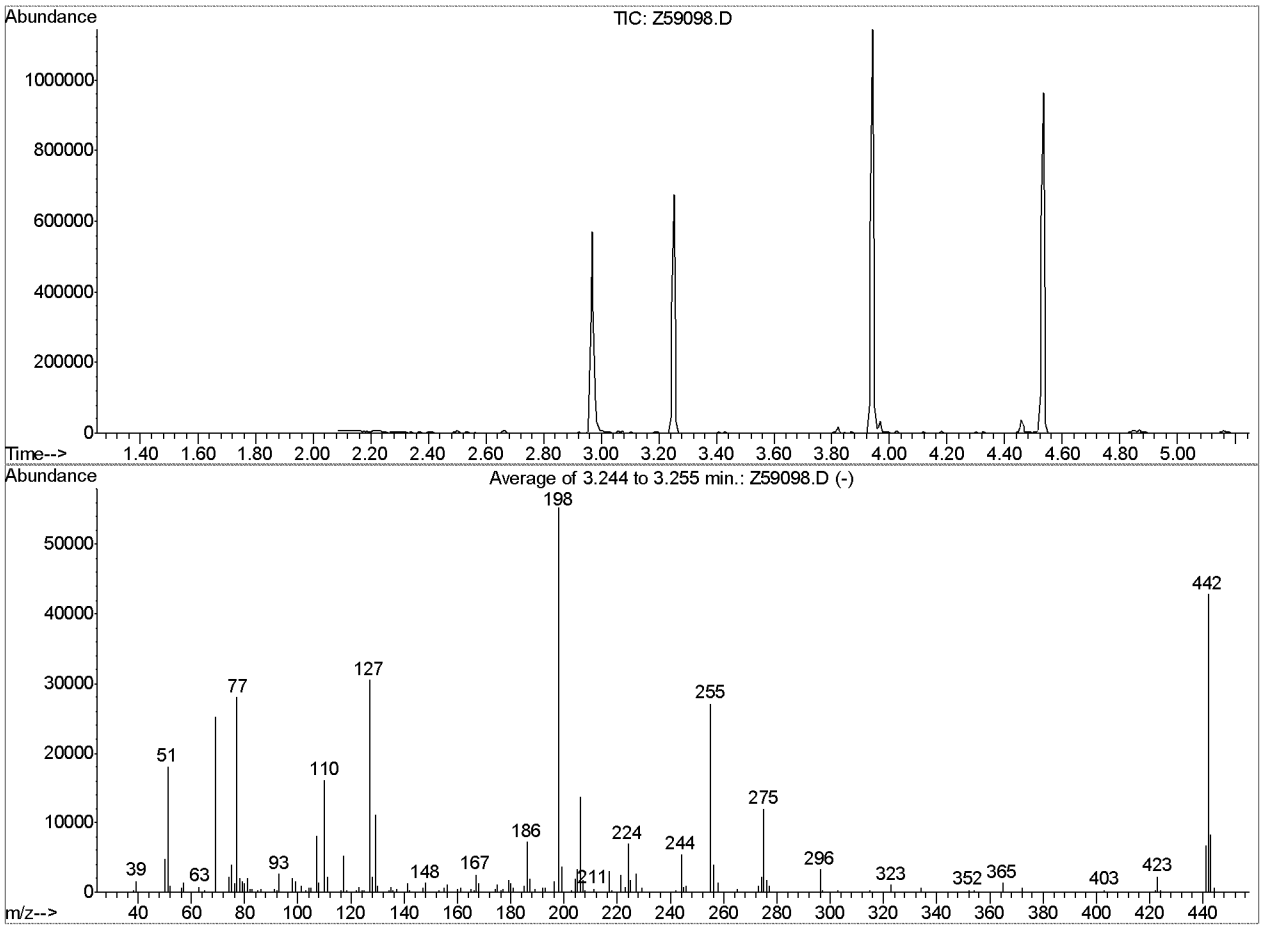
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.95	236	279.00	40	295.95	4862	314.95	538
270.00	60	283.00	223	296.90	683	316.00	335
270.90	72	283.95	199	300.80	47	319.00	37
271.20	77	285.05	474	301.10	34	320.90	241
272.05	167	286.00	75	302.05	133	322.00	49
273.00	1370	289.00	153	303.00	517	323.00	1584
274.00	3942	289.70	34	303.95	171	323.95	283
275.00	20791	290.00	39	308.00	40	326.30	41
275.95	2648	292.00	55	308.90	84	326.95	316
276.95	1414	292.95	362	313.20	52	327.90	121
277.95	416	294.00	77	313.95	260	332.00	68

Average of 3.336 to 3.349 min.: M77591.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
332.95	128	358.90	78	404.00	111	437.40	58
333.30	38	364.90	1884	420.95	356	438.20	113
334.00	898	365.95	297	421.95	375	438.40	37
334.95	274	371.00	92	423.00	2359	439.00	34
341.05	189	372.00	889	424.00	519	439.40	39
341.90	47	372.90	219	424.90	37	441.00	7943
345.90	348	383.00	131	433.45	98	442.00	48573
351.95	416	389.80	39	434.20	35	443.00	9386
352.95	354	391.05	101	435.40	53	444.00	828
353.95	530	401.90	348	436.30	47	446.10	19
354.95	163	403.00	399	437.00	72	448.15	68

DFTPPR

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59098.D Vial: 1
Acq On : 1 Nov 2010 5:13 pm Operator: larisap
Sample : dftpp Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS



AutoFind: Scans 218, 219, 220; Background Corrected with Scan 214

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.7	18057	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.5	25163	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	55.3	30552	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	55261	PASS
199	198	5	9	6.6	3644	PASS
275	198	10	30	21.6	11957	PASS
365	198	1	100	2.6	1420	PASS
441	443	0.10	100	80.6	6657	PASS
442	198	40	100	77.5	42834	PASS
443	442	17	23	19.3	8262	PASS

Z59098.D DFTPPR.M Tue Nov 02 13:44:52 2010 RPT1

Average of 3.244 to 3.255 min.: Z59098.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.05	248	69.00	25163	85.05	274	104.00	638
39.10	1674	74.05	2212	86.00	514	105.00	622
50.10	4756	75.00	3991	87.10	125	107.00	8129
51.10	18057	76.10	1328	91.00	416	108.00	1395
52.10	922	77.10	28054	92.00	306	110.00	16125
56.00	630	78.05	2012	93.00	2649	111.00	2286
57.00	1476	79.00	1539	94.00	100	111.90	113
61.00	132	80.00	1255	98.00	2025	116.05	349
62.00	163	81.00	2044	99.00	1641	117.00	5189
63.00	875	82.00	423	101.00	1041	118.05	302
65.05	379	82.95	559	103.00	297	122.00	363

Average of 3.244 to 3.255 min.: Z59098.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	799	141.00	1358	156.00	1200	169.00	180
123.95	310	142.00	333	157.20	155	172.00	136
125.00	320	143.00	148	157.90	132	173.00	171
127.00	30552	146.10	129	158.90	114	174.00	454
128.00	2270	147.00	664	159.95	487	175.10	1077
129.00	11154	148.00	1398	161.00	672	176.05	355
130.00	931	148.90	147	162.00	119	176.95	434
134.00	273	151.10	106	164.95	480	179.00	1834
134.95	845	152.95	298	166.05	343	180.00	1347
135.95	284	154.00	175	167.00	2580	180.95	677
137.00	494	155.05	705	168.00	1242	184.00	107

Average of 3.244 to 3.255 min.: Z59098.D
dftpp
Modified:subtracted

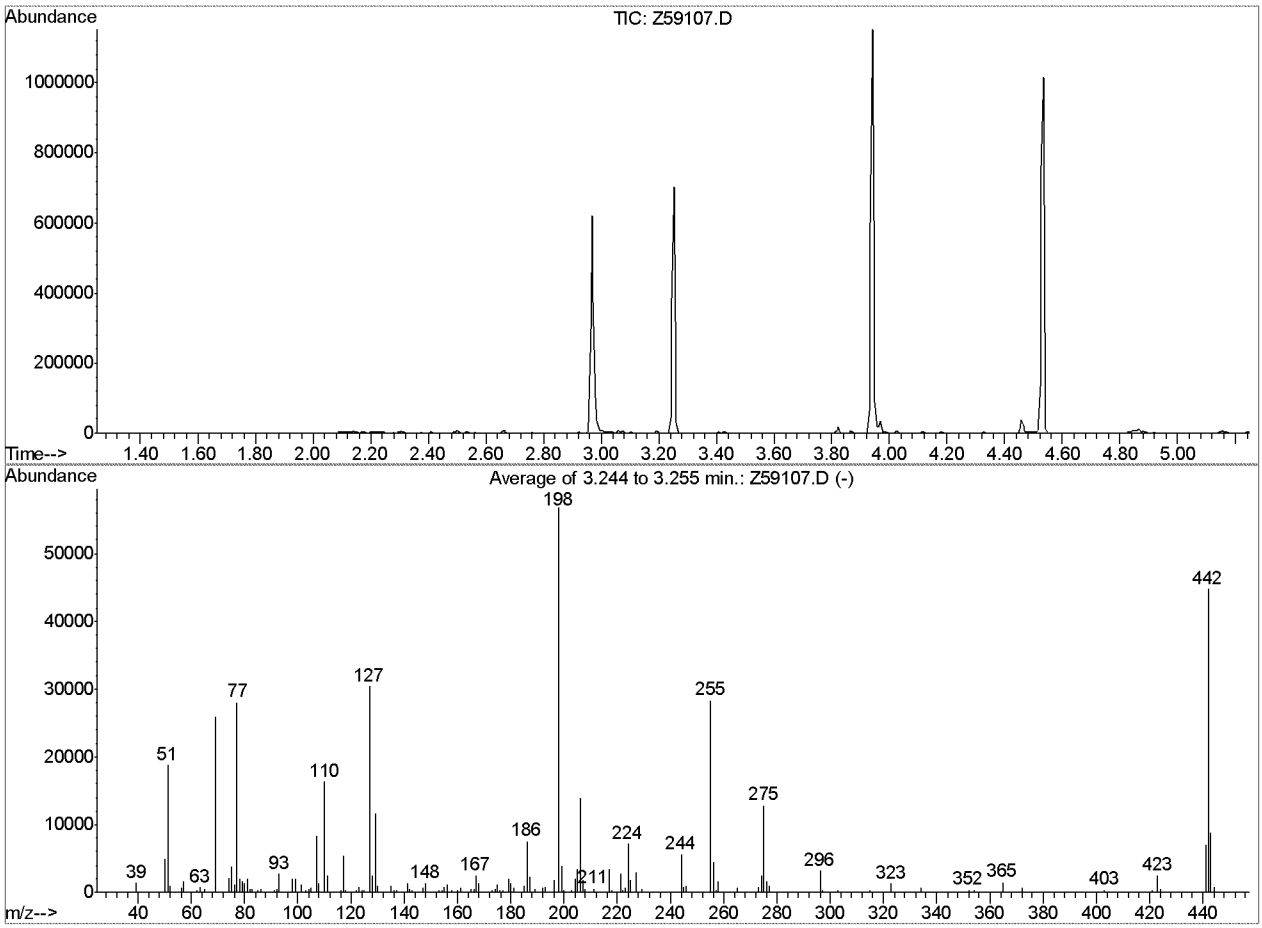
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.00	960	201.30	107	217.00	3000	241.00	113
186.00	7294	203.00	319	218.00	326	242.05	280
187.00	1986	204.00	1940	221.00	2539	242.90	116
188.10	156	205.00	3380	223.00	817	244.05	5454
188.95	435	206.00	13690	224.00	6978	245.05	731
191.95	702	207.05	1736	225.05	1751	245.95	964
193.00	717	208.05	330	227.00	2719	246.90	101
196.05	1642	210.20	164	228.00	136	255.00	27133
198.00	55261	211.00	533	228.95	631	256.00	4016
199.00	3644	211.70	116	231.00	141	257.00	171
200.00	170	216.00	122	236.00	109	257.95	1503

Average of 3.244 to 3.255 min.: Z59098.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.00	127	303.00	320	372.00	718	444.00	648
264.95	559	315.00	351	402.00	107		
273.00	945	316.00	104	402.95	347		
274.00	2274	323.05	1042	420.80	143		
275.00	11957	324.10	100	421.00	149		
276.05	1755	333.95	659	422.00	265		
276.95	929	346.00	115	423.00	2276		
285.00	104	352.00	336	424.00	330		
292.90	102	353.00	116	441.05	6657		
296.00	3319	353.95	291	442.00	42834		
297.00	326	364.95	1420	443.00	8262		

DFTPPR

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59107.D Vial: 1
Acq On : 1 Nov 2010 11:17 pm Operator: larisap
Sample : dftpp Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS



AutoFind: Scans 218, 219, 220; Background Corrected with Scan 214

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.1	18769	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.5	25828	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.6	30449	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	56760	PASS
199	198	5	9	7.0	3982	PASS
275	198	10	30	22.5	12799	PASS
365	198	1	100	2.6	1504	PASS
441	443	0.10	100	79.5	6971	PASS
442	198	40	100	78.9	44792	PASS
443	442	17	23	19.6	8771	PASS

Z59107.D DFTPPR.M Tue Nov 02 14:21:47 2010 RPT1

Average of 3.244 to 3.255 min.: Z59107.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.05	247	74.05	2159	86.00	440	105.00	669
39.10	1415	75.00	3769	87.00	250	107.00	8372
50.10	4861	76.10	1163	91.00	354	108.00	1274
51.10	18769	77.10	28085	92.05	450	110.00	16354
52.10	997	78.10	1919	93.00	2717	111.00	2444
56.00	711	79.05	1617	94.10	108	112.00	105
57.05	1573	80.00	1284	98.00	1969	116.05	382
62.10	263	81.00	1921	99.00	1994	117.00	5377
63.05	771	82.00	431	101.00	1118	118.00	395
65.05	450	83.00	421	103.00	349	122.05	382
69.00	25828	85.05	344	104.00	495	123.00	880

Average of 3.244 to 3.255 min.: Z59107.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.00	328	142.05	420	158.05	252	174.00	558
125.00	345	142.95	274	159.95	291	175.00	1139
127.00	30449	146.00	131	161.00	642	175.95	278
128.00	2478	147.00	701	162.00	103	176.90	361
129.00	11647	148.00	1389	165.00	487	179.00	2018
130.00	997	149.10	165	166.00	505	180.00	1396
134.00	146	153.00	405	167.00	2481	181.05	645
135.00	928	154.00	295	168.00	1383	185.05	1054
136.00	274	155.00	847	169.00	164	186.00	7608
137.05	378	156.00	1108	172.00	143	187.00	2260
141.00	1339	157.00	129	173.00	304	188.00	163

Average of 3.244 to 3.255 min.: Z59107.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.95	426	206.00	13918	221.90	286	242.00	245
192.05	665	207.05	1871	223.00	638	243.10	130
193.00	778	207.95	453	223.20	206	244.10	5631
196.05	1737	209.00	109	224.00	7155	245.05	747
198.00	56760	210.20	136	225.05	1779	245.95	1003
199.00	3982	211.00	566	227.00	2901	247.00	100
200.00	338	215.00	106	228.00	236	249.00	122
201.60	161	216.10	179	228.95	570	255.00	28397
202.95	348	217.00	3368	231.00	150	256.00	4346
204.00	1936	218.00	328	234.00	115	257.05	325
205.05	3459	221.05	2782	236.90	111	258.00	1638

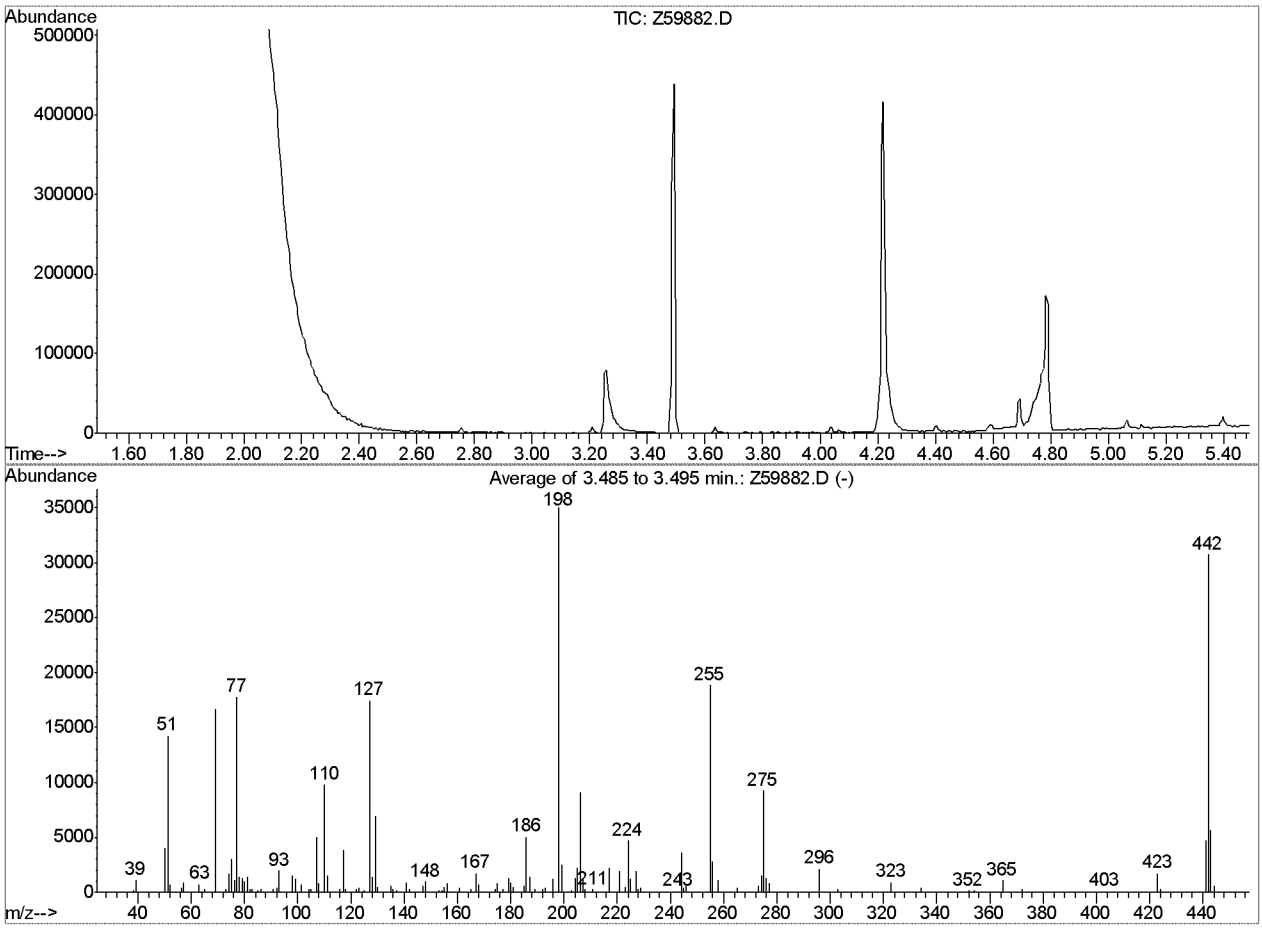
Average of 3.244 to 3.255 min.: Z59107.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.00	106	303.00	392	403.00	350		
264.95	605	315.00	298	420.95	286		
273.05	841	323.00	1244	421.95	244		
274.00	2416	334.00	734	423.00	2456		
275.00	12799	345.90	131	424.00	432		
276.00	1678	352.05	334	441.10	6971		
276.95	973	353.00	127	442.00	44792		
278.00	105	354.05	307	443.05	8771		
293.00	127	364.95	1504	444.00	778		
296.00	3275	371.95	658				
297.00	399	401.90	225				

ACCUTEST LABORATORIES JA61582

DFTPPR

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59882.D Vial: 1
Acq On : 29 Nov 2010 9:18 am Operator: ninap
Sample : dftpp Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS



AutoFind: Scans 263, 264, 265; Background Corrected with Scan 259

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.7	14244	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	16658	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.0	17508	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	34997	PASS
199	198	5	9	7.2	2511	PASS
275	198	10	30	26.5	9263	PASS
365	198	1	100	3.1	1090	PASS
441	443	0.10	100	82.8	4715	PASS
442	198	40	100	87.9	30766	PASS
443	442	17	23	18.5	5694	PASS

Z59882.D DFTPPR.M Mon Nov 29 15:17:59 2010 RPT1

Average of 3.485 to 3.495 min.: Z59882.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.15	230	69.10	16658	83.05	265	103.10	152
39.10	1131	73.10	305	85.05	247	104.00	356
50.10	4083	74.10	1743	86.10	341	105.05	355
51.10	14244	75.10	3029	87.10	119	107.10	5002
52.10	680	76.10	1118	90.95	268	108.05	808
56.05	400	77.10	17808	92.15	365	109.00	101
57.10	873	78.10	1418	93.05	1993	110.05	9831
61.00	113	79.05	1321	98.05	1500	111.10	1552
62.10	128	80.10	1037	99.00	1176	116.00	340
63.10	724	81.10	1379	101.10	688	117.05	3829
65.10	275	82.10	283	102.90	143	118.00	292

Average of 3.485 to 3.495 min.: Z59882.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
122.00	355	137.05	226	157.10	124	177.05	293
123.05	403	141.00	941	159.90	117	179.00	1332
124.00	134	142.05	286	160.10	149	180.00	906
125.00	219	142.80	100	161.00	383	181.05	473
127.05	17508	147.05	579	165.00	348	185.00	594
128.10	1445	148.00	976	166.10	154	186.05	5092
129.00	6979	148.90	104	167.05	1737	187.05	1445
130.05	537	153.00	248	168.05	711	189.00	306
134.00	120	154.10	242	174.10	326	191.95	343
135.00	614	155.10	491	175.05	778	193.00	391
136.00	273	156.10	785	176.10	107	196.05	1172

Average of 3.485 to 3.495 min.: Z59882.D
dftpp
Modified:subtracted

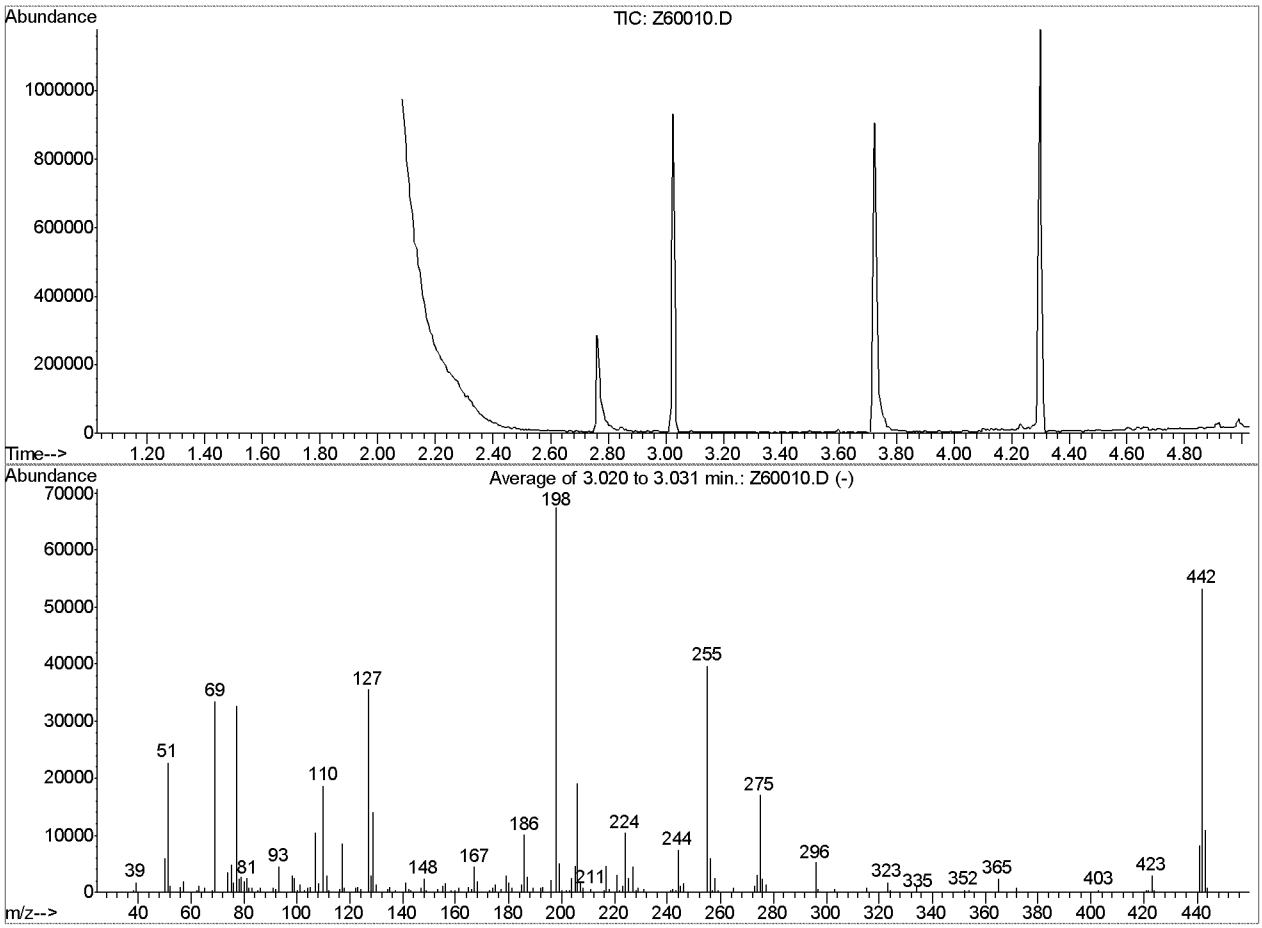
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
198.00	34997	217.00	2206	243.10	140	275.00	9263
199.00	2511	218.00	125	244.10	3627	276.00	1302
200.00	102	221.05	1910	245.00	399	277.00	848
203.00	245	223.00	534	246.00	725	293.00	105
204.05	1345	224.05	4706	255.00	18876	296.00	2143
205.05	2198	225.10	1198	256.00	2835	297.00	144
206.10	9113	227.05	1913	257.00	138	303.00	351
207.00	1242	227.95	259	258.00	1077	314.90	123
208.00	332	228.95	404	264.95	388	323.10	927
211.00	277	233.90	112	273.05	598	333.90	134
216.10	113	242.00	103	274.05	1549	334.05	436

Average of 3.485 to 3.495 min.: Z59882.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.00	158	442.05	30766				
354.10	156	443.05	5694				
365.00	1090	444.05	622				
365.90	103						
372.00	334						
402.10	108						
403.10	141						
421.00	120						
423.10	1744						
424.05	323						
441.10	4715						

DFTPPR

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60010.D Vial: 1
Acq On : 6 Dec 2010 8:59 am Operator: ninap
Sample : dftpp Inst : MSZ
Misc : op46867,EZ3191 Multiplr: 1.00
MS Integration Params: rteint.p
Method : C:\MSDCHEM\1\METHODS\DFTPPR.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS



AutoFind: Scans 176, 177, 178; Background Corrected with Scan 172

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.8	22786	PASS
68	69	0.00	2	0.9	314	PASS
69	198	0.00	100	49.6	33456	PASS
70	69	0.00	2	0.4	127	PASS
127	198	40	60	52.7	35521	PASS
197	198	0.00	1	0.4	248	PASS
198	198	100	100	100.0	67416	PASS
199	198	5	9	7.4	4975	PASS
275	198	10	30	25.3	17082	PASS
365	198	1	100	3.6	2409	PASS
441	443	0.10	100	74.7	8182	PASS
442	198	40	100	79.1	53309	PASS
443	442	17	23	20.5	10953	PASS

Z60010.D DFTPPR.M Mon Dec 06 15:30:34 2010 RPT1

Average of 3.020 to 3.031 min.: Z60010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.10	385	63.05	1149	76.10	1831	91.05	743
39.10	1802	63.90	124	77.10	32616	92.10	630
49.20	141	65.05	762	78.10	2244	93.00	4479
50.10	5945	68.10	314	79.05	2825	94.05	271
51.10	22786	69.00	33456	80.00	2035	96.10	251
52.10	1130	69.90	119	81.05	2491	97.10	174
55.05	246	70.20	127	82.05	849	98.00	2912
56.00	982	71.10	109	83.00	742	99.05	2479
57.05	1860	73.05	88	85.05	485	100.10	303
60.95	238	74.05	3414	86.05	727	101.00	1312
62.05	303	75.00	4896	87.00	273	103.00	464

Average of 3.020 to 3.031 min.: Z60010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.05	814	117.00	8552	130.00	1324	141.05	1812
105.00	961	118.00	707	131.00	113	142.00	662
106.10	184	120.10	136	132.00	102	143.05	451
107.00	10558	122.00	750	133.00	115	145.00	191
108.10	1585	123.05	1023	134.05	540	145.80	113
109.00	197	124.00	497	135.00	1068	146.10	149
110.00	18718	124.90	177	135.80	190	147.00	882
111.00	2936	125.10	265	136.00	292	148.00	2436
112.05	400	127.00	35521	137.05	470	149.05	321
115.00	106	128.05	2891	137.90	105	150.20	130
116.15	607	129.00	14092	139.90	127	151.00	150

Average of 3.020 to 3.031 min.: Z60010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
151.20	162	160.00	409	174.00	835	184.00	151
151.50	136	161.10	837	175.00	1317	185.00	1373
151.90	122	162.00	250	175.90	255	186.00	10043
152.10	118	165.00	1048	176.20	163	187.00	2780
153.00	680	165.90	518	177.00	577	188.10	290
154.00	243	167.00	4428	178.10	118	189.00	767
155.00	1095	168.00	1966	178.95	2915	190.90	193
155.95	1488	169.10	173	180.00	1711	191.20	144
157.10	118	170.95	253	181.05	837	191.90	799
158.00	410	172.00	147	182.20	121	193.00	965
159.10	215	173.00	399	182.80	143	194.90	127

Average of 3.020 to 3.031 min.: Z60010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
196.00	2151	206.00	18978	223.05	1175	237.00	238
196.70	248	207.00	2032	224.00	10439	238.90	109
198.00	67416	208.05	855	225.00	2482	239.80	136
199.00	4975	209.90	144	226.00	184	241.05	309
200.00	318	210.30	126	227.00	4395	242.05	600
201.40	186	211.10	659	227.95	468	243.10	344
201.70	343	216.05	445	229.00	881	244.05	7451
202.80	181	217.00	4741	230.95	568	245.05	1112
203.00	373	218.05	532	234.00	203	246.00	1565
204.00	2509	221.00	3135	234.90	130	246.90	171
205.05	4692	221.90	357	236.00	225	248.90	164

Average of 3.020 to 3.031 min.: Z60010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
253.10	108	274.00	3149	303.00	647	335.00	145
255.00	39752	275.00	17082	313.90	209	341.00	126
256.00	6092	276.05	2341	314.80	150	345.90	264
256.85	310	276.95	1360	315.10	700	352.05	410

257.20	221	278.00	273	316.00	278	352.70	178
257.95	2606	283.00	248	321.10	210	353.10	112
259.05	395	285.05	261	323.05	1776	354.05	428
264.95	869	292.90	292	323.95	322	365.00	2409
265.80	6	296.00	5177	326.70	197	365.90	134
266.10	127	297.00	498	332.90	111	366.10	109
272.95	1167	297.20	163	334.00	1218	371.90	164

Average of 3.020 to 3.031 min.: Z60010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
372.05	693	441.10	8182				
372.80	142	442.05	53309				
373.20	118	443.00	10953				
402.00	157	443.95	882				
402.40	191	446.30	103				
403.00	402						
403.90	141						
421.00	375						
421.95	367						
423.00	2931						
424.05	453						

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77424.D Vial: 2
Acq On : 18 Nov 2010 10:27 am Operator: olgaa
Sample : icc3014-50 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:48 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:47:30 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	121530	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	426293	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	261671	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	451543	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	454497	40.00	ppb	0.00
92) Perylene-d12	20.15	264	411244	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	121530	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	261671	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	451543	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	454497	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	454497	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	193766	53.17	ppb	0.00
Spiked Amount 50.000			Recovery = 106.34%			
8) Phenol-d5	4.99	99	232342	57.82	ppb	0.00
Spiked Amount 50.000			Recovery = 115.64%			
25) Nitrobenzene-d5	6.46	82	208844	54.68	ppb	0.00
Spiked Amount 50.000			Recovery = 109.36%			
51) 2-Fluorobiphenyl	9.83	172	437964	49.43	ppb	0.00
Spiked Amount 50.000			Recovery = 98.86%			
73) 2,4,6-Tribromophenol	12.68	330	46286	56.13	ppb	0.00
Spiked Amount 50.000			Recovery = 112.26%			
86) Terphenyl-d14	16.92	244	443600	52.44	ppb	0.00
Spiked Amount 50.000			Recovery = 104.88%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.31	88	94147	47.10	ppb	100
3) Pyridine	2.59	79	215275	48.16	ppb	100
4) N-Nitrosodimethylamine	2.55	42	161051	52.70	ppb	100
6) Indene	5.95	116	279564	50.98	ppb	100
7) Cumene	4.41	105	411309	51.59	ppb	100
9) Phenol	5.01	94	267393	58.57	ppb	100
10) Aniline	5.07	93	280293	51.15	ppb	100
11) bis(2-Chloroethyl)ether	5.16	93	190744	52.55	ppb	100
12) 2-Chlorophenol	5.22	128	205290	53.69	ppb	100
13) Decane	5.28	43	342437	48.75	ppb	100
14) 1,3-Dichlorobenzene	5.44	146	242586	50.65	ppb	100
15) 1,4-Dichlorobenzene	5.52	146	237031	49.94	ppb	100
16) Benzyl alcohol	5.76	108	140853	58.14	ppb	100
17) 1,2-Dichlorobenzene	5.82	146	221706	50.20	ppb	100
18) Acetophenone	6.20	105	266866	53.75	ppb	100
19) 2-Methylphenol	5.97	108	142970	55.79	ppb	100
20) 2,2'-oxybis(1-Chloropropan	6.03	121	70084	52.15	ppb	100
21) 3&4-Methylphenol	6.21	108	154585	58.21	ppb	99
22) n-Nitroso-di-n-propylamine	6.27	70	136585	64.48	ppb	71
23) Hexachloroethane	6.33	201	85312	52.19	ppb	100
26) Nitrobenzene	6.49	123	106445	51.26	ppb	100
27) Quinoline	8.39	129	368672	53.20	ppb	100
28) Isophorone	6.91	82	370456	53.53	ppb	100

(#) = qualifier out of range (m) = manual integration
M77424.D MM3014.M Thu Nov 18 12:48:22 2010 GCMSM Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77424.D Vial: 2
Acq On : 18 Nov 2010 10:27 am Operator: olgaa
Sample : icc3014-50 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:48 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:47:30 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29)	2-Nitrophenol	7.05	139	114635	56.56	ppb	99
30)	2,4-Dimethylphenol	7.16	107	182203	53.54	ppb	100
31)	Benzoic acid	7.36	105	123011	68.90	ppb	100
32)	bis(2-Chloroethoxy)methane	7.34	93	224027	51.54	ppb	100
33)	2,4-Dichlorophenol	7.47	162	182124	56.68	ppb	99
34)	2,6-Dichlorophenol	7.90	162	170692	51.66	ppb	100
35)	1,3,5-Trichlorobenzene	7.06	180	209455	49.75	ppb	100
36)	1,2,4-Trichlorobenzene	7.63	180	200334	50.00	ppb	100
37)	1,2,3-Trichlorobenzene	8.08	180	198865	50.58	ppb	100
38)	Naphthalene	7.73	128	553258	49.72	ppb	100
39)	4-Chloroaniline	7.90	127	259872	55.34	ppb	100
40)	2,3-Dichloroaniline	9.67	161	198966	49.90	ppb	100
41)	Caprolactam	8.53	55	144919	57.10	ppb	100
42)	Hexachlorobutadiene	8.10	225	109955	50.59	ppb	100
43)	4-Chloro-3-methylphenol	8.86	107	174203	57.38	ppb	96
44)	2-Methylnaphthalene	9.04	142	418165	51.00	ppb	100
45)	1-Methylnaphthalene	9.25	142	390892	49.87	ppb	100
46)	Dimethylnaphthalene	10.27	156	345834	50.93	ppb	100
48)	Hexachlorocyclopentadiene	9.51	237	202281	112.64	ppb	100
49)	2,4,6-Trichlorophenol	9.67	196	135437	55.09	ppb	100
50)	2,4,5-Trichlorophenol	9.73	196	116339	55.80	ppb	100
52)	2-Chloronaphthalene	9.98	162	377250	50.68	ppb	100
53)	Biphenyl	9.99	154	453185	49.37	ppb	100
54)	2-Nitroaniline	10.28	65	124401	61.19	ppb	100
55)	Dimethylphthalate	10.75	163	430401	51.56	ppb	100
56)	Acenaphthylene	10.80	152	586348	51.91	ppb	100
57)	2,6-Dinitrotoluene	10.86	165	99414	57.64	ppb	100
58)	3-Nitroaniline	11.10	138	118297	58.79	ppb	100
59)	Acenaphthene	11.17	153	370973	50.64	ppb	100
60)	2,4-Dinitrophenol	11.31	184	116403	127.80	ppb	96
61)	4-Nitrophenol	11.48	109	54610	65.06	ppb	100
62)	Dibenzofuran	11.48	168	529627	50.54	ppb	100
63)	2,4-Dinitrotoluene	11.63	165	138796	61.37	ppb	100
64)	2,3,4,6-Tetrachlorophenol	11.83	232	117989	56.13	ppb	100
65)	Diethylphthalate	12.18	149	405301	51.05	ppb	100
66)	Fluorene	12.17	166	427989	51.42	ppb	100
67)	4-Chlorophenyl-phenylether	12.22	204	217813	50.05	ppb	100
68)	4-Nitroaniline	12.33	138	123786	60.67	ppb	100
70)	4,6-Dinitro-2-methylphenol	12.41	198	91339	61.91	ppb	98
71)	n-Nitrosodiphenylamine	12.48	169	311166	51.50	ppb	100
72)	1,2-Diphenylhydrazine	12.52	77	420725	54.13	ppb	100
74)	4-Bromophenyl-phenylether	13.17	248	126290	53.19	ppb	100
75)	Hexachlorobenzene	13.42	284	116155	50.64	ppb	100
76)	Pentachlorophenol	13.79	266	165477	119.58	ppb	100
77)	Phenanthrene	14.05	178	604164	49.20	ppb	100
78)	Anthracene	14.14	178	628166	52.19	ppb	100
79)	Carbazole	14.51	167	587034	52.57	ppb	100
80)	Di-n-butylphthalate	15.38	149	724768	55.43	ppb	100
81)	Fluoranthene	16.24	202	708323	51.06	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77424.D Vial: 2
Acq On : 18 Nov 2010 10:27 am Operator: olgaa
Sample : icc3014-50 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:48 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:47:30 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

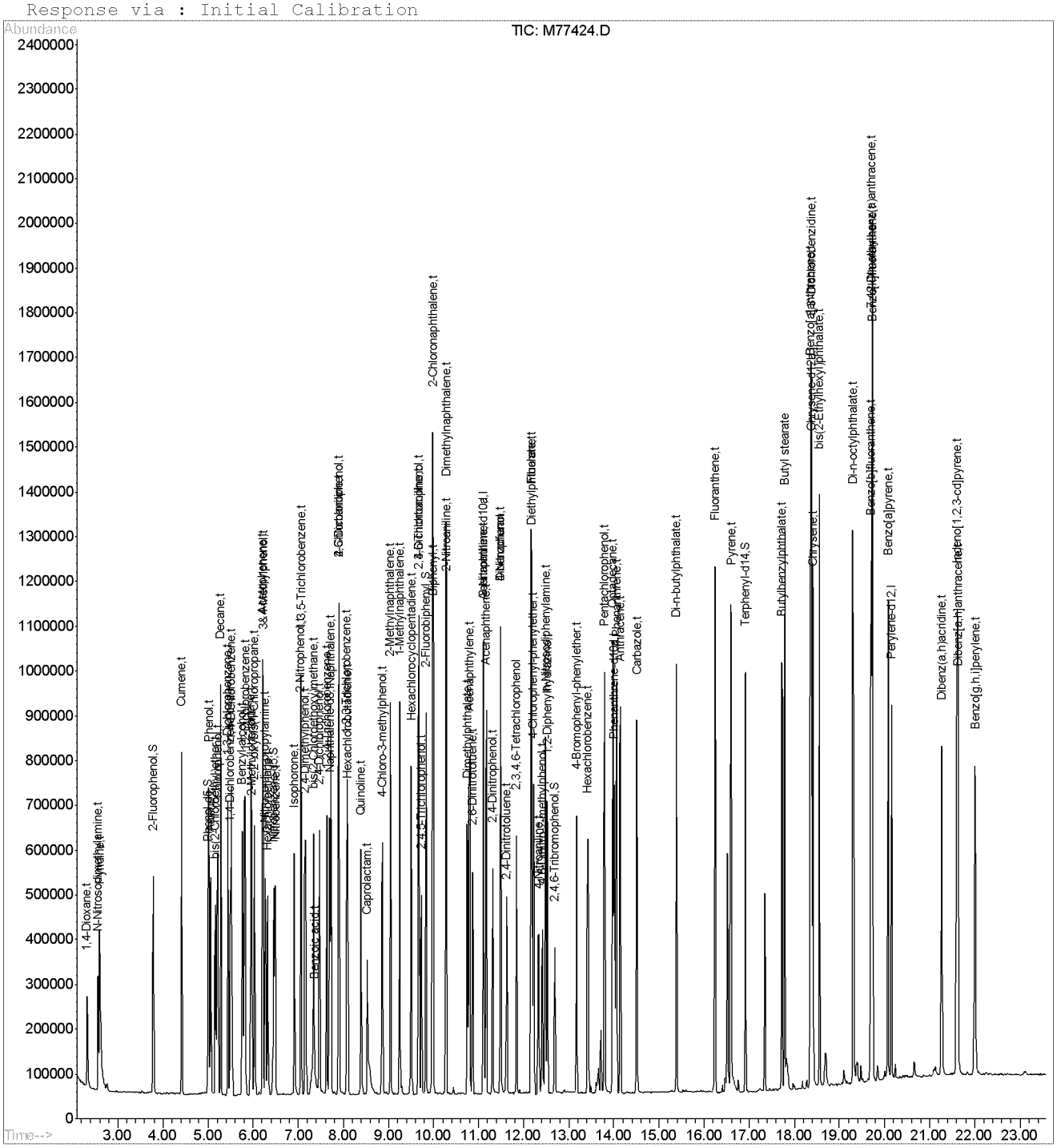
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.97	57	364593	48.14	ppb	100
84)	Pyrene	16.60	202	724666	51.11	ppb	100
85)	Butyl stearate	17.79	56	269803	49.14	ppb	100
87)	Butylbenzylphthalate	17.71	149	342726	59.29	ppb	100
88)	Benzo[a]anthracene	18.36	228	683557	50.29	ppb	100
89)	3,3'-Dichlorobenzidine	18.37	252	241181	56.73	ppb	100
90)	Chrysene	18.42	228	625207	50.45	ppb	100
91)	bis(2-Ethylhexyl)phthalate	18.55	149	441212	57.57	ppb	100
93)	Di-n-octylphthalate	19.30	149	769443	57.66	ppb	100
94)	Benzo[b]fluoranthene	19.70	252	657615	52.13	ppb	99
95)	Benzo[k]fluoranthene	19.73	252	571622m	45.92	ppb	
96)	Benzo[a]pyrene	20.08	252	623940	51.87	ppb	100
97)	Indeno[1,2,3-cd]pyrene	21.61	276	692078	54.06	ppb	100
98)	Dibenz(a,h)acridine	21.26	279	514145	56.12	ppb	100
99)	Dibenz[a,h]anthracene	21.63	278	550513	54.55	ppb	100
100)	7,12-Dimethylbenz(a)anthra	19.72	256	267606	54.11	ppb	100
101)	Benzo[g,h,i]perylene	22.01	276	605499	55.10	ppb	100

(#) = qualifier out of range (m) = manual integration
M77424.D MM3014.M Thu Nov 18 12:48:23 2010 GCMSM Page 3

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77424.D Vial: 2
Acq On : 18 Nov 2010 10:27 am Operator: olgaa
Sample : icc3014-50 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:48 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:47:30 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

Manual Integration Approval Summary

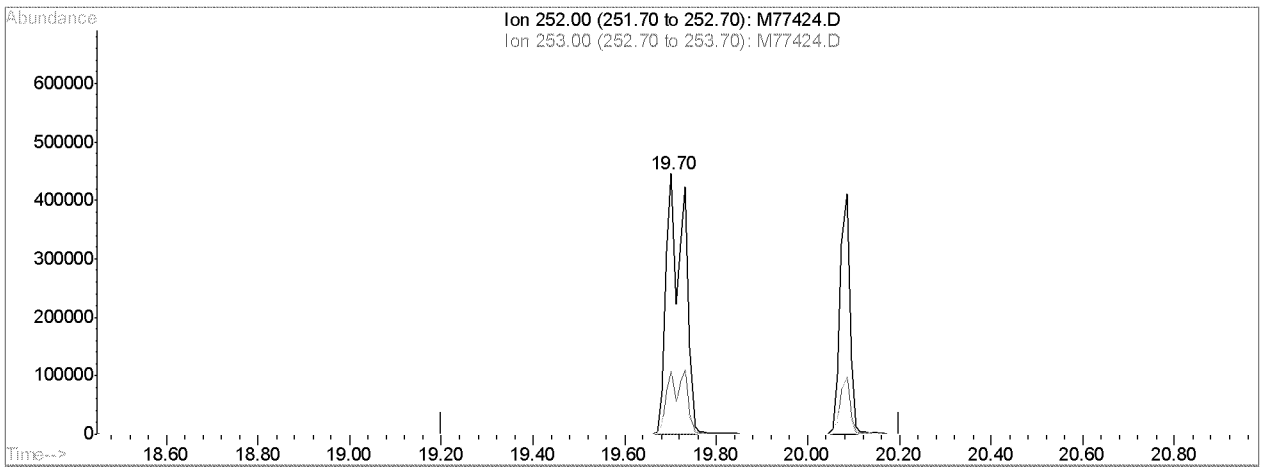
Sample Number: EM3014-ICC3014
Lab FileID: M77424.D
Injection Time: 11/18/10 10:27
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

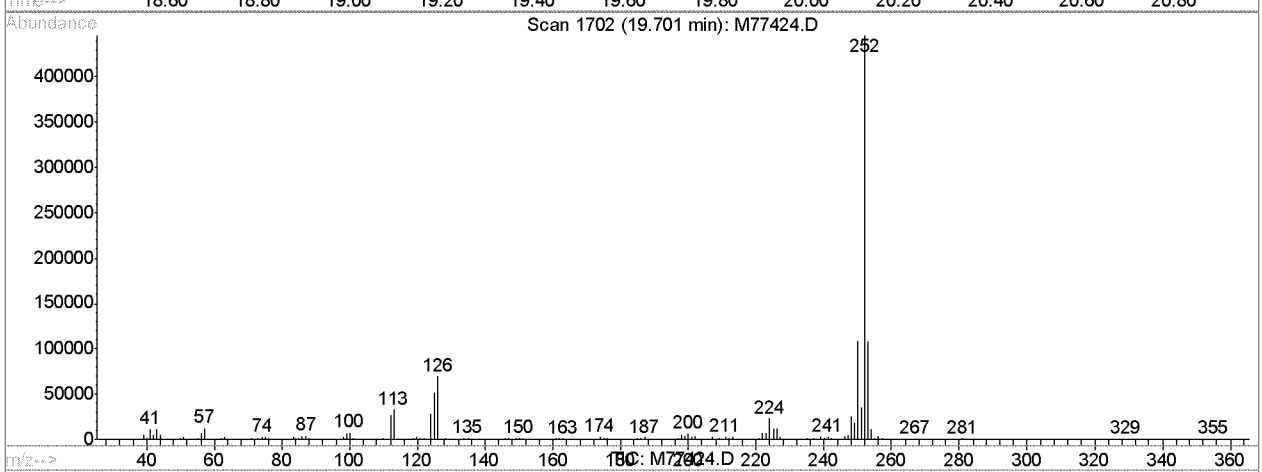
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		19.73	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77424.D Vial: 2
Acq On : 18 Nov 2010 10:27 am Operator: olgaa
Sample : icc3014-50 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:26 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:26:19 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.70min 122.38ppb

response 1238088

Ion	Exp%	Act%
252.00	100	100
253.00	23.80	24.17
125.00	6.50	11.58
0.00	0.00	0.00

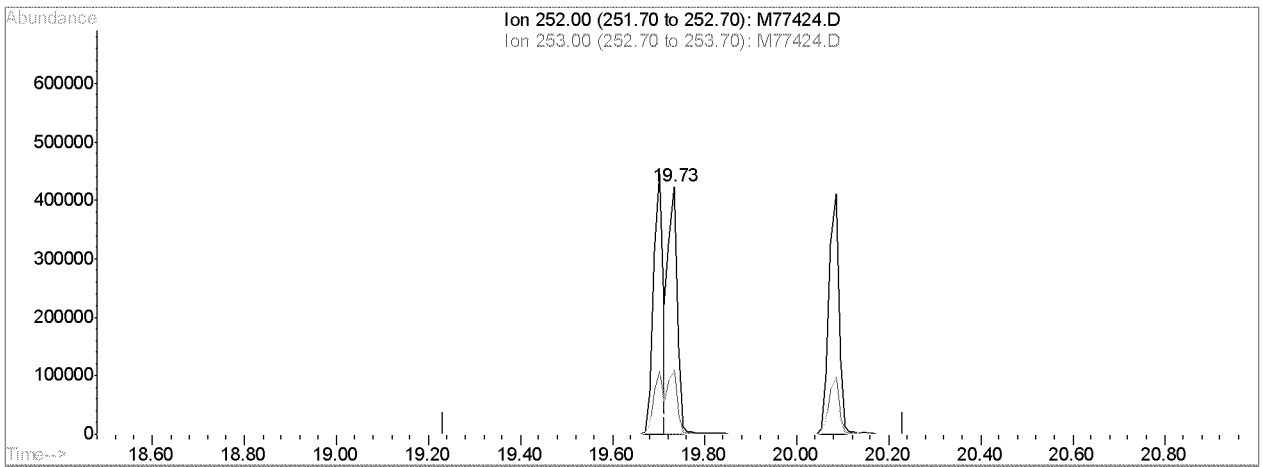
M77424.D MM3014.M Thu Nov 18 12:27:34 2010 GCMSM

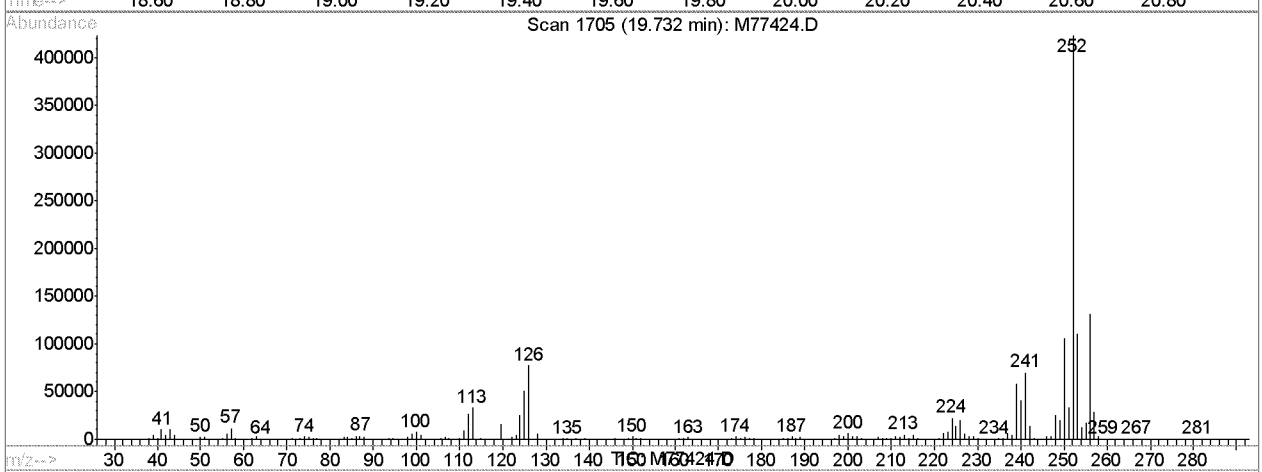
M77424.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77424.D Vial: 2
Acq On : 18 Nov 2010 10:27 am Operator: olgaa
Sample : icc3014-50 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:48 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.73min 45.92ppb m

response 571622

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	26.08
125.00	12.20	12.16
0.00	0.00	0.00

M77424.D MM3014.M Fri Nov 19 12:24:34 2010 GCMSM

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:28:41 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	134376	40.00	ppb		0.00
24) Naphthalene-d8	7.69	136	463354	40.00	ppb		0.00
47) Acenaphthene-d10	11.11	164	289211	40.00	ppb		0.00
69) Phenanthrene-d10	14.02	188	491926	40.00	ppb		0.00
83) Chrysene-d12	18.38	240	486694	40.00	ppb		0.00
92) Perylene-d12	20.15	264	439055	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	134376	40.00	ppb		0.00
104) Acenaphthene-d10a	11.11	164	289211	40.00	ppb		0.00
106) Phenanthrene-d10a	14.02	188	491926	40.00	ppb		0.00
110) Chrysene-d12a	18.38	240	486694	40.00	ppb		0.00
112) Chrysene-d12b	18.38	240	486694	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.78	112	410315	104.03	ppb		0.00
Spiked Amount 50.000			Recovery = 208.06%				
8) Phenol-d5	5.01	99	491522	97.05	ppb		0.00
Spiked Amount 50.000			Recovery = 194.10%				
25) Nitrobenzene-d5	6.46	82	429085	81.05	ppb		0.00
Spiked Amount 50.000			Recovery = 162.10%				
51) 2-Fluorobiphenyl	9.84	172	873075	91.95	ppb		0.00
Spiked Amount 50.000			Recovery = 183.90%				
73) 2,4,6-Tribromophenol	12.69	330	96730	102.67	ppb		0.00
Spiked Amount 50.000			Recovery = 205.34%				
86) Terphenyl-d14	16.92	244	882889	92.66	ppb		0.00
Spiked Amount 50.000			Recovery = 185.32%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.31	88	198222	101.25	ppb		79
3) Pyridine	2.59	79	474062	104.25	ppb	#	64
4) N-Nitrosodimethylamine	2.56	42	312469	97.97	ppb		89
6) Indene	5.95	116	565019	89.44	ppb		96
7) Cumene	4.41	105	800570	74.94	ppb		88
9) Phenol	5.02	94	548072	91.54	ppb	#	36
10) Aniline	5.06	93	552083	108.29	ppb		78
11) bis(2-Chloroethyl)ether	5.16	93	389733	82.52	ppb		96
12) 2-Chlorophenol	5.23	128	421256	98.93	ppb		86
13) Decane	5.29	43	619888	134.98	ppb		90
14) 1,3-Dichlorobenzene	5.45	146	487972	99.36	ppb		96
15) 1,4-Dichlorobenzene	5.53	146	472869	84.15	ppb		94
16) Benzyl alcohol	5.77	108	300150	125.20	ppb		86
17) 1,2-Dichlorobenzene	5.82	146	437491	85.40	ppb		94
18) Acetophenone	6.21	105	530189	83.52	ppb		89
19) 2-Methylphenol	5.97	108	288431	86.25	ppb		94
20) 2,2'-oxybis(1-Chloropropan	6.03	121	144374	97.30	ppb	#	1
21) 3&4-Methylphenol	6.22	108	314794	97.29	ppb	#	82
22) n-Nitroso-di-n-propylamine	6.29	70	280998	81.22	ppb		74
23) Hexachloroethane	6.33	201	174844	75.15	ppb		96
26) Nitrobenzene	6.50	123	222840	118.70	ppb	#	51
27) Quinoline	8.40	129	764324	108.47	ppb		91
28) Isophorone	6.92	82	738840	81.73	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:28:41 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.06	139	241669	109.54	ppb		73
30)	2,4-Dimethylphenol	7.17	107	384385	90.50	ppb		74
31)	Benzoic acid	7.40	105	291015	92.60	ppb		89
32)	bis(2-Chloroethoxy)methane	7.35	93	461935	100.83	ppb		93
33)	2,4-Dichlorophenol	7.48	162	373922	101.05	ppb		94
34)	2,6-Dichlorophenol	7.91	162	352772	85.16	ppb		96
35)	1,3,5-Trichlorobenzene	7.07	180	412589	82.17	ppb		97
36)	1,2,4-Trichlorobenzene	7.63	180	411229	85.02	ppb		97
37)	1,2,3-Trichlorobenzene	8.09	180	393621	82.55	ppb		99
38)	Naphthalene	7.73	128	1075970	89.71	ppb		97
39)	4-Chloroaniline	7.91	127	508670	110.83	ppb		88
40)	2,3-Dichloroaniline	9.68	161	402544	89.03	ppb		79
41)	Caprolactam	8.57	55	321030m	157.44	ppb		
42)	Hexachlorobutadiene	8.11	225	218558	65.56	ppb		99
43)	4-Chloro-3-methylphenol	8.87	107	363971	88.63	ppb		49
44)	2-Methylnaphthalene	9.05	142	824235	86.67	ppb		91
45)	1-Methylnaphthalene	9.26	142	786238	83.73	ppb		90
46)	Dimethylnaphthalene	10.28	156	691491	85.35	ppb		95
48)	Hexachlorocyclopentadiene	9.50	237	407668	310.88	ppb		95
49)	2,4,6-Trichlorophenol	9.68	196	273386	103.83	ppb		95
50)	2,4,5-Trichlorophenol	9.74	196	243919	90.52	ppb		97
52)	2-Chloronaphthalene	9.98	162	743561	95.13	ppb		94
53)	Biphenyl	9.99	154	862956	88.61	ppb		93
54)	2-Nitroaniline	10.29	65	244538	93.55	ppb		83
55)	Dimethylphthalate	10.76	163	882143	92.12	ppb		99
56)	Acenaphthylene	10.80	152	1124225	97.70	ppb		97
57)	2,6-Dinitrotoluene	10.87	165	213860	111.33	ppb		82
58)	3-Nitroaniline	11.12	138	255191	144.74	ppb		87
59)	Acenaphthene	11.18	153	731931	98.08	ppb		99
60)	2,4-Dinitrophenol	11.33	184	276520	274.51	ppb		76
61)	4-Nitrophenol	11.49	109	111394	111.08	ppb	#	66
62)	Dibenzofuran	11.49	168	1016523	93.70	ppb		84
63)	2,4-Dinitrotoluene	11.64	165	295866	110.87	ppb		78
64)	2,3,4,6-Tetrachlorophenol	11.84	232	250273	105.33	ppb		95
65)	Diethylphthalate	12.19	149	788542	85.42	ppb		94
66)	Fluorene	12.17	166	843032	93.71	ppb		94
67)	4-Chlorophenyl-phenylether	12.23	204	437328	89.19	ppb		92
68)	4-Nitroaniline	12.35	138	265830	142.95	ppb	#	63
70)	4,6-Dinitro-2-methylphenol	12.43	198	206982	119.37	ppb	#	42
71)	n-Nitrosodiphenylamine	12.49	169	628455	101.70	ppb		99
72)	1,2-Diphenylhydrazine	12.53	77	819430	81.41	ppb		89
74)	4-Bromophenyl-phenylether	13.18	248	259489	98.60	ppb		92
75)	Hexachlorobenzene	13.43	284	239937	87.96	ppb		97
76)	Pentachlorophenol	13.80	266	344438	250.33	ppb		95
77)	Phenanthrene	14.06	178	1176350	94.82	ppb		94
78)	Anthracene	14.15	178	1216360	92.52	ppb		94
79)	Carbazole	14.51	167	1165654	107.23	ppb		98
80)	Di-n-butylphthalate	15.39	149	1388123	97.47	ppb		95
81)	Fluoranthene	16.25	202	1370427	85.31	ppb		89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:28:41 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

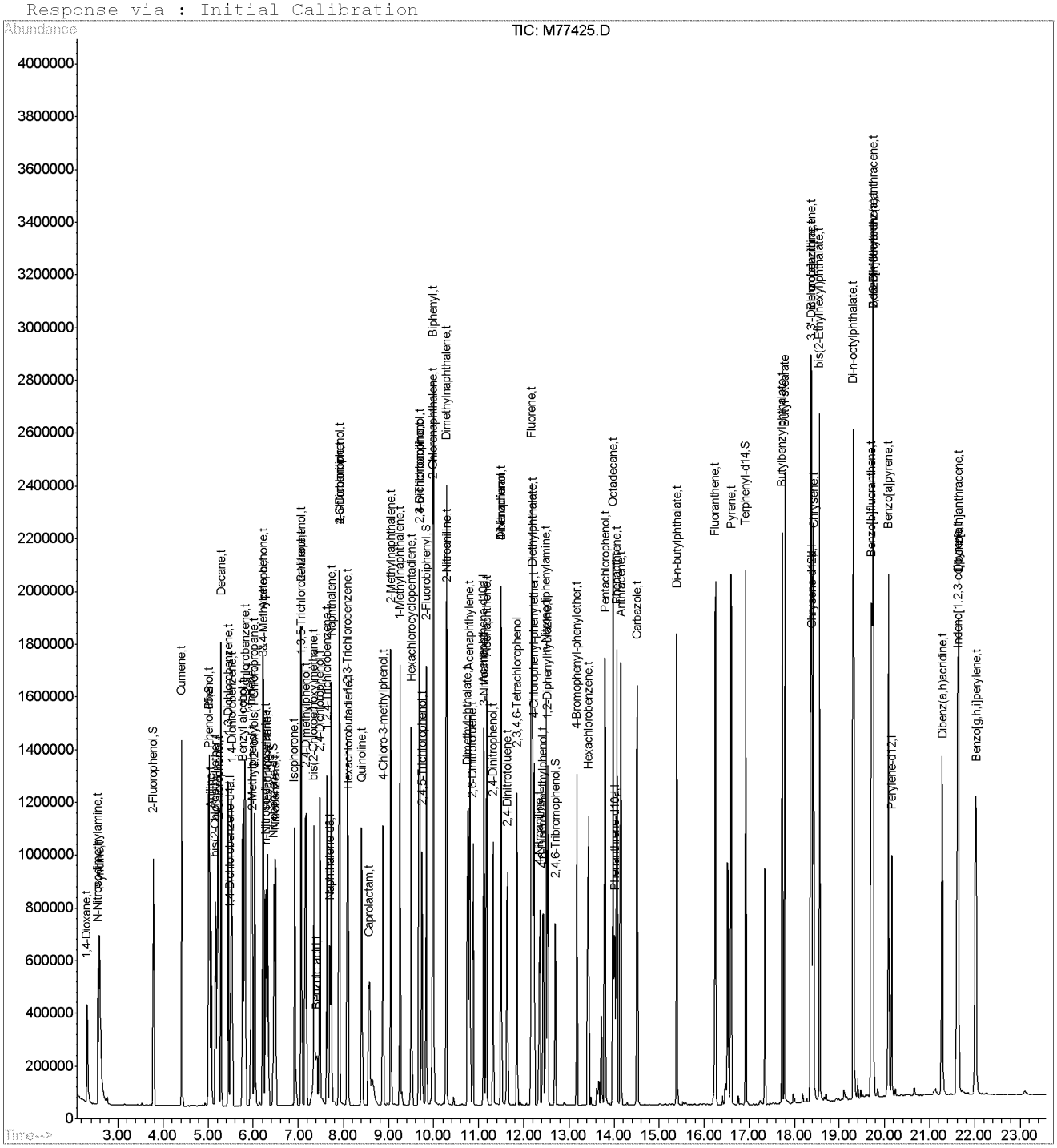
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.98	57	693669	131.45	ppb	89
84)	Pyrene	16.59	202	1381511	92.48	ppb	94
85)	Butyl stearate	17.78	56	487016	129.38	ppb	78
87)	Butylbenzylphthalate	17.72	149	681394	110.74	ppb	84
88)	Benzo[a]anthracene	18.36	228	1287311	99.09	ppb	92
89)	3,3'-Dichlorobenzidine	18.37	252	476585	94.71	ppb	99
90)	Chrysene	18.43	228	1210578	74.62	ppb	91
91)	bis(2-Ethylhexyl)phthalate	18.55	149	846779	113.07	ppb	94
93)	Di-n-octylphthalate	19.31	149	1426197	96.88	ppb	89
94)	Benzo[b]fluoranthene	19.71	252	1272561m	94.11	ppb	
95)	Benzo[k]fluoranthene	19.74	252	1080054m	69.73	ppb	
96)	Benzo[a]pyrene	20.09	252	1186642	94.19	ppb	89
97)	Indeno[1,2,3-cd]pyrene	21.61	276	1256567	85.70	ppb	73
98)	Dibenz(a,h)acridine	21.28	279	962115	89.05	ppb	94
99)	Dibenz[a,h]anthracene	21.63	278	974124	77.41	ppb	81
100)	7,12-Dimethylbenz(a)anthra	19.74	256	546465	84.07	ppb	94
101)	Benzo[g,h,i]perylene	22.03	276	1075538	90.07	ppb	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:29:27 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

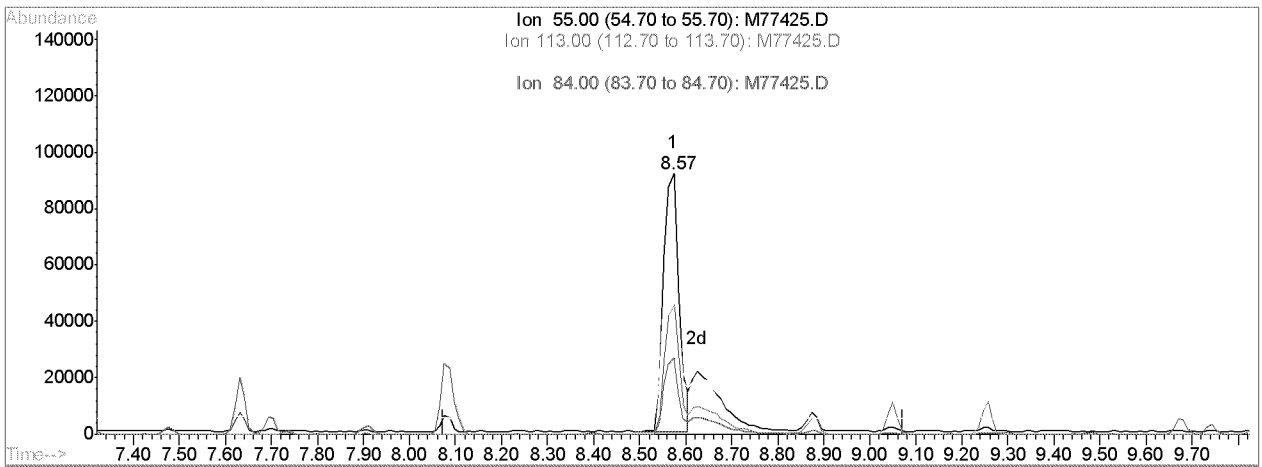
Sample Number: EM3014-IC3014
Lab FileID: M77425.D
Injection Time: 11/18/10 11:00
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

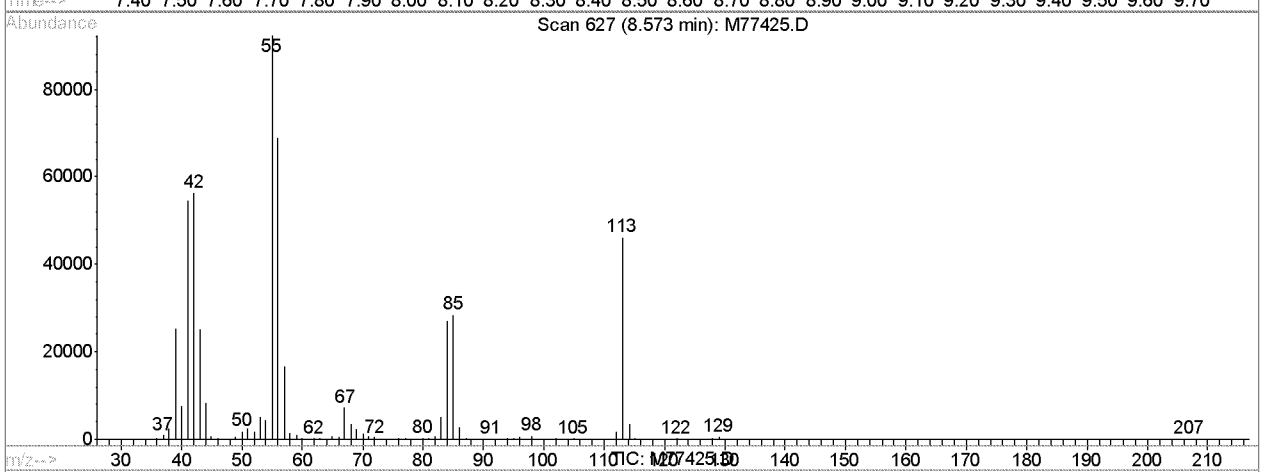
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		8.57	Split peak
Benzo(b)fluoranthene	205-99-2		19.71	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.74	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 11:28 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:29:27 2010
Response via : Multiple Level Calibration





(41) Caprolactam (t)

8.57min 105.15ppb

response 214405

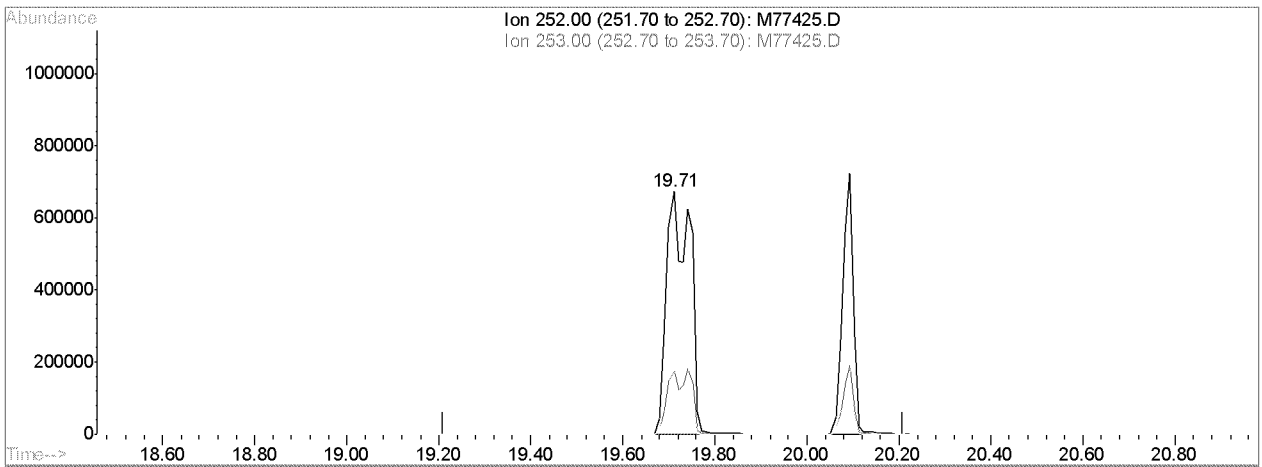
Ion	Exp%	Act%
55.00	100	100
113.00	60.70	50.81
56.00	76.60	68.63
84.00	39.60	29.44

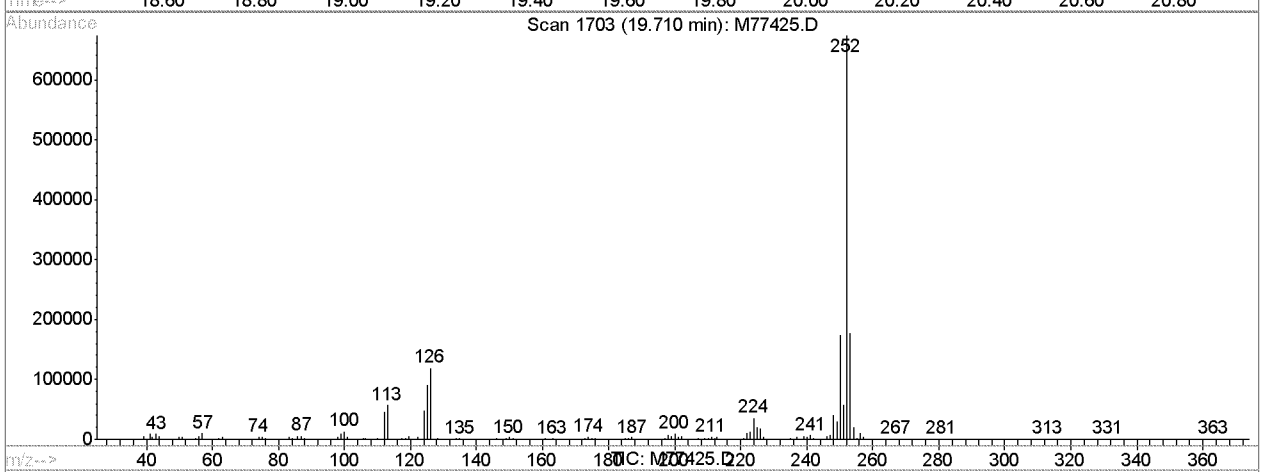
M77425.D MM3014.M Thu Nov 18 12:23:39 2010 GCMSM

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:23 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:29:27 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.71min 175.28ppb

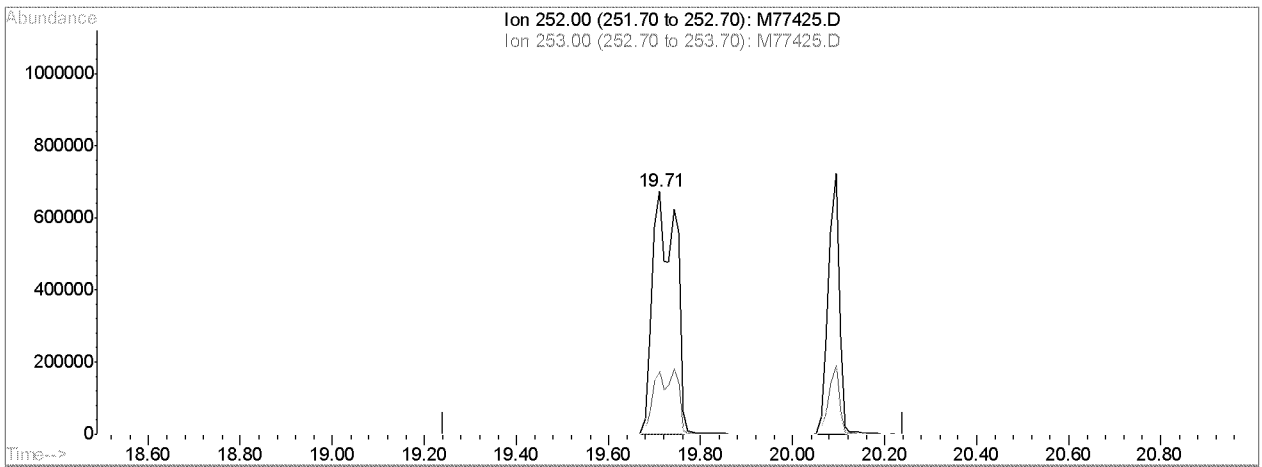
response 2370143

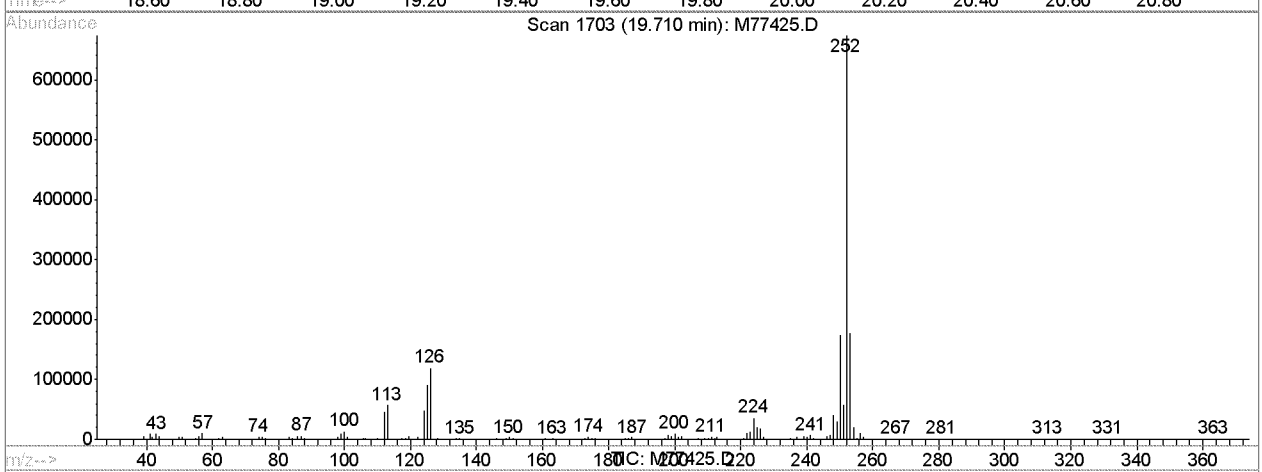
Ion	Exp%	Act%
252.00	100	100
253.00	24.20	26.20
125.00	6.80	13.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:23 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 11:29:27 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.71min 153.02ppb

response 2370143

Ion	Exp%	Act%
252.00	100	100
253.00	23.80	26.20
125.00	6.50	13.33
0.00	0.00	0.00

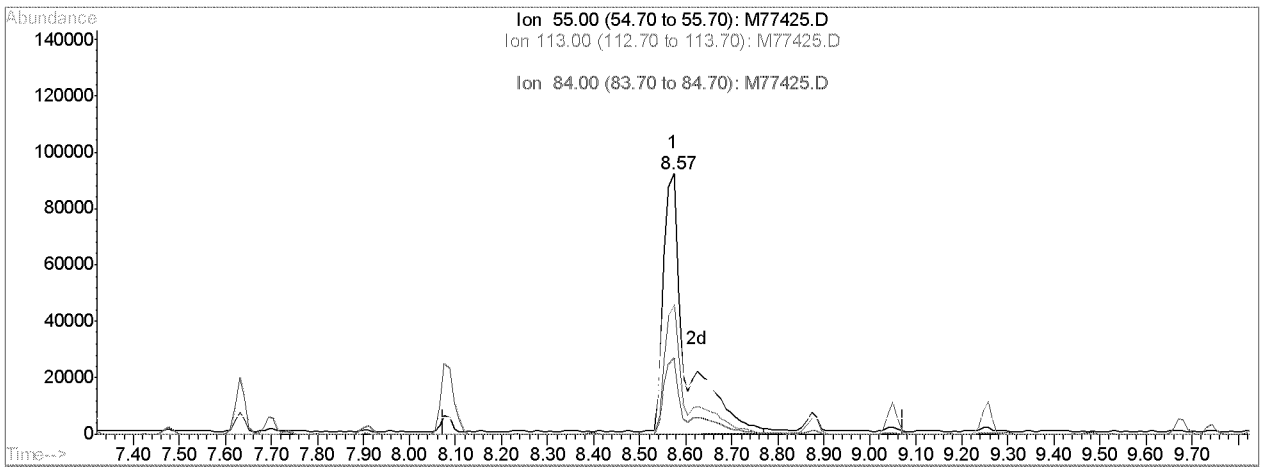
M77425.D MM3014.M Thu Nov 18 12:24:30 2010 GCMSM

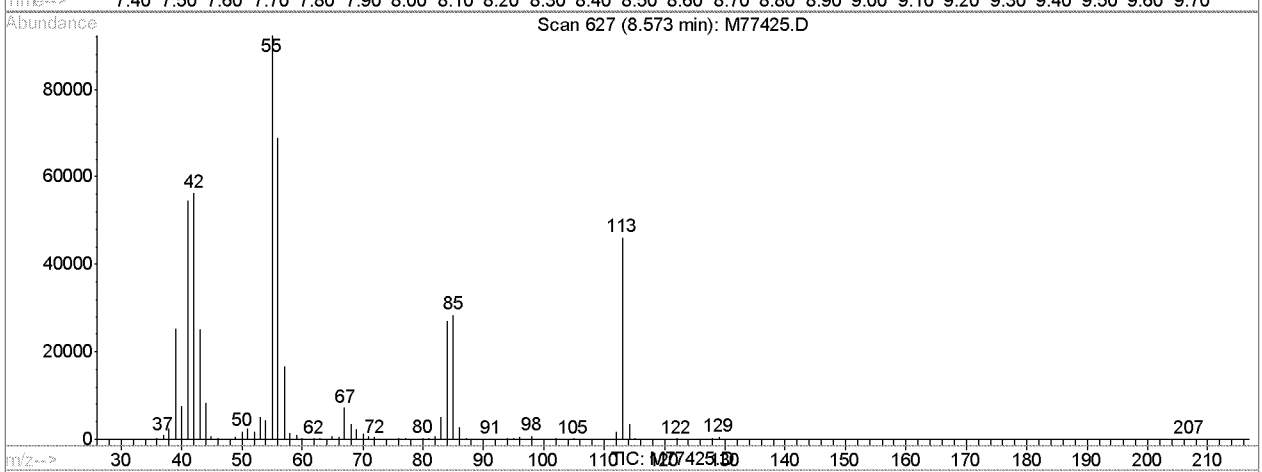
M77425.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(41) Caprolactam (t)

8.57min 157.44ppb m

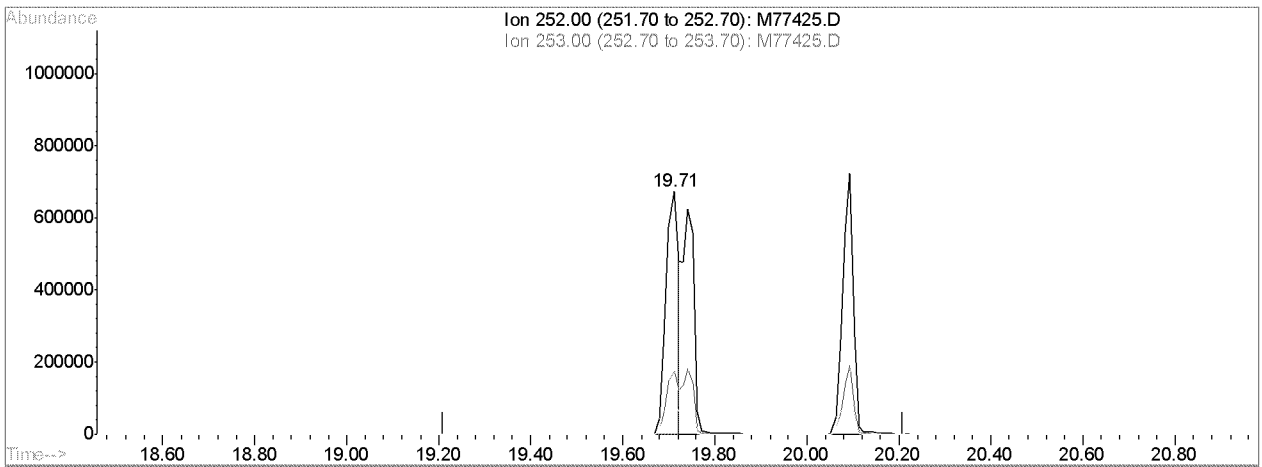
response 321030

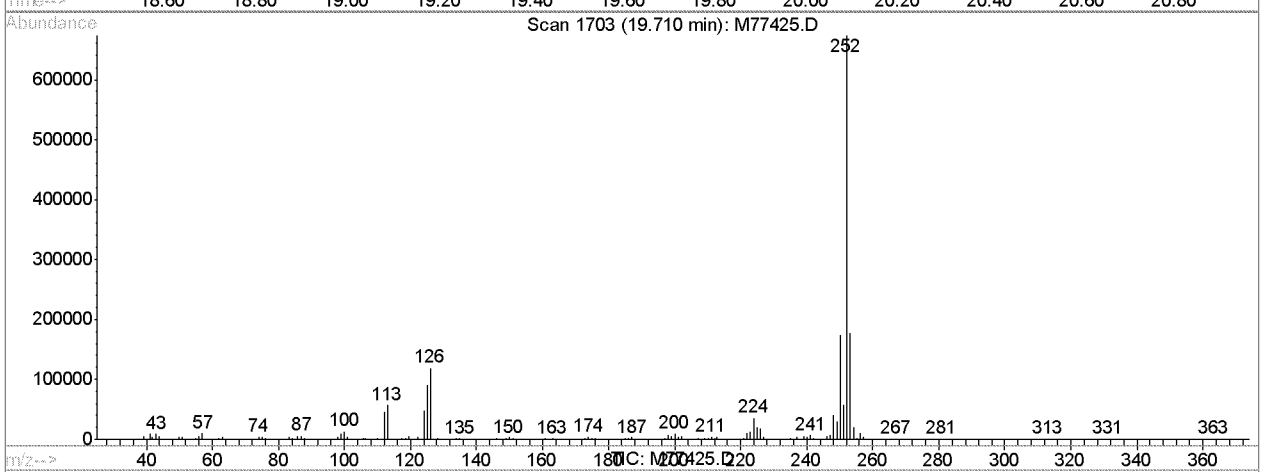
Ion	Exp%	Act%
55.00	100	100
113.00	60.70	50.03
56.00	76.60	74.66
84.00	39.60	29.36

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.71min 94.11ppb m

response 1272561

Ion	Exp%	Act%
252.00	100	100
253.00	24.20	26.26
125.00	6.80	13.34
0.00	0.00	0.00

M77425.D MM3014.M Fri Nov 19 12:25:03 2010 GCMSM

M77425.D edits: Benzo[b]fluoranthene

ACCUTEST LABORATORIES JA61582

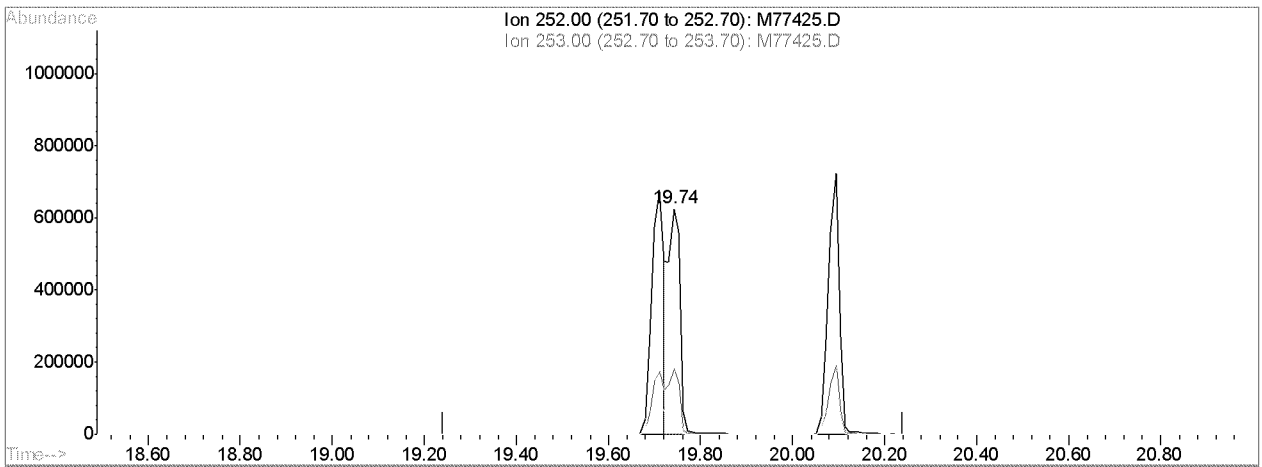
SII-SSA-0014-004405

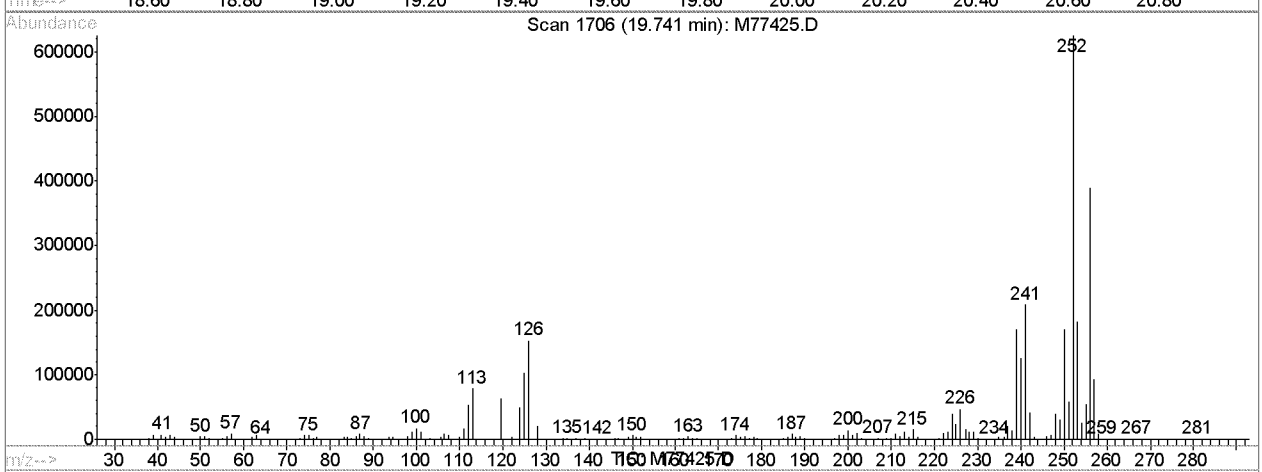
6.6.2.6 6

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77425.D Vial: 3
Acq On : 18 Nov 2010 11:00 am Operator: olgaa
Sample : ic3014-100 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:24 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.74min 69.73ppb m

response 1080054

Ion	Exp%	Act%
252.00	100	100
253.00	23.80	29.11
125.00	6.50	16.54
0.00	0.00	0.00

M77425.D MM3014.M Fri Nov 19 12:25:07 2010 GCMSM

M77425.D edits: Benzo[k]fluoranthene

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:30 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:28:23 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	158893	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	540127	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	336188	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	589597	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	618965	40.00	ppb	0.00
92) Perylene-d12	20.14	264	528339	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	158893	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	336188	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	589597	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	618965	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	618965	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	4805	0.97	ppb	0.00
Spiked Amount 50.000			Recovery =	1.94%		
8) Phenol-d5	4.99	99	4685	0.79	ppb	0.00
Spiked Amount 50.000			Recovery =	1.58%		
25) Nitrobenzene-d5	6.46	82	4868	0.95	ppb	0.00
Spiked Amount 50.000			Recovery =	1.90%		
51) 2-Fluorobiphenyl	9.82	172	12587	1.17	ppb	0.00
Spiked Amount 50.000			Recovery =	2.34%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	16.90	244	12183	1.05	ppb	-0.01
Spiked Amount 50.000			Recovery =	2.10%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.33	88	3185	1.33	ppb	# 68
3) Pyridine	2.69	79	6697	1.19	ppb	78
4) N-Nitrosodimethylamine	2.58	42	5056	1.28	ppb	81
6) Indene	5.94	116	7766	1.11	ppb	98
7) Cumene	4.41	105	11534	1.14	ppb	98
9) Phenol	5.01	94	5472	0.81	ppb	87
10) Aniline	5.06	93	7840	1.13	ppb	96
11) bis(2-Chloroethyl)ether	5.16	93	4967	1.04	ppb	93
12) 2-Chlorophenol	5.22	128	5046	0.97	ppb	96
13) Decane	5.28	43	10976	1.35	ppb	85
14) 1,3-Dichlorobenzene	5.45	146	6919	1.14	ppb	96
15) 1,4-Dichlorobenzene	5.52	146	6924	1.17	ppb	88
16) Benzyl alcohol	5.77	108	2821	0.78	ppb	95
17) 1,2-Dichlorobenzene	5.82	146	6421	1.17	ppb	90
18) Acetophenone	6.21	105	6786	1.02	ppb	94
19) 2-Methylphenol	5.96	108	3233	0.90	ppb	96
20) 2,2'-oxybis(1-Chloropropan	6.03	121	1864	1.05	ppb	93
21) 3&4-Methylphenol	6.20	108	3185	0.82	ppb	# 79
22) n-Nitroso-di-n-propylamine	6.27	70	3746	1.85	ppb	75
23) Hexachloroethane	6.33	201	2317	1.08	ppb	95
26) Nitrobenzene	6.49	123	2937	1.11	ppb	89
27) Quinoline	8.40	129	9134	1.00	ppb	97
28) Isophorone	6.94	82	9179	1.02	ppb	98

(#) = qualifier out of range (m) = manual integration
M77426.D MM3014.M Thu Nov 18 12:31:07 2010 GCMSM

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:30 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:28:23 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.06	139	2401	0.84	ppb		76
30)	2,4-Dimethylphenol	7.14	107	4343	0.96	ppb		95
31)	Benzoic acid	7.25	105	1420	0.43	ppb		87
32)	bis(2-Chloroethoxy)methane	7.34	93	6023	1.09	ppb		96
33)	2,4-Dichlorophenol	7.46	162	3951	0.88	ppb		96
34)	2,6-Dichlorophenol	7.90	162	4559	1.08	ppb		90
35)	1,3,5-Trichlorobenzene	7.06	180	5936	1.17	ppb		96
36)	1,2,4-Trichlorobenzene	7.63	180	5393	1.09	ppb		98
37)	1,2,3-Trichlorobenzene	8.08	180	5352	1.11	ppb		96
38)	Naphthalene	7.72	128	15997	1.20	ppb		94
39)	4-Chloroaniline	7.90	127	5814	0.93	ppb		96
40)	2,3-Dichloroaniline	9.67	161	5590	1.15	ppb		90
41)	Caprolactam	8.60	55	2785	0.75	ppb		87
42)	Hexachlorobutadiene	8.10	225	2932	1.10	ppb		92
43)	4-Chloro-3-methylphenol	8.85	107	3532	0.81	ppb		94
44)	2-Methylnaphthalene	9.04	142	11227	1.11	ppb		94
45)	1-Methylnaphthalene	9.25	142	10972	1.15	ppb		94
46)	Dimethylnaphthalene	10.27	156	9235	1.09	ppb		92
48)	Hexachlorocyclopentadiene	9.50	237	4508	1.81	ppb		96
49)	2,4,6-Trichlorophenol	9.66	196	3233	0.97	ppb		93
50)	2,4,5-Trichlorophenol	9.72	196	2554	0.87	ppb		96
52)	2-Chloronaphthalene	9.98	162	10597	1.15	ppb		97
53)	Biphenyl	9.98	154	13799	1.27	ppb		96
54)	2-Nitroaniline	10.27	65	2363	0.78	ppb		88
55)	Dimethylphthalate	10.75	163	11377	1.07	ppb		98
56)	Acenaphthylene	10.80	152	15910	1.13	ppb		98
57)	2,6-Dinitrotoluene	10.86	165	1942	0.77	ppb		93
58)	3-Nitroaniline	11.10	138	2282	0.76	ppb	#	1
59)	Acenaphthene	11.16	153	10669	1.18	ppb		94
62)	Dibenzofuran	11.48	168	15044	1.18	ppb		78
63)	2,4-Dinitrotoluene	11.62	165	2351	0.67	ppb		95
64)	2,3,4,6-Tetrachlorophenol	11.83	232	2524	0.85	ppb		87
65)	Diethylphthalate	12.16	149	11520	1.18	ppb		93
66)	Fluorene	12.16	166	11752	1.13	ppb		93
67)	4-Chlorophenyl-phenylether	12.22	204	6296	1.18	ppb		87
68)	4-Nitroaniline	12.31	138	2182	0.70	ppb		80
71)	n-Nitrosodiphenylamine	12.46	169	8701	1.11	ppb		92
72)	1,2-Diphenylhydrazine	12.52	77	10189	0.98	ppb		94
74)	4-Bromophenyl-phenylether	13.17	248	3225	1.01	ppb		94
75)	Hexachlorobenzene	13.42	284	3273	1.11	ppb		89
76)	Pentachlorophenol	13.79	266	3148	1.49	ppb		91
77)	Phenanthrene	14.05	178	18656	1.25	ppb		97
78)	Anthracene	14.13	178	16962	1.09	ppb		93
79)	Carbazole	14.49	167	15687	1.07	ppb		96
80)	Di-n-butylphthalate	15.38	149	17441	0.98	ppb		97
81)	Fluoranthene	16.24	202	20204	1.16	ppb		94
82)	Octadecane	13.96	57	12503	1.40	ppb		90
84)	Pyrene	16.58	202	21669	1.16	ppb		98
85)	Butyl stearate	17.78	56	9106	1.35	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:30 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:28:23 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

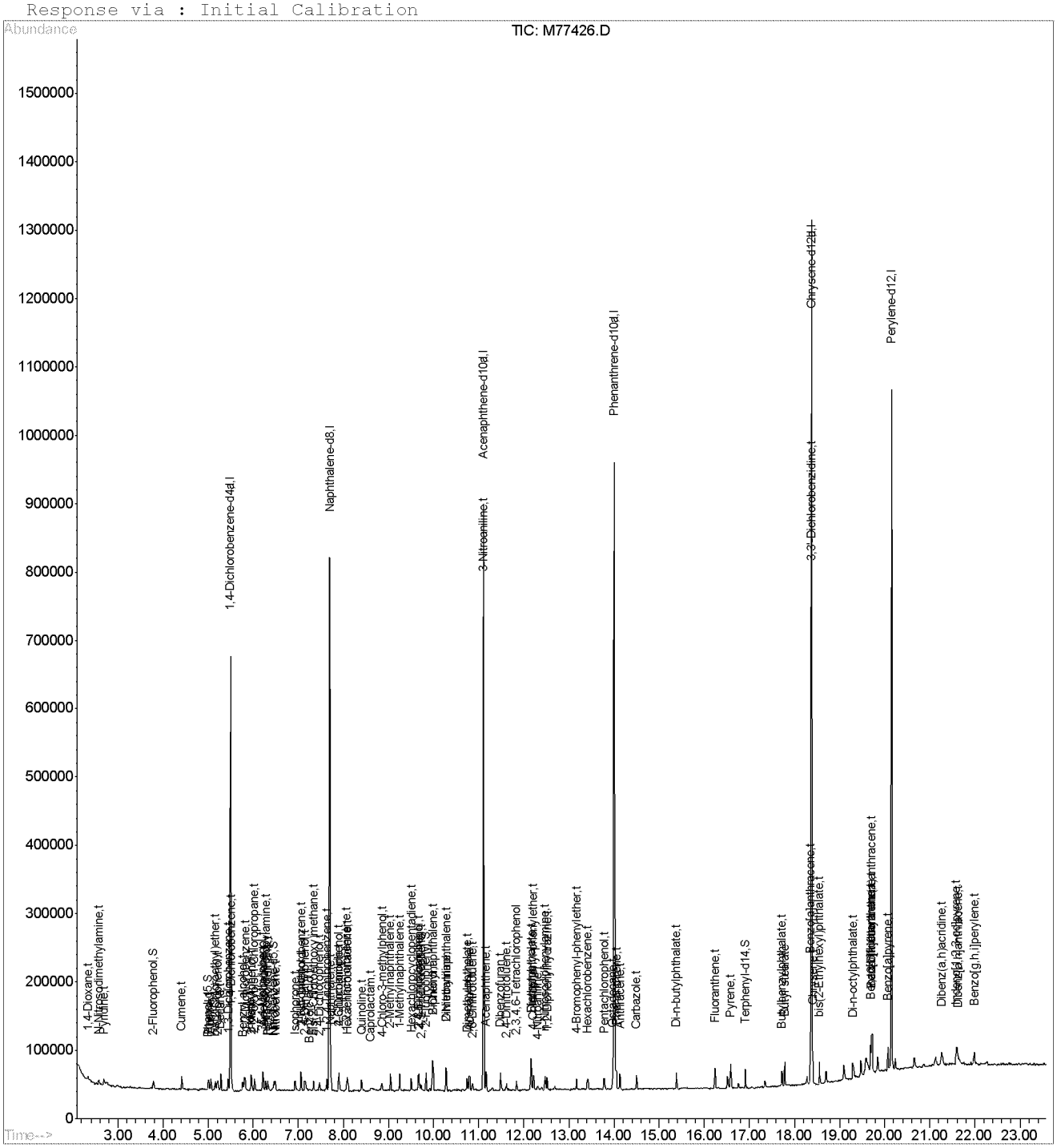
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
87)	Butylbenzylphthalate	17.72	149	7068	0.78	ppb	83
88)	Benzo[a]anthracene	18.35	228	21300	1.22	ppb	97
89)	3,3'-Dichlorobenzidine	18.36	252	5587	0.88	ppb	92
90)	Chrysene	18.40	228	18990	1.17	ppb	99
91)	bis(2-Ethylhexyl)phthalate	18.55	149	10134	0.89	ppb	92
93)	Di-n-octylphthalate	19.30	149	16960	0.92	ppb	88
94)	Benzo[b]fluoranthene	19.69	252	17104m	1.06	ppb	
95)	Benzo[k]fluoranthene	19.72	252	19743m	1.43	ppb	
96)	Benzo[a]pyrene	20.07	252	16594	1.09	ppb	94
97)	Indeno[1,2,3-cd]pyrene	21.58	276	17959	1.09	ppb	92
98)	Dibenz(a,h)acridine	21.26	279	12080	0.97	ppb	95
99)	Dibenz[a,h]anthracene	21.61	278	13750	1.06	ppb	93
100)	7,12-Dimethylbenz(a)anthra	19.71	256	6445	0.96	ppb	94
101)	Benzo[g,h,i]perylene	21.99	276	14837	1.04	ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:30 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:28:23 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

Manual Integration Approval Summary

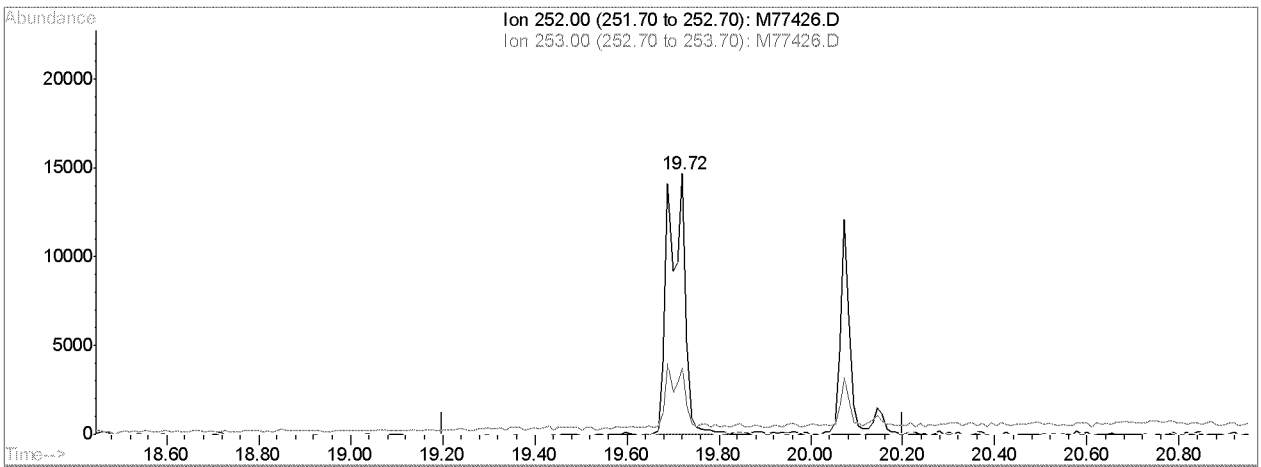
Sample Number: EM3014-IC3014
Lab FileID: M77426.D
Injection Time: 11/18/10 11:38
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

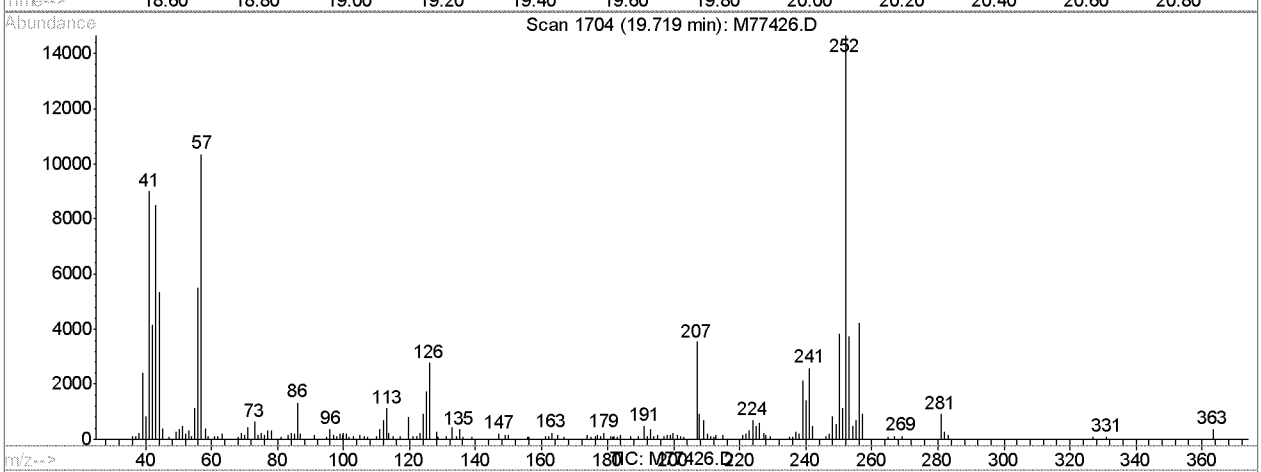
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.69	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.72	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:28 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:28:23 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.72min 2.30ppb

response 37077

Ion	Exp%	Act%
252.00	100	100
253.00	24.30	22.97
125.00	11.60	11.29
0.00	0.00	0.00

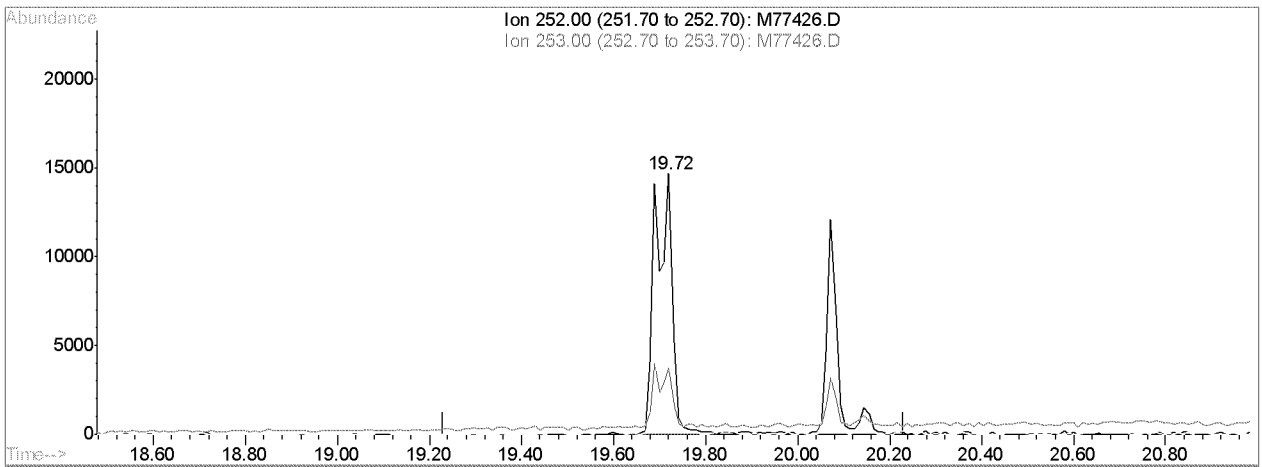
M77426.D MM3014.M Thu Nov 18 12:30:29 2010 GCMSM

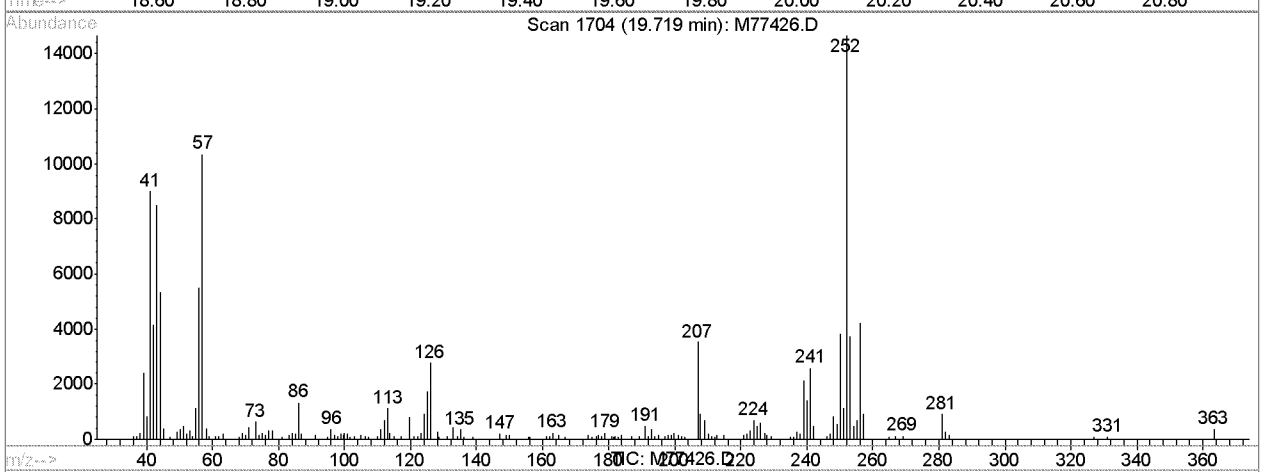
M77426.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:28 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:28:23 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 2.68ppb

response 37077

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	22.97
125.00	12.20	11.29
0.00	0.00	0.00

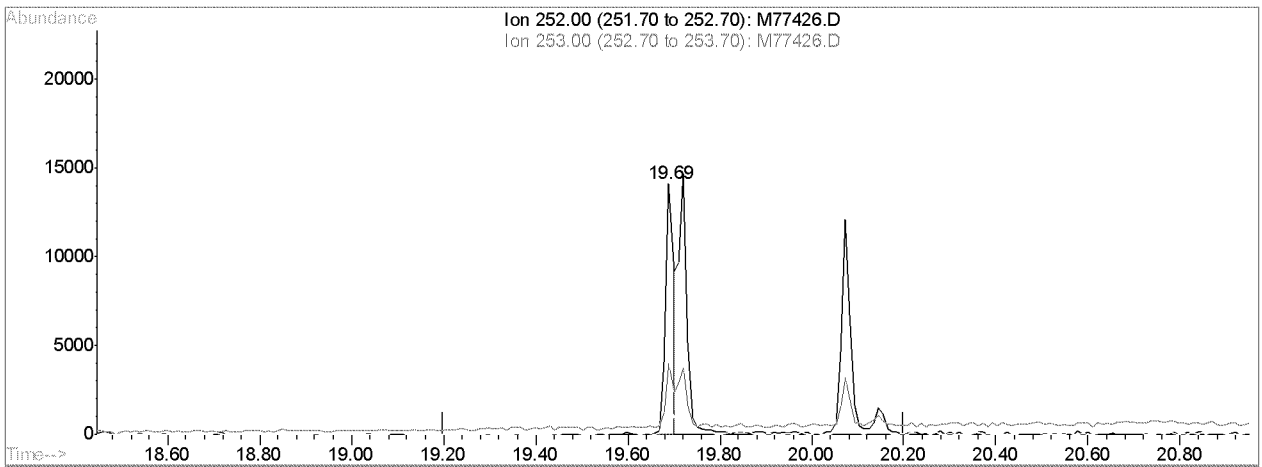
M77426.D MM3014.M Thu Nov 18 12:30:33 2010 GCMSM

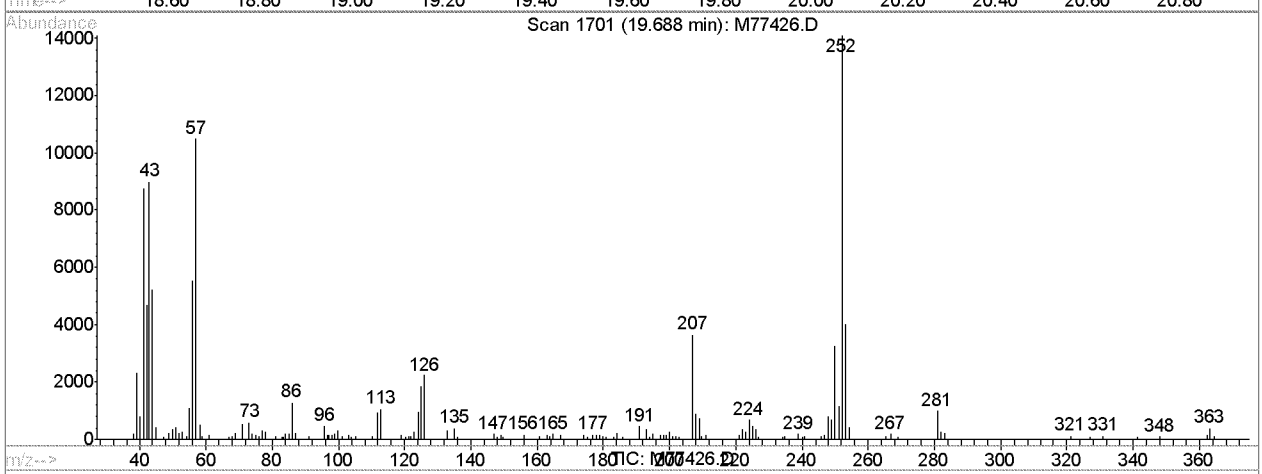
M77426.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:30 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.69min 1.06ppb m

response 17104

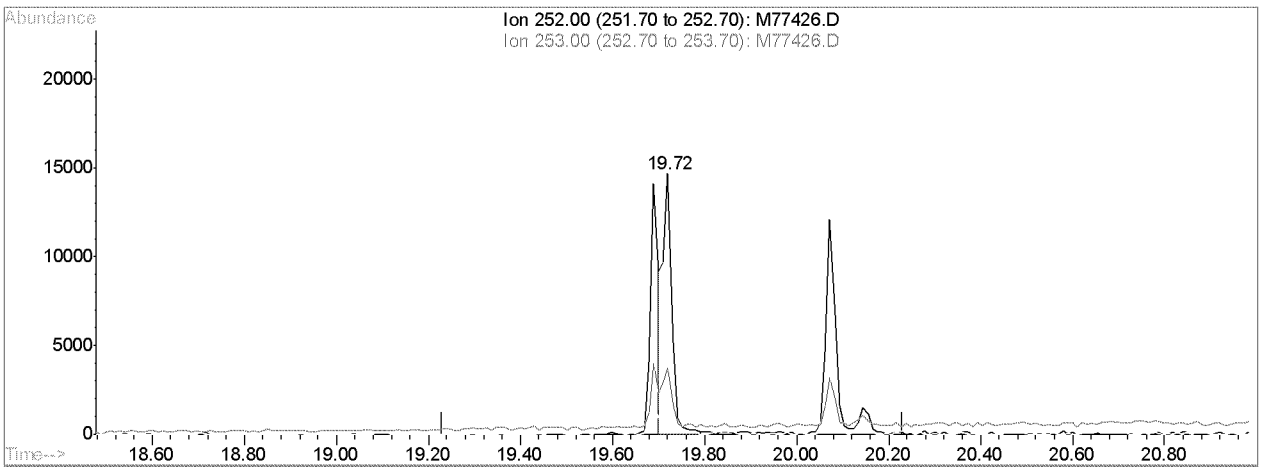
Ion	Exp%	Act%
252.00	100	100
253.00	24.30	28.45
125.00	11.60	13.22
0.00	0.00	0.00

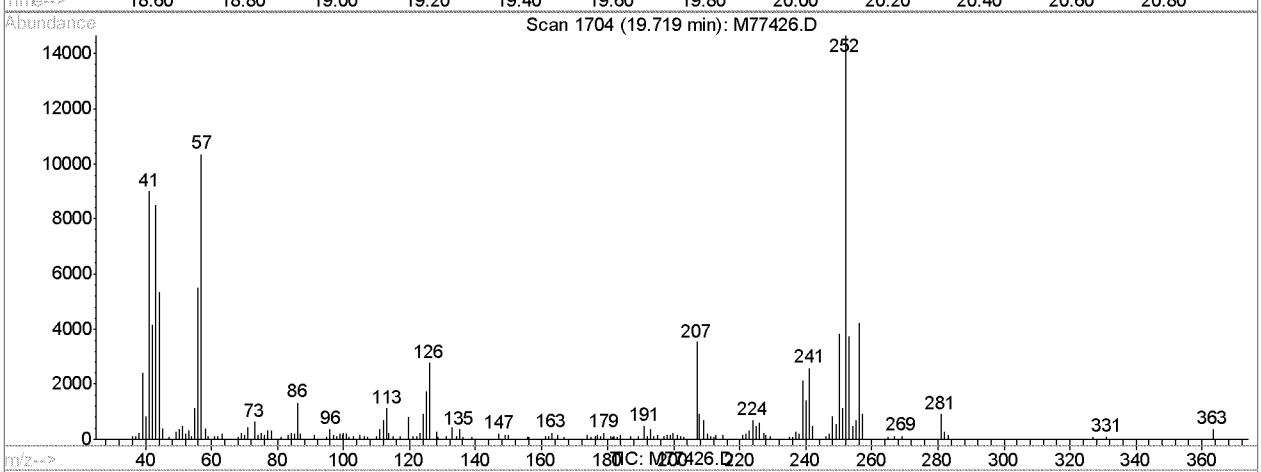
M77426.D MM3014.M Fri Nov 19 12:25:30 2010 GCMSM

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77426.D Vial: 4
Acq On : 18 Nov 2010 11:38 am Operator: olgaa
Sample : ic3014-1 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:30 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 1.43ppb m

response 19743

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	25.69
125.00	12.20	11.93
0.00	0.00	0.00

M77426.D MM3014.M Fri Nov 19 12:25:33 2010 GCMSM

M77426.D edits: Benzo[k]fluoranthene

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:38 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:36:04 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	165177	40.00	ppb	0.00
24) Naphthalene-d8	7.70	136	562568	40.00	ppb	0.00
47) Acenaphthene-d10	11.10	164	351311	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	616012	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	637027	40.00	ppb	0.00
92) Perylene-d12	20.15	264	524716	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	165177	40.00	ppb	0.00
104) Acenaphthene-d10a	11.10	164	351311	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	616012	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	637027	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	637027	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	9010	1.77	ppb	0.00
Spiked Amount 50.000			Recovery =	3.54%		
8) Phenol-d5	4.99	99	9208	1.60	ppb	0.00
Spiked Amount 50.000			Recovery =	3.20%		
25) Nitrobenzene-d5	6.45	82	8745	1.66	ppb	0.00
Spiked Amount 50.000			Recovery =	3.32%		
51) 2-Fluorobiphenyl	9.83	172	23807	2.00	ppb	0.00
Spiked Amount 50.000			Recovery =	4.00%		
73) 2,4,6-Tribromophenol	12.68	330	1801	1.46	ppb	0.00
Spiked Amount 50.000			Recovery =	2.92%		
86) Terphenyl-d14	16.91	244	21832	1.79	ppb	0.00
Spiked Amount 50.000			Recovery =	3.58%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.32	88	5121	1.85	ppb	94
3) Pyridine	2.68	79	11326	1.82	ppb	88
4) N-Nitrosodimethylamine	2.57	42	8485	2.06	ppb	77
6) Indene	5.95	116	14394	1.91	ppb	98
7) Cumene	4.41	105	20664	1.88	ppb	97
9) Phenol	5.01	94	10250	1.56	ppb	90
10) Aniline	5.07	93	14467	1.92	ppb	97
11) bis(2-Chloroethyl)ether	5.16	93	9189	1.82	ppb	100
12) 2-Chlorophenol	5.22	128	9549	1.79	ppb	95
13) Decane	5.28	43	19703	2.09	ppb	97
14) 1,3-Dichlorobenzene	5.44	146	12506	1.90	ppb	92
15) 1,4-Dichlorobenzene	5.52	146	12699	1.96	ppb	94
16) Benzyl alcohol	5.76	108	5438	1.56	ppb	87
17) 1,2-Dichlorobenzene	5.82	146	11859	1.97	ppb	92
18) Acetophenone	6.21	105	12322	1.77	ppb	99
19) 2-Methylphenol	5.97	108	6279	1.75	ppb	94
20) 2,2'-oxybis(1-Chloropropan	6.03	121	3377	1.80	ppb #	88
21) 3&4-Methylphenol	6.21	108	6096	1.61	ppb #	74
22) n-Nitroso-di-n-propylamine	6.28	70	6837	2.53	ppb	71
23) Hexachloroethane	6.33	201	4019	1.75	ppb	94
26) Nitrobenzene	6.48	123	4779	1.67	ppb	84
27) Quinoline	8.39	129	16118	1.70	ppb	99
28) Isophorone	6.93	82	16453	1.74	ppb	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:38 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:36:04 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.05	139	4464	1.58	ppb		90
30)	2,4-Dimethylphenol	7.15	107	7935	1.70	ppb		94
31)	Benzoic acid	7.25	105	2242	0.81	ppb		84
32)	bis(2-Chloroethoxy)methane	7.34	93	10304	1.74	ppb		94
33)	2,4-Dichlorophenol	7.47	162	6938	1.54	ppb		98
34)	2,6-Dichlorophenol	7.90	162	7815	1.73	ppb		98
35)	1,3,5-Trichlorobenzene	7.06	180	11016	1.98	ppb		95
36)	1,2,4-Trichlorobenzene	7.63	180	10500	1.98	ppb		96
37)	1,2,3-Trichlorobenzene	8.08	180	10310	1.98	ppb		94
38)	Naphthalene	7.73	128	28834	1.95	ppb		96
39)	4-Chloroaniline	7.90	127	11367	1.79	ppb		95
40)	2,3-Dichloroaniline	9.67	161	10183	1.91	ppb		98
41)	Caprolactam	8.58	55	5511	1.55	ppb		91
42)	Hexachlorobutadiene	8.10	225	5729	2.00	ppb		99
43)	4-Chloro-3-methylphenol	8.84	107	6622	1.56	ppb		89
44)	2-Methylnaphthalene	9.04	142	21103	1.93	ppb		98
45)	1-Methylnaphthalene	9.25	142	20179	1.94	ppb		95
46)	Dimethylnaphthalene	10.27	156	17312	1.91	ppb		97
48)	Hexachlorocyclopentadiene	9.51	237	8386	3.33	ppb		93
49)	2,4,6-Trichlorophenol	9.66	196	5735	1.66	ppb		96
50)	2,4,5-Trichlorophenol	9.72	196	4844	1.66	ppb		89
52)	2-Chloronaphthalene	9.97	162	19454	1.93	ppb		95
53)	Biphenyl	9.98	154	24344	1.97	ppb		98
54)	2-Nitroaniline	10.27	65	4277	1.46	ppb		98
55)	Dimethylphthalate	10.75	163	21237	1.86	ppb		96
56)	Acenaphthylene	10.79	152	29065	1.89	ppb		96
57)	2,6-Dinitrotoluene	10.85	165	3930	1.62	ppb		92
58)	3-Nitroaniline	11.09	138	4290	1.49	ppb	#	73
59)	Acenaphthene	11.16	153	18680	1.87	ppb		91
60)	2,4-Dinitrophenol	11.31	184	1676	1.03	ppb		93
61)	4-Nitrophenol	11.47	109	1123	0.80	ppb	#	1
62)	Dibenzofuran	11.48	168	27746	1.96	ppb		77
63)	2,4-Dinitrotoluene	11.62	165	4736	1.45	ppb		93
64)	2,3,4,6-Tetrachlorophenol	11.84	232	4885	1.66	ppb		93
65)	Diethylphthalate	12.16	149	20239	1.87	ppb		93
66)	Fluorene	12.16	166	21372	1.88	ppb		96
67)	4-Chlorophenyl-phenylether	12.22	204	11259	1.90	ppb		95
68)	4-Nitroaniline	12.31	138	4249	1.44	ppb		90
70)	4,6-Dinitro-2-methylphenol	12.40	198	1893	0.74	ppb		97
71)	n-Nitrosodiphenylamine	12.47	169	15024	1.77	ppb		98
72)	1,2-Diphenylhydrazine	12.52	77	19979	1.85	ppb		88
74)	4-Bromophenyl-phenylether	13.17	248	5782	1.72	ppb		90
75)	Hexachlorobenzene	13.42	284	5845	1.83	ppb		91
76)	Pentachlorophenol	13.78	266	5958	2.95	ppb		93
77)	Phenanthrene	14.04	178	32594	1.93	ppb		99
78)	Anthracene	14.13	178	30987	1.85	ppb		99
79)	Carbazole	14.50	167	27862	1.78	ppb		100
80)	Di-n-butylphthalate	15.39	149	31814	1.72	ppb		99
81)	Fluoranthene	16.23	202	36212	1.89	ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:38 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:36:04 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

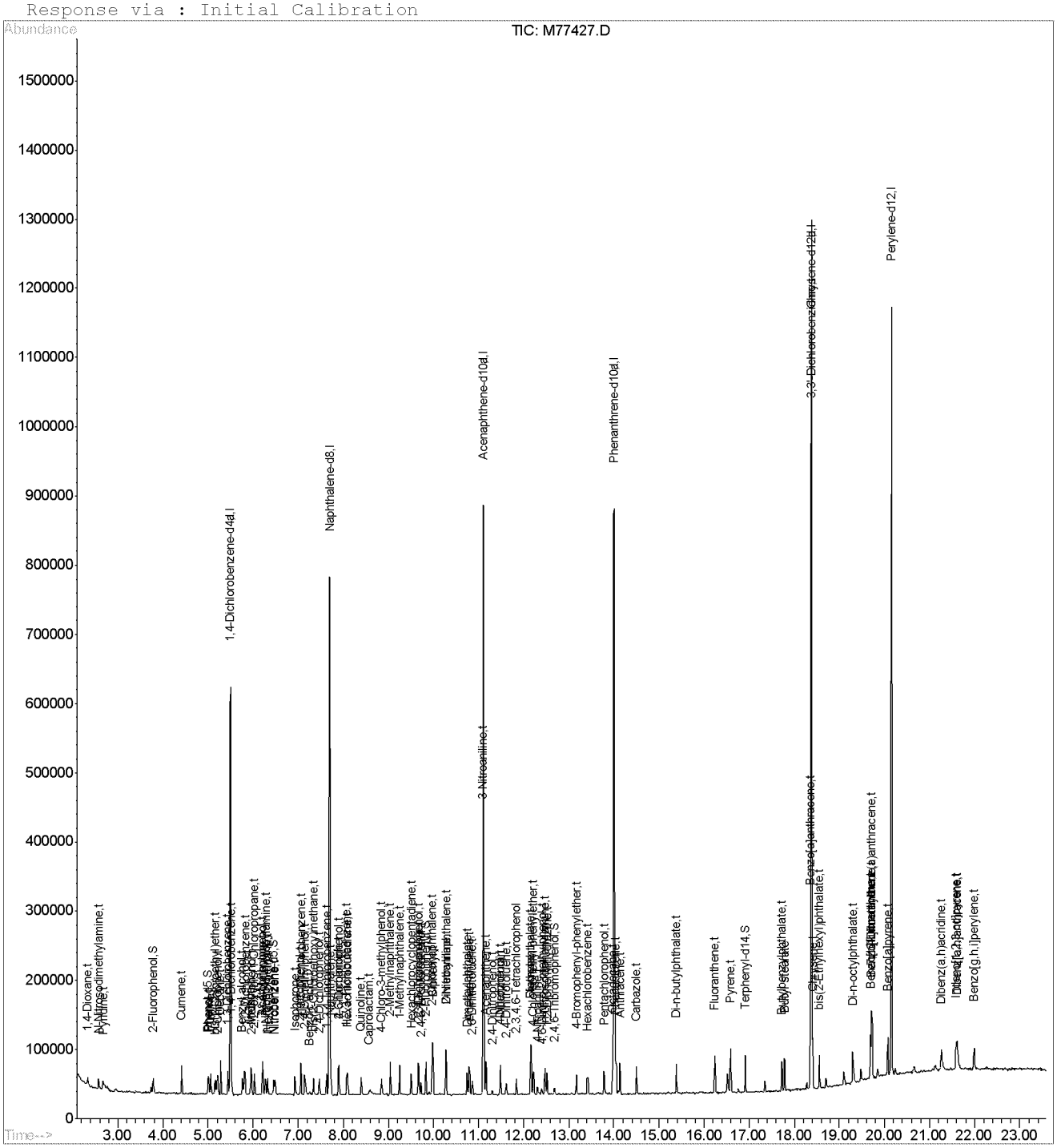
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.97	57	19270	1.82	ppb	98
84)	Pyrene	16.59	202	37730	1.87	ppb	93
85)	Butyl stearate	17.78	56	15002	1.93	ppb	82
87)	Butylbenzylphthalate	17.71	149	13048	1.51	ppb	98
88)	Benzo[a]anthracene	18.36	228	36684	1.90	ppb	97
89)	3,3'-Dichlorobenzidine	18.37	252	10099	1.61	ppb	97
90)	Chrysene	18.41	228	33050	1.87	ppb	97
91)	bis(2-Ethylhexyl)phthalate	18.55	149	18066	1.60	ppb	97
93)	Di-n-octylphthalate	19.30	149	29141	1.63	ppb	93
94)	Benzo[b]fluoranthene	19.69	252	30828m	1.89	ppb	
95)	Benzo[k]fluoranthene	19.72	252	32924m	2.10	ppb	
96)	Benzo[a]pyrene	20.07	252	29355	1.88	ppb	99
97)	Indeno[1,2,3-cd]pyrene	21.59	276	29629	1.76	ppb	94
98)	Dibenz(a,h)acridine	21.25	279	20246	1.66	ppb	99
99)	Dibenz[a,h]anthracene	21.61	278	24320	1.85	ppb	95
100)	7,12-Dimethylbenz(a)anthra	19.71	256	10956	1.66	ppb	98
101)	Benzo[g,h,i]perylene	21.98	276	25939	1.80	ppb	97

(#) = qualifier out of range (m) = manual integration
M77427.D MM3014.M Thu Nov 18 12:38:55 2010 GCMSM Page 3

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:38 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:36:04 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

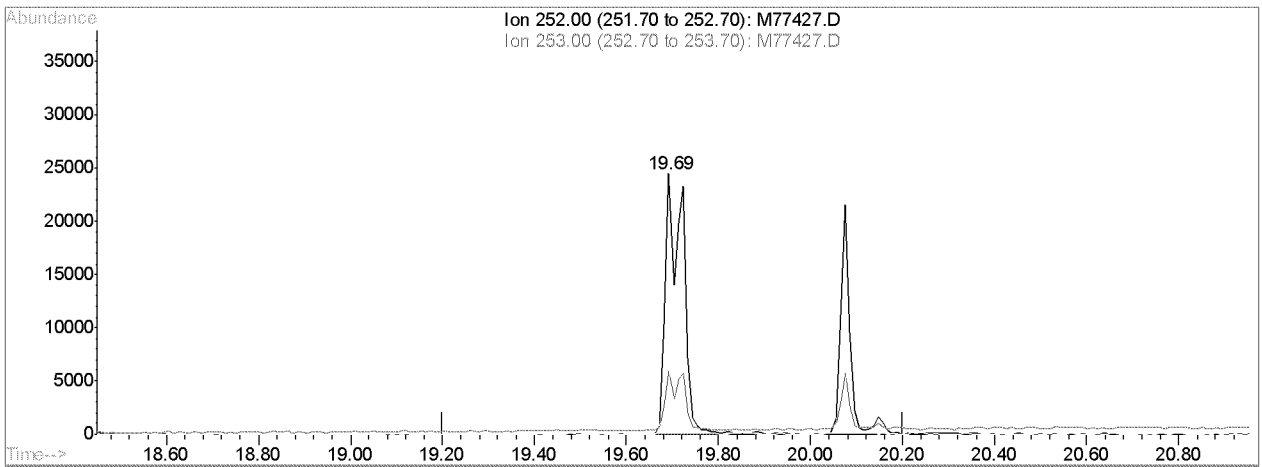
Sample Number: EM3014-IC3014
Lab FileID: M77427.D
Injection Time: 11/18/10 12:09
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

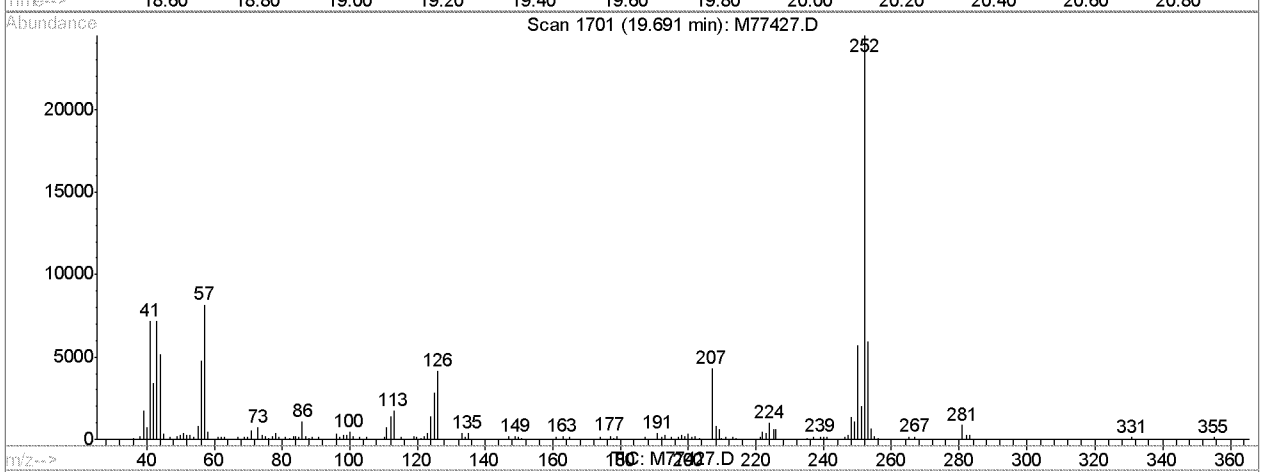
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.69	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.72	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:34 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:31:19 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.69min 3.93ppb

response 64352

Ion	Exp%	Act%
252.00	100	100
253.00	24.30	22.70
125.00	11.60	11.62
0.00	0.00	0.00

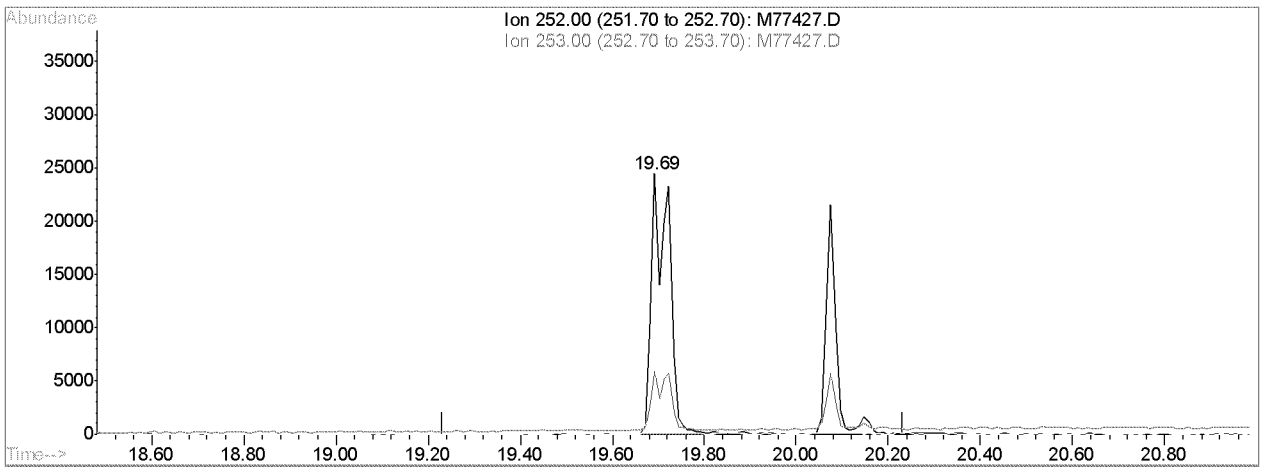
M77427.D MM3014.M Thu Nov 18 12:35:29 2010 GCMSM

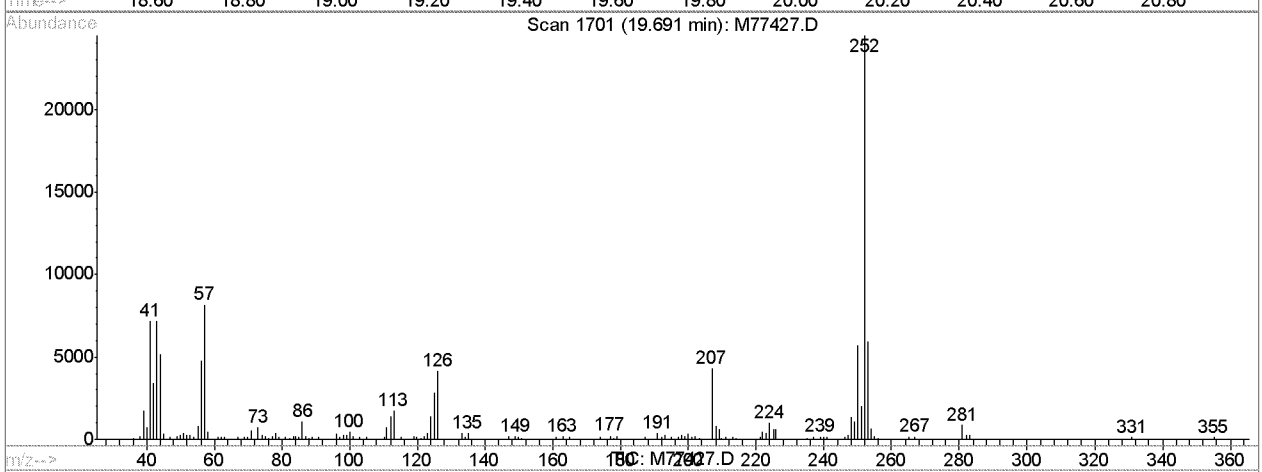
M77427.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:34 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:31:19 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.69min 4.09ppb

response 64352

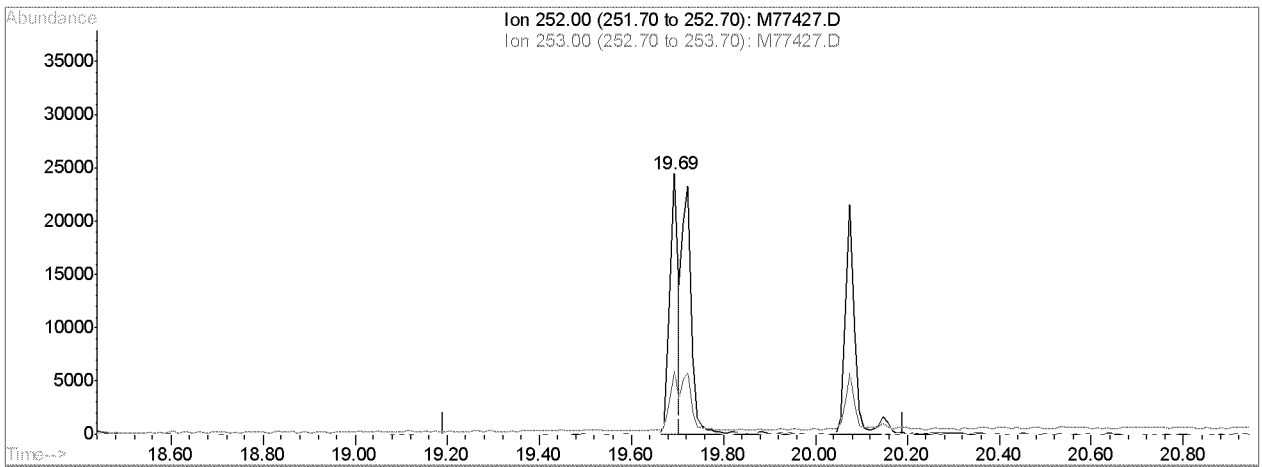
Ion	Exp%	Act%
252.00	100	100
253.00	26.10	22.70
125.00	12.20	11.62
0.00	0.00	0.00

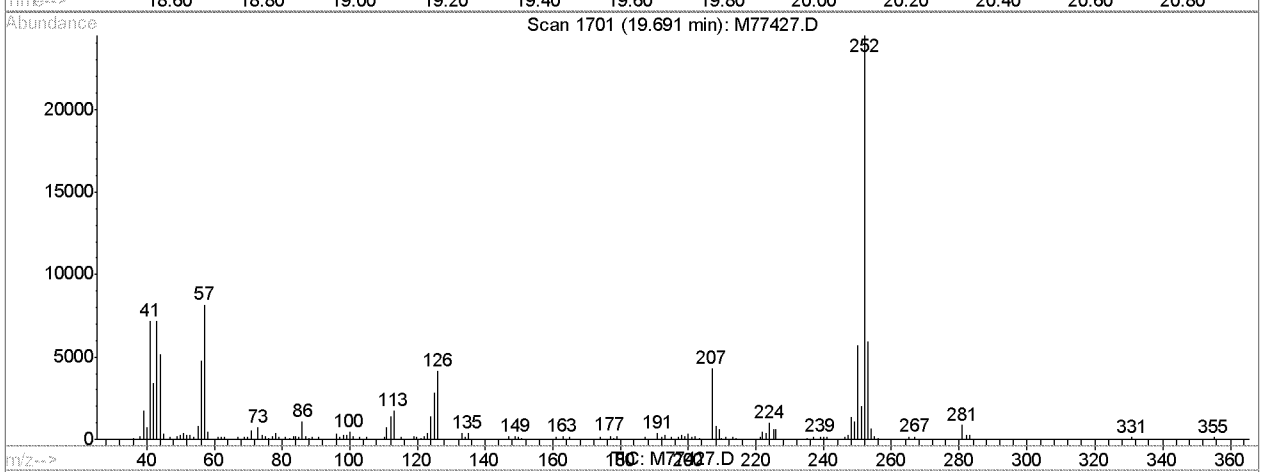
M77427.D MM3014.M Thu Nov 18 12:35:33 2010 GCMSM

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:38 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.69min 1.89ppb m

response 30828

Ion	Exp%	Act%
252.00	100	100
253.00	24.30	24.26
125.00	11.60	11.60
0.00	0.00	0.00

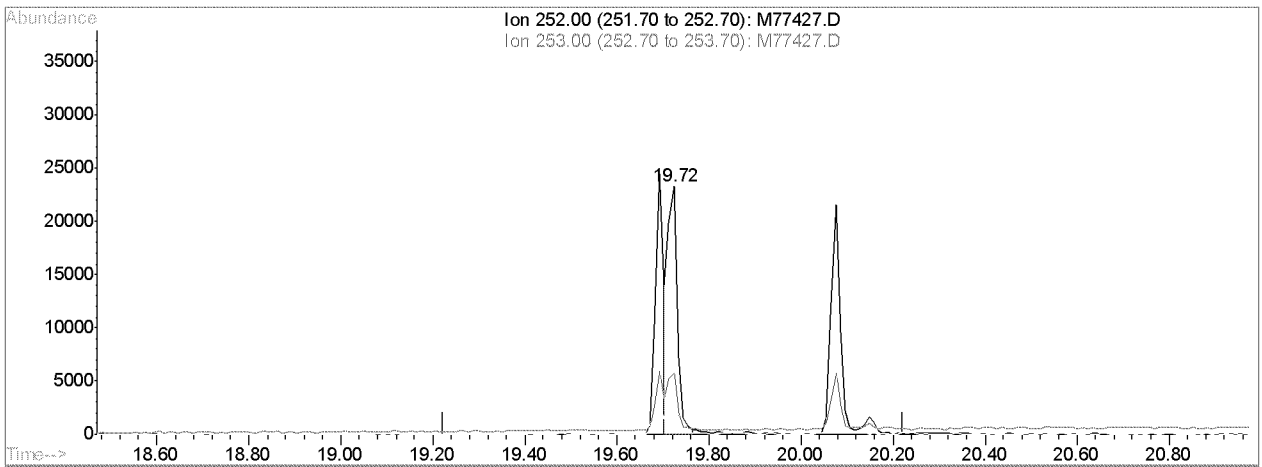
M77427.D MM3014.M Fri Nov 19 12:25:55 2010 GCMSM

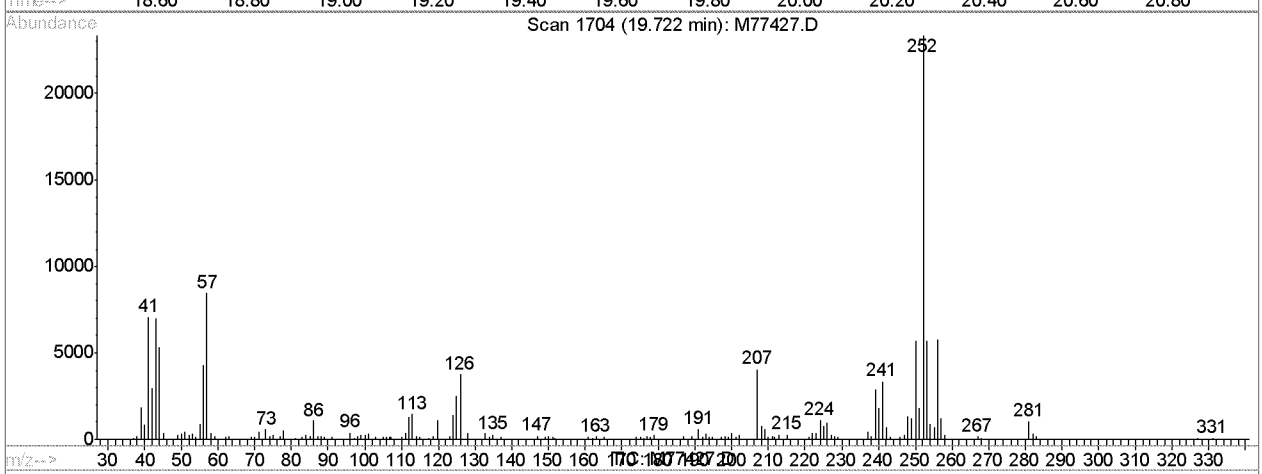
M77427.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77427.D Vial: 5
Acq On : 18 Nov 2010 12:09 pm Operator: olgaa
Sample : ic3014-2 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 12:38 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 2.10ppb m

response 32924

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	24.45
125.00	12.20	10.82
0.00	0.00	0.00

M77427.D MM3014.M Fri Nov 19 12:25:59 2010 GCMSM

M77427.D edits: Benzo[k]fluoranthene

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:30 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:48:47 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	169089	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	570755	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	357825	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	623953	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	639346	40.00	ppb	0.00
92) Perylene-d12	20.15	264	530730	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	169089	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	357825	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	623953	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	639346	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	639346	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	25663	5.06	ppb	0.00
Spiked Amount 50.000			Recovery =	10.12%		
8) Phenol-d5	4.99	99	28542	5.11	ppb	0.00
Spiked Amount 50.000			Recovery =	10.22%		
25) Nitrobenzene-d5	6.46	82	25853	5.05	ppb	0.00
Spiked Amount 50.000			Recovery =	10.10%		
51) 2-Fluorobiphenyl	9.82	172	65108	5.39	ppb	0.00
Spiked Amount 50.000			Recovery =	10.78%		
73) 2,4,6-Tribromophenol	12.68	330	5089	4.47	ppb	0.00
Spiked Amount 50.000			Recovery =	8.94%		
86) Terphenyl-d14	16.91	244	63558	5.34	ppb	0.00
Spiked Amount 50.000			Recovery =	10.68%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.32	88	13880	4.99	ppb	88
3) Pyridine	2.64	79	30987	4.98	ppb	89
4) N-Nitrosodimethylamine	2.57	42	20523	4.83	ppb	86
6) Indene	5.94	116	39915	5.23	ppb	97
7) Cumene	4.41	105	58077	5.24	ppb	97
9) Phenol	5.01	94	32124	5.06	ppb	93
10) Aniline	5.06	93	41080	5.39	ppb	90
11) bis(2-Chloroethyl)ether	5.16	93	26214	5.19	ppb	99
12) 2-Chlorophenol	5.22	128	28878	5.43	ppb	95
13) Decane	5.29	43	50562	5.17	ppb	97
14) 1,3-Dichlorobenzene	5.45	146	35379	5.31	ppb	97
15) 1,4-Dichlorobenzene	5.52	146	34596	5.24	ppb	97
16) Benzyl alcohol	5.76	108	16216	4.81	ppb	93
17) 1,2-Dichlorobenzene	5.82	146	33649	5.48	ppb	94
18) Acetophenone	6.21	105	35855	5.19	ppb	97
19) 2-Methylphenol	5.96	108	18798	5.27	ppb	96
20) 2,2'-oxybis(1-Chloropropan	6.03	121	9170	4.90	ppb #	76
21) 3&4-Methylphenol	6.21	108	19667	5.33	ppb #	72
22) n-Nitroso-di-n-propylamine	6.27	70	17943	4.84	ppb	89
23) Hexachloroethane	6.33	201	11899	5.23	ppb	96
26) Nitrobenzene	6.49	123	14405	5.18	ppb	94
27) Quinoline	8.39	129	48409	5.22	ppb	99
28) Isophorone	6.93	82	46542	5.02	ppb	95

(#) = qualifier out of range (m) = manual integration
M77428.D MM3014.M Thu Nov 18 13:31:03 2010 GCMSM Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:30 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:48:47 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 2-Nitrophenol	7.06	139	13762	5.07 ppb	77
30) 2,4-Dimethylphenol	7.15	107	22719	4.99 ppb	98
31) Benzoic acid	7.27	105	8511	3.58 ppb	84
32) bis(2-Chloroethoxy)methane	7.34	93	29191	5.02 ppb	96
33) 2,4-Dichlorophenol	7.46	162	22189	5.17 ppb	99
34) 2,6-Dichlorophenol	7.90	162	22393	5.06 ppb	98
35) 1,3,5-Trichlorobenzene	7.06	180	31694	5.62 ppb	96
36) 1,2,4-Trichlorobenzene	7.63	180	28868	5.38 ppb	95
37) 1,2,3-Trichlorobenzene	8.07	180	28344	5.38 ppb	97
38) Naphthalene	7.72	128	80723	5.42 ppb	96
39) 4-Chloroaniline	7.90	127	34725	5.53 ppb	92
40) 2,3-Dichloroaniline	9.67	161	29388	5.50 ppb	97
41) Caprolactam	8.54	55	15845	4.67 ppb	90
42) Hexachlorobutadiene	8.10	225	15842	5.44 ppb	99
43) 4-Chloro-3-methylphenol	8.85	107	20369	5.02 ppb	91
44) 2-Methylnaphthalene	9.04	142	60072	5.47 ppb	98
45) 1-Methylnaphthalene	9.24	142	56610	5.39 ppb	96
46) Dimethylnaphthalene	10.27	156	49245	5.42 ppb	94
48) Hexachlorocyclopentadiene	9.50	237	25090	10.22 ppb	95
49) 2,4,6-Trichlorophenol	9.66	196	17596	5.23 ppb	98
50) 2,4,5-Trichlorophenol	9.72	196	15199	5.34 ppb	96
52) 2-Chloronaphthalene	9.98	162	55600	5.46 ppb	97
53) Biphenyl	9.98	154	69880	5.57 ppb	99
54) 2-Nitroaniline	10.27	65	13703	4.93 ppb	93
55) Dimethylphthalate	10.75	163	59612	5.23 ppb	97
56) Acenaphthylene	10.80	152	83955	5.44 ppb	98
57) 2,6-Dinitrotoluene	10.86	165	11791	5.00 ppb	97
58) 3-Nitroaniline	11.10	138	13512	4.91 ppb	86
59) Acenaphthene	11.17	153	52703	5.26 ppb	95
60) 2,4-Dinitrophenol	11.30	184	6738	5.42 ppb	90
61) 4-Nitrophenol	11.47	109	5058	4.41 ppb	97
62) Dibenzofuran	11.48	168	76833	5.37 ppb	81
63) 2,4-Dinitrotoluene	11.61	165	15701	5.08 ppb	99
64) 2,3,4,6-Tetrachlorophenol	11.83	232	14235	4.95 ppb	91
65) Diethylphthalate	12.16	149	57891	5.33 ppb	99
66) Fluorene	12.16	166	60842	5.35 ppb	97
67) 4-Chlorophenyl-phenylether	12.21	204	32516	5.46 ppb	97
68) 4-Nitroaniline	12.31	138	14319	5.13 ppb	93
70) 4,6-Dinitro-2-methylphenol	12.40	198	6926	3.40 ppb	97
71) n-Nitrosodiphenylamine	12.46	169	43384	5.20 ppb	99
72) 1,2-Diphenylhydrazine	12.51	77	52122	4.86 ppb	95
74) 4-Bromophenyl-phenylether	13.17	248	16811	5.12 ppb	97
75) Hexachlorobenzene	13.42	284	15003	4.73 ppb	96
76) Pentachlorophenol	13.79	266	19850	10.39 ppb	99
77) Phenanthrene	14.05	178	89365	5.27 ppb	97
78) Anthracene	14.13	178	87707	5.28 ppb	97
79) Carbazole	14.49	167	79205	5.13 ppb	99
80) Di-n-butylphthalate	15.38	149	95839	5.31 ppb	98
81) Fluoranthene	16.24	202	102757	5.36 ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:30 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:48:47 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

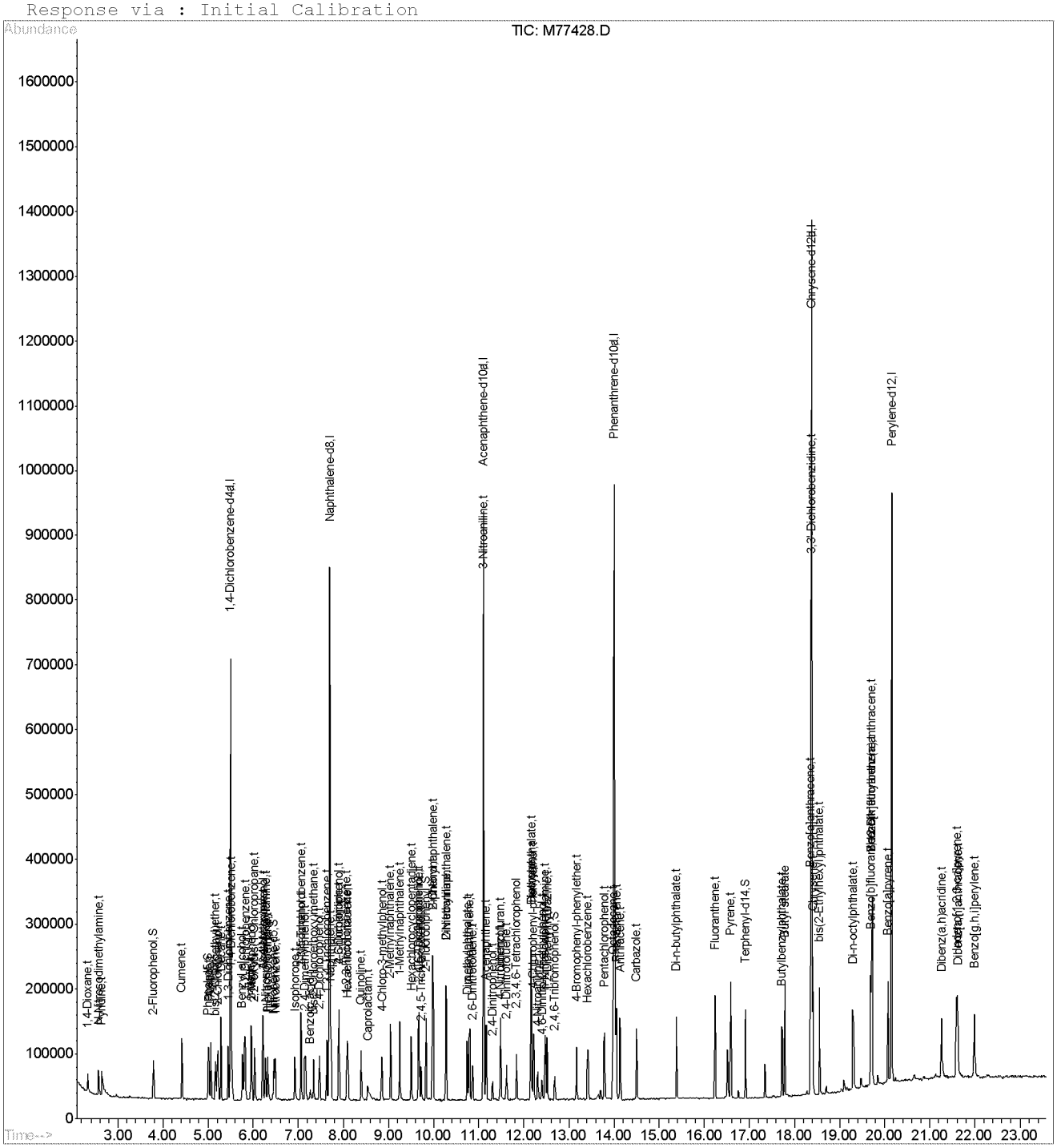
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.97	57	48736	4.66	ppb	97
84)	Pyrene	16.58	202	109567	5.49	ppb	96
85)	Butyl stearate	17.78	56	35150	4.55	ppb	98
87)	Butylbenzylphthalate	17.72	149	40226	4.96	ppb	87
88)	Benzo[a]anthracene	18.35	228	100936	5.27	ppb	97
89)	3,3'-Dichlorobenzidine	18.36	252	30777	5.15	ppb	97
90)	Chrysene	18.40	228	93146	5.35	ppb	99
91)	bis(2-Ethylhexyl)phthalate	18.55	149	54126	5.03	ppb	97
93)	Di-n-octylphthalate	19.29	149	90077	5.23	ppb	96
94)	Benzo[b]fluoranthene	19.69	252	108823m	6.68	ppb	
95)	Benzo[k]fluoranthene	19.72	252	75744m	4.71	ppb	
96)	Benzo[a]pyrene	20.07	252	82854	5.35	ppb	97
97)	Indeno[1,2,3-cd]pyrene	21.59	276	88586	5.36	ppb	96
98)	Dibenz(a,h)acridine	21.26	279	61799	5.23	ppb	96
99)	Dibenz[a,h]anthracene	21.61	278	71619	5.50	ppb	99
100)	7,12-Dimethylbenz(a)anthra	19.72	256	29943	4.69	ppb	99
101)	Benzo[g,h,i]perylene	21.99	276	74796	5.28	ppb	98

(#) = qualifier out of range (m) = manual integration
M77428.D MM3014.M Thu Nov 18 13:31:03 2010 GCMSM Page 3

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:30 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:48:47 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

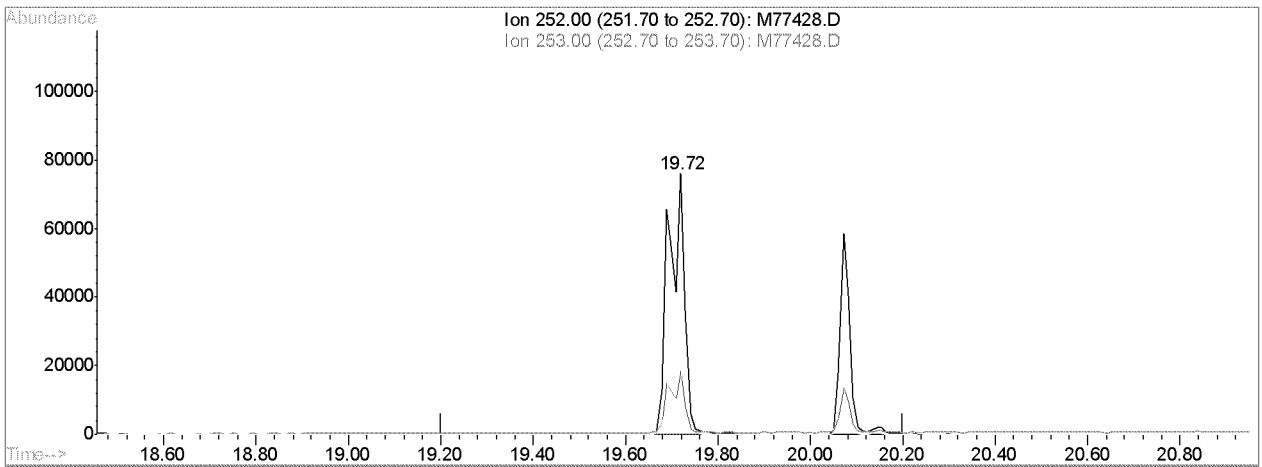
Sample Number: EM3014-IC3014
Lab FileID: M77428.D
Injection Time: 11/18/10 12:41
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

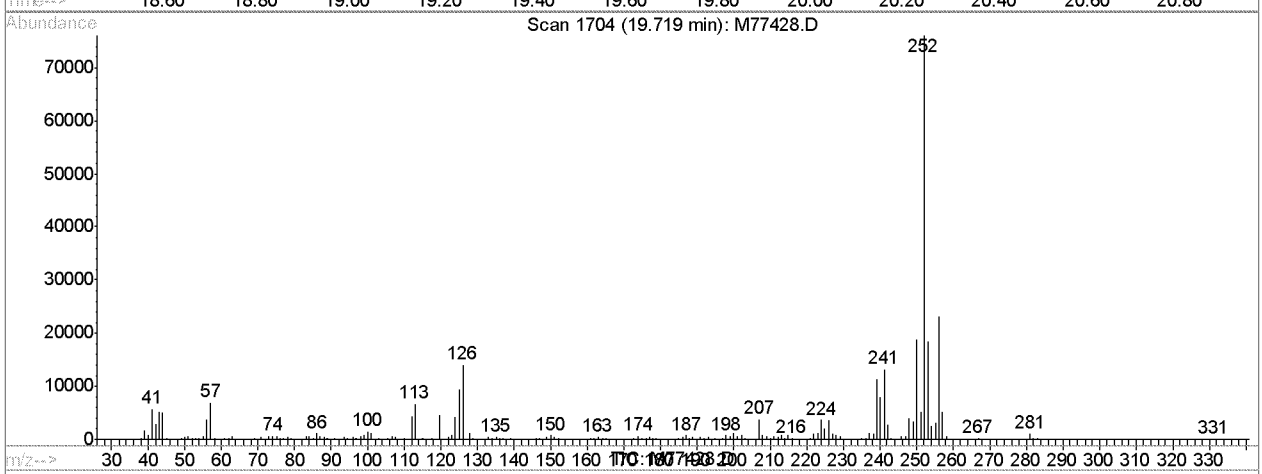
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.69	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.72	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:29 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:48:47 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.72min 11.47ppb

response 186811

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	23.53
125.00	10.90	12.42
0.00	0.00	0.00

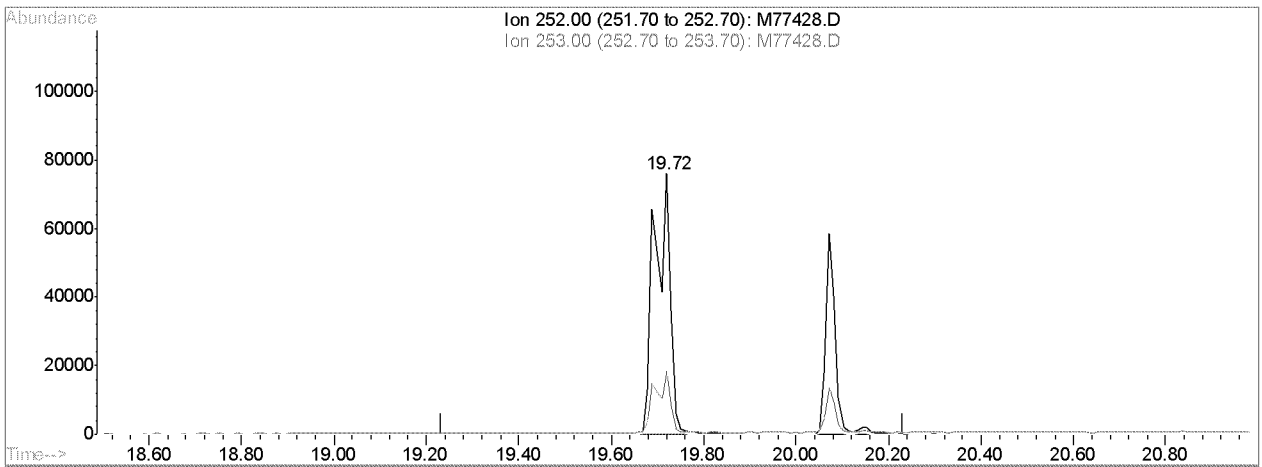
M77428.D MM3014.M Thu Nov 18 13:30:30 2010 GCMSM

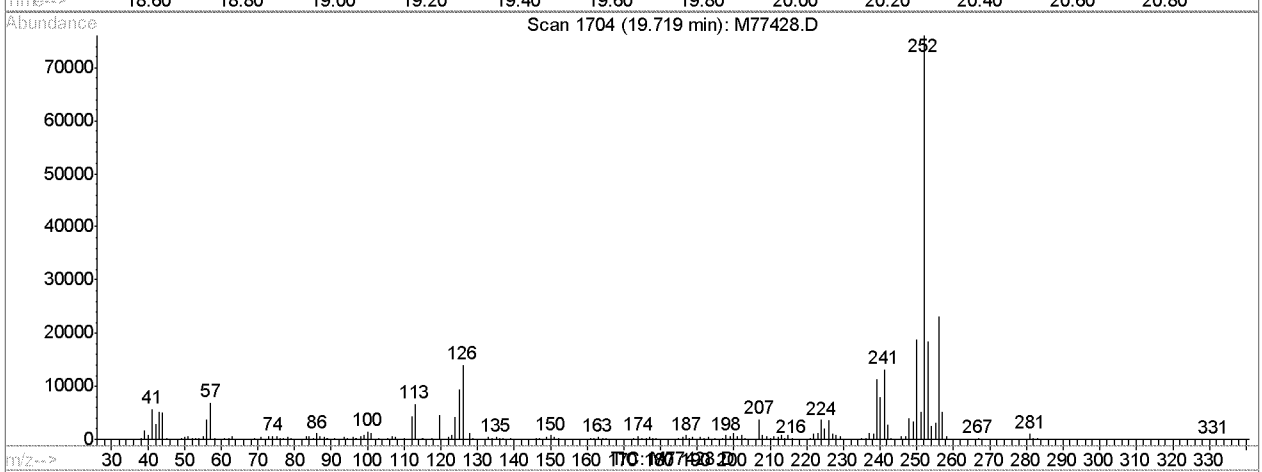
M77428.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:29 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 12:48:47 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 11.62ppb

response 186811

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	23.53
125.00	12.20	12.42
0.00	0.00	0.00

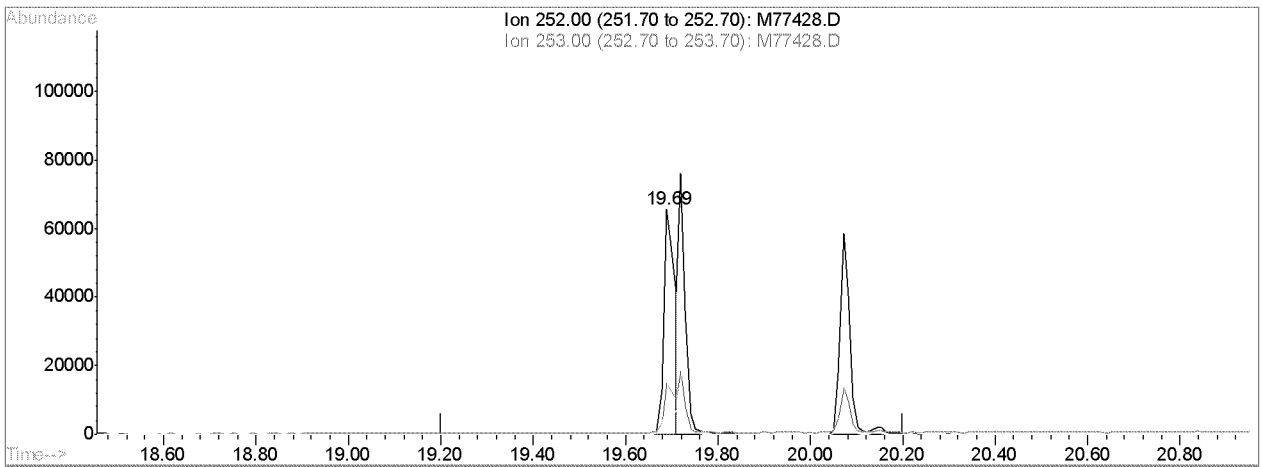
M77428.D MM3014.M Thu Nov 18 13:30:33 2010 GCMSM

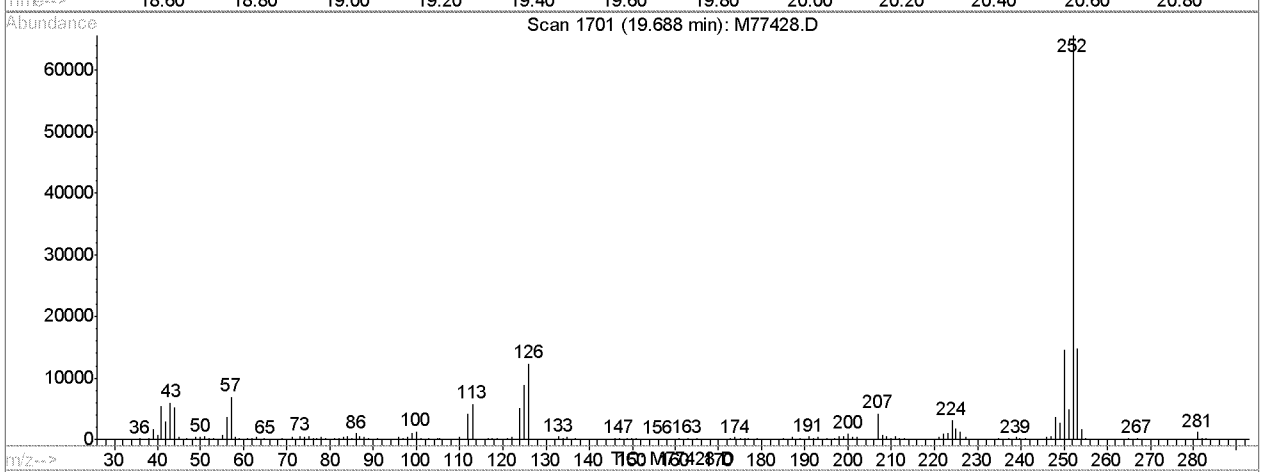
M77428.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:30 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.69min 6.68ppb m

response 108823

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	22.54
125.00	10.90	13.35
0.00	0.00	0.00

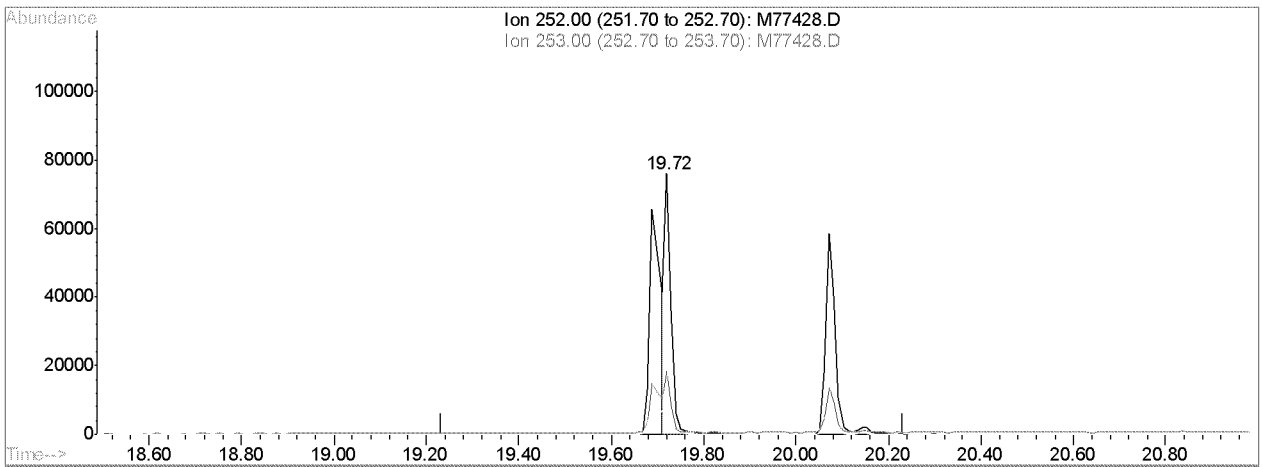
M77428.D MM3014.M Fri Nov 19 12:26:19 2010 GCMSM

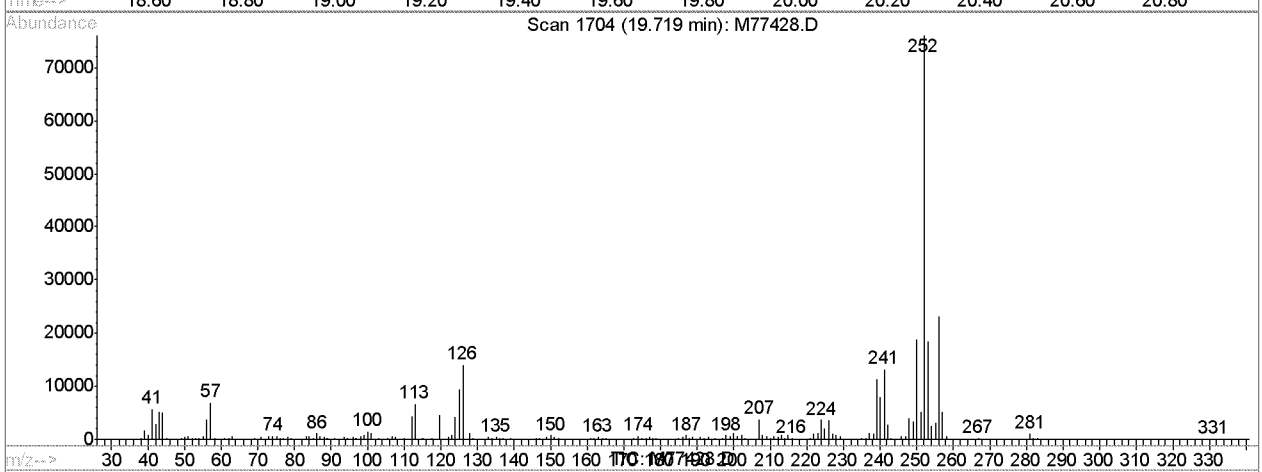
M77428.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77428.D Vial: 6
Acq On : 18 Nov 2010 12:41 pm Operator: olgaa
Sample : ic3014-5 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:30 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 4.71ppb m

response 75744

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	24.13
125.00	12.20	12.41
0.00	0.00	0.00

M77428.D MM3014.M Fri Nov 19 12:26:23 2010 GCMSM

M77428.D edits: Benzo[k]fluoranthene

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:39 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:31:17 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	176849	40.00	ppb		0.00
24) Naphthalene-d8	7.69	136	598464	40.00	ppb		0.00
47) Acenaphthene-d10	11.11	164	375622	40.00	ppb		0.00
69) Phenanthrene-d10	14.01	188	657373	40.00	ppb		0.00
83) Chrysene-d12	18.38	240	661174	40.00	ppb		0.00
92) Perylene-d12	20.15	264	562602	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	176849	40.00	ppb		0.00
104) Acenaphthene-d10a	11.11	164	375622	40.00	ppb		0.00
106) Phenanthrene-d10a	14.01	188	657373	40.00	ppb		0.00
110) Chrysene-d12a	18.38	240	661174	40.00	ppb		0.00
112) Chrysene-d12b	18.38	240	661174	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.78	112	55265	10.40	ppb		0.00
Spiked Amount 50.000			Recovery =	20.80%			
8) Phenol-d5	4.99	99	66610	11.35	ppb		0.00
Spiked Amount 50.000			Recovery =	22.70%			
25) Nitrobenzene-d5	6.46	82	57853	10.76	ppb		0.00
Spiked Amount 50.000			Recovery =	21.52%			
51) 2-Fluorobiphenyl	9.83	172	140791	10.94	ppb		0.00
Spiked Amount 50.000			Recovery =	21.88%			
73) 2,4,6-Tribromophenol	12.68	330	11793	10.09	ppb		0.00
Spiked Amount 50.000			Recovery =	20.18%			
86) Terphenyl-d14	16.92	244	139199	11.16	ppb		0.00
Spiked Amount 50.000			Recovery =	22.32%			
Target Compounds							Qvalue
2) 1,4-Dioxane	2.32	88	28211	9.70	ppb		93
3) Pyridine	2.62	79	64003	9.85	ppb		94
4) N-Nitrosodimethylamine	2.56	42	45031	10.21	ppb		95
6) Indene	5.94	116	84072	10.44	ppb		99
7) Cumene	4.41	105	123480	10.54	ppb		98
9) Phenol	5.01	94	71368	10.72	ppb		89
10) Aniline	5.06	93	88042	10.87	ppb		98
11) bis(2-Chloroethyl)ether	5.16	93	56143	10.55	ppb		96
12) 2-Chlorophenol	5.22	128	61753	10.92	ppb		96
13) Decane	5.28	43	99875	9.70	ppb		97
14) 1,3-Dichlorobenzene	5.44	146	74876	10.61	ppb		95
15) 1,4-Dichlorobenzene	5.52	146	72037	10.33	ppb		96
16) Benzyl alcohol	5.76	108	38616	11.04	ppb		97
17) 1,2-Dichlorobenzene	5.82	146	70192	10.72	ppb		96
18) Acetophenone	6.20	105	77524	10.65	ppb		97
19) 2-Methylphenol	5.97	108	41376	10.98	ppb		97
20) 2,2'-oxybis(1-Chloropropan	6.03	121	20579	10.56	ppb		97
21) 3&4-Methylphenol	6.20	108	43896	11.22	ppb	#	72
22) n-Nitroso-di-n-propylamine	6.27	70	39081	10.15	ppb		97
23) Hexachloroethane	6.33	201	26078	10.86	ppb		98
26) Nitrobenzene	6.49	123	30517	10.39	ppb		96
27) Quinoline	8.38	129	107529	10.96	ppb		98
28) Isophorone	6.92	82	104696	10.77	ppb		95

(#) = qualifier out of range (m) = manual integration
M77429.D MM3014.M Thu Nov 18 13:39:29 2010 GCMSM Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:39 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:31:17 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.05	139	31379	11.00	ppb		99
30)	2,4-Dimethylphenol	7.15	107	50623	10.60	ppb		94
31)	Benzoic acid	7.29	105	25434	10.81	ppb		96
32)	bis(2-Chloroethoxy)methane	7.34	93	65452	10.72	ppb		98
33)	2,4-Dichlorophenol	7.47	162	51711	11.41	ppb		97
34)	2,6-Dichlorophenol	7.90	162	50987	10.96	ppb		99
35)	1,3,5-Trichlorobenzene	7.06	180	66020	10.90	ppb		97
36)	1,2,4-Trichlorobenzene	7.63	180	62017	10.86	ppb		99
37)	1,2,3-Trichlorobenzene	8.08	180	62059	11.07	ppb		97
38)	Naphthalene	7.72	128	171442	10.79	ppb		96
39)	4-Chloroaniline	7.90	127	76890	11.43	ppb		96
40)	2,3-Dichloroaniline	9.67	161	62769	10.99	ppb		97
41)	Caprolactam	8.51	55	36337	10.35	ppb		94
42)	Hexachlorobutadiene	8.10	225	32900	10.59	ppb		99
43)	4-Chloro-3-methylphenol	8.85	107	46740	10.97	ppb		89
44)	2-Methylnaphthalene	9.04	142	130340	11.11	ppb		98
45)	1-Methylnaphthalene	9.25	142	122176	10.93	ppb		97
46)	Dimethylnaphthalene	10.27	156	108592	11.22	ppb		99
48)	Hexachlorocyclopentadiene	9.51	237	56583	21.86	ppb		97
49)	2,4,6-Trichlorophenol	9.66	196	40016	11.23	ppb		98
50)	2,4,5-Trichlorophenol	9.72	196	34450	11.38	ppb		95
52)	2-Chloronaphthalene	9.97	162	118879	10.93	ppb		98
53)	Biphenyl	9.98	154	148998	11.07	ppb		100
54)	2-Nitroaniline	10.27	65	33015	11.34	ppb		97
55)	Dimethylphthalate	10.75	163	131305	10.87	ppb		99
56)	Acenaphthylene	10.80	152	189486	11.50	ppb		99
57)	2,6-Dinitrotoluene	10.86	165	27578	11.14	ppb		91
58)	3-Nitroaniline	11.10	138	32463	11.28	ppb		91
59)	Acenaphthene	11.16	153	117280	11.04	ppb		96
60)	2,4-Dinitrophenol	11.31	184	20975	18.15	ppb		85
61)	4-Nitrophenol	11.47	109	12030	10.29	ppb	#	72
62)	Dibenzofuran	11.48	168	170075	11.16	ppb		82
63)	2,4-Dinitrotoluene	11.62	165	36160	11.10	ppb		99
64)	2,3,4,6-Tetrachlorophenol	11.83	232	34221	11.36	ppb		95
65)	Diethylphthalate	12.17	149	125913	10.91	ppb		99
66)	Fluorene	12.17	166	135788	11.21	ppb		99
67)	4-Chlorophenyl-phenylether	12.22	204	70014	11.00	ppb		94
68)	4-Nitroaniline	12.31	138	33161	11.26	ppb		99
70)	4,6-Dinitro-2-methylphenol	12.40	198	20540	10.41	ppb		97
71)	n-Nitrosodiphenylamine	12.47	169	98083	11.07	ppb		100
72)	1,2-Diphenylhydrazine	12.52	77	114399	10.18	ppb		95
74)	4-Bromophenyl-phenylether	13.17	248	38643	11.12	ppb		95
75)	Hexachlorobenzene	13.42	284	35734	10.82	ppb		94
76)	Pentachlorophenol	13.79	266	47046	23.18	ppb		98
77)	Phenanthrene	14.05	178	191991	10.63	ppb		97
78)	Anthracene	14.13	178	201095	11.36	ppb		97
79)	Carbazole	14.49	167	183802	11.25	ppb		98
80)	Di-n-butylphthalate	15.38	149	218104	11.33	ppb		98
81)	Fluoranthene	16.24	202	230436	11.25	ppb		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:39 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:31:17 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

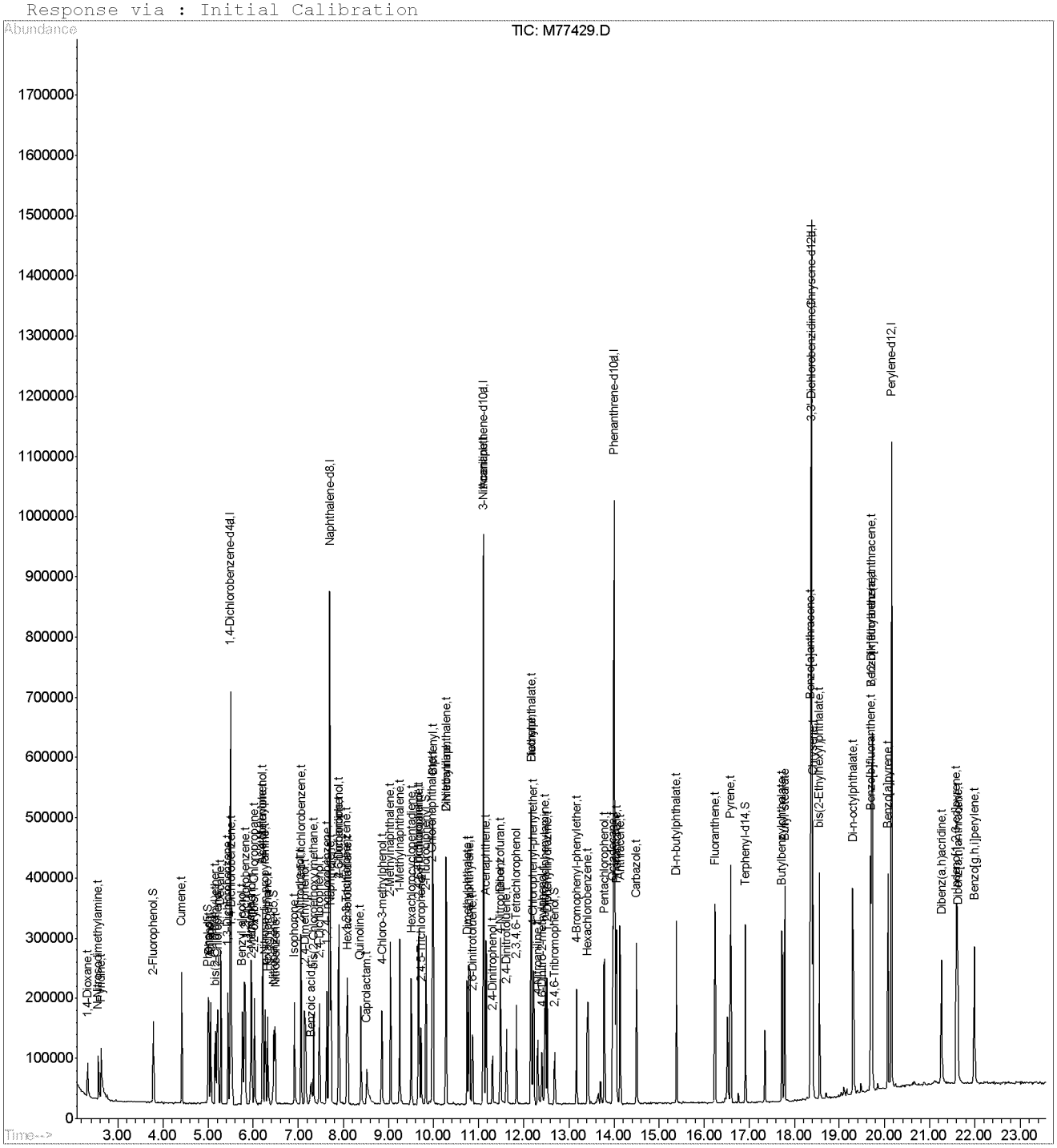
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.97	57	101997	9.38	ppb	98
84)	Pyrene	16.58	202	244029	11.59	ppb	97
85)	Butyl stearate	17.79	56	74822	9.53	ppb	98
87)	Butylbenzylphthalate	17.71	149	95822	11.44	ppb	95
88)	Benzo[a]anthracene	18.35	228	223682	11.18	ppb	98
89)	3,3'-Dichlorobenzidine	18.36	252	73847	11.89	ppb	99
90)	Chrysene	18.41	228	199003	10.89	ppb	98
91)	bis(2-Ethylhexyl)phthalate	18.55	149	127384	11.43	ppb	99
93)	Di-n-octylphthalate	19.30	149	216593	11.76	ppb	95
94)	Benzo[b]fluoranthene	19.69	252	250985m	13.62	ppb	
95)	Benzo[k]fluoranthene	19.72	252	150920m	8.96	ppb	
96)	Benzo[a]pyrene	20.07	252	187168	11.24	ppb	97
97)	Indeno[1,2,3-cd]pyrene	21.58	276	200123	11.26	ppb	98
98)	Dibenz(a,h)acridine	21.26	279	143813	11.37	ppb	96
99)	Dibenz[a,h]anthracene	21.61	278	158047	11.22	ppb	98
100)	7,12-Dimethylbenz(a)anthra	19.72	256	72240	10.81	ppb	96
101)	Benzo[g,h,i]perylene	21.99	276	168632	11.11	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:39 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:31:17 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

Sample Number: EM3014-IC3014
Lab FileID: M77429.D
Injection Time: 11/18/10 13:13

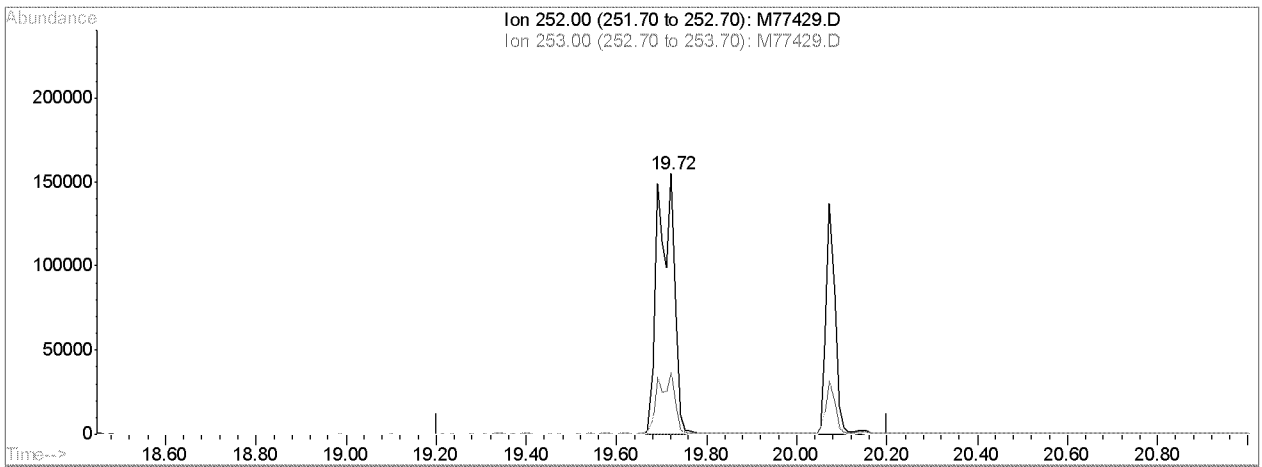
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

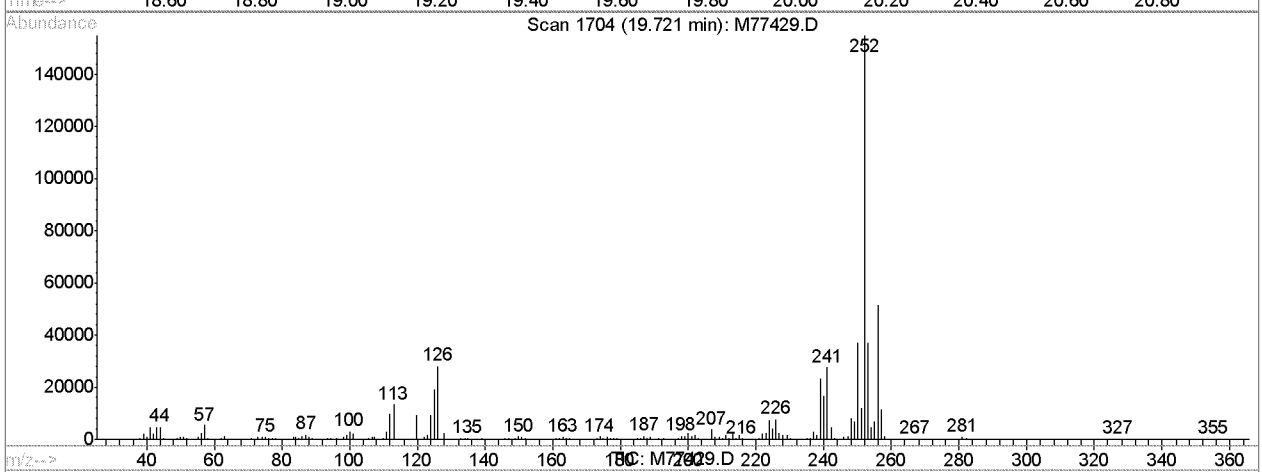
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.69	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.72	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:36 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:31:17 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.72min 22.05ppb

response 406124

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	23.75
125.00	10.90	12.43
0.00	0.00	0.00

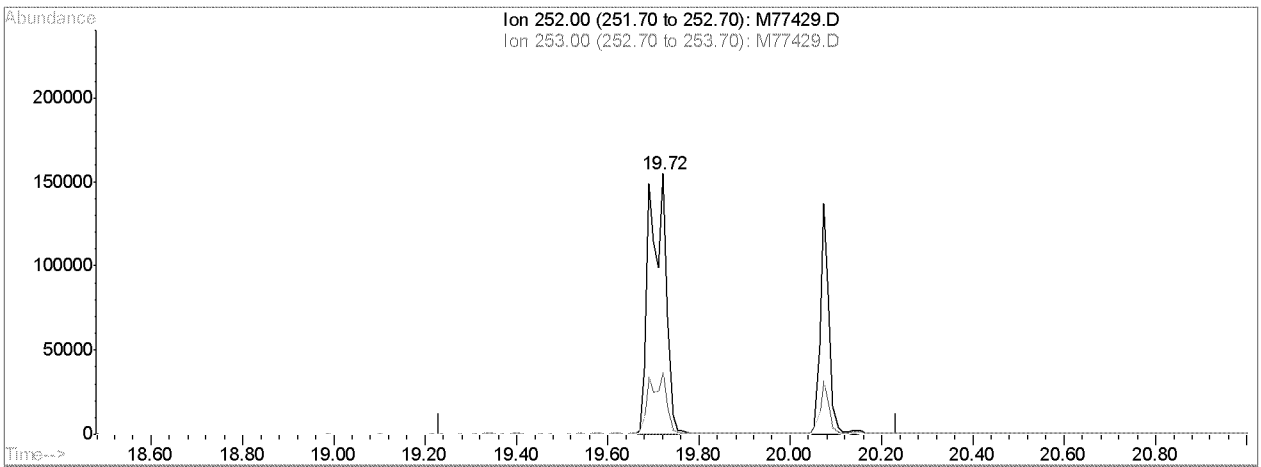
M77429.D MM3014.M Thu Nov 18 13:38:56 2010 GCMSM

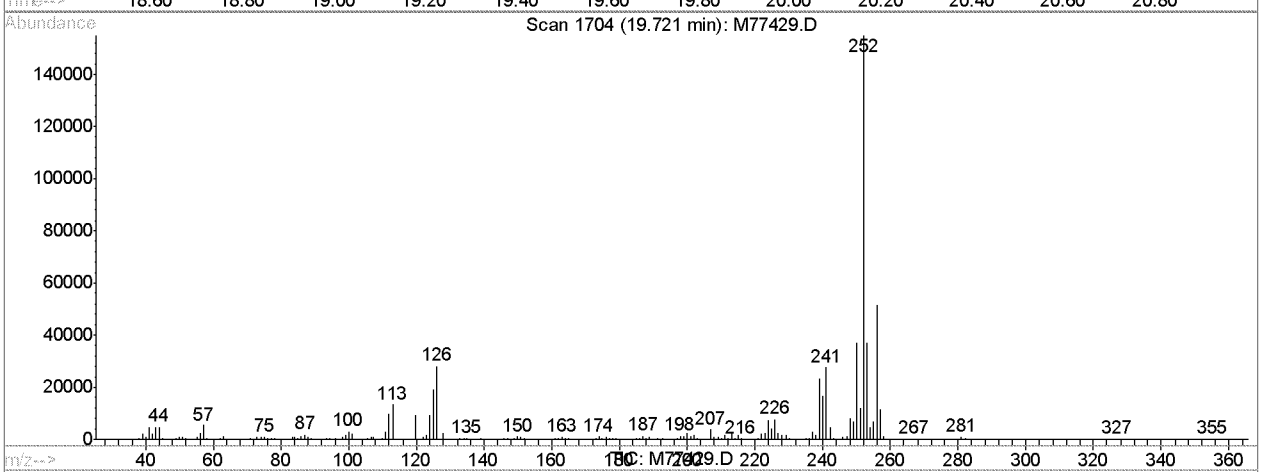
M77429.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:36 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:31:17 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 24.11ppb

response 406124

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	23.75
125.00	12.20	12.43
0.00	0.00	0.00

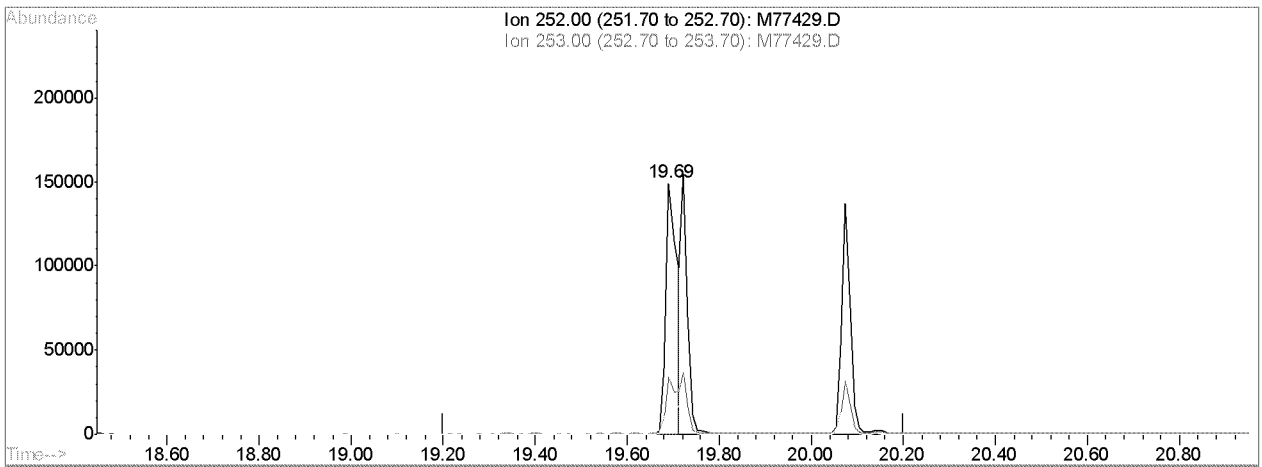
M77429.D MM3014.M Thu Nov 18 13:39:00 2010 GCMSM

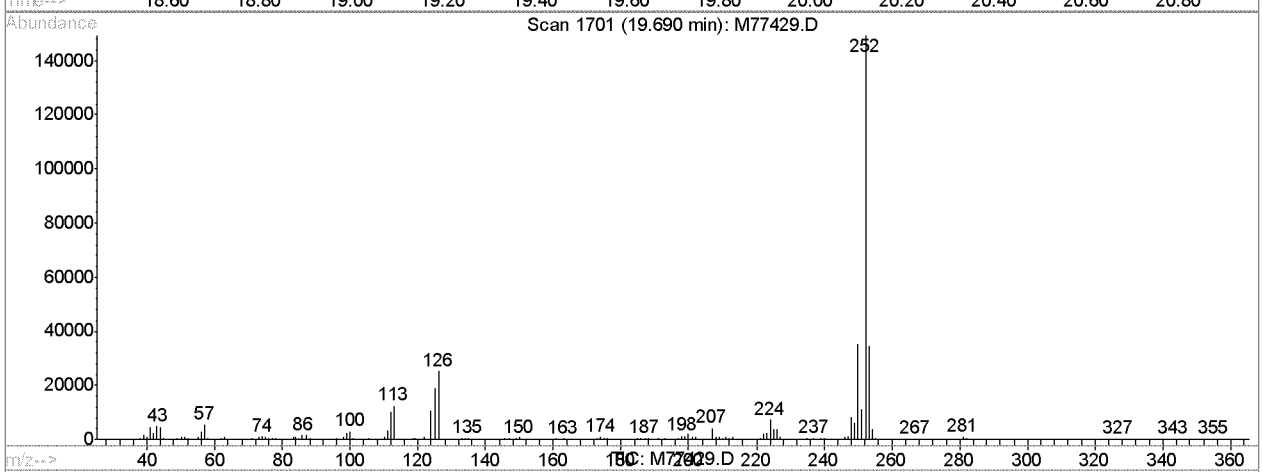
M77429.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:39 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.69min 13.62ppb m

response 250985

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	23.08
125.00	10.90	12.68
0.00	0.00	0.00

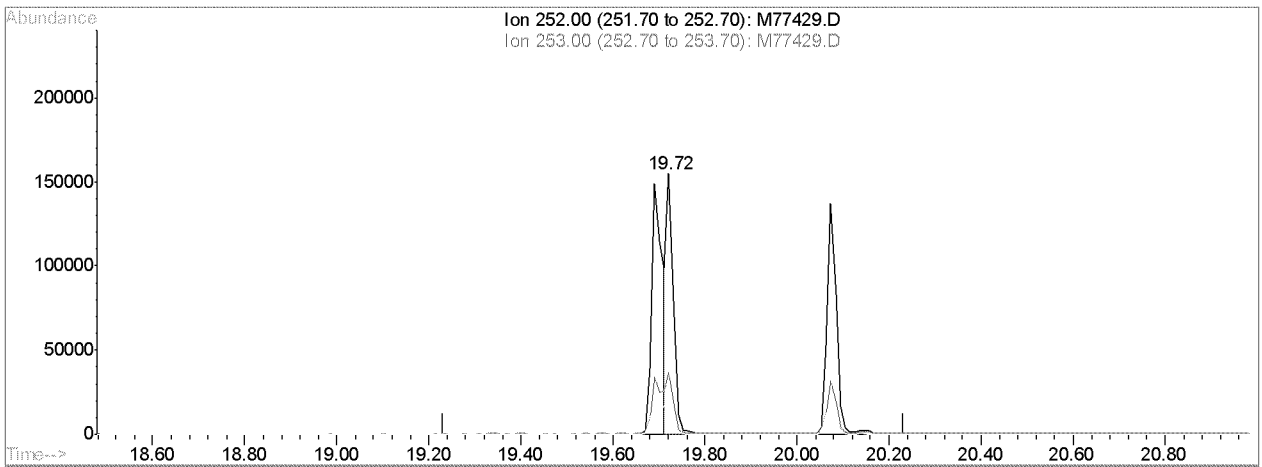
M77429.D MM3014.M Fri Nov 19 12:26:46 2010 GCMSM

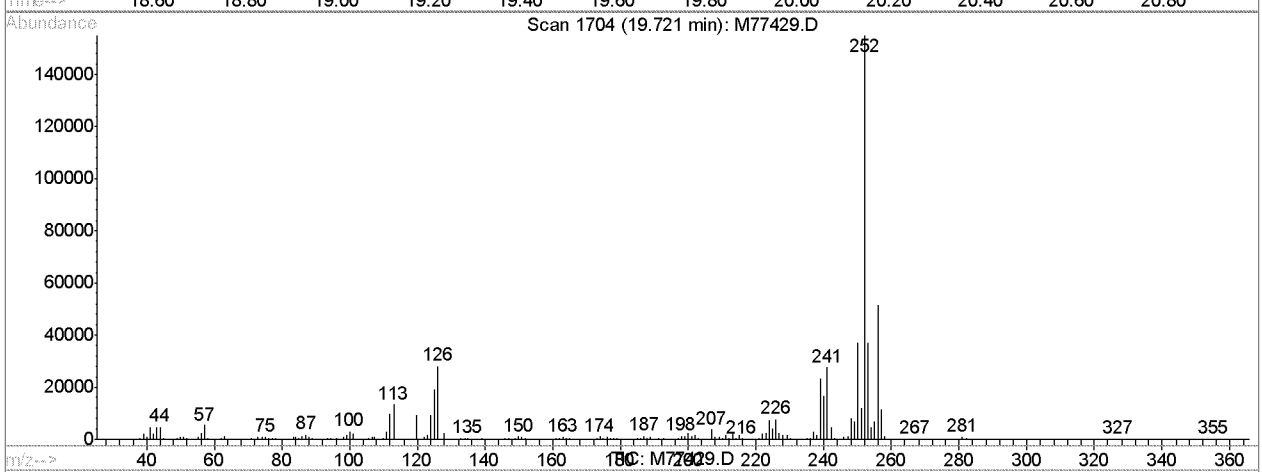
M77429.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77429.D Vial: 7
Acq On : 18 Nov 2010 1:13 pm Operator: olgaa
Sample : ic3014-10 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 13:39 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 8.96ppb m

response 150920

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	24.04
125.00	12.20	12.47
0.00	0.00	0.00

M77429.D MM3014.M Fri Nov 19 12:26:50 2010 GCMSM

M77429.D edits: Benzo[k]fluoranthene

JA61582

SII-SSA-0014-004442

M77430.D
Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/24/10 09:47

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77430.D Vial: 8
Acq On : 18 Nov 2010 1:44 pm Operator: olgaa
Sample : ic3014-25 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:11 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:39:39 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	155164	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	530818	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	337870	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	581798	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	574467	40.00	ppb	0.00
92) Perylene-d12	20.14	264	501314	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	155164	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	337870	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	581798	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	574467	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	574467	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	125073	26.64	ppb	0.00
Spiked Amount 50.000			Recovery = 53.28%			
8) Phenol-d5	4.99	99	149980	28.49	ppb	0.00
Spiked Amount 50.000			Recovery = 56.98%			
25) Nitrobenzene-d5	6.46	82	127507	26.41	ppb	0.00
Spiked Amount 50.000			Recovery = 52.82%			
51) 2-Fluorobiphenyl	9.83	172	294753	25.06	ppb	0.00
Spiked Amount 50.000			Recovery = 50.12%			
73) 2,4,6-Tribromophenol	12.68	330	28136	27.16	ppb	0.00
Spiked Amount 50.000			Recovery = 54.32%			
86) Terphenyl-d14	16.92	244	298292	26.99	ppb	0.00
Spiked Amount 50.000			Recovery = 53.98%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.32	88	63035	24.83	ppb	92
3) Pyridine	2.61	79	154294	27.12	ppb	91
4) N-Nitrosodimethylamine	2.56	42	95727	24.64	ppb	83
6) Indene	5.94	116	183964	25.84	ppb	99
7) Cumene	4.41	105	267826	25.83	ppb	98
9) Phenol	5.01	94	160385	27.13	ppb	90
10) Aniline	5.06	93	188321	26.13	ppb	98
11) bis(2-Chloroethyl)ether	5.16	93	123703	26.25	ppb	96
12) 2-Chlorophenol	5.22	128	134565	26.70	ppb	97
13) Decane	5.29	43	205701	22.89	ppb	96
14) 1,3-Dichlorobenzene	5.45	146	163163	26.09	ppb	96
15) 1,4-Dichlorobenzene	5.52	146	157420	25.59	ppb	98
16) Benzyl alcohol	5.76	108	88230	28.26	ppb	95
17) 1,2-Dichlorobenzene	5.82	146	149896	25.78	ppb	96
18) Acetophenone	6.20	105	167251	25.91	ppb	98
19) 2-Methylphenol	5.96	108	91060	27.09	ppb	100
20) 2,2'-oxybis(1-Chloropropan	6.03	121	44551	25.82	ppb	96
21) 3&4-Methylphenol	6.21	108	96373	27.51	ppb	91
22) n-Nitroso-di-n-propylamine	6.26	70	83502	24.65	ppb	96
23) Hexachloroethane	6.33	201	57559	26.94	ppb	96
26) Nitrobenzene	6.49	123	68230	26.02	ppb	99
27) Quinoline	8.38	129	239204	27.05	ppb	99
28) Isophorone	6.92	82	231721	26.52	ppb	92

(#) = qualifier out of range (m) = manual integration
M77430.D MM3014.M Thu Nov 18 14:11:54 2010 GCMSM

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77430.D Vial: 8
Acq On : 18 Nov 2010 1:44 pm Operator: olgaa
Sample : ic3014-25 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:11 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:39:39 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.05	139	74767	29.07	ppb		96
30)	2,4-Dimethylphenol	7.15	107	112184	26.22	ppb		96
31)	Benzoic acid	7.32	105	69163	32.70	ppb		94
32)	bis(2-Chloroethoxy)methane	7.34	93	143488	26.18	ppb		98
33)	2,4-Dichlorophenol	7.47	162	117760	28.62	ppb		97
34)	2,6-Dichlorophenol	7.90	162	113644	27.11	ppb		99
35)	1,3,5-Trichlorobenzene	7.06	180	142551	26.14	ppb		99
36)	1,2,4-Trichlorobenzene	7.63	180	136447	26.56	ppb		97
37)	1,2,3-Trichlorobenzene	8.08	180	134715	26.62	ppb		99
38)	Naphthalene	7.72	128	368975	25.85	ppb		99
39)	4-Chloroaniline	7.90	127	168530	27.59	ppb		96
40)	2,3-Dichloroaniline	9.67	161	132164	25.66	ppb		98
41)	Caprolactam	8.51	55	79640	25.43	ppb		96
42)	Hexachlorobutadiene	8.10	225	72830	26.18	ppb		99
43)	4-Chloro-3-methylphenol	8.85	107	108183	28.18	ppb		96
44)	2-Methylnaphthalene	9.04	142	276470	26.09	ppb		98
45)	1-Methylnaphthalene	9.25	142	261279	25.95	ppb		99
46)	Dimethylnaphthalene	10.27	156	231595	26.43	ppb		99
48)	Hexachlorocyclopentadiene	9.50	237	129908	54.93	ppb		99
49)	2,4,6-Trichlorophenol	9.67	196	88643	27.11	ppb		99
50)	2,4,5-Trichlorophenol	9.73	196	73596	26.41	ppb		98
52)	2-Chloronaphthalene	9.98	162	252813	25.44	ppb		99
53)	Biphenyl	9.98	154	308048	24.99	ppb		100
54)	2-Nitroaniline	10.27	65	71569	26.74	ppb		96
55)	Dimethylphthalate	10.75	163	285805	25.93	ppb		99
56)	Acenaphthylene	10.80	152	399992	26.33	ppb		99
57)	2,6-Dinitrotoluene	10.86	165	61128	26.94	ppb		92
58)	3-Nitroaniline	11.10	138	71188	26.92	ppb		92
59)	Acenaphthene	11.17	153	247547	25.46	ppb		94
60)	2,4-Dinitrophenol	11.31	184	60931	59.73	ppb		88
61)	4-Nitrophenol	11.47	109	30479	28.81	ppb	#	52
62)	Dibenzofuran	11.48	168	360388	25.80	ppb		88
63)	2,4-Dinitrotoluene	11.62	165	85750	28.75	ppb		97
64)	2,3,4,6-Tetrachlorophenol	11.83	232	76946	27.77	ppb		96
65)	Diethylphthalate	12.16	149	264459	25.09	ppb		100
66)	Fluorene	12.16	166	288340	25.94	ppb		99
67)	4-Chlorophenyl-phenylether	12.22	204	146937	25.25	ppb		96
68)	4-Nitroaniline	12.32	138	75848	28.05	ppb		95
70)	4,6-Dinitro-2-methylphenol	12.40	198	51904	29.47	ppb		75
71)	n-Nitrosodiphenylamine	12.47	169	211874	26.54	ppb		99
72)	1,2-Diphenylhydrazine	12.52	77	240384	24.09	ppb		94
74)	4-Bromophenyl-phenylether	13.17	248	84090	26.85	ppb		97
75)	Hexachlorobenzene	13.42	284	75941	25.63	ppb		98
76)	Pentachlorophenol	13.79	266	108776	59.00	ppb		98
77)	Phenanthrene	14.05	178	405646	25.11	ppb		99
78)	Anthracene	14.13	178	417538	26.07	ppb		98
79)	Carbazole	14.50	167	394220	26.70	ppb		97
80)	Di-n-butylphthalate	15.38	149	473907	27.21	ppb		98
81)	Fluoranthene	16.24	202	488911	26.41	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77430.D Vial: 8
Acq On : 18 Nov 2010 1:44 pm Operator: olgaa
Sample : ic3014-25 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:11 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:39:39 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

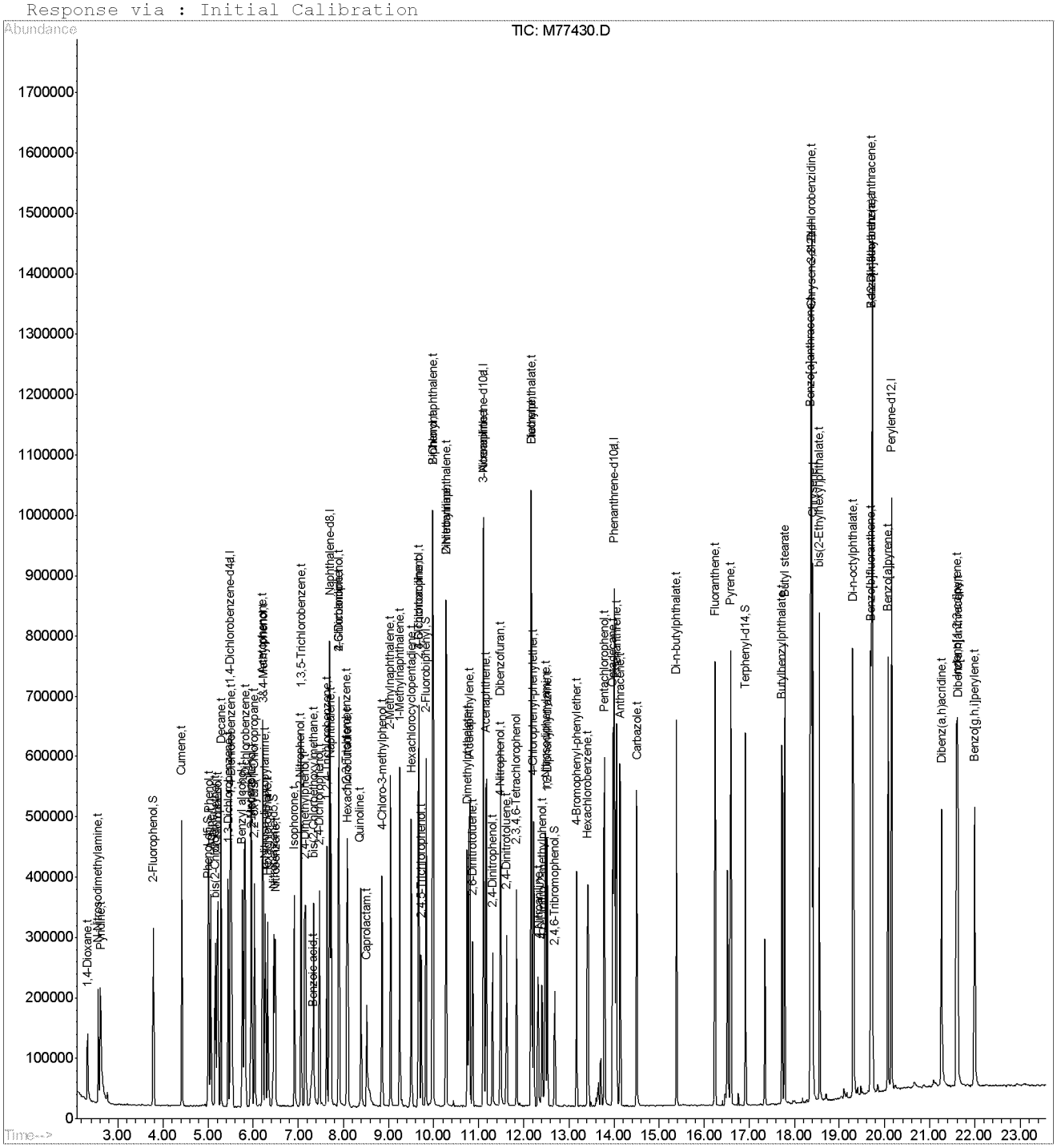
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.97	57	218167	22.90	ppb	98
84)	Pyrene	16.58	202	496121	26.43	ppb	98
85)	Butyl stearate	17.78	56	157084	23.21	ppb	97
87)	Butylbenzylphthalate	17.71	149	208276	27.95	ppb	100
88)	Benzo[a]anthracene	18.35	228	461261	26.02	ppb	99
89)	3,3'-Dichlorobenzidine	18.36	252	159510	28.65	ppb	99
90)	Chrysene	18.41	228	417574	25.92	ppb	100
91)	bis(2-Ethylhexyl)phthalate	18.55	149	273313	27.56	ppb	99
93)	Di-n-octylphthalate	19.30	149	477071	28.24	ppb	98
94)	Benzo[b]fluoranthene	19.70	252	471978	27.11	ppb	96
95)	Benzo[k]fluoranthene	19.72	252	353801m	23.99	ppb	
96)	Benzo[a]pyrene	20.07	252	406517	26.84	ppb	97
97)	Indeno[1,2,3-cd]pyrene	21.59	276	431791	26.71	ppb	96
98)	Dibenz(a,h)acridine	21.26	279	316617	27.47	ppb	100
99)	Dibenz[a,h]anthracene	21.61	278	340016	26.56	ppb	98
100)	7,12-Dimethylbenz(a)anthra	19.72	256	174248	28.88	ppb	97
101)	Benzo[g,h,i]perylene	22.00	276	365211	26.51	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77430.D Vial: 8
Acq On : 18 Nov 2010 1:44 pm Operator: olgaa
Sample : ic3014-25 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:11 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:39:39 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

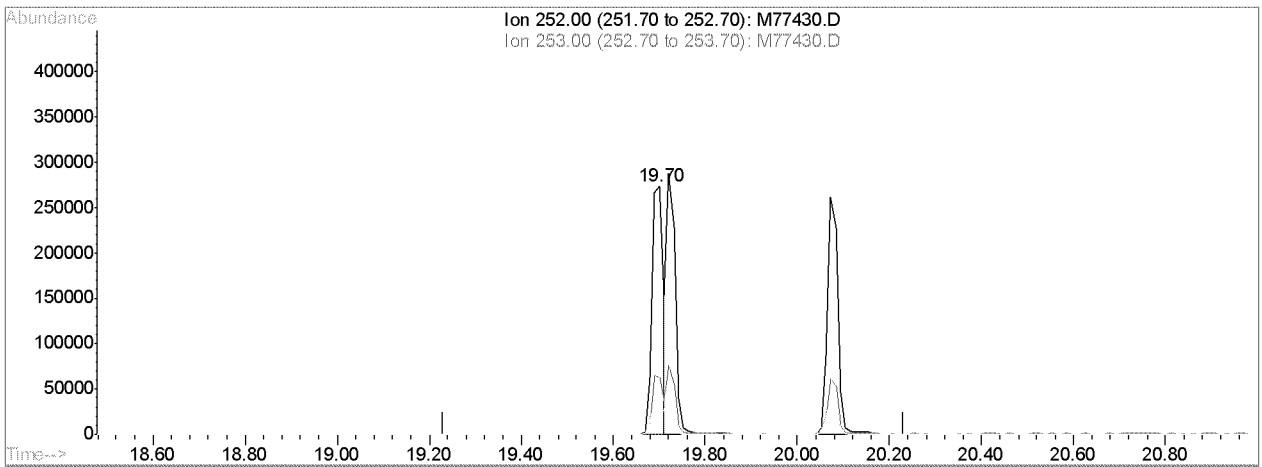
Sample Number: EM3014-IC3014
Lab FileID: M77430.D
Injection Time: 11/18/10 13:44
Method: SW846 8270C
Analyst approved: 11/22/10 12:55 Olga Azarihn
Supervisor approved: 11/24/10 09:47 Cheng-Hwan Ao

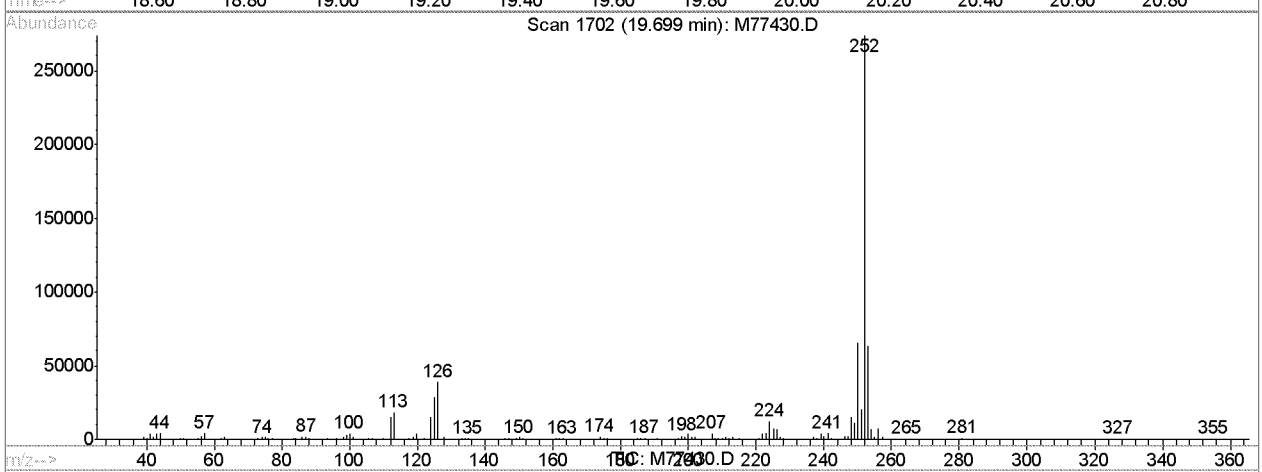
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		19.72	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77430.D Vial: 8
Acq On : 18 Nov 2010 1:44 pm Operator: olgaa
Sample : ic3014-25 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:09 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 13:39:39 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.70min 32.00ppb

response 471978

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	22.65
125.00	12.20	7.93
0.00	0.00	0.00

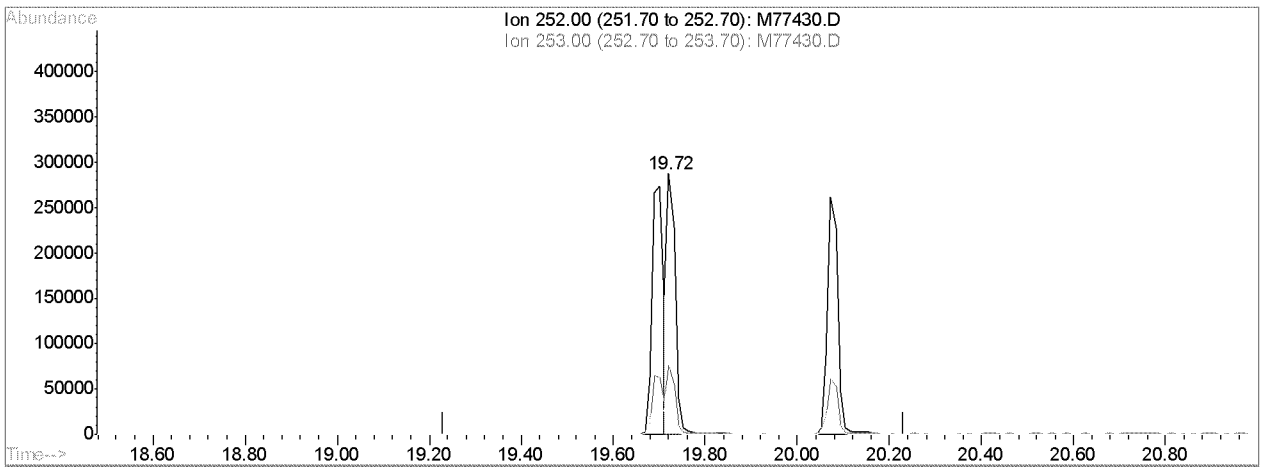
M77430.D MM3014.M Thu Nov 18 14:11:25 2010 GCMSM

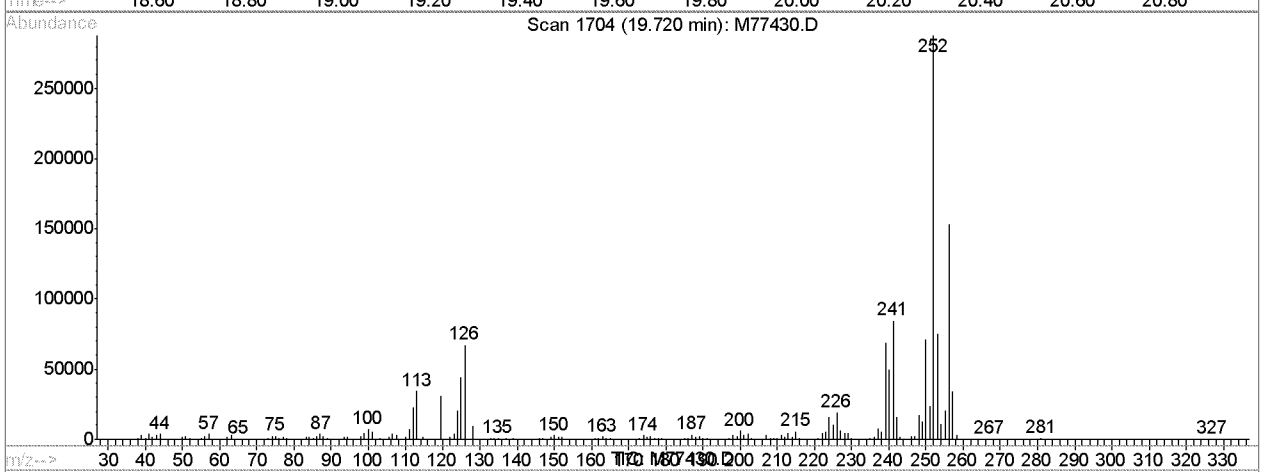
M77430.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3014\M77430.D Vial: 8
Acq On : 18 Nov 2010 1:44 pm Operator: olgaa
Sample : ic3014-25 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:11 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:55:45 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.72min 23.99ppb m

response 353801

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	26.23
125.00	12.20	15.35
0.00	0.00	0.00

M77430.D MM3014.M Fri Nov 19 12:27:11 2010 GCMSM

M77430.D edits: Benzo[k]fluoranthene

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77431.D Vial: 9
Acq On : 18 Nov 2010 2:16 pm Operator: olgaa
Sample : ic3014-80 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:45 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:12:06 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	167095	40.00	ppb	0.00
24) Naphthalene-d8	7.70	136	556023	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	351314	40.00	ppb	0.00
69) Phenanthrene-d10	14.02	188	585340	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	556470	40.00	ppb	0.00
92) Perylene-d12	20.15	264	506974	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	167095	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	351314	40.00	ppb	0.00
106) Phenanthrene-d10a	14.02	188	585340	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	556470	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	556470	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.78	112	413158	80.96	ppb	0.00
Spiked Amount 50.000			Recovery = 161.92%			
8) Phenol-d5	5.00	99	494315	85.48	ppb	0.00
Spiked Amount 50.000			Recovery = 170.96%			
25) Nitrobenzene-d5	6.46	82	402107	78.88	ppb	0.00
Spiked Amount 50.000			Recovery = 157.76%			
51) 2-Fluorobiphenyl	9.83	172	871432	71.23	ppb	0.00
Spiked Amount 50.000			Recovery = 142.46%			
73) 2,4,6-Tribromophenol	12.69	330	91407	86.45	ppb	0.00
Spiked Amount 50.000			Recovery = 172.90%			
86) Terphenyl-d14	16.91	244	860419	79.48	ppb	0.00
Spiked Amount 50.000			Recovery = 158.96%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.31	88	199795	73.16	ppb	99
3) Pyridine	2.59	79	452942	73.05	ppb	92
4) N-Nitrosodimethylamine	2.56	42	294073	70.46	ppb	78
6) Indene	5.95	116	556672	72.27	ppb	95
7) Cumene	4.41	105	800053	71.32	ppb	97
9) Phenol	5.02	94	541359	84.01	ppb	97
10) Aniline	5.06	93	538320	68.91	ppb	95
11) bis(2-Chloroethyl)ether	5.16	93	378756	74.11	ppb	99
12) 2-Chlorophenol	5.23	128	408494	74.55	ppb	95
13) Decane	5.29	43	577632	60.42	ppb	92
14) 1,3-Dichlorobenzene	5.45	146	487757	71.98	ppb	95
15) 1,4-Dichlorobenzene	5.53	146	469381	70.62	ppb	96
16) Benzyl alcohol	5.77	108	293832	85.78	ppb	91
17) 1,2-Dichlorobenzene	5.82	146	434897	69.15	ppb	99
18) Acetophenone	6.21	105	511063	73.13	ppb	94
19) 2-Methylphenol	5.97	108	281338	76.81	ppb	99
20) 2,2'-oxybis(1-Chloropropan	6.04	121	141209	75.65	ppb #	71
21) 3&4-Methylphenol	6.22	108	310976	81.27	ppb	85
22) n-Nitroso-di-n-propylamine	6.27	70	265755	73.00	ppb	93
23) Hexachloroethane	6.33	201	177317	76.22	ppb	99
26) Nitrobenzene	6.49	123	217840	78.86	ppb	96
27) Quinoline	8.39	129	752899	80.34	ppb	99
28) Isophorone	6.92	82	715185	77.48	ppb	96

(#) = qualifier out of range (m) = manual integration
M77431.D MM3014.M Thu Nov 18 14:46:10 2010 GCMSM Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77431.D Vial: 9
Acq On : 18 Nov 2010 2:16 pm Operator: olgaa
Sample : ic3014-80 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:45 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:12:06 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
29) 2-Nitrophenol	7.06	139	234636	85.11	ppb	95
30) 2,4-Dimethylphenol	7.15	107	363858	80.63	ppb	98
31) Benzoic acid	7.39	105	268197	115.96	ppb	97
32) bis(2-Chloroethoxy)methane	7.35	93	442268	76.52	ppb	98
33) 2,4-Dichlorophenol	7.47	162	371969	84.55	ppb	97
34) 2,6-Dichlorophenol	7.91	162	352709	79.38	ppb	97
35) 1,3,5-Trichlorobenzene	7.07	180	414316	72.05	ppb	96
36) 1,2,4-Trichlorobenzene	7.63	180	412179	75.92	ppb	98
37) 1,2,3-Trichlorobenzene	8.09	180	397511	74.30	ppb	98
38) Naphthalene	7.73	128	1065328	70.90	ppb	98
39) 4-Chloroaniline	7.91	127	497646	76.63	ppb	96
40) 2,3-Dichloroaniline	9.68	161	398181	73.54	ppb	96
41) Caprolactam	8.56	55	283227	86.11	ppb	95
42) Hexachlorobutadiene	8.11	225	219774	74.92	ppb	98
43) 4-Chloro-3-methylphenol	8.87	107	347182	84.78	ppb	94
44) 2-Methylnaphthalene	9.05	142	819992	73.42	ppb	98
45) 1-Methylnaphthalene	9.25	142	782348	73.78	ppb	98
46) Dimethylnaphthalene	10.28	156	686008	74.14	ppb	97
48) Hexachlorocyclopentadiene	9.50	237	399453	160.20	ppb	99
49) 2,4,6-Trichlorophenol	9.68	196	271500	78.90	ppb	98
50) 2,4,5-Trichlorophenol	9.74	196	237829	81.43	ppb	97
52) 2-Chloronaphthalene	9.98	162	730296	70.50	ppb	98
53) Biphenyl	9.99	154	851494	66.44	ppb	98
54) 2-Nitroaniline	10.29	65	221189	78.70	ppb	91
55) Dimethylphthalate	10.76	163	865681	75.13	ppb	99
56) Acenaphthylene	10.80	152	1125959	70.75	ppb	97
57) 2,6-Dinitrotoluene	10.87	165	205561	86.17	ppb	93
58) 3-Nitroaniline	11.12	138	243022	87.43	ppb	87
59) Acenaphthene	11.17	153	715462	70.58	ppb	97
60) 2,4-Dinitrophenol	11.31	184	253412	231.40	ppb	92
61) 4-Nitrophenol	11.49	109	101136	89.67	ppb	98
62) Dibenzofuran	11.49	168	1014262	69.51	ppb	98
63) 2,4-Dinitrotoluene	11.64	165	284554	89.82	ppb	95
64) 2,3,4,6-Tetrachlorophenol	11.84	232	245546	83.91	ppb	95
65) Diethylphthalate	12.18	149	752115	68.59	ppb	96
66) Fluorene	12.17	166	833261	71.71	ppb	98
67) 4-Chlorophenyl-phenylether	12.23	204	434588	71.72	ppb	95
68) 4-Nitroaniline	12.35	138	253323	88.55	ppb	95
70) 4,6-Dinitro-2-methylphenol	12.42	198	196909	107.92	ppb	97
71) n-Nitrosodiphenylamine	12.48	169	615595	75.97	ppb	98
72) 1,2-Diphenylhydrazine	12.53	77	757785	75.88	ppb	92
74) 4-Bromophenyl-phenylether	13.18	248	260108	81.69	ppb	94
75) Hexachlorobenzene	13.43	284	233022	77.88	ppb	96
76) Pentachlorophenol	13.80	266	332873	174.96	ppb	98
77) Phenanthrene	14.06	178	1141842	70.20	ppb	97
78) Anthracene	14.15	178	1173675	72.39	ppb	98
79) Carbazole	14.51	167	1129005	75.27	ppb	99
80) Di-n-butylphthalate	15.39	149	1339483	75.49	ppb	98
81) Fluoranthene	16.25	202	1349147	71.87	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3014\M77431.D Vial: 9
Acq On : 18 Nov 2010 2:16 pm Operator: olgaa
Sample : ic3014-80 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:45 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:12:06 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

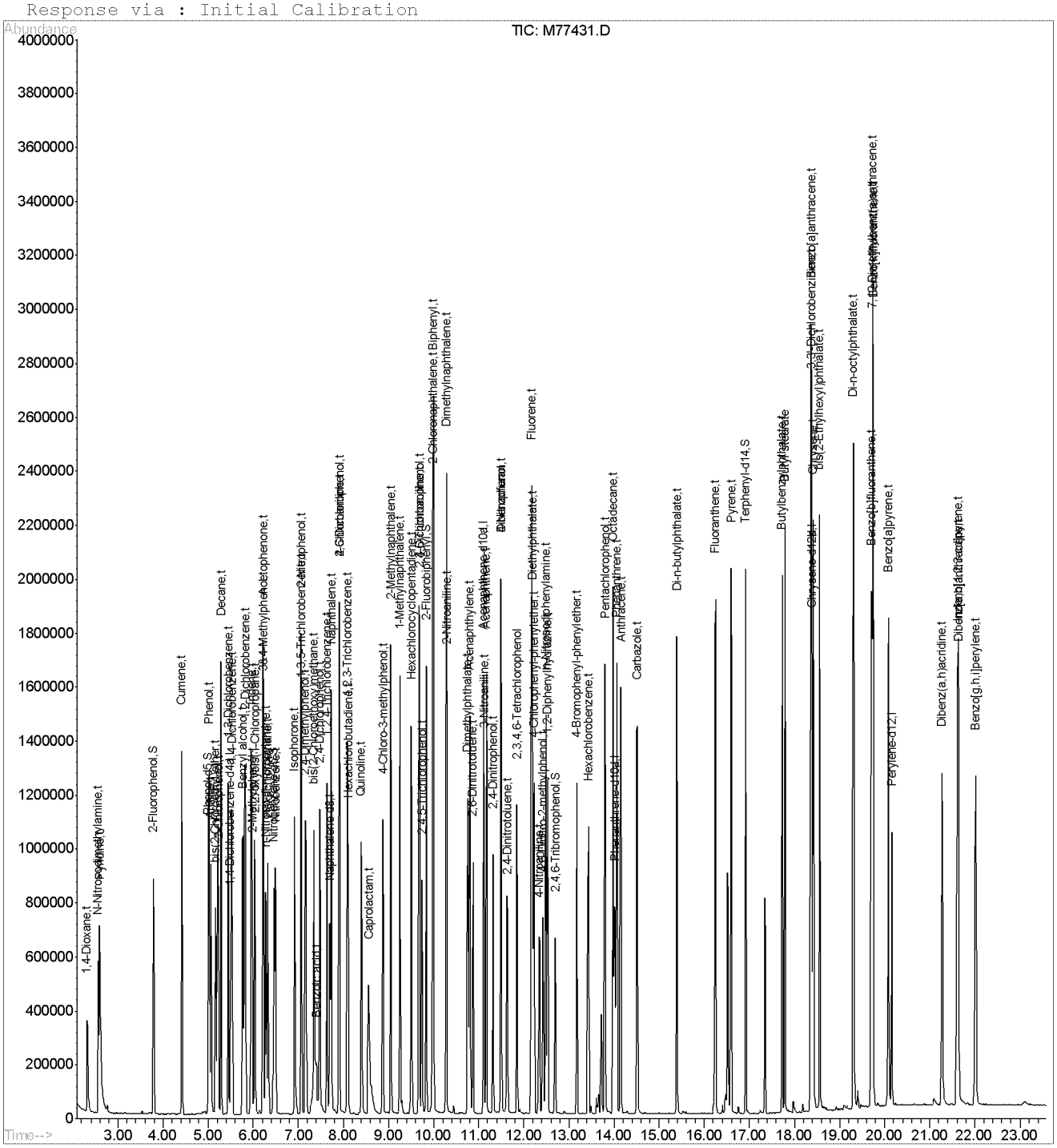
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	13.97	57	640717	67.67	ppb	95
84)	Pyrene	16.59	202	1321856	72.10	ppb	97
85)	Butyl stearate	17.78	56	453323	69.87	ppb	93
87)	Butylbenzylphthalate	17.72	149	636216	86.69	ppb	91
88)	Benzo[a]anthracene	18.36	228	1240039	71.80	ppb	96
89)	3,3'-Dichlorobenzidine	18.37	252	453582	82.38	ppb	96
90)	Chrysene	18.41	228	1143532	72.90	ppb	95
91)	bis(2-Ethylhexyl)phthalate	18.55	149	801992	82.29	ppb	98
93)	Di-n-octylphthalate	19.30	149	1366928	78.55	ppb	95
94)	Benzo[b]fluoranthene	19.71	252	1240069	69.60	ppb	97
95)	Benzo[k]fluoranthene	19.74	252	988017	66.63	ppb	94
96)	Benzo[a]pyrene	20.09	252	1134171	73.29	ppb	97
97)	Indeno[1,2,3-cd]pyrene	21.61	276	1194144	72.34	ppb	98
98)	Dibenz(a,h)acridine	21.27	279	927831	78.50	ppb	98
99)	Dibenz[a,h]anthracene	21.63	278	926751	70.94	ppb	95
100)	7,12-Dimethylbenz(a)anthra	19.73	256	506879	81.26	ppb	98
101)	Benzo[g,h,i]perylene	22.02	276	1028193	73.16	ppb	95

(#) = qualifier out of range (m) = manual integration
M77431.D MM3014.M Thu Nov 18 14:46:11 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3014\M77431.D Vial: 9
Acq On : 18 Nov 2010 2:16 pm Operator: olgaa
Sample : ic3014-80 Inst : MSM
Misc : op46685,em3014, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 18 14:45 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Thu Nov 18 14:12:06 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77433.D Vial: 2
Acq On : 18 Nov 2010 3:02 pm Operator: olgaa
Sample : ic3015-100 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:35 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

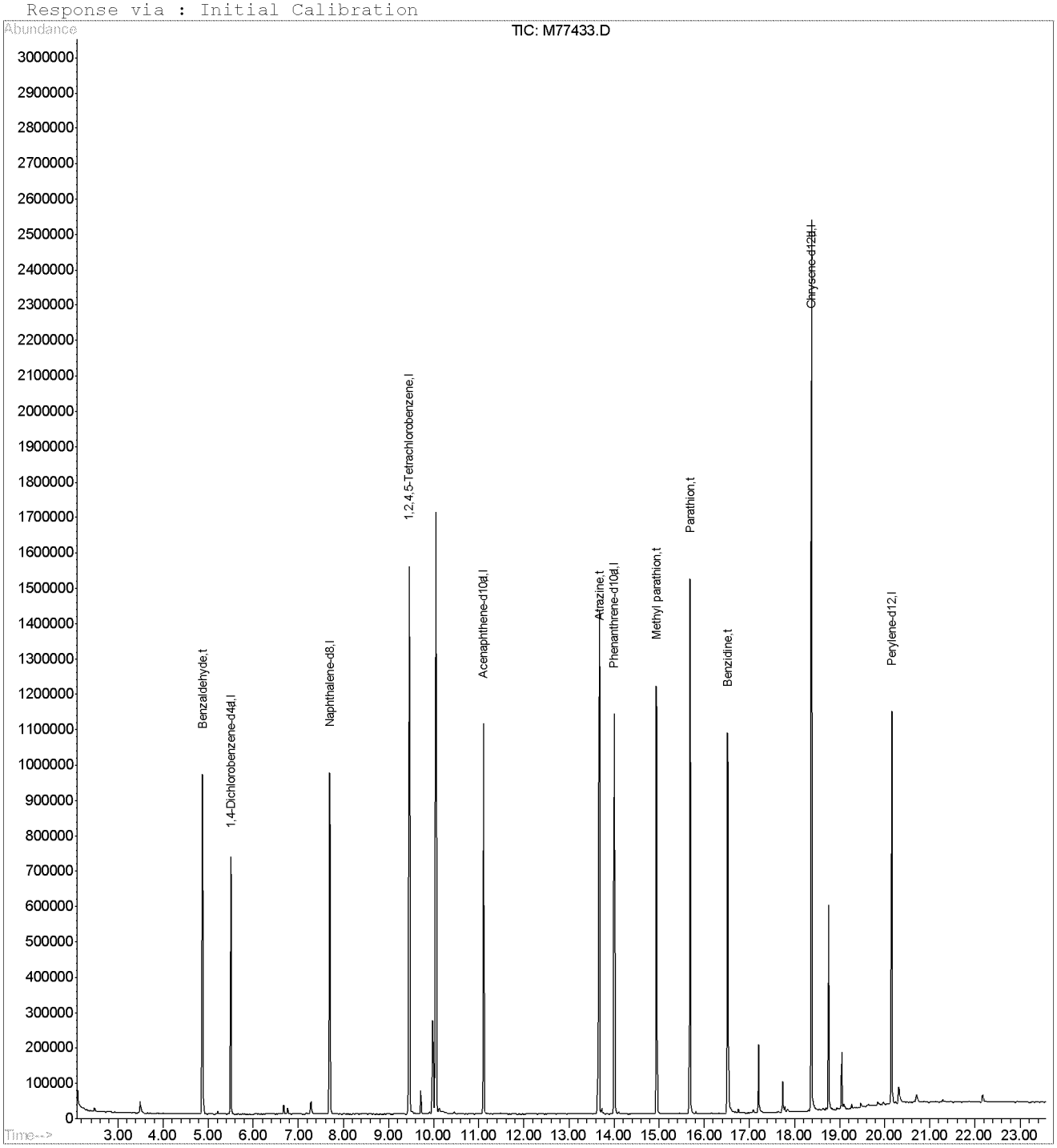
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.51	152	199970	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	686758	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	436213	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	734193	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	698187	40.00	ppb	0.00
92) Perylene-d12	20.15	264	633511	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.51	152	199970	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	436213	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	734193	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	698187	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	698187	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.88	105	281096	100.00	ppb	98
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	533443	100.00	ppb	98
107) Atrazine	13.67	215	199114	100.00	ppb	79
108) Methyl parathion	14.94	109	341444	100.00	ppb	91
109) Parathion	15.68	109	210576	100.00	ppb	82
111) Benzidine	16.51	184	731077	100.00	ppb	98

(#) = qualifier out of range (m) = manual integration
M77433.D MM3014.M Fri Nov 19 12:35:53 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77433.D Vial: 2
Acq On : 18 Nov 2010 3:02 pm Operator: olgaa
Sample : ic3015-100 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:35 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77434.D Vial: 3
Acq On : 18 Nov 2010 3:33 pm Operator: olgaa
Sample : ic3015-80 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:36 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

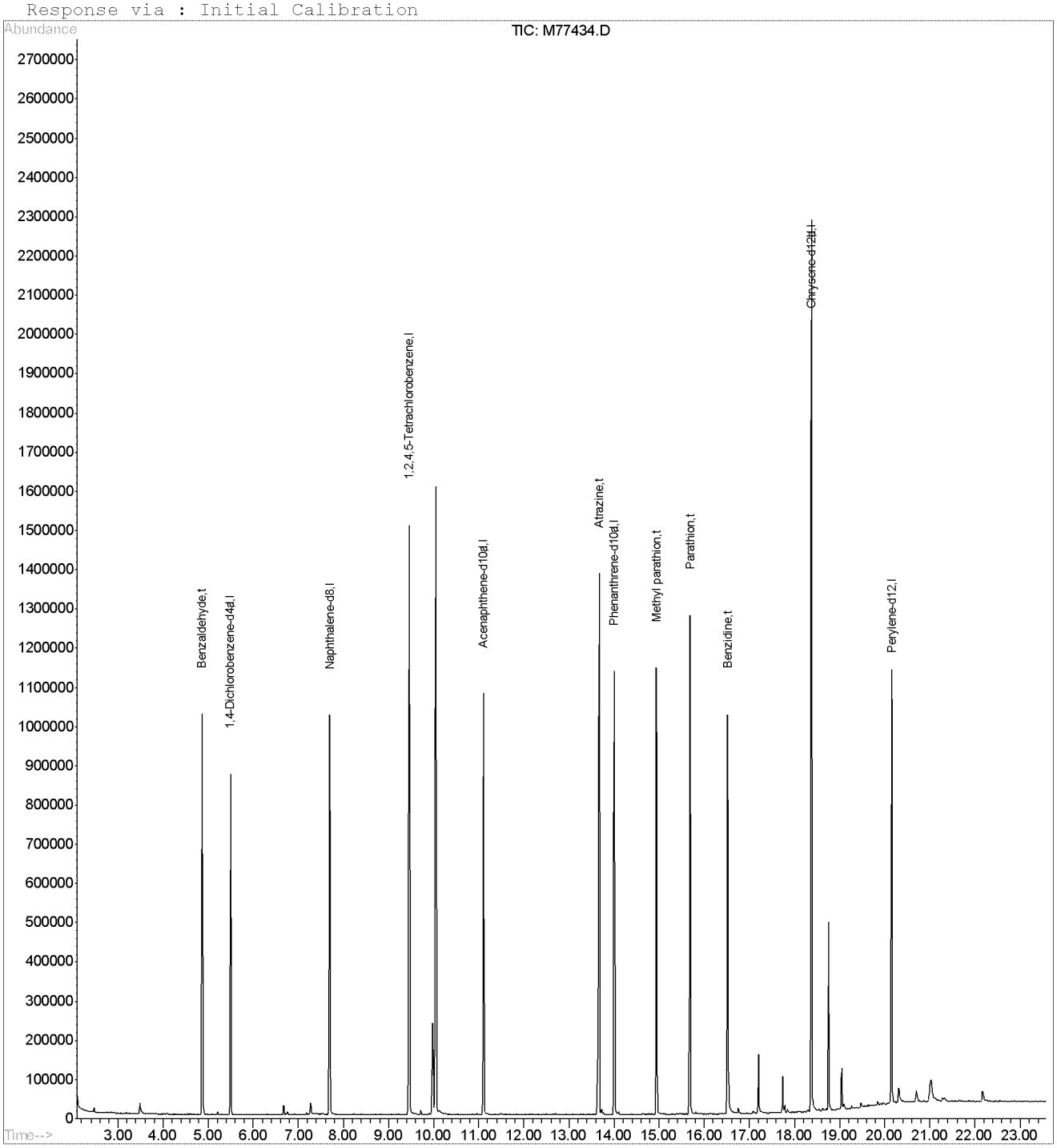
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	209705	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	708748	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	439327	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	742407	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	699469	40.00	ppb	0.00
92) Perylene-d12	20.15	264	633022	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	209705	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.11	164	439327	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	742407	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	699469	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	699469	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	270658	91.82	ppb	96
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	489145	91.05	ppb	99
107) Atrazine	13.66	215	179780	89.29	ppb #	78
108) Methyl parathion	14.94	109	301212	87.24	ppb	91
109) Parathion	15.68	109	185367	87.05	ppb	78
111) Benzidine	16.51	184	616732	84.20	ppb	98

(#) = qualifier out of range (m) = manual integration
M77434.D MM3014.M Fri Nov 19 12:36:42 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77434.D Vial: 3
Acq On : 18 Nov 2010 3:33 pm Operator: olgaa
Sample : ic3015-80 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:36 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

SII-SSA-0014-004457

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77435.D Vial: 4
Acq On : 18 Nov 2010 4:44 pm Operator: olgaa
Sample : icc3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:37 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

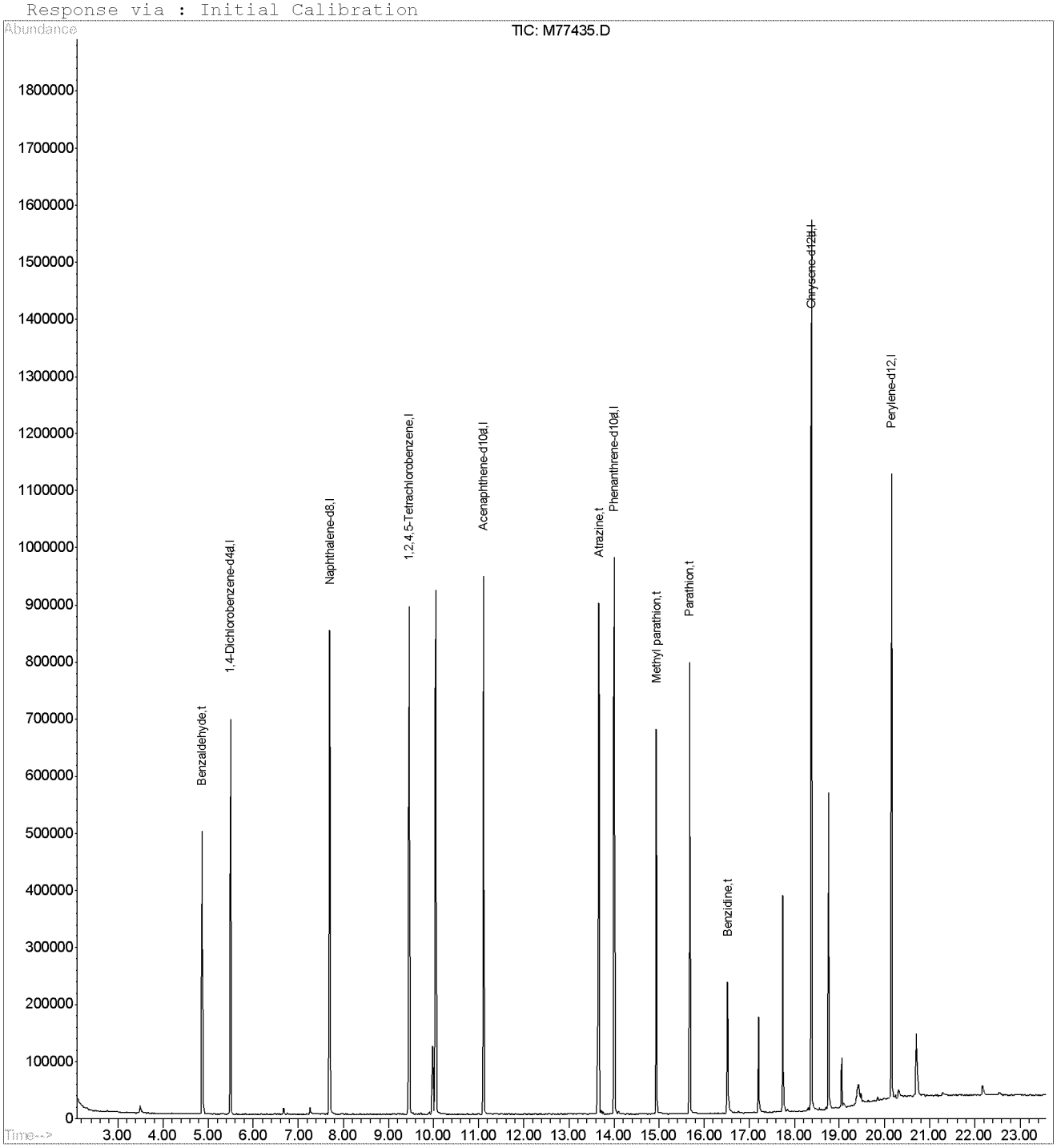
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	177581	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	599756	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	377668	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	654653	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	667776	40.00	ppb	0.00
92) Perylene-d12	20.14	264	571980	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	177581	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	377668	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	654653	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	667776	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	667776	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	140616	56.33	ppb	98
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	282862	61.25	ppb	99
107) Atrazine	13.65	215	103496	58.29	ppb #	79
108) Methyl parathion	14.94	109	163624	53.74	ppb	88
109) Parathion	15.67	109	103564	55.16	ppb	88
111) Benzidine	16.51	184	158339	22.64	ppb	98

(#) = qualifier out of range (m) = manual integration
M77435.D MM3014.M Fri Nov 19 12:37:28 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77435.D Vial: 4
Acq On : 18 Nov 2010 4:44 pm Operator: olgaa
Sample : icc3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:37 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77436.D Vial: 5
Acq On : 18 Nov 2010 5:16 pm Operator: olgaa
Sample : ic3015-25 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:37 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	168953	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	577688	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	370571	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	639501	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	667723	40.00	ppb	0.00
92) Perylene-d12	20.14	264	563421	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	168953	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	370571	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	639501	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	667723	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	667723	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	66851	28.15	ppb	95
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	142824	31.52	ppb	98
107) Atrazine	13.65	215	51118	29.47	ppb	80
108) Methyl parathion	14.93	109	70272	23.63	ppb	84
109) Parathion	15.67	109	46545	25.38	ppb	83
111) Benzidine	16.51	184	41079	5.88	ppb	98

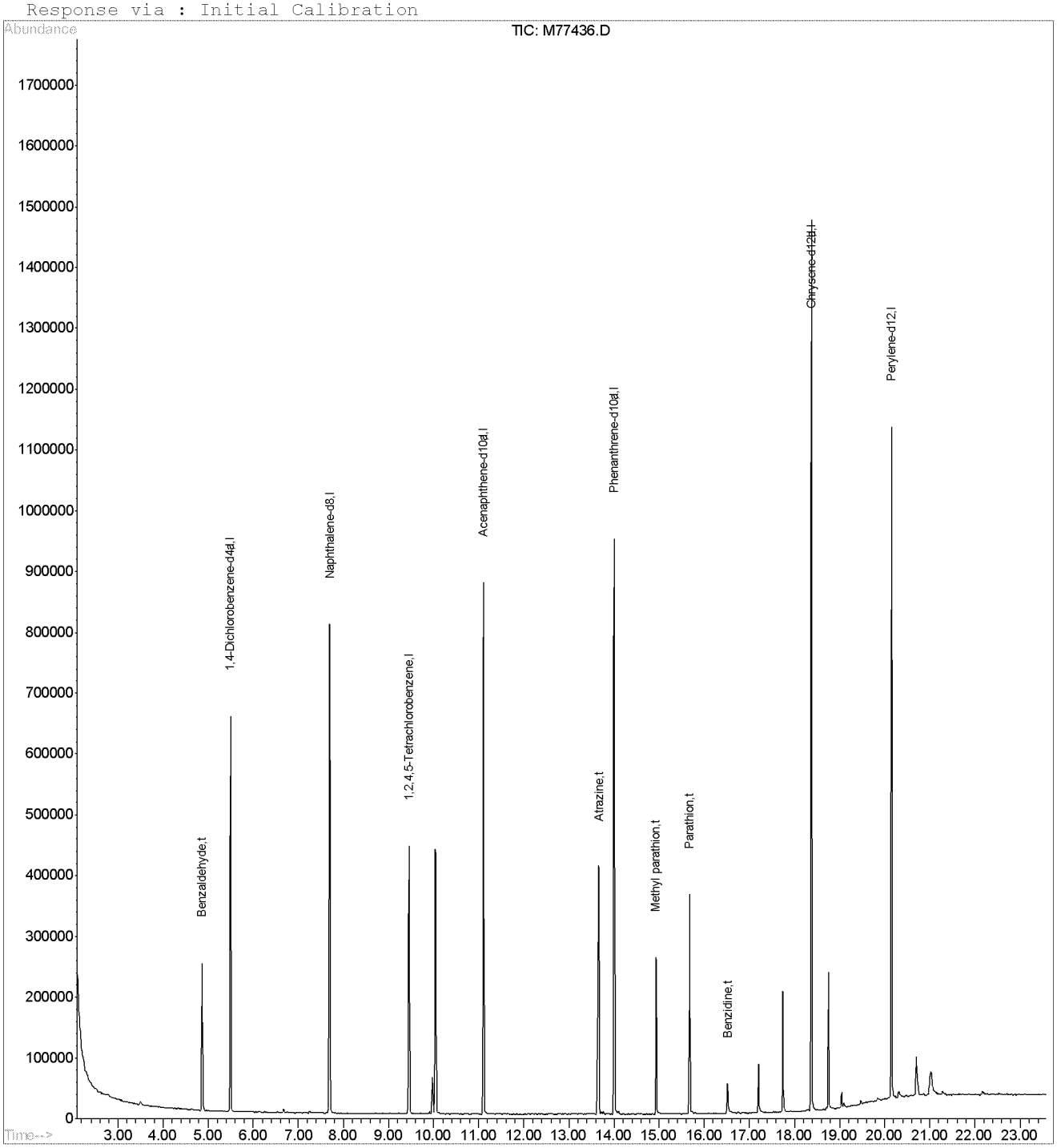
(#) = qualifier out of range (m) = manual integration
M77436.D MM3014.M Fri Nov 19 12:38:12 2010 GCMSM Page 1

ACCUTEST LABORATORIES JA61582

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77436.D Vial: 5
Acq On : 18 Nov 2010 5:16 pm Operator: olgaa
Sample : ic3015-25 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:37 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77437.D Vial: 6
Acq On : 18 Nov 2010 5:47 pm Operator: olgaa
Sample : ic3015-10 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:38 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

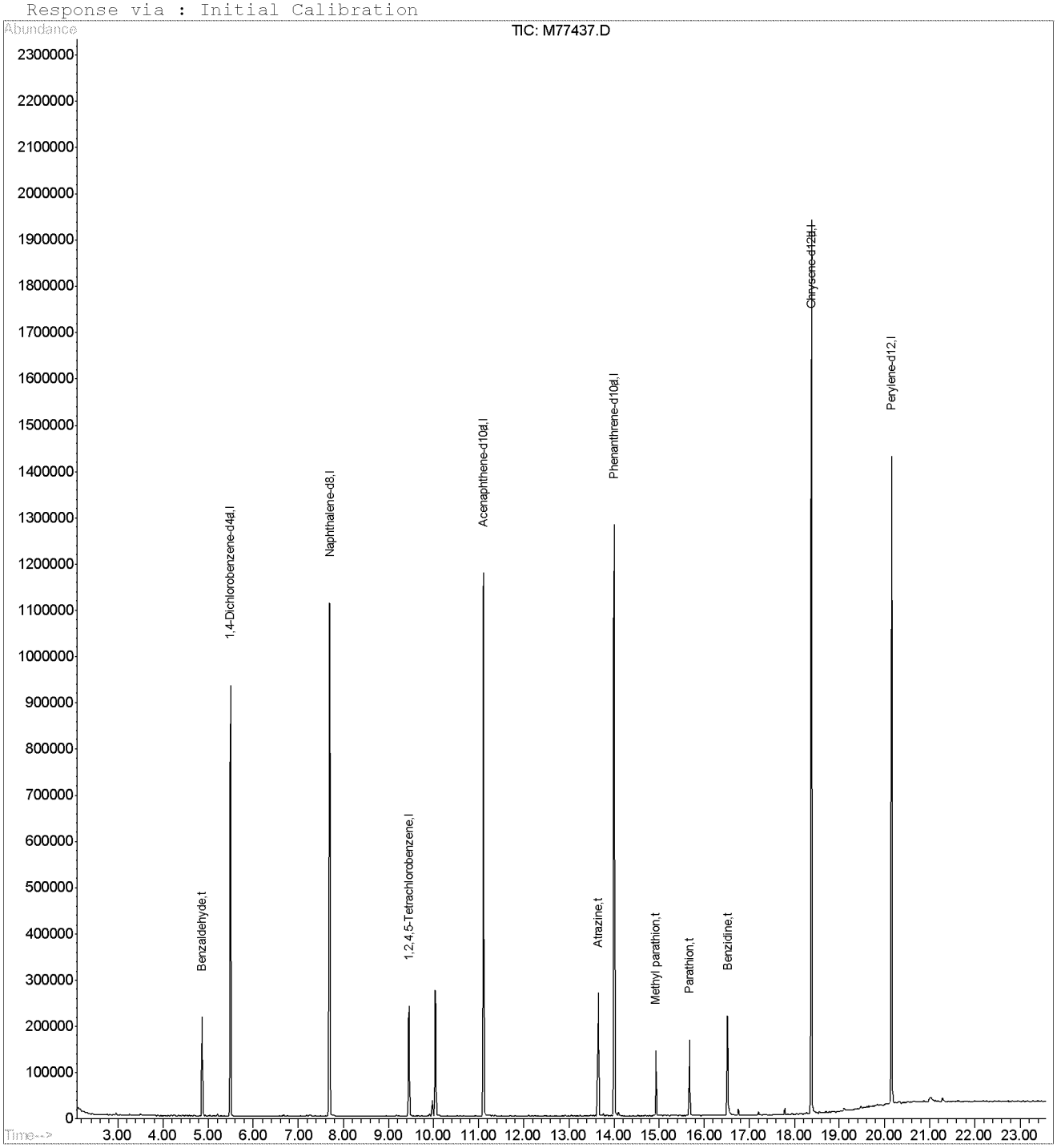
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	254151	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	819526	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	515426	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	888684	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	908609	40.00	ppb	0.00
92) Perylene-d12	20.14	264	767510	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	254151	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	515426	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	888684	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	908609	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	908609	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	59041	16.53	ppb	95
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	81599	12.95	ppb	99
107) Atrazine	13.64	215	27259	11.31	ppb #	82
108) Methyl parathion	14.93	109	33373	8.07	ppb	87
109) Parathion	15.67	109	21826	8.56	ppb	85
111) Benzidine	16.51	184	152957	16.08	ppb	98

(#) = qualifier out of range (m) = manual integration
M77437.D MM3014.M Fri Nov 19 12:38:54 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77437.D Vial: 6
Acq On : 18 Nov 2010 5:47 pm Operator: olgaa
Sample : ic3015-10 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:38 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77438.D Vial: 7
Acq On : 18 Nov 2010 6:19 pm Operator: olgaa
Sample : ic3015-5 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:39 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

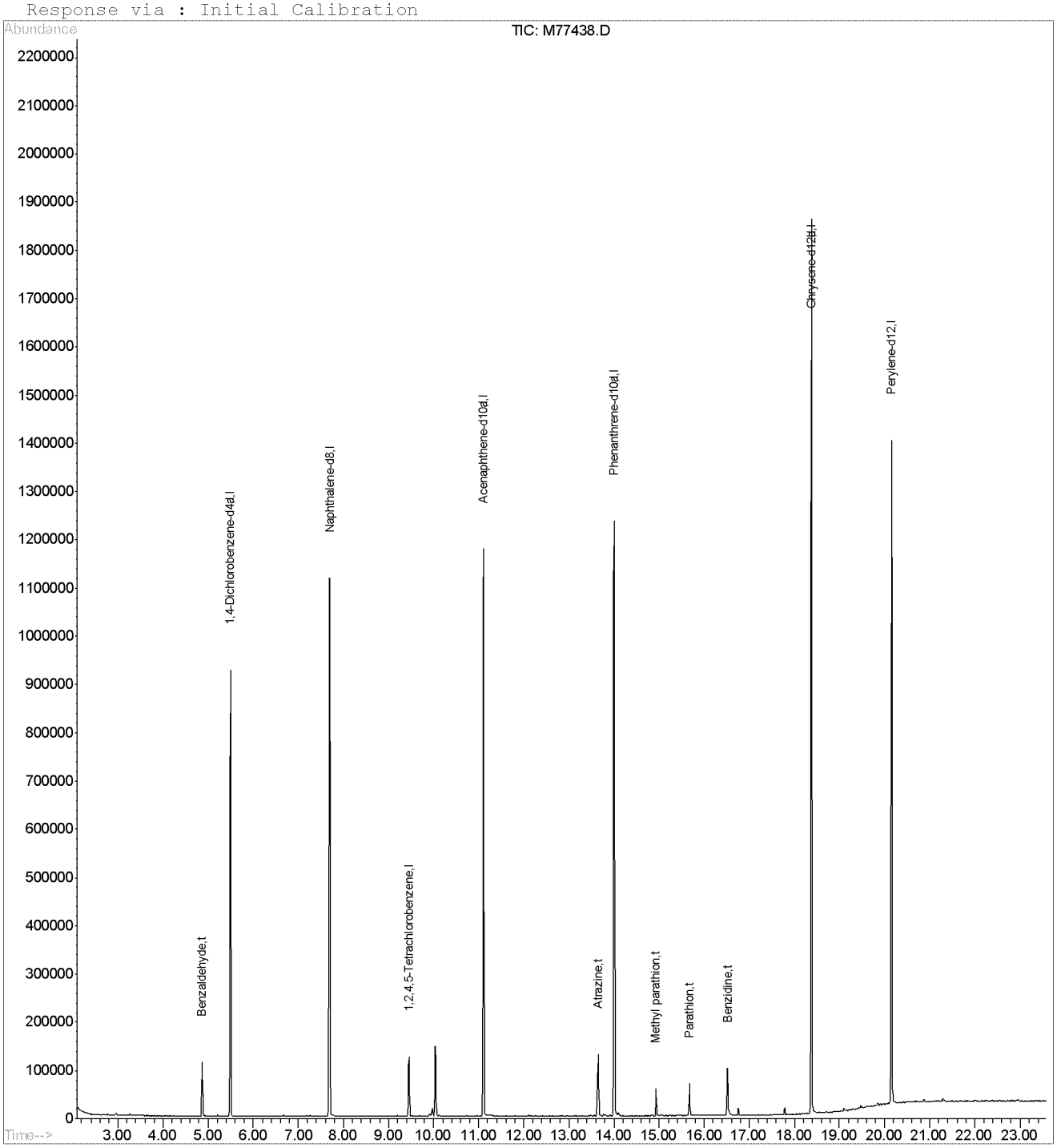
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	253333	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	817760	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	516268	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	891706	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	909020	40.00	ppb	0.00
92) Perylene-d12	20.14	264	765513	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	253333	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	516268	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	891706	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	909020	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	909020	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	31639	8.88	ppb	97
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	42689	6.76	ppb	99
107) Atrazine	13.64	215	13578	5.61	ppb	79
108) Methyl parathion	14.93	109	12948	3.12	ppb	90
109) Parathion	15.67	109	9619	3.76	ppb	85
111) Benzidine	16.51	184	73493	7.72	ppb	98

(#) = qualifier out of range (m) = manual integration
M77438.D MM3014.M Fri Nov 19 12:40:04 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77438.D Vial: 7
Acq On : 18 Nov 2010 6:19 pm Operator: olgaa
Sample : ic3015-5 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:39 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77439.D Vial: 8
Acq On : 18 Nov 2010 6:50 pm Operator: olgaa
Sample : ic3015-2 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:40 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

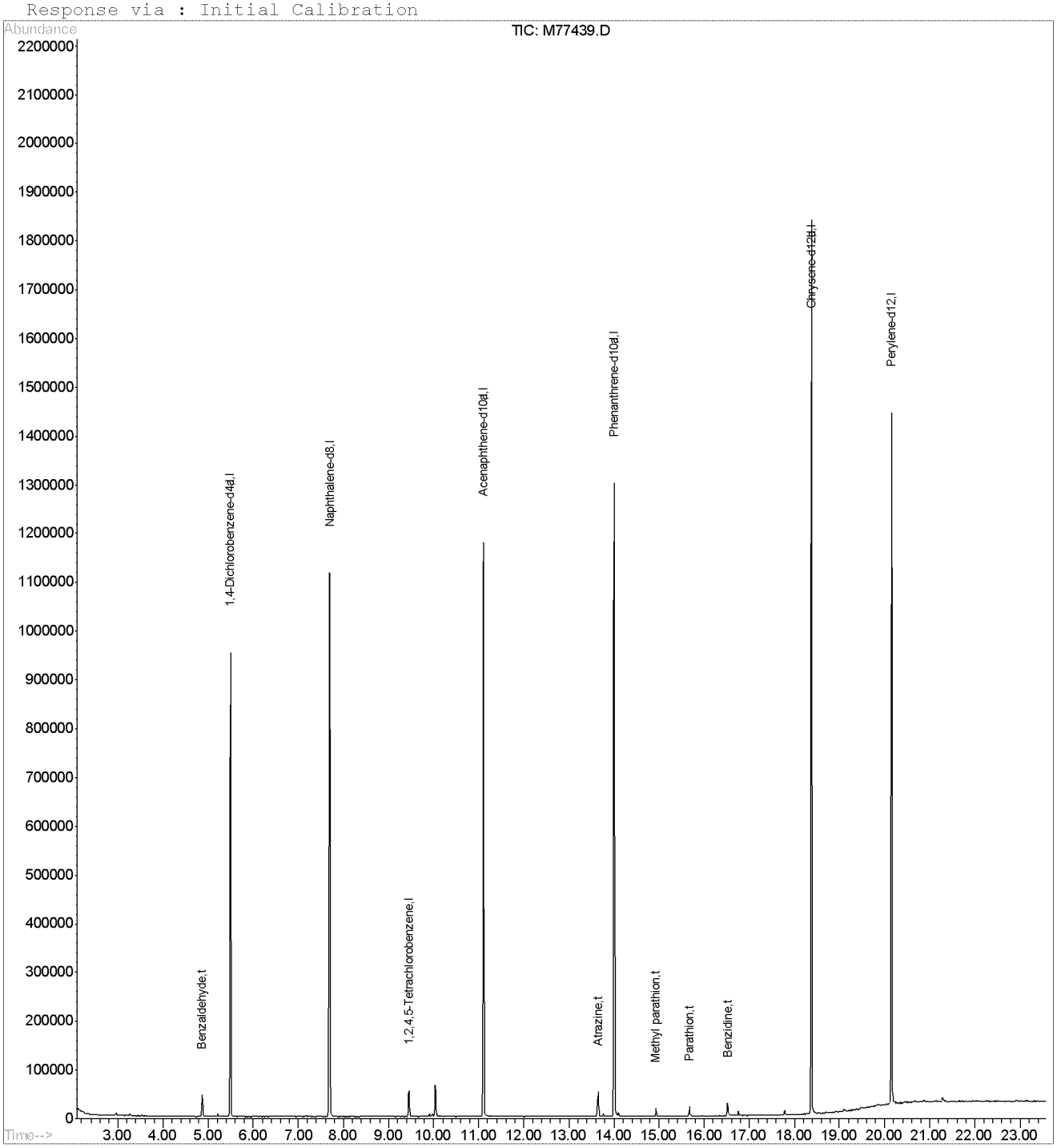
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	254649	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	827148	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	526450	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	894436	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	916916	40.00	ppb	0.00
92) Perylene-d12	20.14	264	764227	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	254649	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	526450	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	894436	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	916916	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	916916	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	13002	3.63	ppb	91
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	18132	2.82	ppb	97
107) Atrazine	13.64	215	5729	2.36	ppb	79
108) Methyl parathion	14.93	109	4045	0.97	ppb	87
109) Parathion	15.67	109	3129	1.22	ppb	89
111) Benzidine	16.51	184	24860	2.59	ppb	96

(#) = qualifier out of range (m) = manual integration
M77439.D MM3014.M Fri Nov 19 12:40:38 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77439.D Vial: 8
Acq On : 18 Nov 2010 6:50 pm Operator: olgaa
Sample : ic3015-2 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:40 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

SII-SSA-0014-004467

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77440.D Vial: 9
Acq On : 18 Nov 2010 7:21 pm Operator: olgaa
Sample : ic3015-1 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:40 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

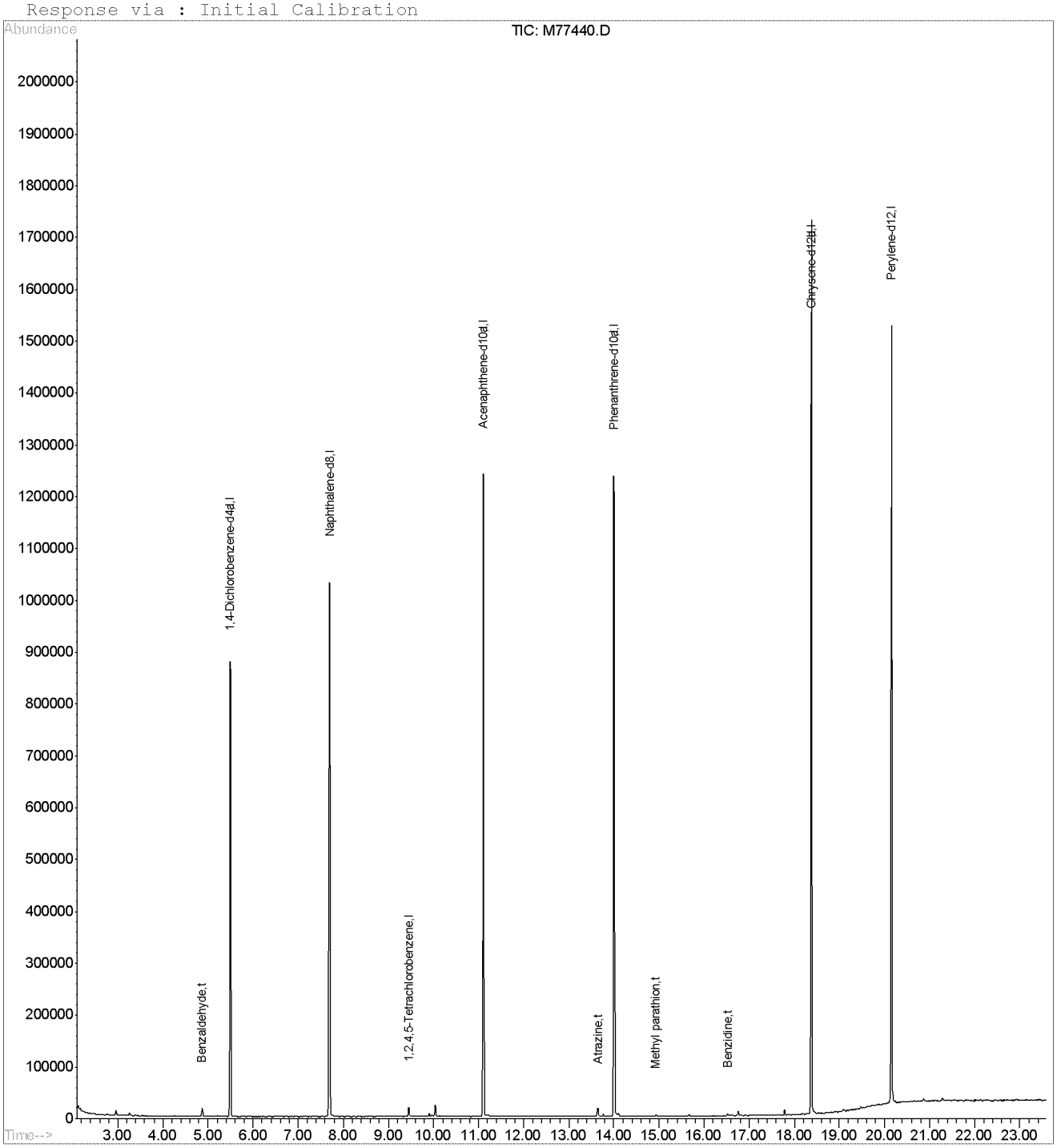
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	255864	40.00	ppb	0.00
24) Naphthalene-d8	7.70	136	820729	40.00	ppb	0.00
47) Acenaphthene-d10	11.10	164	522076	40.00	ppb	0.00
69) Phenanthrene-d10	14.00	188	891937	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	921166	40.00	ppb	0.00
92) Perylene-d12	20.15	264	762335	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	255864	40.00	ppb	0.00
104) Acenaphthene-d10a	11.10	164	522076	40.00	ppb	0.00
106) Phenanthrene-d10a	14.00	188	891937	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	921166	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	921166	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	4982	1.39	ppb	95
105) 1,2,4,5-Tetrachlorobenzene	9.46	216	6355	1.00	ppb	97
107) Atrazine	13.65	215	1924	0.80	ppb #	76
108) Methyl parathion	14.93	109	1174	0.28	ppb	81
111) Benzidine	16.51	184	6787	0.70	ppb	97

(#) = qualifier out of range (m) = manual integration
M77440.D MM3014.M Fri Nov 19 12:41:15 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77440.D Vial: 9
Acq On : 18 Nov 2010 7:21 pm Operator: olgaa
Sample : ic3015-1 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 12:40 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 12:35:07 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77442.D Vial: 11
Acq On : 18 Nov 2010 8:25 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 13:06 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

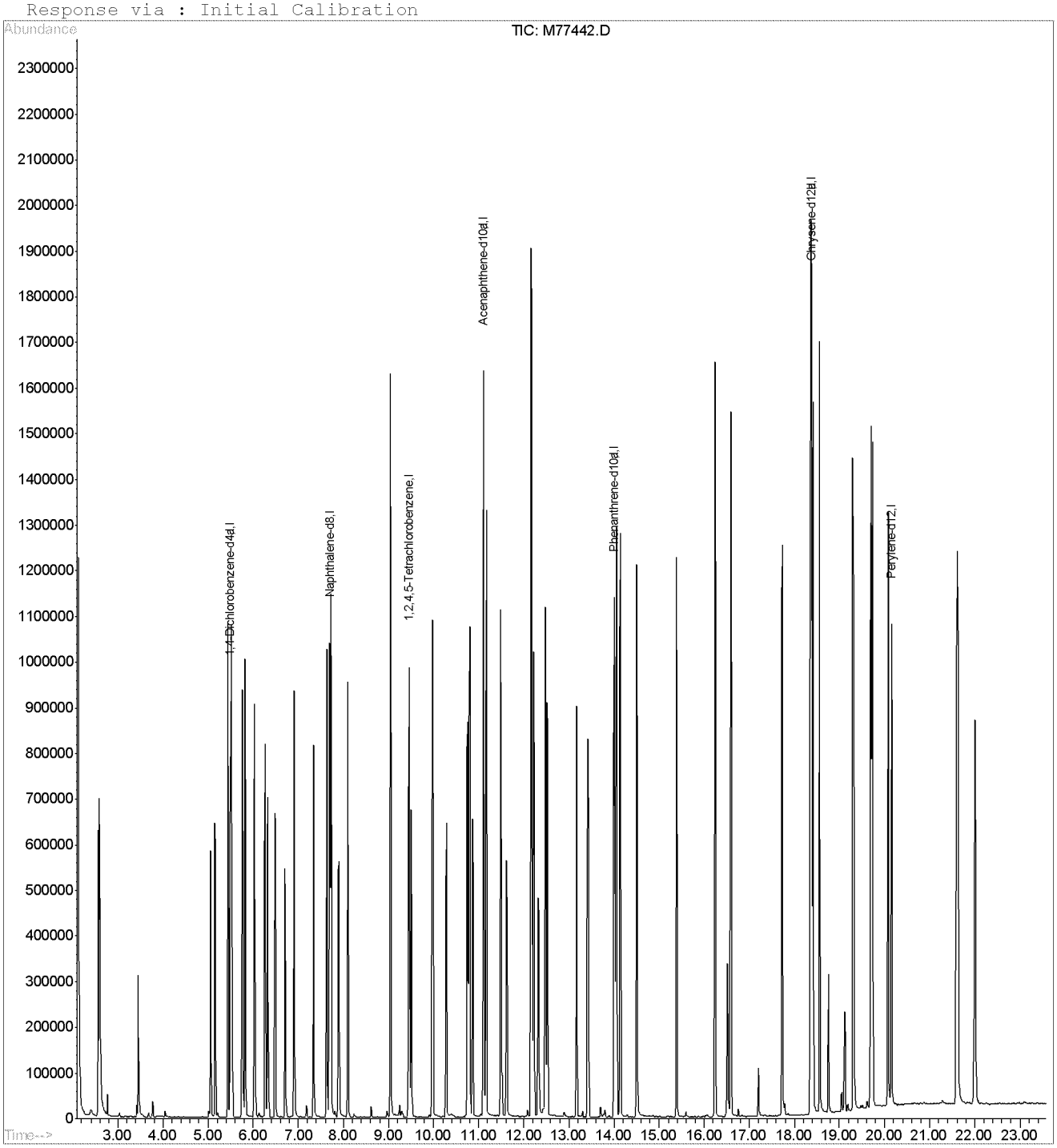
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	223864	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	724901	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	447852	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	797011	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	667033	40.00	ppb	0.00
92) Perylene-d12	20.14	264	564226	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	223864	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	447852	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	797011	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	667033	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	667033	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
105) 1,2,4,5-Tetrachlorobenzene	9.45	216	316709	47.82	ppb	100

(#) = qualifier out of range (m) = manual integration
M77442.D MM3014.M Fri Nov 19 13:06:24 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77442.D Vial: 11
Acq On : 18 Nov 2010 8:25 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 13:06 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77443.D Vial: 12
Acq On : 18 Nov 2010 8:56 pm Operator: olgaa
Sample : icV3014-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 16:20 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

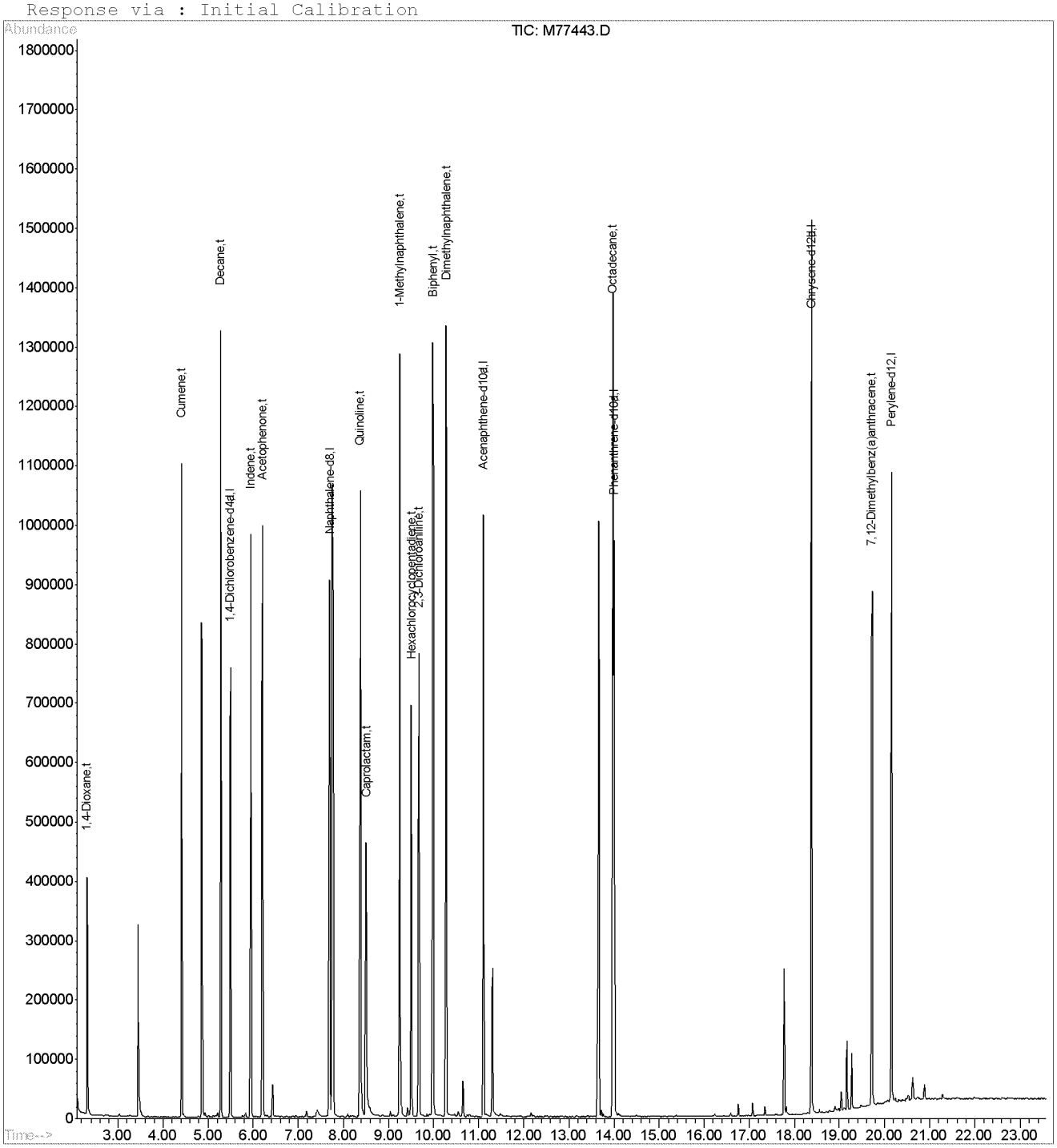
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	204235	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	704249	40.00	ppb	0.00
47) Acenaphthene-d10	11.10	164	429897	40.00	ppb	-0.01
69) Phenanthrene-d10	14.01	188	675387	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	747968	40.00	ppb	0.00
92) Perylene-d12	20.14	264	529896	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	204235	40.00	ppb	0.00
104) Acenaphthene-d10a	11.10	164	429897	40.00	ppb	-0.01
106) Phenanthrene-d10a	14.01	188	675387	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	747968	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	747968	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.31	88	141022	42.70	ppb	99
6) Indene	5.94	116	435281	46.80	ppb	97
7) Cumene	4.41	105	555500	41.07	ppb	97
13) Decane	5.28	43	444030	39.20	ppb	94
18) Acetophenone	6.20	105	419923	49.70	ppb	88
27) Quinoline	8.37	129	597813	50.34	ppb	98
40) 2,3-Dichloroaniline	9.67	161	305829	45.05	ppb	97
41) Caprolactam	8.50	55	178529	42.45	ppb	92
45) 1-Methylnaphthalene	9.25	142	604600	45.46	ppb	98
46) Dimethylnaphthalene	10.27	156	530925	45.72	ppb	96
48) Hexachlorocyclopentadiene	9.50	237	193192	63.31	ppb	99
53) Biphenyl	9.98	154	725904	47.29	ppb	99
82) Octadecane	13.97	57	484505	45.22	ppb	96
100) 7,12-Dimethylbenz(a)anthra	19.72	256	254577	38.97	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77443.D Vial: 12
Acq On : 18 Nov 2010 8:56 pm Operator: olgaa
Sample : icV3014-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 16:20 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 16:00:33 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77443A.D Vial: 12
Acq On : 18 Nov 2010 8:56 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 13:41 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 13:40:19 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

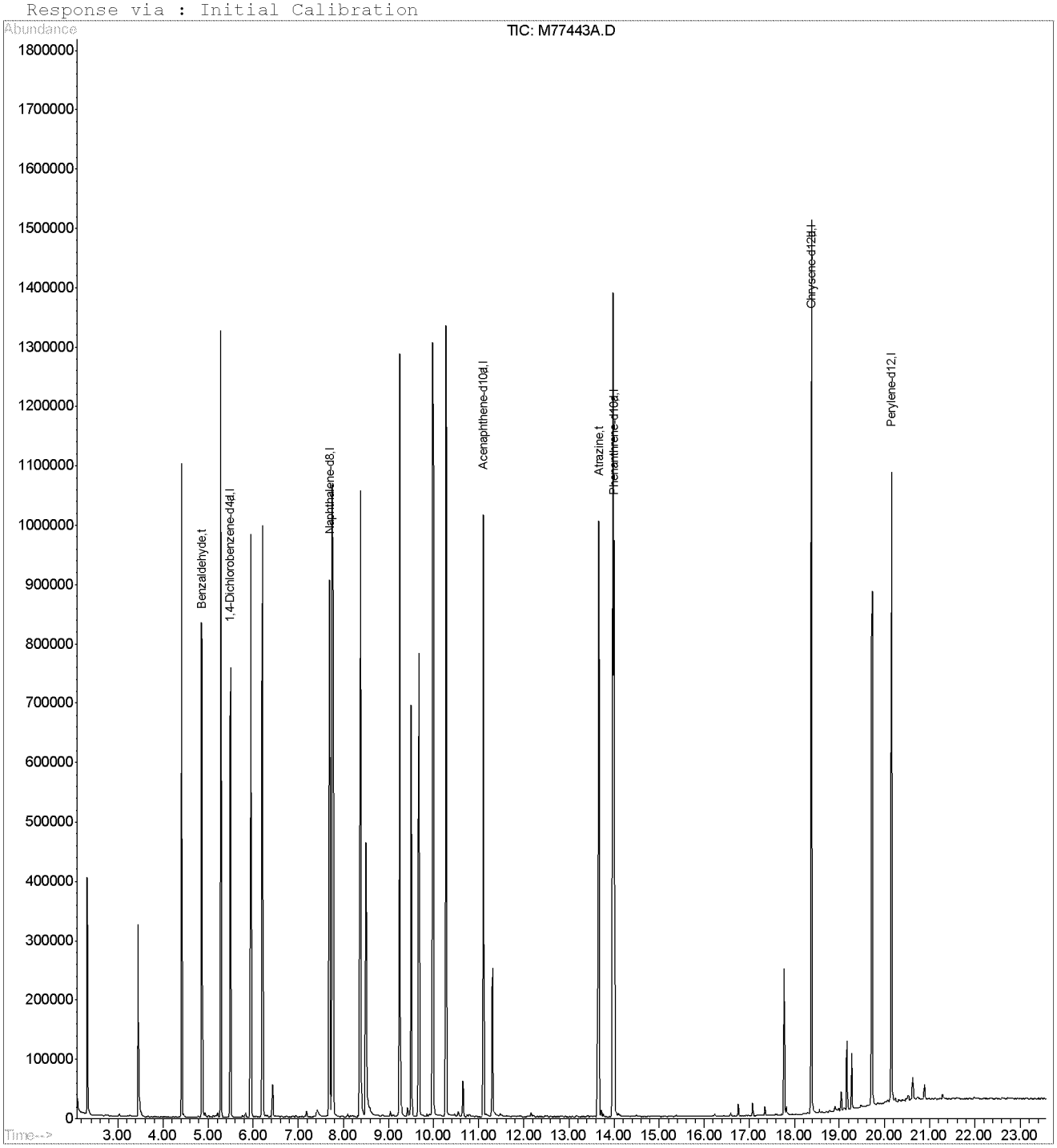
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	204235	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	704249	40.00	ppb	0.00
47) Acenaphthene-d10	11.10	164	429897	40.00	ppb	-0.01
69) Phenanthrene-d10	14.01	188	675387	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	747968	40.00	ppb	0.00
92) Perylene-d12	20.14	264	529896	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	204235	40.00	ppb	0.00
104) Acenaphthene-d10a	11.10	164	429897	40.00	ppb	-0.01
106) Phenanthrene-d10a	14.01	188	675387	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	747968	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	747968	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.87	105	251114	63.43	ppb	97
107) Atrazine	13.65	215	116895	58.74	ppb	94

(#) = qualifier out of range (m) = manual integration
M77443A.D MM3014.M Mon Nov 22 13:41:30 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77443A.D Vial: 12
Acq On : 18 Nov 2010 8:56 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 13:41 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 13:40:19 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3015\M77445.D Vial: 14
Acq On : 18 Nov 2010 9:59 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 13:12 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

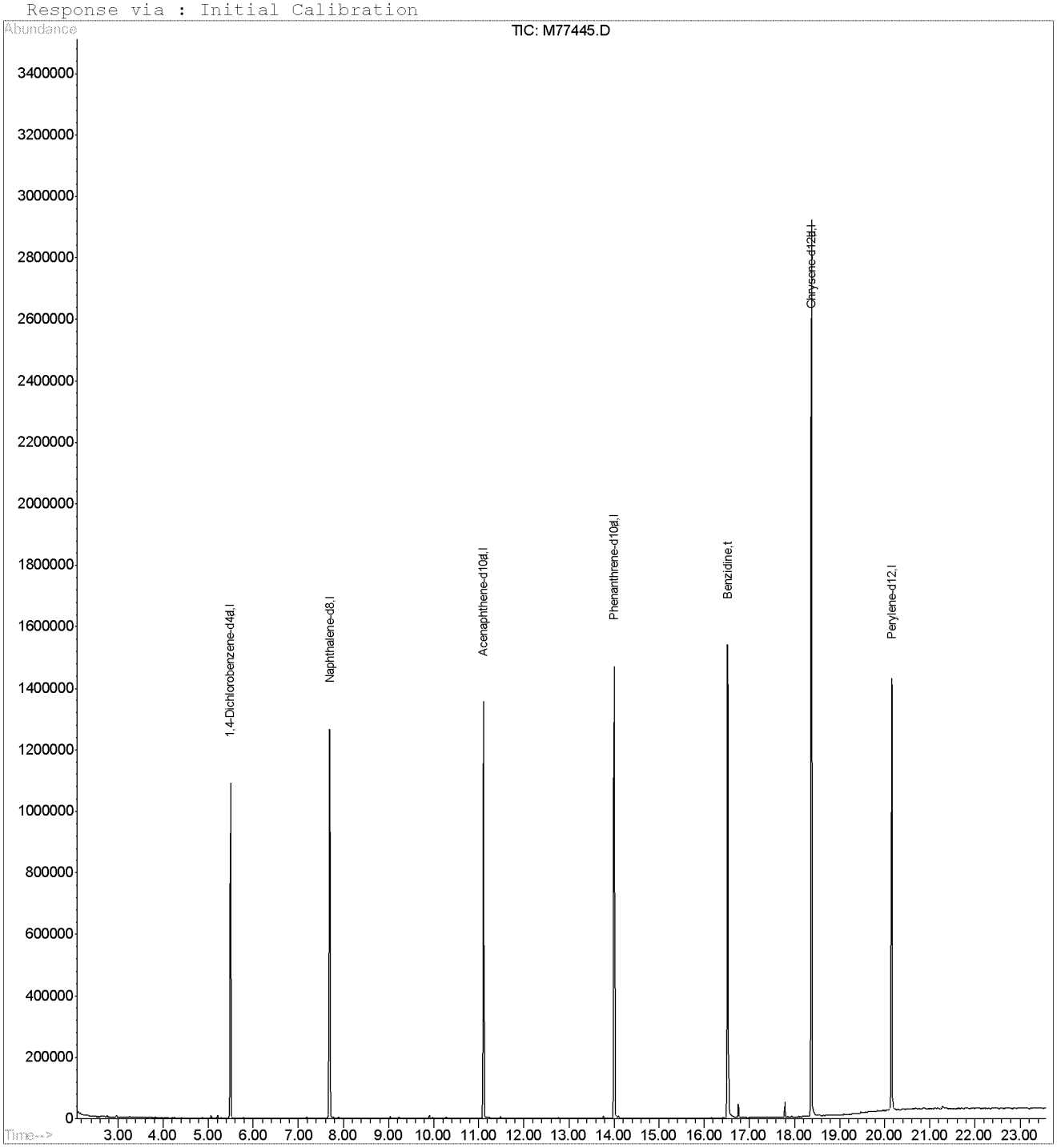
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	285358	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	899186	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	571772	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	990391	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	896832	40.00	ppb	0.00
92) Perylene-d12	20.15	264	831088	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	285358	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	571772	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	990391	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	896832	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	896832	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
111) Benzidine	16.51	184	992450	107.15	ppb	96

(#) = qualifier out of range (m) = manual integration
M77445.D MM3014.M Fri Nov 19 13:13:03 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3015\M77445.D Vial: 14
Acq On : 18 Nov 2010 9:59 pm Operator: olgaa
Sample : icV3015-50 Inst : MSM
Misc : op46685,em3015, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 13:12 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 13:00:35 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integrations APPROVED (compounds with "m" flag)
Wen Wen Chi
11/24/10 04:43

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3017\M77469.D Vial: 4
Acq On : 19 Nov 2010 3:30 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 15:58 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 15:41:48 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.49	152	167526	40.00	ppb	0.00
24) Naphthalene-d8	7.70	136	572041	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	339571	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	591087	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	492436	40.00	ppb	0.00
92) Perylene-d12	20.15	264	420158	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.49	152	167526	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	339571	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	591087	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	492436	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	492436	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Pyridine	2.58	79	275853	44.86	ppb	86
4) N-Nitrosodimethylamine	2.55	42	165238	40.18	ppb	84
11) bis(2-Chloroethyl)ether	5.15	93	261597	51.53	ppb	99
14) 1,3-Dichlorobenzene	5.44	146	309092	46.07	ppb	97
15) 1,4-Dichlorobenzene	5.52	146	288648	43.96	ppb	98
16) Benzyl alcohol	5.75	108	177737	51.29	ppb	97
17) 1,2-Dichlorobenzene	5.81	146	279689	45.12	ppb	99
20) 2,2'-oxybis(1-Chloropropan	6.02	121	90388	48.63	ppb	95
22) n-Nitroso-di-n-propylamine	6.26	70	169134	46.85	ppb	91
23) Hexachloroethane	6.32	201	105667	45.57	ppb	97
26) Nitrobenzene	6.48	123	132418	46.68	ppb	98
28) Isophorone	6.90	82	444362	46.98	ppb	97
32) bis(2-Chloroethoxy)methane	7.34	93	305411	51.64	ppb	98
36) 1,2,4-Trichlorobenzene	7.62	180	254816	45.91	ppb	96
38) Naphthalene	7.73	128	664736	43.62	ppb	99
42) Hexachlorobutadiene	8.10	225	137467	45.27	ppb	100
44) 2-Methylnaphthalene	9.04	142	482434	42.42	ppb	97
48) Hexachlorocyclopentadiene	9.50	237	132635	55.02	ppb	98
52) 2-Chloronaphthalene	9.97	162	462179	46.85	ppb	98
54) 2-Nitroaniline	10.27	65	131772	48.60	ppb	99
55) Dimethylphthalate	10.75	163	491196	44.05	ppb	99
56) Acenaphthylene	10.79	152	631982	41.69	ppb	100
57) 2,6-Dinitrotoluene	10.86	165	110889	47.63	ppb	94

(#) = qualifier out of range (m) = manual integration
M77469.D MM3014.M Fri Nov 19 16:01:18 2010 GCMSM

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3017\M77469.D Vial: 4
Acq On : 19 Nov 2010 3:30 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 15:58 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 15:41:48 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

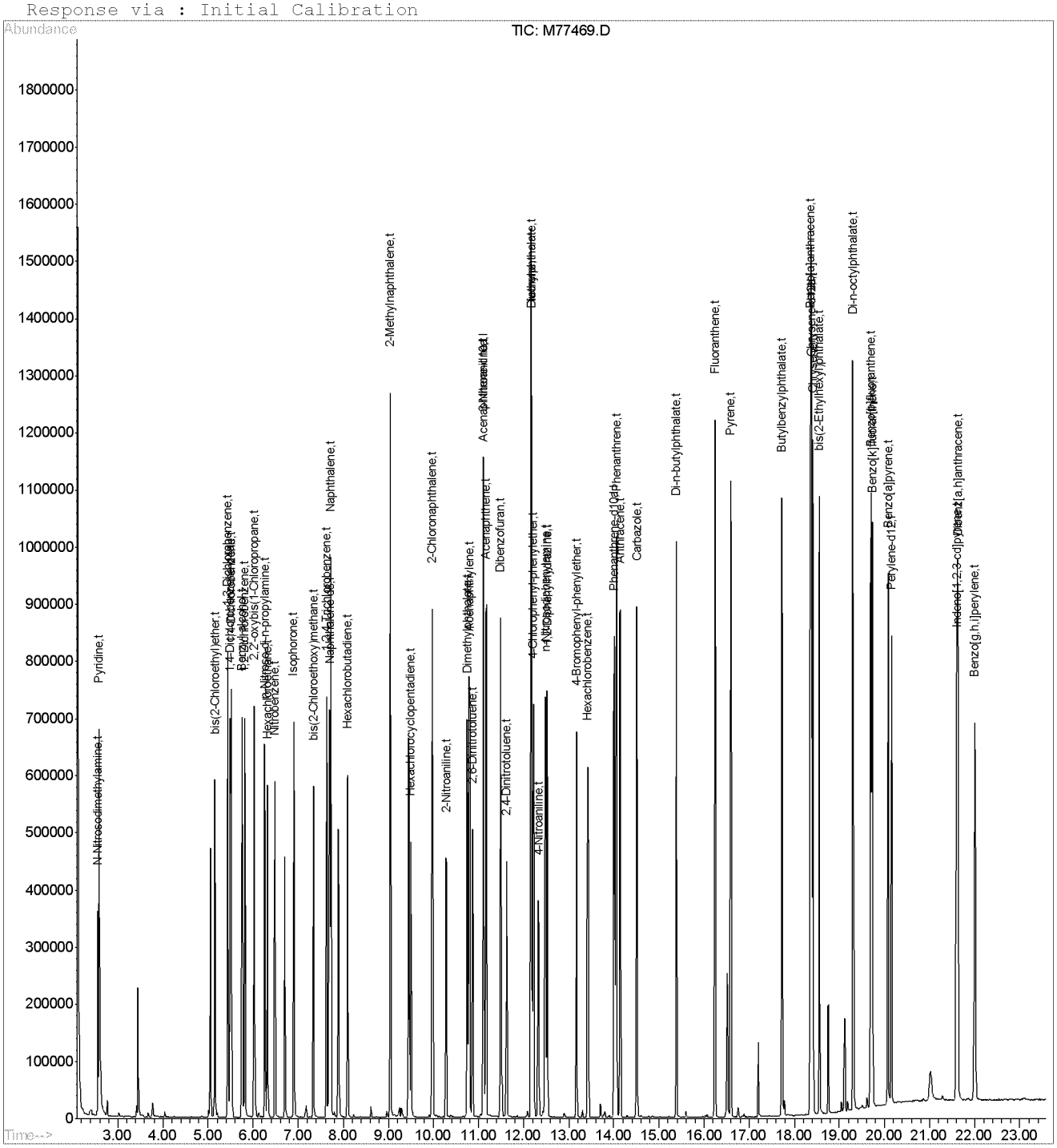
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
58)	3-Nitroaniline	11.10	138	120494	44.34	ppb	96
59)	Acenaphthene	11.17	153	420830	43.59	ppb	93
62)	Dibenzofuran	11.48	168	629251	45.36	ppb	78
63)	2,4-Dinitrotoluene	11.62	165	139606	43.43	ppb	93
65)	Diethylphthalate	12.17	149	420977	39.81	ppb	98
66)	Fluorene	12.17	166	486593	43.89	ppb	100
67)	4-Chlorophenyl-phenylether	12.22	204	240360	41.58	ppb	96
68)	4-Nitroaniline	12.32	138	132912	46.03	ppb	93
71)	n-Nitrosodiphenylamine	12.48	169	343250	42.21	ppb	100
72)	1,2-Diphenylhydrazine	12.52	77	457921	45.70	ppb	92
74)	4-Bromophenyl-phenylether	13.17	248	139622	43.31	ppb	95
75)	Hexachlorobenzene	13.42	284	127512	42.34	ppb	96
77)	Phenanthrene	14.05	178	674972	41.73	ppb	100
78)	Anthracene	14.14	178	680930	42.09	ppb	99
79)	Carbazole	14.51	167	660051	43.90	ppb	99
80)	Di-n-butylphthalate	15.39	149	773761	43.10	ppb	99
81)	Fluoranthene	16.24	202	760088	40.61	ppb	99
84)	Pyrene	16.59	202	761529	47.53	ppb	99
87)	Butylbenzylphthalate	17.71	149	340240	52.22	ppb	94
88)	Benzo[a]anthracene	18.36	228	678483	44.97	ppb	99
90)	Chrysene	18.41	228	609572	44.41	ppb	99
91)	bis(2-Ethylhexyl)phthalate	18.55	149	436647	50.38	ppb	97
93)	Di-n-octylphthalate	19.30	149	761284	52.52	ppb	95
94)	Benzo[b]fluoranthene	19.70	252	657447m	50.87	ppb	
95)	Benzo[k]fluoranthene	19.73	252	526466m	43.75	ppb	
96)	Benzo[a]pyrene	20.08	252	586849	46.24	ppb	100
97)	Indeno[1,2,3-cd]pyrene	21.60	276	637381	47.16	ppb	99
99)	Dibenz[a,h]anthracene	21.62	278	502655	47.10	ppb	94
101)	Benzo[g,h,i]perylene	22.00	276	551124	47.83	ppb	94

(#) = qualifier out of range (m) = manual integration
M77469.D MM3014.M Fri Nov 19 16:01:19 2010 GCMSM Page 2

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77469.D Vial: 4
Acq On : 19 Nov 2010 3:30 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 19 15:58 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 16:00:33 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integration Approval Summary

Sample Number: EM3017-ICV3014
Lab FileID: M77469.D
Injection Time: 11/19/10 15:30
Method: SW846 8270C
Analyst approved: 11/22/10 12:57 Olga Azarihn
Supervisor approved: 11/24/10 04:43 Wen Wen Chi

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.70	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.73	Overlapping peak

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3017\M77470.D Vial: 5
Acq On : 19 Nov 2010 4:01 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 12:55 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

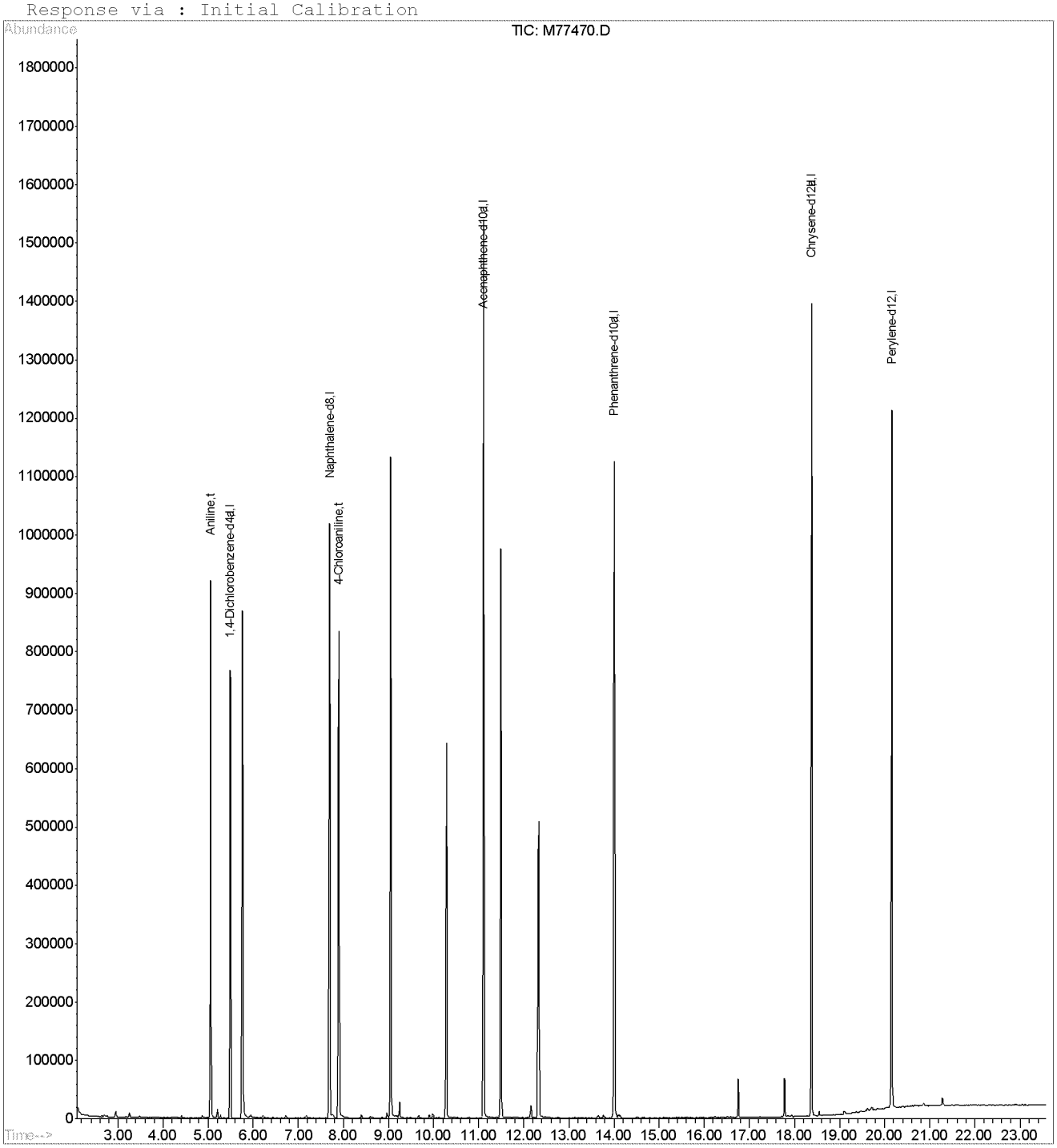
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.50	152	219560	40.00	ppb	0.00
24) Naphthalene-d8	7.69	136	745844	40.00	ppb	0.00
47) Acenaphthene-d10	11.11	164	431768	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	776512	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	773261	40.00	ppb	0.00
92) Perylene-d12	20.15	264	632207	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.50	152	219560	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	431768	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	776512	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	773261	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	773261	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
10) Aniline	5.05	93	494371	49.01	ppb	96
39) 4-Chloroaniline	7.90	127	407678	47.05	ppb	96

(#) = qualifier out of range (m) = manual integration
M77470.D MM3014.M Mon Nov 22 12:55:37 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77470.D Vial: 5
Acq On : 19 Nov 2010 4:01 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 12:55 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3017\M77471.D Vial: 6
Acq On : 19 Nov 2010 4:34 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 12:58 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 12:57:44 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

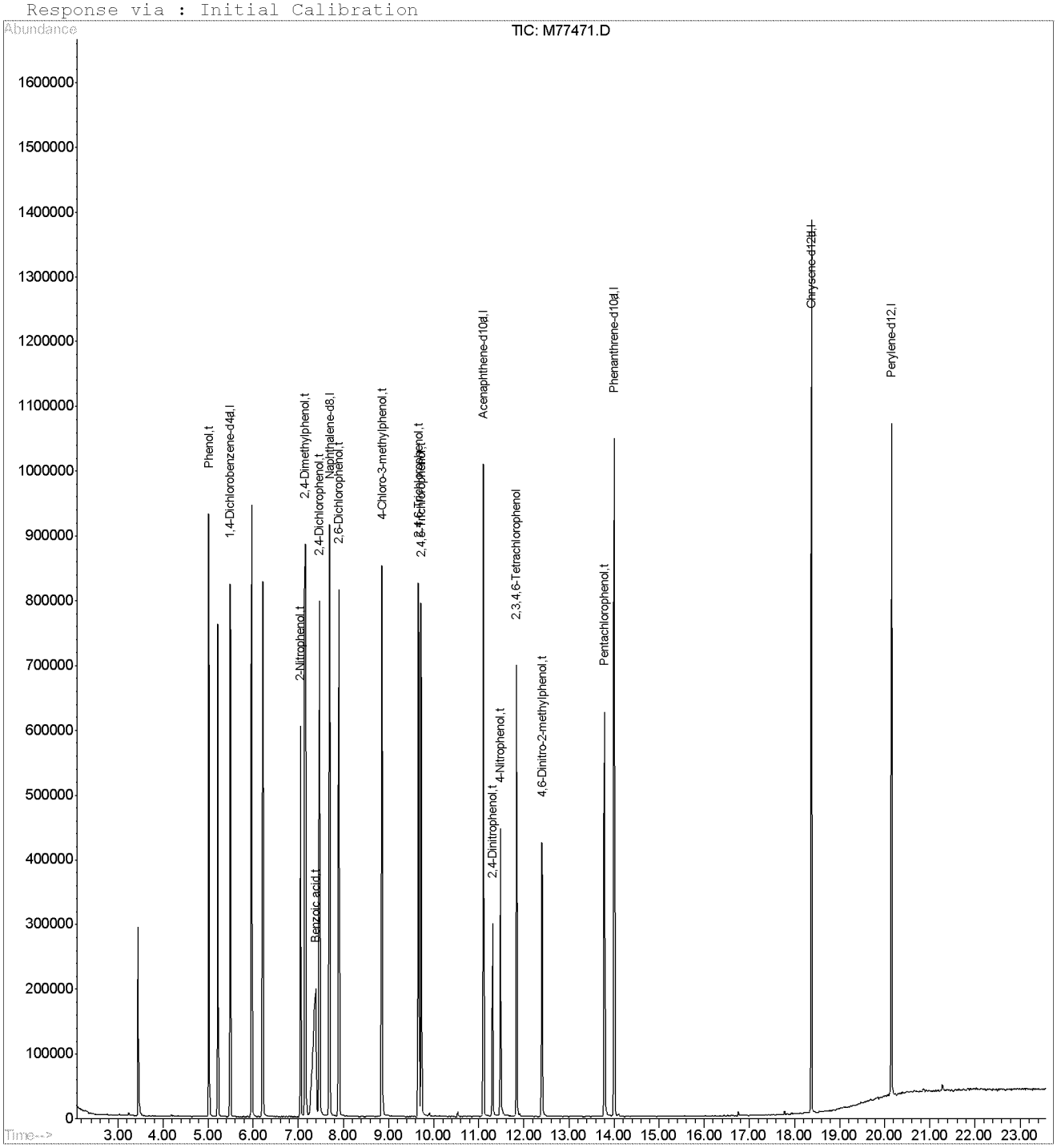
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.49	152	217595	40.00	ppb	-0.01
24) Naphthalene-d8	7.69	136	694842	40.00	ppb	0.00
47) Acenaphthene-d10	11.10	164	446398	40.00	ppb	-0.01
69) Phenanthrene-d10	14.01	188	711110	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	681345	40.00	ppb	0.00
92) Perylene-d12	20.14	264	528570	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.49	152	217595	40.00	ppb	-0.01
104) Acenaphthene-d10a	11.10	164	446398	40.00	ppb	-0.01
106) Phenanthrene-d10a	14.01	188	711110	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	681345	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	681345	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
9) Phenol	5.01	94	415673	49.23	ppb	91
29) 2-Nitrophenol	7.05	139	189771	54.65	ppb	75
30) 2,4-Dimethylphenol	7.15	107	288073	51.03	ppb	97
31) Benzoic acid	7.38	105	222391	58.10	ppb	95
33) 2,4-Dichlorophenol	7.46	162	272822	49.27	ppb	98
34) 2,6-Dichlorophenol	7.90	162	273470	49.30	ppb	98
43) 4-Chloro-3-methylphenol	8.85	107	250732	48.63	ppb	89
49) 2,4,6-Trichlorophenol	9.66	196	213183	48.84	ppb	98
50) 2,4,5-Trichlorophenol	9.72	196	217914	58.59	ppb	96
60) 2,4-Dinitrophenol	11.30	184	73871	43.07	ppb	83
61) 4-Nitrophenol	11.48	109	60980	41.83	ppb #	13
64) 2,3,4,6-Tetrachlorophenol	11.83	232	156950	41.95	ppb	96
70) 4,6-Dinitro-2-methylphenol	12.40	198	121034	42.33	ppb	97
76) Pentachlorophenol	13.79	266	121333	51.89	ppb	98

(#) = qualifier out of range (m) = manual integration
M77471.D MM3014.M Mon Nov 22 12:58:58 2010 GCMSM Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77471.D Vial: 6
Acq On : 19 Nov 2010 4:34 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 12:58 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 12:57:44 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3017\M77490.D Vial: 6
Acq On : 19 Nov 2010 5:15 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 13:06 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.49	152	202095	40.00	ppb	-0.01
24) Naphthalene-d8	7.68	136	654556	40.00	ppb	-0.01
47) Acenaphthene-d10	11.11	164	421139	40.00	ppb	0.00
69) Phenanthrene-d10	14.01	188	672967	40.00	ppb	0.00
83) Chrysene-d12	18.37	240	647152	40.00	ppb	0.00
92) Perylene-d12	20.14	264	504615	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	5.49	152	202095	40.00	ppb	0.00
104) Acenaphthene-d10a	11.11	164	421139	40.00	ppb	0.00
106) Phenanthrene-d10a	14.01	188	672967	40.00	ppb	0.00
110) Chrysene-d12a	18.37	240	647152	40.00	ppb	0.00
112) Chrysene-d12b	18.37	240	647152	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
19) 2-Methylphenol	5.96	108	236143	53.57	ppb	98
21) 3&4-Methylphenol	6.20	108	244015	52.62	ppb #	64

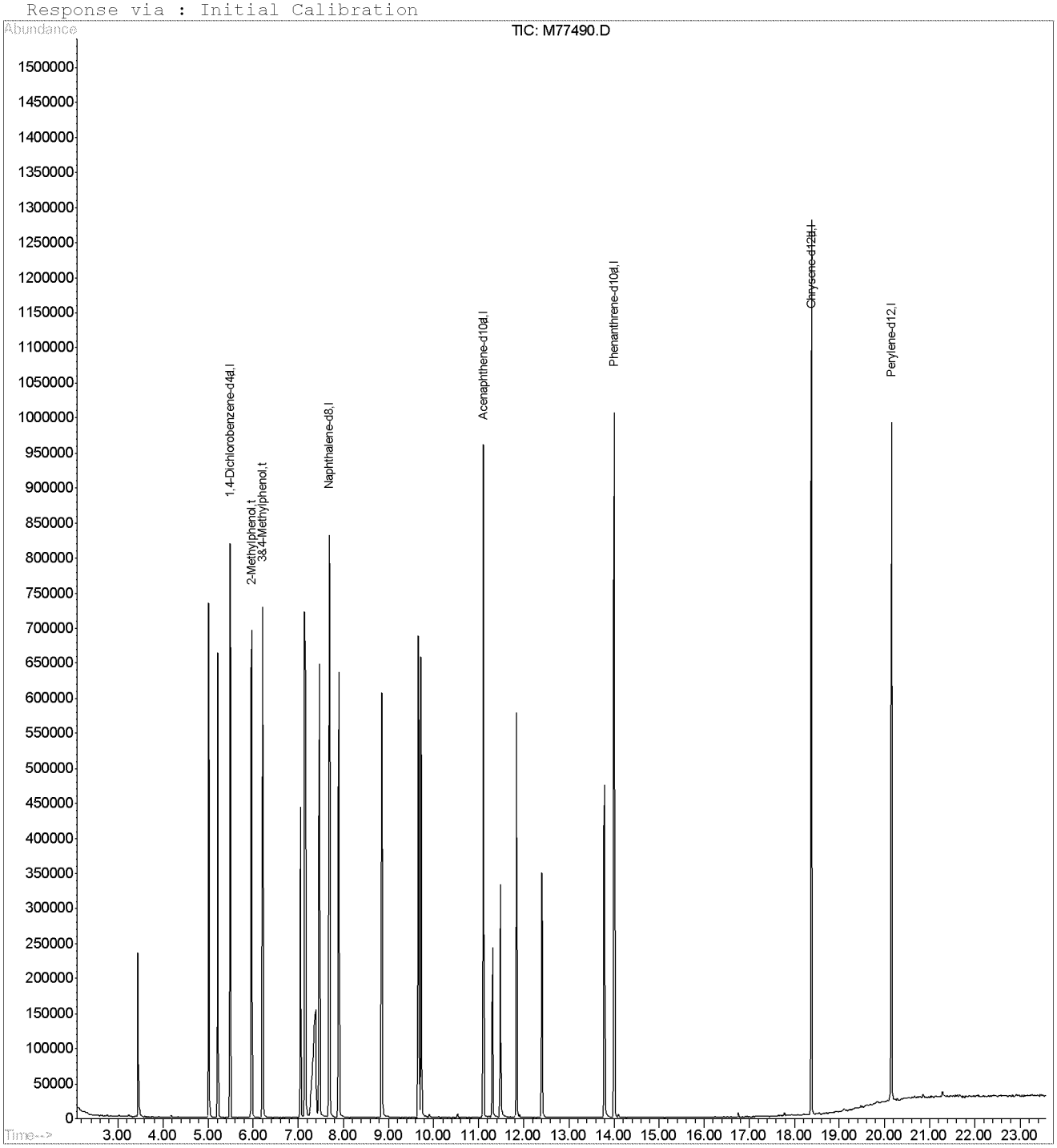
(#) = qualifier out of range (m) = manual integration
M77490.D MM3014.M Mon Nov 22 13:06:54 2010 GCMSM Page 1

ACCUTEST LABORATORIES JA61582

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3017\M77490.D Vial: 6
Acq On : 19 Nov 2010 5:15 pm Operator: olgaa
Sample : icv3014-50 Inst : MSM
Misc : op46720,em3017, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 22 13:06 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
12/06/10 11:57

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:53 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 09:20:25 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.48	152	282597	40.00	ppb		0.00
24) Naphthalene-d8	7.68	136	897387	40.00	ppb		0.00
47) Acenaphthene-d10	11.10	164	601994	40.00	ppb		0.00
69) Phenanthrene-d10	14.01	188	975792	40.00	ppb		0.00
83) Chrysene-d12	18.38	240	929633	40.00	ppb		0.00
92) Perylene-d12	20.16	264	757109	40.00	ppb		0.02
102) 1,4-Dichlorobenzene-d4a	5.48	152	282597	40.00	ppb		0.00
104) Acenaphthene-d10a	11.10	164	601994	40.00	ppb		0.00
106) Phenanthrene-d10a	14.01	188	975792	40.00	ppb		0.00
110) Chrysene-d12a	18.38	240	929633	40.00	ppb		0.00
112) Chrysene-d12b	18.38	240	929633	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.78	112	203074	23.49	ppb		0.00
Spiked Amount 50.000			Recovery = 46.98%				
8) Phenol-d5	5.00	99	249754	25.32	ppb		0.00
Spiked Amount 50.000			Recovery = 50.64%				
25) Nitrobenzene-d5	6.44	82	226566	27.59	ppb		0.00
Spiked Amount 50.000			Recovery = 55.18%				
51) 2-Fluorobiphenyl	9.81	172	486217	23.52	ppb		0.00
Spiked Amount 50.000			Recovery = 47.04%				
73) 2,4,6-Tribromophenol	12.69	330	54711	30.69	ppb		0.00
Spiked Amount 50.000			Recovery = 61.38%				
86) Terphenyl-d14	16.91	244	494623	27.37	ppb		0.00
Spiked Amount 50.000			Recovery = 54.74%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.30	88	93333	20.43	ppb		87
3) Pyridine	2.58	79	211919	20.43	ppb		82
4) N-Nitrosodimethylamine	2.54	42	153056	22.06	ppb		91
6) Indene	5.93	116	310006	24.09	ppb		95
7) Cumene	4.39	105	437613	23.38	ppb		98
9) Phenol	5.02	94	275425	25.11	ppb		96
10) Aniline	5.04	93	262626	20.23	ppb		77
11) bis(2-Chloroethyl)ether	5.14	93	197905	23.11	ppb		97
12) 2-Chlorophenol	5.21	128	225780	24.57	ppb		99
13) Decane	5.26	43	259510	16.56	ppb		86
14) 1,3-Dichlorobenzene	5.43	146	271690	24.01	ppb		97
15) 1,4-Dichlorobenzene	5.51	146	255603	23.08	ppb		96
16) Benzyl alcohol	5.75	108	147628	25.26	ppb		97
17) 1,2-Dichlorobenzene	5.80	146	248386	23.75	ppb		99
18) Acetophenone	6.19	105	290324	24.83	ppb		89
19) 2-Methylphenol	5.97	108	151259	24.54	ppb		99
20) 2,2'-oxybis(1-Chloropropan	6.01	121	71623	22.84	ppb	#	50
21) 3&4-Methylphenol	6.22	108	161907	24.97	ppb	#	61
22) n-Nitroso-di-n-propylamine	6.24	70	141631	23.26	ppb		82
23) Hexachloroethane	6.31	201	89739	22.94	ppb		100
26) Nitrobenzene	6.47	123	113372	25.47	ppb		90
27) Quinoline	8.37	129	380436	25.14	ppb		96
28) Isophorone	6.90	82	353033	23.79	ppb		92

(#) = qualifier out of range (m) = manual integration
M77592.D MM3014.M Sat Dec 04 09:53:47 2010 GCMSM

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:53 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 09:20:25 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	7.04	139	131110	29.23	ppb		92
30)	2,4-Dimethylphenol	7.15	107	190564	26.14	ppb		97
31)	Benzoic acid	7.36	105	125267	25.34	ppb		97
32)	bis(2-Chloroethoxy)methane	7.32	93	232835	25.10	ppb		99
33)	2,4-Dichlorophenol	7.47	162	204246	28.56	ppb		98
34)	2,6-Dichlorophenol	7.90	162	196550	27.43	ppb		99
35)	1,3,5-Trichlorobenzene	7.05	180	226477	24.71	ppb		99
36)	1,2,4-Trichlorobenzene	7.62	180	216358	24.85	ppb		99
37)	1,2,3-Trichlorobenzene	8.06	180	209530	24.49	ppb		98
38)	Naphthalene	7.71	128	583754	24.42	ppb		99
39)	4-Chloroaniline	7.89	127	264087	25.33	ppb		99
40)	2,3-Dichloroaniline	9.67	161	227184	26.26	ppb		96
41)	Caprolactam	8.51	55	109210	20.38	ppb		84
42)	Hexachlorobutadiene	8.08	225	120234	25.24	ppb		99
43)	4-Chloro-3-methylphenol	8.87	107	192256	28.87	ppb		75
44)	2-Methylnaphthalene	9.03	142	457447	25.64	ppb		99
45)	1-Methylnaphthalene	9.23	142	434923	25.66	ppb		97
46)	Dimethylnaphthalene	10.26	156	391574	26.46	ppb		99
48)	Hexachlorocyclopentadiene	9.48	237	188002	43.99	ppb		98
49)	2,4,6-Trichlorophenol	9.67	196	138712	23.56	ppb		98
50)	2,4,5-Trichlorophenol	9.75	196	127424	25.40	ppb		98
52)	2-Chloronaphthalene	9.97	162	406725	23.26	ppb		99
53)	Biphenyl	9.97	154	496742	23.11	ppb		99
54)	2-Nitroaniline	10.28	65	128447	26.73	ppb		95
55)	Dimethylphthalate	10.74	163	462949	23.42	ppb		99
56)	Acenaphthylene	10.79	152	641876	23.88	ppb		100
57)	2,6-Dinitrotoluene	10.85	165	111078	26.91	ppb		97
58)	3-Nitroaniline	11.11	138	113743	23.61	ppb		97
59)	Acenaphthene	11.16	153	389445	22.76	ppb		94
60)	2,4-Dinitrophenol	11.33	184	110328	46.68	ppb		78
61)	4-Nitrophenol	11.57	109	55714	24.99	ppb	#	1
62)	Dibenzofuran	11.48	168	587990	23.91	ppb		77
63)	2,4-Dinitrotoluene	11.63	165	151918	26.66	ppb		94
64)	2,3,4,6-Tetrachlorophenol	11.84	232	131502	26.07	ppb		96
65)	Diethylphthalate	12.15	149	438876	23.78	ppb		97
66)	Fluorene	12.15	166	464176	23.62	ppb		98
67)	4-Chlorophenyl-phenylether	12.20	204	227749	22.22	ppb		96
68)	4-Nitroaniline	12.34	138	129221	25.24	ppb		94
70)	4,6-Dinitro-2-methylphenol	12.42	198	86738	23.62	ppb		91
71)	n-Nitrosodiphenylamine	12.46	169	348297	25.95	ppb		96
72)	1,2-Diphenylhydrazine	12.51	77	437521	26.45	ppb		97
74)	4-Bromophenyl-phenylether	13.17	248	136786	25.70	ppb		92
75)	Hexachlorobenzene	13.42	284	134663	27.09	ppb		92
76)	Pentachlorophenol	13.80	266	173751	54.15	ppb		95
77)	Phenanthrene	14.05	178	610387	22.86	ppb		99
78)	Anthracene	14.14	178	674218	25.25	ppb		98
79)	Carbazole	14.51	167	650958	26.23	ppb		98
80)	Di-n-butylphthalate	15.37	149	752264	25.38	ppb		99
81)	Fluoranthene	16.24	202	737774	23.88	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:53 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 09:20:25 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

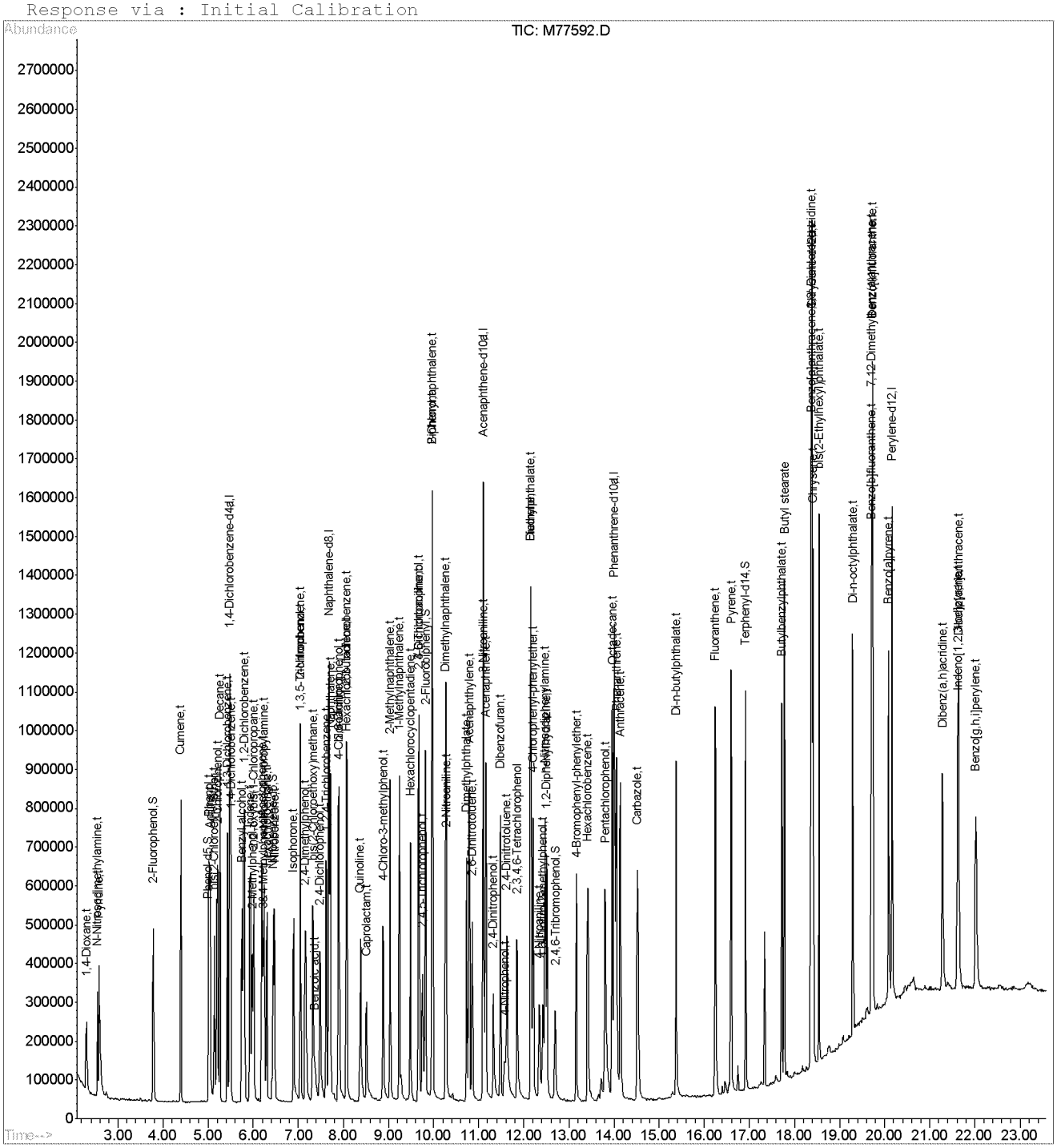
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
82) Octadecane	13.95	57	313226	20.23 ppb	91
84) Pyrene	16.59	202	754677	24.95 ppb	98
85) Butyl stearate	17.77	56	212173	19.89 ppb	89
87) Butylbenzylphthalate	17.71	149	340989	27.72 ppb	90
88) Benzo[a]anthracene	18.36	228	684176	24.02 ppb	99
89) 3,3'-Dichlorobenzidine	18.37	252	220344	23.87 ppb	94
90) Chrysene	18.42	228	624183	24.09 ppb	99
91) bis(2-Ethylhexyl)phthalate	18.54	149	484633	29.62 ppb	97
93) Di-n-octylphthalate	19.29	149	747103	28.60 ppb	91
94) Benzo[b]fluoranthene	19.71	252	639012m	26.05 ppb	
95) Benzo[k]fluoranthene	19.73	252	532398m	24.56 ppb	
96) Benzo[a]pyrene	20.09	252	567494	24.82 ppb	99
97) Indeno[1,2,3-cd]pyrene	21.61	276	550451	22.60 ppb	94
98) Dibenz(a,h)acridine	21.28	279	435131	24.71 ppb	100
99) Dibenz[a,h]anthracene	21.63	278	476000	24.75 ppb	97
100) 7,12-Dimethylbenz(a)anthra	19.72	256	266446	28.55 ppb	93
101) Benzo[g,h,i]perylene	22.02	276	470237	22.65 ppb	96

(#) = qualifier out of range (m) = manual integration
M77592.D MM3014.M Sat Dec 04 09:53:48 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:53 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

Manual Integration Approval Summary

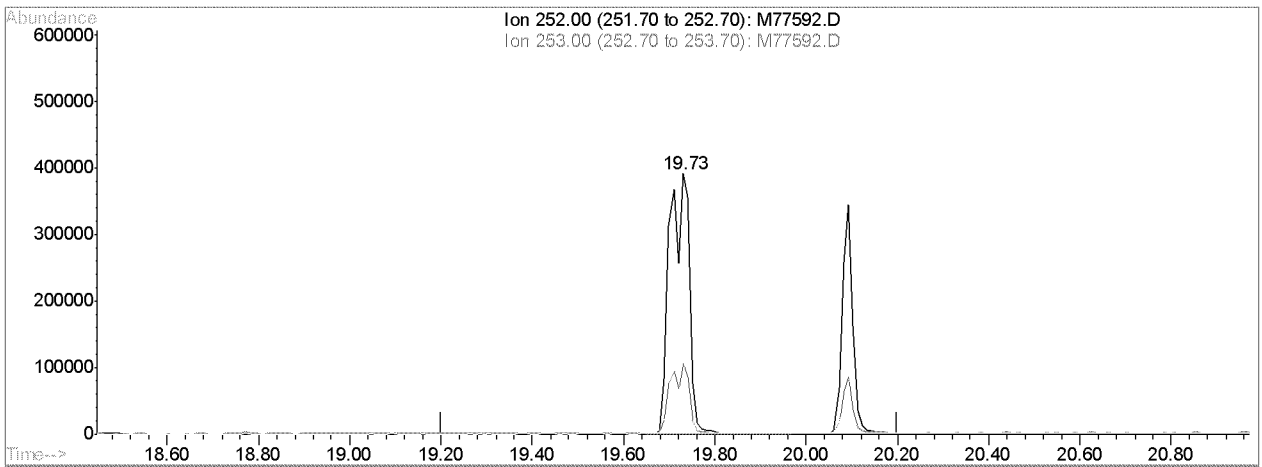
Sample Number: EM3023-CC3014
Lab FileID: M77592.D
Injection Time: 11/29/10 09:06
Method: SW846 8270C
Analyst approved: 12/04/10 10:03 Olga Azarihn
Supervisor approved: 12/06/10 11:57 Cheng-Hwan Ao

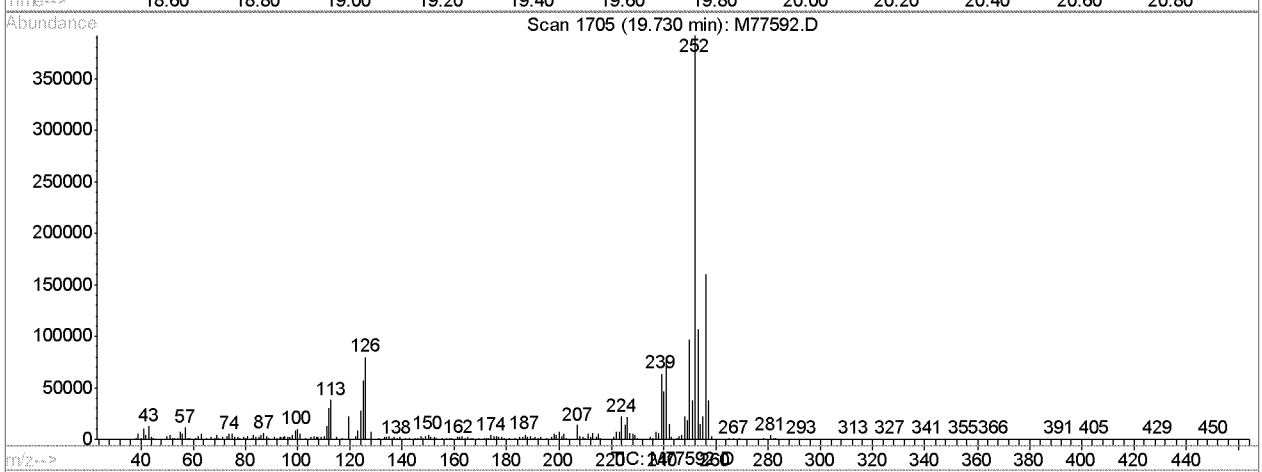
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.71	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.73	Overlapping peak

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 9:30 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.73min 50.93ppb

response 1185872

Ion	Exp%	Act%
252.00	100	100
253.00	24.10	26.72
125.00	10.90	14.28
0.00	0.00	0.00

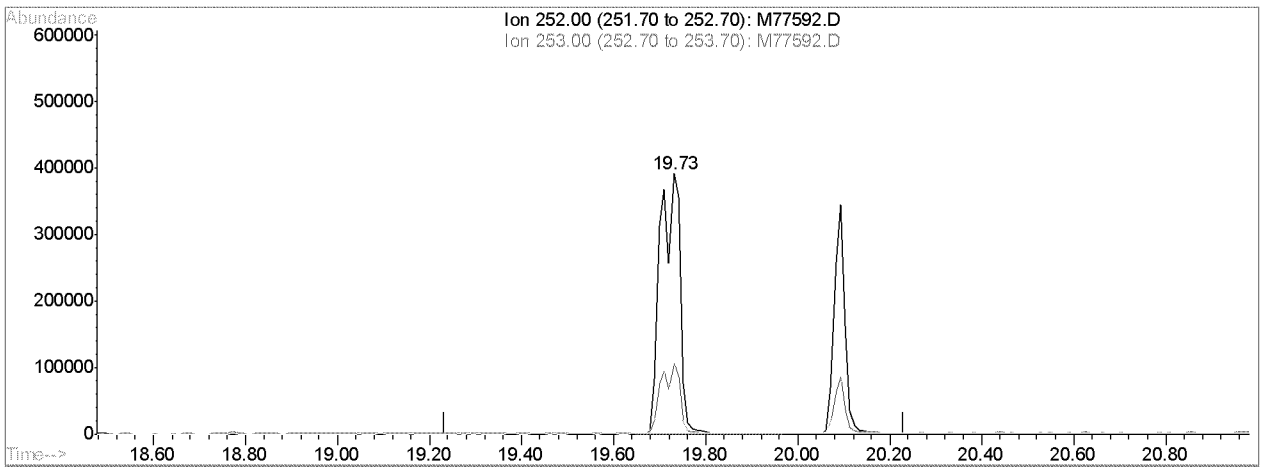
M77592.D MM3014.M Sat Dec 04 09:53:13 2010 GCMSM

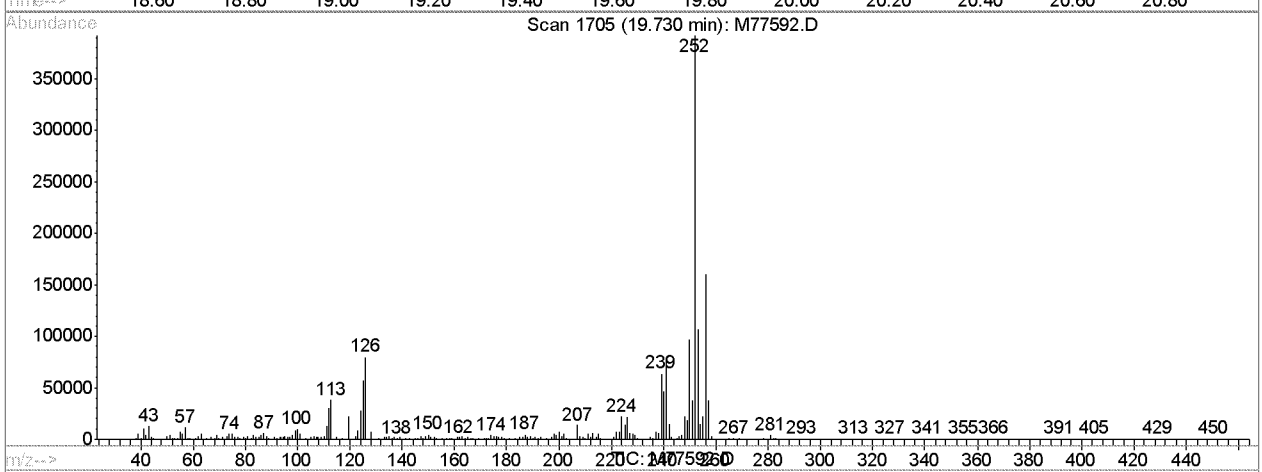
M77592.D edits: Benzo[b]fluoranthene

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Nov 29 9:30 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.73min 54.69ppb

response 1185872

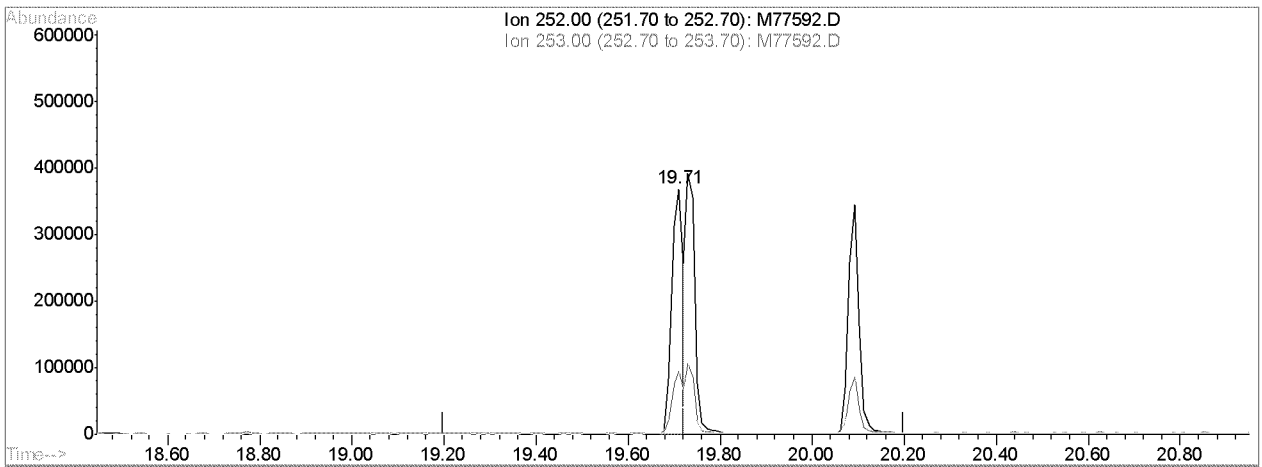
Ion	Exp%	Act%
252.00	100	100
253.00	26.10	26.72
125.00	12.20	14.28
0.00	0.00	0.00

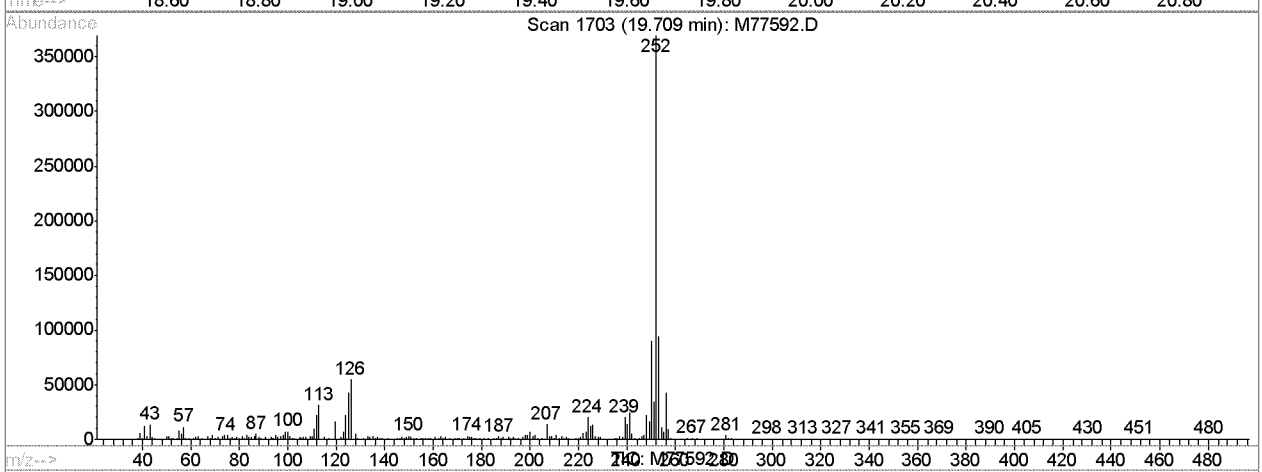
M77592.D MM3014.M Sat Dec 04 09:53:17 2010 GCMSM

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:53 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration





(94) Benzo[b]fluoranthene (t)

19.71min 26.05ppb m

response 639012

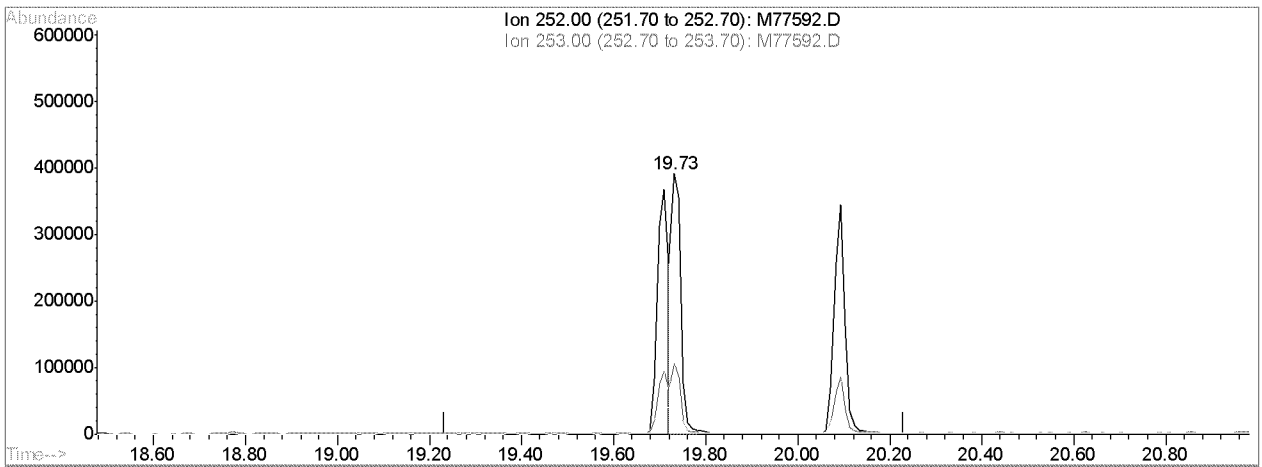
Ion	Exp%	Act%
252.00	100	100
253.00	24.10	25.59
125.00	10.90	11.54
0.00	0.00	0.00

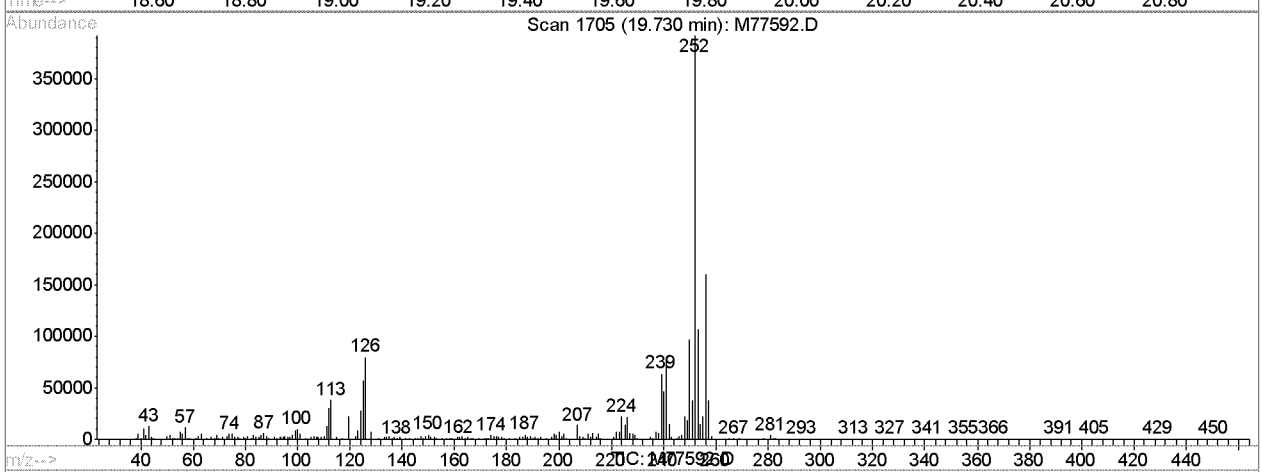
M77592.D MM3014.M Mon Dec 06 11:10:16 2010 GCMSM

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\EM3023\M77592.D Vial: 2
Acq On : 29 Nov 2010 9:06 am Operator: olgaa
Sample : cc3014-25 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:53 2010 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Multiple Level Calibration





(95) Benzo[k]fluoranthene (t)

19.73min 24.56ppb m

response 532398

Ion	Exp%	Act%
252.00	100	100
253.00	26.10	27.19
125.00	12.20	14.56
0.00	0.00	0.00

M77592.D MM3014.M Mon Dec 06 11:10:20 2010 GCMSM

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\EM3023\M77593.D Vial: 3
Acq On : 29 Nov 2010 9:38 am Operator: olgaa
Sample : cc3015-50 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:56 2010 Quant Results File: MM3014.RES

Quant Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration
DataAcq Meth : MM3014

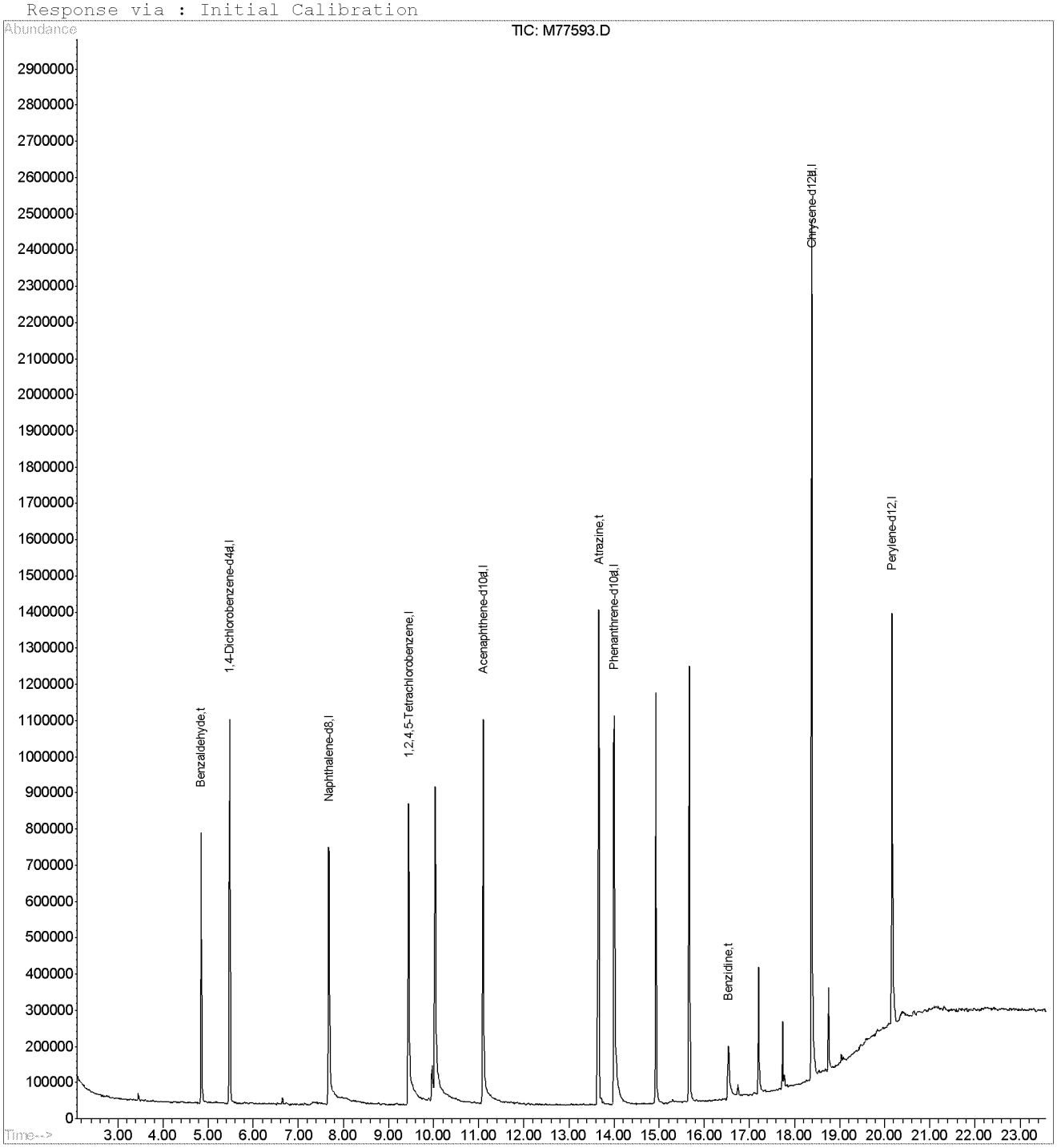
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.48	152	292553	40.00	ppb	-0.02
24) Naphthalene-d8	7.67	136	910246	40.00	ppb	-0.02
47) Acenaphthene-d10	11.10	164	613315	40.00	ppb	-0.01
69) Phenanthrene-d10	14.01	188	1081204	40.00	ppb	0.00
83) Chrysene-d12	18.38	240	997662	40.00	ppb	0.00
92) Perylene-d12	20.16	264	827446	40.00	ppb	0.02
102) 1,4-Dichlorobenzene-d4a	5.48	152	292553	40.00	ppb	-0.02
104) Acenaphthene-d10a	11.10	164	613315	40.00	ppb	-0.01
106) Phenanthrene-d10a	14.01	188	1081204	40.00	ppb	0.00
110) Chrysene-d12a	18.38	240	997662	40.00	ppb	0.00
112) Chrysene-d12b	18.38	240	997662	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.85	105	226372	50.39	ppb	97
105) 1,2,4,5-Tetrachlorobenzene	9.44	216	431828	47.61	ppb	100
107) Atrazine	13.65	215	167148	52.47	ppb	89
111) Benzidine	16.53	184	233745	22.69	ppb	96

(#) = qualifier out of range (m) = manual integration
M77593.D MM3014.M Sat Dec 04 09:56:44 2010 GCMSM

Quantitation Report

Data File : C:\HPCHEM\1\DATA\EM3023\M77593.D Vial: 3
Acq On : 29 Nov 2010 9:38 am Operator: olgaa
Sample : cc3015-50 Inst : MSM
Misc : op46878,em3023, Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Dec 4 9:56 2010 Quant Results File: MM3014.RES

Method : C:\HPCHEM\1\METHODS\MM3014.M (RTE Integrator)
Title : Semi Volatile GC/MS, HP-5MS 30m x .25mm x .25um
Last Update : Fri Nov 19 17:03:38 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59101.D Vial: 4
Acq On : 1 Nov 2010 5:36 pm Operator: larisap
Sample : ic3145-5 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 13:56:58 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:56:44 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	73417	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	256877	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	146693	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	232868	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	221346	40.00	ppb	0.00
92) Perylene-d12	16.79	264	199363	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	73417	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	232868	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	221346	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	146693	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.54	112	12630	4.77	ppb	0.00
Spiked Amount 50.000			Recovery =	9.54%		
8) Phenol-d5	4.55	99	16982	4.81	ppb	0.00
Spiked Amount 50.000			Recovery =	9.62%		
25) Nitrobenzene-d5	5.77	82	12604	4.72	ppb	0.00
Spiked Amount 50.000			Recovery =	9.44%		
51) 2-Fluorobiphenyl	8.50	172	26665	4.98	ppb	0.00
Spiked Amount 50.000			Recovery =	9.96%		
73) 2,4,6-Tribromophenol	10.83	330	2063	4.01	ppb	0.00
Spiked Amount 50.000			Recovery =	8.02%		
86) Terphenyl-d14	14.08	244	22776	5.03	ppb	0.00
Spiked Amount 50.000			Recovery =	10.06%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.24	88	6430	4.75	ppb	98
3) Pyridine	2.50	79	16080	4.71	ppb	98
4) N-Nitrosodimethylamine	2.46	74	9776	4.64	ppb	97
6) Indene	5.37	116	18887	5.15	ppb	98
7) Cumene	4.09	105	29403	5.03	ppb	99
9) Phenol	4.57	94	17999	4.83	ppb	98
10) Aniline	4.62	93	23264	4.98	ppb	97
11) bis(2-Chloroethyl)ether	4.68	93	13600	5.07	ppb	97
12) 2-Chlorophenol	4.76	128	13535	4.95	ppb	96
13) Decane	4.81	43	11566	4.98	ppb	97
14) 1,3-Dichlorobenzene	4.95	146	15191	4.98	ppb	96
15) 1,4-Dichlorobenzene	5.01	146	14899	5.09	ppb	99
16) Benzyl alcohol	5.19	108	8982	4.79	ppb	98
17) 1,2-Dichlorobenzene	5.26	146	14129	5.06	ppb	97
18) Acetophenone	5.56	105	17450	5.00	ppb	95
19) 2-Methylphenol	5.35	108	9805	4.84	ppb	97
20) 2,2'-oxybis(1-Chloropropan	5.41	121	3970	4.99	ppb	96
21) 3&4-Methylphenol	5.55	108	9992	4.71	ppb	94
22) n-Nitroso-di-n-propylamine	5.59	70	9567	4.90	ppb	95
23) Hexachloroethane	5.68	201	4224	4.85	ppb	98
26) Nitrobenzene	5.80	123	6030	4.90	ppb	99
27) Quinoline	7.33	129	22115	4.86	ppb	98
28) Isophorone	6.13	82	24430	4.94	ppb	98
29) 2-Nitrophenol	6.26	139	5055	4.31	ppb	84

(#) = qualifier out of range (m) = manual integration
Z59101.D MZ3145.M Tue Nov 02 14:08:52 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59101.D Vial: 4
Acq On : 1 Nov 2010 5:36 pm Operator: larisap
Sample : ic3145-5 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 13:56:58 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:56:44 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.32	107	12221	5.01	ppb		99
31)	Benzoic Acid	6.40	105	1873	9.38	ppb		95
32)	bis(2-Chloroethoxy)methane	6.47	93	14572	4.81	ppb		99
33)	2,4-Dichlorophenol	6.60	162	9806	4.88	ppb		99
34)	2,6-Dichlorophenol	6.95	162	9592	5.08	ppb		97
35)	1,3,5-Trichlorobenzene	6.28	180	11552	5.02	ppb		99
36)	1,2,4-Trichlorobenzene	6.74	180	11165	4.99	ppb		95
37)	1,2,3-Trichlorobenzene	7.10	180	10357	4.91	ppb		98
38)	Naphthalene	6.82	128	36791	5.07	ppb		97
39)	4-Chloroaniline	6.94	127	16308	4.95	ppb		99
40)	2,3-Dichloroaniline	8.39	161	11909	5.08	ppb		99
41)	Caprolactam	7.38	55	4752	4.95	ppb		91
42)	Hexachlorobutadiene	7.12	225	4837	4.92	ppb		99
43)	4-Chloro-3-methylphenol	7.70	107	9982	4.83	ppb		98
44)	2-Methylnaphthalene	7.89	142	26158	5.01	ppb		98
45)	1-Methylnaphthalene	8.06	142	25009	5.07	ppb		99
46)	Dimethylnaphthalene	8.88	156	21310	5.09	ppb		98
48)	Hexachlorocyclopentadiene	8.26	237	8369	9.47	ppb		95
49)	2,4,6-Trichlorophenol	8.38	196	5862	4.98	ppb		99
50)	2,4,5-Trichlorophenol	8.43	196	5009	4.68	ppb		94
52)	2-Chloronaphthalene	8.64	162	22906	5.04	ppb		99
53)	Biphenyl	8.64	154	30180	5.03	ppb		96
54)	2-Nitroaniline	8.86	65	5469	4.53	ppb		97
55)	Dimethylphthalate	9.23	163	24925	4.96	ppb		98
56)	Acenaphthylene	9.31	152	36233	4.97	ppb		99
57)	2,6-Dinitrotoluene	9.32	165	3605	3.99	ppb		88
58)	3-Nitroaniline	9.52	138	5828	4.54	ppb		93
59)	Acenaphthene	9.60	153	21950	4.99	ppb		99
60)	2,4-Dinitrophenol	9.69	184	971	23.19	ppb		98
61)	4-Nitrophenol	9.81	109	1944	5.37	ppb	#	80
62)	Dibenzofuran	9.86	168	32411	5.08	ppb		97
63)	2,4-Dinitrotoluene	9.94	165	4749	4.09	ppb		97
64)	2,3,4,6-Tetrachlorophenol	10.14	232	3858	4.40	ppb		95
65)	Diethylphthalate	10.36	149	23943	4.89	ppb		99
66)	Fluorene	10.41	166	25712	5.13	ppb		98
67)	4-Chlorophenyl-phenylether	10.43	204	11802	5.24	ppb		97
68)	4-Nitroaniline	10.50	138	6006	4.65	ppb		97
70)	4,6-Dinitro-2-methylphenol	10.58	198	1002	1.69	ppb	#	74
71)	n-Nitrosodiphenylamine	10.63	169	18315	4.95	ppb		98
72)	1,2-Diphenylhydrazine	10.68	77	26545	5.11	ppb		97
74)	4-Bromophenyl-phenylether	11.21	248	6044	4.85	ppb		94
75)	Hexachlorobenzene	11.43	284	6687	5.04	ppb		98
76)	Pentachlorophenol	11.71	266	5447	7.47	ppb		96
77)	Phenanthrene	11.93	178	35422	5.09	ppb		99
78)	Anthracene	12.00	178	34861	4.95	ppb		98
79)	Carbazole	12.26	167	34812	5.03	ppb		99
80)	Di-n-butylphthalate	12.88	149	39942	5.01	ppb		98
81)	Fluoranthene	13.58	202	36521	4.96	ppb		100
82)	Octadecane	11.81	57	14411	5.13	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59101.D Vial: 4
Acq On : 1 Nov 2010 5:36 pm Operator: larisap
Sample : ic3145-5 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 13:56:58 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:56:44 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

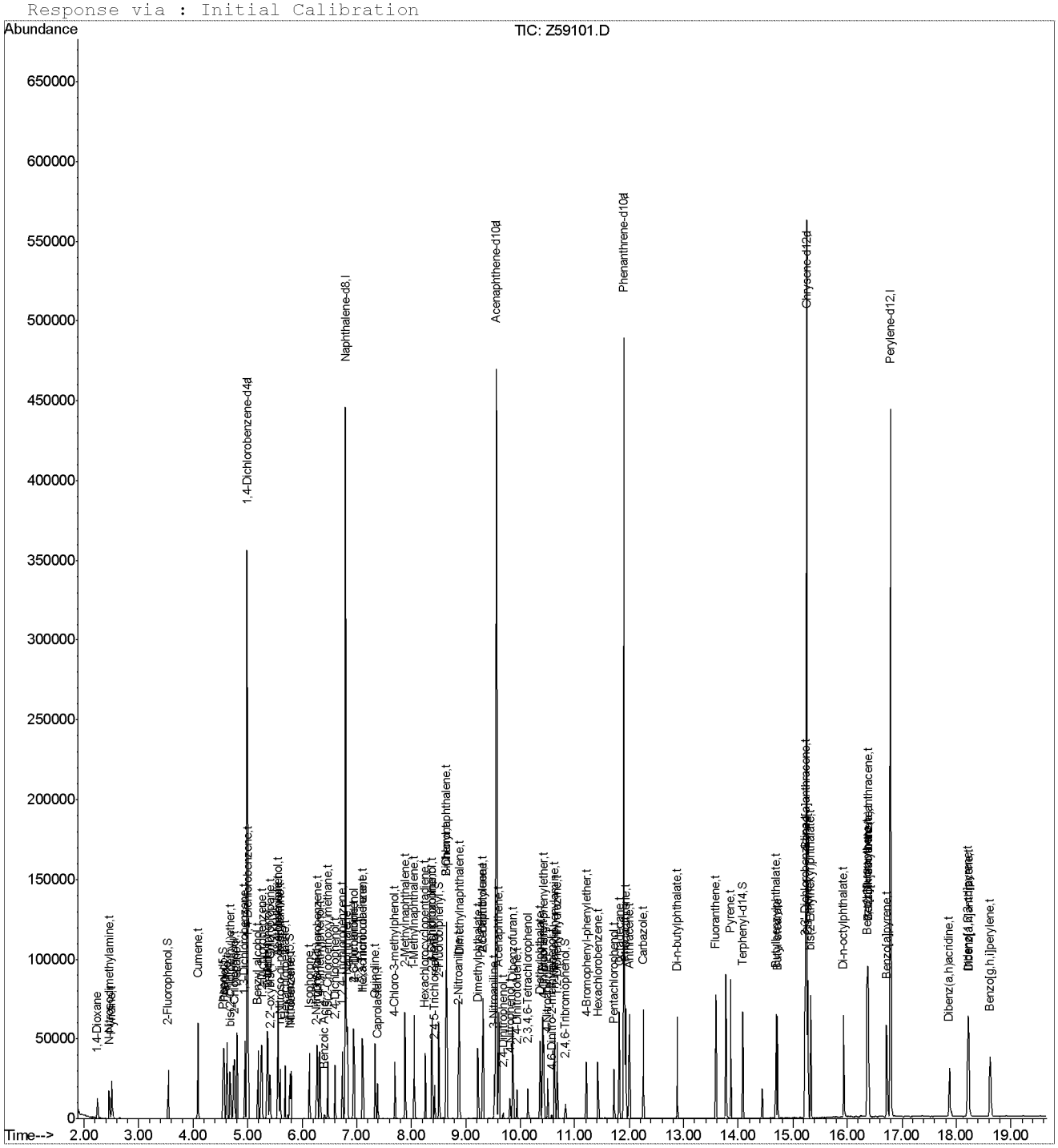
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.86	202	40590	5.20	ppb	98
85)	Butyl stearate	14.72	56	9385	5.15	ppb	98
87)	Butylbenzylphthalate	14.69	149	16734	4.69	ppb	97
88)	Benzo[a]anthracene	15.23	228	33639	5.15	ppb	98
89)	3,3'-Dichlorobenzidine	15.22	252	11241	4.86	ppb	94
90)	Chrysene	15.27	228	30439	4.99	ppb	99
91)	bis(2-Ethylhexyl)phthalate	15.33	149	21950	4.87	ppb	98
93)	Di-n-octylphthalate	15.93	149	36223	4.00	ppb	99
94)	Benzo[b]fluoranthene	16.36	252	33036	5.04	ppb	97
95)	Benzo[k]fluoranthene	16.38	252	31456	5.49	ppb	98
96)	Benzo[a]pyrene	16.72	252	29045	5.00	ppb	97
97)	Indeno[1,2,3-cd]pyrene	18.21	276	31814	4.96	ppb	99
98)	Dibenz(a,h)acridine	17.87	279	22679	4.73	ppb	97
99)	Dibenz[a,h]anthracene	18.22	278	26618	5.10	ppb	98
100)	7,12-Dimethylbenz(a)anthra	16.37	256	14311	5.28	ppb	96
101)	Benzo[g,h,i]perylene	18.62	276	26818	4.82	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59101.D MZ3145.M Tue Nov 02 14:08:52 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59101.D Vial: 4
Acq On : 1 Nov 2010 5:36 pm Operator: larisap
Sample : ic3145-5 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 13:57 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:07:06 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59099.D Vial: 2
Acq On : 1 Nov 2010 6:05 pm Operator: larisap
Sample : ic3145-100 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 18:25:54 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:25:50 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	61269	40.00	ppb		0.00
24) Naphthalene-d8	6.80	136	223320	40.00	ppb		0.00
47) Acenaphthene-d10	9.56	164	127748	40.00	ppb		0.00
69) Phenanthrene-d10	11.91	188	206998	40.00	ppb		0.00
83) Chrysene-d12	15.26	240	186754	40.00	ppb		0.00
92) Perylene-d12	16.80	264	179627	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	61269	40.00	ppb		0.00
104) Phenanthrene-d10a	11.91	188	206998	40.00	ppb		0.00
108) Chrysene-d12a	15.26	240	186754	40.00	ppb		0.00
110) Acenaphthene-d10a	9.56	164	127748	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.54	112	214522	100.00	ppb		0.00
Spiked Amount 50.000			Recovery = 200.00%				
8) Phenol-d5	4.56	99	280984	100.00	ppb		0.00
Spiked Amount 50.000			Recovery = 200.00%				
25) Nitrobenzene-d5	5.78	82	219418	100.00	ppb		0.00
Spiked Amount 50.000			Recovery = 200.00%				
51) 2-Fluorobiphenyl	8.51	172	393126	100.00	ppb		0.00
Spiked Amount 50.000			Recovery = 200.00%				
73) 2,4,6-Tribromophenol	10.84	330	47592	100.00	ppb		0.00
Spiked Amount 50.000			Recovery = 200.00%				
86) Terphenyl-d14	14.08	244	344610	100.00	ppb		0.00
Spiked Amount 50.000			Recovery = 200.00%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.24	88	113152	100.00	ppb		93
3) Pyridine	2.48	79	275618	100.00	ppb		81
4) N-Nitrosodimethylamine	2.46	74	175488	100.00	ppb	#	49
6) Indene	5.37	116	268892	100.00	ppb		94
7) Cumene	4.09	105	431556	100.00	ppb		92
9) Phenol	4.58	94	277150	100.00	ppb	#	58
10) Aniline	4.63	93	344636	100.00	ppb	#	49
11) bis(2-Chloroethyl)ether	4.69	93	200966	100.00	ppb		97
12) 2-Chlorophenol	4.76	128	199103	100.00	ppb		99
13) Decane	4.81	43	162558	100.00	ppb		92
14) 1,3-Dichlorobenzene	4.95	146	223096	100.00	ppb		95
15) 1,4-Dichlorobenzene	5.02	146	217126	100.00	ppb		94
16) Benzyl alcohol	5.20	108	153860	100.00	ppb	#	65
17) 1,2-Dichlorobenzene	5.27	146	198369	100.00	ppb		97
18) Acetophenone	5.57	105	253795	100.00	ppb		89
19) 2-Methylphenol	5.36	108	150168	100.00	ppb		98
20) 2,2'-oxybis(1-Chloropropan	5.41	121	64218	100.00	ppb	#	22
21) 3&4-Methylphenol	5.57	108	164068	100.00	ppb		92
22) n-Nitroso-di-n-propylamine	5.60	70	150350	100.00	ppb		94
23) Hexachloroethane	5.68	201	68879	100.00	ppb		84
26) Nitrobenzene	5.81	123	100833	100.00	ppb	#	78
27) Quinoline	7.35	129	369469	100.00	ppb		94
28) Isophorone	6.14	82	397325	100.00	ppb		92
29) 2-Nitrophenol	6.27	139	108395	100.00	ppb	#	46

(#) = qualifier out of range (m) = manual integration
Z59099.D MZ3145.M Tue Nov 02 13:45:06 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59099.D Vial: 2
Acq On : 1 Nov 2010 6:05 pm Operator: larisap
Sample : ic3145-100 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 18:25:54 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:25:50 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.33	107	193206	100.00	ppb		82
31)	Benzoic Acid	6.51	105	108148	100.00	ppb		91
32)	bis(2-Chloroethoxy)methane	6.48	93	233824	100.00	ppb		98
33)	2,4-Dichlorophenol	6.61	162	168240	100.00	ppb		98
34)	2,6-Dichlorophenol	6.96	162	153910	100.00	ppb		99
35)	1,3,5-Trichlorobenzene	6.28	180	168372	100.00	ppb		94
36)	1,2,4-Trichlorobenzene	6.74	180	170347	100.00	ppb		98
37)	1,2,3-Trichlorobenzene	7.11	180	157262	100.00	ppb		97
38)	Naphthalene	6.83	128	528463	100.00	ppb		98
39)	4-Chloroaniline	6.95	127	250466	100.00	ppb		94
40)	2,3-Dichloroaniline	8.39	161	176043	100.00	ppb		93
41)	Caprolactam	7.45	55	87913	100.00	ppb	#	80
42)	Hexachlorobutadiene	7.12	225	74610	100.00	ppb		99
43)	4-Chloro-3-methylphenol	7.72	107	181355	100.00	ppb	#	70
44)	2-Methylnaphthalene	7.90	142	399217	100.00	ppb		90
45)	1-Methylnaphthalene	8.06	142	379117	100.00	ppb		90
46)	Dimethylnaphthalene	8.89	156	312396	100.00	ppb		91
48)	Hexachlorocyclopentadiene	8.26	237	153139	200.00	ppb		98
49)	2,4,6-Trichlorophenol	8.39	196	103176	100.00	ppb		99
50)	2,4,5-Trichlorophenol	8.45	196	95803	100.00	ppb		97
52)	2-Chloronaphthalene	8.65	162	308818	100.00	ppb		96
53)	Biphenyl	8.65	154	402169	100.00	ppb		98
54)	2-Nitroaniline	8.88	65	106294	100.00	ppb		79
55)	Dimethylphthalate	9.24	163	398179	100.00	ppb		99
56)	Acenaphthylene	9.32	152	548055	100.00	ppb		99
57)	2,6-Dinitrotoluene	9.33	165	83507	100.00	ppb		73
58)	3-Nitroaniline	9.54	138	121784	100.00	ppb		95
59)	Acenaphthene	9.62	153	338021	100.00	ppb		95
60)	2,4-Dinitrophenol	9.71	184	80791	200.00	ppb		77
61)	4-Nitrophenol	9.83	109	52907	100.00	ppb	#	9
62)	Dibenzofuran	9.87	168	476232	100.00	ppb		76
63)	2,4-Dinitrotoluene	9.95	165	123329	100.00	ppb		82
64)	2,3,4,6-Tetrachlorophenol	10.14	232	92931	100.00	ppb		91
65)	Diethylphthalate	10.38	149	400883	100.00	ppb		98
66)	Fluorene	10.42	166	375834	100.00	ppb		94
67)	4-Chlorophenyl-phenylether	10.44	204	164027	100.00	ppb		94
68)	4-Nitroaniline	10.54	138	121181	100.00	ppb	#	47
70)	4,6-Dinitro-2-methylphenol	10.60	198	64975	100.00	ppb		83
71)	n-Nitrosodiphenylamine	10.65	169	287848	100.00	ppb		95
72)	1,2-Diphenylhydrazine	10.69	77	398190	100.00	ppb		93
74)	4-Bromophenyl-phenylether	11.21	248	104722	100.00	ppb		99
75)	Hexachlorobenzene	11.44	284	104582	100.00	ppb		97
76)	Pentachlorophenol	11.73	266	136918	200.00	ppb		98
77)	Phenanthrene	11.94	178	514770	100.00	ppb		97
78)	Anthracene	12.01	178	528669	100.00	ppb		99
79)	Carbazole	12.27	167	539389	100.00	ppb		96
80)	Di-n-butylphthalate	12.88	149	655101	100.00	ppb		96
81)	Fluoranthene	13.60	202	572792	100.00	ppb		75
82)	Octadecane	11.82	57	225508	100.00	ppb		86

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59099.D Vial: 2
Acq On : 1 Nov 2010 6:05 pm Operator: larisap
Sample : ic3145-100 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 18:25:54 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:25:50 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

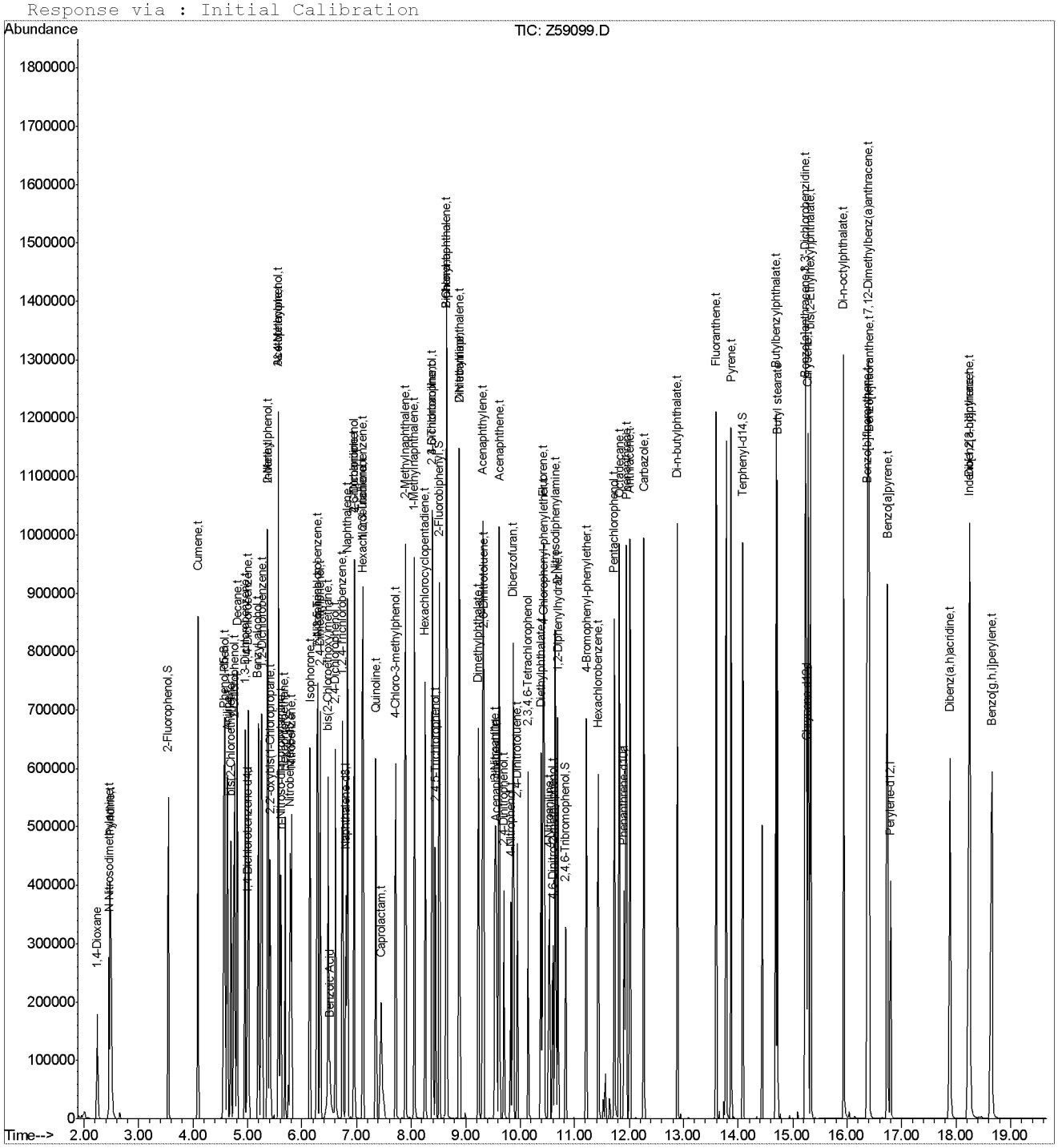
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.87	202	555719	100.00	ppb	71
85)	Butyl stearate	14.72	56	147822	100.00	ppb	80
87)	Butylbenzylphthalate	14.69	149	304244	100.00	ppb	98
88)	Benzo[a]anthracene	15.24	228	455357	100.00	ppb	99
89)	3,3'-Dichlorobenzidine	15.22	252	189695	100.00	ppb	97
90)	Chrysene	15.28	228	437922	100.00	ppb	95
91)	bis(2-Ethylhexyl)phthalate	15.33	149	370376	100.00	ppb	95
93)	Di-n-octylphthalate	15.94	149	690391	100.00	ppb	97
94)	Benzo[b]fluoranthene	16.37	252	517954	100.00	ppb	94
95)	Benzo[k]fluoranthene	16.40	252	412746	100.00	ppb	93
96)	Benzo[a]pyrene	16.74	252	488696	100.00	ppb	89
97)	Indeno[1,2,3-cd]pyrene	18.24	276	543090	100.00	ppb	56
98)	Dibenz(a,h)acridine	17.89	279	439281	100.00	ppb	98
99)	Dibenz[a,h]anthracene	18.25	278	429820	100.00	ppb	88
100)	7,12-Dimethylbenz(a)anthra	16.39	256	204994	100.00	ppb	98
101)	Benzo[g,h,i]perylene	18.65	276	491704	100.00	ppb	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59099.D MZ3145.M Tue Nov 02 13:45:06 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59099.D Vial: 2
Acq On : 1 Nov 2010 6:05 pm Operator: larisap
Sample : ic3145-100 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 1 18:26 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:43:37 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59100.D Vial: 3
Acq On : 1 Nov 2010 6:33 pm Operator: larisap
Sample : ic3145-10 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 18:57:25 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:27:19 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	70615	40.00	ppb		0.00
24) Naphthalene-d8	6.79	136	250209	40.00	ppb		-0.01
47) Acenaphthene-d10	9.56	164	141560	40.00	ppb		-0.01
69) Phenanthrene-d10	11.90	188	222317	40.00	ppb		0.00
83) Chrysene-d12	15.25	240	218231	40.00	ppb		0.00
92) Perylene-d12	16.79	264	198019	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	70615	40.00	ppb		0.00
104) Phenanthrene-d10a	11.90	188	222317	40.00	ppb		0.00
108) Chrysene-d12a	15.25	240	218231	40.00	ppb		0.00
110) Acenaphthene-d10a	9.56	164	141560	40.00	ppb		-0.01
System Monitoring Compounds							
5) 2-Fluorophenol	3.54	112	25812	10.53	ppb		0.00
Spiked Amount 50.000			Recovery = 21.06%				
8) Phenol-d5	4.55	99	34951	10.75	ppb		-0.02
Spiked Amount 50.000			Recovery = 21.50%				
25) Nitrobenzene-d5	5.77	82	26785	10.90	ppb		-0.02
Spiked Amount 50.000			Recovery = 21.80%				
51) 2-Fluorobiphenyl	8.50	172	53884	11.34	ppb		-0.02
Spiked Amount 50.000			Recovery = 22.68%				
73) 2,4,6-Tribromophenol	10.83	330	5044	11.15	ppb		-0.01
Spiked Amount 50.000			Recovery = 22.30%				
86) Terphenyl-d14	14.08	244	45873	10.77	ppb		-0.01
Spiked Amount 50.000			Recovery = 21.54%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.24	88	12588	9.91	ppb		91
3) Pyridine	2.49	79	33440	10.67	ppb		79
4) N-Nitrosodimethylamine	2.46	74	20718	10.62	ppb	#	51
6) Indene	5.36	116	36891	10.96	ppb		96
7) Cumene	4.09	105	56916	10.71	ppb		91
9) Phenol	4.57	94	38114	11.45	ppb	#	57
10) Aniline	4.62	93	46771	11.07	ppb		66
11) bis(2-Chloroethyl)ether	4.68	93	26591	10.78	ppb		99
12) 2-Chlorophenol	4.76	128	27709	11.31	ppb		95
13) Decane	4.80	43	23623	11.53	ppb		89
14) 1,3-Dichlorobenzene	4.95	146	30287	11.03	ppb		96
15) 1,4-Dichlorobenzene	5.01	146	28496	10.62	ppb		94
16) Benzyl alcohol	5.19	108	18232	10.41	ppb	#	70
17) 1,2-Dichlorobenzene	5.26	146	28199	11.27	ppb		94
18) Acetophenone	5.56	105	35062	11.16	ppb		93
19) 2-Methylphenol	5.35	108	20271	11.21	ppb		95
20) 2,2'-oxybis(1-Chloropropan	5.41	121	8101	10.77	ppb	#	11
21) 3&4-Methylphenol	5.55	108	21235	11.14	ppb		92
22) n-Nitroso-di-n-propylamine	5.59	70	19172	10.73	ppb		92
23) Hexachloroethane	5.68	201	8871	11.04	ppb		87
26) Nitrobenzene	5.80	123	12506	10.85	ppb		85
27) Quinoline	7.33	129	45006	10.66	ppb		92
28) Isophorone	6.13	82	49780	10.81	ppb		90
29) 2-Nitrophenol	6.26	139	11795	10.73	ppb	#	39

(#) = qualifier out of range (m) = manual integration
Z59100.D MZ3145.M Tue Nov 02 13:45:29 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59100.D Vial: 3
Acq On : 1 Nov 2010 6:33 pm Operator: larisap
Sample : ic3145-10 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 18:57:25 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:27:19 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.32	107	25344	11.15	ppb		87
31)	Benzoic Acid	6.42	105	6260	7.94	ppb		91
32)	bis(2-Chloroethoxy)methane	6.47	93	29991	10.99	ppb		98
33)	2,4-Dichlorophenol	6.60	162	20396	10.75	ppb		98
34)	2,6-Dichlorophenol	6.95	162	19385	10.79	ppb		99
35)	1,3,5-Trichlorobenzene	6.28	180	23580	11.40	ppb		94
36)	1,2,4-Trichlorobenzene	6.74	180	22128	10.84	ppb		93
37)	1,2,3-Trichlorobenzene	7.10	180	21378	11.31	ppb		92
38)	Naphthalene	6.82	128	72560	11.09	ppb		98
39)	4-Chloroaniline	6.94	127	33118	11.07	ppb		92
40)	2,3-Dichloroaniline	8.39	161	24554	11.44	ppb		95
41)	Caprolactam	7.38	55	9547	9.99	ppb	#	78
42)	Hexachlorobutadiene	7.12	225	10078	11.33	ppb		99
43)	4-Chloro-3-methylphenol	7.70	107	20779	10.45	ppb	#	66
44)	2-Methylnaphthalene	7.88	142	52448	10.96	ppb		88
45)	1-Methylnaphthalene	8.06	142	49446	10.84	ppb		89
46)	Dimethylnaphthalene	8.88	156	42438	11.09	ppb		89
48)	Hexachlorocyclopentadiene	8.26	237	18311	22.11	ppb		98
49)	2,4,6-Trichlorophenol	8.38	196	12689	11.16	ppb		96
50)	2,4,5-Trichlorophenol	8.43	196	11126	10.97	ppb		96
52)	2-Chloronaphthalene	8.64	162	44381	11.32	ppb		96
53)	Biphenyl	8.64	154	58410	11.36	ppb		98
54)	2-Nitroaniline	8.86	65	12577	11.26	ppb		76
55)	Dimethylphthalate	9.23	163	49336	10.70	ppb		99
56)	Acenaphthylene	9.31	152	74842	11.46	ppb		97
57)	2,6-Dinitrotoluene	9.32	165	9215	11.37	ppb		83
58)	3-Nitroaniline	9.52	138	13147	10.63	ppb		96
59)	Acenaphthene	9.60	153	44239	11.08	ppb		95
60)	2,4-Dinitrophenol	9.69	184	3440	7.68	ppb		80
61)	4-Nitrophenol	9.81	109	5027	10.46	ppb	#	1
62)	Dibenzofuran	9.86	168	64060	11.11	ppb		86
63)	2,4-Dinitrotoluene	9.94	165	12381	10.85	ppb		80
64)	2,3,4,6-Tetrachlorophenol	10.14	232	9212	10.38	ppb		87
65)	Diethylphthalate	10.36	149	49975	11.03	ppb		98
66)	Fluorene	10.41	166	51761	11.34	ppb		98
67)	4-Chlorophenyl-phenylether	10.43	204	22673	11.07	ppb		96
68)	4-Nitroaniline	10.50	138	13356	10.68	ppb	#	50
70)	4,6-Dinitro-2-methylphenol	10.58	198	3354	7.54	ppb		81
71)	n-Nitrosodiphenylamine	10.63	169	37585	11.41	ppb		96
72)	1,2-Diphenylhydrazine	10.68	77	53245	11.40	ppb		96
74)	4-Bromophenyl-phenylether	11.21	248	12267	10.77	ppb		98
75)	Hexachlorobenzene	11.43	284	13468	11.22	ppb		95
76)	Pentachlorophenol	11.72	266	13118	20.90	ppb		96
77)	Phenanthrene	11.93	178	70373	11.45	ppb		97
78)	Anthracene	12.00	178	72021	11.68	ppb		97
79)	Carbazole	12.26	167	70588	11.35	ppb		96
80)	Di-n-butylphthalate	12.88	149	83647	11.41	ppb		95
81)	Fluoranthene	13.58	202	75928	11.57	ppb		75
82)	Octadecane	11.81	57	29808	11.52	ppb		82

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59100.D Vial: 3
Acq On : 1 Nov 2010 6:33 pm Operator: larisap
Sample : ic3145-10 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 18:57:25 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:27:19 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

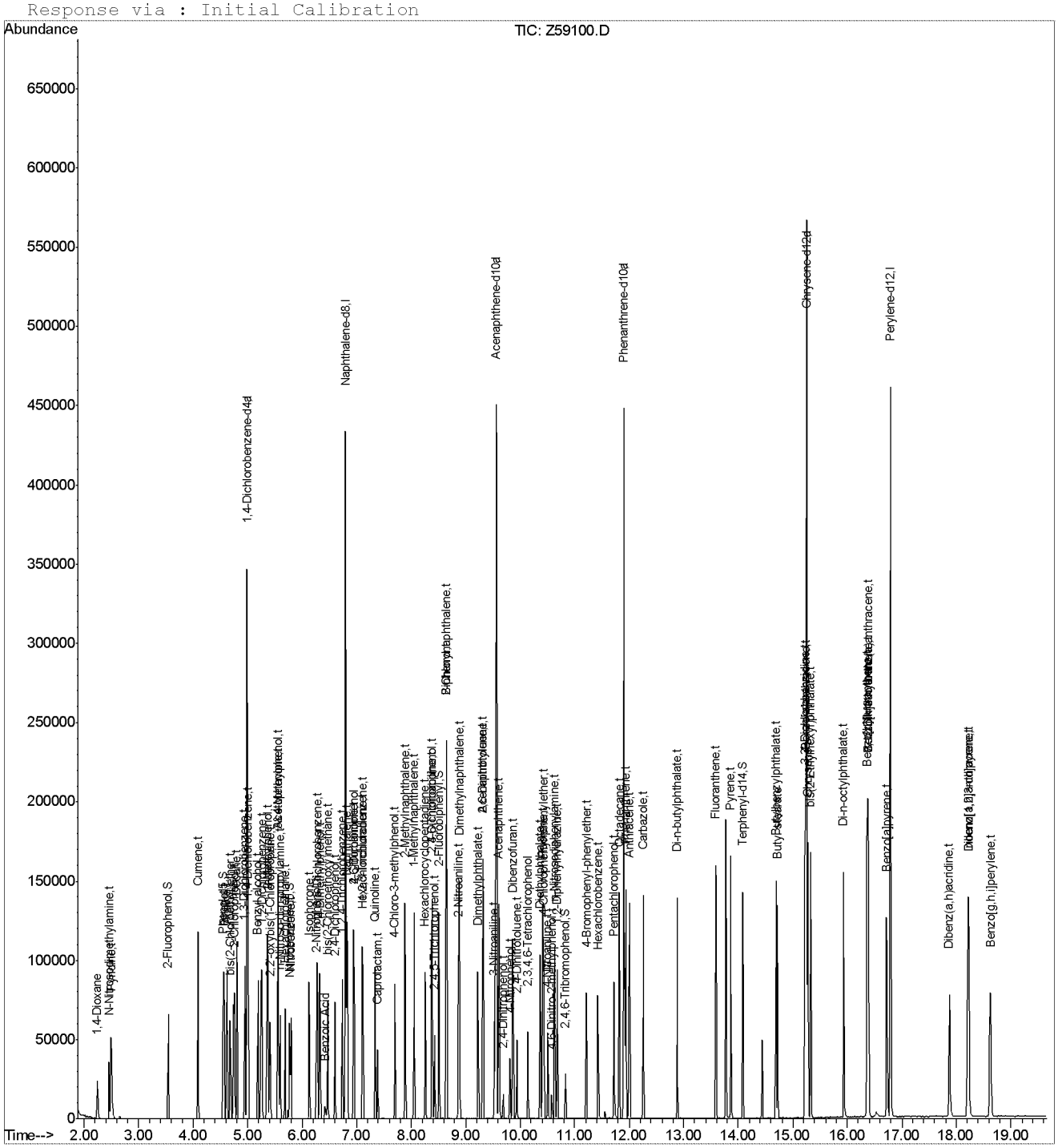
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.86	202	79395	10.95	ppb	80
85)	Butyl stearate	14.72	56	19862	11.10	ppb	78
87)	Butylbenzylphthalate	14.69	149	36882	10.76	ppb	100
88)	Benzo[a]anthracene	15.23	228	68306	11.43	ppb	96
89)	3,3'-Dichlorobenzidine	15.22	252	24338	10.98	ppb	97
90)	Chrysene	15.27	228	62774	11.29	ppb	97
91)	bis(2-Ethylhexyl)phthalate	15.33	149	47124	10.89	ppb	98
93)	Di-n-octylphthalate	15.93	149	82803	11.18	ppb	100
94)	Benzo[b]fluoranthene	16.36	252	67407	10.99	ppb	94
95)	Benzo[k]fluoranthene	16.38	252	64190	11.89	ppb	94
96)	Benzo[a]pyrene	16.72	252	62258	11.16	ppb	93
97)	Indeno[1,2,3-cd]pyrene	18.21	276	68878	11.19	ppb	60
98)	Dibenz(a,h)acridine	17.87	279	50854	10.88	ppb	94
99)	Dibenz[a,h]anthracene	18.22	278	56926	11.36	ppb	86
100)	7,12-Dimethylbenz(a)anthra	16.37	256	29617	11.61	ppb	98
101)	Benzo[g,h,i]perylene	18.62	276	57604	10.72	ppb	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59100.D MZ3145.M Tue Nov 02 13:45:30 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59100.D Vial: 3
Acq On : 1 Nov 2010 6:33 pm Operator: larisap
Sample : ic3145-10 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 1 18:57 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:43:37 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59102.D Vial: 5
Acq On : 1 Nov 2010 7:02 pm Operator: larisap
Sample : ic3145-2 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 19:22:10 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:57:51 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	64798	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	223718	40.00	ppb	-0.01
47) Acenaphthene-d10	9.56	164	125813	40.00	ppb	-0.01
69) Phenanthrene-d10	11.90	188	197010	40.00	ppb	-0.01
83) Chrysene-d12	15.25	240	187441	40.00	ppb	-0.01
92) Perylene-d12	16.79	264	167141	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	64798	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	197010	40.00	ppb	-0.01
108) Chrysene-d12a	15.25	240	187441	40.00	ppb	-0.01
110) Acenaphthene-d10a	9.56	164	125813	40.00	ppb	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.54	112	4648	2.03	ppb	0.00
Spiked Amount 50.000			Recovery =	4.06%		
8) Phenol-d5	4.55	99	6061	1.98	ppb	-0.02
Spiked Amount 50.000			Recovery =	3.96%		
25) Nitrobenzene-d5	5.77	82	4806	2.12	ppb	-0.02
Spiked Amount 50.000			Recovery =	4.24%		
51) 2-Fluorobiphenyl	8.50	172	10101	2.29	ppb	-0.02
Spiked Amount 50.000			Recovery =	4.58%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	14.08	244	7898	2.10	ppb	0.00
Spiked Amount 50.000			Recovery =	4.20%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.24	88	2389	2.06	ppb	# 86
3) Pyridine	2.50	79	6149	2.09	ppb	79
4) N-Nitrosodimethylamine	2.46	74	3717	2.03	ppb	# 53
6) Indene	5.36	116	6934	2.18	ppb	98
7) Cumene	4.09	105	11009	2.21	ppb	89
9) Phenol	4.57	94	7182	2.24	ppb	# 55
10) Aniline	4.62	93	8930	2.22	ppb	64
11) bis(2-Chloroethyl)ether	4.68	93	4986	2.15	ppb	92
12) 2-Chlorophenol	4.76	128	5010	2.14	ppb	99
13) Decane	4.80	43	4635	2.35	ppb	92
14) 1,3-Dichlorobenzene	4.95	146	5820	2.23	ppb	99
15) 1,4-Dichlorobenzene	5.01	146	5579	2.22	ppb	89
16) Benzyl alcohol	5.18	108	3177	1.95	ppb	# 65
17) 1,2-Dichlorobenzene	5.26	146	5511	2.30	ppb	96
18) Acetophenone	5.56	105	6448	2.15	ppb	94
19) 2-Methylphenol	5.35	108	3707	2.15	ppb	98
20) 2,2'-oxybis(1-Chloropropan	5.41	121	1394	1.97	ppb	# 25
21) 3&4-Methylphenol	5.55	108	3819	2.10	ppb	87
22) n-Nitroso-di-n-propylamine	5.59	70	3476	2.07	ppb	97
23) Hexachloroethane	5.68	201	1556	2.04	ppb	80
26) Nitrobenzene	5.80	123	2111	1.99	ppb	# 78
27) Quinoline	7.33	129	8244	2.14	ppb	90
28) Isophorone	6.13	82	8803	2.08	ppb	88
29) 2-Nitrophenol	6.26	139	1764	1.75	ppb	# 34

(#) = qualifier out of range (m) = manual integration
Z59102.D MZ3145.M Tue Nov 02 13:45:58 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59102.D Vial: 5
Acq On : 1 Nov 2010 7:02 pm Operator: larisap
Sample : ic3145-2 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 19:22:10 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:57:51 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.32	107	4449	2.11	ppb		73
32)	bis(2-Chloroethoxy)methane	6.47	93	5669	2.25	ppb		97
33)	2,4-Dichlorophenol	6.60	162	3324	1.91	ppb		93
34)	2,6-Dichlorophenol	6.95	162	3362	2.04	ppb	#	84
35)	1,3,5-Trichlorobenzene	6.28	180	4364	2.25	ppb		91
36)	1,2,4-Trichlorobenzene	6.74	180	4300	2.29	ppb		93
37)	1,2,3-Trichlorobenzene	7.10	180	3961	2.25	ppb		97
38)	Naphthalene	6.82	128	14100	2.33	ppb		97
39)	4-Chloroaniline	6.94	127	6235	2.25	ppb		90
40)	2,3-Dichloroaniline	8.39	161	4266	2.12	ppb		91
41)	Caprolactam	7.38	55	1519	1.78	ppb	#	71
42)	Hexachlorobutadiene	7.12	225	1736	2.09	ppb		97
43)	4-Chloro-3-methylphenol	7.70	107	3255	1.80	ppb		73
44)	2-Methylnaphthalene	7.88	142	9404	2.13	ppb		88
45)	1-Methylnaphthalene	8.06	142	9354	2.23	ppb		90
46)	Dimethylnaphthalene	8.88	156	7870	2.22	ppb		90
48)	Hexachlorocyclopentadiene	8.26	237	2852	3.74	ppb		86
49)	2,4,6-Trichlorophenol	8.38	196	1648	1.57	ppb		92
50)	2,4,5-Trichlorophenol	8.43	196	1528	1.64	ppb		91
52)	2-Chloronaphthalene	8.64	162	8738	2.40	ppb		91
53)	Biphenyl	8.64	154	11761	2.46	ppb		98
54)	2-Nitroaniline	8.86	65	1756	1.70	ppb		83
55)	Dimethylphthalate	9.23	163	9058	2.16	ppb		99
56)	Acenaphthylene	9.31	152	13289	2.18	ppb		99
57)	2,6-Dinitrotoluene	9.32	165	1193	1.58	ppb		89
58)	3-Nitroaniline	9.52	138	1759	1.57	ppb		92
59)	Acenaphthene	9.60	153	8051	2.19	ppb		93
62)	Dibenzofuran	9.86	168	11787	2.22	ppb		84
63)	2,4-Dinitrotoluene	9.94	165	1343	1.29	ppb		88
65)	Diethylphthalate	10.36	149	8376	2.01	ppb		98
66)	Fluorene	10.41	166	8948	2.11	ppb		97
67)	4-Chlorophenyl-phenylether	10.43	204	4282	2.27	ppb		91
68)	4-Nitroaniline	10.50	138	1728	1.52	ppb	#	56
71)	n-Nitrosodiphenylamine	10.63	169	6482	2.12	ppb		97
72)	1,2-Diphenylhydrazine	10.68	77	9357	2.16	ppb		95
74)	4-Bromophenyl-phenylether	11.21	248	2033	1.96	ppb		85
75)	Hexachlorobenzene	11.43	284	2306	2.08	ppb		95
77)	Phenanthrene	11.93	178	13058	2.29	ppb		97
78)	Anthracene	12.00	178	12455	2.16	ppb		95
79)	Carbazole	12.26	167	12064	2.09	ppb		95
80)	Di-n-butylphthalate	12.88	149	12556	1.85	ppb		96
81)	Fluoranthene	13.58	202	12029	1.97	ppb		76
82)	Octadecane	11.81	57	4369	1.81	ppb		86
84)	Pyrene	13.86	202	13956	2.17	ppb		74
85)	Butyl stearate	14.72	56	2488	1.56	ppb		80
87)	Butylbenzylphthalate	14.68	149	5007	1.66	ppb		97
88)	Benzo[a]anthracene	15.23	228	11693	2.17	ppb		93
89)	3,3'-Dichlorobenzidine	15.22	252	3327	1.69	ppb		96
90)	Chrysene	15.27	228	10977	2.20	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59102.D Vial: 5
Acq On : 1 Nov 2010 7:02 pm Operator: larisap
Sample : ic3145-2 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 19:22:10 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 18:57:51 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

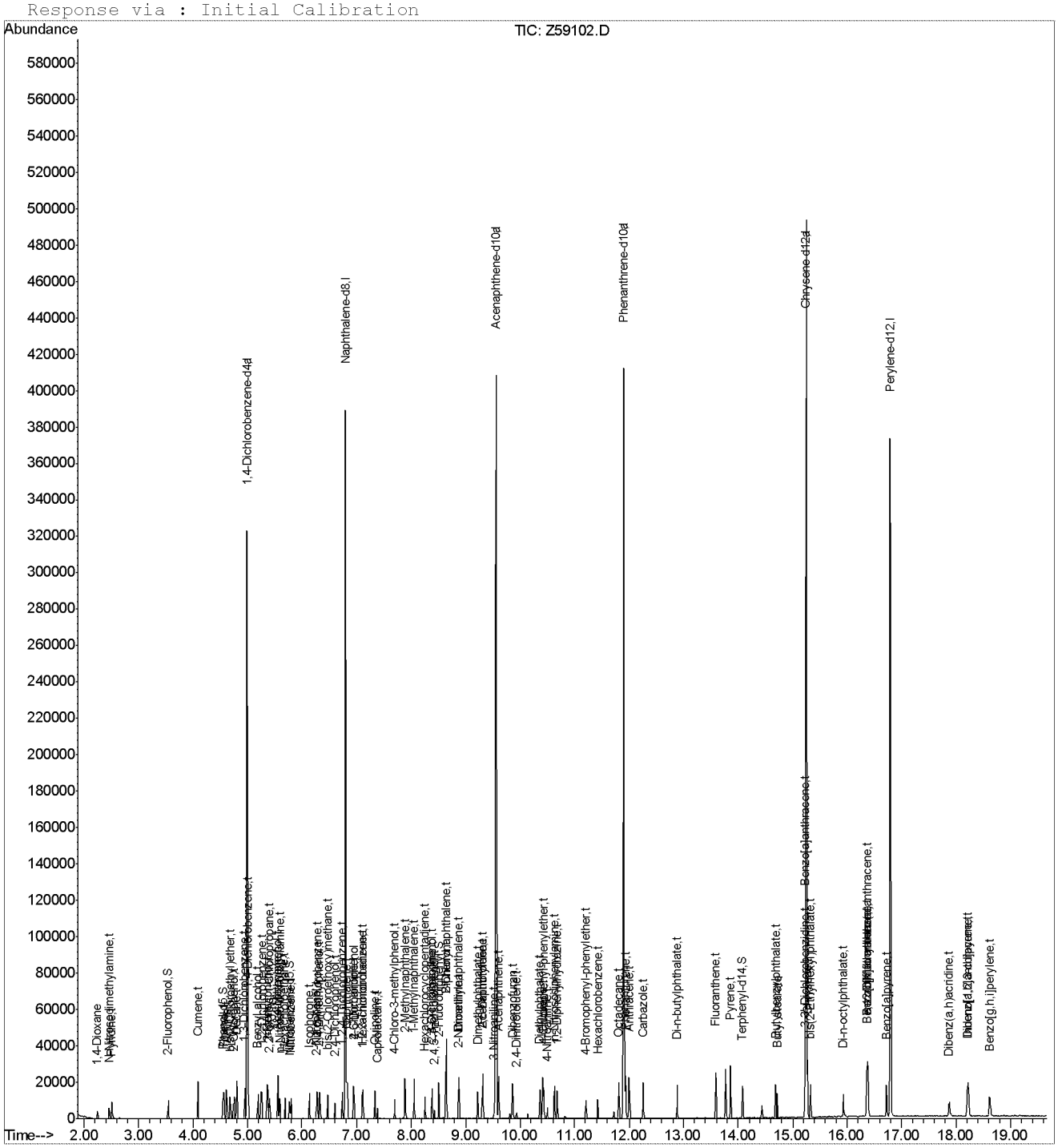
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
91)	bis(2-Ethylhexyl)phthalate	15.33	149	6565	1.72	ppb	97
93)	Di-n-octylphthalate	15.93	149	9227	1.42	ppb	98
94)	Benzo[b]fluoranthene	16.36	252	11382	2.13	ppb	95
95)	Benzo[k]fluoranthene	16.38	252	10460	2.16	ppb	91
96)	Benzo[a]pyrene	16.72	252	9281	1.90	ppb	91
97)	Indeno[1,2,3-cd]pyrene	18.21	276	10110	1.87	ppb	62
98)	Dibenz(a,h)acridine	17.87	279	6859	1.69	ppb	97
99)	Dibenz[a,h]anthracene	18.22	278	8193	1.85	ppb	84
100)	7,12-Dimethylbenz(a)anthra	16.37	256	4719	2.08	ppb	97
101)	Benzo[g,h,i]perylene	18.62	276	8871	1.91	ppb	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59102.D MZ3145.M Tue Nov 02 13:45:59 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59102.D Vial: 5
Acq On : 1 Nov 2010 7:02 pm Operator: larisap
Sample : ic3145-2 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 1 19:22 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:43:37 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59104.D Vial: 7
Acq On : 1 Nov 2010 7:59 pm Operator: larisap
Sample : icc3145-50 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 20:25:56 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 20:25:52 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	64798	40.00	ppb		0.00
24) Naphthalene-d8	6.79	136	233392	40.00	ppb		0.00
47) Acenaphthene-d10	9.56	164	134733	40.00	ppb		0.00
69) Phenanthrene-d10	11.90	188	210660	40.00	ppb		0.00
83) Chrysene-d12	15.25	240	195680	40.00	ppb		0.00
92) Perylene-d12	16.79	264	185530	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	64798	40.00	ppb		0.00
104) Phenanthrene-d10a	11.90	188	210660	40.00	ppb		0.00
108) Chrysene-d12a	15.25	240	195680	40.00	ppb		0.00
110) Acenaphthene-d10a	9.56	164	134733	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	3.54	112	117741	50.98	ppb		0.00
Spiked Amount 50.000			Recovery = 101.96%				
8) Phenol-d5	4.56	99	155795	49.24	ppb		0.00
Spiked Amount 50.000			Recovery = 98.48%				
25) Nitrobenzene-d5	5.77	82	119153	48.08	ppb		0.00
Spiked Amount 50.000			Recovery = 96.16%				
51) 2-Fluorobiphenyl	8.51	172	223771	43.58	ppb		0.00
Spiked Amount 50.000			Recovery = 87.16%				
73) 2,4,6-Tribromophenol	10.83	330	24598	68.00	ppb		0.00
Spiked Amount 50.000			Recovery = 136.00%				
86) Terphenyl-d14	14.08	244	194254	47.35	ppb		0.00
Spiked Amount 50.000			Recovery = 94.70%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.24	88	60789	50.44	ppb		94
3) Pyridine	2.48	79	151409	49.59	ppb		80
4) N-Nitrosodimethylamine	2.46	74	94314	50.33	ppb	#	51
6) Indene	5.37	116	156039	45.82	ppb		94
7) Cumene	4.09	105	249498	46.96	ppb		92
9) Phenol	4.57	94	157893	46.57	ppb	#	57
10) Aniline	4.62	93	197991	45.56	ppb	#	61
11) bis(2-Chloroethyl)ether	4.68	93	113903	46.01	ppb		97
12) 2-Chlorophenol	4.76	128	114033	45.75	ppb		98
13) Decane	4.81	43	95006	44.50	ppb		91
14) 1,3-Dichlorobenzene	4.95	146	127172	45.27	ppb		97
15) 1,4-Dichlorobenzene	5.02	146	121496	44.98	ppb		92
16) Benzyl alcohol	5.19	108	83338	50.86	ppb	#	69
17) 1,2-Dichlorobenzene	5.26	146	114653	44.25	ppb		95
18) Acetophenone	5.56	105	144994	45.05	ppb		92
19) 2-Methylphenol	5.36	108	85688	47.85	ppb		99
20) 2,2'-oxybis(1-Chloropropan	5.41	121	35956	50.74	ppb	#	8
21) 3&4-Methylphenol	5.56	108	91854	49.02	ppb		92
22) n-Nitroso-di-n-propylamine	5.60	70	82618	47.31	ppb		93
23) Hexachloroethane	5.68	201	36847	47.06	ppb		85
26) Nitrobenzene	5.80	123	55100	48.99	ppb	#	82
27) Quinoline	7.34	129	203512	47.85	ppb		92
28) Isophorone	6.13	82	222922	48.42	ppb		90
29) 2-Nitrophenol	6.27	139	57360	56.58	ppb	#	45

(#) = qualifier out of range (m) = manual integration
Z59104.D MZ3145.M Tue Nov 02 13:46:26 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59104.D Vial: 7
Acq On : 1 Nov 2010 7:59 pm Operator: larisap
Sample : icc3145-50 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 20:25:56 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 20:25:52 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.32	107	107646	46.55	ppb		84
31)	Benzoic Acid	6.47	105	47254	69.00	ppb		93
32)	bis(2-Chloroethoxy)methane	6.47	93	129496	45.77	ppb		98
33)	2,4-Dichlorophenol	6.60	162	91202	49.86	ppb		97
34)	2,6-Dichlorophenol	6.95	162	85500	48.36	ppb		98
35)	1,3,5-Trichlorobenzene	6.28	180	96845	43.86	ppb		96
36)	1,2,4-Trichlorobenzene	6.74	180	94608	44.40	ppb		96
37)	1,2,3-Trichlorobenzene	7.10	180	89659	44.50	ppb		96
38)	Naphthalene	6.83	128	308340	44.19	ppb		99
39)	4-Chloroaniline	6.94	127	142223	45.97	ppb		94
40)	2,3-Dichloroaniline	8.39	161	101058	45.13	ppb		95
41)	Caprolactam	7.41	55	46295	55.79	ppb	#	77
42)	Hexachlorobutadiene	7.12	225	42573	45.54	ppb		99
43)	4-Chloro-3-methylphenol	7.71	107	97595	53.50	ppb		72
44)	2-Methylnaphthalene	7.89	142	227518	46.48	ppb		90
45)	1-Methylnaphthalene	8.06	142	214312	45.59	ppb		90
46)	Dimethylnaphthalene	8.88	156	180825	45.46	ppb		91
48)	Hexachlorocyclopentadiene	8.26	237	82574	105.25	ppb		99
49)	2,4,6-Trichlorophenol	8.38	196	57896	56.36	ppb		96
50)	2,4,5-Trichlorophenol	8.43	196	50386	53.97	ppb		99
52)	2-Chloronaphthalene	8.65	162	179722	41.70	ppb		95
53)	Biphenyl	8.64	154	238068	41.64	ppb		100
54)	2-Nitroaniline	8.87	65	59433	56.05	ppb		82
55)	Dimethylphthalate	9.23	163	218199	46.07	ppb		100
56)	Acenaphthylene	9.31	152	316543	45.58	ppb		99
57)	2,6-Dinitrotoluene	9.32	165	44576	62.36	ppb		76
58)	3-Nitroaniline	9.54	138	64578	57.97	ppb		93
59)	Acenaphthene	9.61	153	188398	44.45	ppb		97
60)	2,4-Dinitrophenol	9.70	184	32173	109.11	ppb		81
61)	4-Nitrophenol	9.82	109	26330	56.68	ppb	#	4
62)	Dibenzofuran	9.87	168	271010	43.95	ppb		84
63)	2,4-Dinitrotoluene	9.94	165	63010	68.89	ppb		85
64)	2,3,4,6-Tetrachlorophenol	10.14	232	48613	65.63	ppb		90
65)	Diethylphthalate	10.37	149	217541	47.30	ppb		98
66)	Fluorene	10.42	166	214051	44.67	ppb		95
67)	4-Chlorophenyl-phenylether	10.44	204	92142	42.39	ppb		91
68)	4-Nitroaniline	10.52	138	62771	55.61	ppb	#	48
70)	4,6-Dinitro-2-methylphenol	10.59	198	28472	73.61	ppb		82
71)	n-Nitrosodiphenylamine	10.64	169	161065	46.63	ppb		96
72)	1,2-Diphenylhydrazine	10.68	77	225328	45.90	ppb		93
74)	4-Bromophenyl-phenylether	11.21	248	56444	50.05	ppb		98
75)	Hexachlorobenzene	11.43	284	57883	46.22	ppb		97
76)	Pentachlorophenol	11.72	266	72886	147.83	ppb		96
77)	Phenanthrene	11.94	178	289793	43.23	ppb		98
78)	Anthracene	12.00	178	299666	45.63	ppb		100
79)	Carbazole	12.27	167	301212	46.75	ppb		97
80)	Di-n-butylphthalate	12.88	149	376710	52.76	ppb		96
81)	Fluoranthene	13.59	202	326479	48.85	ppb		77
82)	Octadecane	11.81	57	128462	50.87	ppb		83

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59104.D Vial: 7
Acq On : 1 Nov 2010 7:59 pm Operator: larisap
Sample : icc3145-50 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 20:25:56 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 20:25:52 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

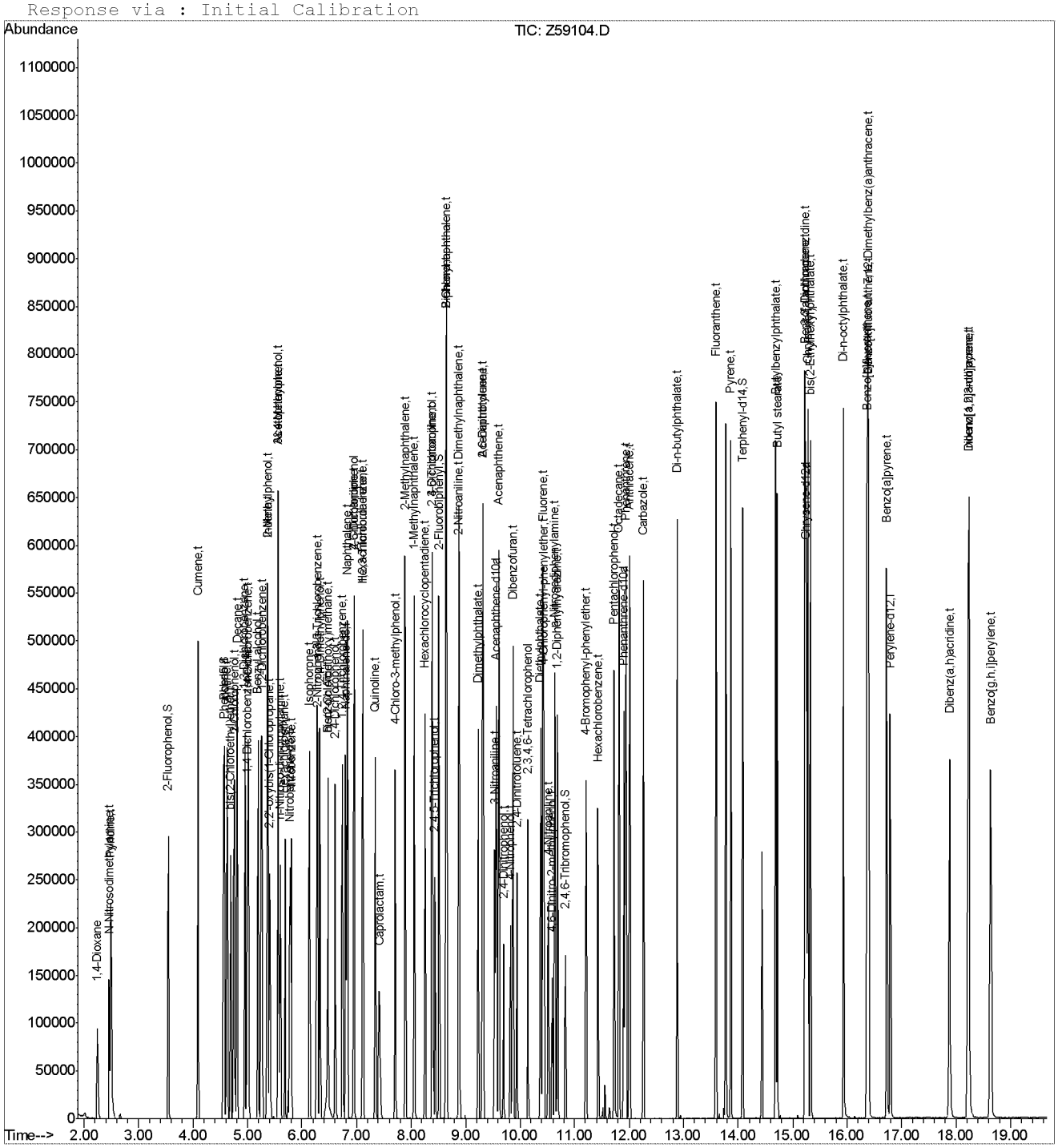
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.86	202	322370	45.49	ppb	73
85)	Butyl stearate	14.72	56	85484	57.19	ppb	81
87)	Butylbenzylphthalate	14.69	149	170554	57.90	ppb	98
88)	Benzo[a]anthracene	15.24	228	268453	44.74	ppb	98
89)	3,3'-Dichlorobenzidine	15.22	252	108277	55.14	ppb	95
90)	Chrysene	15.28	228	252152	45.11	ppb	98
91)	bis(2-Ethylhexyl)phthalate	15.33	149	210248	55.65	ppb	98
93)	Di-n-octylphthalate	15.93	149	392544	61.77	ppb	98
94)	Benzo[b]fluoranthene	16.36	252	283624	45.53	ppb	92
95)	Benzo[k]fluoranthene	16.39	252	259622	45.65	ppb	93
96)	Benzo[a]pyrene	16.73	252	272405	50.40	ppb	92
97)	Indeno[1,2,3-cd]pyrene	18.22	276	303698	51.22	ppb	60
98)	Dibenz(a,h)acridine	17.88	279	240418	55.87	ppb	98
99)	Dibenz[a,h]anthracene	18.23	278	248322	50.74	ppb	85
100)	7,12-Dimethylbenz(a)anthra	16.38	256	122096	46.60	ppb	98
101)	Benzo[g,h,i]perylene	18.63	276	270142	52.79	ppb	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59104.D MZ3145.M Tue Nov 02 13:46:26 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59104.D Vial: 7
Acq On : 1 Nov 2010 7:59 pm Operator: larisap
Sample : icc3145-50 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 1 20:26 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:43:37 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59105.D Vial: 8
Acq On : 1 Nov 2010 8:27 pm Operator: larisap
Sample : ic3145-80 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 20:48:08 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 20:32:53 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	62442	40.00	ppb	0.00
24) Naphthalene-d8	6.80	136	225215	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	128005	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	204516	40.00	ppb	0.00
83) Chrysene-d12	15.26	240	188534	40.00	ppb	0.00
92) Perylene-d12	16.79	264	181846	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	62442	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	204516	40.00	ppb	0.00
108) Chrysene-d12a	15.26	240	188534	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	128005	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.54	112	178558	79.97	ppb	0.00
Spiked Amount 50.000			Recovery = 159.94%			
8) Phenol-d5	4.56	99	234624	77.14	ppb	0.00
Spiked Amount 50.000			Recovery = 154.28%			
25) Nitrobenzene-d5	5.78	82	181556	76.40	ppb	0.00
Spiked Amount 50.000			Recovery = 152.80%			
51) 2-Fluorobiphenyl	8.51	172	329447	69.01	ppb	0.00
Spiked Amount 50.000			Recovery = 138.02%			
73) 2,4,6-Tribromophenol	10.83	330	38196	101.46	ppb	0.00
Spiked Amount 50.000			Recovery = 202.92%			
86) Terphenyl-d14	14.08	244	284604	72.64	ppb	0.00
Spiked Amount 50.000			Recovery = 145.28%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.24	88	93939	80.76	ppb	100
3) Pyridine	2.48	79	226634	77.14	ppb	100
4) N-Nitrosodimethylamine	2.46	74	144140	79.73	ppb	99
6) Indene	5.37	116	225034	69.54	ppb	99
7) Cumene	4.09	105	368589	72.74	ppb	98
9) Phenol	4.58	94	232902	72.11	ppb	99
10) Aniline	4.62	93	292247	70.83	ppb	93
11) bis(2-Chloroethyl)ether	4.69	93	166535	70.74	ppb	97
12) 2-Chlorophenol	4.76	128	168751	71.26	ppb	98
13) Decane	4.81	43	137521	68.09	ppb	100
14) 1,3-Dichlorobenzene	4.95	146	187970	70.55	ppb	98
15) 1,4-Dichlorobenzene	5.02	146	181717	71.00	ppb	99
16) Benzyl alcohol	5.19	108	126012	79.57	ppb	97
17) 1,2-Dichlorobenzene	5.26	146	168312	68.73	ppb	99
18) Acetophenone	5.57	105	211741	69.42	ppb	97
19) 2-Methylphenol	5.36	108	125666	73.35	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.41	121	53580	78.27	ppb	90
21) 3&4-Methylphenol	5.56	108	136281	75.73	ppb	100
22) n-Nitroso-di-n-propylamine	5.60	70	123107	73.81	ppb	97
23) Hexachloroethane	5.68	201	56340	75.41	ppb	98
26) Nitrobenzene	5.81	123	84540	78.15	ppb	96
27) Quinoline	7.34	129	303789	74.55	ppb	98
28) Isophorone	6.14	82	330420	74.77	ppb	99
29) 2-Nitrophenol	6.27	139	91378	91.41	ppb	97

(#) = qualifier out of range (m) = manual integration
Z59105.D MZ3145.M Tue Nov 02 13:46:39 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59105.D Vial: 8
Acq On : 1 Nov 2010 8:27 pm Operator: larisap
Sample : ic3145-80 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 20:48:08 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 20:32:53 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
30)	2,4-Dimethylphenol	6.33	107	159934	72.50	ppb	98
31)	Benzoic Acid	6.50	105	79349	109.65	ppb	89
32)	bis(2-Chloroethoxy)methane	6.47	93	194254	72.17	ppb	100
33)	2,4-Dichlorophenol	6.61	162	139640	79.14	ppb	98
34)	2,6-Dichlorophenol	6.96	162	128306	75.63	ppb	99
35)	1,3,5-Trichlorobenzene	6.28	180	143333	68.67	ppb	99
36)	1,2,4-Trichlorobenzene	6.74	180	143735	71.24	ppb	98
37)	1,2,3-Trichlorobenzene	7.10	180	132486	69.41	ppb	99
38)	Naphthalene	6.83	128	451428	68.37	ppb	98
39)	4-Chloroaniline	6.95	127	208558	70.81	ppb	100
40)	2,3-Dichloroaniline	8.39	161	147614	69.44	ppb	98
41)	Caprolactam	7.44	55	71229	87.28	ppb	95
42)	Hexachlorobutadiene	7.12	225	63054	70.95	ppb	98
43)	4-Chloro-3-methylphenol	7.71	107	148298	83.28	ppb	99
44)	2-Methylnaphthalene	7.89	142	337712	72.34	ppb	99
45)	1-Methylnaphthalene	8.06	142	319727	71.54	ppb	99
46)	Dimethylnaphthalene	8.88	156	262294	69.39	ppb	99
48)	Hexachlorocyclopentadiene	8.26	237	126249	167.90	ppb	99
49)	2,4,6-Trichlorophenol	8.39	196	86835	87.12	ppb	98
50)	2,4,5-Trichlorophenol	8.44	196	78597	87.46	ppb	98
52)	2-Chloronaphthalene	8.65	162	258790	65.00	ppb	97
53)	Biphenyl	8.64	154	338740	64.15	ppb	98
54)	2-Nitroaniline	8.87	65	89780	87.36	ppb	95
55)	Dimethylphthalate	9.24	163	332533	74.89	ppb	99
56)	Acenaphthylene	9.32	152	460195	70.80	ppb	99
57)	2,6-Dinitrotoluene	9.33	165	70010	99.01	ppb	97
58)	3-Nitroaniline	9.54	138	99149	91.25	ppb	98
59)	Acenaphthene	9.62	153	280213	70.90	ppb	96
60)	2,4-Dinitrophenol	9.70	184	65094	225.51	ppb	97
61)	4-Nitrophenol	9.82	109	42776	93.79	ppb	94
62)	Dibenzofuran	9.87	168	401932	70.01	ppb	94
63)	2,4-Dinitrotoluene	9.95	165	101443	109.83	ppb	96
64)	2,3,4,6-Tetrachlorophenol	10.14	232	75960	101.58	ppb	98
65)	Diethylphthalate	10.38	149	325956	75.28	ppb	98
66)	Fluorene	10.42	166	315940	70.66	ppb	97
67)	4-Chlorophenyl-phenylether	10.44	204	136534	67.84	ppb	98
68)	4-Nitroaniline	10.53	138	98660	90.31	ppb	99
70)	4,6-Dinitro-2-methylphenol	10.59	198	52591	125.27	ppb	99
71)	n-Nitrosodiphenylamine	10.64	169	239717	72.30	ppb	100
72)	1,2-Diphenylhydrazine	10.69	77	330904	70.39	ppb	99
74)	4-Bromophenyl-phenylether	11.21	248	85633	78.19	ppb	98
75)	Hexachlorobenzene	11.43	284	87696	73.05	ppb	98
76)	Pentachlorophenol	11.73	266	112007	213.58	ppb	97
77)	Phenanthrene	11.94	178	428589	67.38	ppb	98
78)	Anthracene	12.01	178	436455	69.46	ppb	98
79)	Carbazole	12.26	167	452275	73.09	ppb	99
80)	Di-n-butylphthalate	12.88	149	551519	78.84	ppb	99
81)	Fluoranthene	13.60	202	476452	73.72	ppb	99
82)	Octadecane	11.82	57	188187	76.53	ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59105.D Vial: 8
Acq On : 1 Nov 2010 8:27 pm Operator: larisap
Sample : ic3145-80 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 20:48:08 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 20:32:53 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

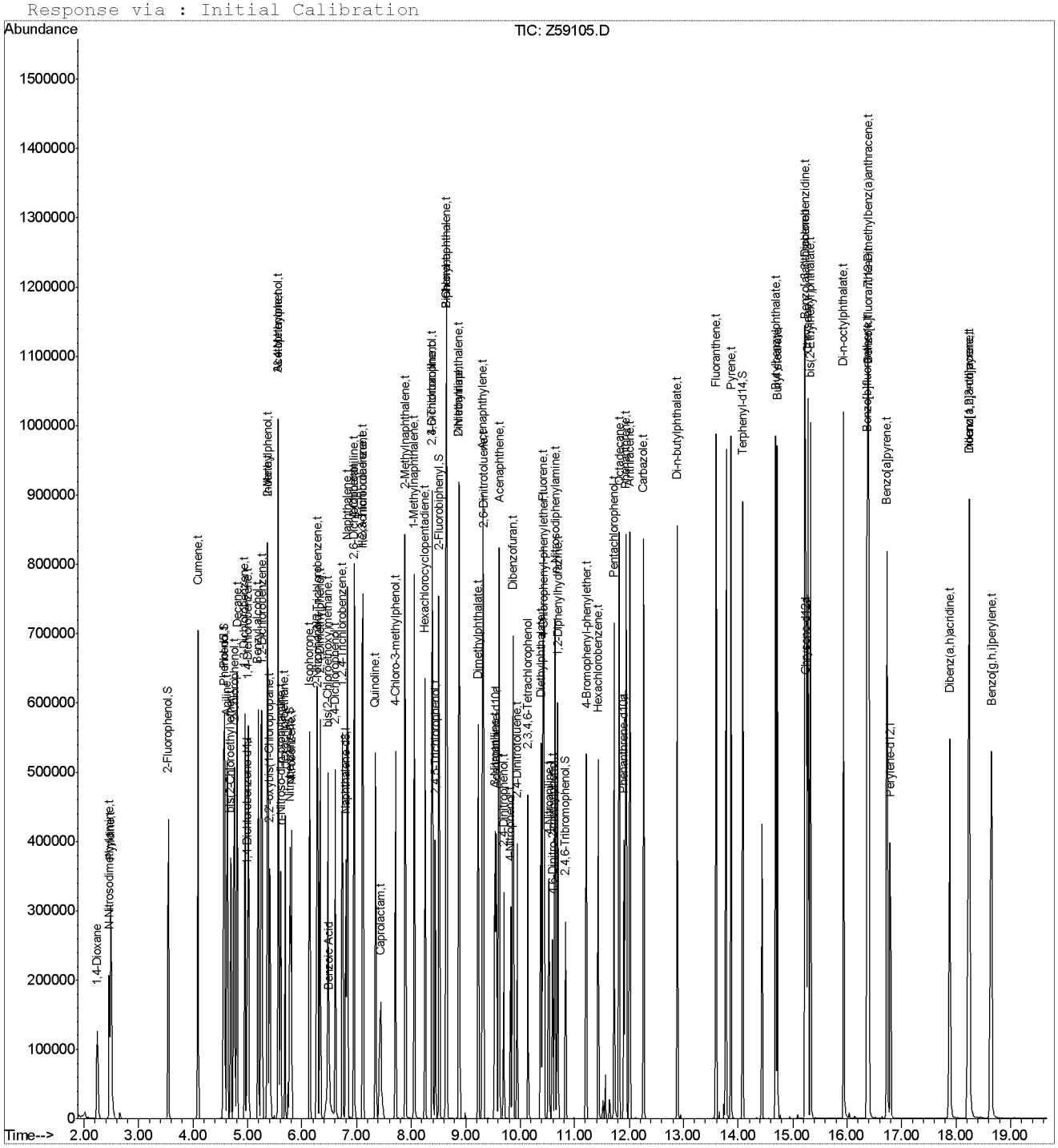
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.87	202	473248	70.37	ppb	98
85)	Butyl stearate	14.72	56	124601	84.49	ppb	98
87)	Butylbenzylphthalate	14.68	149	255933	87.87	ppb	98
88)	Benzo[a]anthracene	15.24	228	385599	67.88	ppb	100
89)	3,3'-Dichlorobenzidine	15.22	252	161987	84.18	ppb	98
90)	Chrysene	15.28	228	372952	70.40	ppb	97
91)	bis(2-Ethylhexyl)phthalate	15.33	149	313851	84.62	ppb	96
93)	Di-n-octylphthalate	15.94	149	582078	89.92	ppb	98
94)	Benzo[b]fluoranthene	16.36	252	431149	71.68	ppb	99
95)	Benzo[k]fluoranthene	16.39	252	366208	66.66	ppb	98
96)	Benzo[a]pyrene	16.73	252	415236	78.28	ppb	99
97)	Indeno[1,2,3-cd]pyrene	18.23	276	459056	78.67	ppb	97
98)	Dibenz(a,h)acridine	17.88	279	371006	86.28	ppb	97
99)	Dibenz[a,h]anthracene	18.24	278	371642	77.29	ppb	99
100)	7,12-Dimethylbenz(a)anthra	16.38	256	177606	69.95	ppb	99
101)	Benzo[g,h,i]perylene	18.64	276	418431	82.66	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59105.D MZ3145.M Tue Nov 02 13:46:40 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59105.D Vial: 8
Acq On : 1 Nov 2010 8:27 pm Operator: larisap
Sample : ic3145-80 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 1 20:48 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:43:37 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59103.D Vial: 6
Acq On : 1 Nov 2010 9:20 pm Operator: larisap
Sample : ic3145-1 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 21:41:04 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 21:32:22 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	72718	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	253474	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	142029	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	225097	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	215983	40.00	ppb	0.00
92) Perylene-d12	16.79	264	198952	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	72718	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	225097	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	215983	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	142029	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.54	112	2802	1.07	ppb	0.00
Spiked Amount 50.000			Recovery =	2.14%		
8) Phenol-d5	4.55	99	3840	1.09	ppb	0.00
Spiked Amount 50.000			Recovery =	2.18%		
25) Nitrobenzene-d5	5.77	82	2885	1.10	ppb	0.00
Spiked Amount 50.000			Recovery =	2.20%		
51) 2-Fluorobiphenyl	8.50	172	6439	1.26	ppb	0.00
Spiked Amount 50.000			Recovery =	2.52%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	14.08	244	5025	1.18	ppb	0.00
Spiked Amount 50.000			Recovery =	2.36%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.24	88	1378	1.03	ppb	# 76
3) Pyridine	2.51	79	3581	1.06	ppb	92
4) N-Nitrosodimethylamine	2.46	74	2097	1.01	ppb	80
6) Indene	5.36	116	4033	1.12	ppb	95
7) Cumene	4.09	105	6548	1.14	ppb	98
9) Phenol	4.57	94	4077	1.12	ppb	97
10) Aniline	4.62	93	5165	1.13	ppb	95
11) bis(2-Chloroethyl)ether	4.68	93	3007	1.14	ppb	95
12) 2-Chlorophenol	4.75	128	3265	1.21	ppb	96
13) Decane	4.80	43	2771	1.23	ppb	97
14) 1,3-Dichlorobenzene	4.95	146	3545	1.19	ppb	97
15) 1,4-Dichlorobenzene	5.01	146	3369	1.17	ppb	98
16) Benzyl alcohol	5.19	108	2034	1.09	ppb	92
17) 1,2-Dichlorobenzene	5.26	146	3217	1.18	ppb	95
18) Acetophenone	5.56	105	4196	1.22	ppb	89
19) 2-Methylphenol	5.35	108	2179	1.11	ppb	99
20) 2,2'-oxybis(1-Chloropropan	5.41	121	722	0.92	ppb	# 83
21) 3&4-Methylphenol	5.55	108	2370	1.13	ppb	94
22) n-Nitroso-di-n-propylamine	5.59	70	2311	1.19	ppb	100
23) Hexachloroethane	5.68	201	966	1.12	ppb	92
26) Nitrobenzene	5.80	123	1276	1.05	ppb	# 80
27) Quinoline	7.33	129	4956	1.11	ppb	96
28) Isophorone	6.13	82	5293	1.09	ppb	96
29) 2-Nitrophenol	6.26	139	1080	0.92	ppb	# 67

(#) = qualifier out of range (m) = manual integration
Z59103.D MZ3145.M Thu Nov 04 15:01:29 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59103.D Vial: 6
Acq On : 1 Nov 2010 9:20 pm Operator: larisap
Sample : ic3145-1 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 21:41:04 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 21:32:22 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.32	107	2506	1.05	ppb		84
32)	bis(2-Chloroethoxy)methane	6.47	93	3603	1.22	ppb		94
33)	2,4-Dichlorophenol	6.60	162	2103	1.06	ppb		95
34)	2,6-Dichlorophenol	6.95	162	1837	0.99	ppb		96
35)	1,3,5-Trichlorobenzene	6.28	180	2768	1.23	ppb		99
36)	1,2,4-Trichlorobenzene	6.74	180	2637	1.21	ppb		92
37)	1,2,3-Trichlorobenzene	7.10	180	2562	1.24	ppb		89
38)	Naphthalene	6.82	128	8601	1.22	ppb		99
39)	4-Chloroaniline	6.94	127	3792	1.18	ppb		93
40)	2,3-Dichloroaniline	8.39	161	2663	1.16	ppb		96
41)	Caprolactam	7.38	55	796	0.84	ppb		78
42)	Hexachlorobutadiene	7.12	225	1179	1.22	ppb		94
43)	4-Chloro-3-methylphenol	7.70	107	1968	0.96	ppb		82
44)	2-Methylnaphthalene	7.88	142	5943	1.16	ppb		96
45)	1-Methylnaphthalene	8.06	142	5311	1.11	ppb		98
46)	Dimethylnaphthalene	8.88	156	4743	1.17	ppb		97
48)	Hexachlorocyclopentadiene	8.26	237	1648	1.92	ppb		84
49)	2,4,6-Trichlorophenol	8.38	196	945	0.82	ppb		86
52)	2-Chloronaphthalene	8.64	162	5476	1.31	ppb		98
53)	Biphenyl	8.64	154	7069	1.29	ppb		94
54)	2-Nitroaniline	8.86	65	1045	0.89	ppb		88
55)	Dimethylphthalate	9.23	163	5532	1.15	ppb		99
56)	Acenaphthylene	9.31	152	8001	1.15	ppb		94
57)	2,6-Dinitrotoluene	9.32	165	550	0.66	ppb		69
58)	3-Nitroaniline	9.52	138	1047	0.83	ppb		91
59)	Acenaphthene	9.61	153	5006	1.19	ppb		96
62)	Dibenzofuran	9.86	168	7278	1.19	ppb		99
63)	2,4-Dinitrotoluene	9.94	165	633	0.55	ppb		90
64)	2,3,4,6-Tetrachlorophenol	10.14	232	424	0.49	ppb	#	67
65)	Diethylphthalate	10.36	149	5160	1.09	ppb		95
66)	Fluorene	10.41	166	5624	1.17	ppb		99
67)	4-Chlorophenyl-phenylether	10.43	204	2678	1.25	ppb		96
68)	4-Nitroaniline	10.50	138	1124	0.88	ppb		97
71)	n-Nitrosodiphenylamine	10.63	169	4062	1.18	ppb		98
72)	1,2-Diphenylhydrazine	10.68	77	5503	1.14	ppb		96
74)	4-Bromophenyl-phenylether	11.21	248	1294	1.09	ppb		93
75)	Hexachlorobenzene	11.43	284	1396	1.12	ppb		96
77)	Phenanthrene	11.93	178	8034	1.27	ppb		97
78)	Anthracene	12.00	178	8246	1.28	ppb		96
79)	Carbazole	12.26	167	7337	1.13	ppb		95
80)	Di-n-butylphthalate	12.87	149	7061	0.91	ppb		94
81)	Fluoranthene	13.58	202	8213	1.19	ppb		98
82)	Octadecane	11.81	57	2679	0.99	ppb		92
84)	Pyrene	13.86	202	9229	1.28	ppb		99
85)	Butyl stearate	14.71	56	1655	0.90	ppb		78
87)	Butylbenzylphthalate	14.69	149	3335	0.93	ppb		92
88)	Benzo[a]anthracene	15.23	228	7805	1.30	ppb		94
89)	3,3'-Dichlorobenzidine	15.22	252	2225	0.97	ppb		94
90)	Chrysene	15.27	228	7204	1.28	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59103.D Vial: 6
Acq On : 1 Nov 2010 9:20 pm Operator: larisap
Sample : ic3145-1 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 01 21:41:04 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 01 21:32:22 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

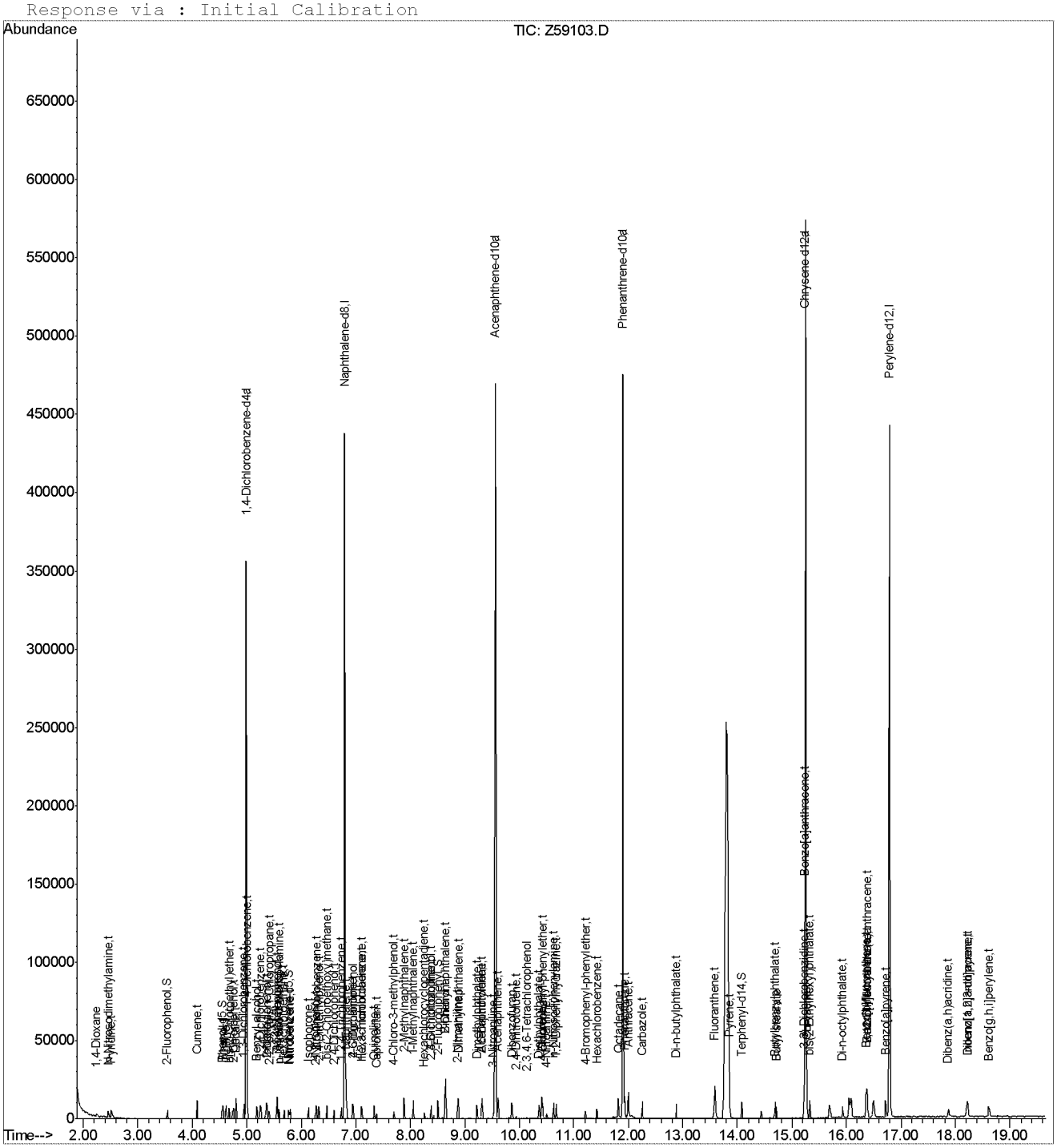
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
91)	bis(2-Ethylhexyl)phthalate	15.33	149	4158	0.93	ppb	97
93)	Di-n-octylphthalate	15.93	149	5523	0.70	ppb	99
94)	Benzo[b]fluoranthene	16.35	252	7526	1.21	ppb	95
95)	Benzo[k]fluoranthene	16.38	252	6148	1.10	ppb	92
96)	Benzo[a]pyrene	16.72	252	5738	0.99	ppb	96
97)	Indeno[1,2,3-cd]pyrene	18.21	276	6252	0.97	ppb	97
98)	Dibenz(a,h)acridine	17.87	279	4326	0.87	ppb	95
99)	Dibenz[a,h]anthracene	18.22	278	4938	0.94	ppb	94
100)	7,12-Dimethylbenz(a)anthra	16.37	256	2858	1.09	ppb	93
101)	Benzo[g,h,i]perylene	18.61	276	5267	0.94	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59103.D MZ3145.M Thu Nov 04 15:01:30 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59103.D Vial: 6
Acq On : 1 Nov 2010 9:20 pm Operator: larisap
Sample : ic3145-1 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 4 15:01 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59106.D Vial: 9
Acq On : 1 Nov 2010 10:46 pm Operator: larisap
Sample : ic3145-25 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 13:31:38 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:31:01 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	68977	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	246119	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	139879	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	221839	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	212464	40.00	ppb	0.00
92) Perylene-d12	16.79	264	197841	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	68977	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	221839	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	212464	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	139879	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.54	112	62289	26.10	ppb	0.00
Spiked Amount 50.000			Recovery = 52.20%			
8) Phenol-d5	4.55	99	83952	25.98	ppb	0.00
Spiked Amount 50.000			Recovery = 51.96%			
25) Nitrobenzene-d5	5.77	82	64571	26.04	ppb	0.00
Spiked Amount 50.000			Recovery = 52.08%			
51) 2-Fluorobiphenyl	8.51	172	126014	25.15	ppb	0.00
Spiked Amount 50.000			Recovery = 50.30%			
73) 2,4,6-Tribromophenol	10.83	330	12490	28.26	ppb	0.00
Spiked Amount 50.000			Recovery = 56.52%			
86) Terphenyl-d14	14.08	244	108857	25.63	ppb	0.00
Spiked Amount 50.000			Recovery = 51.26%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.24	88	32277	25.31	ppb	100
3) Pyridine	2.48	79	81312	25.94	ppb	99
4) N-Nitrosodimethylamine	2.46	74	50662	26.28	ppb	99
6) Indene	5.36	116	86499	25.40	ppb	99
7) Cumene	4.09	105	138247	25.29	ppb	99
9) Phenol	4.57	94	88002	25.94	ppb	99
10) Aniline	4.62	93	109892	25.53	ppb	95
11) bis(2-Chloroethyl)ether	4.68	93	63205	25.53	ppb	98
12) 2-Chlorophenol	4.76	128	62999	25.30	ppb	98
13) Decane	4.80	43	53457	25.11	ppb	97
14) 1,3-Dichlorobenzene	4.95	146	70915	25.28	ppb	99
15) 1,4-Dichlorobenzene	5.01	146	67972	24.93	ppb	99
16) Benzyl alcohol	5.19	108	44023	25.42	ppb	99
17) 1,2-Dichlorobenzene	5.26	146	64766	25.14	ppb	100
18) Acetophenone	5.56	105	81169	25.28	ppb	99
19) 2-Methylphenol	5.35	108	47479	26.50	ppb	100
20) 2,2'-oxybis(1-Chloropropan	5.41	121	19701	26.38	ppb	96
21) 3&4-Methylphenol	5.55	108	50703	26.52	ppb	99
22) n-Nitroso-di-n-propylamine	5.59	70	45083	25.17	ppb	97
23) Hexachloroethane	5.68	201	20045	25.42	ppb	97
26) Nitrobenzene	5.80	123	30509	26.86	ppb	97
27) Quinoline	7.33	129	109438	25.77	ppb	99
28) Isophorone	6.13	82	119495	25.88	ppb	98
29) 2-Nitrophenol	6.26	139	29682	28.53	ppb	91

(#) = qualifier out of range (m) = manual integration
Z59106.D MZ3145.M Tue Nov 02 13:47:01 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59106.D Vial: 9
Acq On : 1 Nov 2010 10:46 pm Operator: larisap
Sample : ic3145-25 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 13:31:38 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:31:01 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
30) 2,4-Dimethylphenol	6.32	107	59599	26.12	ppb	97
31) Benzoic Acid	6.45	105	19738	23.24	ppb	98
32) bis(2-Chloroethoxy)methane	6.47	93	72067	25.67	ppb	98
33) 2,4-Dichlorophenol	6.60	162	49160	26.77	ppb	99
34) 2,6-Dichlorophenol	6.95	162	46274	26.45	ppb	100
35) 1,3,5-Trichlorobenzene	6.28	180	54341	25.39	ppb	99
36) 1,2,4-Trichlorobenzene	6.74	180	51418	24.30	ppb	99
37) 1,2,3-Trichlorobenzene	7.10	180	49898	25.34	ppb	99
38) Naphthalene	6.83	128	171934	25.15	ppb	99
39) 4-Chloroaniline	6.94	127	79364	25.99	ppb	98
40) 2,3-Dichloroaniline	8.39	161	56499	25.69	ppb	98
41) Caprolactam	7.40	55	24504	27.50	ppb	94
42) Hexachlorobutadiene	7.12	225	23583	25.53	ppb	99
43) 4-Chloro-3-methylphenol	7.70	107	52474	27.56	ppb	97
44) 2-Methylnaphthalene	7.89	142	126871	25.95	ppb	99
45) 1-Methylnaphthalene	8.06	142	119320	25.52	ppb	100
46) Dimethylnaphthalene	8.88	156	101875	25.92	ppb	99
48) Hexachlorocyclopentadiene	8.26	237	43886	54.33	ppb	100
49) 2,4,6-Trichlorophenol	8.38	196	31078	28.64	ppb	97
50) 2,4,5-Trichlorophenol	8.43	196	26716	28.71	ppb	97
52) 2-Chloronaphthalene	8.64	162	102154	24.93	ppb	97
53) Biphenyl	8.64	154	137018	25.31	ppb	99
54) 2-Nitroaniline	8.87	65	32140	29.59	ppb	95
55) Dimethylphthalate	9.23	163	119424	25.59	ppb	100
56) Acenaphthylene	9.31	152	179002	26.43	ppb	99
57) 2,6-Dinitrotoluene	9.32	165	24181	30.81	ppb	96
58) 3-Nitroaniline	9.53	138	33660	28.78	ppb	98
59) Acenaphthene	9.60	153	103763	25.09	ppb	99
60) 2,4-Dinitrophenol	9.69	184	12067	34.70	ppb	91
61) 4-Nitrophenol	9.81	109	13252	25.70	ppb	90
62) Dibenzofuran	9.87	168	152885	25.63	ppb	98
63) 2,4-Dinitrotoluene	9.94	165	33119	31.91	ppb	96
64) 2,3,4,6-Tetrachlorophenol	10.14	232	24386	30.23	ppb	99
65) Diethylphthalate	10.37	149	119459	26.35	ppb	99
66) Fluorene	10.41	166	120628	25.54	ppb	97
67) 4-Chlorophenyl-phenylether	10.43	204	52140	25.05	ppb	97
68) 4-Nitroaniline	10.51	138	33781	29.04	ppb	97
70) 4,6-Dinitro-2-methylphenol	10.58	198	12128	23.92	ppb	99
71) n-Nitrosodiphenylamine	10.64	169	89030	25.96	ppb	99
72) 1,2-Diphenylhydrazine	10.68	77	125722	25.96	ppb	99
74) 4-Bromophenyl-phenylether	11.21	248	30607	26.76	ppb	97
75) Hexachlorobenzene	11.43	284	32494	26.00	ppb	99
76) Pentachlorophenol	11.72	266	36734	60.33	ppb	98
77) Phenanthrene	11.93	178	163054	25.14	ppb	99
78) Anthracene	12.00	178	171001	26.61	ppb	98
79) Carbazole	12.26	167	169598	26.48	ppb	99
80) Di-n-butylphthalate	12.88	149	208265	28.49	ppb	98
81) Fluoranthene	13.59	202	182316	27.00	ppb	99
82) Octadecane	11.81	57	73161	28.22	ppb	99

(#) = qualifier out of range (m) = manual integration
Z59106.D MZ3145.M Tue Nov 02 13:47:02 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59106.D Vial: 9
Acq On : 1 Nov 2010 10:46 pm Operator: larisap
Sample : ic3145-25 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 13:31:38 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:31:01 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

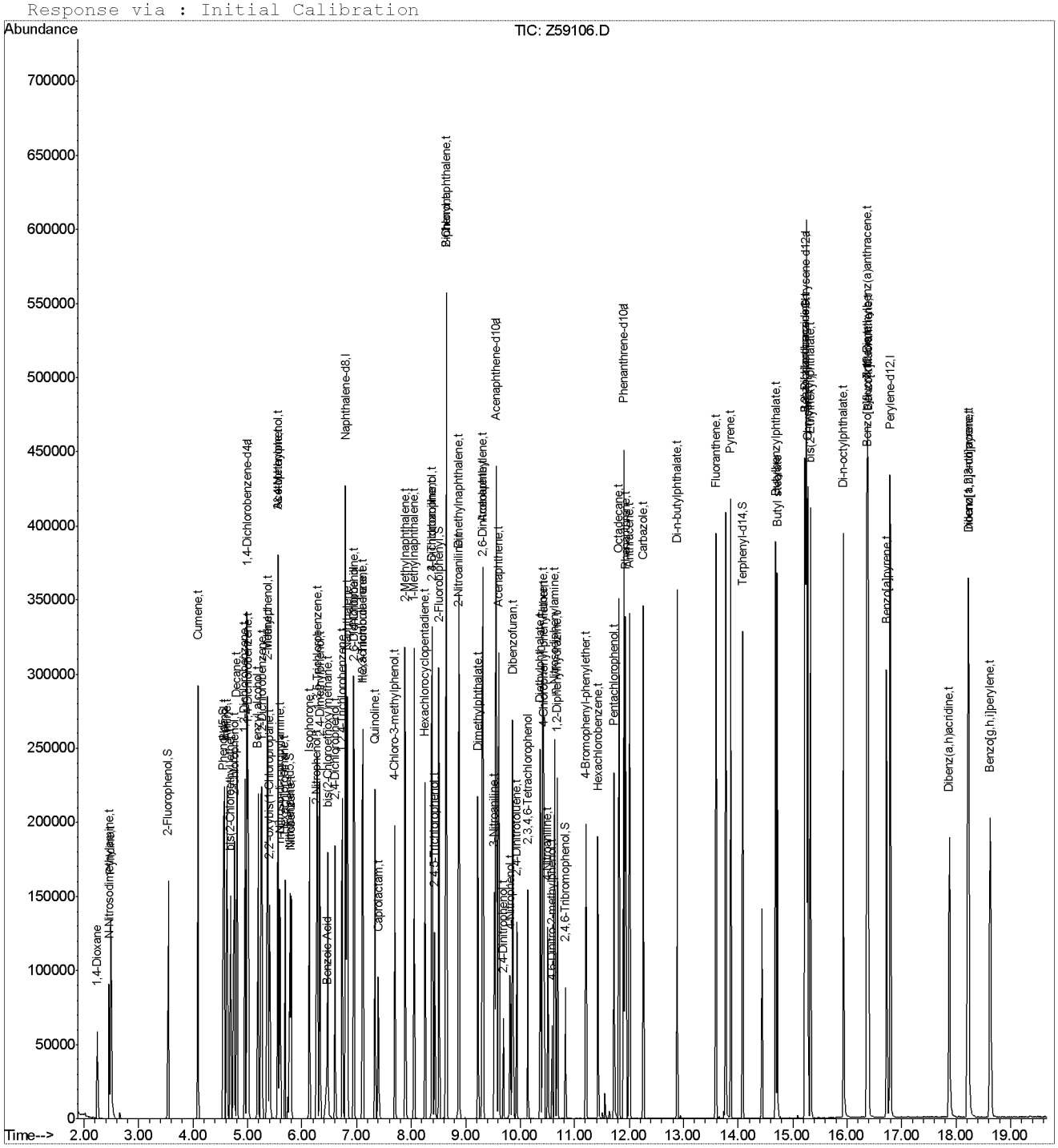
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.86	202	186888	25.81	ppb	97
85)	Butyl stearate	14.72	56	48237	29.73	ppb	98
87)	Butylbenzylphthalate	14.69	149	92319	28.65	ppb	99
88)	Benzo[a]anthracene	15.23	228	158492	25.87	ppb	99
89)	3,3'-Dichlorobenzidine	15.22	252	59575	28.69	ppb	98
90)	Chrysene	15.28	228	147601	25.68	ppb	99
91)	bis(2-Ethylhexyl)phthalate	15.33	149	119400	29.65	ppb	99
93)	Di-n-octylphthalate	15.93	149	211637	31.06	ppb	99
94)	Benzo[b]fluoranthene	16.36	252	173190	27.84	ppb	99
95)	Benzo[k]fluoranthene	16.38	252	137494	24.44	ppb	98
96)	Benzo[a]pyrene	16.73	252	151389	27.60	ppb	98
97)	Indeno[1,2,3-cd]pyrene	18.22	276	169994	27.79	ppb	99
98)	Dibenz(a,h)acridine	17.87	279	127748	28.42	ppb	99
99)	Dibenz[a,h]anthracene	18.23	278	141148	28.17	ppb	97
100)	7,12-Dimethylbenz(a)anthra	16.37	256	69779	27.47	ppb	97
101)	Benzo[g,h,i]perylene	18.62	276	144185	27.11	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59106.D MZ3145.M Tue Nov 02 13:47:02 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59106.D Vial: 9
Acq On : 1 Nov 2010 10:46 pm Operator: larisap
Sample : ic3145-25 Inst : MSZ
Misc : op45866,EZ3145,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 13:32 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 13:43:37 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59108.D Vial: 10
Acq On : 1 Nov 2010 11:32 pm Operator: larisap
Sample : ic3146-100 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:27:07 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

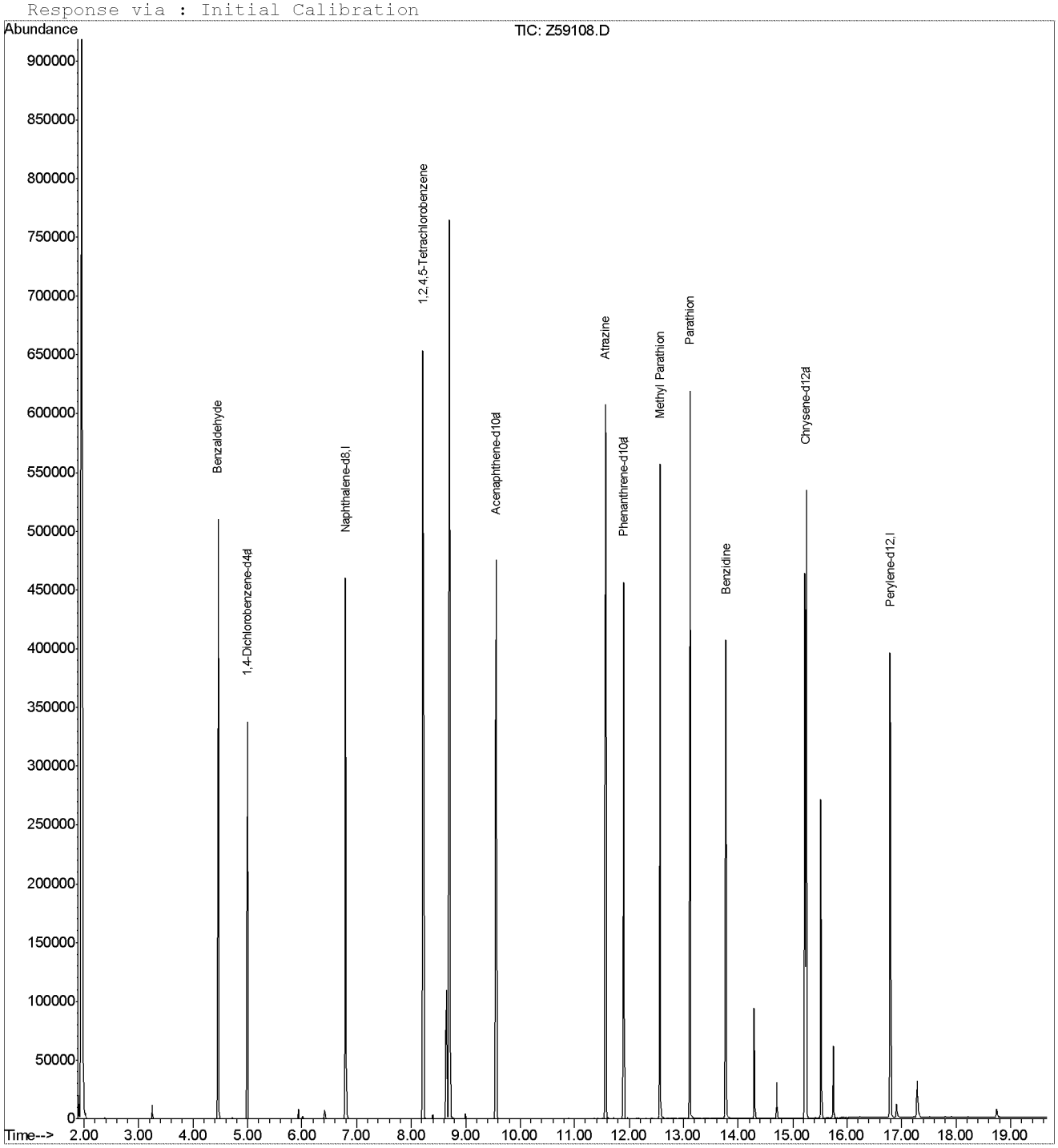
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	70668	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	259462	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	143778	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	220900	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	199769	40.00	ppb	0.00
92) Perylene-d12	16.79	264	184830	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	70668	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	220900	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	199769	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	143778	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.46	105	119653	100.00	ppb	# 83
105) Atrazine	11.57	215	54366	100.01	ppb	# 80
106) Methyl Parathion	12.56	109	112393	100.00	ppb	81
107) Parathion	13.11	109	70013	99.85	ppb	94
109) Benzidine	13.77	184	187665	99.67	ppb	97
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	156762	99.95	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59108.D MZ3145.M Tue Nov 02 14:27:37 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59108.D Vial: 10
Acq On : 1 Nov 2010 11:32 pm Operator: larisap
Sample : ic3146-100 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:27 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59109.D Vial: 11
Acq On : 2 Nov 2010 12:01 am Operator: larisap
Sample : ic3146-80 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:27:53 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

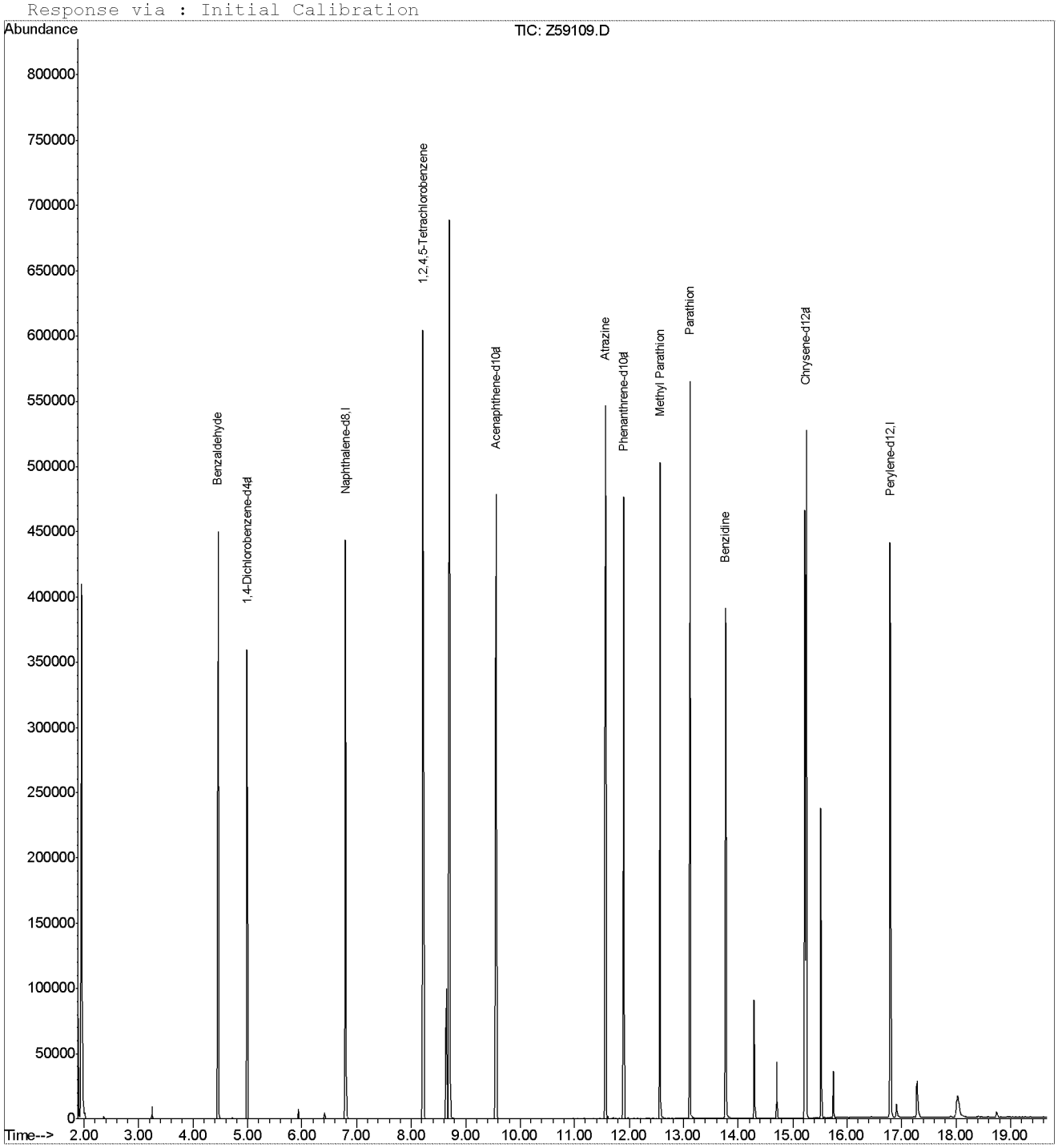
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	72190	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	257771	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	141783	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	222916	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	209739	40.00	ppb	0.00
92) Perylene-d12	16.79	264	196613	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	72190	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	222916	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	209739	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	141783	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.46	105	113304	92.70	ppb	# 84
105) Atrazine	11.57	215	47393	86.39	ppb	# 82
106) Methyl Parathion	12.56	109	98933	87.23	ppb	83
107) Parathion	13.11	109	62827	88.79	ppb	95
109) Benzidine	13.77	184	174237	88.14	ppb	96
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	136670	88.36	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59109.D MZ3145.M Tue Nov 02 14:28:20 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59109.D Vial: 11
Acq On : 2 Nov 2010 12:01 am Operator: larisap
Sample : ic3146-80 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:28 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59110.D Vial: 12
Acq On : 2 Nov 2010 12:29 am Operator: larisap
Sample : icc3146-50 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:28:33 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

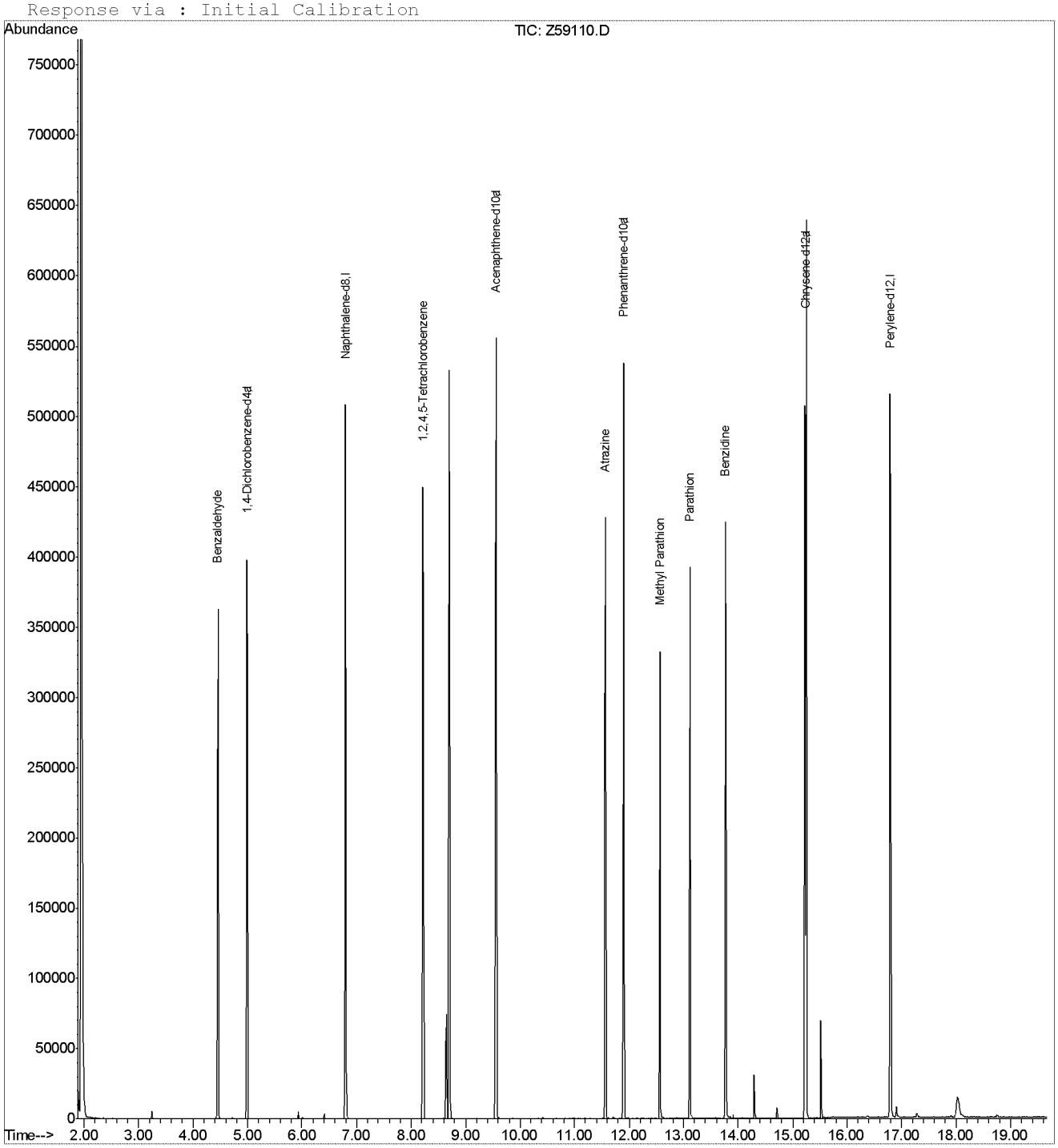
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	82211	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	295418	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	165709	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	261954	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	248294	40.00	ppb	0.00
92) Perylene-d12	16.79	264	238903	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	82211	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	261954	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	248294	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	165709	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.45	105	90950	65.34	ppb	# 83
105) Atrazine	11.57	215	35941	55.75	ppb	# 81
106) Methyl Parathion	12.56	109	70533	52.92	ppb	82
107) Parathion	13.11	109	45313	54.49	ppb	98
109) Benzidine	13.77	184	177062	75.66	ppb	96
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	102082	56.47	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59110.D MZ3145.M Tue Nov 02 14:28:57 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59110.D Vial: 12
Acq On : 2 Nov 2010 12:29 am Operator: larisap
Sample : icc3146-50 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:28 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59111.D Vial: 13
Acq On : 2 Nov 2010 12:58 am Operator: larisap
Sample : ic3146-25 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:29:13 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

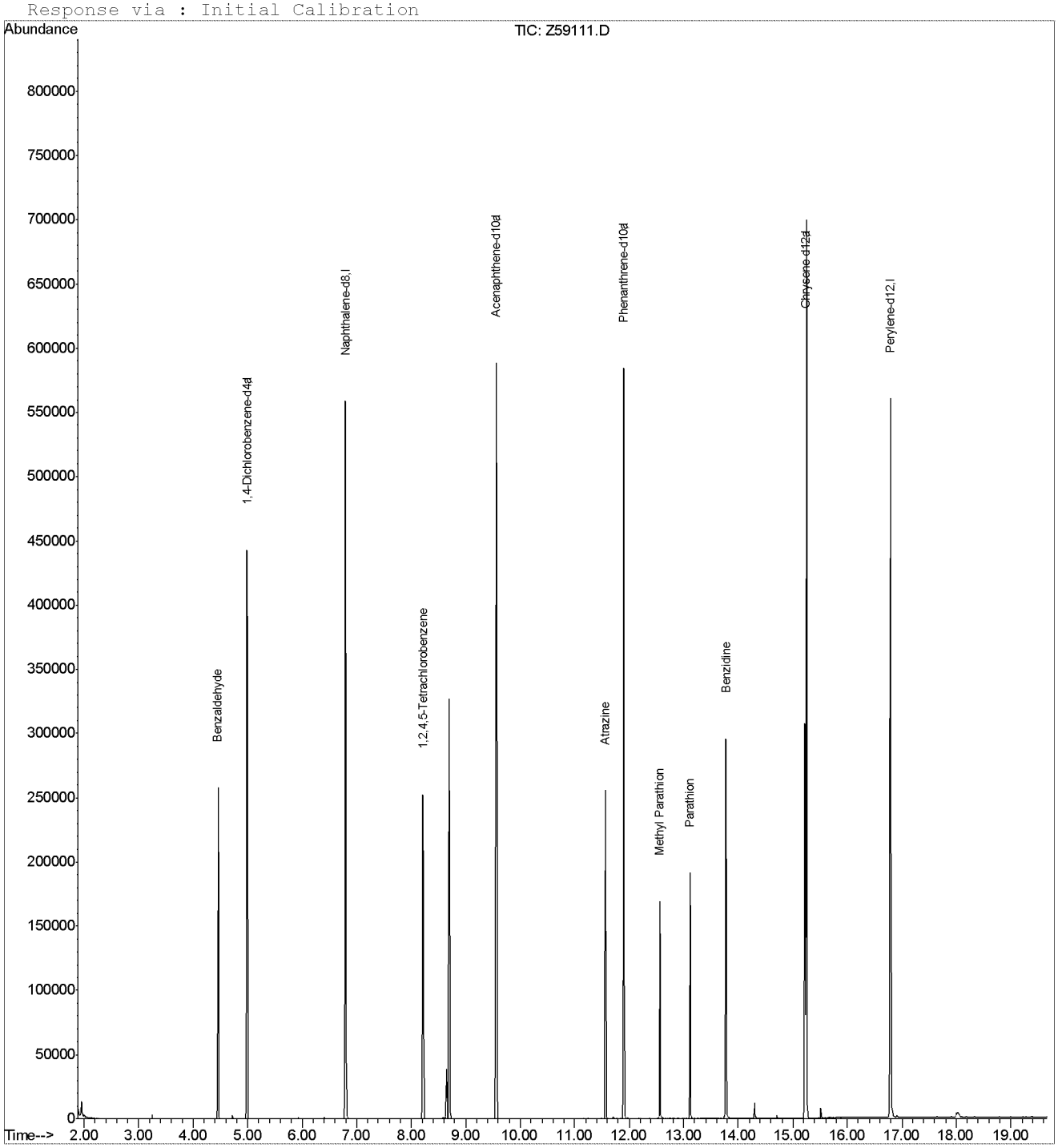
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	90094	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	321607	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	175832	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	281294	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	266414	40.00	ppb	0.00
92) Perylene-d12	16.79	264	251615	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	90094	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	281294	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	266414	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	175832	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.45	105	62281	40.83	ppb	# 84
105) Atrazine	11.56	215	19247	27.80	ppb	# 80
106) Methyl Parathion	12.56	109	31909	22.30	ppb	# 76
107) Parathion	13.11	109	21866	24.49	ppb	90
109) Benzidine	13.77	184	124654	49.65	ppb	96
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	58076	30.28	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59111.D MZ3145.M Tue Nov 02 14:29:29 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59111.D Vial: 13
Acq On : 2 Nov 2010 12:58 am Operator: larisap
Sample : ic3146-25 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:29 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59112.D Vial: 14
Acq On : 2 Nov 2010 1:26 am Operator: larisap
Sample : ic3146-10 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:29:52 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

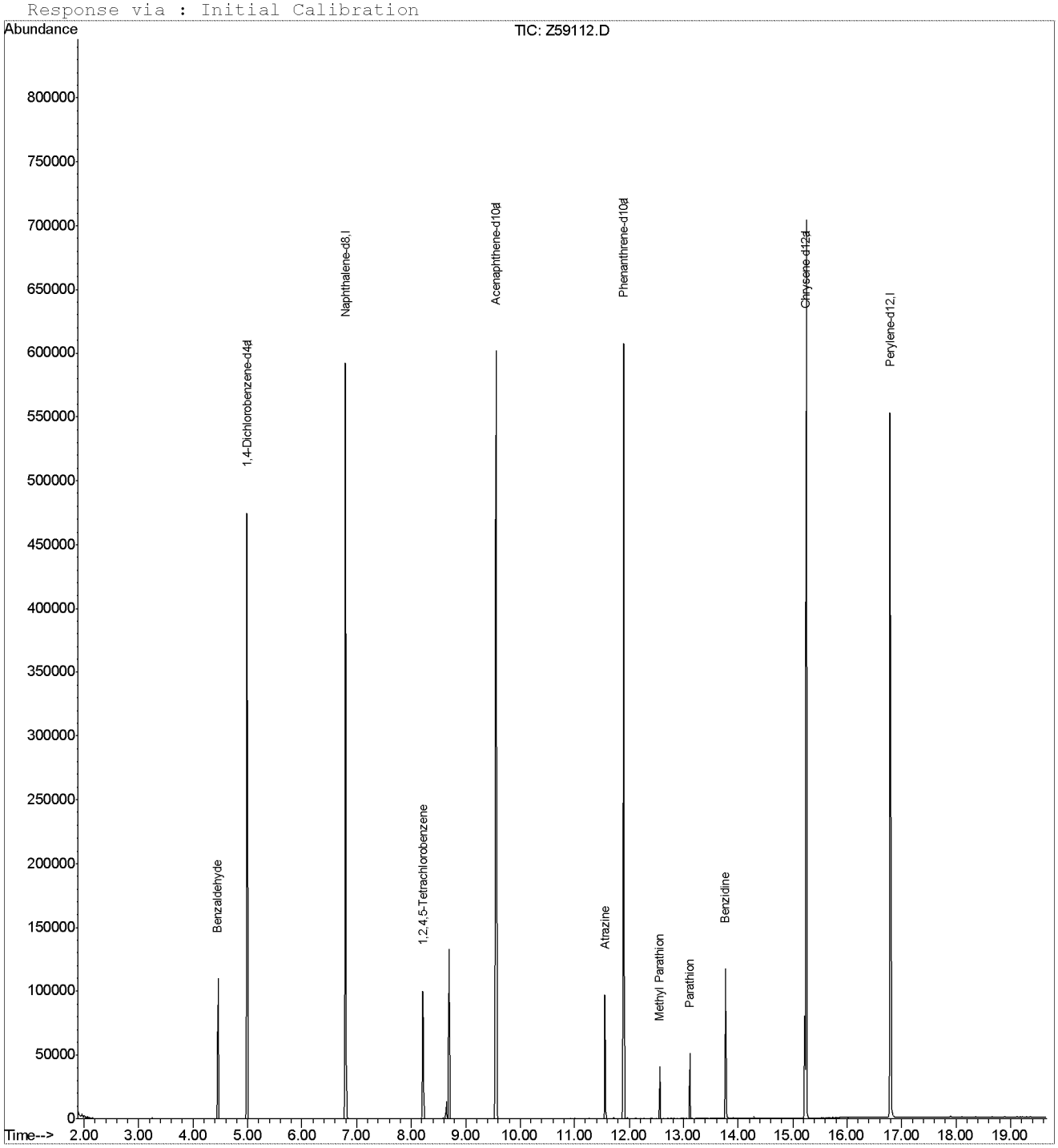
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	98284	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	337536	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	188893	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	292439	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	276154	40.00	ppb	0.00
92) Perylene-d12	16.79	264	255910	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	98284	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	292439	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	276154	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	188893	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.45	105	26846	16.13	ppb	# 84
105) Atrazine	11.55	215	7136	9.92	ppb	# 83
106) Methyl Parathion	12.56	109	8551	5.75	ppb	# 78
107) Parathion	13.11	109	6173	6.65	ppb	89
109) Benzidine	13.77	184	52054	20.00	ppb	96
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	24384	11.83	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59112.D MZ3145.M Tue Nov 02 14:30:12 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59112.D Vial: 14
Acq On : 2 Nov 2010 1:26 am Operator: larisap
Sample : ic3146-10 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:30 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59113.D Vial: 15
Acq On : 2 Nov 2010 1:55 am Operator: larisap
Sample : ic3146-5 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:30:28 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

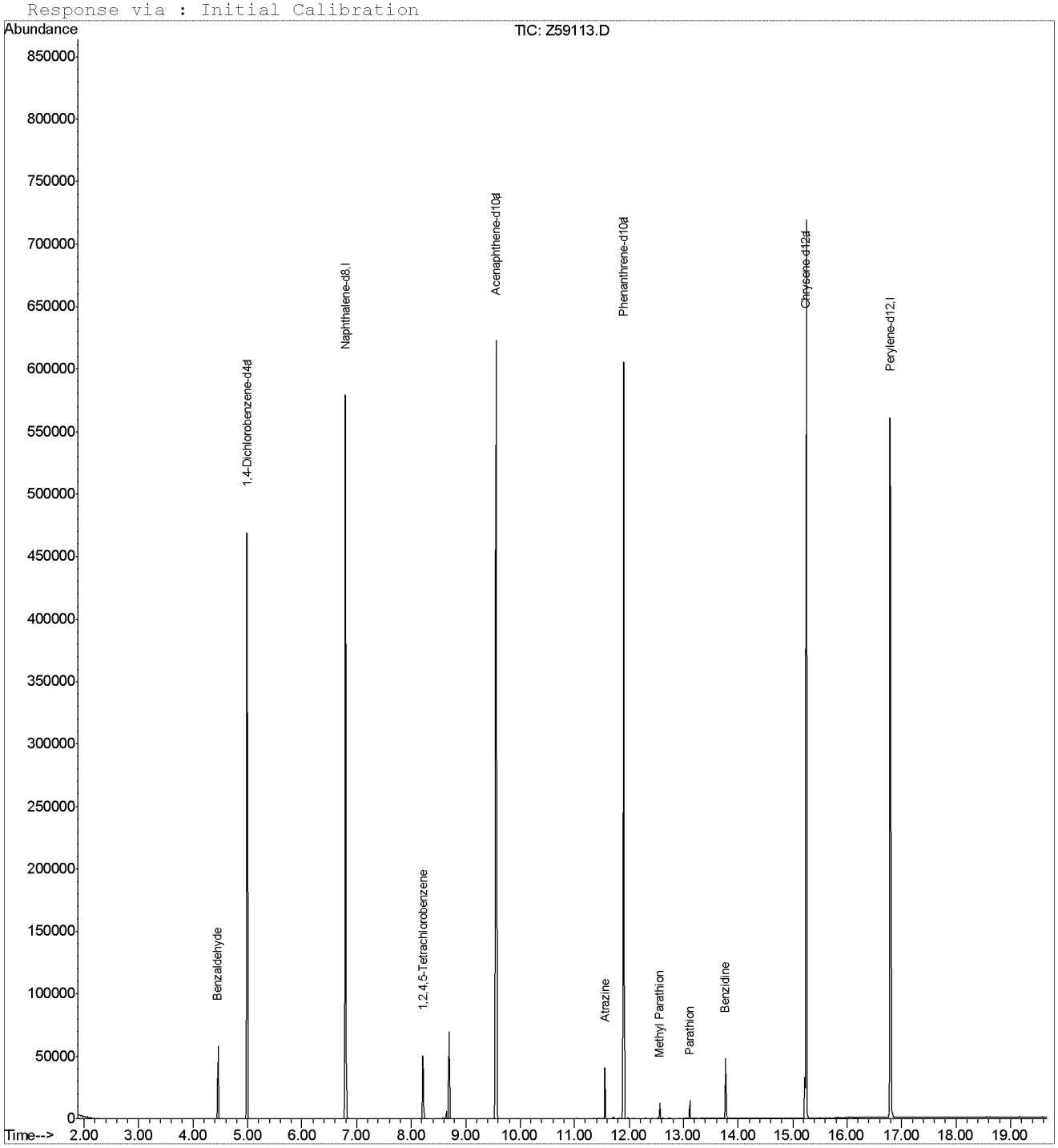
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	96776	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	336277	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	186968	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	292470	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	275900	40.00	ppb	0.00
92) Perylene-d12	16.79	264	253778	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	96776	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	292470	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	275900	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	186968	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.45	105	14007	8.55	ppb	# 84
105) Atrazine	11.55	215	3224	4.48	ppb	# 83
106) Methyl Parathion	12.56	109	2940	1.98	ppb	# 86
107) Parathion	13.11	109	2293	2.47	ppb	83
109) Benzidine	13.77	184	23713	9.12	ppb	96
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	12983	6.37	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59113.D MZ3145.M Tue Nov 02 14:30:51 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59113.D Vial: 15
Acq On : 2 Nov 2010 1:55 am Operator: larisap
Sample : ic3146-5 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:30 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59114.D Vial: 16
Acq On : 2 Nov 2010 2:23 am Operator: larisap
Sample : ic3146-2 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:34:47 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

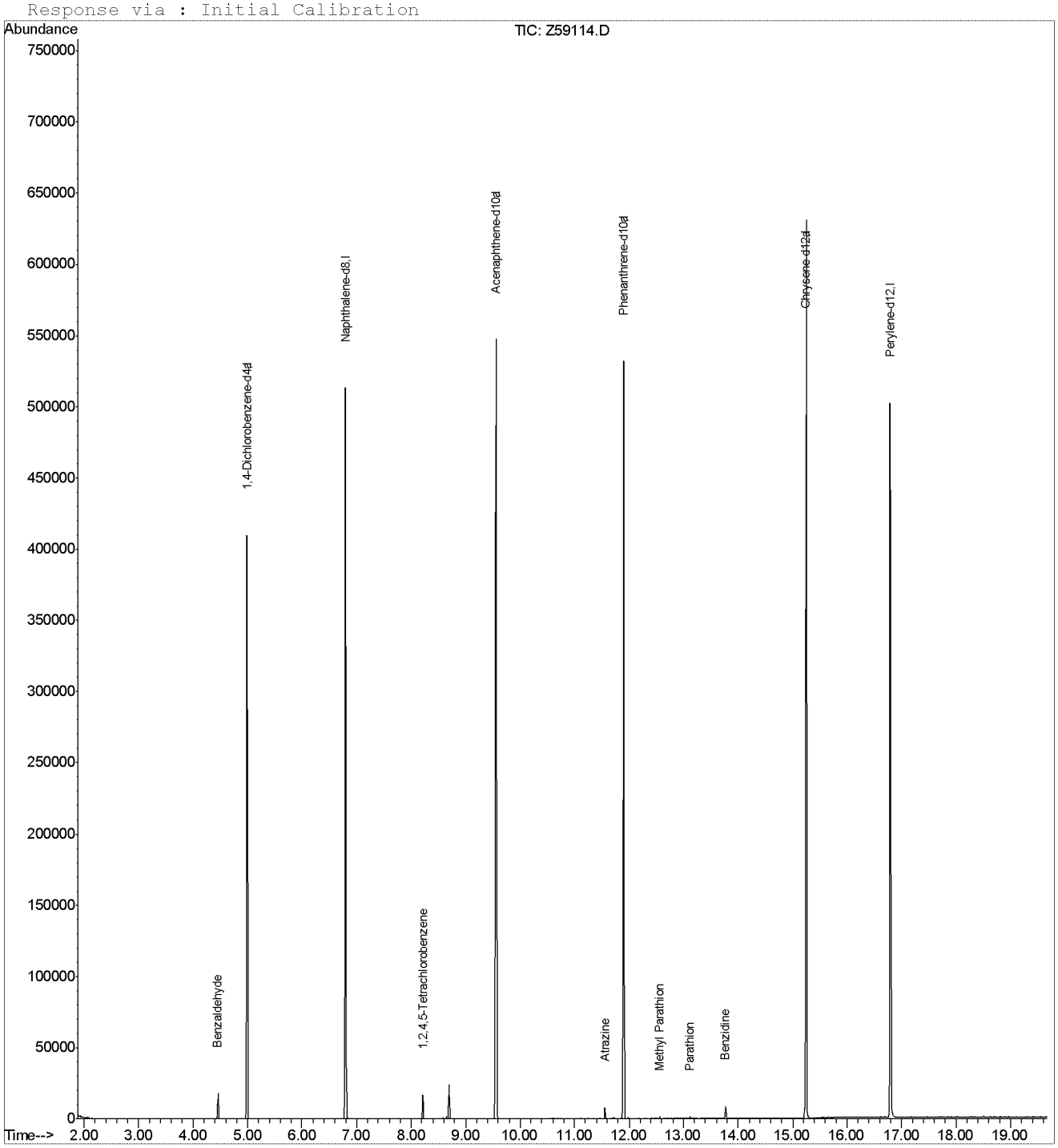
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	86060	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	299325	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	166311	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	261175	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	244909	40.00	ppb	0.00
92) Perylene-d12	16.79	264	219334	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	86060	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	261175	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	244909	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	166311	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.46	105	4945	3.39	ppb	# 83
105) Atrazine	11.55	215	892	1.39	ppb	# 83
106) Methyl Parathion	12.56	109	748	0.56	ppb	# 62
107) Parathion	13.11	109	427	0.52	ppb	# 60
109) Benzidine	13.77	184	6481	2.81	ppb	96
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	4652	2.56	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59114.D MZ3145.M Tue Nov 02 14:35:19 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59114.D Vial: 16
Acq On : 2 Nov 2010 2:23 am Operator: larisap
Sample : ic3146-2 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:35 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59115.D Vial: 17
Acq On : 2 Nov 2010 2:52 am Operator: larisap
Sample : ic3146-1 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:35:36 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

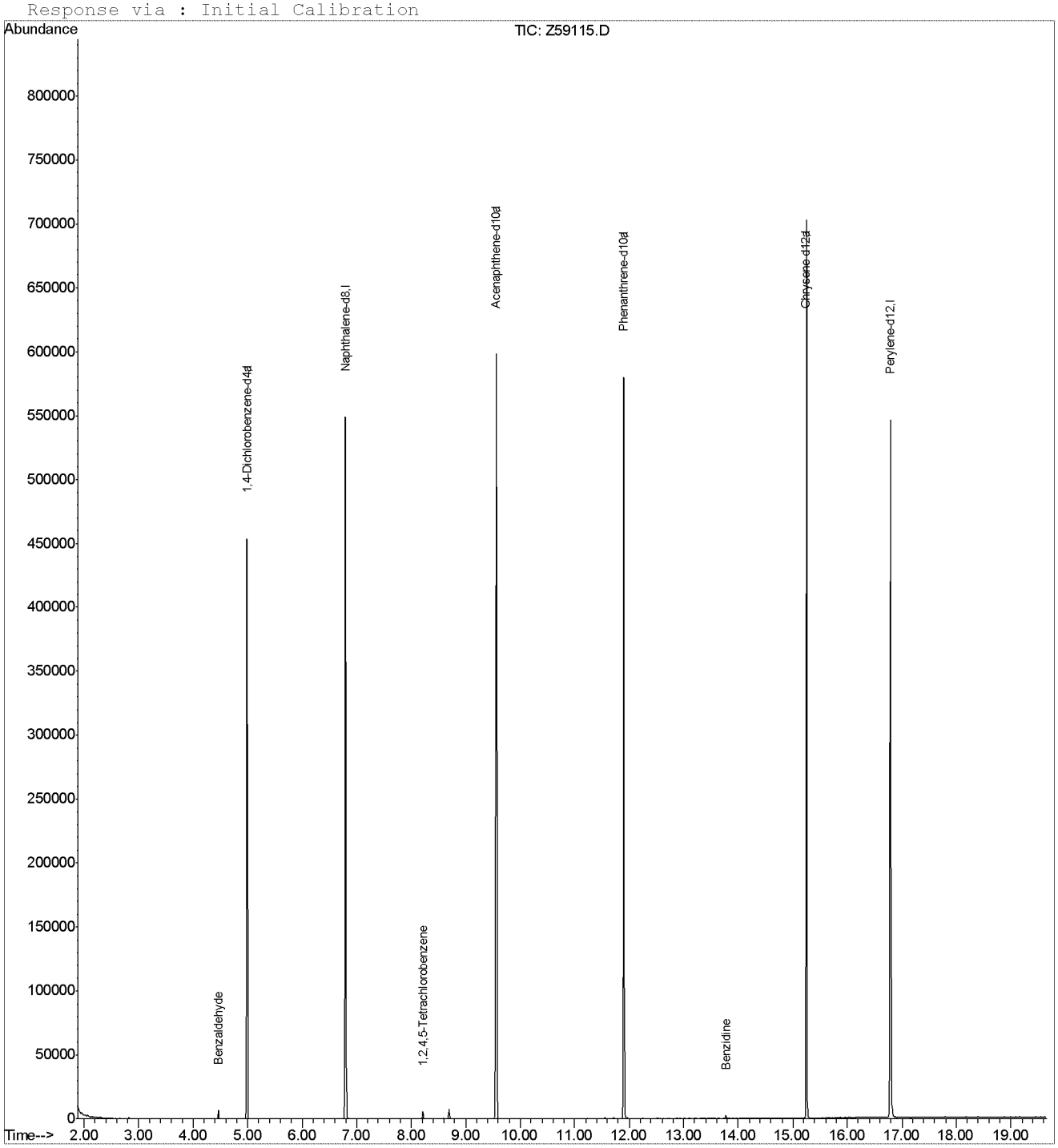
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	94029	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	322701	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	180415	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	278527	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	265310	40.00	ppb	0.00
92) Perylene-d12	16.79	264	244230	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	94029	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	278527	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	265310	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	180415	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.46	105	2029	1.27	ppb	# 84
109) Benzidine	13.77	184	1929	0.77	ppb	# 84
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	2085	1.06	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59115.D MZ3145.M Tue Nov 02 14:36:35 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59115.D Vial: 17
Acq On : 2 Nov 2010 2:52 am Operator: larisap
Sample : ic3146-1 Inst : MSZ
Misc : op45866,EZ3146,1000,,,1,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:36 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:26:57 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59116.D Vial: 18
Acq On : 2 Nov 2010 3:21 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,acid Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 14:07:09 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:07:06 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

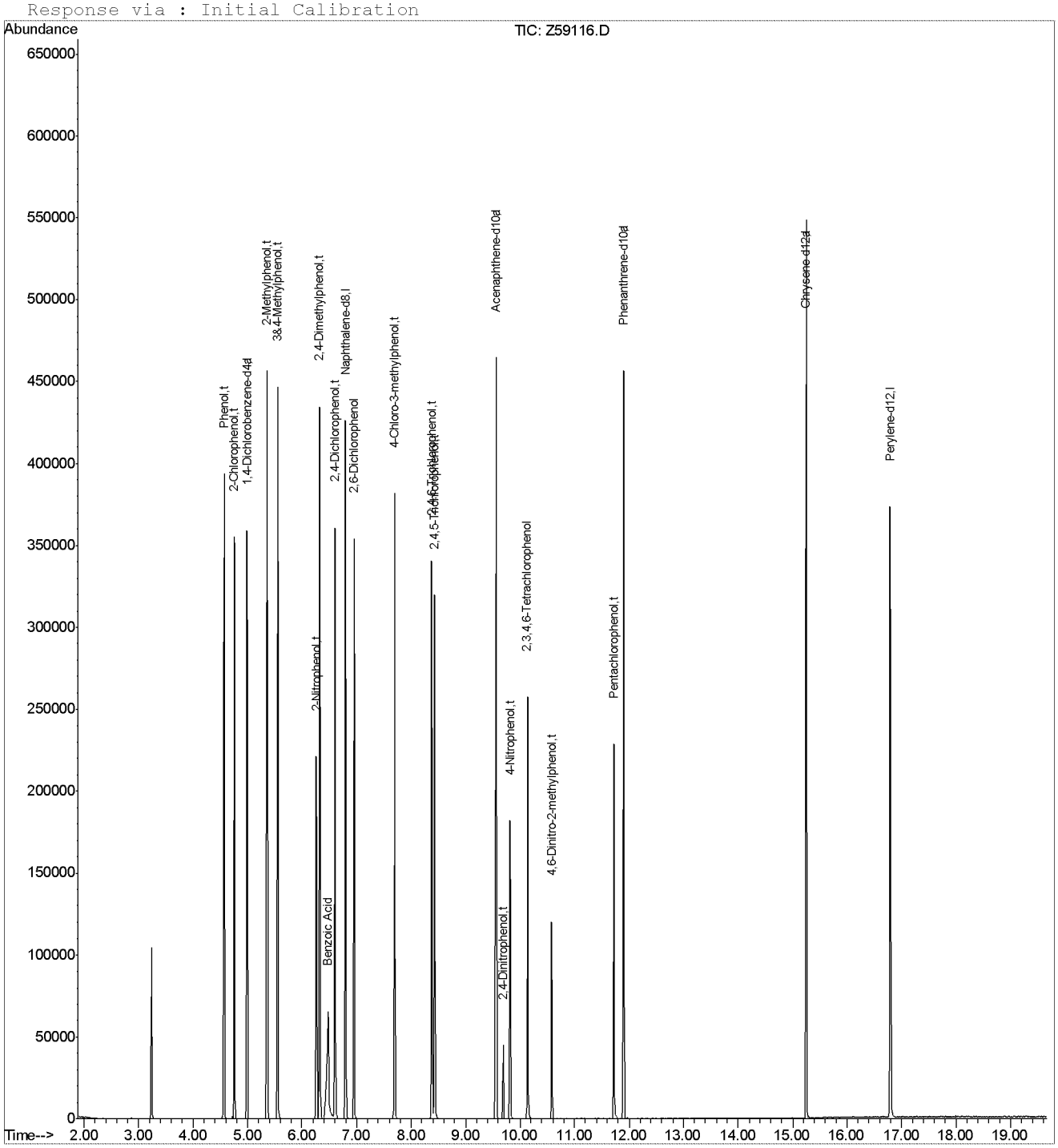
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	72196	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	243874	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	140684	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	212519	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	200008	40.00	ppb	0.00
92) Perylene-d12	16.79	264	177508	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	72196	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	212519	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	200008	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	140684	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
9) Phenol	4.57	94	173172	47.25	ppb	99
12) 2-Chlorophenol	4.76	128	127830	47.58	ppb	97
19) 2-Methylphenol	5.35	108	118474	59.48	ppb	97
21) 3&4-Methylphenol	5.55	108	122910	58.92	ppb	100
29) 2-Nitrophenol	6.26	139	56348	50.62	ppb	90
30) 2,4-Dimethylphenol	6.32	107	115047	49.71	ppb	99
31) Benzoic Acid	6.48	105	51944	49.88	ppb	100
33) 2,4-Dichlorophenol	6.60	162	92070	48.25	ppb	98
34) 2,6-Dichlorophenol	6.95	162	90523	50.47	ppb	99
43) 4-Chloro-3-methylphenol	7.70	107	96677	49.28	ppb	100
49) 2,4,6-Trichlorophenol	8.38	196	57677	51.09	ppb	98
50) 2,4,5-Trichlorophenol	8.43	196	59787	58.27	ppb	99
60) 2,4-Dinitrophenol	9.69	184	9147	41.97	ppb	98
61) 4-Nitrophenol	9.81	109	24663	43.61	ppb	89
64) 2,3,4,6-Tetrachlorophenol	10.14	232	41774	41.22	ppb	97
70) 4,6-Dinitro-2-methylphenol	10.58	198	22608	41.71	ppb	95
76) Pentachlorophenol	11.71	266	32630	49.02	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59116.D MZ3145.M Tue Nov 02 14:08:23 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59116.D Vial: 18
Acq On : 2 Nov 2010 3:21 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,acid Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 14:08 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 14:07:06 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59117.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:08:57 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	71209	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	249229	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	138493	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	228169	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	196366	40.00	ppb	0.00
92) Perylene-d12	16.79	264	180864	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	71209	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	228169	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	196366	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	138493	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
3) Pyridine	2.48	79	140418	42.40	ppb	99
4) N-Nitrosodimethylamine	2.45	74	82083	40.19	ppb	99
11) bis(2-Chloroethyl)ether	4.68	93	117680	45.20	ppb	96
14) 1,3-Dichlorobenzene	4.95	146	130267	44.03	ppb	99
15) 1,4-Dichlorobenzene	5.01	146	123169	43.37	ppb	99
16) Benzyl alcohol	5.19	108	82614	45.42	ppb	98
17) 1,2-Dichlorobenzene	5.26	146	116375	42.98	ppb	98
20) 2,2'-oxybis(1-Chloropropan	5.41	121	37207	48.21	ppb #	85
22) n-Nitroso-di-n-propylamine	5.59	70	83228	43.97	ppb	97
23) Hexachloroethane	5.68	201	37169	44.01	ppb	96
26) Nitrobenzene	5.80	123	53647	44.92	ppb	98
28) Isophorone	6.13	82	214475	44.67	ppb	99
32) bis(2-Chloroethoxy)methane	6.47	93	137416	46.79	ppb	98
36) 1,2,4-Trichlorobenzene	6.74	180	96200	44.35	ppb	99
38) Naphthalene	6.83	128	305776	43.40	ppb	100
42) Hexachlorobutadiene	7.12	225	44246	46.34	ppb	99
44) 2-Methylnaphthalene	7.89	142	212705	42.01	ppb	98
48) Hexachlorocyclopentadiene	8.25	237	44152	52.91	ppb	97
52) 2-Chloronaphthalene	8.64	162	189695	44.18	ppb	96
54) 2-Nitroaniline	8.87	65	53691	47.15	ppb	90
55) Dimethylphthalate	9.23	163	208423	43.95	ppb	100
56) Acenaphthylene	9.31	152	276773	40.23	ppb	99
57) 2,6-Dinitrotoluene	9.32	165	41397	48.58	ppb	97
58) 3-Nitroaniline	9.53	138	51022	42.09	ppb	98

(#) = qualifier out of range (m) = manual integration
Z59117.D MZ3145.M Tue Nov 02 15:13:16 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59117.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:08:57 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

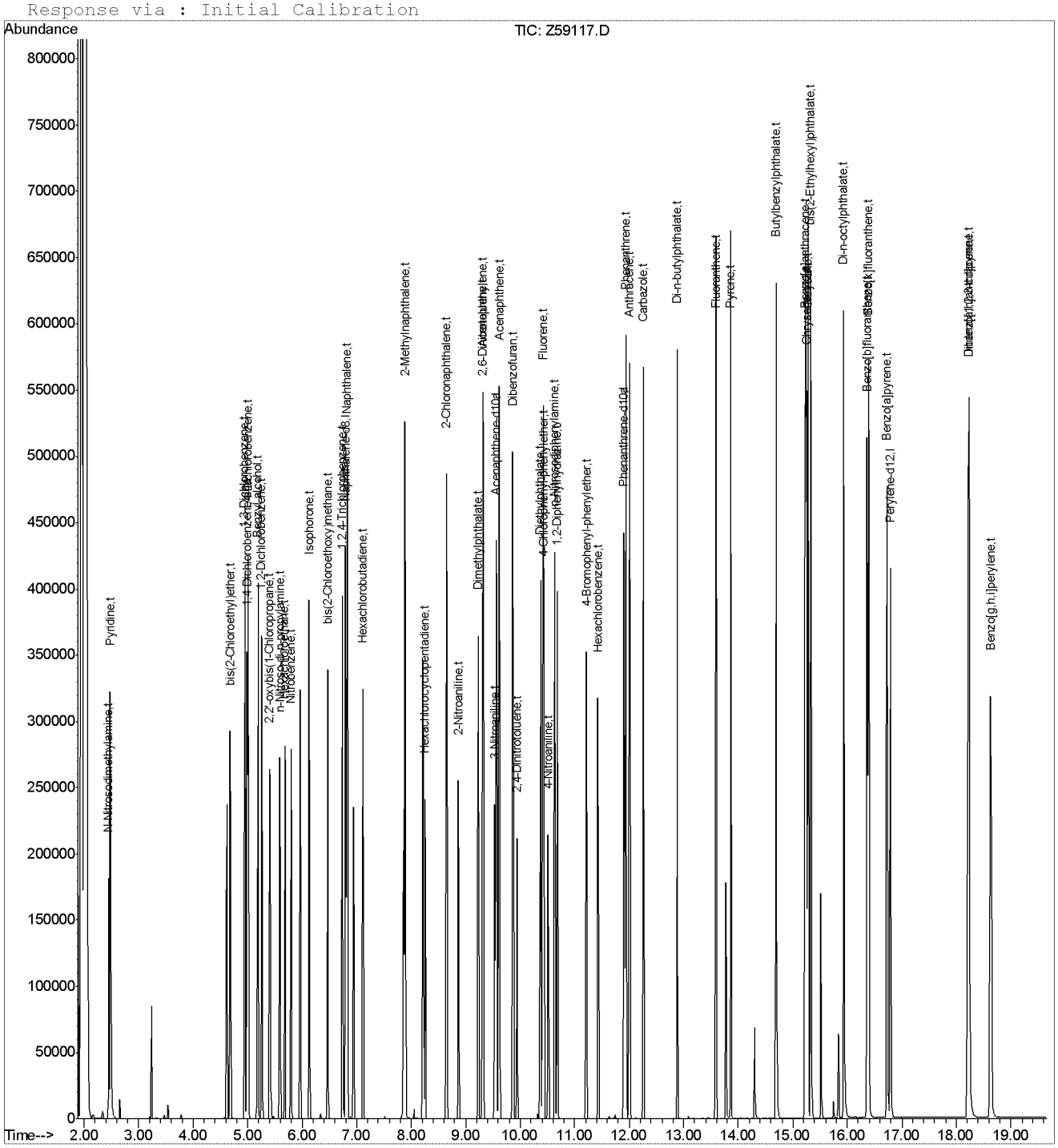
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
59)	Acenaphthene	9.61	153	180401	43.44	ppb	99
62)	Dibenzofuran	9.87	168	264610	43.92	ppb	98
63)	2,4-Dinitrotoluene	9.94	165	51628	44.27	ppb	96
65)	Diethylphthalate	10.37	149	203531	44.00	ppb	99
66)	Fluorene	10.42	166	208662	44.10	ppb	99
67)	4-Chlorophenyl-phenylether	10.43	204	87538	41.20	ppb	96
68)	4-Nitroaniline	10.51	138	55797	45.72	ppb	97
71)	n-Nitrosodiphenylamine	10.64	169	147311	40.66	ppb	99
72)	1,2-Diphenylhydrazine	10.68	77	216443	42.52	ppb	99
74)	4-Bromophenyl-phenylether	11.21	248	53244	43.63	ppb	99
75)	Hexachlorobenzene	11.43	284	54183	41.64	ppb	95
77)	Phenanthrene	11.93	178	286868	42.10	ppb	99
78)	Anthracene	12.00	178	283716	41.09	ppb	99
79)	Carbazole	12.26	167	289720	42.73	ppb	99
80)	Di-n-butylphthalate	12.88	149	340235	43.56	ppb	100
81)	Fluoranthene	13.59	202	300637	41.63	ppb	99
84)	Pyrene	13.86	202	304440	43.94	ppb	98
87)	Butylbenzylphthalate	14.69	149	149312	47.20	ppb	99
88)	Benzo[a]anthracene	15.23	228	250526	43.20	ppb	99
90)	Chrysene	15.28	228	233356	43.09	ppb	99
91)	bis(2-Ethylhexyl)phthalate	15.33	149	188570	47.19	ppb	98
93)	Di-n-octylphthalate	15.93	149	342263	49.19	ppb	100
94)	Benzo[b]fluoranthene	16.36	252	260043	43.71	ppb	99
95)	Benzo[k]fluoranthene	16.38	252	231099	44.42	ppb	95
96)	Benzo[a]pyrene	16.73	252	234000	44.44	ppb	99
97)	Indeno[1,2,3-cd]pyrene	18.22	276	275913	47.44	ppb	99
99)	Dibenz[a,h]anthracene	18.23	278	224814	47.45	ppb	98
101)	Benzo[g,h,i]perylene	18.63	276	237079	46.94	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59117.D MZ3145.M Tue Nov 02 15:13:16 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59117.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 15:13 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:08:53 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\Z59117A.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:08:57 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:08:53 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

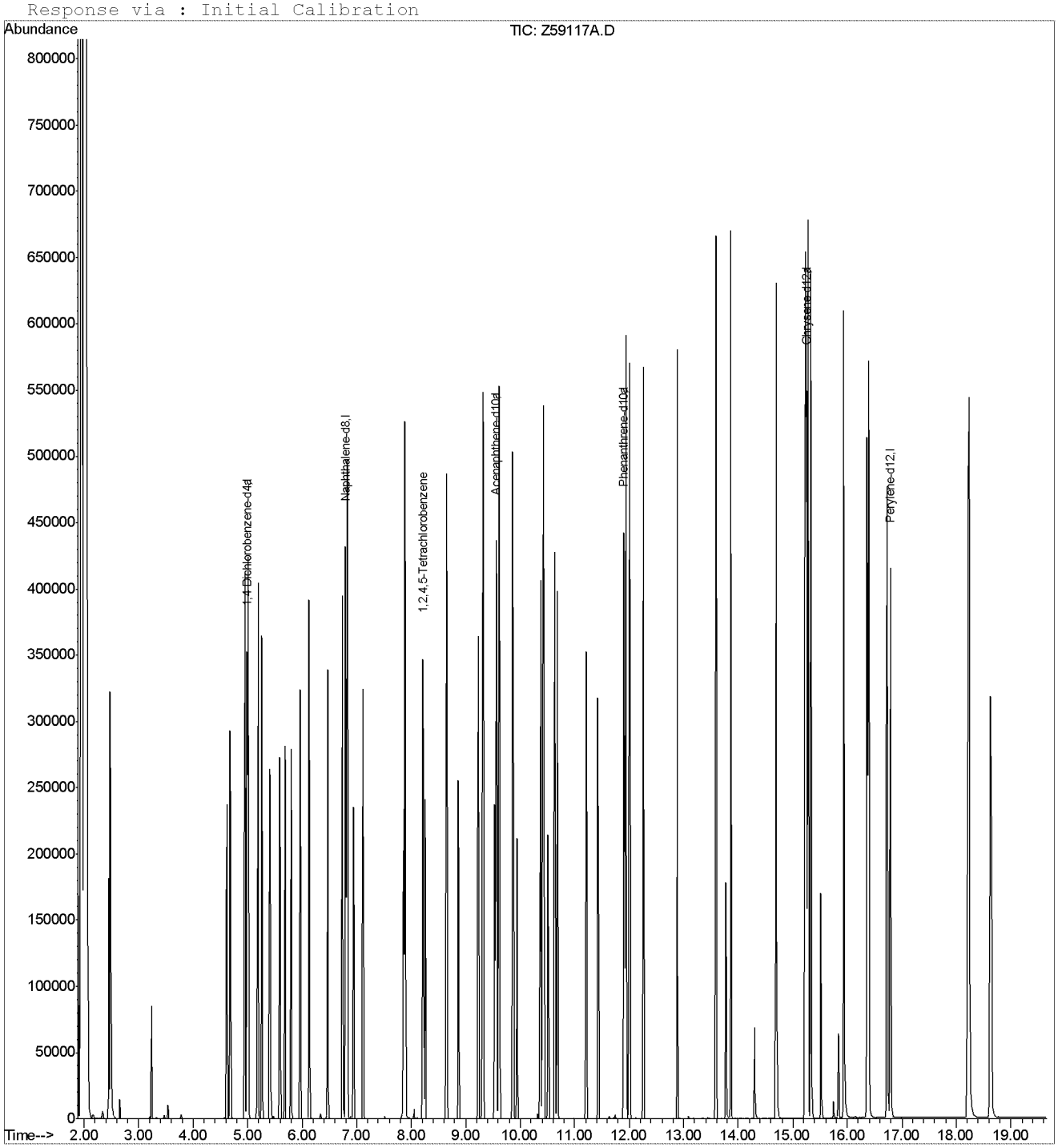
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	71209	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	249229	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	138493	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	228169	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	196366	40.00	ppb	0.00
92) Perylene-d12	16.79	264	180864	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	71209	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	228169	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	196366	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	138493	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
111) 1,2,4,5-Tetrachlorobenzene	8.22	216	81802	46.87	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59117A.D MZ3145.M Tue Nov 02 15:15:06 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\Z59117A.D Vial: 19
Acq On : 2 Nov 2010 3:49 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 15:14 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:08:53 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59118.D Vial: 20
Acq On : 2 Nov 2010 4:17 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:45:09 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:45:00 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

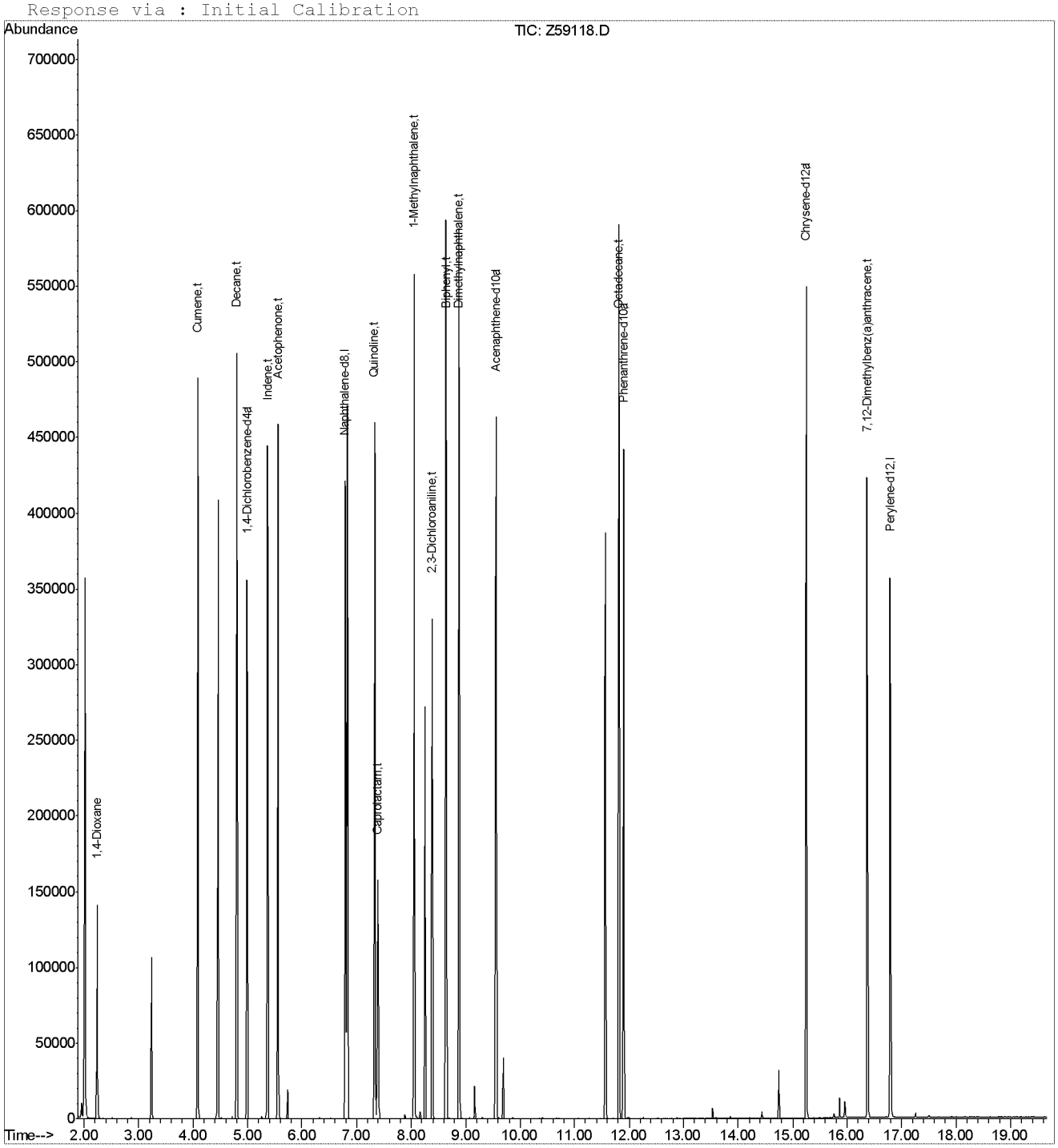
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	70264	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	258198	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	136221	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	209283	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	203624	40.00	ppb	0.00
92) Perylene-d12	16.79	264	165645	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	70264	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	209283	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	203624	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	136221	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.24	88	56341	43.50	ppb	98
6) Indene	5.36	116	169143	48.15	ppb	99
7) Cumene	4.08	105	223883	40.01	ppb	99
13) Decane	4.80	43	96907	43.57	ppb	99
18) Acetophenone	5.56	105	166531	49.86	ppb	86
27) Quinoline	7.33	129	222567	48.63	ppb	100
40) 2,3-Dichloroaniline	8.39	161	96279	40.84	ppb	99
41) Caprolactam	7.39	55	41702	43.23	ppb	97
45) 1-Methylnaphthalene	8.06	142	215022	43.38	ppb	100
46) Dimethylnaphthalene	8.88	156	183240	43.52	ppb	99
53) Biphenyl	8.64	154	254872	45.71	ppb	100
82) Octadecane	11.81	57	128432	50.84	ppb	98
100) 7,12-Dimethylbenz(a)anthra	16.37	256	95646	42.50	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59118.D MZ3145.M Tue Nov 02 16:21:01 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59118.D Vial: 20
Acq On : 2 Nov 2010 4:17 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 16:20 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\Z59118A.D Vial: 20
Acq On : 2 Nov 2010 4:17 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:45:09 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:45:00 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

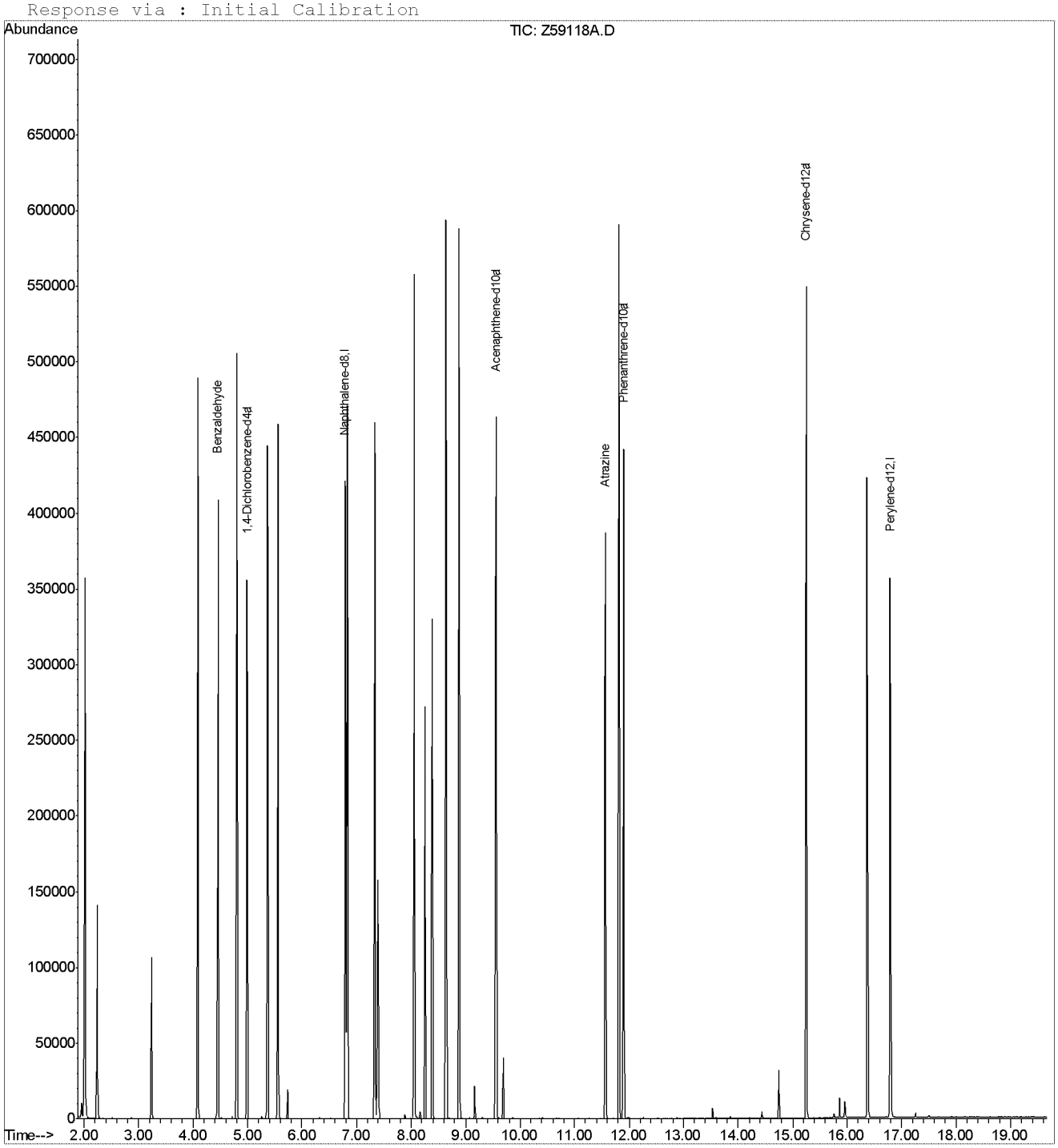
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	70264	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	258198	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	136221	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	209283	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	203624	40.00	ppb	0.00
92) Perylene-d12	16.79	264	165645	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	70264	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	209283	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	203624	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	136221	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
103) Benzaldehyde	4.45	105	96898	53.59	ppb	# 83
105) Atrazine	11.56	215	30912	58.13	ppb	# 80

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59118A.D MZ3145.M Tue Nov 02 16:22:04 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\Z59118A.D Vial: 20
Acq On : 2 Nov 2010 4:17 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 16:21 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59119.D Vial: 21
Acq On : 2 Nov 2010 4:45 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,3rd source Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:18:49 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:18:20 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

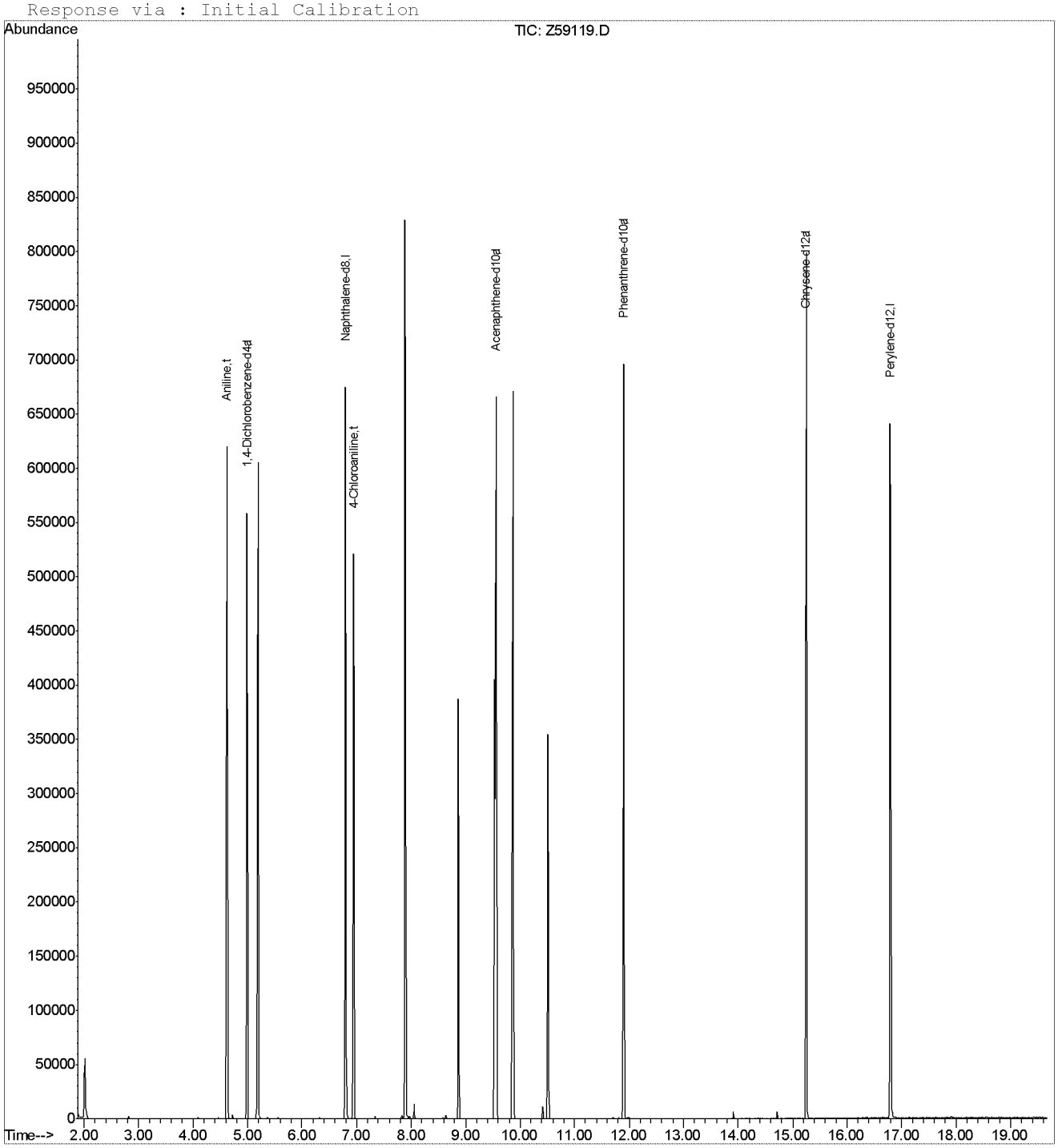
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	114418	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	391533	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	209555	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	341498	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	325348	40.00	ppb	0.00
92) Perylene-d12	16.79	264	293360	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	114418	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	341498	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	325348	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	209555	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
10) Aniline	4.62	93	306281	42.06	ppb	95
39) 4-Chloroaniline	6.94	127	212080	42.19	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59119.D MZ3145.M Tue Nov 02 15:49:27 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59119.D Vial: 21
Acq On : 2 Nov 2010 4:45 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,3rd source Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 15:49 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA61582

SII-SSA-0014-004559

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59120.D Vial: 22
Acq On : 2 Nov 2010 5:14 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,benzidine Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:50:04 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:49:59 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

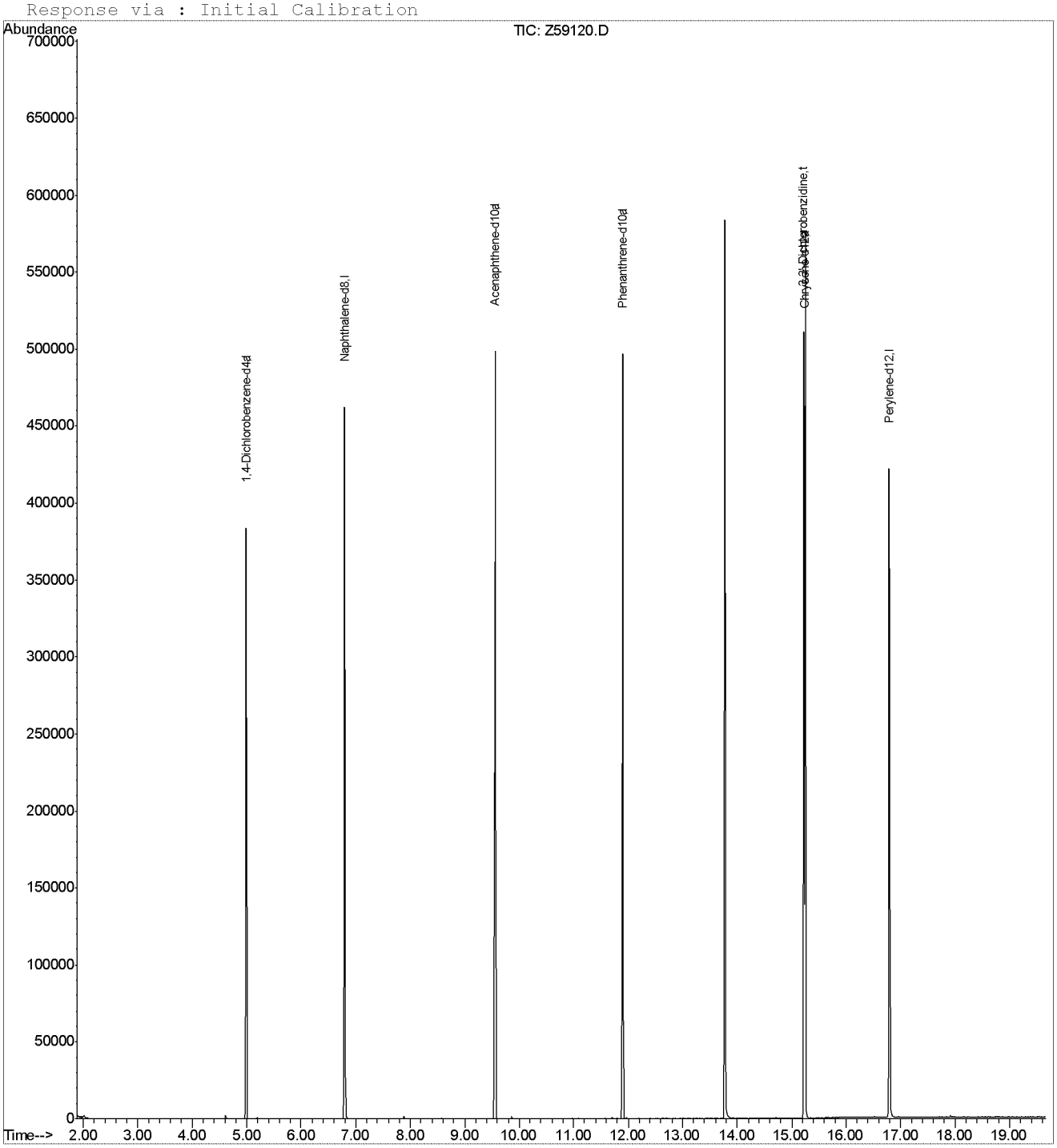
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	79009	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	270233	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	150411	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	238874	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	213656	40.00	ppb	0.00
92) Perylene-d12	16.79	264	197270	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	79009	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	238874	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	213656	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	150411	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	15.22	252	104898	46.95	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59120.D MZ3145.M Tue Nov 02 16:23:19 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3145\Z59120.D Vial: 22
Acq On : 2 Nov 2010 5:14 am Operator: larisap
Sample : icv3145-50 Inst : MSZ
Misc : op45866,EZ3146,benzidine Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 16:23 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\Z59120A.D Vial: 22
Acq On : 2 Nov 2010 5:14 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,benzidine Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 02 15:50:04 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:49:59 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

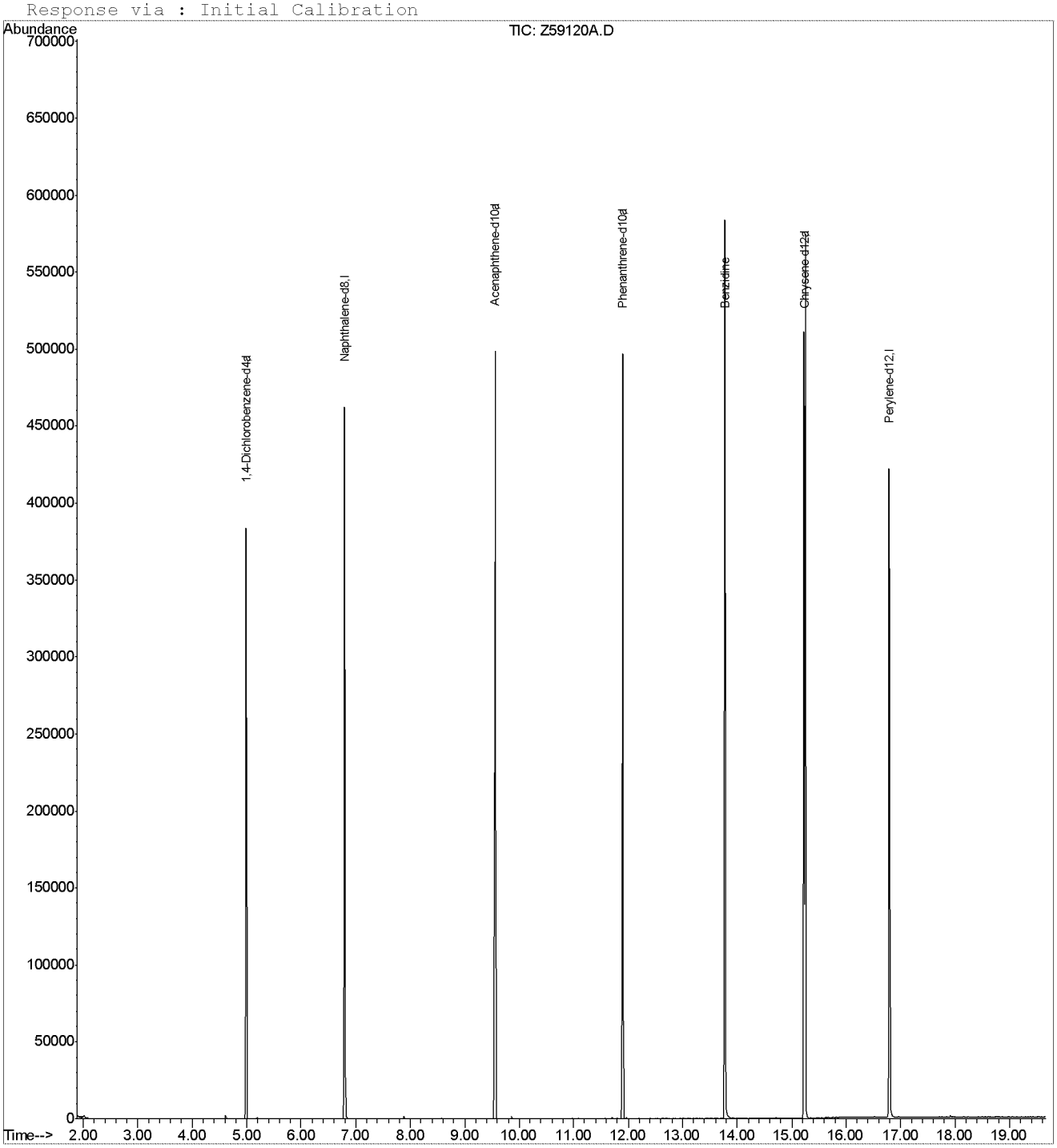
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.99	152	79009	40.00	ppb	0.00
24) Naphthalene-d8	6.79	136	270233	40.00	ppb	0.00
47) Acenaphthene-d10	9.56	164	150411	40.00	ppb	0.00
69) Phenanthrene-d10	11.90	188	238874	40.00	ppb	0.00
83) Chrysene-d12	15.25	240	213656	40.00	ppb	0.00
92) Perylene-d12	16.79	264	197270	40.00	ppb	0.00
102) 1,4-Dichlorobenzene-d4a	4.99	152	79009	40.00	ppb	0.00
104) Phenanthrene-d10a	11.90	188	238874	40.00	ppb	0.00
108) Chrysene-d12a	15.25	240	213656	40.00	ppb	0.00
110) Acenaphthene-d10a	9.56	164	150411	40.00	ppb	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	0.00	244	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
109) Benzidine	13.77	184	245071	78.70	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59120A.D MZ3145.M Tue Nov 02 16:22:38 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:_RESTORE\Z59120A.D Vial: 22
Acq On : 2 Nov 2010 5:14 am Operator: larisap
Sample : icv3146-50 Inst : MSZ
Misc : op45866,EZ3146,benzidine Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 2 16:22 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Tue Nov 02 15:17:24 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59883.D Vial: 2
Acq On : 29 Nov 2010 9:42 am Operator: ninap
Sample : cc3145-50 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 10:01:57 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.81	152	80783	40.00	ppb	-0.05
24) Naphthalene-d8	6.60	136	289409	40.00	ppb	-0.06
47) Acenaphthene-d10	9.35	164	174207	40.00	ppb	-0.06
69) Phenanthrene-d10	11.70	188	275221	40.00	ppb	-0.06
83) Chrysene-d12	15.10	240	275789	40.00	ppb	-0.05
92) Perylene-d12	16.61	264	251333	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.81	152	80783	40.00	ppb	-0.05
104) Phenanthrene-d10a	11.70	188	275221	40.00	ppb	-0.06
108) Chrysene-d12a	15.10	240	275789	40.00	ppb	-0.05
110) Acenaphthene-d10a	9.35	164	174207	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.45	112	133407	45.78	ppb	-0.03
Spiked Amount 50.000			Recovery =	91.56%		
8) Phenol-d5	4.44	99	166502	42.84	ppb	-0.05
Spiked Amount 50.000			Recovery =	85.68%		
25) Nitrobenzene-d5	5.60	82	153675	51.03	ppb	-0.05
Spiked Amount 50.000			Recovery =	102.06%		
51) 2-Fluorobiphenyl	8.31	172	282031	44.34	ppb	-0.06
Spiked Amount 50.000			Recovery =	88.68%		
73) 2,4,6-Tribromophenol	10.65	330	30849	50.71	ppb	-0.06
Spiked Amount 50.000			Recovery =	101.42%		
86) Terphenyl-d14	13.91	244	261530	46.37	ppb	-0.06
Spiked Amount 50.000			Recovery =	92.74%		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.11	88	63786	42.83	ppb	96
3) Pyridine	2.36	79	159813	42.53	ppb	89
4) N-Nitrosodimethylamine	2.34	74	97054	41.88	ppb	71
6) Indene	5.18	116	187716	46.48	ppb	94
7) Cumene	3.90	105	310162	48.21	ppb	96
9) Phenol	4.46	94	201811	49.21	ppb #	19
10) Aniline	4.47	93	170071	33.08	ppb	61
11) bis(2-Chloroethyl)ether	4.51	93	129196	43.74	ppb	97
12) 2-Chlorophenol	4.60	128	133609	44.45	ppb	95
13) Decane	4.61	43	121423	47.49	ppb	95
14) 1,3-Dichlorobenzene	4.76	146	152976	45.58	ppb	99
15) 1,4-Dichlorobenzene	4.83	146	152282	47.27	ppb	97
16) Benzyl alcohol	5.05	108	86796	42.06	ppb	80
17) 1,2-Dichlorobenzene	5.08	146	142809	46.49	ppb	97
18) Acetophenone	5.40	105	181739	47.33	ppb	83
19) 2-Methylphenol	5.23	108	94054	42.20	ppb	95
20) 2,2'-oxybis(1-Chloropropan	5.22	121	41981	47.95	ppb	89
21) 3&4-Methylphenol	5.45	108	107553	46.08	ppb	92
22) n-Nitroso-di-n-propylamine	5.42	70	99019	46.11	ppb	92
23) Hexachloroethane	5.48	201	47312	49.38	ppb	93
26) Nitrobenzene	5.64	123	64978	46.86	ppb	96
27) Quinoline	7.18	129	219689	42.82	ppb	95
28) Isophorone	5.96	82	257022	46.10	ppb	93
29) 2-Nitrophenol	6.10	139	69844	52.87	ppb	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59883.D Vial: 2
Acq On : 29 Nov 2010 9:42 am Operator: ninap
Sample : cc3145-50 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 10:01:57 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30)	2,4-Dimethylphenol	6.18	107	128776	46.89	ppb		97
31)	Benzoic Acid	6.60	105	60179	48.88	ppb	#	48
32)	bis(2-Chloroethoxy)methane	6.29	93	150001	43.98	ppb		98
33)	2,4-Dichlorophenol	6.49	162	107444	47.44	ppb		98
34)	2,6-Dichlorophenol	6.78	162	106312	49.95	ppb		99
35)	1,3,5-Trichlorobenzene	6.08	180	123223	47.49	ppb		100
36)	1,2,4-Trichlorobenzene	6.55	180	116614	46.30	ppb		94
37)	1,2,3-Trichlorobenzene	6.91	180	111679	46.95	ppb		99
38)	Naphthalene	6.63	128	369978	45.22	ppb		99
39)	4-Chloroaniline	6.78	127	156438	42.10	ppb		95
40)	2,3-Dichloroaniline	8.21	161	126834	48.00	ppb		96
41)	Caprolactam	7.31	55	51710	47.82	ppb		95
42)	Hexachlorobutadiene	6.90	225	61518	55.49	ppb		98
43)	4-Chloro-3-methylphenol	7.60	107	129362	55.56	ppb		93
44)	2-Methylnaphthalene	7.69	142	290637	49.43	ppb		97
45)	1-Methylnaphthalene	7.86	142	260464	46.88	ppb		97
46)	Dimethylnaphthalene	8.68	156	225273	47.73	ppb		96
48)	Hexachlorocyclopentadiene	8.04	237	6133	5.84	ppb		97
49)	2,4,6-Trichlorophenol	8.23	196	67962	48.62	ppb		98
50)	2,4,5-Trichlorophenol	8.35	196	55007	43.29	ppb		95
52)	2-Chloronaphthalene	8.45	162	228489	42.30	ppb		98
53)	Biphenyl	8.44	154	304534	42.71	ppb		97
54)	2-Nitroaniline	8.72	65	78717	54.96	ppb		90
55)	Dimethylphthalate	9.04	163	272969	45.76	ppb		99
56)	Acenaphthylene	9.11	152	381116	44.04	ppb		99
57)	2,6-Dinitrotoluene	9.15	165	58853	54.91	ppb		97
58)	3-Nitroaniline	9.40	138	67314	44.15	ppb		88
59)	Acenaphthene	9.40	153	235059	45.00	ppb		97
60)	2,4-Dinitrophenol	9.65	184	35871	85.83	ppb	#	28
61)	4-Nitrophenol	9.87	109	12944	19.77	ppb	#	78
62)	Dibenzofuran	9.66	168	347875	45.91	ppb		97
63)	2,4-Dinitrotoluene	9.80	165	84184	50.30	ppb		90
64)	2,3,4,6-Tetrachlorophenol	9.99	232	46618	37.27	ppb		98
65)	Diethylphthalate	10.17	149	265083	45.55	ppb		99
66)	Fluorene	10.21	166	264453	44.43	ppb		99
67)	4-Chlorophenyl-phenylether	10.22	204	122185	45.71	ppb		94
68)	4-Nitroaniline	10.40	138	68568	44.66	ppb		89
70)	4,6-Dinitro-2-methylphenol	10.47	198	37812	47.80	ppb	#	1
71)	n-Nitrosodiphenylamine	10.44	169	199709	45.70	ppb		99
72)	1,2-Diphenylhydrazine	10.48	77	285178	46.45	ppb		97
74)	4-Bromophenyl-phenylether	11.00	248	72764	49.43	ppb		99
75)	Hexachlorobenzene	11.23	284	74941	47.75	ppb		95
76)	Pentachlorophenol	11.56	266	60831	70.57	ppb		97
77)	Phenanthrene	11.74	178	360589	43.88	ppb		99
78)	Anthracene	11.82	178	370328	44.47	ppb		99
79)	Carbazole	12.10	167	365956	44.74	ppb		98
80)	Di-n-butylphthalate	12.69	149	453195	48.11	ppb		99
81)	Fluoranthene	13.43	202	408087	46.85	ppb		96
82)	Octadecane	11.59	57	162880	49.03	ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59883.D Vial: 2
Acq On : 29 Nov 2010 9:42 am Operator: ninap
Sample : cc3145-50 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 10:01:57 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

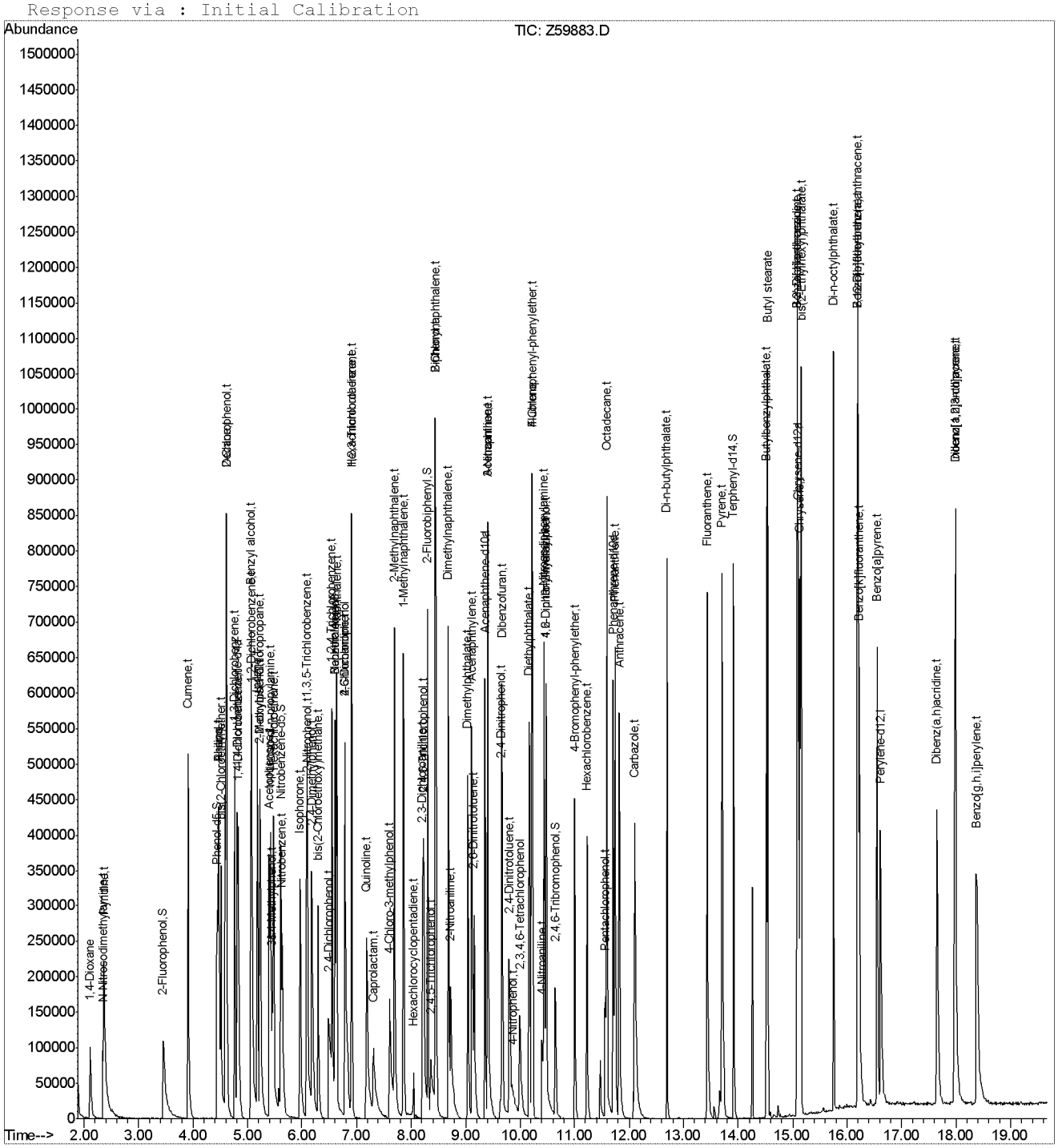
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
84)	Pyrene	13.70	202	416940	42.85	ppb	96
85)	Butyl stearate	14.54	56	116319	51.22	ppb	97
87)	Butylbenzylphthalate	14.51	149	202939	45.67	ppb	96
88)	Benzo[a]anthracene	15.09	228	359467	44.14	ppb	99
89)	3,3'-Dichlorobenzidine	15.08	252	137877	47.80	ppb	97
90)	Chrysene	15.13	228	343829	45.20	ppb	98
91)	bis(2-Ethylhexyl)phthalate	15.16	149	259472	46.23	ppb	96
93)	Di-n-octylphthalate	15.75	149	460058	47.58	ppb	98
94)	Benzo[b]fluoranthene	16.20	252	376543	45.55	ppb	98
95)	Benzo[k]fluoranthene	16.22	252	351289	48.59	ppb	97
96)	Benzo[a]pyrene	16.55	252	352963	48.24	ppb	94
97)	Indeno[1,2,3-cd]pyrene	17.98	276	409976	50.72	ppb	93
98)	Dibenz(a,h)acridine	17.64	279	314908	52.10	ppb	96
99)	Dibenz[a,h]anthracene	17.98	278	354567	53.86	ppb	94
100)	7,12-Dimethylbenz(a)anthra	16.19	256	162260	47.52	ppb	98
101)	Benzo[g,h,i]perylene	18.38	276	357248	50.90	ppb	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59883.D MZ3145.M Mon Nov 29 15:19:18 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59883.D Vial: 2
Acq On : 29 Nov 2010 9:42 am Operator: ninap
Sample : cc3145-50 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 15:19 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59884.D Vial: 3
Acq On : 29 Nov 2010 10:50 am Operator: krutikap
Sample : cc3146-25 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 15:21:46 2010 Quant Results File: MZ3145.RES

Quant Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 15:21:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

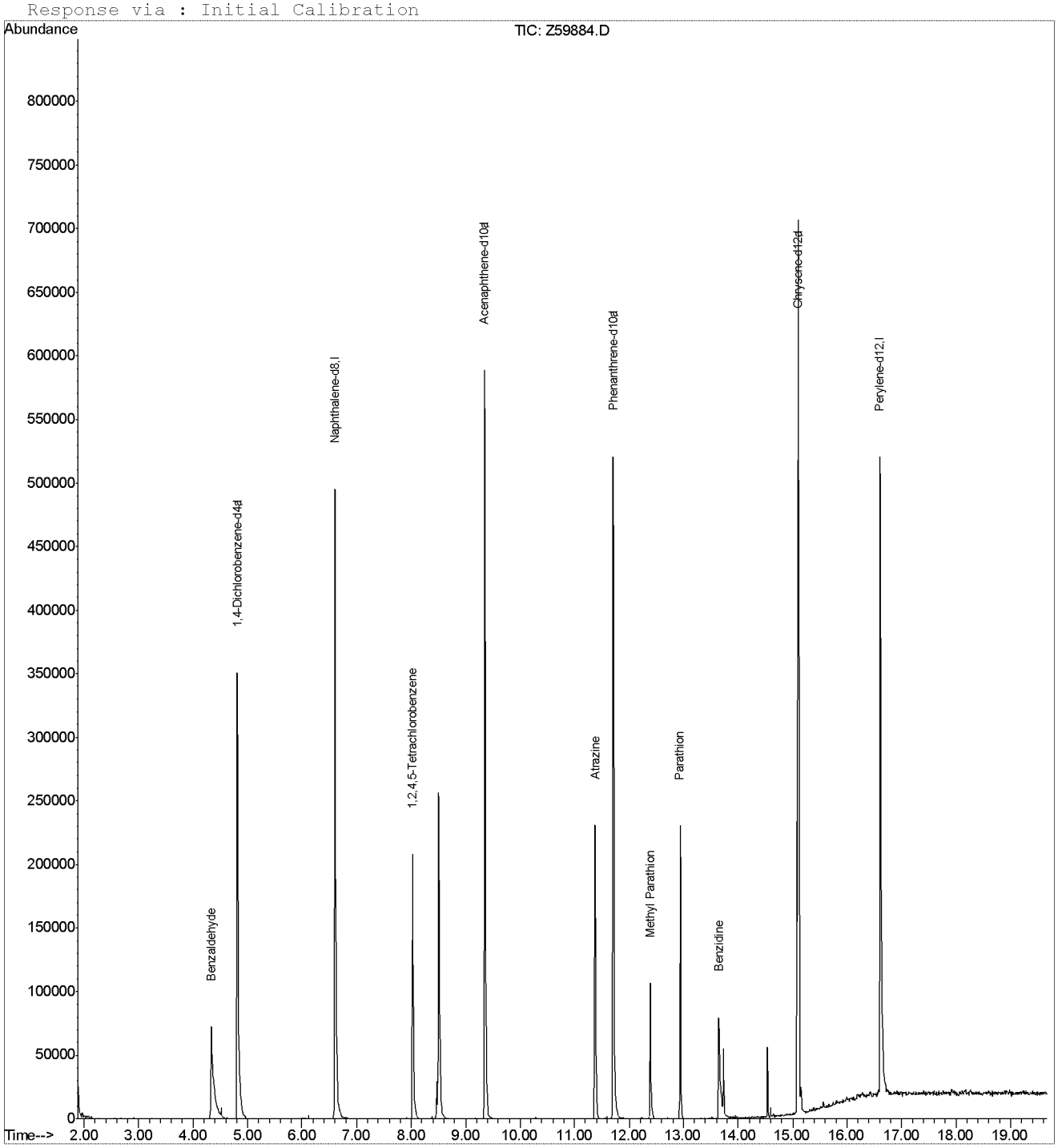
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.81	152	105925	40.00	ppb		0.00
24) Naphthalene-d8	6.60	136	362485	40.00	ppb		0.00
47) Acenaphthene-d10	9.35	164	201286	40.00	ppb		0.00
69) Phenanthrene-d10	11.70	188	318837	40.00	ppb		0.00
83) Chrysene-d12	15.10	240	323733	40.00	ppb		0.00
92) Perylene-d12	16.60	264	301217	40.00	ppb		0.00
102) 1,4-Dichlorobenzene-d4a	4.81	152	105925	40.00	ppb		0.00
104) Phenanthrene-d10a	11.70	188	318837	40.00	ppb		0.00
108) Chrysene-d12a	15.10	240	323733	40.00	ppb		0.00
110) Acenaphthene-d10a	9.35	164	201286	40.00	ppb		0.00
System Monitoring Compounds							
5) 2-Fluorophenol	0.00	112	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
86) Terphenyl-d14	0.00	244	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
Target Compounds							Qvalue
103) Benzaldehyde	4.33	105	56638	20.23	ppb		90
105) Atrazine	11.37	215	22529	27.81	ppb	#	83
106) Methyl Parathion	12.39	109	30087	20.06	ppb		82
107) Parathion	12.93	109	27127	26.90	ppb		93
109) Benzidine	13.64	184	93147	16.14	ppb	#	87
111) 1,2,4,5-Tetrachlorobenzene	8.02	216	67372	26.56	ppb		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
Z59884.D MZ3145.M Mon Nov 29 15:22:30 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3182\Z59884.D Vial: 3
Acq On : 29 Nov 2010 10:50 am Operator: krutikap
Sample : cc3146-25 Inst : MSZ
Misc : op46867,EZ3182 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Nov 29 15:22 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 29 15:21:35 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60011.D Vial: 2
Acq On : 6 Dec 2010 9:23 am Operator: ninap
Sample : cc3145-25 Inst : MSZ
Misc : op46867,EZ3191 Multiplr: 1.00
MS Integration Params: NA
Quant Time: Dec 6 15:31 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.76	152	71231	40.00	ppb		-0.10
24) Naphthalene-d8	6.54	136	255441	40.00	ppb		-0.12
47) Acenaphthene-d10	9.30	164	149006	40.00	ppb		-0.12
69) Phenanthrene-d10	11.65	188	255275	40.00	ppb		-0.12
83) Chrysene-d12	15.06	240	269738	40.00	ppb		-0.09
92) Perylene-d12	16.57	264	224799	40.00	ppb		-0.11
102) 1,4-Dichlorobenzene-d4a	4.76	152	71231	40.00	ppb		-0.10
104) Phenanthrene-d10a	11.65	188	255275	40.00	ppb		-0.12
108) Chrysene-d12a	15.06	240	269738	40.00	ppb		-0.09
110) Acenaphthene-d10a	9.30	164	149006	40.00	ppb		-0.12
System Monitoring Compounds							
5) 2-Fluorophenol	3.42	112	49256	19.17	ppb		-0.06
Spiked Amount 50.000			Recovery = 38.34%				
8) Phenol-d5	4.40	99	70762	20.65	ppb		-0.09
Spiked Amount 50.000			Recovery = 41.30%				
25) Nitrobenzene-d5	5.56	82	71074	26.74	ppb		-0.10
Spiked Amount 50.000			Recovery = 53.48%				
51) 2-Fluorobiphenyl	8.25	172	120497	22.15	ppb		-0.11
Spiked Amount 50.000			Recovery = 44.30%				
73) 2,4,6-Tribromophenol	10.59	330	14136	25.05	ppb		-0.12
Spiked Amount 50.000			Recovery = 50.10%				
86) Terphenyl-d14	13.87	244	135347	24.54	ppb		-0.10
Spiked Amount 50.000			Recovery = 49.08%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.07	88	20808	15.85	ppb		94
3) Pyridine	2.32	79	55719	16.82	ppb		92
4) N-Nitrosodimethylamine	2.31	74	29407	14.39	ppb		64
6) Indene	5.13	116	82912	23.28	ppb		94
7) Cumene	3.86	105	125626	22.15	ppb		93
9) Phenol	4.42	94	85044	23.52	ppb	#	1
10) Aniline	4.42	93	75292	16.61	ppb	#	45
11) bis(2-Chloroethyl)ether	4.47	93	55916	21.47	ppb		94
12) 2-Chlorophenol	4.56	128	58377	22.03	ppb		97
13) Decane	4.56	43	43390	19.24	ppb		96
14) 1,3-Dichlorobenzene	4.72	146	66785	22.57	ppb		95
15) 1,4-Dichlorobenzene	4.78	146	68374	24.07	ppb		96
16) Benzyl alcohol	5.01	108	36331	19.97	ppb	#	74
17) 1,2-Dichlorobenzene	5.03	146	64579	23.84	ppb		93
18) Acetophenone	5.34	105	82597	24.39	ppb		88
19) 2-Methylphenol	5.18	108	45359	23.08	ppb		93
20) 2,2'-oxybis(1-Chloropropan	5.17	121	18315	23.72	ppb	#	52
21) 3&4-Methylphenol	5.41	108	47047	22.86	ppb		92
22) n-Nitroso-di-n-propylamine	5.37	70	45919	24.25	ppb		96
23) Hexachloroethane	5.43	201	23945	28.34	ppb		94
26) Nitrobenzene	5.58	123	29000	23.69	ppb		96
27) Quinoline	7.13	129	101129	22.33	ppb		94
28) Isophorone	5.90	82	120741	24.53	ppb		96
29) 2-Nitrophenol	6.05	139	32443	27.82	ppb		74

(#) = qualifier out of range (m) = manual integration
Z60011.D MZ3145.M Mon Dec 06 15:49:31 2010 RPT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60011.D Vial: 2
Acq On : 6 Dec 2010 9:23 am Operator: ninap
Sample : cc3145-25 Inst : MSZ
Misc : op46867,EZ3191 Multiplr: 1.00
MS Integration Params: NA
Quant Time: Dec 6 15:31 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
30) 2,4-Dimethylphenol	6.13	107	53724	22.16	ppb		98
31) Benzoic Acid	6.48	105	28930	30.24	ppb	#	70
32) bis(2-Chloroethoxy)methane	6.24	93	66004	21.93	ppb		96
33) 2,4-Dichlorophenol	6.44	162	49391	24.71	ppb		94
34) 2,6-Dichlorophenol	6.74	162	48356	25.74	ppb		97
35) 1,3,5-Trichlorobenzene	6.04	180	56583	24.71	ppb		99
36) 1,2,4-Trichlorobenzene	6.50	180	53095	23.88	ppb		98
37) 1,2,3-Trichlorobenzene	6.85	180	51693	24.62	ppb		95
38) Naphthalene	6.58	128	164461	22.77	ppb		99
39) 4-Chloroaniline	6.74	127	68113	20.77	ppb		94
40) 2,3-Dichloroaniline	8.16	161	50681	21.73	ppb		95
41) Caprolactam	7.24	55	18566	19.45	ppb		86
42) Hexachlorobutadiene	6.85	225	31642	32.34	ppb		98
43) 4-Chloro-3-methylphenol	7.55	107	56653	27.57	ppb	#	59
44) 2-Methylnaphthalene	7.64	142	127356	24.54	ppb		91
45) 1-Methylnaphthalene	7.80	142	107441	21.91	ppb		94
46) Dimethylnaphthalene	8.63	156	99678	23.93	ppb		91
49) 2,4,6-Trichlorophenol	8.18	196	29339	24.54	ppb		96
50) 2,4,5-Trichlorophenol	8.30	196	23956	22.04	ppb		97
52) 2-Chloronaphthalene	8.40	162	100240	21.70	ppb		95
53) Biphenyl	8.39	154	129029	21.16	ppb		96
54) 2-Nitroaniline	8.68	65	34290	27.99	ppb		82
55) Dimethylphthalate	8.98	163	127259	24.94	ppb		98
56) Acenaphthylene	9.06	152	172102	23.25	ppb		99
57) 2,6-Dinitrotoluene	9.10	165	28437	31.02	ppb		91
58) 3-Nitroaniline	9.35	138	28825	22.10	ppb		90
59) Acenaphthene	9.35	153	103399	23.14	ppb		99
60) 2,4-Dinitrophenol	9.62	184	9600	37.03	ppb	#	1
61) 4-Nitrophenol	9.87	109	3319	7.50	ppb	#	23
62) Dibenzofuran	9.61	168	148772	22.95	ppb		90
63) 2,4-Dinitrotoluene	9.76	165	36027	25.81	ppb		95
64) 2,3,4,6-Tetrachlorophenol	9.94	232	18220	17.68	ppb		93
65) Diethylphthalate	10.11	149	126747	25.46	ppb		98
66) Fluorene	10.16	166	125919	24.73	ppb		98
67) 4-Chlorophenyl-phenylether	10.18	204	57427	25.12	ppb		89
68) 4-Nitroaniline	10.36	138	28460	21.67	ppb	#	60
70) 4,6-Dinitro-2-methylphenol	10.44	198	14831	24.65	ppb	#	2
71) n-Nitrosodiphenylamine	10.38	169	91035	22.46	ppb		99
72) 1,2-Diphenylhydrazine	10.42	77	137376	24.12	ppb		95
74) 4-Bromophenyl-phenylether	10.95	248	34631	25.36	ppb		89
75) Hexachlorobenzene	11.18	284	34460	23.67	ppb		94
76) Pentachlorophenol	11.52	266	16294	20.38	ppb		93
77) Phenanthrene	11.69	178	174615	22.91	ppb		99
78) Anthracene	11.76	178	176581	22.86	ppb		98
79) Carbazole	12.06	167	172726	22.77	ppb		99
80) Di-n-butylphthalate	12.65	149	222295	25.44	ppb		97
81) Fluoranthene	13.39	202	206195	25.52	ppb		89
82) Octadecane	11.54	57	55894	18.14	ppb		89
84) Pyrene	13.66	202	210628	22.13	ppb		84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60011.D Vial: 2
Acq On : 6 Dec 2010 9:23 am Operator: ninap
Sample : cc3145-25 Inst : MSZ
Misc : op46867,EZ3191 Multiplr: 1.00
MS Integration Params: NA
Quant Time: Dec 6 15:31 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration
DataAcq Meth : MZ3145

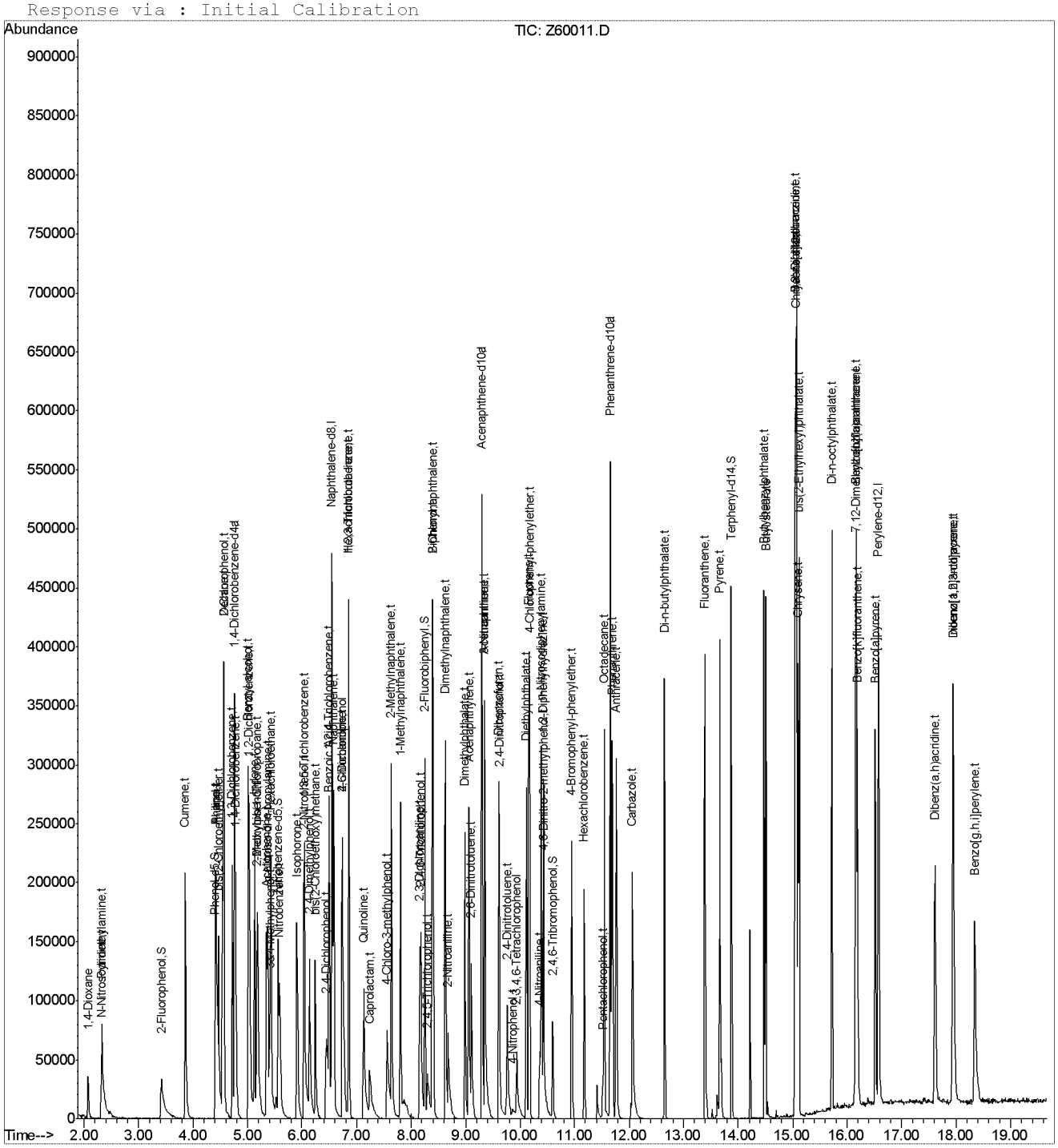
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85)	Butyl stearate	14.50	56	44577	20.07	ppb	90
87)	Butylbenzylphthalate	14.48	149	99029	22.79	ppb	94
88)	Benzo[a]anthracene	15.05	228	186911	23.46	ppb	97
89)	3,3'-Dichlorobenzidine	15.04	252	71905	25.49	ppb	93
90)	Chrysene	15.10	228	168891	22.70	ppb	99
91)	bis(2-Ethylhexyl)phthalate	15.12	149	125219	22.81	ppb	100
93)	Di-n-octylphthalate	15.72	149	222467	25.72	ppb	99
94)	Benzo[b]fluoranthene	16.16	252	189905	25.68	ppb	94
95)	Benzo[k]fluoranthene	16.19	252	161858	25.03	ppb	92
96)	Benzo[a]pyrene	16.52	252	161163	24.63	ppb	89
97)	Indeno[1,2,3-cd]pyrene	17.94	276	178196	24.65	ppb	81
98)	Dibenz(a,h)acridine	17.61	279	136771	25.30	ppb	99
99)	Dibenz[a,h]anthracene	17.94	278	154285	26.20	ppb	87
100)	7,12-Dimethylbenz(a)anthra	16.15	256	67556	22.12	ppb	96
101)	Benzo[g,h,i]perylene	18.34	276	149211	23.77	ppb	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EZ3191\Z60011.D Vial: 2
Acq On : 6 Dec 2010 9:23 am Operator: ninap
Sample : cc3145-25 Inst : MSZ
Misc : op46867,EZ3191 Multiplr: 1.00
MS Integration Params: NA
Quant Time: Dec 6 15:31 2010 Quant Results File: MZ3145.RES

Method : C:\MSDCHEM\1\METHODS\MZ3145.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 30m x .25mm x .25um
Last Update : Mon Nov 22 19:08:35 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA61582

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EM3014

Date: 11-18-10

Analyst Signature: QA

Standard Data

Lot #	Description	Conc.
CV105267	8270 BVA	50ppm
-121A	BVA	100ppm
-121B	↓	80ppm
-121C		50ppm
-121D		25ppm
-121E	↓	10ppm

Standard Data

Lot #	Description	Conc.
CF0911	IS	4000ppm
8270 847	8270 MIX	—

Columns: ~~DB-5~~ HP-5MS ~~30m x 0.25mm~~ QA 111810 30m x 0.25mm x 0.25µm

Method 8270

Initial Cal. Method EM3014

Injection Volume: 1µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/15/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	EM77423	8270 MIX			W	1					ok	10:14 am ~~2.45 µL~~ QA 111810
	77424	IC3014-50		BVA		2					ok	
	77425	IC 3014-100				3					ok	
	77426	IC3014-1				4					ok	
	77427	IC3014-2				5					ok	
	77428	IC3014-5				6					ok	
	77429	IC3014-10				7					ok	
	77430	IC3014-25				8					ok	
	77431	IC3014-80				9					ok	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EM3015

Date: 11-18-10

Analyst Signature: DA

Standard Data

Lot #	Description	Conc.
1 SV052A	97F TCL42	5ppm
-97G	↓	2ppm
-97H	↓	1ppm
1 CF0915	IS	1000ppm
1 MC842	Dew kw	—

Standard Data

Lot #	Description	Conc.
SV1052H-67	DF PPP	80ppm
-97A	TCL42	150ppm
-97B	↓	80ppm
-97C	↓	50ppm
-97D	↓	20ppm
-97E	↓	10ppm

Columns: DA 11/18/10 HP-5MS (30 m x 0.25 mm x

Method 8270

Initial Cal. Method mm 3014

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/19/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
1	M77432	DFPPP			W	1					DA	2.45 µm
	77433	IC3015-100		TCL42		2					DA	
	77434	IC3015-80				3					DA	
	77435	IC3015-50				4					DA	
	77436	IC3015-25				5					DA	
	77437	IC3015-10				6					DA	
	77438	IC3015-5				7					DA	
	77439	IC3015-2				8					DA	
	77440	IC3015-1				9					DA	
	77441	ICV3014-50		acids		10					RR	area ↑ CP10-420-141
	77442	ICV3014-50		BN1		11					DA	CP10-501-20
	77443	ICV3014-50		BN2		12					DA	CP10-420-140
	77444	ICV3014-50		3rd		13					RR	area ↑ SV10-521-85
	77445	ICV3015-50		Benzidi		14					DA	SV10-521-88

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

143

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

6.7.2 6

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EM3017

Date: 11-19-10

Analyst Signature: OA

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1052467	DFTPP	50ng/µl
-124	BLA	50ng/µl
-47	TCL 42	50ng/µl
CF0915	IS	40000ng/µl
SC 847	8270 4 W	—

OA 111910

Columns: ~~DB-5~~ HP-5MS (30mx0.25mm ID)

Method 8270

Initial Cal. Method EM3014

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11-22-10

6.7.3 6

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	EM77466	DFTPP			W	1					OK	2:11 pm
	77467	CC 3014-50				2					OK	
	77468	CC 3015-50		TCL 42		3					OK	
	77469	ICV 3014-50		~~Acids~~ BNS OA 111910		4					OK	opio-501-20
	77470	ICV 3014-50		3rd		5					OK	SV10-521-85
	77471	ICV 3014-50		acids		6					OK	SV10-521-27
R	77472	JA61295-1	46720-1	+PYR ABSTCL42+	S	7			✓	✓	OK	
R	77473	JA61024-9A	46685-1	ABSTCL11+		8	4		✓	✓	OK	
R	77474	JA61024-2A				9		+	✓	✓	OK	
R	77475	-10A				10		+	✓	✓	OK	
R	77476	-1A				11	10		✓	✓	OK	sent to MX
	77477	JA61095-3		ABSTCL11		12			✓	✓	OK	
	77478	-5				13			✓	✓	OK	
	77479	-6				14			✓	✓	OK	
	77480	-1				15			✓	✓	OK	
	77481	-2				16			✓	✓	OK	RR 1:5
	77482	-4				17			✓	✓	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

149

All strikeouts must be initialed, dated and reason code applied as follows:
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Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EM3017

Date: 11-19-10

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CT0915	IS	40000
SC 847	8270 MW	—

Columns: HP-5MS (30m x 0.25mm x 0.25µ)

Method 8270

Initial Cal. Method 8270 3014

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/22/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M77483	JA61095-7	46685-1	8270C(1)	S	18			✓	✓	OK	
	77484	JA60808-6	46720-1	8270C(2)+		19		+	✓	✓	OK	
	77485	-1				20		+	✓	✓	OK	
	77486	-2				21		+	✓	✓	OK	
	77487	-3				22		+	✓	✓	OK	
	77488	-4				23			✓	✓	RR	outside 12hrs 2:15 am
R	77489	JA61095-2	46685-1	8270C(1)		24	5		✓		not using	RR 1:2 2:47 am
	77490	ICV2014-50		acids		6			✓	✓	ok	DPA-501-43 run after 77471

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EM3023

Date: 11-29-10

Analyst Signature: QA

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV10521-69	DFTPP	50 µg
-118	BFB	25 µg
-97	TCL 42	50 µg
CF0915	IS	4000 µg
DE933	BCM 4,4'	—

Columns: HP-5MS (30m x 0.25mm x 0.25µ)

Method 8270

Initial Cal. Method MM3014

Injection Volume: 1µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 12/3/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M77591	DFTPP			W	1					QA	8:53 am
	77592	CC3014-25				2					QA	
	77593	CC3015-50		TCL42		3					QA	
	77594	OP46916-MS1	46916-1	ABN	S	4		+	✓		QA	
	77595	-MSD1				5			✓		QA	
R	77596	JA62468-10	46892-1	ABTCL		6	4		✓	✓	QA	
	77597	JA61651-4	46916-1	ABTCL		7			✓	✓	QA	
	77598	JA62059-1		ABTCL III+		8		+	✓	✓	QA	
	77599	JA62139-1		BTCL III+		9		+	✓	✓	OK	
	77600	JA61839-2		ABNSSC08		10			GC	✓	OK	22 for CFI
	77601	JA62252-1		BPPL		11			✓	✓	OK	
	77602	OP46916-MS				12			✓	✓	QA	
	77603	-MSD				13			✓	✓	QA	
R	77604	JA62001-6	46878-1	Acid+Neu	W	14	400		✓	✓	QA	
R	77605	-7				15	800		✓	✓	QA	
	77606	JA62402-3		STAR		16			✓	✓	QA	
	77607	JA61724-1A	46824-1	BTCL III+	S	17		+	✓	✓	QA	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EM3023

Date: 11-29-10

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CF0917	IS	4000 ppb
~~BC 973~~	~~Decaf tea~~	—

Columns: HP-5MS (30m x 0.25 mm x 0.25 µm)

Method 8270

Initial Cal. Method MM3014

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11-30-10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M 77608	JA61724-3A	Y6824-1	BTEX+	S	18		+	✓	✓	OK	RR 1:5
	77609	-5A				19			6 ↓	✓	not integ	RR for IS
	77610	-6A				20		+	✓	✓	OK	7:08 µM
	77611	-2A				21					not run	cut from sequence
	R 77612	JA61839-2				10			9/6 ↓	✓	OK	CTI

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

171

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EZ3145

Date: 11-1-2010

Analyst Signature: JP

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV105216	DFTPP	50ppm
DC744	Honeywell Mix	—
CF0915	Int. Std.	4000ppm

Columns: ZB5MSi 30mx.25mmx.25μm

Method 8270/625

Initial Cal. Method M23110 / M23145

Injection Volume: 1.0μL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11-02-10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	Z59098	DFTPP			W	1					OK	5:13pm
	59099	IC3145-100				2					OK	SV10-521-121A
	59100	IC3145-10				3					OK	-121E
	59101	IC3145-5				4					OK	-121F
	59102	IC3145-2				5					OK	-121G
	59103	IC3145-1				6					OK	-121H
	59104	Icc3145-50				7					OK	-121C
	59105	IC3145-80				8					OK	-121B
	59106	IC3145-25				9					OK	-121D

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EZ3146

Date: 11-01-2010 Analyst Signature: JP

Columns: ZB5HS; 30mx.25mmx.25µm

Method 8270/1625

Initial Cal. Method MZ3110/MZ3146

Injection Volume: 1.0µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV10-5167	DFTPP	50ppm
DC744	Honeywell Refe	—
CF0915	Int. Std	4000ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11-2-10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	25907	DFTPP			W	1					OK	11:17 pm
	59108	IC3146-100				10					OK	SV10-521-97A
	59109	IC3146-80				11					OK	-97B
	59110	ICC3146-50				12					OK	-97C
	59111	IC3146-25				13					OK	-97D
	59112	IC3146-10				14					OK	-97E
	59113	IC3146-5				15					OK	-97F
	59114	IC3146-2				16					OK	-97G
	59115	IC3146-1				17					OK	-97H
	59116	ICV3145-50		acid		18					OK	0710-420-14L
	59117	ICV3145-50		BN #1		19					OK	0710-501-10
	59118	ICV3145-50		BN #2		20					OK	0710-420-140
	59119	ICV3145-50		3rd source		21					OK	SV10-521-85
	59120	ICV3145-50		benzidine		22					OK	-88

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EZ3182

e: 11/29/10

Analyst Signature: dh

Standard Data

ot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1052167	DFTPP	50 ppm
121	BNA 570	50ppm
LE0915	IS	40ppm
DC8417	mech (Honeywell)	
1105C197	TCL 42 ND	80ppm

Columns: 2 5ms (30m x .25mm x .25um)

Method 8270

Initial Cal. Method MZ3145

Injection Volume: 1ul

nually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply h the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/30/10

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
Z59882	DFTPP				1					OK	9:18am
Z59883	CC3145-50				2					OK	ABK
59884	CC3146-25				3					OK	
59885	OP46854-MB1	46854-1	ABN8270	S	4			✓	✓	OK	
59886	OP46916-MB1	46916-1	ABN8270	S	5			✓	✓	OK	
59887	JA62138-3 (38 ml 11/29)		Benzothiaz		6			✓	✓	OK	
59888	-2				7			✓	✓	OK	
59889	-4				8			✓	✓	OK	
59890	-1				9			✓	✓	OK	
59891	JA61240-1	46854-1	NAP+2MNAP	S	10			✓	✓	OK	
59892	JA61966-3		NAP+2MNAP		11			✓	✓	OK	
59893	-4				12			✓	✓	OK	
59894	-5				13			✓	✓	OK	
59895	-6				14			✓	✓	OK	
59896	OP46986-DB1	46986-1	ABN8270	S	15			1/4 d	all d	RR	run beyond Z59892
59897	JA62138-5		BATYRN		16			✓	✓	OK	
59898	-6				17			✓	✓	OK	

X = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

mple volume/weight used and final volumes refer to extraction log.

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strikeouts must be initialed, dated and reason code applied as follows:
reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

m: OR015-05
. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EZ3182

Date: 11-29-2010

Analyst Signature: JP

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CP0915	Int. Std.	40000ppm
DC847	Honeywell Burdick	–

Columns: ZB5MSi (30m x .25mm x .25µm)

Method 8270

Initial Cal. Method MZ3145

Injection Volume: 1.0µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature]

Date: 11/30/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	Z59899	JA62185-6	46954-1	1,4 Dioxane	W	18			✓	✓	OK	
	59900	0746986-MB1	46986-1	8270+	S	19		+	✓	✓	OK	

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

rm: OR015-05
v. Date: 1/16/2006

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ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EZ3191

ate: 12/06/10

Analyst Signature:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
BV10521131)	DFHPP	50ppb
-136	BNA STD	25ppb
CE0915	7-5	40000ppb
DC973	Meley Chorey 915	

Columns: 2B5MS; C30mx.25mmx.25um

Method 8270

Initial Cal. Method M23145

Injection Volume: 1ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 12-7-10

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
Z60010	DFHPP				1					OK	8:59am
Z60011	CC3145 CC3145-25				2					OK	only for PAH
Z60012	OP47064MB1	47064-1	A521	S	3		-1	✓	✓	OK	
Z60013	JA62818-1		PAH		4			✓	✓	OK	
Z60014	JA62977-1		PAH		5			✓	✓	OK	
Z60015	JA62752-1		PAH		6			✓	✓	OK	
Z60016	-2				7			✓	✓	OK	
Z60017	-3				8			✓	✓	OK	
Z60018	-3				9			✓	✓	OK	
Z60019	JA62468-22R		XIAP12MMA		10			✓	✓	OK	2R 1:2
Z60020	JA62822-6		STAR		11			✓	✓	OK	JA62822-6
Z60021	JA62822-7				12			✓	✓	OK	-7
Z60022	JA62747-1		xlysuffolk		13			✓	✓	OK	
Z60023	JA62969-1		STAR		14			✓	✓	OK	
Z60024	-2				15			✓	✓	OK	
Z60025	-3				16			✓	✓	OK	
Z60026	JA62317-1	46968-1	STAR	S	17			4,5 ✓	✓	OK	2R for CFI

MTX = Matrix, Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

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Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST.

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EZ3191

ate: 12-06-2010

Analyst Signature: JT

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CF0915	Int. Std.	40000pg
DC973	Honeywell Surr	—

Columns: ZB5MSi (30m x .25mm x .25µm)

Method 8270

Initial Cal. Method MT3145

Injection Volume: 1.0µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 12-7-10

Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
Z60027	JA61582-32	46916-1	NAP +2MNAP	S	18			✓	✓	OK	
60028	JA62468-2R2	47064-1	NAP +2DMNAP	S	19 (18)	2		✓	✓	OK	
60029	JA 62317-1	46968-1	2MAR	S	17			3% ✓		OK	CFI

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST

SOLID/LIQUID EXTRACTION

BATCH # MS46916-1 | RACK# A-7

EXTRACTION TIME: 10:00 AM | Sonication | Pressurized Fluid (ASE) | Soxhlet | Supervisor Review

EXTRACTION METHOD (circle one) SW846 3550B / CLP / other | SW846 3545 / CLP / other | SW846 3540C / other | Signature

EXTRACTION DATE: 11/24/10 ANALYST: JS/DB METHOD: AB827o | Water Bath Temp(C) 85° | Nitrogen Evap Temp(C) 35° | Date 11/24/10

Sample #	pH	Sample Bottle #	Analysis Type	Sample Description	Sample Wet Wt. (g)	Decant Y	Decant N	Final Extract Vol(ml)	Final Extract Color	Extract Cleanup GPC	H2SO4	Cu	Florisil		Comments
MB			ABN	Na_2SO_4	35.0			1	clear						
BS				"	35.0			1	yellow						
JA61651-1 MS		1		soil	35.2			1	brown						
MSD		1		soil	35.2			1	brown						
~~BS~~															
~~MS~~ 11/24/10															
~~MSD~~															
JA61532-1R		1	ABN	sand	35.1			5	brown						****
-8R		1		sand	35.2			1	yellow						
JA61611-1R		1		sand/rock	35.1			1	dk. brown						
JA62277-2		1		soil	35.1			1	lt. yellow						
JA62252-1		1		soil	35.1			1	dk. brown						
JA62223-1		1		rock	10.0			1	lt. brown						*
-2		1		crushed rock	35.0			1	lt. yellow						
-3		1		pebbles	35.1			L	yellow						
-4		1		mixed material	~~35.0~~			1	lt. yellow						**
JA62069-1		1		soil	35.1			1	brown						
JA62138-1		1		soil	35.1			1	brown						
-2		1		soil	35.3			1	brown						
-3		1		soil	35.2			1	brown						
-4		1		sand	35.4			1	brown						
JA62139-1		1		crushed ~~JA61354~~		DB 11/24/10		1	brown						
JA61651-1		1		soil	35.2			1	brown						**** DB 11/24/10
JA62112-1		1		oil	1.0			1	brown						***
JA61900-1		1		lint	85.0			5	black						****
JA61839-2		1		clay	35.3			1	peach						
JA61582-3R		1		soil	35.2			1	brown						

COMMENTS:

* Limited volume received; reduced volume

** Very light material *** oily sample **** Will not concentrate to 1 mL; final vol 5mL

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE DB	10-501-48	50	1
ACID DB	10-501-44	50	1
PPCB			
HERB			

WITNESS SIGN: DB / JS

MATRIX SPIKE DATA

	LOT #	CONC.	AMT ADDED (ML)
BASE DB	10-501-46	50	1
ACID DB	10-501-43	50	1
PEST			
PCB			
HERB			
Base #2 DB	10-501-41	50	1

WITNESS SIGN: JS

SOLVENT DATA

	LOT #	BRAND	AMT X/ML
1:1 MC/ACE DB	10-520-134	Burdick & Jackson	5/200
METH CHLOR			
HEXANE			
ACETONE			
ETH ETHER			

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULF. DB	10-93	Fisher
FILTER PAPER	0320320	Ahlstrom
COPPER		
FLORISIL		
SULFURIC ACID		

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See back for instructions

New Jersey ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46762-MB1	4Y1350.D	1	11/16/10	OPM	11/16/10	OP46762	G4Y41

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-1, JA61582-2, JA61582-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	4.7		mg/kg	
	EPH (> C28-C40)	ND	4.7		mg/kg	
	Total EPH (C9-C40)	ND	4.7		mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	93%	40-140%
3386-33-2	1-Chlorooctadecane	92%	40-140%

Method Blank Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46776-MB1	4Y1412.D	1	11/18/10	DNM	11/16/10	OP46776	G4Y43

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	EPH (C9-C28)	ND	0.040		mg/l	
	EPH (> C28-C40)	ND	0.040		mg/l	
	Total EPH (C9-C40)	ND	0.040		mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	82%	40-140%
3386-33-2	1-Chlorooctadecane	63%	40-140%

Blank Spike Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46762-BS11	4Y1351.D	1	11/16/10	OPM	11/16/10	OP46762	G4Y41

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-1, JA61582-2, JA61582-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	EPH (C9-C28)	29.4	21.5	73	40-140
	Total EPH (C9-C40)	29.4	21.5	73	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	83%	40-140%
3386-33-2	1-Chlorooctadecane	82%	40-140%

Blank Spike Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46776-BS11	4Y1413.D	1	11/18/10	DNM	11/16/10	OP46776	G4Y43

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	EPH (C9-C28)	0.5	0.363	73	40-140
	Total EPH (C9-C40)	0.5	0.363	73	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	88%	40-140%
3386-33-2	1-Chlorooctadecane	86%	40-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46762-MS	4Y1373.D	1	11/17/10	OPM	11/16/10	OP46762	G4Y41
OP46762-MSD	4Y1374.D	1	11/17/10	OPM	11/16/10	OP46762	G4Y41
JA61582-2	4Y1353.D	1	11/16/10	OPM	11/16/10	OP46762	G4Y41

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-1, JA61582-2, JA61582-3

CAS No.	Compound	JA61582-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	EPH (C9-C28)	986		152	1010	16* [a]	1260	180* [a]	22	40-140/50
	EPH (> C28-C40)	85.9		76.2	105	25* [b]	218	173* [b]	70* [b]	40-140/50
	Total EPH (C9-C40)	1070		229	1110	17* [a]	1480	179* [a]	29	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	JA61582-2	Limits
84-15-1	o-Terphenyl	82%	102%	87%	40-140%
3386-33-2	1-Chlorooctadecane	80%	91%	86%	40-140%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46776-MS	4Y1441.D	1	11/19/10	DNM	11/16/10	OP46776	G4Y43
OP46776-MSD	4Y1442.D	1	11/19/10	DNM	11/16/10	OP46776	G4Y43
JA61635-2	4Y1431.D	1	11/19/10	DNM	11/16/10	OP46776	G4Y43

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-4

CAS No.	Compound	JA61635-2 mg/l	Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	EPH (C9-C28)	15.3		5.65	28.2	228* [a]	20.3	89	33	40-140/50
	EPH (> C28-C40)	1.90		2.82	4.33	86	3.28	49	28	40-140/50
	Total EPH (C9-C40)	17.2		8.47	32.5	181* [a]	23.6	76	32	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	JA61635-2	Limits
84-15-1	o-Terphenyl	87%	86%	72%	40-140%
3386-33-2	1-Chlorooctadecane	83%	82%	45%	40-140%

(a) Outside control limits due to high level in sample relative to spike amount.

Duplicate Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46762-DUP	4Y1372.D	1	11/17/10	OPM	11/16/10	OP46762	G4Y41
JA61561-8	4Y1358.D	1	11/17/10	OPM	11/16/10	OP46762	G4Y41

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-1, JA61582-2, JA61582-3

CAS No.	Compound	JA61561-8 mg/kg	Q	DUP mg/kg	Q	RPD	Limits
	EPH (C9-C28)	1340		1220		9	25
	EPH (> C28-C40)	125		107		16	25
	Total EPH (C9-C40)	1470		1330		10	25

CAS No.	Surrogate Recoveries	DUP	JA61561-8	Limits
84-15-1	o-Terphenyl	87%	87%	40-140%
3386-33-2	1-Chlorooctadecane	88%	86%	40-140%

7.4.1

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Duplicate Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP46776-DUP	4Y1440.D	1	11/19/10	DNM	11/16/10	OP46776	G4Y43
JA61635-3	4Y1432.D	1	11/19/10	DNM	11/16/10	OP46776	G4Y43

The QC reported here applies to the following samples: **Method:** NJDEP EPH

JA61582-4

CAS No.	Compound	JA61635-3 mg/l	Q	DUP mg/l	Q	RPD	Limits
	EPH (C9-C28)	1.60		2.03		24	25
	EPH (> C28-C40)	ND		ND		nc	25
	Total EPH (C9-C40)	1.60		2.03		24	25

CAS No.	Surrogate Recoveries	DUP	JA61635-3	Limits
84-15-1	o-Terphenyl	79%	86%	40-140%
3386-33-2	1-Chlorooctadecane	64%	64%	40-140%

Semivolatile Surrogate Recovery Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: NJDEP EPH	**Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
JA61582-4	4Y1414.D	86.0	79.0
OP46776-BS11	4Y1413.D	88.0	86.0
OP46776-DUP	4Y1440.D	79.0	64.0
OP46776-MB1	4Y1412.D	82.0	63.0
OP46776-MS	4Y1441.D	87.0	83.0
OP46776-MSD	4Y1442.D	86.0	82.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%
S2 = 1-Chlorooctadecane	40-140%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: NJDEP EPH **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
JA61582-1	4Y1352.D	88.0	86.0
JA61582-2	4Y1353.D	87.0	86.0
JA61582-3	4Y1354.D	93.0	89.0
OP46762-BS11	4Y1351.D	83.0	82.0
OP46762-DUP	4Y1372.D	87.0	88.0
OP46762-MB1	4Y1350.D	93.0	92.0
OP46762-MS	4Y1373.D	82.0	80.0
OP46762-MSD	4Y1374.D	102.0	91.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%
S2 = 1-Chlorooctadecane	40-140%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	G4Y41-CC1	**Injection Date:**	11/16/10
Lab File ID:	4Y1348.D	**Injection Time:**	19:23
Instrument ID:	GC4Y	**Method:**	NJDEP EPH

	S1 [a] RT	S2 [a] RT
Check Std	12.58	13.46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP46762-MB1	4Y1350.D	11/16/10	20:35	12.58	13.45
OP46762-BS11	4Y1351.D	11/16/10	21:11	12.58	13.45
JA61582-1	4Y1352.D	11/16/10	21:48	12.59	13.47
JA61582-2	4Y1353.D	11/16/10	22:24	12.59	13.47
JA61582-3	4Y1354.D	11/16/10	23:00	12.60	13.48
ZZZZZZ	4Y1355.D	11/16/10	23:36	12.58	13.45
ZZZZZZ	4Y1356.D	11/17/10	00:12	12.58	13.45
ZZZZZZ	4Y1357.D	11/17/10	00:48	12.58	13.45
JA61561-8	4Y1358.D	11/17/10	01:24	12.58	13.46
ZZZZZZ	4Y1359.D	11/17/10	02:00	12.58	13.45
ZZZZZZ	4Y1360.D	11/17/10	02:36	12.58	13.45
ZZZZZZ	4Y1361.D	11/17/10	03:12	12.58	13.45
ZZZZZZ	4Y1362.D	11/17/10	03:48	12.58	13.45
ZZZZZZ	4Y1363.D	11/17/10	04:24	12.58	13.45
ZZZZZZ	4Y1364.D	11/17/10	05:00	12.58	13.45
ZZZZZZ	4Y1365.D	11/17/10	05:36	12.57	13.45
ZZZZZZ	4Y1366.D	11/17/10	06:12	12.58	13.45
ZZZZZZ	4Y1367.D	11/17/10	06:48	12.58	13.45
ZZZZZZ	4Y1368.D	11/17/10	07:23	12.58	13.45
ZZZZZZ	4Y1369.D	11/17/10	07:59	12.58	13.45
ZZZZZZ	4Y1370.D	11/17/10	08:35	12.57	13.45
ZZZZZZ	4Y1371.D	11/17/10	09:11	12.58	13.45
OP46762-DUP	4Y1372.D	11/17/10	09:47	12.58	13.45
OP46762-MS	4Y1373.D	11/17/10	10:23	12.59	13.46
OP46762-MSD	4Y1374.D	11/17/10	10:59	12.59	13.47

Surrogate Compounds

S1 = o-Terphenyl
S2 = 1-Chlorooctadecane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	G4Y42-CC1	**Injection Date:**	11/18/10
Lab File ID:	4Y1410.D	**Injection Time:**	10:50
Instrument ID:	GC4Y	**Method:**	NJDEP EPH

	S1 [a] RT	S2 [a] RT
Check Std	12.56	13.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP46776-MB1	4Y1412.D	11/18/10	12:11	12.58	13.45
OP46776-BS11	4Y1413.D	11/18/10	12:47	12.58	13.46
JA61582-4	4Y1414.D	11/18/10	13:23	12.58	13.45
ZZZZZZ	4Y1415.D	11/18/10	13:59	12.57	13.45
ZZZZZZ	4Y1416.D	11/18/10	14:34	12.57	13.45
ZZZZZZ	4Y1417.D	11/18/10	15:10	12.57	13.44

Surrogate Compounds

S1 = o-Terphenyl
S2 = 1-Chlorooctadecane

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	G4Y43-CC1	**Injection Date:**	11/18/10
Lab File ID:	4Y1418.D	**Injection Time:**	16:28
Instrument ID:	GC4Y	**Method:**	NJDEP EPH

	S1 [a] RT	S2 [a] RT
Check Std	12.57	13.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
OP46804-MB1	4Y1420.D	11/18/10	17:46	12.56	13.44
OP46804-BS11	4Y1421.D	11/18/10	18:22	12.57	13.44
ZZZZZZ	4Y1422.D	11/18/10	18:58	12.58	13.46
ZZZZZZ	4Y1423.D	11/18/10	19:34	12.56	13.44
ZZZZZZ	4Y1424.D	11/18/10	20:09	12.58	13.46
ZZZZZZ	4Y1425.D	11/18/10	20:45	12.56	13.44
ZZZZZZ	4Y1426.D	11/18/10	21:21	12.56	13.44
ZZZZZZ	4Y1427.D	11/18/10	21:57	12.56	13.44
ZZZZZZ	4Y1428.D	11/18/10	22:32	12.56	13.44
ZZZZZZ	4Y1430.D	11/18/10	23:45	12.58	13.45
JA61635-2	4Y1431.D	11/19/10	00:20	12.60	13.48
JA61635-3	4Y1432.D	11/19/10	00:56	12.58	13.45
ZZZZZZ	4Y1433.D	11/19/10	01:32	12.58	13.45
ZZZZZZ	4Y1434.D	11/19/10	02:08	12.57	13.45
ZZZZZZ	4Y1435.D	11/19/10	02:44	12.58	13.45
ZZZZZZ	4Y1436.D	11/19/10	03:20	12.57	13.44
ZZZZZZ	4Y1437.D	11/19/10	03:55	12.58	13.44
ZZZZZZ	4Y1438.D	11/19/10	04:31	12.57	13.44
ZZZZZZ	4Y1439.D	11/19/10	05:07	12.57	13.45
OP46776-DUP	4Y1440.D	11/19/10	05:43	12.58	13.45
OP46776-MS	4Y1441.D	11/19/10	06:19	12.60	13.48
OP46776-MSD	4Y1442.D	11/19/10	06:54	12.59	13.47

Surrogate Compounds

S1 = o-Terphenyl
S2 = 1-Chlorooctadecane

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y1-ICC1
Lab FileID: 4Y5.D

Response Factor Report 4Y4Z

Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M (ChemStation Integrator)
Title : NJDEP Extractable Petroleum Hydrocarbons
Last Update : Mon Sep 20 16:48:24 2010
Response via : Initial Calibration

Calibration Files
5 =4Y3.D 10 =4Y4.D 50 =4Y6.D 100 =4Y7.D
2 =4Y2.D 20 =4Y5.D =

Compound	5	10	50	100	2	20	Avg	%RSD
1)T C9	1.291	1.297	1.214	1.242	1.496	1.226	1.294 E6	8.06
2)T C10	1.338	1.345	1.244	1.268	1.566	1.259	1.337 E6	8.98
3)T C12	1.351	1.362	1.267	1.280	1.584	1.279	1.354 E6	8.85
4)T C14	1.374	1.375	1.292	1.301	1.609	1.300	1.375 E6	8.78
5)T C16	1.406	1.402	1.326	1.326	1.653	1.327	1.407 E6	9.01
6)T C18	1.435	1.425	1.343	1.340	1.679	1.346	1.428 E6	9.11
7)T C20	1.452	1.440	1.355	1.352	1.720	1.360	1.446 E6	9.76
8)T C21	1.538	1.527	1.434	1.432	1.867	1.441	1.540 E6	10.86
9)T C22	1.487	1.477	1.386	1.385	1.759	1.391	1.481 E6	9.72
10)T C24	1.483	1.469	1.380	1.382	1.760	1.383	1.476 E6	9.93
11)T C26	1.503	1.500	1.409	1.413	1.787	1.410	1.504 E6	9.71
12)T C28	1.496	1.489	1.404	1.409	1.781	1.403	1.497 E6	9.72
13)H EPH (C9-C28)	1.429	1.426	1.338	1.344	1.688	1.344	1.428 E6	9.40
14)T C30	1.521	1.506	1.415	1.425	1.943	1.418	1.538 E6	13.26
15)T C32	1.470	1.471	1.382	1.399	1.750	1.379	1.475 E6	9.54
16)T C34	1.512	1.511	1.427	1.442	1.788	1.396	1.513 E6	9.43
17)T C36	1.450	1.453	1.345	1.387	1.780	1.320	1.456 E6	11.50
18)T C38	1.388	1.402	1.297	1.344	1.665	1.267	1.394 E6	10.23
19)T C40	1.320	1.350	1.260	1.308	1.557	1.222	1.336 E6	8.79
20)H EPH (>C28-C40)	1.443	1.449	1.355	1.384	1.747	1.334	1.452 E6	10.46
21)H TOTAL PHC	1.434	1.434	1.343	1.358	1.708	1.340	1.436 E6	9.74
22)S o-Terphenyl (S)	1.527	1.518	1.422	1.411	1.800	1.431	1.518 E6	9.67
23)S 1-chlorooctadecan	1.293	1.270	1.187	1.184	1.558	1.189	1.280 E6	11.27
24)S 2-Fluorobiphenyl	1.295	1.302	1.224	1.236	1.504	1.229	1.298 E6	8.20
25)S 2-Bromonaphthalen	0.890	0.897	0.852	0.857	1.037	0.850	0.897 E6	7.96

(#) = Out of Range

EPH4Y01.M Wed Sep 22 12:26:01 2010 RPT1

Initial Calibration Verification

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y1-ICV1
Lab FileID: 4Y8.D

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y8.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 11:04 pm
Operator : owenm
Sample : icv1-1000
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 22 14:07:17 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Sep 22 12:57:27 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
13 H	EPH (C9-C28)	1.428	1.204 E6	15.7	116	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

EPH4Y01.M Wed Sep 22 14:07:52 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y41-CC1
Lab FileID: 4Y1348.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\g4y41\4Y1348.D Vial: 3
Acq On : 16 Nov 10 7:23 pm Operator: owenm
Sample : cc1-50 Inst : 4Y4Z
Misc : op46729,g4y41,17.0,,,2,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M (ChemStation Integrator)
Title : NJDEP Extractable Petroleum Hydrocarbons
Last Update : Thu Nov 18 11:32:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	T	C9	1.285	1.365 E6	-6.2	118	0.00	3.54- 3.64
2	T	C10	1.337	1.410 E6	-5.5	113	0.00	4.30- 4.36
3	T	C12	1.351	1.426 E6	-5.6	114	0.00	5.50- 5.56
4	T	C14	1.377	1.481 E6	-7.6	114	0.01	6.75- 6.81
5	T	C16	1.405	1.513 E6	-7.7	115	0.02	8.41- 8.47
6	T	C18	1.428	1.540 E6	-7.8	114	0.02	10.30-10.36
7	T	C20	1.446	1.561 E6	-8.0	115	0.02	12.18-12.24
8	T	C21	1.541	1.656 E6	-7.5	115	0.02	13.08-13.14
9	T	C22	1.483	1.599 E6	-7.8	114	0.02	13.95-14.01
10	T	C24	1.480	1.591 E6	-7.5	114	0.02	15.60-15.66
11	T	C26	1.509	1.625 E6	-7.7	113	0.02	17.10-17.16
12	T	C28	1.503	1.629 E6	-8.4	113	0.02	18.33-18.39
13	H	EPH (C9-C28)	1.448	1.533 E6	-5.9	111	0.00	3.56-18.69
14	T	C30	1.546	1.644 E6	-6.3	112	0.02	19.36-19.46
15	T	C32	1.481	1.616 E6	-9.1	114	0.02	20.27-20.41
16	T	C34	1.517	1.649 E6	-8.7	114	0.02	21.09-21.27
17	T	C36	1.463	1.580 E6	-8.0	114	0.02	22.01-22.19
18	T	C38	1.403	1.521 E6	-8.4	113	0.03	23.15-23.36
19	T	C40	1.348	1.455 E6	-7.9	110	0.04	24.68-24.91
20	H	EPH (>C28-C40)	1.478	1.577 E6	-6.7	107	0.00	18.70-25.56
21	H	TOTAL PHC	1.462	1.548 E6	-5.8	109	0.00	3.56-25.56
22	S	o-Terphenyl (S)	1.520	1.641 E6	-8.0	114	0.02	12.55-12.61
23	S	1-chlorooctadecane (S)	1.283	1.364 E6	-6.3	113	0.02	13.43-13.49
24	S	2-Fluorobiphenyl (S)	1.293	1.378 E6	-6.6	116	0.01	7.43- 7.49
25	S	2-Bromonaphthalene (S)	887.178	952.240 E3	-7.3	120	0.00	8.57- 8.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4Y876.D EPH4Y01.M Thu Nov 18 12:14:35 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y41-CC1
Lab FileID: 4Y1375.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\g4y41\4Y1375.D Vial: 2
Acq On : 17 Nov 10 12:01 pm Operator: owenm
Sample : cc1-20 Inst : 4Y4Z
Misc : op46762,g4y41,17.0,,,2,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M (ChemStation Integrator)
Title : NJDEP Extractable Petroleum Hydrocarbons
Last Update : Thu Nov 18 11:32:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	T	C9	1.285	1.349 E6	-5.0	110	0.00	3.53- 3.64
2	T	C10	1.337	1.381 E6	-3.3	110	0.00	4.30- 4.36
3	T	C12	1.351	1.375 E6	-1.8	107	0.00	5.49- 5.55
4	T	C14	1.377	1.443 E6	-4.8	111	0.00	6.74- 6.80
5	T	C16	1.405	1.491 E6	-6.1	112	0.00	8.40- 8.46
6	T	C18	1.428	1.518 E6	-6.3	113	0.00	10.28-10.34
7	T	C20	1.446	1.554 E6	-7.5	114	0.00	12.16-12.22
8	T	C21	1.541	1.653 E6	-7.3	115	0.00	13.06-13.12
9	T	C22	1.483	1.601 E6	-8.0	115	0.00	13.94-14.00
10	T	C24	1.480	1.588 E6	-7.3	115	0.00	15.58-15.64
11	T	C26	1.509	1.628 E6	-7.9	116	0.00	17.08-17.14
12	T	C28	1.503	1.628 E6	-8.3	116	0.00	18.32-18.38
13	H	EPH (C9-C28)	1.448	1.517 E6	-4.8	132	0.00	3.56-18.69
14	T	C30	1.546	1.651 E6	-6.8	116	0.00	19.35-19.45
15	T	C32	1.481	1.625 E6	-9.7	118	0.00	20.26-20.40
16	T	C34	1.517	1.673 E6	-10.3	120	0.00	21.08-21.26
17	T	C36	1.463	1.580 E6	-8.0	120	0.00	22.00-22.17
18	T	C38	1.403	1.531 E6	-9.1	121	0.00	23.13-23.34
19	T	C40	1.348	1.497 E6	-11.1	123	0.01	24.65-24.88
20	H	EPH (>C28-C40)	1.478	1.593 E6	-7.8	153	0.00	18.70-25.56
21	H	TOTAL PHC	1.462	1.543 E6	-5.5	155	0.00	3.56-25.56
22	S	o-Terphenyl (S)	1.520	1.640 E6	-7.9	115	0.00	12.54-12.60
23	S	1-chlorooctadecane (S)	1.283	1.359 E6	-5.9	114	-0.03	13.41-13.47
24	S	2-Fluorobiphenyl (S)	1.293	1.340 E6	-3.6	109	0.00	7.42- 7.48
25	S	2-Bromonaphthalene (S)	887.178	908.978 E3	-2.5	107	0.00	8.57- 8.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4Y1410.D EPH4Y01.M Thu Nov 18 12:33:26 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y42-CC1
Lab FileID: 4Y1410.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\g4y42\4Y1410.D Vial: 2
Acq On : 18 Nov 10 10:50 am Operator: diaan
Sample : cc1-20 Inst : 4Y4Z
Misc : op46730,g4y42,17.0,,,2,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M (ChemStation Integrator)
Title : NJDEP Extractable Petroleum Hydrocarbons
Last Update : Thu Nov 18 11:32:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	T	C9	1.285	1.352 E6	-5.2	110	0.00	3.53- 3.63
2	T	C10	1.337	1.389 E6	-3.9	110	0.00	4.30- 4.36
3	T	C12	1.351	1.382 E6	-2.3	108	0.00	5.49- 5.55
4	T	C14	1.377	1.444 E6	-4.9	111	0.00	6.74- 6.80
5	T	C16	1.405	1.485 E6	-5.7	112	0.00	8.39- 8.45
6	T	C18	1.428	1.526 E6	-6.9	113	0.00	10.28-10.34
7	T	C20	1.446	1.553 E6	-7.4	114	0.00	12.16-12.22
8	T	C21	1.541	1.659 E6	-7.7	115	0.00	13.06-13.12
9	T	C22	1.483	1.604 E6	-8.2	115	0.00	13.93-13.99
10	T	C24	1.480	1.596 E6	-7.8	115	0.00	15.58-15.64
11	T	C26	1.509	1.639 E6	-8.6	116	0.00	17.08-17.14
12	T	C28	1.503	1.643 E6	-9.3	117	0.00	18.31-18.37
13	H	EPH (C9-C28)	1.448	1.522 E6	-5.2	129	0.00	3.56-18.69
14	T	C30	1.546	1.655 E6	-7.1	117	0.00	19.34-19.45
15	T	C32	1.481	1.631 E6	-10.1	118	0.00	20.25-20.39
16	T	C34	1.517	1.680 E6	-10.7	120	0.00	21.08-21.25
17	T	C36	1.463	1.597 E6	-9.2	121	0.00	21.99-22.17
18	T	C38	1.403	1.543 E6	-10.0	122	0.00	23.12-23.33
19	T	C40	1.348	1.515 E6	-12.4	124	0.00	24.64-24.87
20	H	EPH (>C28-C40)	1.478	1.603 E6	-8.5	152	0.00	18.70-25.56
21	H	TOTAL PHC	1.462	1.550 E6	-5.9	155	0.00	3.56-25.56
22	S	o-Terphenyl (S)	1.520	1.640 E6	-7.9	115	0.00	12.53-12.59
23	S	1-chlorooctadecane (S)	1.283	1.362 E6	-6.2	115	0.00	13.41-13.47
24	S	2-Fluorobiphenyl (S)	1.293	1.327 E6	-2.6	108	0.00	7.42- 7.48
25	S	2-Bromonaphthalene (S)	887.178	893.964 E3	-0.8	105	0.00	8.57- 8.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4Y1410.D EPH4Y01.M Fri Nov 19 14:21:11 2010 RPT1

7.7.5

7

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y43-CC1
Lab FileID: 4Y1418.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\g4y43\4Y1418.D Vial: 3
Acq On : 18 Nov 10 4:28 pm Operator: diaan
Sample : cc1-50 Inst : 4Y4Z
Misc : op46730,g4y43,17.0,,,2,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M (ChemStation Integrator)
Title : NJDEP Extractable Petroleum Hydrocarbons
Last Update : Thu Nov 18 11:32:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	T	C9	1.285	1.464 E6	-13.9	126	0.00	3.53- 3.63
2	T	C10	1.337	1.518 E6	-13.5	122	0.00	4.30- 4.36
3	T	C12	1.351	1.534 E6	-13.5	123	0.00	5.49- 5.55
4	T	C14	1.377	1.587 E6	-15.3	122	0.00	6.74- 6.80
5	T	C16	1.405	1.617 E6	-15.1	123	0.00	8.40- 8.46
6	T	C18	1.428	1.649 E6	-15.5	123	0.00	10.29-10.35
7	T	C20	1.446	1.671 E6	-15.6	123	0.00	12.17-12.23
8	T	C21	1.541	1.773 E6	-15.1	123	0.00	13.07-13.13
9	T	C22	1.483	1.713 E6	-15.5	123	0.00	13.94-14.00
10	T	C24	1.480	1.703 E6	-15.1	122	0.00	15.59-15.65
11	T	C26	1.509	1.746 E6	-15.7	121	0.00	17.09-17.15
12	T	C28	1.503	1.743 E6	-16.0	121	0.00	18.32-18.38
13	H	EPH (C9-C28)	1.448	1.643 E6	-13.5	120	0.00	3.56-18.69
14	T	C30	1.546	1.769 E6	-14.4	121	0.00	19.35-19.46
15	T	C32	1.481	1.729 E6	-16.7	122	0.00	20.26-20.40
16	T	C34	1.517	1.783 E6	-17.5	123	0.00	21.08-21.26
17	T	C36	1.463	1.710 E6	-16.9	123	0.01	22.00-22.18
18	T	C38	1.403	1.659 E6	-18.2	123	0.02	23.14-23.35
19	T	C40	1.348	1.625 E6	-20.5	122	0.02	24.66-24.89
20	H	EPH (>C28-C40)	1.478	1.712 E6	-15.8	121	0.00	18.70-25.56
21	H	TOTAL PHC	1.462	1.666 E6	-13.9	121	0.00	3.56-25.56
22	S	o-Terphenyl (S)	1.520	1.757 E6	-15.6	122	0.00	12.54-12.60
23	S	1-chlorooctadecane (S)	1.283	1.466 E6	-14.3	122	0.00	13.41-13.47
24	S	2-Fluorobiphenyl (S)	1.293	1.482 E6	-14.6	125	0.00	7.42- 7.48
25	S	2-Bromonaphthalene (S)	887.178	1015.708 E3	-14.5	128	0.00	8.56- 8.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4Y876.D EPH4Y01.M Fri Nov 19 14:53:21 2010 RPT1

Continuing Calibration Summary

Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: G4Y43-CC1
Lab FileID: 4Y1443.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\g4y43\4Y1443.D Vial: 2
Acq On : 19 Nov 10 11:06 am Operator: diaan
Sample : cc1-20 Inst : 4Y4Z
Misc : op46776,g4y43,17.0,,,2,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M (ChemStation Integrator)
Title : NJDEP Extractable Petroleum Hydrocarbons
Last Update : Thu Nov 18 11:32:24 2010
Response via : Multiple Level Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	T	C9	1.285	1.387 E6	-7.9	113	0.00	3.53- 3.63
2	T	C10	1.337	1.428 E6	-6.8	113	0.00	4.29- 4.35
3	T	C12	1.351	1.423 E6	-5.3	111	0.00	5.49- 5.55
4	T	C14	1.377	1.486 E6	-7.9	114	0.00	6.73- 6.79
5	T	C16	1.405	1.525 E6	-8.5	115	0.00	8.39- 8.45
6	T	C18	1.428	1.560 E6	-9.2	116	0.00	10.27-10.33
7	T	C20	1.446	1.596 E6	-10.4	117	-0.01	12.15-12.21
8	T	C21	1.541	1.705 E6	-10.6	118	-0.01	13.05-13.11
9	T	C22	1.483	1.645 E6	-10.9	118	-0.01	13.92-13.98
10	T	C24	1.480	1.636 E6	-10.5	118	-0.01	15.57-15.63
11	T	C26	1.509	1.672 E6	-10.8	119	-0.01	17.07-17.13
12	T	C28	1.503	1.680 E6	-11.8	120	-0.01	18.30-18.36
13	H	EPH (C9-C28)	1.448	1.562 E6	-7.9	133	0.00	3.56-18.69
14	T	C30	1.546	1.700 E6	-10.0	120	0.00	19.33-19.44
15	T	C32	1.481	1.687 E6	-13.9	122	0.00	20.24-20.38
16	T	C34	1.517	1.742 E6	-14.8	125	0.00	21.07-21.24
17	T	C36	1.463	1.628 E6	-11.3	123	-0.01	21.98-22.15
18	T	C38	1.403	1.572 E6	-12.0	124	-0.02	23.11-23.32
19	T	C40	1.348	1.524 E6	-13.1	125	-0.02	24.62-24.84
20	H	EPH (>C28-C40)	1.478	1.642 E6	-11.1	131	0.00	18.70-25.56
21	H	TOTAL PHC	1.462	1.588 E6	-8.6	135	0.00	3.56-25.56
22	S	o-Terphenyl (S)	1.520	1.688 E6	-11.1	118	-0.01	12.52-12.58
23	S	1-chlorooctadecane (S)	1.283	1.396 E6	-8.8	117	-0.01	13.40-13.46
24	S	2-Fluorobiphenyl (S)	1.293	1.370 E6	-6.0	111	0.00	7.41- 7.47
25	S	2-Bromonaphthalene (S)	887.178	931.535 E3	-5.0	110	0.00	8.56- 8.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4Y1410.D EPH4Y01.M Fri Nov 19 15:09:41 2010 RPT1

New Jersey
ACCUTEST
LABORATORIES

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/19/10 14:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1352.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 9:48 pm
Operator : owenm
Sample : ja61582-1
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:17:09 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.589f	66905689	44.004 ug/L m
Spiked Amount 50.000		Recovery =	88.01%
23) S 1-chlorooctadecane (S)	13.466	55137091	42.983 ug/L m
Spiked Amount 50.000		Recovery =	85.97%
Target Compounds			
13) H EPH (C9-C28)	11.123	5289420482	3652.700 ug/L
20) H EPH (>C28-C40)	22.126	340183788	230.116 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

8.1.1
8

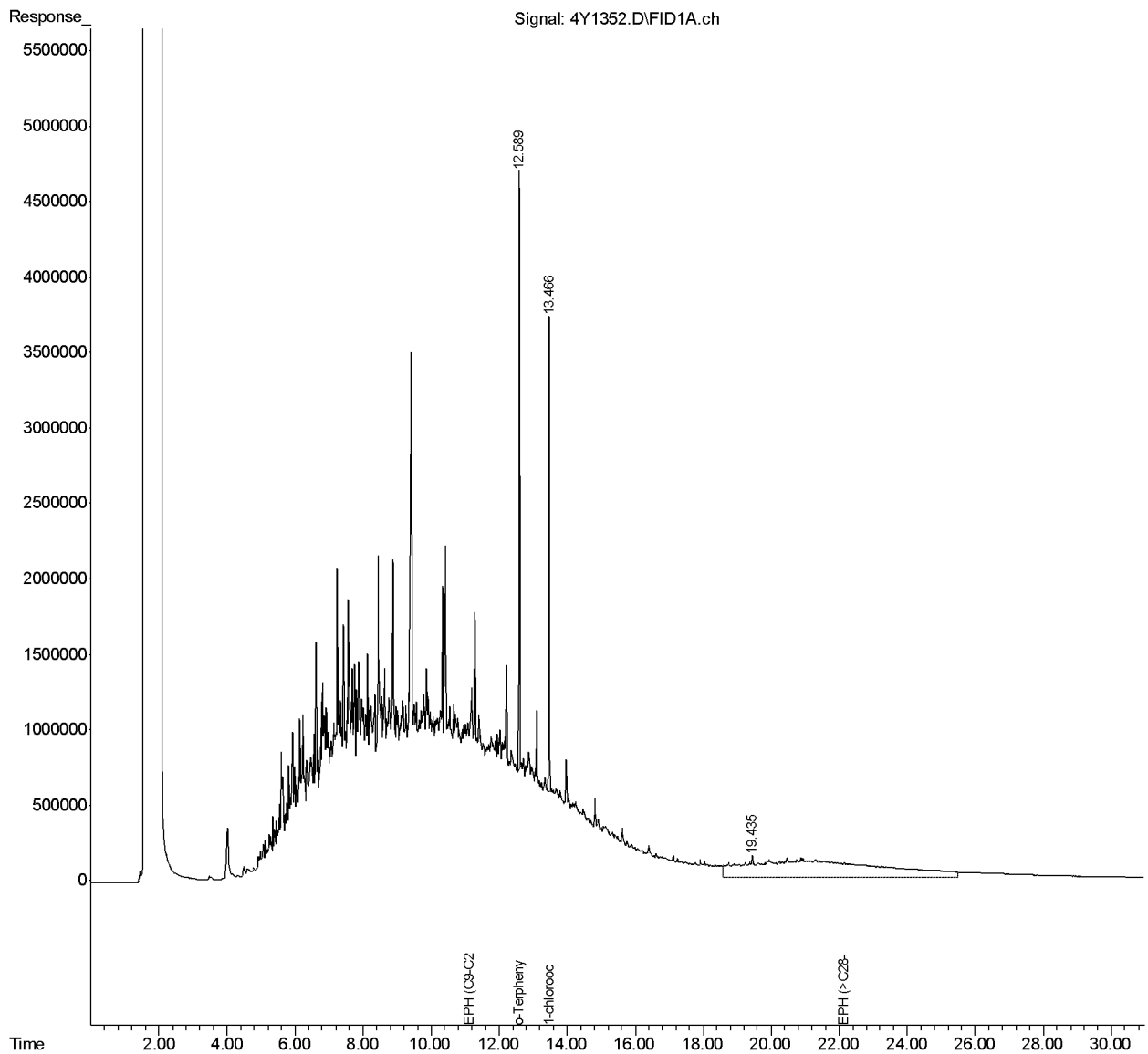
Quantitation Report (QT Reviewed)

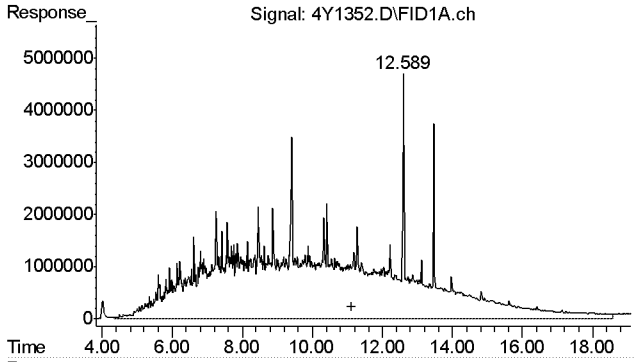
Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1352.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 9:48 pm
Operator : owenm
Sample : ja61582-1
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:17:09 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

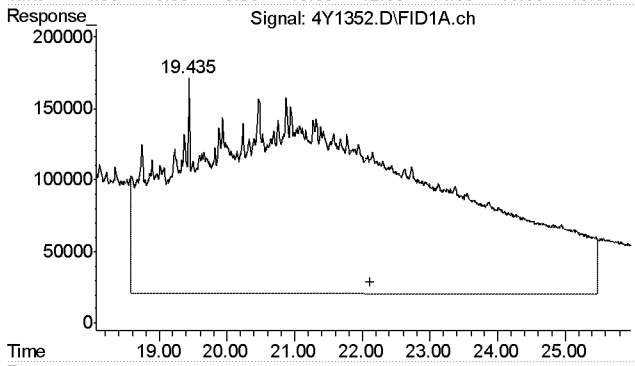
8.1.1
8





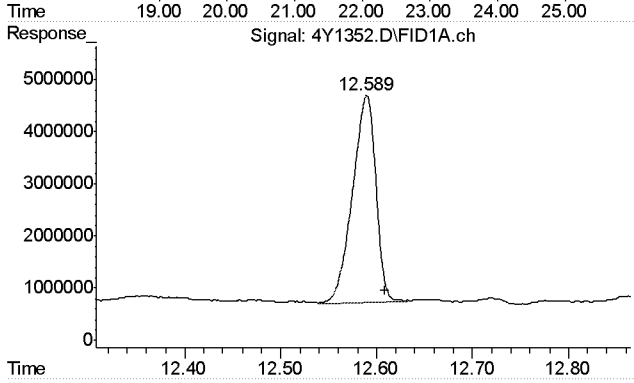
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 5289420482
Conc: 3652.70 ug/L m



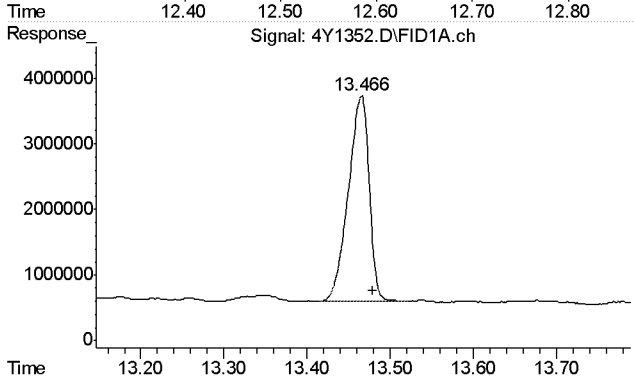
#20 EPH (>C28-C40)

R.T.: 22.126 min
Delta R.T.: 0.000 min
Response: 340183788
Conc: 230.12 ug/L m



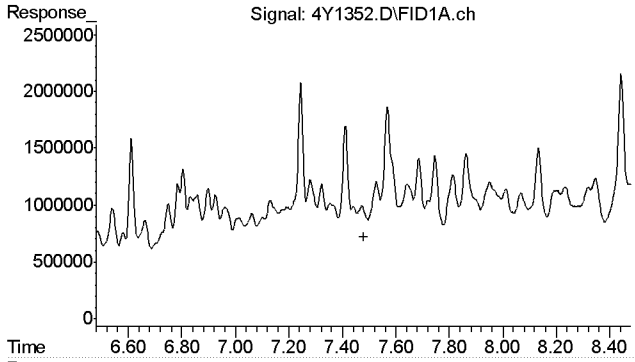
#22 o-Terphenyl (S)

R.T.: 12.589 min
Delta R.T.: -0.020 min
Response: 66905689
Conc: 44.00 ug/L m



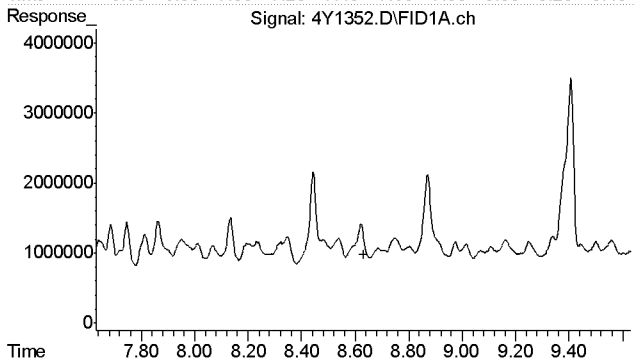
#23 1-chlorooctadecane (S)

R.T.: 13.466 min
Delta R.T.: -0.014 min
Response: 55137091
Conc: 42.98 ug/L m



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.479 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.: 0.000 min
Exp R.T. : 8.631 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: JA61582-1
Lab FileID: 4Y1352.D
Injection Time: 11/16/10 21:48
Method: NJDEP EPH
Analyst approved: 11/18/10 14:03 Diaa Nimer
Supervisor approved: 11/19/10 14:25 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	12.59	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	1	13.47	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/19/10 14:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1353.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 10:24 pm
Operator : owenm
Sample : ja61582-2
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:17:58 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.594f	66120507	43.487 ug/L m
Spiked Amount 50.000		Recovery =	86.97%
23) S 1-chlorooctadecane (S)	13.470	54864920	42.771 ug/L m
Spiked Amount 50.000		Recovery =	85.54%
Target Compounds			
13) H EPH (C9-C28)	11.123	11237519047	7760.261 ug/L
20) H EPH (>C28-C40)	22.126	999487208	676.100 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

8.1.2 8

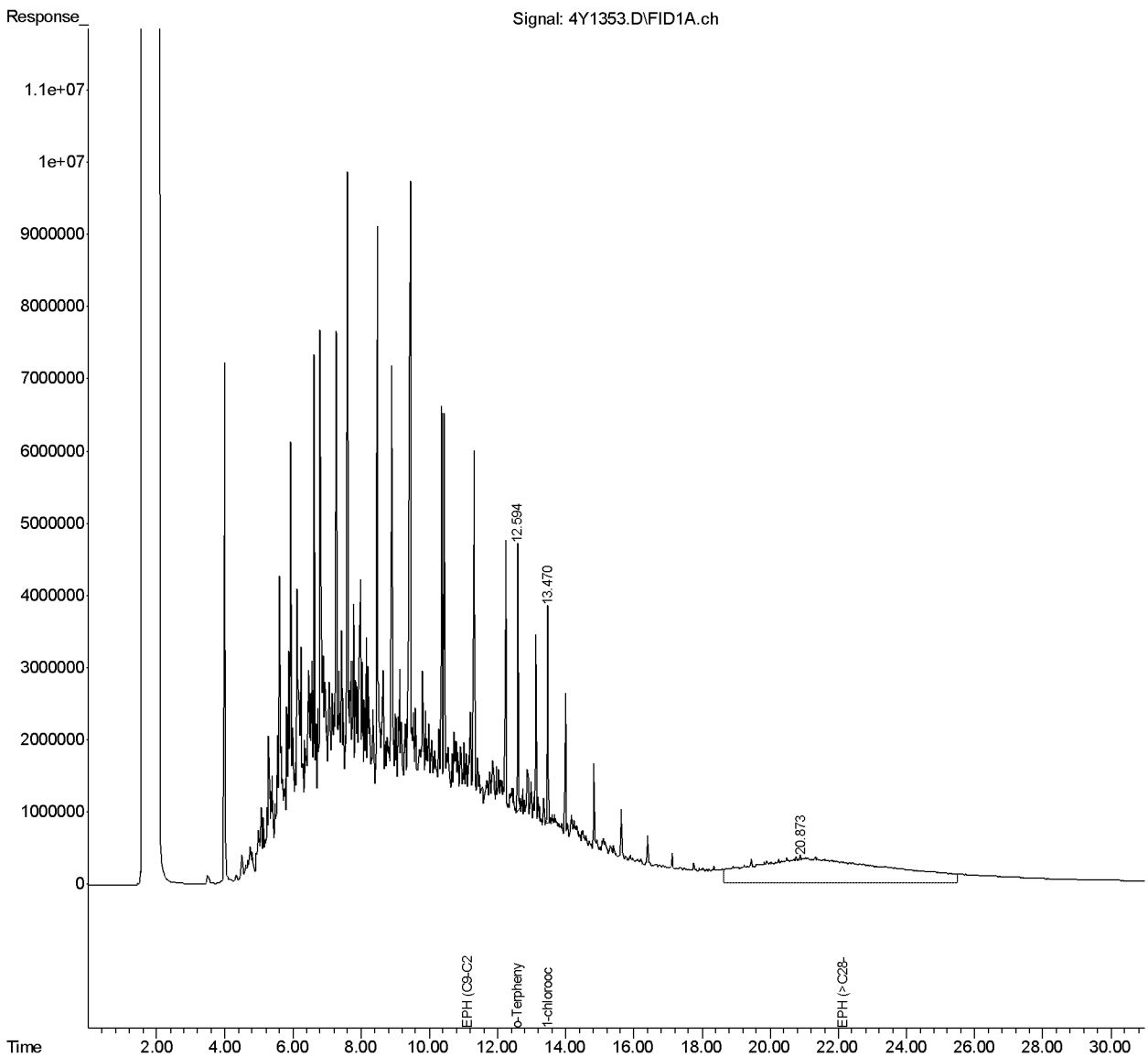
Quantitation Report (QT Reviewed)

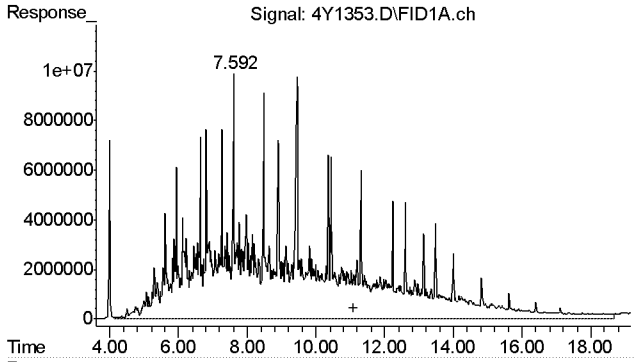
Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1353.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 10:24 pm
Operator : owenm
Sample : ja61582-2
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:17:58 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

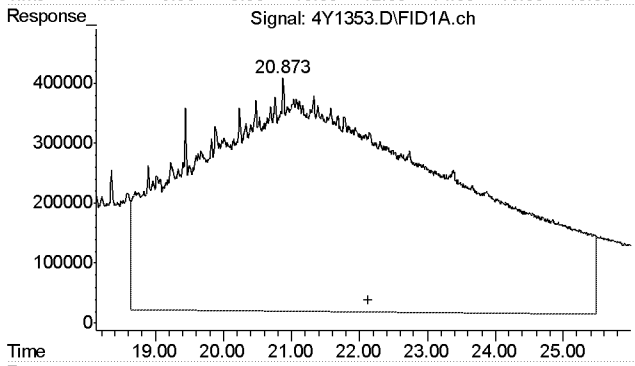
8.1.2
8





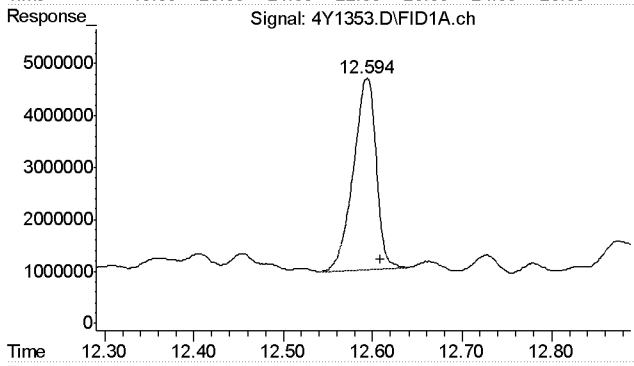
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 11237519047
Conc: 7760.26 ug/L m



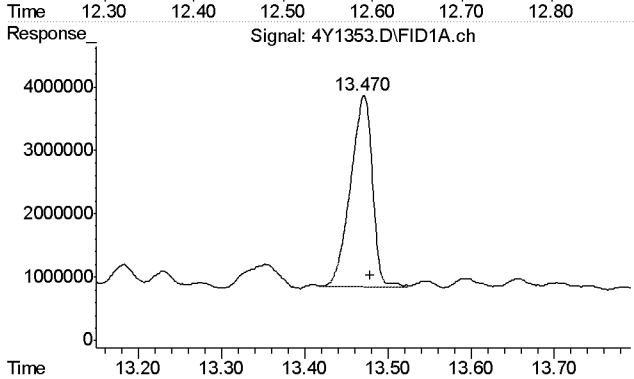
#20 EPH (>C28-C40)

R.T.: 22.126 min
Delta R.T.: 0.000 min
Response: 999487208
Conc: 676.10 ug/L m



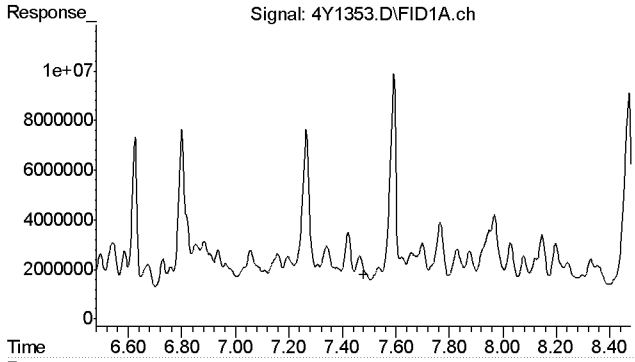
#22 o-Terphenyl (S)

R.T.: 12.594 min
Delta R.T.: -0.015 min
Response: 66120507
Conc: 43.49 ug/L m



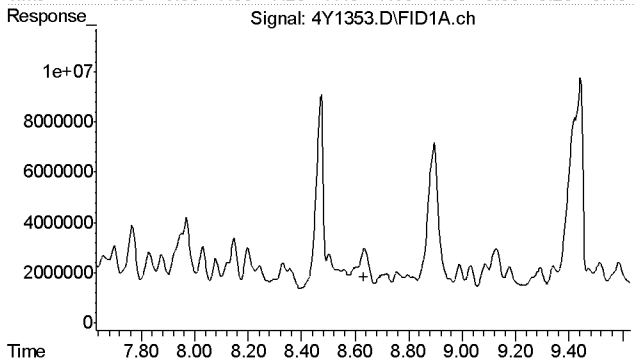
#23 1-chlorooctadecane (S)

R.T.: 13.470 min
Delta R.T.: -0.009 min
Response: 54864920
Conc: 42.77 ug/L m



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.479 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.: 0.000 min
Exp R.T. : 8.631 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: JA61582-2
Lab FileID: 4Y1353.D
Injection Time: 11/16/10 22:24
Method: NJDEP EPH
Analyst approved: 11/18/10 14:03 Diaa Nimer
Supervisor approved: 11/19/10 14:25 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	12.59	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	1	13.47	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/19/10 14:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1354.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 11:00 pm
Operator : owenm
Sample : ja61582-3
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:18:55 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.598	70519697	46.381 ug/L m
Spiked Amount 50.000		Recovery =	92.76%
23) S 1-chlorooctadecane (S)	13.475	56858443	44.325 ug/L m
Spiked Amount 50.000		Recovery =	88.65%
Target Compounds			
13) H EPH (C9-C28)	11.123	13979971011	9654.108 ug/L
20) H EPH (>C28-C40)	22.126	1473489036	996.737 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

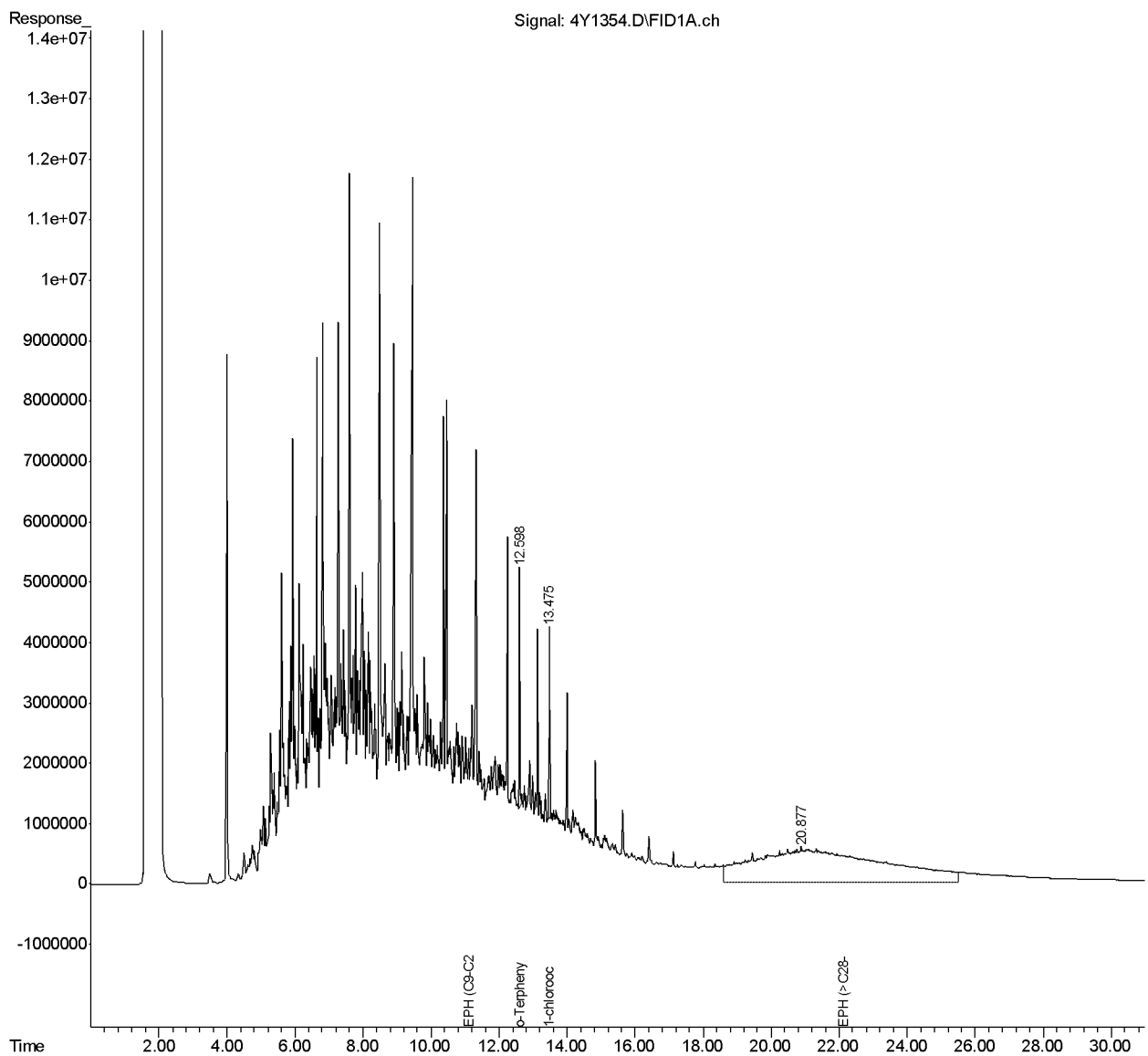
Quantitation Report (QT Reviewed)

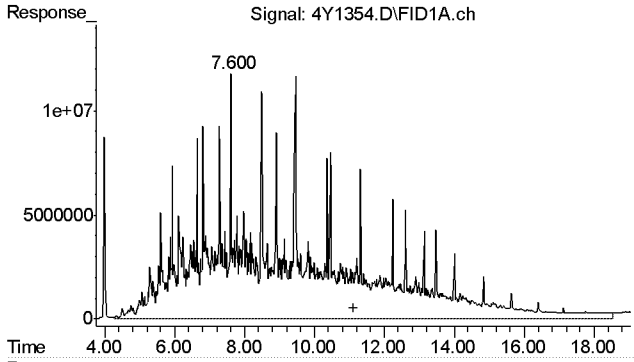
Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1354.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 11:00 pm
Operator : owenm
Sample : ja61582-3
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:18:55 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

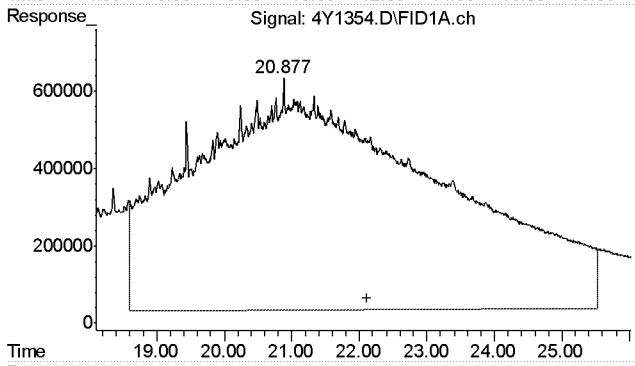
8.1.3
8





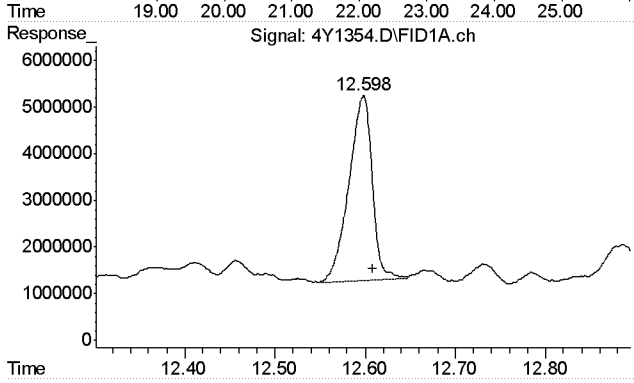
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 13979971011
Conc: 9654.11 ug/L m



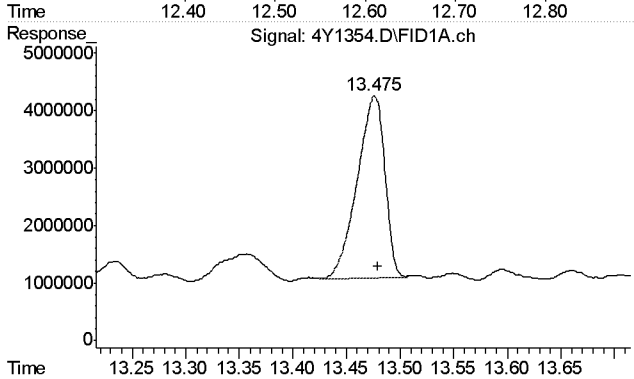
#20 EPH (>C28-C40)

R.T.: 22.126 min
Delta R.T.: 0.000 min
Response: 1473489036
Conc: 996.74 ug/L m



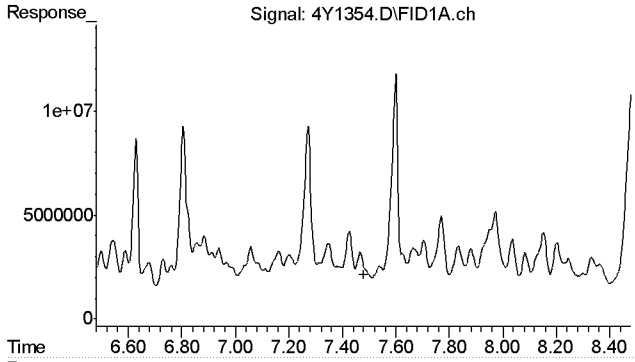
#22 o-Terphenyl (S)

R.T.: 12.598 min
Delta R.T.: -0.011 min
Response: 70519697
Conc: 46.38 ug/L m



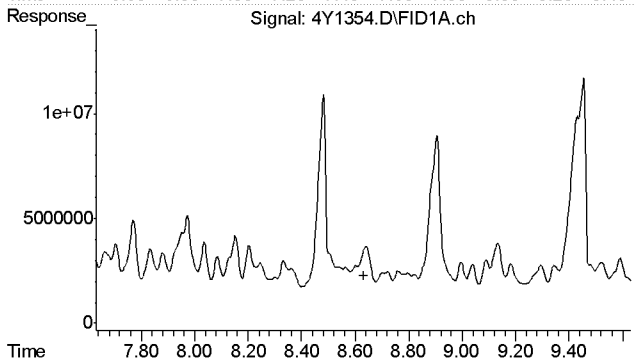
#23 1-chlorooctadecane (S)

R.T.: 13.475 min
Delta R.T.: -0.004 min
Response: 56858443
Conc: 44.32 ug/L m



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.479 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.: 0.000 min
Exp R.T. : 8.631 min
Response: 0
Conc: N.D.

8.1.3
8

Manual Integration Approval Summary

Sample Number: JA61582-3
Lab FileID: 4Y1354.D
Injection Time: 11/16/10 23:00
Method: NJDEP EPH
Analyst approved: 11/18/10 14:03 Diaa Nimer
Supervisor approved: 11/19/10 14:25 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	12.60	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	1	13.48	Poorly defined baseline

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1414.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 1:23 pm
Operator : diaan
Sample : ja61582-4
Misc : op46776,g4y43,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 12:19:01 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.578	130034415	85.523 ug/L
Spiked Amount 50.000		Recovery = 171.05%	
23) S 1-chlorooctadecane (S)	13.453f	101851172	79.399 ug/L
Spiked Amount 50.000		Recovery = 158.80%	
Target Compounds			

(f)=RT Delta > 1/2 Window (m)=manual int.

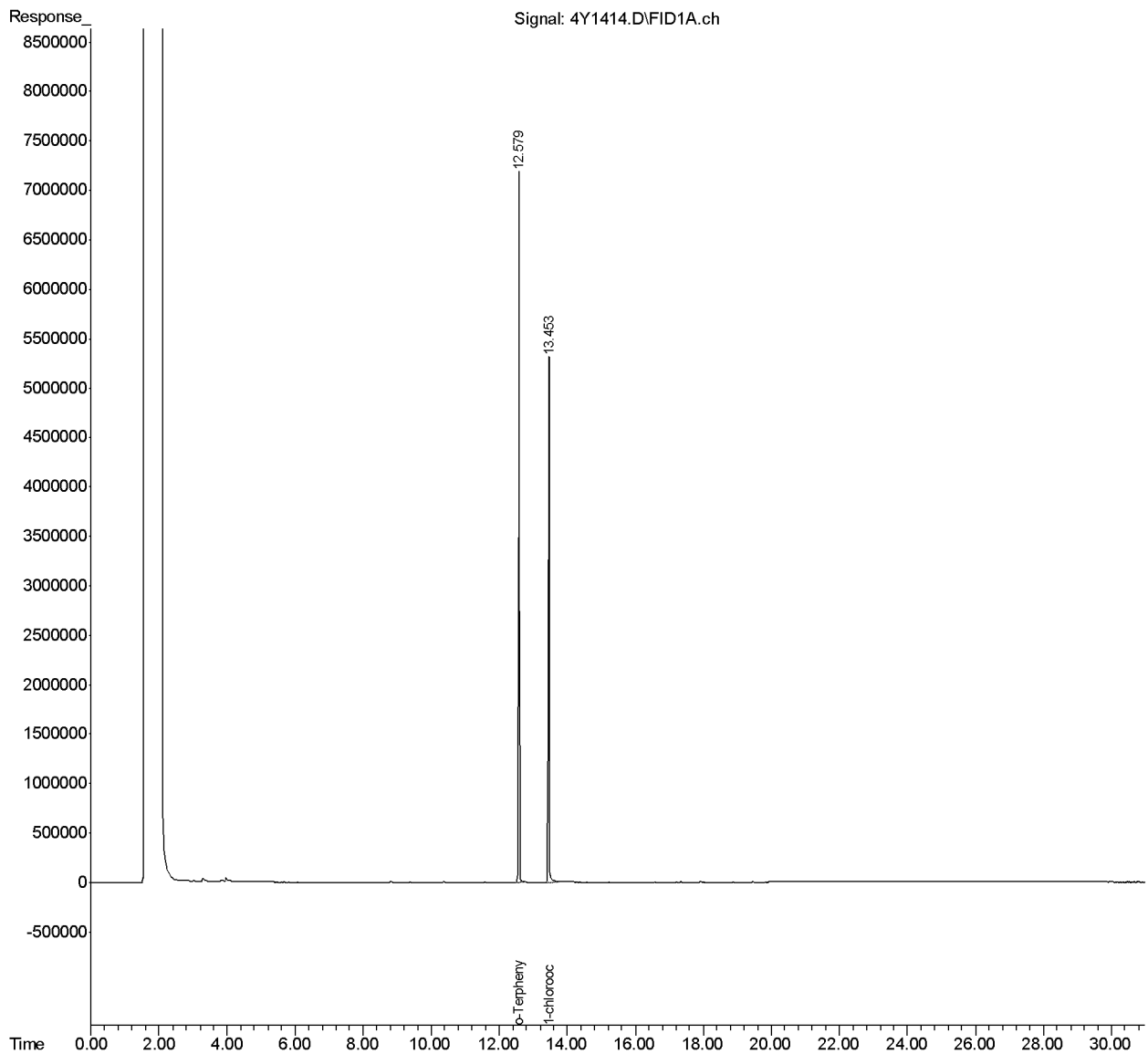
8.1.4 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1414.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 1:23 pm
Operator : diaan
Sample : ja61582-4
Misc : op46776,g4y43,1000,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 12:19:01 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1350.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 8:35 pm
Operator : owenm
Sample : op46762-mb1
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:15:35 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.582f	70784211	46.555 ug/L
Spiked Amount 50.000		Recovery =	93.11%
23) S 1-chlorooctadecane (S)	13.454f	59219467	46.165 ug/L
Spiked Amount 50.000		Recovery =	92.33%
Target Compounds			

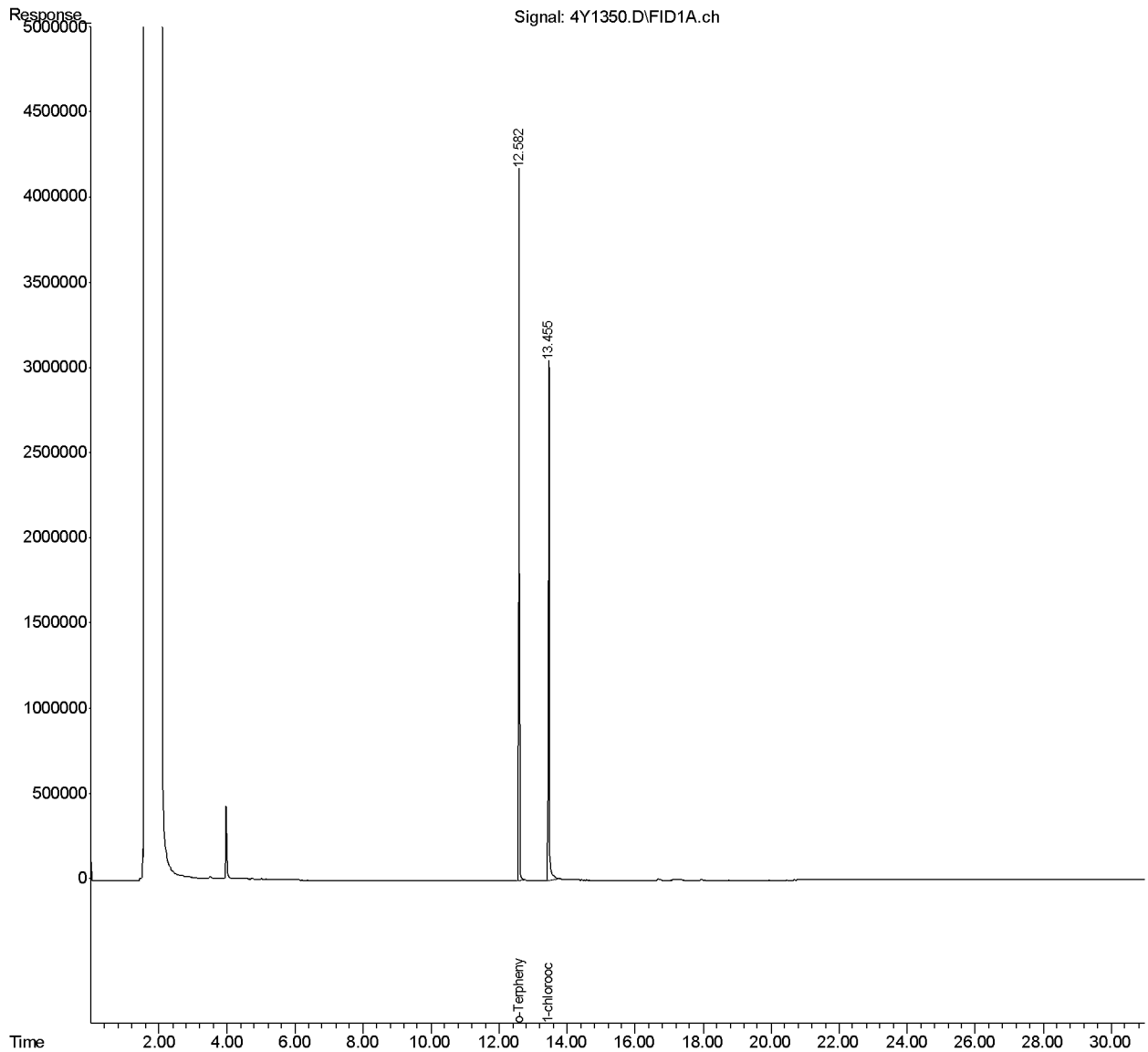
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1350.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 8:35 pm
Operator : owenm
Sample : op46762-mb1
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:15:35 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1412.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 12:11 pm
Operator : diaan
Sample : op46776-mb1
Misc : op46776,g4y43,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:49:53 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.579	125286198	82.400 ug/L
Spiked Amount 50.000		Recovery = 164.80%	
23) S 1-chlorooctadecane (S)	13.449	80308772	62.606 ug/L
Spiked Amount 50.000		Recovery = 125.21%	
Target Compounds			

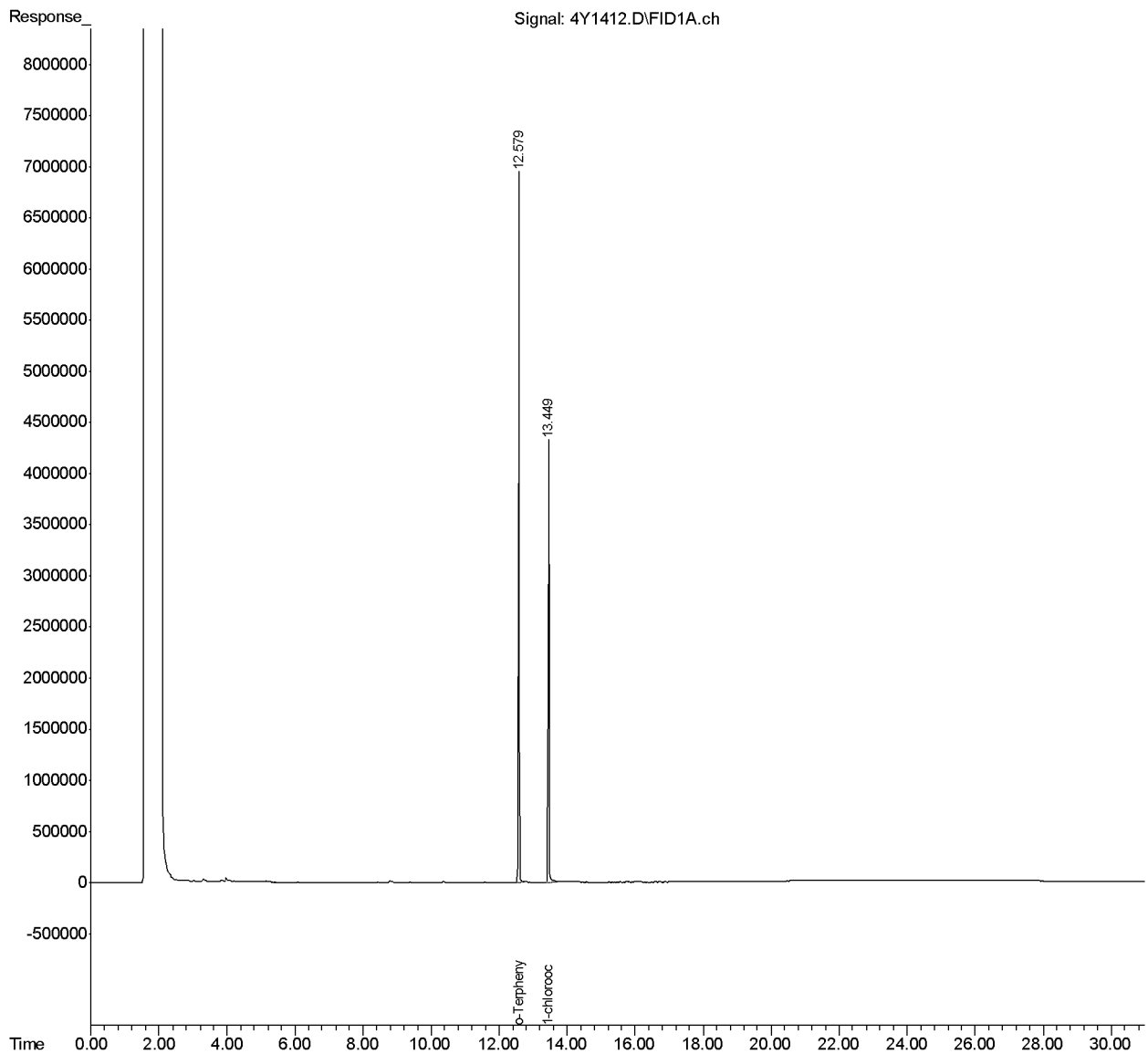
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1412.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 12:11 pm
Operator : diaan
Sample : op46776-mb1
Misc : op46776,g4y43,1000,,,1,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:49:53 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1351.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 9:11 pm
Operator : owenm
Sample : op46762-bs11
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:16:23 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.580f	62796743	41.301 ug/L
Spiked Amount 50.000		Recovery =	82.60%
23) S 1-chlorooctadecane (S)	13.454f	52896571	41.236 ug/L
Spiked Amount 50.000		Recovery =	82.47%
Target Compounds			
13) H EPH (C9-C28)	11.123	265052718	183.037 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

8.3.1

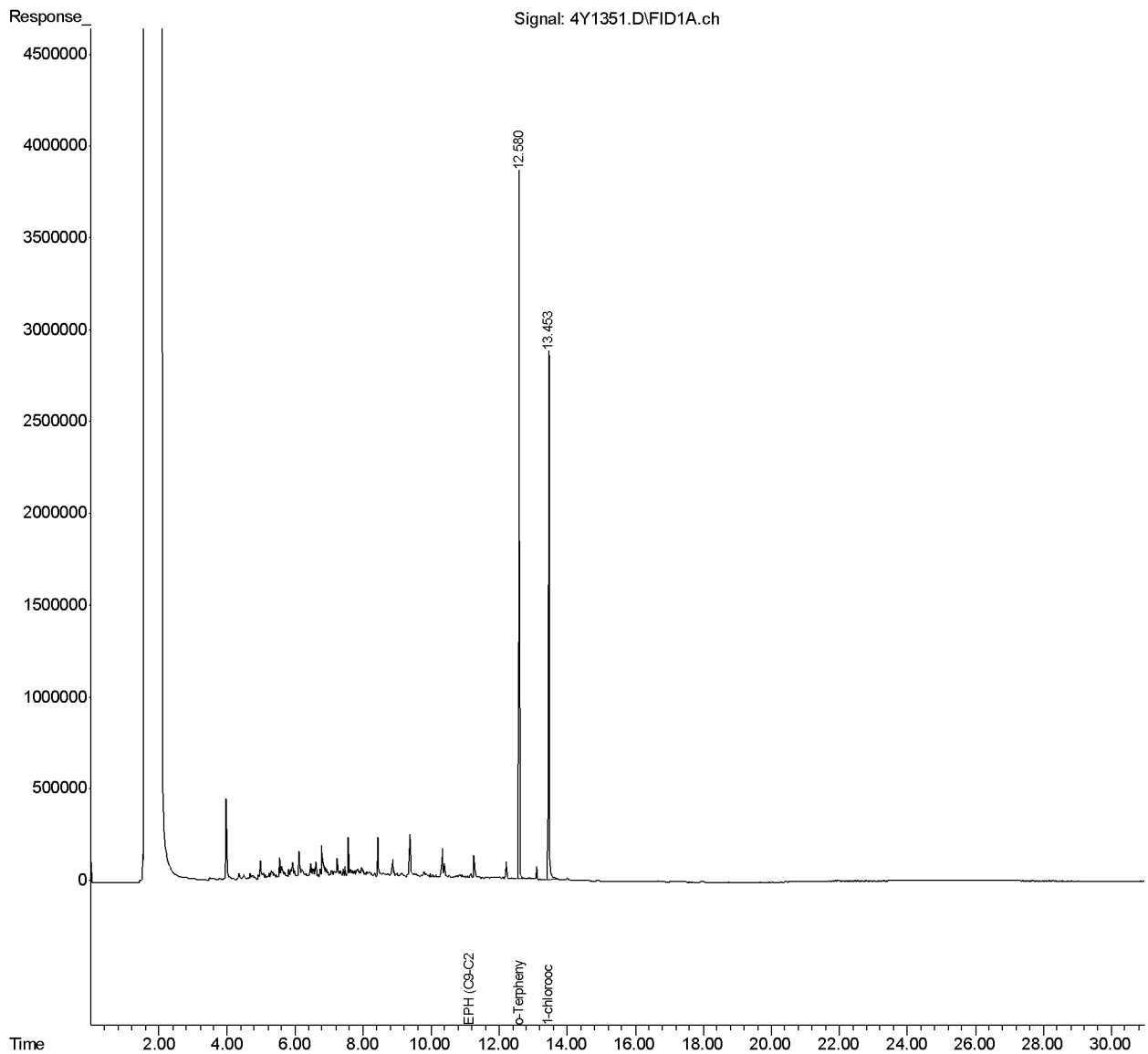
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1351.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 9:11 pm
Operator : owenm
Sample : op46762-bs11
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:16:23 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1413.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 12:47 pm
Operator : diaan
Sample : op46776-bs11
Misc : op46776,g4y43,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:50:08 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.580f	133501221	87.803 ug/L
Spiked Amount 50.000		Recovery = 175.61%	
23) S 1-chlorooctadecane (S)	13.456f	110282934	85.973 ug/L
Spiked Amount 50.000		Recovery = 171.95%	
Target Compounds			
13) H EPH (C9-C28)	11.123	525539550	362.920 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

8.3.2

8

ACCUTEST LABORATORIES JA61582

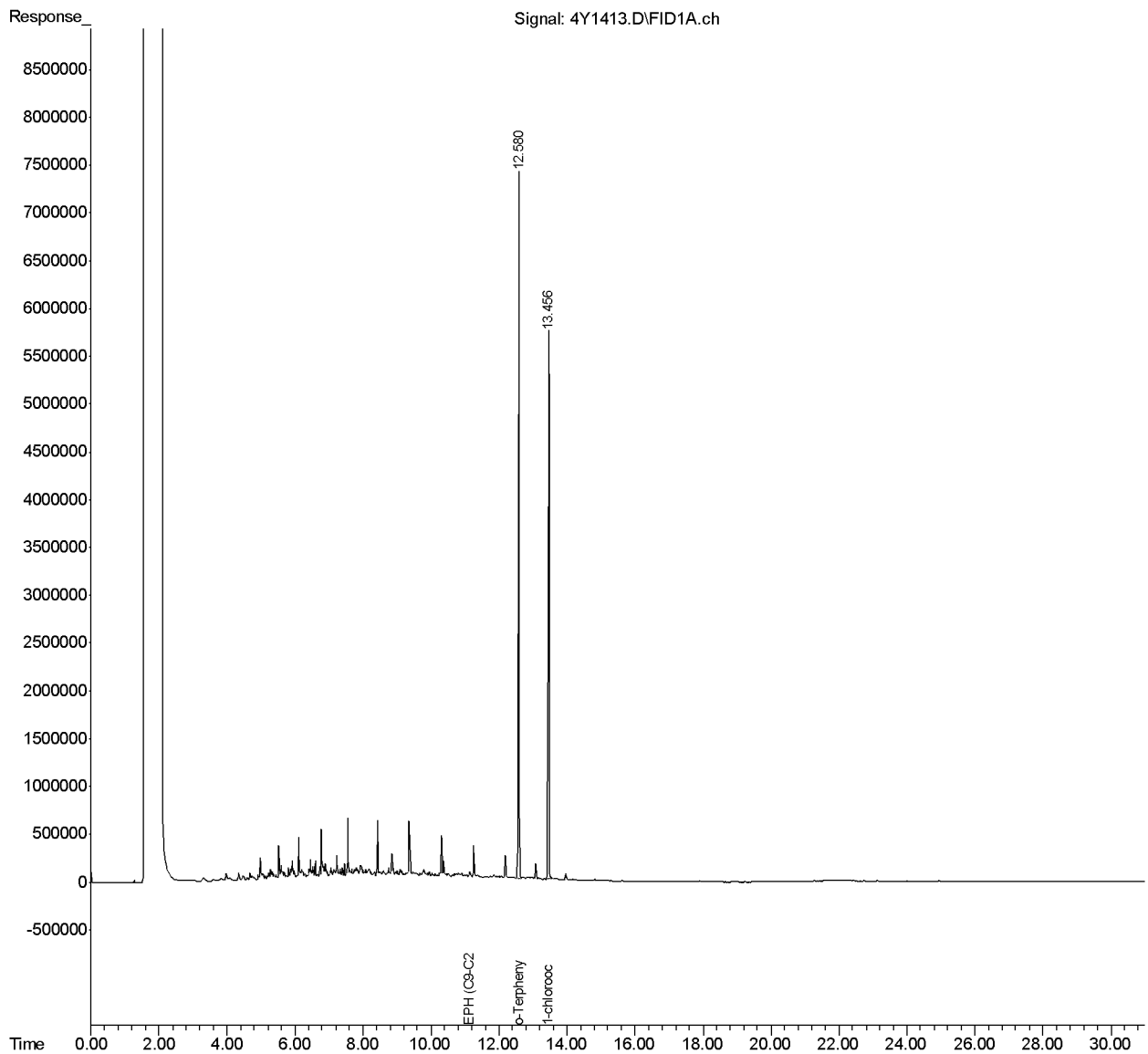
SII-SSA-0014-004632

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1413.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 12:47 pm
Operator : diaan
Sample : op46776-bs11
Misc : op46776,g4y43,1000,,,1,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:50:08 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



ACCUTEST LABORATORIES
JA61582

SII-SSA-0014-004633

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1373.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 10:23 am
Operator : owenm
Sample : op46762-ms
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 32 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:31:34 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.586f	62206195	40.913 ug/L
Spiked Amount 50.000		Recovery =	81.83%
23) S 1-chlorooctadecane (S)	13.465f	50999299	39.757 ug/L
Spiked Amount 50.000		Recovery =	79.51%
Target Compounds			
2) T C10	4.331	32398296	24.238 ug/L
3) T C12	5.530	77177741	57.137 ug/L
4) T C14	6.797f	178394631	129.562 ug/L
10) T C24	15.631f	61236222	41.383 ug/L
11) T C26	17.123f	53032783	35.141 ug/L
12) T C28	18.356	48341896	32.162 ug/L
13) H EPH (C9-C28)	11.123	11478305691	7926.540 ug/L
14) T C30	19.408	44862915	29.013 ug/L
15) T C32	20.331	35782063	24.157 ug/L
16) T C34	21.173	27295011	17.998 ug/L
17) T C36	22.129f	89487254	61.174 ug/L
18) T C38	23.235	10904097	7.774 ug/L
20) H EPH (>C28-C40)	22.126	1223709861	827.775 ug/L
21) H TOTAL PHC	14.556	12378416331	8465.185 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

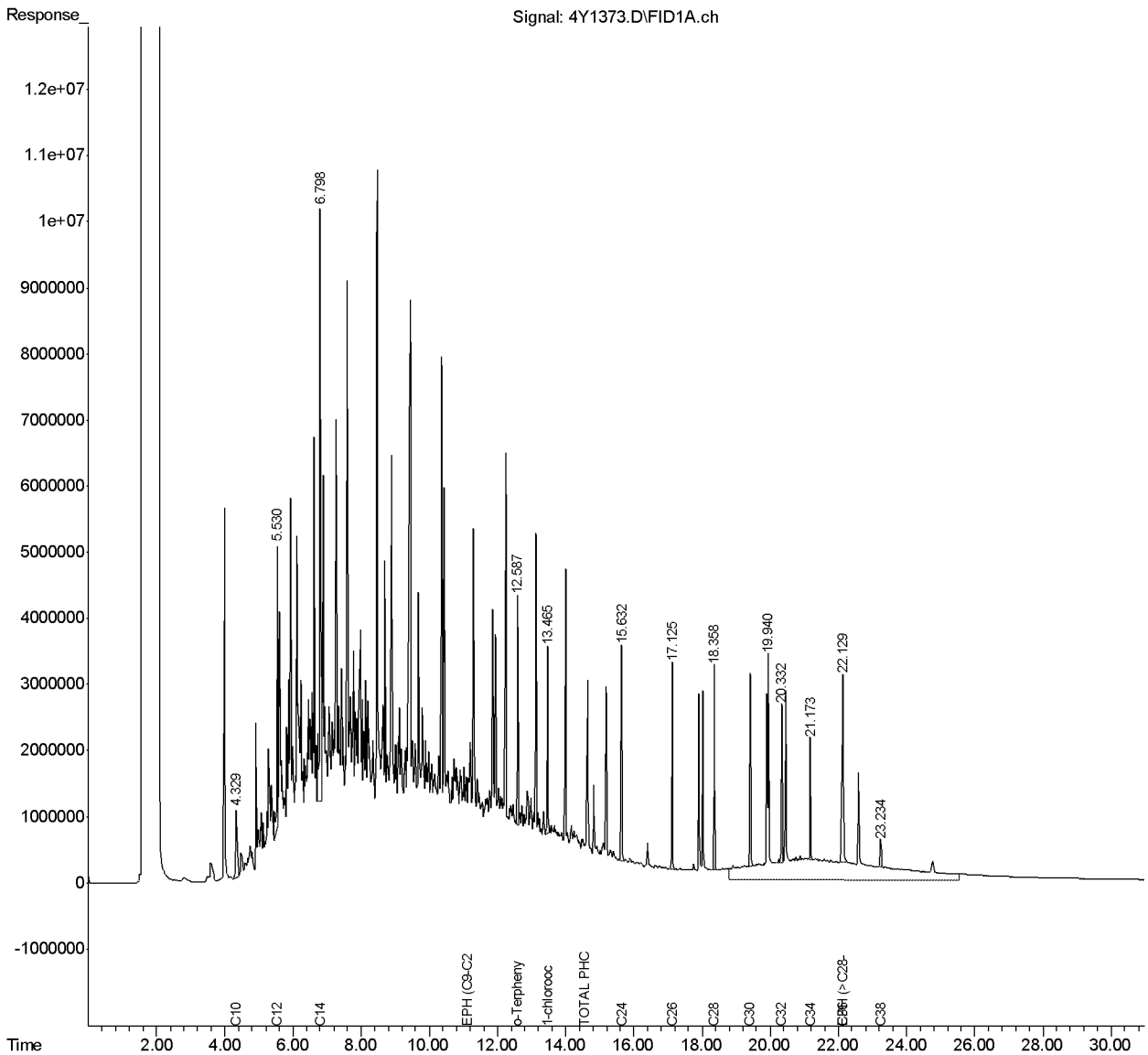
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1373.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 10:23 am
Operator : owenm
Sample : op46762-ms
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 32 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:31:34 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

8.4.1



JA61582

SII-SSA-0014-004635

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1374.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 10:59 am
Operator : owenm
Sample : op46762-msd
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:32:38 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.592f	77496560	50.969 ug/L
Spiked Amount 50.000		Recovery =	101.94%
23) S 1-chlorooctadecane (S)	13.471	58387567	45.517 ug/L
Spiked Amount 50.000		Recovery =	91.03%
Target Compounds			
2) T C10	4.328	35816256	26.795 ug/L
3) T C12	5.531	72896388	53.968 ug/L
6) T C18	10.278f	25771170	18.044 ug/L
10) T C24	15.636f	66149001	44.703 ug/L
11) T C26	17.128f	57284109	37.958 ug/L
12) T C28	18.361f	50406335	33.536 ug/L
13) H EPH (C9-C28)	11.123	14372530471	9925.196 ug/L
14) T C30	19.414	41650863	26.935 ug/L
15) T C32	20.336	28474360	19.223 ug/L
16) T C34	21.178	18651886	12.299 ug/L
17) T C36	22.137f	81212951	55.518 ug/L
20) H EPH (>C28-C40)	22.126	2540456769	1718.484 ug/L

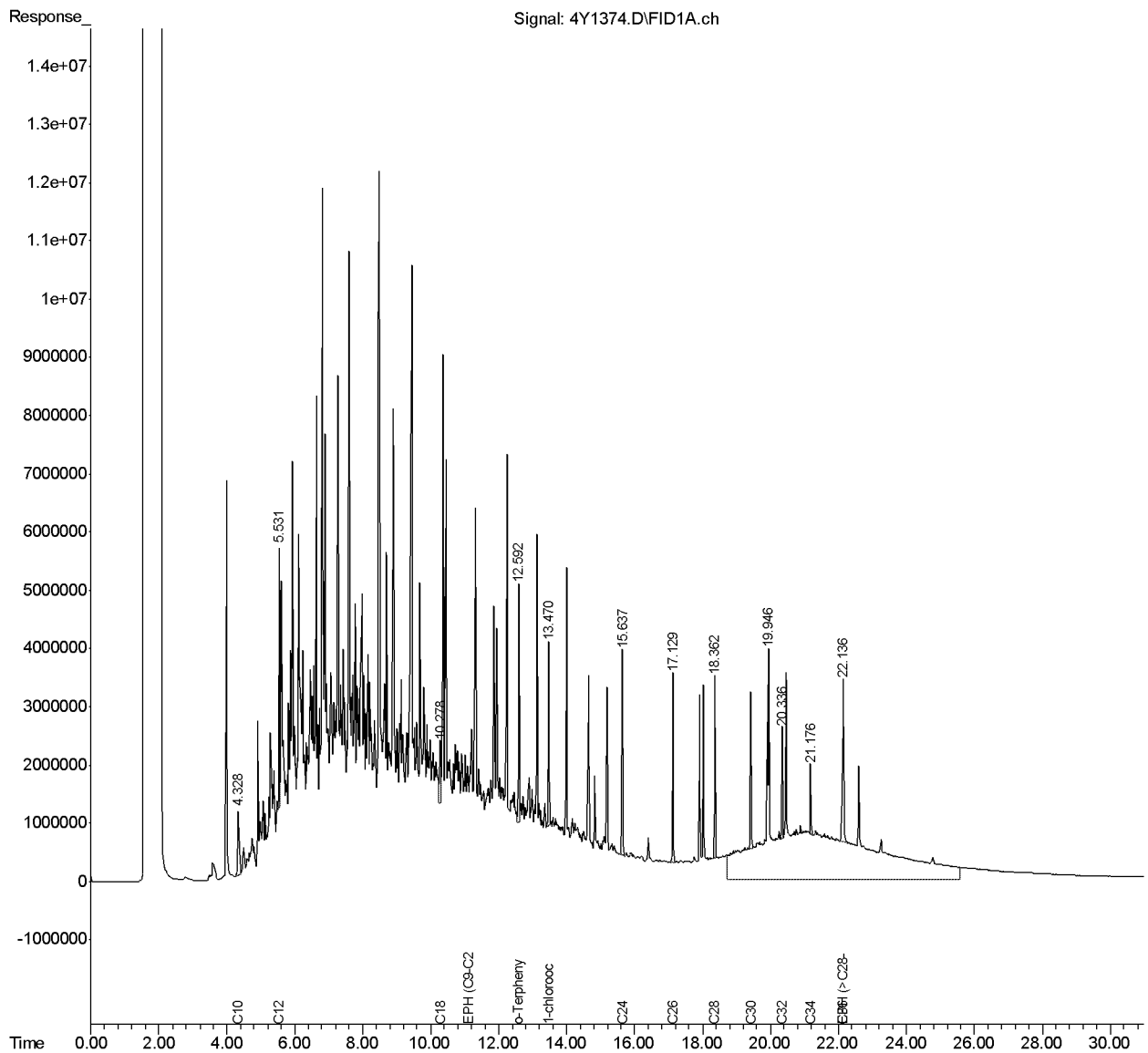
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1374.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 10:59 am
Operator : owenm
Sample : op46762-msd
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:32:38 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/22/10 09:40

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1441.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 6:19 am
Operator : diaan
Sample : op46776-ms
Misc : op46776,g4y43,425,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:07:48 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.596f	132656143	87.248 ug/L m
Spiked Amount	50.000		Recovery =	174.50%
23) S	1-chlorooctadecane (S)	13.476f	105876224	82.537 ug/L m
Spiked Amount	50.000		Recovery =	165.07%
	Target Compounds			
1) T	C9	3.578	2778086	2.162 ug/L
2) T	C10	4.330	3496837	2.616 ug/L
13) H	EPH (C9-C28)	11.123	17346801724	11979.130 ug/L
20) H	EPH (>C28-C40)	22.126	2721625666	1841.036 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

8.4.3

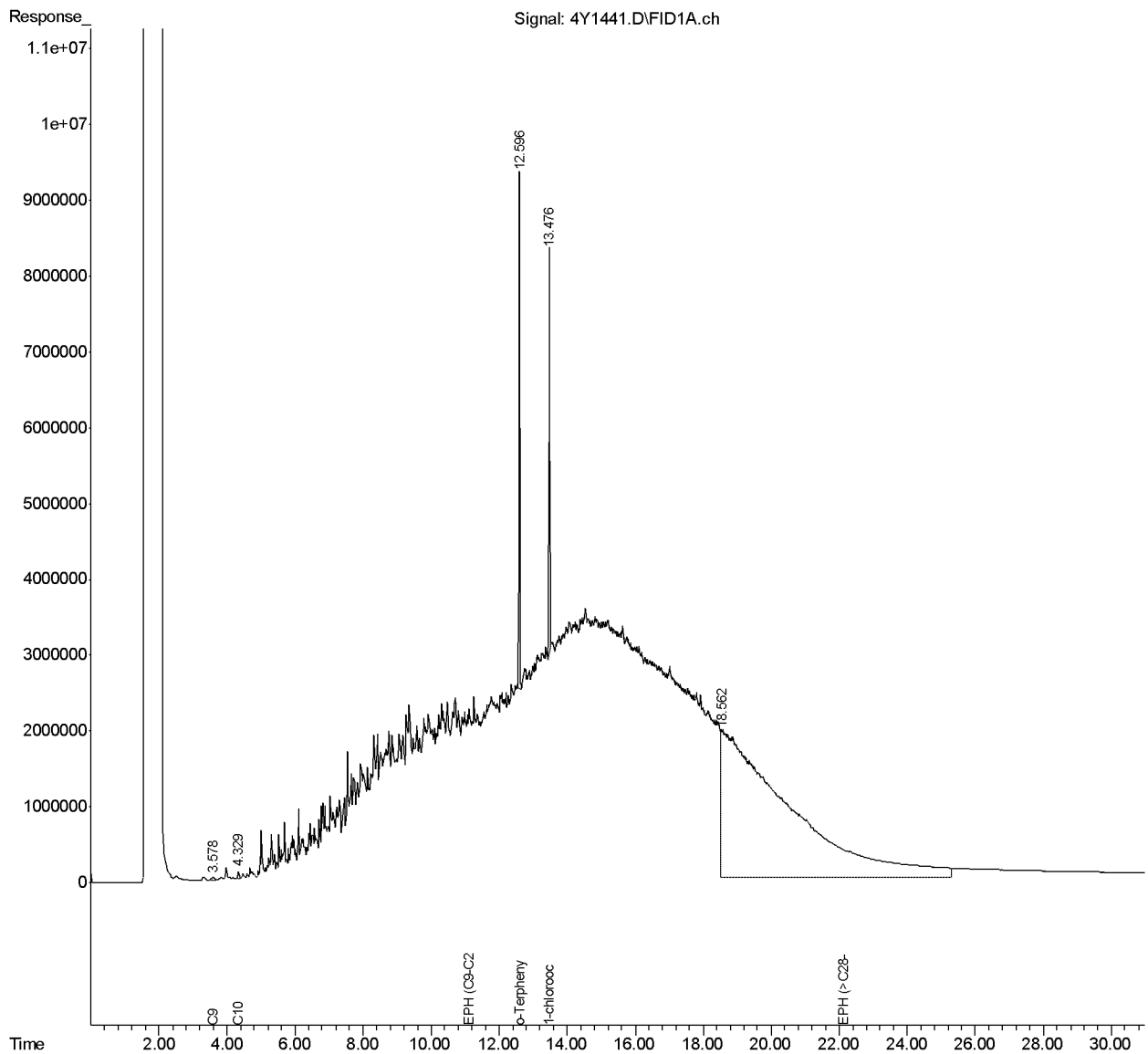
8

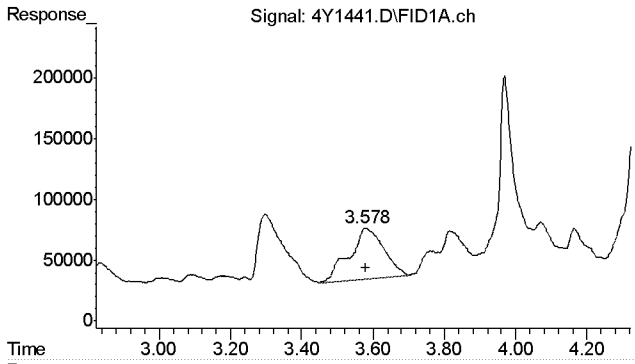
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1441.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 6:19 am
Operator : diaan
Sample : op46776-ms
Misc : op46776,g4y43,425,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:07:48 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

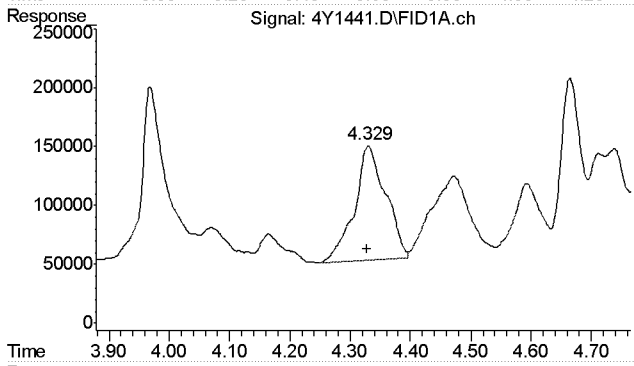
Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um





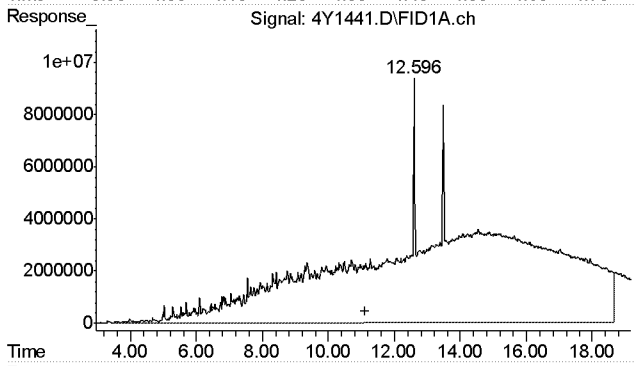
#1 C9

R.T.: 3.578 min
Delta R.T.: -0.004 min
Response: 2778086
Conc: 2.16 ug/L



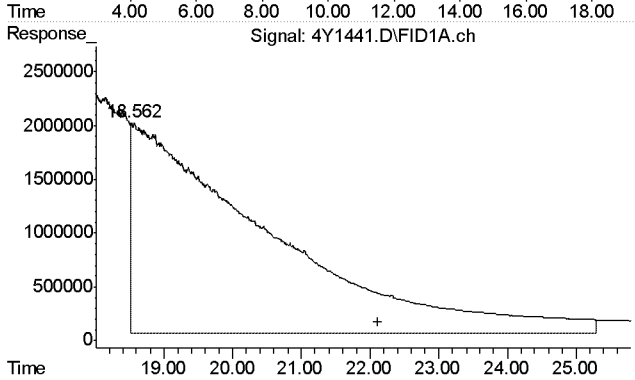
#2 C10

R.T.: 4.330 min
Delta R.T.: 0.002 min
Response: 3496837
Conc: 2.62 ug/L



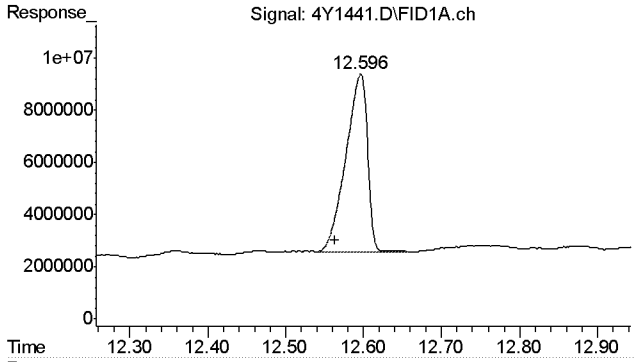
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 17346801724
Conc: 11979.13 ug/L m



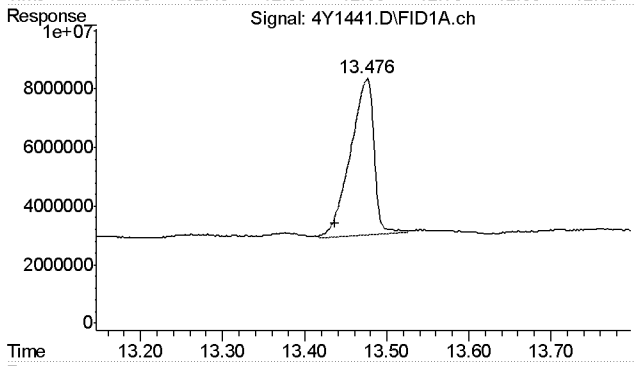
#20 EPH (>C28-C40)

R.T.: 22.126 min
Delta R.T.: 0.000 min
Response: 2721625666
Conc: 1841.04 ug/L m



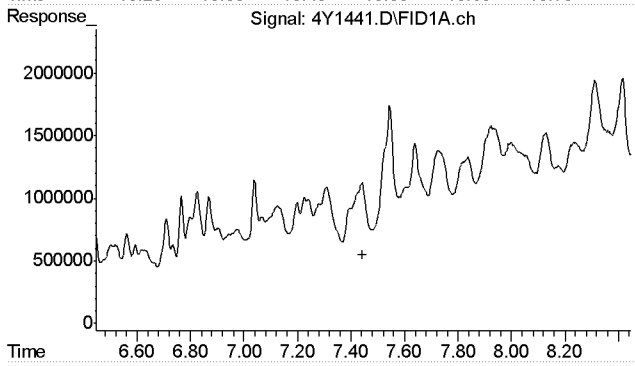
#22 o-Terphenyl (S)

R.T.: 12.596 min
Delta R.T.: 0.032 min
Response: 132656143
Conc: 87.25 ug/L m



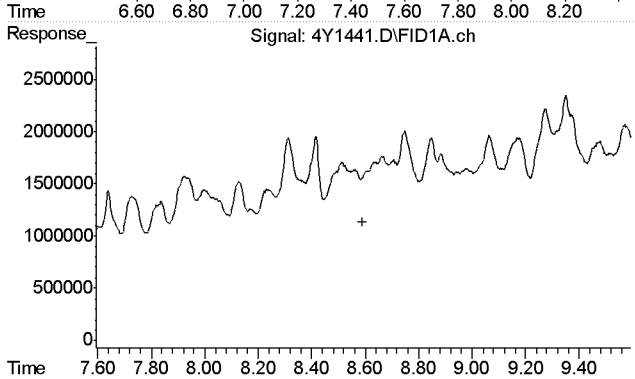
#23 1-chlorooctadecane (S)

R.T.: 13.476 min
Delta R.T.: 0.039 min
Response: 105876224
Conc: 82.54 ug/L m



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.447 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.: 0.000 min
Exp R.T. : 8.594 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: OP46776-MS
Lab FileID: 4Y1441.D
Injection Time: 11/19/10 06:19
Method: NJDEP EPH
Analyst approved: 11/19/10 15:29 Diaa Nimer
Supervisor approved: 11/22/10 09:40 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	12.60	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	1	13.48	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/22/10 09:40

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1442.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 6:54 am
Operator : diaan
Sample : op46776-msd
Misc : op46776,g4y43,425,,,1,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:08:54 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.592f	130000439	85.501 ug/L m
Spiked Amount 50.000		Recovery =	171.00%
23) S 1-chlorooctadecane (S)	13.470f	105697381	82.398 ug/L m
Spiked Amount 50.000		Recovery =	164.80%
Target Compounds			
1) T C9	3.584	2305402	1.794 ug/L
2) T C10	4.333	3240604	2.424 ug/L
13) H EPH (C9-C28)	11.123	12508806095	8638.170 ug/L
20) H EPH (>C28-C40)	22.126	2061048939	1394.190 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

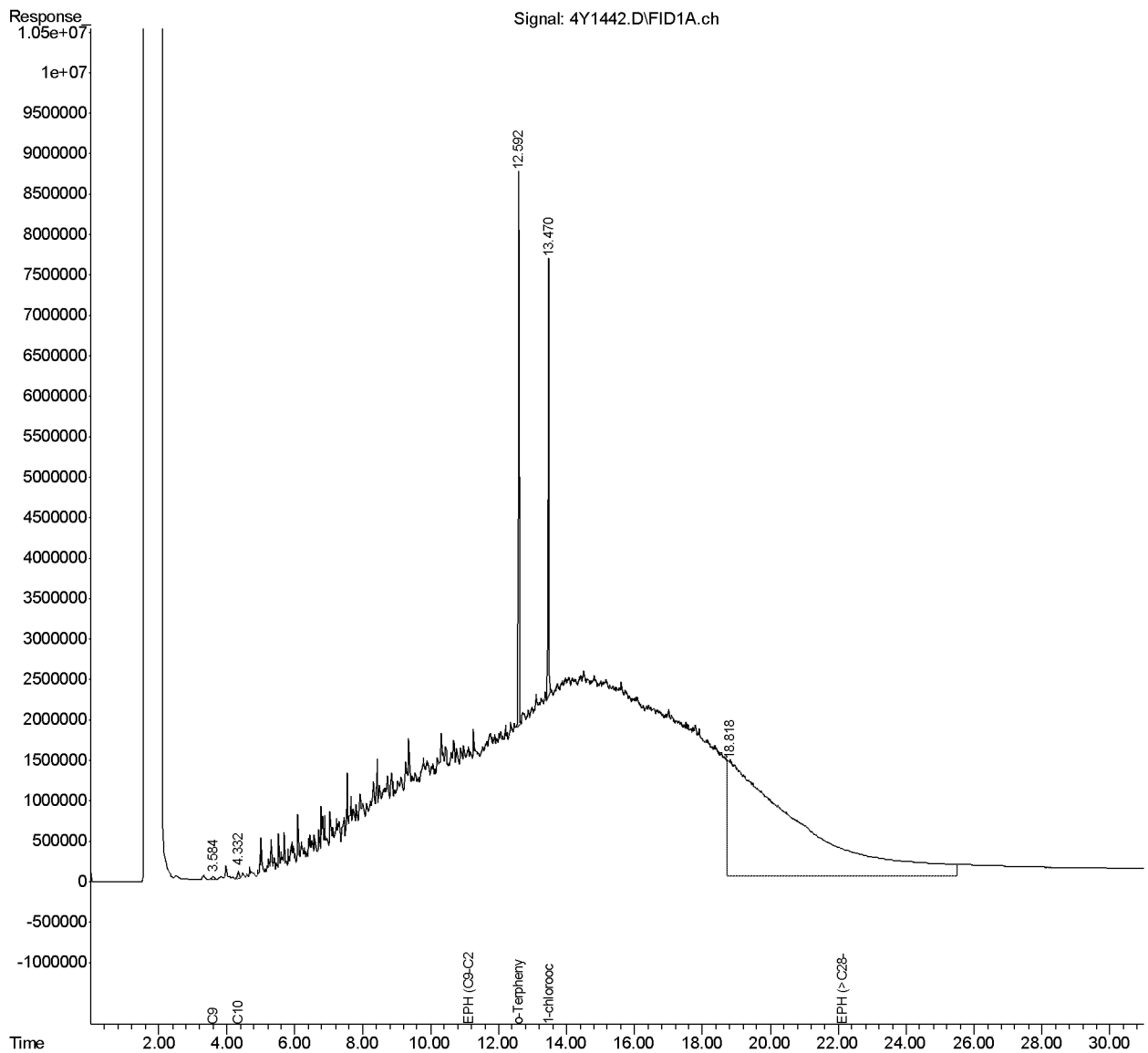
8.4.4
8

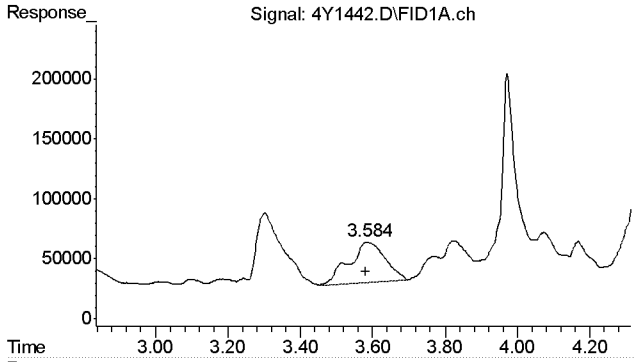
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1442.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 6:54 am
Operator : diaan
Sample : op46776-msd
Misc : op46776,g4y43,425,,,1,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:08:54 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

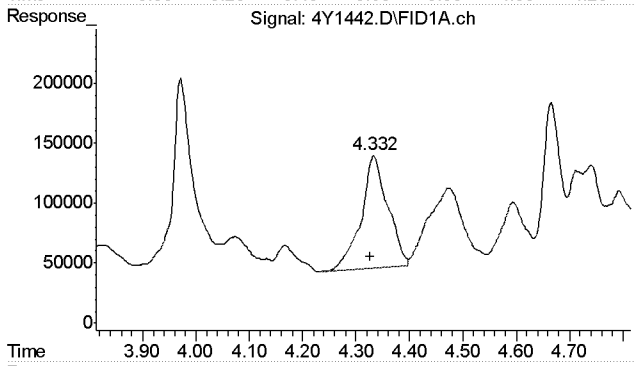
Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um





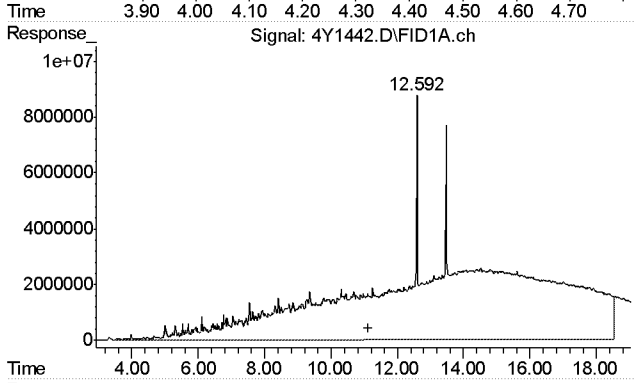
#1 C9

R.T.: 3.584 min
Delta R.T.: 0.002 min
Response: 2305402
Conc: 1.79 ug/L



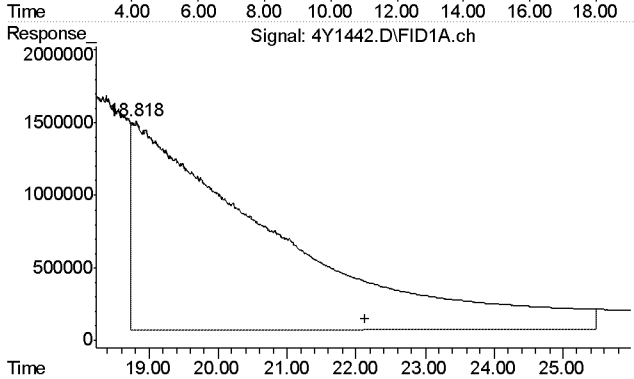
#2 C10

R.T.: 4.333 min
Delta R.T.: 0.005 min
Response: 3240604
Conc: 2.42 ug/L



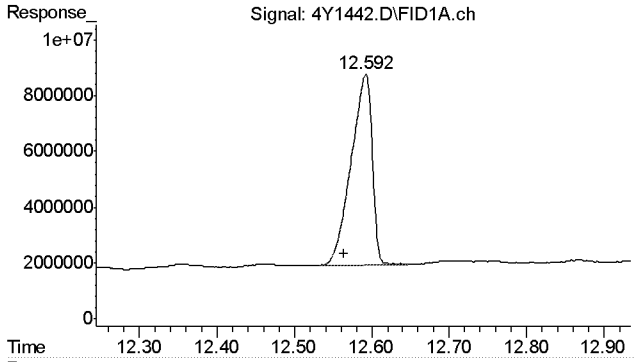
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 12508806095
Conc: 8638.17 ug/L m



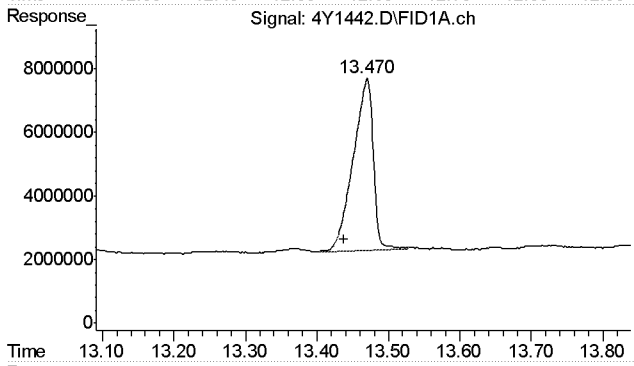
#20 EPH (>C28-C40)

R.T.: 22.126 min
Delta R.T.: 0.000 min
Response: 2061048939
Conc: 1394.19 ug/L m



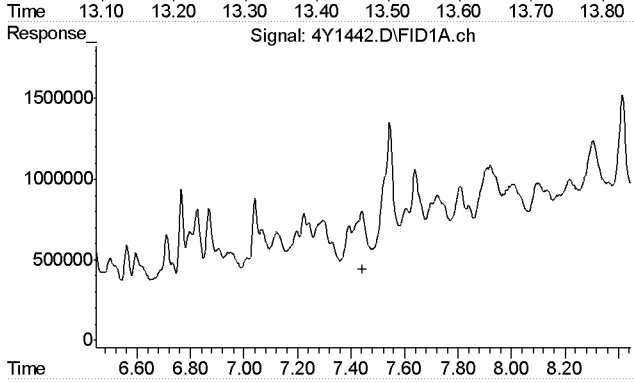
#22 o-Terphenyl (S)

R.T.: 12.592 min
Delta R.T.: 0.028 min
Response: 130000439
Conc: 85.50 ug/L m



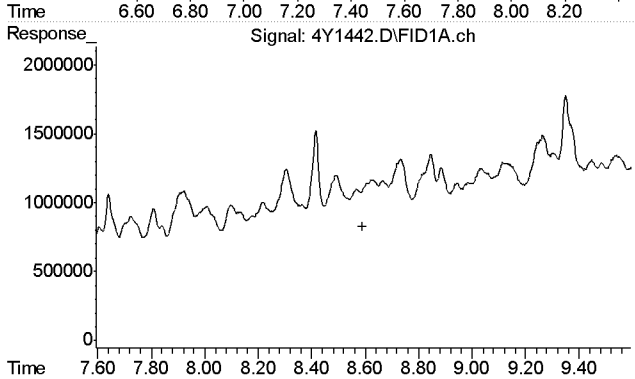
#23 1-chlorooctadecane (S)

R.T.: 13.470 min
Delta R.T.: 0.032 min
Response: 105697381
Conc: 82.40 ug/L m



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.447 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.: 0.000 min
Exp R.T. : 8.594 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: OP46776-MSD
Lab FileID: 4Y1442.D
Injection Time: 11/19/10 06:54
Method: NJDEP EPH
Analyst approved: 11/19/10 15:29 Diaa Nimer
Supervisor approved: 11/22/10 09:40 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	12.59	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	1	13.47	Poorly defined baseline

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1372.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 9:47 am
Operator : owenm
Sample : op46762-dup
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:28:34 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.578	66330948	43.626 ug/L
Spiked Amount 50.000		Recovery =	87.25%
23) S 1-chlorooctadecane (S)	13.452	56166518	43.785 ug/L
Spiked Amount 50.000		Recovery =	87.57%
Target Compounds			
13) H EPH (C9-C28)	11.123	12660161247	8742.690 ug/L
20) H EPH (>C28-C40)	22.126	1130649927	764.825 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

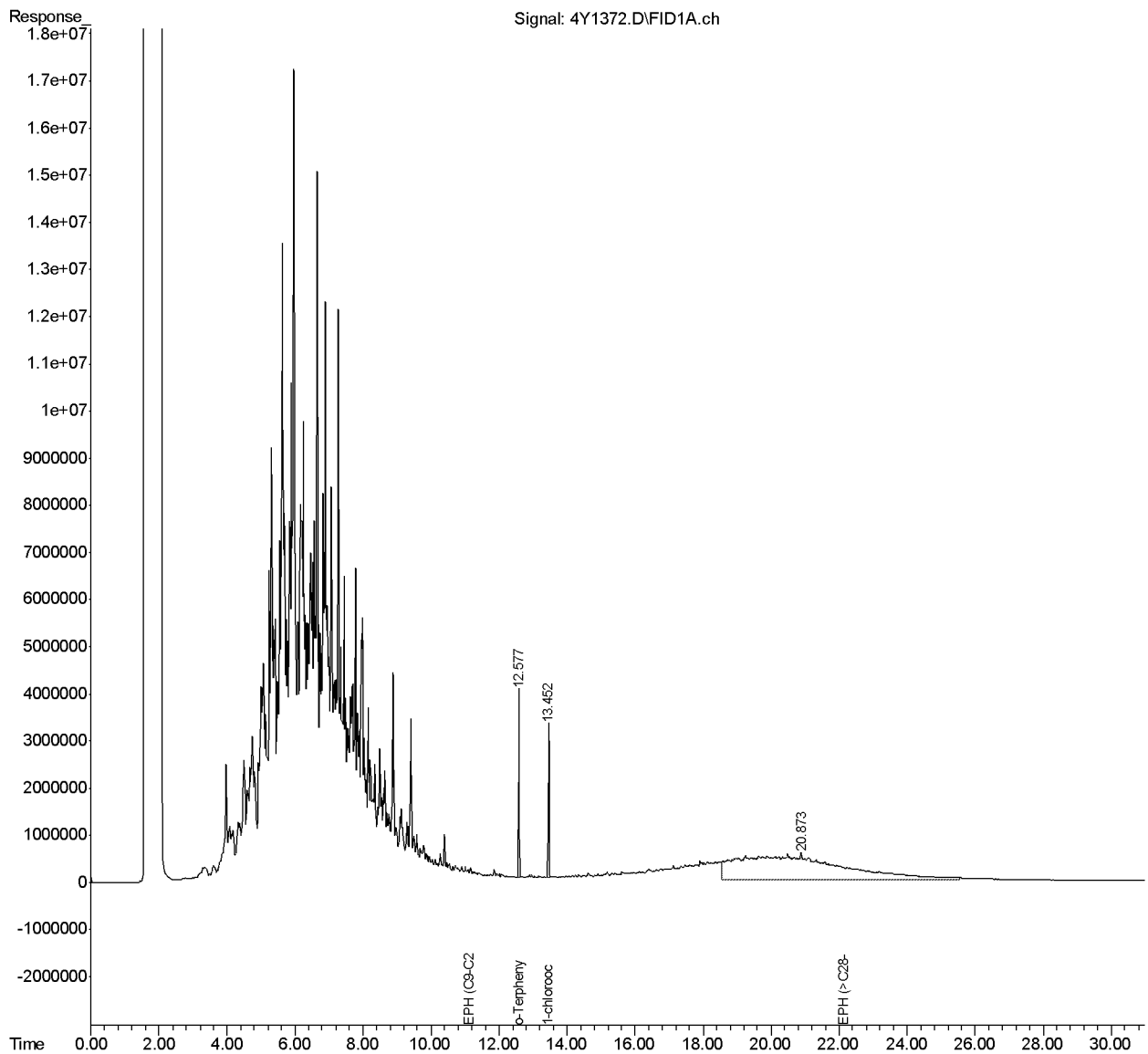
8.5.1

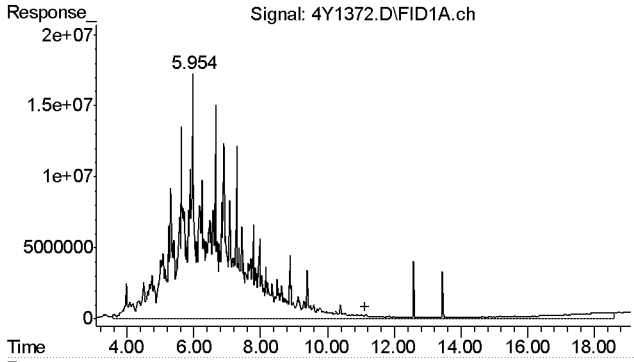
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1372.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 9:47 am
Operator : owenm
Sample : op46762-dup
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:28:34 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

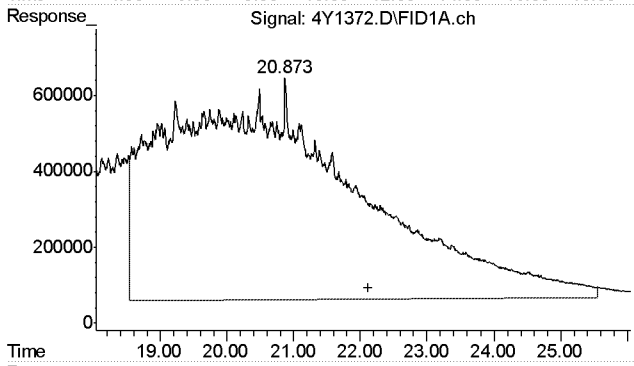
Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um





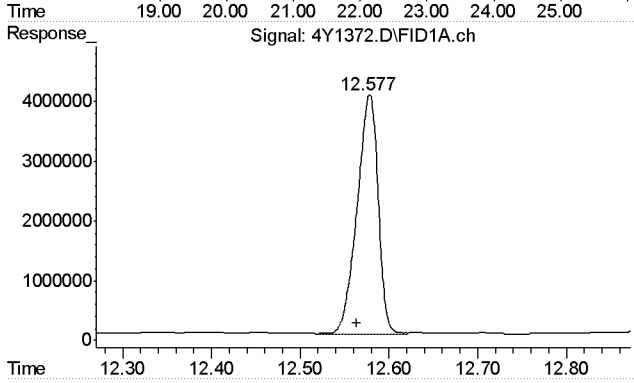
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 12660161247
Conc: 8742.69 ug/L m



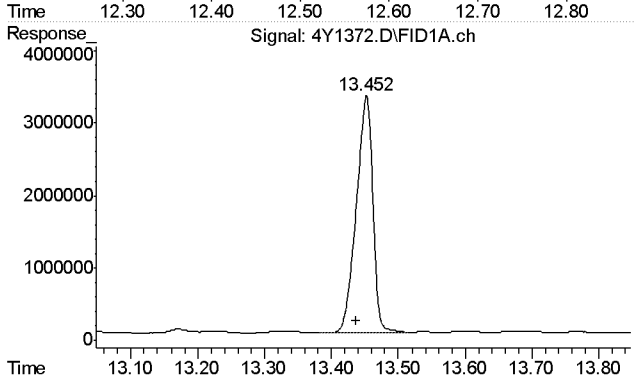
#20 EPH (>C28-C40)

R.T.: 22.126 min
Delta R.T.: 0.000 min
Response: 1130649927
Conc: 764.82 ug/L m



#22 o-Terphenyl (S)

R.T.: 12.578 min
Delta R.T.: 0.014 min
Response: 66330948
Conc: 43.63 ug/L

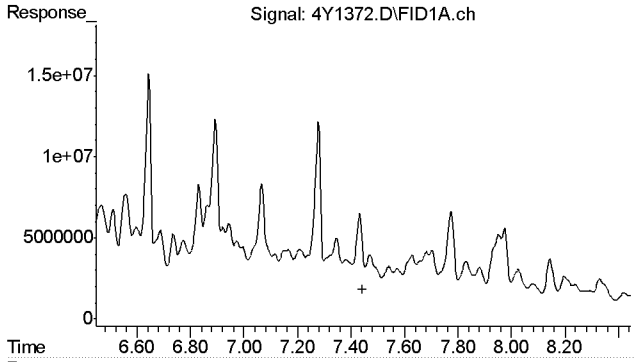


#23 1-chlorooctadecane (S)

R.T.: 13.452 min
Delta R.T.: 0.014 min
Response: 56166518
Conc: 43.79 ug/L

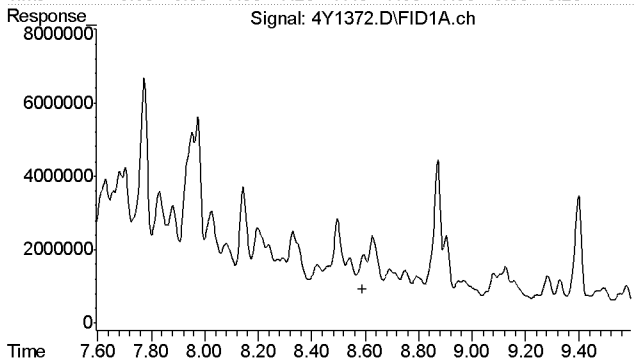
8.5.1

8



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.447 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.: 0.000 min
Exp R.T. : 8.594 min
Response: 0
Conc: N.D.

Manual Integrations APPROVED (compounds with "m" flag)
Cheng-Hwan Ao
11/22/10 09:40

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1440.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 5:43 am
Operator : diaan
Sample : op46776-dup
Misc : op46776,g4y43,970,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:13:56 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.576	120351593	79.155 ug/L m
Spiked Amount 50.000		Recovery = 158.31%	
23) S 1-chlorooctadecane (S)	13.446	81894764	63.842 ug/L m
Spiked Amount 50.000		Recovery = 127.68%	
Target Compounds			
13) H EPH (C9-C28)	11.123	2847945749	1966.698 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

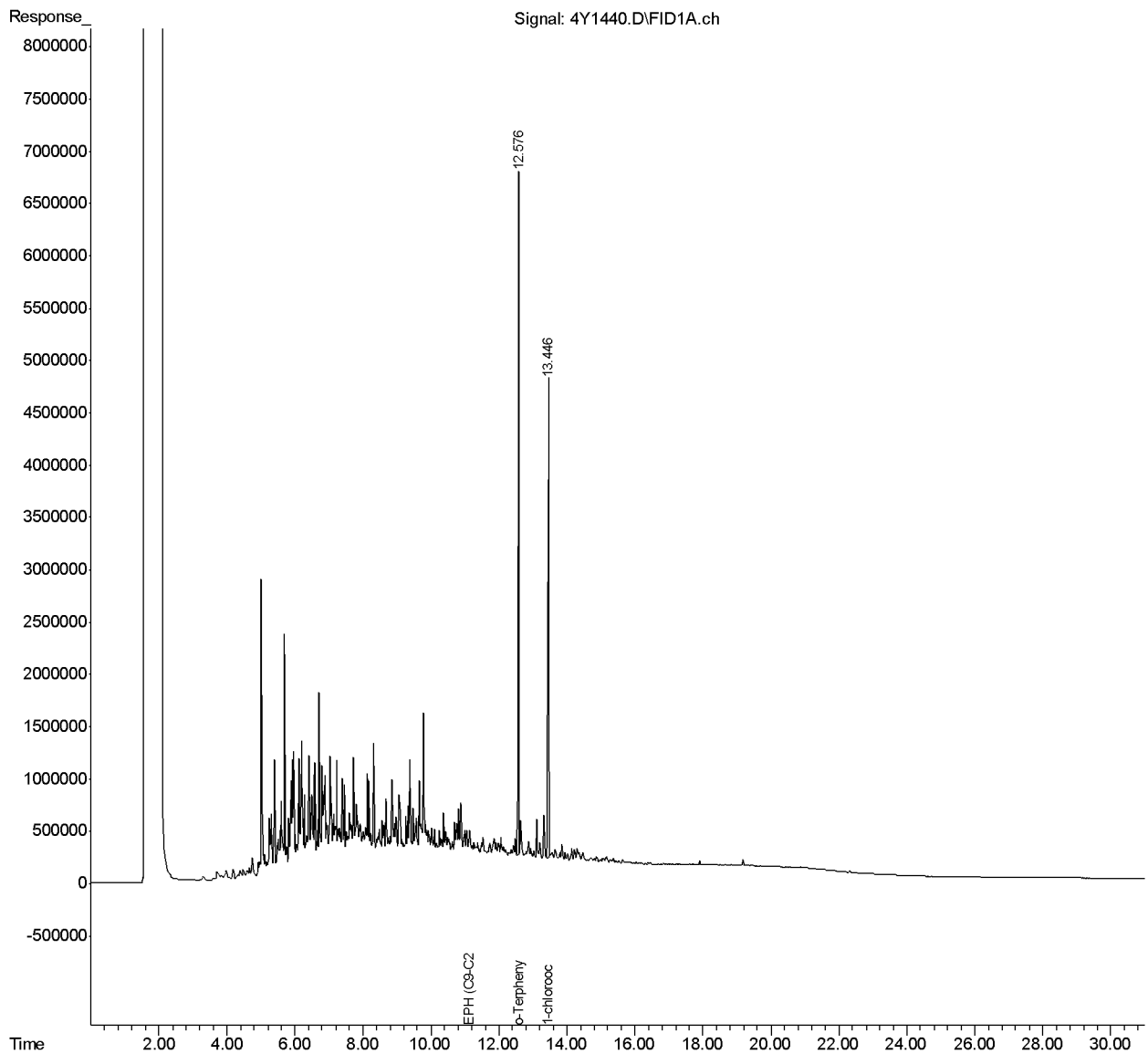
8.5.2

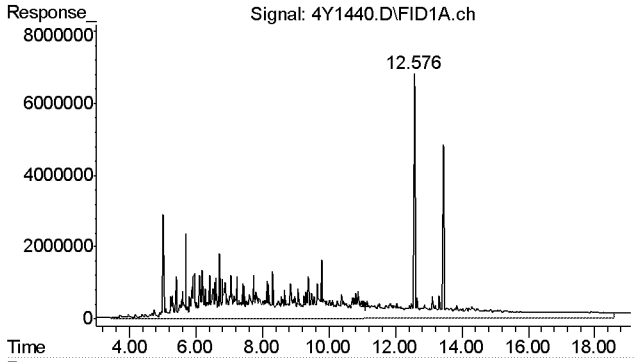
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1440.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 5:43 am
Operator : diaan
Sample : op46776-dup
Misc : op46776,g4y43,970,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:13:56 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

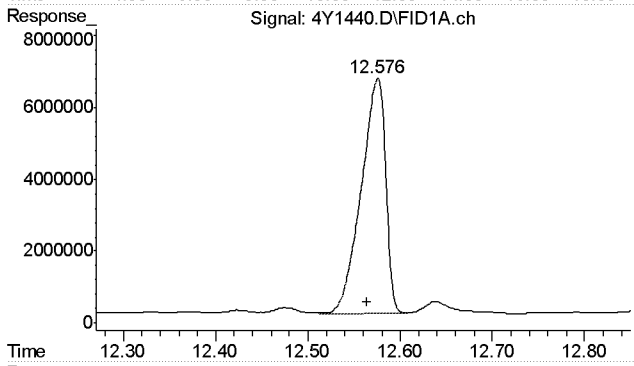
Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um





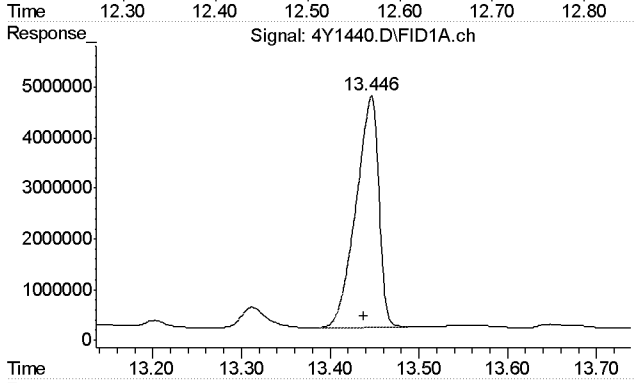
#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 2847945749
Conc: 1966.70 ug/L m



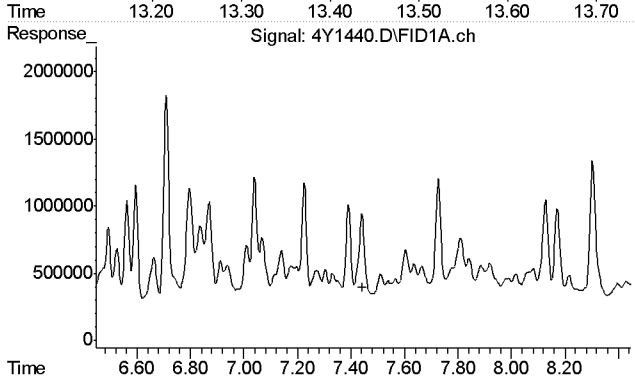
#22 o-Terphenyl (S)

R.T.: 12.576 min
Delta R.T.: 0.011 min
Response: 120351593
Conc: 79.15 ug/L m



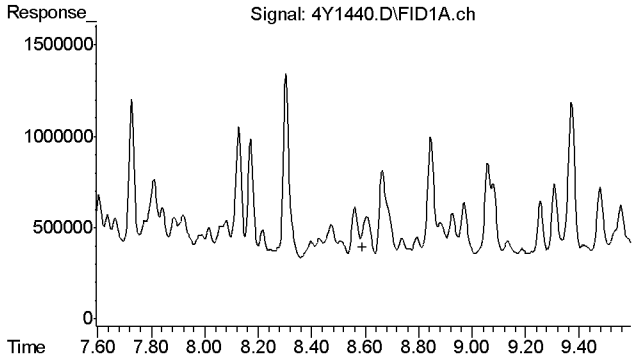
#23 1-chlorooctadecane (S)

R.T.: 13.446 min
Delta R.T.: 0.009 min
Response: 81894764
Conc: 63.84 ug/L m



#24 2-Fluorobiphenyl (S)

R.T.: 0.000 min
Exp R.T. : 7.447 min
Response: 0
Conc: N.D.



#25 2-Bromonaphthalene (S)

R.T.:	0.000 min
Exp R.T. :	8.594 min
Response:	0
Conc:	N.D.

Manual Integration Approval Summary

Sample Number: OP46776-DUP
Lab FileID: 4Y1440.D
Injection Time: 11/19/10 05:43
Method: NJDEP EPH
Analyst approved: 11/19/10 15:29 Diaa Nimer
Supervisor approved: 11/22/10 09:40 Cheng-Hwan Ao

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	12.58	Poorly defined baseline
1-Chlorooctadecane	3386-33-2	1	13.45	Poorly defined baseline

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y2.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 7:28 pm
Operator : owenm
Sample : ic1-2
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 12:14:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:45:20 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.890	3599242	2.427 ug/L
Spiked Amount	50.000		Recovery =	4.85%
23) S	1-chlorooctadecane (S)	13.736	3116747	2.658 ug/L
Spiked Amount	50.000		Recovery =	5.32%
24) S	2-Fluorobiphenyl (S)	7.687	3008812	2.793 ug/L
Spiked Amount	50.000		Recovery =	5.59%
25) S	2-Bromonaphthalene (S)	8.860	2074048	2.735 ug/L
Spiked Amount	50.000		Recovery =	5.47%
	Target Compounds			
1) T	C9	3.708	2991093	2.423 ug/L
2) T	C10	4.458	3132038	2.539 ug/L
3) T	C12	5.657	3168534	2.589 ug/L
4) T	C14	6.965	3218304	2.349 ug/L
5) T	C16	8.668	3306747	2.493 ug/L
6) T	C18	10.579	3357064	2.446 ug/L
7) T	C20	12.471	3439048	2.509 ug/L
8) T	C21	13.376	3733711	2.417 ug/L
9) T	C22	14.250	3517642	2.447 ug/L
10) T	C24	15.902	3519989	2.415 ug/L
11) T	C26	17.377	3574856	2.398 ug/L
12) T	C28	18.593	3561933	2.365 ug/L
13) H	EPH (C9-C28)	11.123	59202888	42.502 ug/L
14) T	C30	19.633	3886812	2.545 ug/L
15) T	C32	20.553	3499062	2.343 ug/L
16) T	C34	21.408	3576166	2.383 ug/L
17) T	C36	22.389	3559395	2.513 ug/L
18) T	C38	23.638	3330873	2.574 ug/L
19) T	C40	25.309	3114975	2.733 ug/L
20) H	EPH (>C28-C40)	19.683	62881380	43.522 ug/L
21) H	TOTAL PHC	14.556	214057851	148.270 ug/L

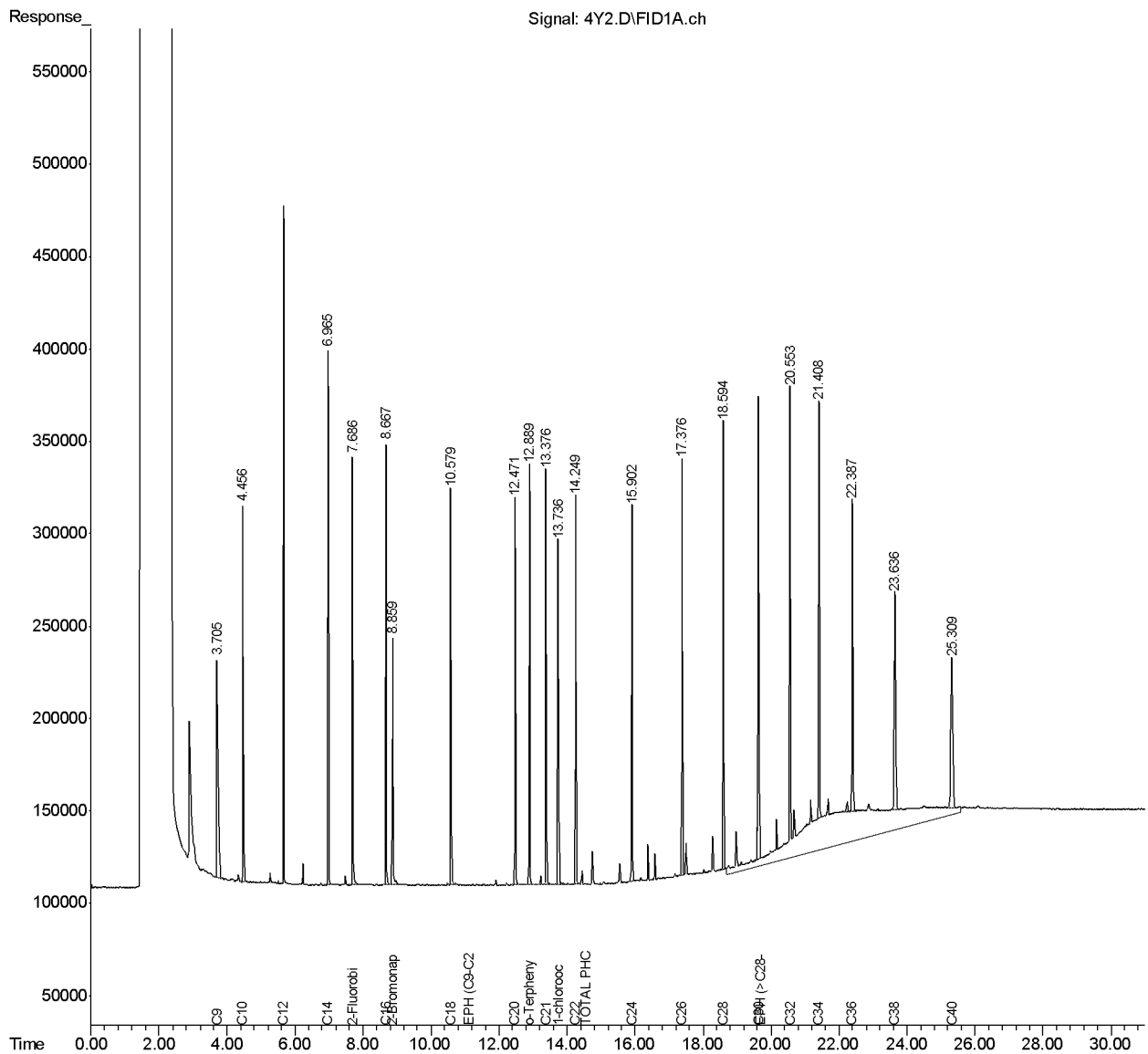
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y2.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 7:28 pm
Operator : owenm
Sample : ic1-2
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 12:14:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:45:20 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM



C:\msdchem\1\DATA\g4y01\4Y2.D

Hydrocarbon Range Total Response

Data File Name	4Y2.D
Date Acquired	9/17/2010 19:28
Method File	EPH4Y01.M
Sample Name	ic1-2

#	Name	Ret Time	Target Response
1)	C9	3.71	2991093
2)	C10	4.46	3132038
3)	C12	5.66	3168534
4)	C14	6.97	3218304
5)	C16	8.67	3306747
6)	C18	10.58	3357064
7)	C20	12.47	3439048
8)	C21	13.38	3733711
9)	C22	14.25	3517642
10)	C24	15.90	3519989
11)	C26	17.38	3574856
12)	C28	18.59	3561933
13)	EPH (C9-C28)	11.12	40520960
14)	C30	19.63	3886812
15)	C32	20.55	3499062
16)	C34	21.41	3576166
17)	C36	22.39	3559395
18)	C38	23.64	3330873
19)	C40	25.31	3114975
20)	EPH (>C28-C40)	19.68	20967282
21)	TOTAL PHC	14.56	61488243

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y3.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 8:04 pm
Operator : owenm
Sample : ic1-5
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:52:00 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:45:20 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.891	7636218	5.150 ug/L
Spiked Amount	50.000		Recovery =	10.30%
23) S	1-chlorooctadecane (S)	13.737	6462645	5.512 ug/L
Spiked Amount	50.000		Recovery =	11.02%
24) S	2-Fluorobiphenyl (S)	7.686	6477032	6.012 ug/L
Spiked Amount	50.000		Recovery =	12.02%
25) S	2-Bromonaphthalene (S)	8.859	4449794	5.868 ug/L
Spiked Amount	50.000		Recovery =	11.74%
	Target Compounds			
1) T	C9	3.707	6454552	5.228 ug/L
2) T	C10	4.458	6689681	5.423 ug/L
3) T	C12	5.657	6753409	5.518 ug/L
4) T	C14	6.965	6869321	5.015 ug/L
5) T	C16	8.668	7029475	5.299 ug/L
6) T	C18	10.579	7173854	5.228 ug/L
7) T	C20	12.471	7260230	5.298 ug/L
8) T	C21	13.377	7688486	4.977 ug/L
9) T	C22	14.251	7437426	5.174 ug/L
10) T	C24	15.904	7413800	5.087 ug/L
11) T	C26	17.378	7516582	5.042 ug/L
12) T	C28	18.594	7481909	4.968 ug/L
13) H	EPH (C9-C28)	11.123	99304133	71.291 ug/L
14) T	C30	19.634	7604547	4.979 ug/L
15) T	C32	20.554	7348849	4.920 ug/L
16) T	C34	21.409	7559269	5.036 ug/L
17) T	C36	22.391	7249659	5.119 ug/L
18) T	C38	23.641	6939427	5.362 ug/L
19) T	C40	25.313	6598884	5.789 ug/L
20) H	EPH (>C28-C40)	19.683	83850003	58.035 ug/L
21) H	TOTAL PHC	14.556	265726549	184.059 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

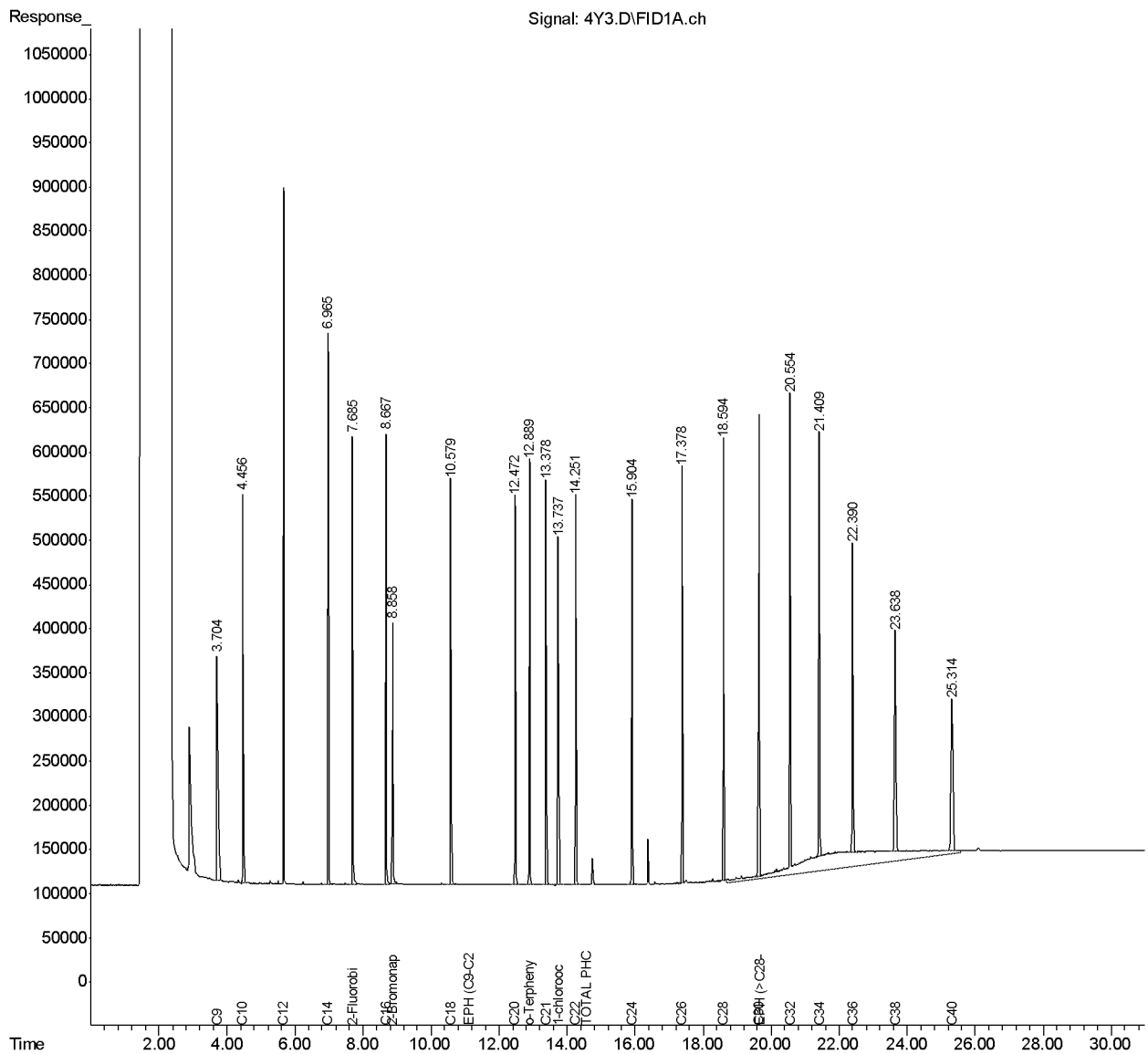
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y3.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 8:04 pm
Operator : owenm
Sample : ic1-5
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:52:00 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:45:20 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

8.6.3



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C:\msdchem\1\DATA\g4y01\4Y3.D

Hydrocarbon Range Total Response

Data File Name	4Y3.D
Date Acquired	9/17/2010 20:04
Method File	EPH4Y01.M
Sample Name	ic1-5

#	Name	Ret Time	Target Response
1)	C9	3.71	6454552
2)	C10	4.46	6689681
3)	C12	5.66	6753409
4)	C14	6.97	6869321
5)	C16	8.67	7029475
6)	C18	10.58	7173854
7)	C20	12.47	7260230
8)	C21	13.38	7688486
9)	C22	14.25	7437426
10)	C24	15.90	7413800
11)	C26	17.38	7516582
12)	C28	18.59	7481909
13)	EPH (C9-C28)	11.12	85768725
14)	C30	19.63	7604547
15)	C32	20.55	7348849
16)	C34	21.41	7559269
17)	C36	22.39	7249659
18)	C38	23.64	6939427
19)	C40	25.31	6598884
20)	EPH (>C28-C40)	19.68	43300635
21)	TOTAL PHC	14.56	129069360

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y4.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 8:40 pm
Operator : owenm
Sample : ic1-10
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 16:45:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 16:45:43 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.892	15177966	10.000 ug/L
Spiked Amount	50.000		Recovery =	20.00%
23) S	1-chlorooctadecane (S)	13.739	12704303	10.000 ug/L
Spiked Amount	50.000		Recovery =	20.00%
24) S	2-Fluorobiphenyl (S)	7.687	13020781	10.000 ug/L
Spiked Amount	50.000		Recovery =	20.00%
25) S	2-Bromonaphthalene (S)	8.860	8973823	10.000 ug/L
Spiked Amount	50.000		Recovery =	20.00%
	Target Compounds			
1) T	C9	3.706	12971138	10.000 ug/L
2) T	C10	4.457	13447361	10.000 ug/L
3) T	C12	5.657	13620460	10.000 ug/L
4) T	C14	6.967	13751205	10.000 ug/L
5) T	C16	8.670	14023240	10.000 ug/L
6) T	C18	10.582	14249988	10.000 ug/L
7) T	C20	12.474	14403379	10.000 ug/L
8) T	C21	13.380	15269262	10.000 ug/L
9) T	C22	14.254	14773755	10.000 ug/L
10) T	C24	15.906	14691589	10.000 ug/L
11) T	C26	17.381	15000159	10.000 ug/L
12) T	C28	18.597	14893102	10.000 ug/L
13) H	EPH (C9-C28)	11.123	189754923	10.000 ug/L
14) T	C30	19.637	15064213	10.000 ug/L
15) T	C32	20.556	14713701	10.000 ug/L
16) T	C34	21.412	15108964	10.000 ug/L
17) T	C36	22.394	14531921	10.000 ug/L
18) T	C38	23.644	14023298	10.000 ug/L
19) T	C40	25.317	13504203	10.000 ug/L
20) H	EPH (>C28-C40)	19.683	132321564	10.000 ug/L
21) H	TOTAL PHC	14.556	406974841	10.000 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y4.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 8:40 pm
Operator : owenm
Sample : ic1-10
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 16:45:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 16:45:43 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

8.6.5

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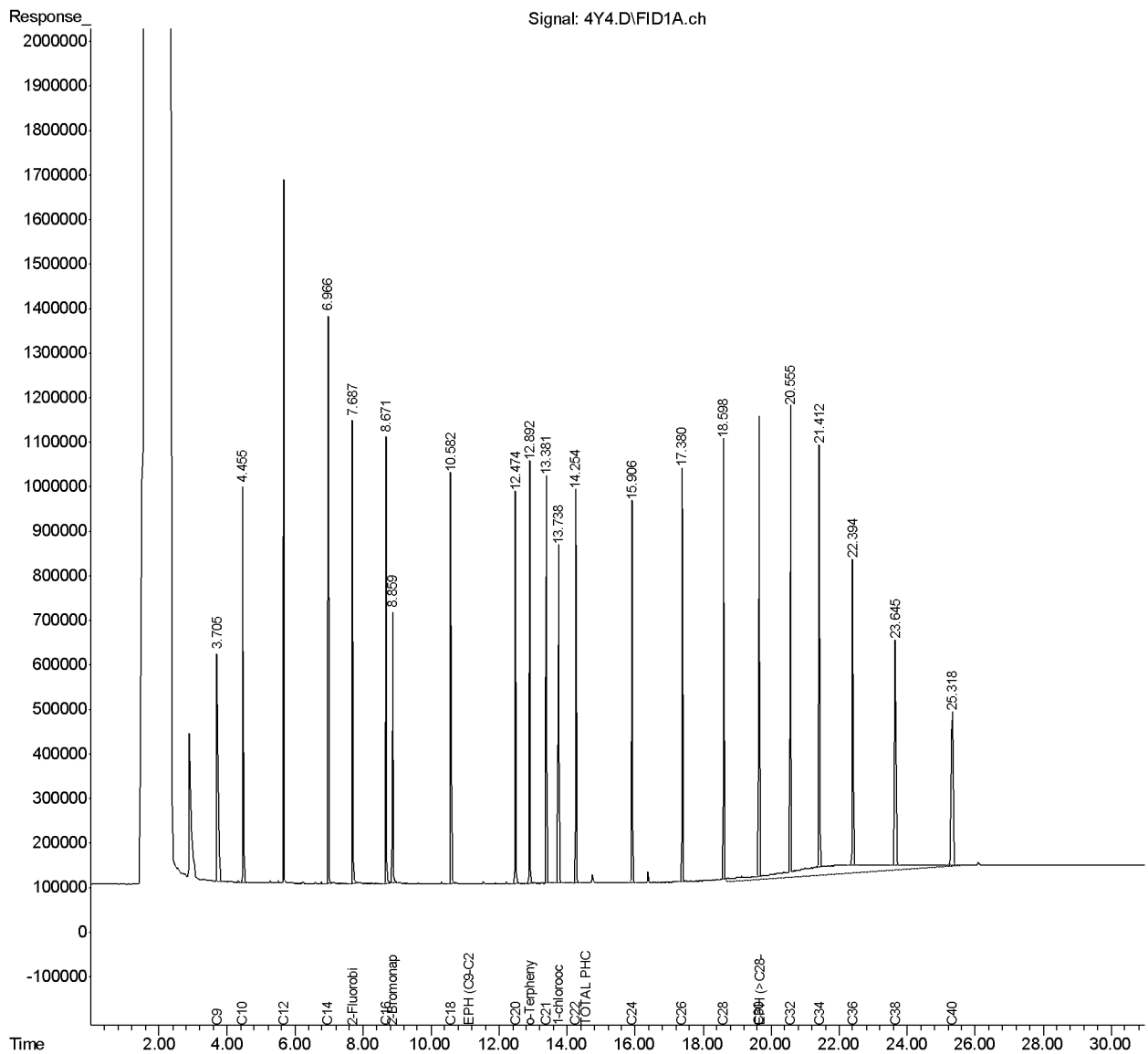

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JA61582

SII-SSA-0014-004664

C:\msdchem\1\DATA\g4y01\4Y4.D

Hydrocarbon Range Total Response

Data File Name	4Y4.D
Date Acquired	9/17/2010 20:40
Method File	EPH4Y01.M
Sample Name	ic1-10

#	Name	Ret Time	Target Response
1)	C9	3.71	12971138
2)	C10	4.46	13447361
3)	C12	5.66	13620460
4)	C14	6.97	13751205
5)	C16	8.67	14023240
6)	C18	10.58	14249988
7)	C20	12.47	14403379
8)	C21	13.38	15269262
9)	C22	14.25	14773755
10)	C24	15.91	14691589
11)	C26	17.38	15000159
12)	C28	18.60	14893102
13)	EPH (C9-C28)	11.12	171094638
14)	C30	19.64	15064213
15)	C32	20.56	14713701
16)	C34	21.41	15108964
17)	C36	22.39	14531921
18)	C38	23.64	14023298
19)	C40	25.32	13504203
20)	EPH (>C28-C40)	19.68	86946301
21)	TOTAL PHC	14.56	258040939

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y5.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 9:16 pm
Operator : owenm
Sample : icc1-20
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:43:33 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Sep 15 18:22:43 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.894f	28620152	18.716 ug/L
Spiked Amount	50.000		Recovery =	37.43%
23) S	1-chlorooctadecane (S)	13.742	23771583	19.656 ug/L
Spiked Amount	50.000		Recovery =	39.31%
24) S	2-Fluorobiphenyl (S)	7.688	24588787	22.442 ug/L
Spiked Amount	50.000		Recovery =	44.88%
25) S	2-Bromonaphthalene (S)	8.861	17004156	22.017 ug/L
Spiked Amount	50.000		Recovery =	44.03%
	Target Compounds			
1) T	C9	3.706	24513841	19.367 ug/L
2) T	C10	4.457	25176682	19.957 ug/L
3) T	C12	5.658	25576373	20.380 ug/L
4) T	C14	6.968	25992889	18.295 ug/L
5) T	C16	8.673f	26530968	19.382 ug/L
6) T	C18	10.585f	26922814	19.001 ug/L
7) T	C20	12.478f	27191534	19.204 ug/L
8) T	C21	13.384	28819085	17.968 ug/L
9) T	C22	14.258f	27824712	18.708 ug/L
10) T	C24	15.910f	27669221	18.316 ug/L
11) T	C26	17.384f	28194283	18.246 ug/L
12) T	C28	18.599f	28063294	17.966 ug/L
13) H	EPH (C9-C28)	11.123	340217985	238.557 ug/L
14) T	C30	19.639	28354443	17.902 ug/L
15) T	C32	20.559	27577313	17.773 ug/L
16) T	C34	21.415	27927535	17.928 ug/L
17) T	C36	22.398	26409288	17.993 ug/L
18) T	C38	23.650	25342054	19.097 ug/L
19) T	C40	25.325f	24437512	21.369 ug/L
20) H	EPH (>C28-C40)	19.683	195653141	136.001 ug/L
21) H	TOTAL PHC	14.556	608160355	425.197 ug/L

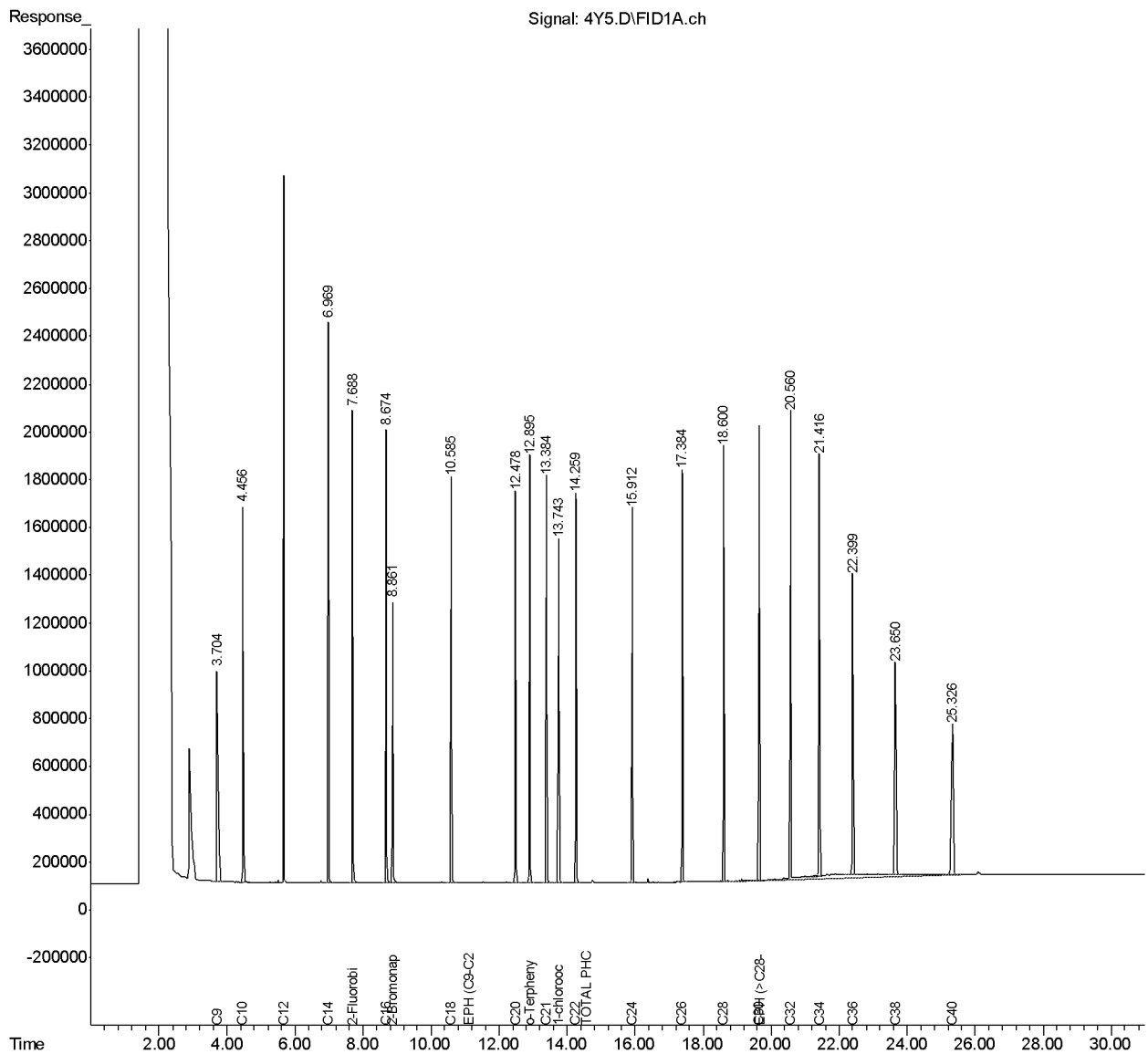
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y5.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 9:16 pm
Operator : owenm
Sample : icc1-20
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:43:33 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Sep 15 18:22:43 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM



C:\msdchem\1\DATA\g4y01\4Y5.D

Hydrocarbon Range Total Response

Data File Name	4Y5.D
Date Acquired	9/17/2010 21:16
Method File	EPH4Y01.M
Sample Name	icc1-20

#	Name	Ret Time	Target Response
1)	C9	3.71	24513841
2)	C10	4.46	25176682
3)	C12	5.66	25576373
4)	C14	6.97	25992889
5)	C16	8.67	26530968
6)	C18	10.58	26922814
7)	C20	12.48	27191534
8)	C21	13.38	28819085
9)	C22	14.26	27824712
10)	C24	15.91	27669221
11)	C26	17.38	28194283
12)	C28	18.60	28063294
13)	EPH (C9-C28)	11.12	322475696
14)	C30	19.64	28354443
15)	C32	20.56	27577313
16)	C34	21.42	27927535
17)	C36	22.40	26409288
18)	C38	23.65	25342054
19)	C40	25.33	24437512
20)	EPH (>C28-C40)	19.68	160048144
21)	TOTAL PHC	14.56	482523840

8.6.8

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y6.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 9:52 pm
Operator : owenm
Sample : ic1-50
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:37:59 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:36:39 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.903	71080877	50.385 ug/L
Spiked Amount	50.000		Recovery =	100.77%
23) S	1-chlorooctadecane (S)	13.751	59346159	50.141 ug/L
Spiked Amount	50.000		Recovery =	100.28%
24) S	2-Fluorobiphenyl (S)	7.692	61194264	49.522 ug/L
Spiked Amount	50.000		Recovery =	99.04%
25) S	2-Bromonaphthalene (S)	8.866	42611940	49.744 ug/L
Spiked Amount	50.000		Recovery =	99.49%
	Target Compounds			
1) T	C9	3.707	60718697	48.906 ug/L
2) T	C10	4.459	62194941	49.032 ug/L
3) T	C12	5.660	63365539	49.495 ug/L
4) T	C14	6.974	64595151	49.658 ug/L
5) T	C16	8.681	66287839	49.981 ug/L
6) T	C18	10.594	67145006	50.120 ug/L
7) T	C20	12.490f	67738406	50.112 ug/L
8) T	C21	13.394	71688052	50.058 ug/L
9) T	C22	14.268	69285426	50.018 ug/L
10) T	C24	15.920	69008941	49.943 ug/L
11) T	C26	17.394	70444250	49.862 ug/L
12) T	C28	18.609	70181139	49.800 ug/L
13) H	EPH (C9-C28)	11.123	822502582	601.258 ug/L
14) T	C30	19.648	70765711	49.665 ug/L
15) T	C32	20.567	69122530	49.399 ug/L
16) T	C34	21.424	71343976	49.492 ug/L
17) T	C36	22.410	67266736	48.482 ug/L
18) T	C38	23.667	64871196	48.258 ug/L
19) T	C40	25.351	63018424	48.181 ug/L
20) H	EPH (>C28-C40)	19.683	445012327	305.672 ug/L
21) H	TOTAL PHC	14.556	1340519958	930.728 ug/L

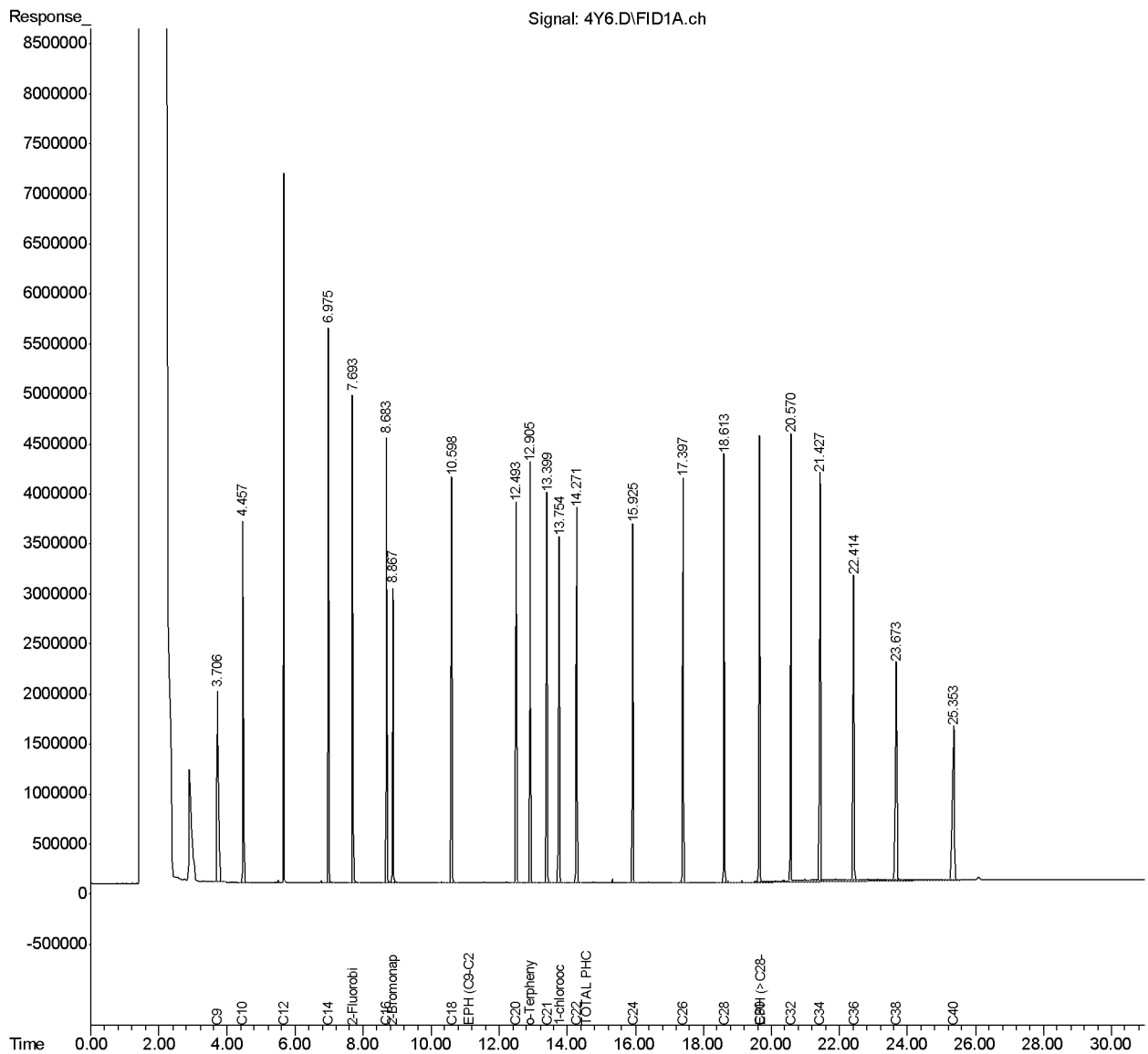
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y6.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 9:52 pm
Operator : owenm
Sample : ic1-50
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:37:59 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:36:39 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM



C:\msdchem\1\DATA\g4y01\4Y6.D

Hydrocarbon Range Total Response

Data File Name	4Y6.D
Date Acquired	9/17/2010 21:52
Method File	EPH4Y01.M
Sample Name	ic1-50

#	Name	Ret Time	Target Response
1)	C9	3.71	60718697
2)	C10	4.46	62194941
3)	C12	5.66	63365539
4)	C14	6.97	64595151
5)	C16	8.68	66287839
6)	C18	10.59	67145006
7)	C20	12.49	67738406
8)	C21	13.39	71688052
9)	C22	14.27	69285426
10)	C24	15.92	69008941
11)	C26	17.39	70444250
12)	C28	18.61	70181139
13)	EPH (C9-C28)	11.12	802653388
14)	C30	19.65	70765711
15)	C32	20.57	69122530
16)	C34	21.42	71343976
17)	C36	22.41	67266736
18)	C38	23.67	64871196
19)	C40	25.35	63018424
20)	EPH (>C28-C40)	19.68	406388572
21)	TOTAL PHC	14.56	1209041960

8.6.10

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y7.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 10:28 pm
Operator : owenm
Sample : ic1-100
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:36:44 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:36:39 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
22) S	o-Terphenyl (S)	12.914	141074756	100.000 ug/L
Spiked Amount	50.000		Recovery =	200.00%
23) S	1-chlorooctadecane (S)	13.764	118357616	100.000 ug/L
Spiked Amount	50.000		Recovery =	200.00%
24) S	2-Fluorobiphenyl (S)	7.697	123568922	100.000 ug/L
Spiked Amount	50.000		Recovery =	200.00%
25) S	2-Bromonaphthalene (S)	8.873	85661724	100.000 ug/L
Spiked Amount	50.000		Recovery =	200.00%
	Target Compounds			
1) T	C9	3.705	124152658	100.000 ug/L
2) T	C10	4.460	126845782	100.000 ug/L
3) T	C12	5.664	128023520	100.000 ug/L
4) T	C14	6.980	130081188	100.000 ug/L
5) T	C16	8.691	132626542	100.000 ug/L
6) T	C18	10.605	133969023	100.000 ug/L
7) T	C20	12.505	135172676	100.000 ug/L
8) T	C21	13.408	143209009	100.000 ug/L
9) T	C22	14.282	138522325	100.000 ug/L
10) T	C24	15.934	138176606	100.000 ug/L
11) T	C26	17.406	141279473	100.000 ug/L
12) T	C28	18.620	140924666	100.000 ug/L
13) H	EPH (C9-C28)	11.123	1641563445	1200.000 ug/L
14) T	C30	19.659	142486519	100.000 ug/L
15) T	C32	20.578	139926954	100.000 ug/L
16) T	C34	21.437	144153279	100.000 ug/L
17) T	C36	22.428	138745410	100.000 ug/L
18) T	C38	23.692	134425084	100.000 ug/L
19) T	C40	25.386	130795704	100.000 ug/L
20) H	EPH (>C28-C40)	19.683	873509189	600.000 ug/L
21) H	TOTAL PHC	14.556	2592525598	1800.000 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

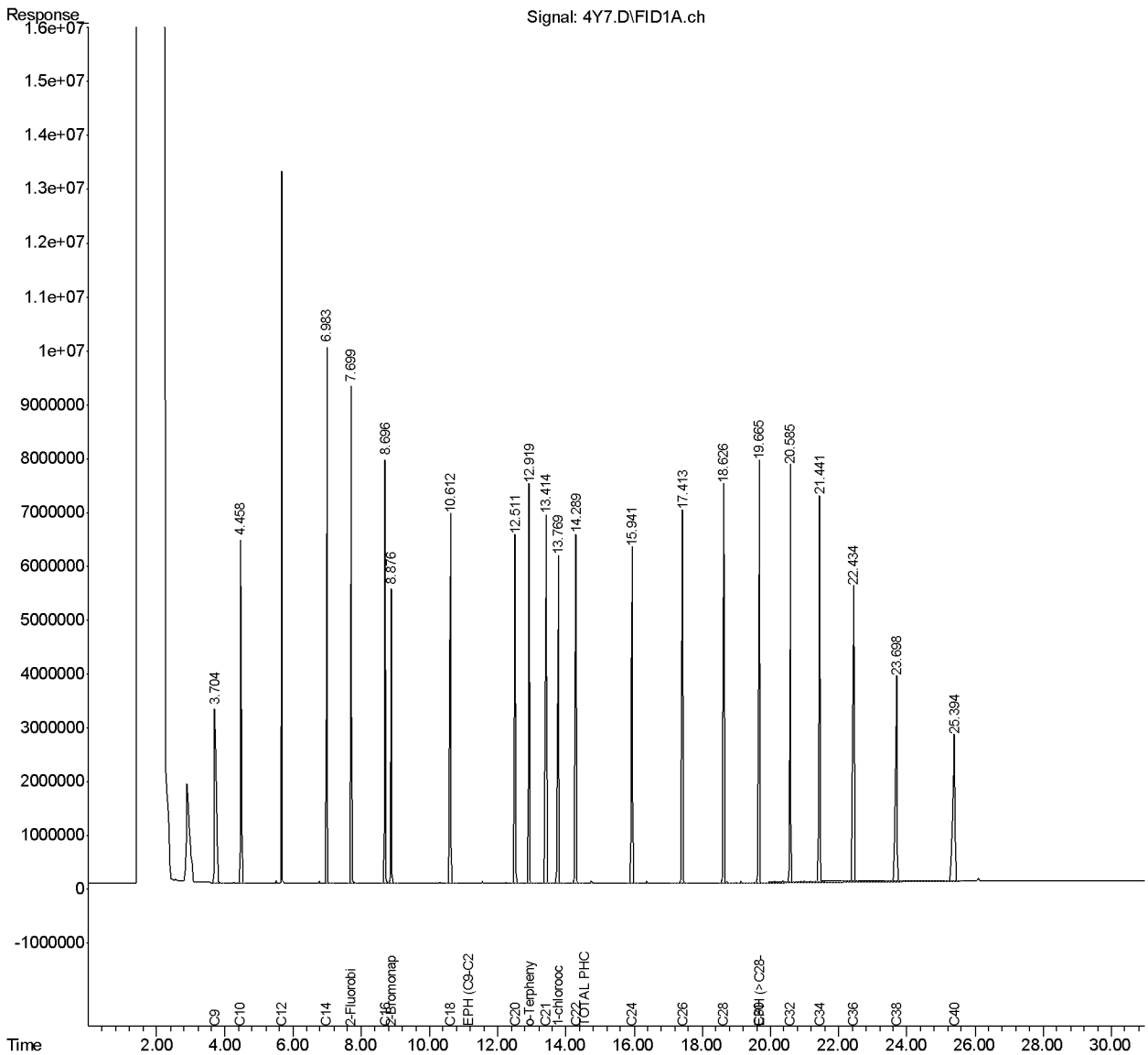
Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y7.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 10:28 pm
Operator : owenm
Sample : ic1-100
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 20 11:36:44 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : MADEP Extractable Petroleum Hydrocarbons
QLast Update : Mon Sep 20 11:36:39 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : DB5
Signal Info : 30MX.32mmIDX0,25uM

8.6.11

8



C:\msdchem\1\DATA\g4y01\4Y7.D

Hydrocarbon Range Total Response

Data File Name	4Y7.D
Date Acquired	9/17/2010 22:28
Method File	EPH4Y01.M
Sample Name	ic1-100

#	Name	Ret Time	Target Response
1)	C9	3.71	124152658
2)	C10	4.46	126845782
3)	C12	5.66	128023520
4)	C14	6.98	130081188
5)	C16	8.69	132626542
6)	C18	10.60	133969023
7)	C20	12.51	135172676
8)	C21	13.41	143209009
9)	C22	14.28	138522325
10)	C24	15.93	138176606
11)	C26	17.41	141279473
12)	C28	18.62	140924666
13)	EPH (C9-C28)	11.12	1612983469
14)	C30	19.66	142486519
15)	C32	20.58	139926954
16)	C34	21.44	144153279
17)	C36	22.43	138745410
18)	C38	23.69	134425084
19)	C40	25.39	130795704
20)	EPH (>C28-C40)	19.68	830532949
21)	TOTAL PHC	14.56	2443516418

8.6.12 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y8.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 11:04 pm
Operator : owenm
Sample : icv1-1000
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 22 14:07:17 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Sep 22 12:57:27 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

	Compound	R.T.	Response	Conc Units
System Monitoring Compounds				
Target Compounds				
13) H	EPH (C9-C28)	11.123	1203835737	842.904 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

8.6.13

8

Quantitation Report (QT Reviewed)

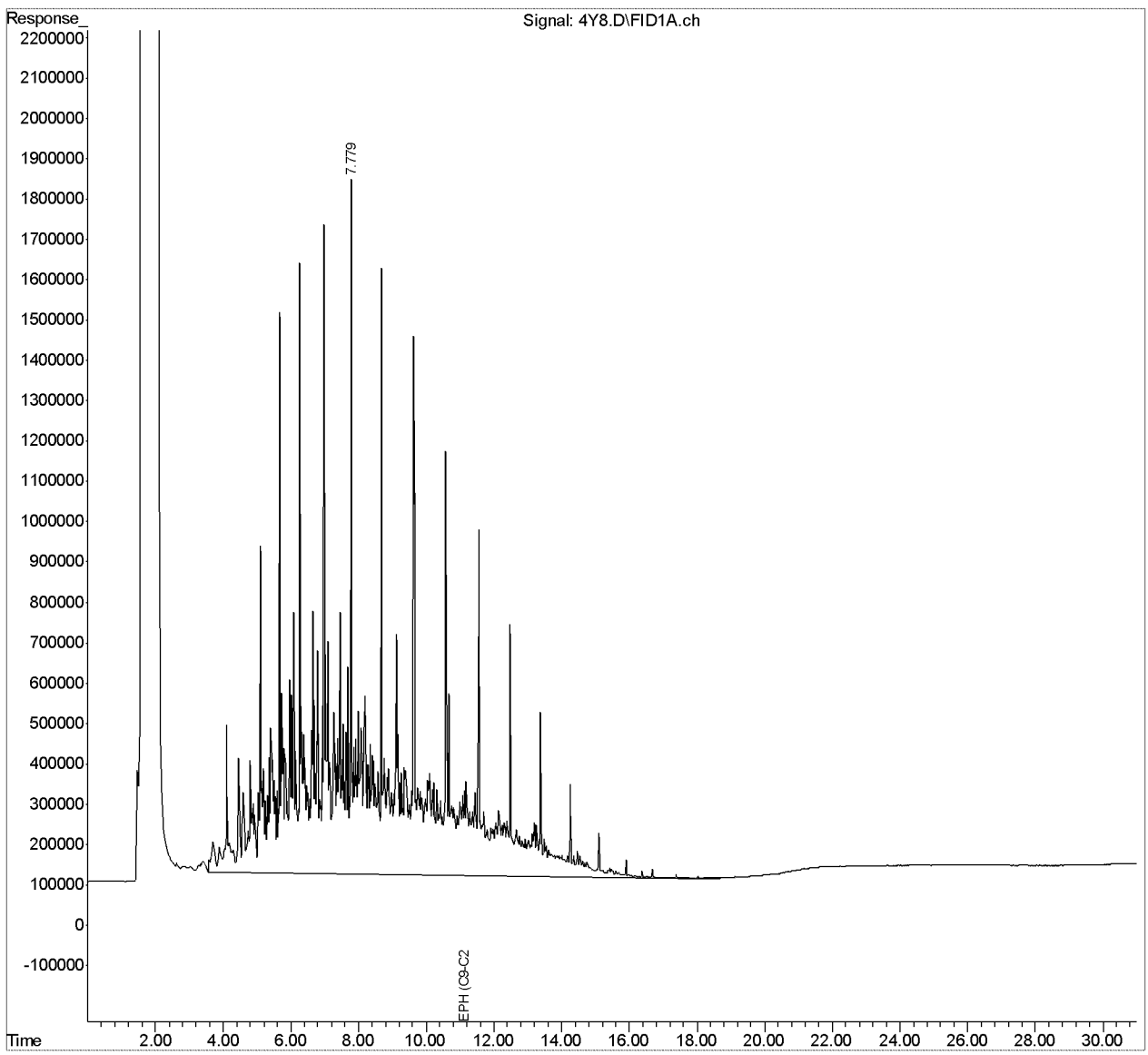
Data Path : C:\msdchem\1\DATA\g4y01\
Data File : 4Y8.D
Signal(s) : FID1A.ch
Acq On : 17 Sep 10 11:04 pm
Operator : owenm
Sample : icv1-1000
Misc : op45625,g4y1,17.0,,,2,1
ALS Vial : 8 Sample Multiplier: 1

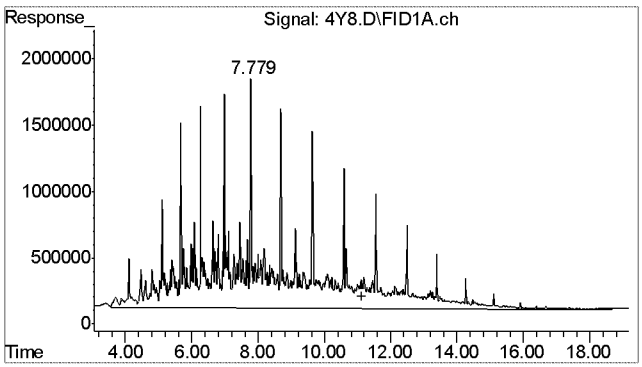
Integration File: autoint1.e
Quant Time: Sep 22 14:07:17 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Sep 22 12:57:27 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

8.6.13

8





#13 EPH (C9-C28)

R.T.: 11.123 min
Delta R.T.: 0.000 min
Response: 1203835737
Conc: 842.90 ug/L m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1348.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 7:23 pm
Operator : owenm
Sample : cc1-50
Misc : op46729,g4y41,17.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:14:57 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.583f	82038224	53.956 ug/L
Spiked Amount 50.000		Recovery =	107.91%
23) S 1-chlorooctadecane (S)	13.457f	68182576	53.153 ug/L
Spiked Amount 50.000		Recovery =	106.31%
24) S 2-Fluorobiphenyl (S)	7.458f	68879316	53.282 ug/L
Spiked Amount 50.000		Recovery =	106.56%
25) S 2-Bromonaphthalene (S)	8.603f	47611981	53.667 ug/L
Spiked Amount 50.000		Recovery =	107.33%
Target Compounds			
1) T C9	3.588	68235715	53.094 ug/L
2) T C10	4.335	70485403	52.732 ug/L
3) T C12	5.527	71282014	52.772 ug/L
4) T C14	6.783	74045925	53.777 ug/L
5) T C16	8.441f	75662953	53.857 ug/L
6) T C18	10.327f	77003669	53.916 ug/L
7) T C20	12.208f	78031420	53.948 ug/L
8) T C21	13.111f	82810727	53.732 ug/L
9) T C22	13.982f	79944856	53.910 ug/L
10) T C24	15.630f	79549780	53.759 ug/L
11) T C26	17.126f	81268417	53.851 ug/L
12) T C28	18.361f	81434015	54.179 ug/L
14) T C30	19.412	82205228	53.161 ug/L
15) T C32	20.338	80775463	54.532 ug/L
16) T C34	21.180	82441858	54.362 ug/L
17) T C36	22.100	79001613	54.006 ug/L
18) T C38	23.257	76065140	54.227 ug/L
19) T C40	24.793	72746204	53.983 ug/L

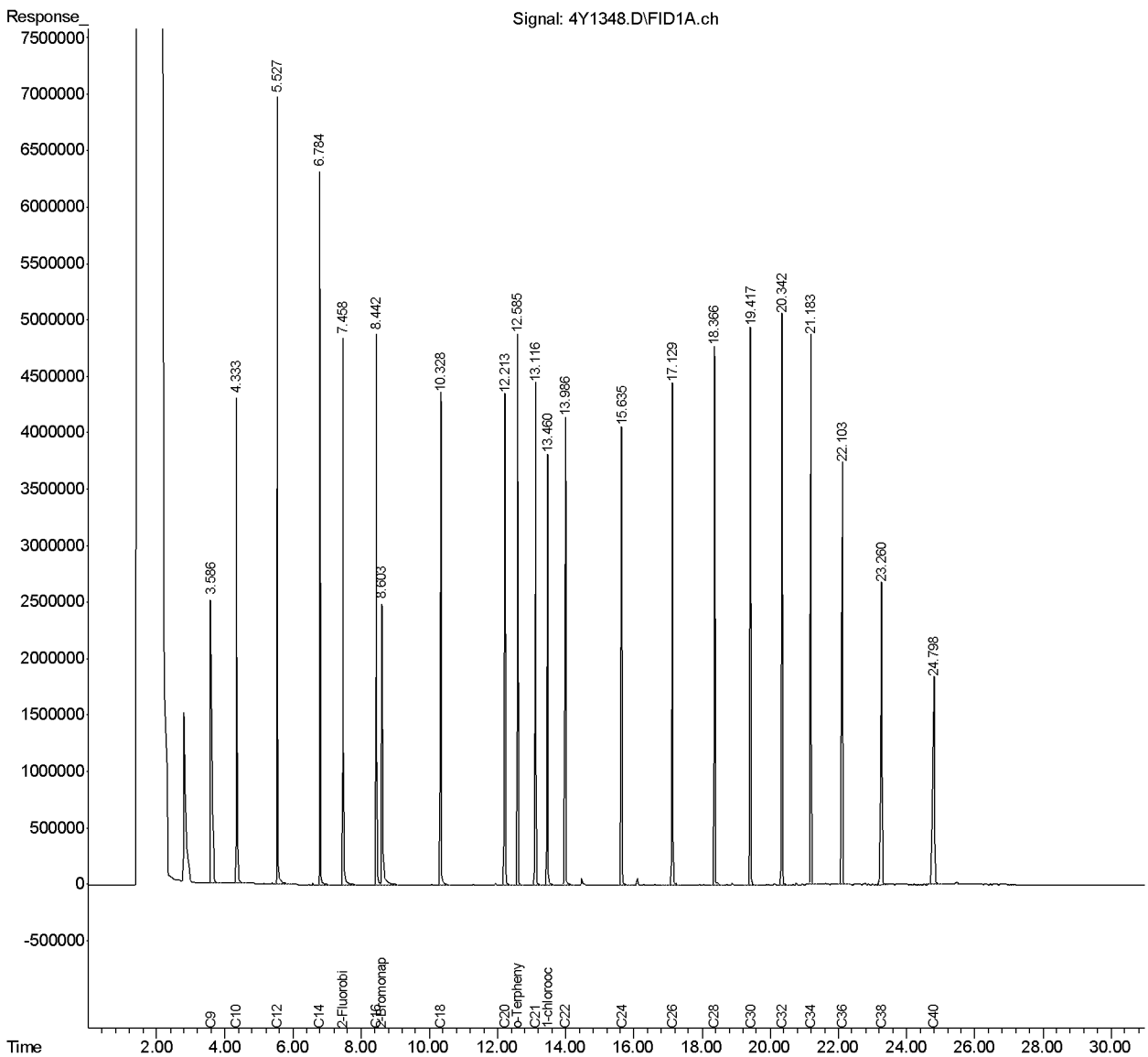
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1348.D
Signal(s) : FID1A.ch
Acq On : 16 Nov 10 7:23 pm
Operator : owenm
Sample : cc1-50
Misc : op46729,g4y41,17.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:14:57 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 10 16:27:02 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



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C:\msdchem\1\DATA\g4y41\4Y1348.D

Hydrocarbon Range Total Response

Data File Name	**4Y1348.D**
Date Acquired	**11/16/2010 19:23**
Method File	**EPH4Y01.M**
Sample Name	**cc1-50**

#	Name	Ret Time	Target Response	RF for EPH	Avg.RF of EPH	%D
1)	C9	3.59	68235715			
2)	C10	4.33	70485403			
3)	C12	5.53	71282014			
4)	C14	6.78	74045925			
5)	C16	8.44	75662953			
6)	C18	10.33	77003669			
7)	C20	12.21	78031420			
8)	C21	13.11	82810727			
9)	C22	13.98	79944856			
10)	C24	15.63	79549780			
11)	C26	17.13	81268417			
12)	C28	18.36	81434015			
13)	EPH (C9-C28)	11.12	919754892	1532924.82	1448085.276	-5.858739
14)	C30	19.41	82205228			
15)	C32	20.34	80775463			
16)	C34	21.18	82441858			
17)	C36	22.10	79001613			
18)	C38	23.26	76065140			
19)	C40	24.79	72746204			
20)	EPH (>C28-C40)	22.13	473235506	1577451.69	1478312.428	-6.706245
21)	TOTAL PHC	14.56	1392990398	1547767.11	1462273.625	-5.846613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1375.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 12:01 pm
Operator : owenm
Sample : cc1-20
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:33:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 17 12:38:07 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.568	32795539	21.570 ug/L
Spiked Amount 50.000		Recovery =	43.14%
23) S 1-chlorooctadecane (S)	13.442	27174444	21.184 ug/L
Spiked Amount 50.000		Recovery =	42.37%
24) S 2-Fluorobiphenyl (S)	7.451	26801611	20.732 ug/L
Spiked Amount 50.000		Recovery =	41.46%
25) S 2-Bromonaphthalene (S)	8.598	18179567	20.491 ug/L
Spiked Amount 50.000		Recovery =	40.98%
Target Compounds			
1) T C9	3.585	26984581	20.996 ug/L
2) T C10	4.330	27623890	20.666 ug/L
3) T C12	5.521	27491969	20.353 ug/L
4) T C14	6.772	28869464	20.967 ug/L
5) T C16	8.426	29818497	21.225 ug/L
6) T C18	10.310	30367981	21.263 ug/L
7) T C20	12.191	31087621	21.493 ug/L
8) T C21	13.093	33066085	21.455 ug/L
9) T C22	13.965	32016055	21.590 ug/L
10) T C24	15.614	31765634	21.467 ug/L
11) T C26	17.111	32567614	21.580 ug/L
12) T C28	18.348	32555379	21.660 ug/L
14) T C30	19.400	33020214	21.354 ug/L
15) T C32	20.327	32503578	21.943 ug/L
16) T C34	21.168	33457127	22.062 ug/L
17) T C36	22.086	31605223	21.605 ug/L
18) T C38	23.237	30625105	21.833 ug/L
19) T C40	24.766	29944299	22.221 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

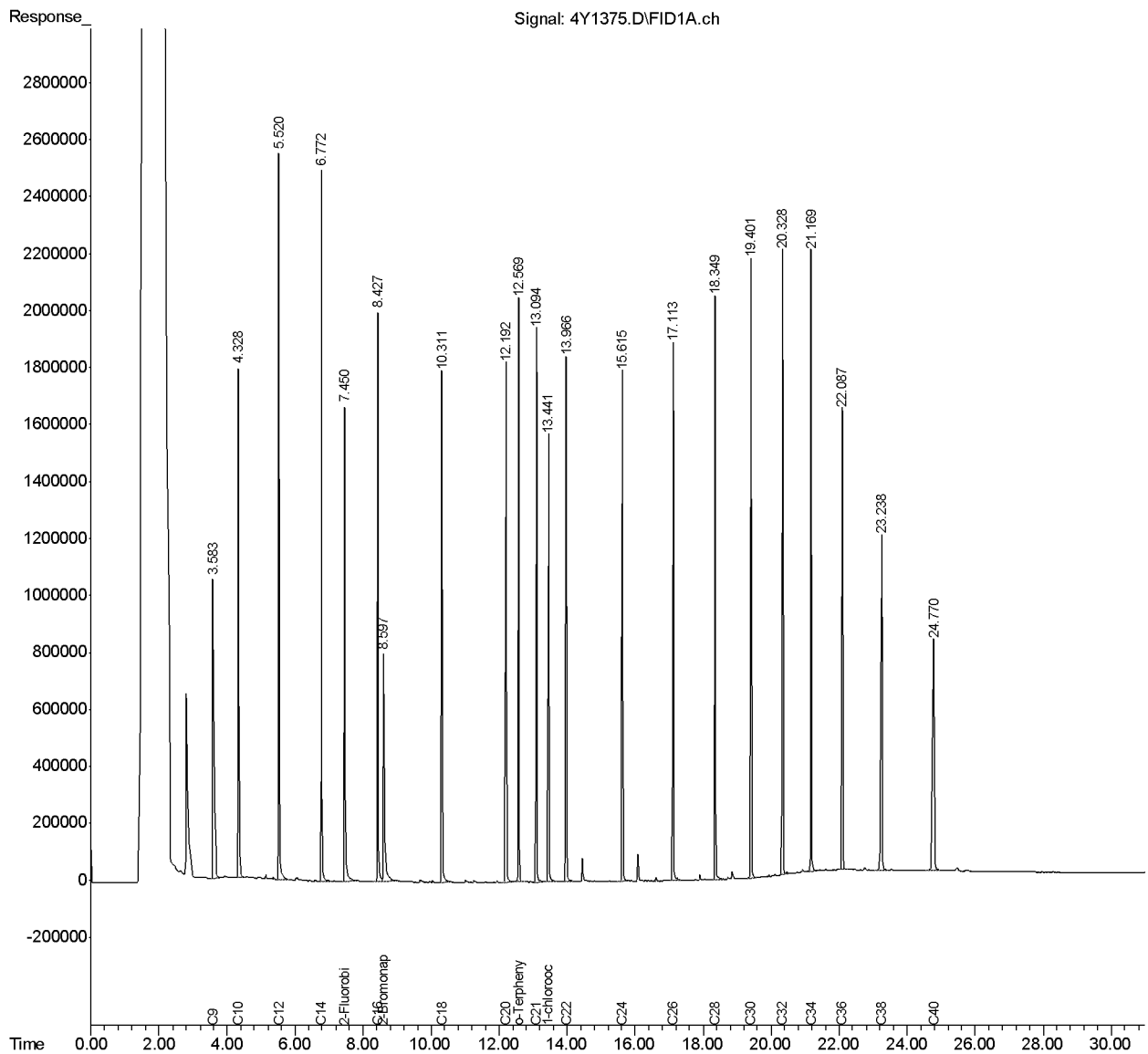
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y41\
Data File : 4Y1375.D
Signal(s) : FID1A.ch
Acq On : 17 Nov 10 12:01 pm
Operator : owenm
Sample : cc1-20
Misc : op46762,g4y41,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 18 12:33:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Wed Nov 17 12:38:07 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

8.6.16



C:\msdchem\1\DATA\g4y41\4Y1375.D

Hydrocarbon Range Total Response

Data File Name	**4Y1375.D**
Date Acquired	**11/17/2010 12:01**
Method File	**EPH4Y01.M**
Sample Name	**cc1-20**

#	Name	Ret Time	Target Response	RF for EPH	Avg.RF of EPH	%D
1)	C9	3.58	26984581			
2)	C10	4.33	27623890			
3)	C12	5.52	27491969			
4)	C14	6.77	28869464			
5)	C16	8.43	29818497			
6)	C18	10.31	30367981			
7)	C20	12.19	31087621			
8)	C21	13.09	33066085			
9)	C22	13.97	32016055			
10)	C24	15.61	31765634			
11)	C26	17.11	32567614			
12)	C28	18.35	32555379			
13)	EPH (C9-C28)	11.12	364214771	1517561.55	1448085.276	-4.797802
14)	C30	19.40	33020214			
15)	C32	20.33	32503578			
16)	C34	21.17	33457127			
17)	C36	22.09	31605223			
18)	C38	23.24	30625105			
19)	C40	24.77	29944299			
20)	EPH (>C28-C40)	22.13	191155547	1592962.89	1478312.428	-7.755496
21)	TOTAL PHC	14.56	555370318	1542695.33	1462273.625	-5.499771

8.6.17 8

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SII-SSA-0014-004683

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y42\
Data File : 4Y1410.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 10:50 am
Operator : diaan
Sample : cc1-20
Misc : op46730,g4y42,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:21:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.562	32808820	21.578 ug/L
Spiked Amount 50.000		Recovery =	43.16%
23) S 1-chlorooctadecane (S)	13.437	27248344	21.242 ug/L
Spiked Amount 50.000		Recovery =	42.48%
24) S 2-Fluorobiphenyl (S)	7.448	26548223	20.536 ug/L
Spiked Amount 50.000		Recovery =	41.07%
25) S 2-Bromonaphthalene (S)	8.597	17879286	20.153 ug/L
Spiked Amount 50.000		Recovery =	40.31%
Target Compounds			
1) T C9	3.582	27043523	21.042 ug/L
2) T C10	4.328	27786369	20.788 ug/L
3) T C12	5.519	27638065	20.461 ug/L
4) T C14	6.770	28889988	20.982 ug/L
5) T C16	8.423	29697546	21.139 ug/L
6) T C18	10.306	30526333	21.374 ug/L
7) T C20	12.187	31067308	21.479 ug/L
8) T C21	13.089	33172161	21.524 ug/L
9) T C22	13.960	32072243	21.628 ug/L
10) T C24	15.609	31917706	21.570 ug/L
11) T C26	17.106	32776788	21.719 ug/L
12) T C28	18.344	32854084	21.858 ug/L
14) T C30	19.396	33099152	21.405 ug/L
15) T C32	20.321	32613847	22.018 ug/L
16) T C34	21.163	33609490	22.162 ug/L
17) T C36	22.079	31934048	21.830 ug/L
18) T C38	23.228	30859874	22.000 ug/L
19) T C40	24.754	30298856	22.484 ug/L

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

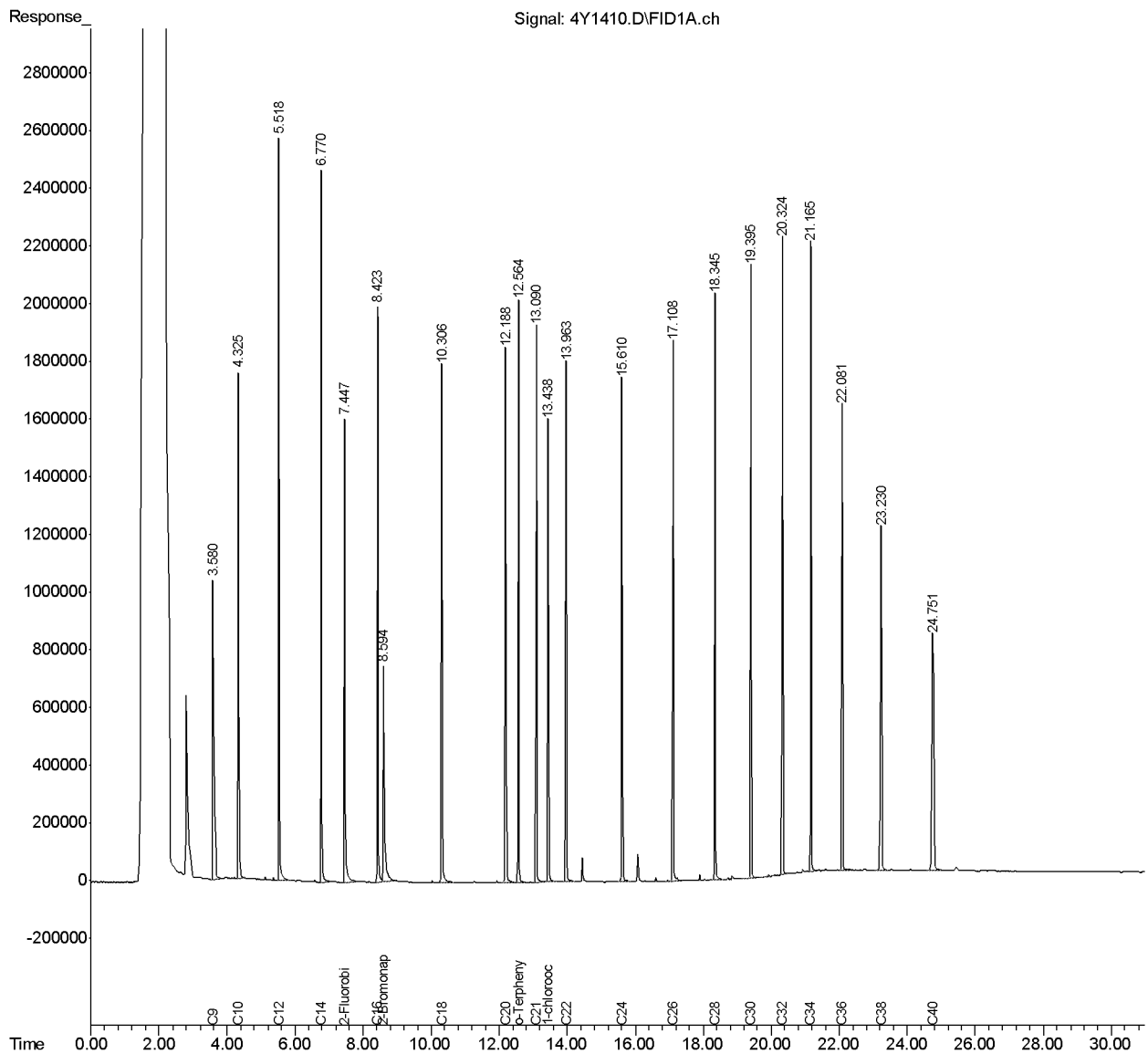
Data Path : C:\msdchem\1\DATA\g4y42\
Data File : 4Y1410.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 10:50 am
Operator : diaan
Sample : cc1-20
Misc : op46730,g4y42,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:21:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

8.6.18

8



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SII-SSA-0014-004685

C:\msdchem\1\DATA\g4y42\4Y1410.D

Hydrocarbon Range Total Response

Data File Name	**4Y1410.D**
Date Acquired	**11/18/2010 10:50**
Method File	**EPH4Y01.M**
Sample Name	**cc1-20**

#	Name	Ret Time	Target Response	RF for EPH	Avg.RF of EPH	%D
1)	C9	3.58	27043523			
2)	C10	4.33	27786369			
3)	C12	5.52	27638065			
4)	C14	6.77	28889988			
5)	C16	8.42	29697546			
6)	C18	10.31	30526333			
7)	C20	12.19	31067308			
8)	C21	13.09	33172161			
9)	C22	13.96	32072243			
10)	C24	15.61	31917706			
11)	C26	17.11	32776788			
12)	C28	18.34	32854084			
13)	EPH (C9-C28)	11.12	365442114	1522675.47	1448085.276	-5.150953
14)	C30	19.40	33099152			
15)	C32	20.32	32613847			
16)	C34	21.16	33609490			
17)	C36	22.08	31934048			
18)	C38	23.23	30859874			
19)	C40	24.75	30298856			
20)	EPH (>C28-C40)	22.13	192415266	1603460.55	1478312.428	-8.465607
21)	TOTAL PHC	14.56	557857380	1549603.83	1462273.625	-5.972221

8.6.19

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1418.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 4:28 pm
Operator : diaan
Sample : cc1-50
Misc : op46730,g4y43,17.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:53:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.569	87849875	57.779 ug/L
Spiked Amount 50.000		Recovery =	115.56%
23) S 1-chlorooctadecane (S)	13.445	73298361	57.141 ug/L
Spiked Amount 50.000		Recovery =	114.28%
24) S 2-Fluorobiphenyl (S)	7.447	74113638	57.331 ug/L
Spiked Amount 50.000		Recovery =	114.66%
25) S 2-Bromonaphthalene (S)	8.590	50785378	57.244 ug/L
Spiked Amount 50.000		Recovery =	114.49%
Target Compounds			
1) T C9	3.582	73183882	56.944 ug/L
2) T C10	4.328	75899830	56.783 ug/L
3) T C12	5.521	76702998	56.786 ug/L
4) T C14	6.775	79360323	57.637 ug/L
5) T C16	8.431	80861506	57.557 ug/L
6) T C18	10.315	82462633	57.738 ug/L
7) T C20	12.197	83572872	57.779 ug/L
8) T C21	13.099	88661229	57.529 ug/L
9) T C22	13.970	85641042	57.751 ug/L
10) T C24	15.618	85164557	57.554 ug/L
11) T C26	17.115	87324032	57.863 ug/L
12) T C28	18.352	87166946	57.993 ug/L
14) T C30	19.404	88446816	57.198 ug/L
15) T C32	20.330	86472932	58.378 ug/L
16) T C34	21.172	89168816	58.798 ug/L
17) T C36	22.090	85503141	58.450 ug/L
18) T C38	23.244	82925975	59.118 ug/L
19) T C40	24.777	81254425	60.297 ug/L

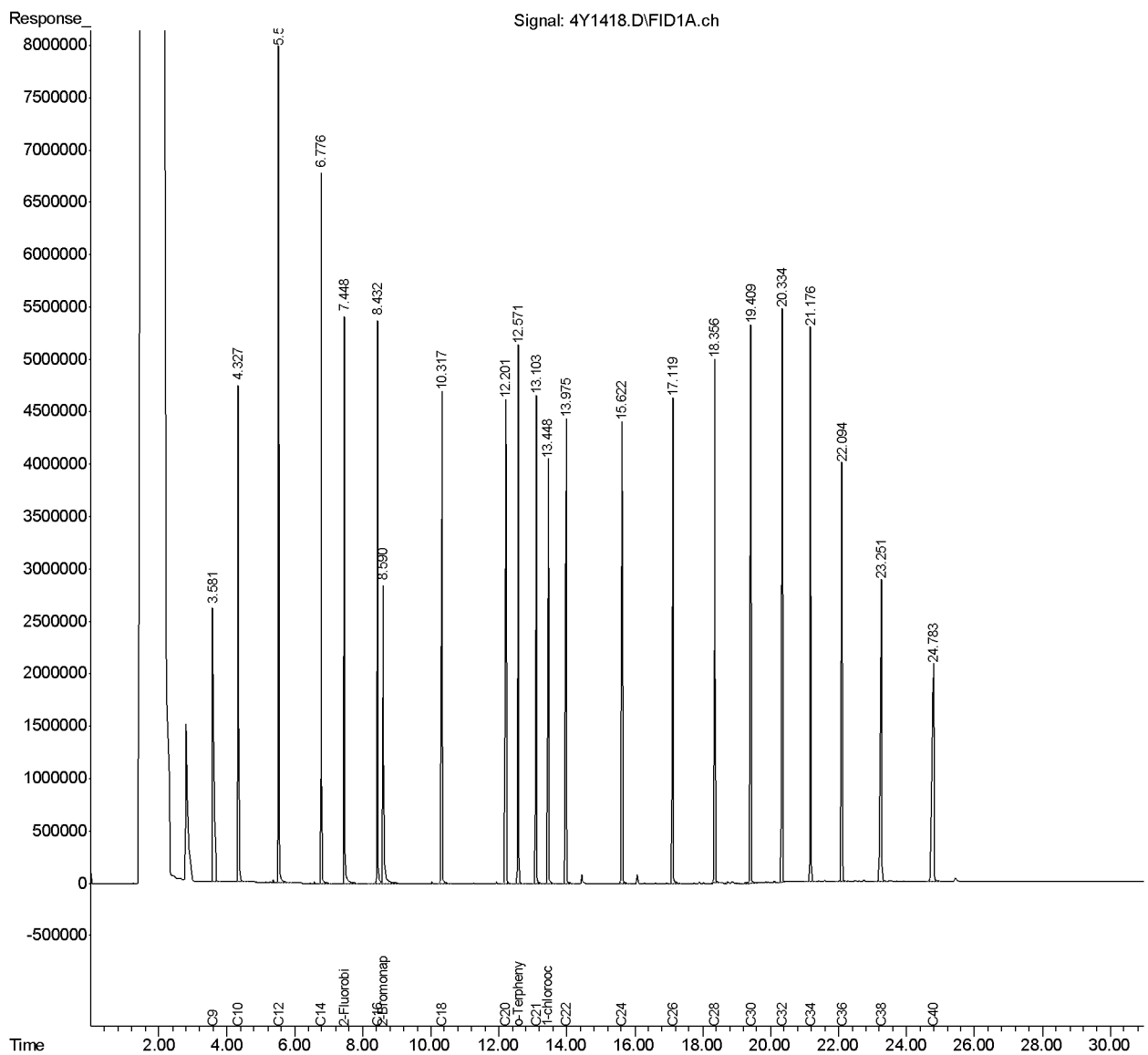
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1418.D
Signal(s) : FID1A.ch
Acq On : 18 Nov 10 4:28 pm
Operator : diaan
Sample : cc1-50
Misc : op46730,g4y43,17.0,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 14:53:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



ACCUTEST LABORATORIES
JA61582

SII-SSA-0014-004688

C:\msdchem\1\DATA\g4y43\4Y1418.D

Hydrocarbon Range Total Response

Data File Name	**4Y1418.D**
Date Acquired	**11/18/2010 16:28**
Method File	**EPH4Y01.M**
Sample Name	**cc1-50**

#	Name	Ret Time	Target Response	RF for EPH	Avg.RF of EPH	%D
1)	C9	3.58	73183882			
2)	C10	4.33	75899830			
3)	C12	5.52	76702998			
4)	C14	6.77	79360323			
5)	C16	8.43	80861506			
6)	C18	10.32	82462633			
7)	C20	12.20	83572872			
8)	C21	13.10	88661229			
9)	C22	13.97	85641042			
10)	C24	15.62	85164557			
11)	C26	17.12	87324032			
12)	C28	18.35	87166946			
13)	EPH (C9-C28)	11.12	986001848	1643336.41	1448085.276	-13.4834
14)	C30	19.40	88446816			
15)	C32	20.33	86472932			
16)	C34	21.17	89168816			
17)	C36	22.09	85503141			
18)	C38	23.24	82925975			
19)	C40	24.78	81254425			
20)	EPH (>C28-C40)	22.13	513772105	1712573.68	1478312.428	-15.84653
21)	TOTAL PHC	14.56	1499773953	1666415.5	1462273.625	-13.96058

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1443.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 11:06 am
Operator : diaan
Sample : cc1-20
Misc : op46776,g4y43,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:10:14 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
22) S o-Terphenyl (S)	12.552	33754035	22.200 ug/L
Spiked Amount 50.000		Recovery =	44.40%
23) S 1-chlorooctadecane (S)	13.427	27914534	21.761 ug/L
Spiked Amount 50.000		Recovery =	43.52%
24) S 2-Fluorobiphenyl (S)	7.444	27397625	21.194 ug/L
Spiked Amount 50.000		Recovery =	42.39%
25) S 2-Bromonaphthalene (S)	8.591	18630693	21.000 ug/L
Spiked Amount 50.000		Recovery =	42.00%
Target Compounds			
1) T C9	3.579	27749932	21.592 ug/L
2) T C10	4.324	28562990	21.369 ug/L
3) T C12	5.516	28458387	21.069 ug/L
4) T C14	6.765	29722001	21.586 ug/L
5) T C16	8.416	30491158	21.704 ug/L
6) T C18	10.297	31202070	21.847 ug/L
7) T C20	12.177	31912507	22.063 ug/L
8) T C21	13.079	34096556	22.124 ug/L
9) T C22	13.950	32905943	22.190 ug/L
10) T C24	15.598	32727699	22.117 ug/L
11) T C26	17.096	33440605	22.159 ug/L
12) T C28	18.334	33599140	22.354 ug/L
14) T C30	19.386	33999593	21.987 ug/L
15) T C32	20.313	33741624	22.779 ug/L
16) T C34	21.154	34841234	22.974 ug/L
17) T C36	22.067	32556209	22.256 ug/L
18) T C38	23.212	31433080	22.409 ug/L
19) T C40	24.729	30478221	22.617 ug/L

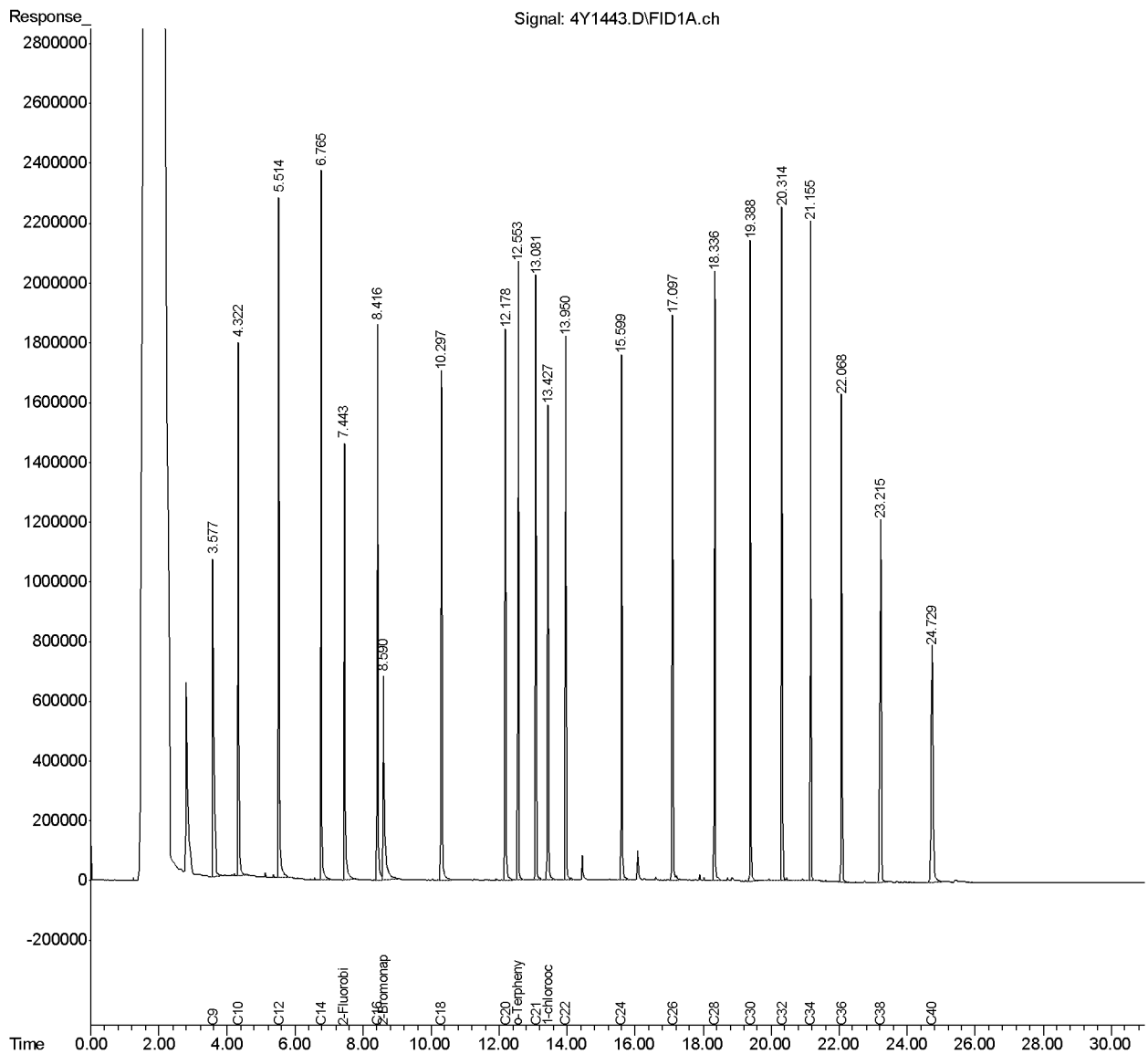
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\g4y43\
Data File : 4Y1443.D
Signal(s) : FID1A.ch
Acq On : 19 Nov 10 11:06 am
Operator : diaan
Sample : cc1-20
Misc : op46776,g4y43,17.0,,,2,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 19 15:10:14 2010
Quant Method : C:\MSDCHEM\1\METHODS\EPH4Y01.M
Quant Title : NJDEP Extractable Petroleum Hydrocarbons
QLast Update : Thu Nov 18 11:32:24 2010
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1UL/COLUMN
Signal Phase : RTX-CLP2
Signal Info : 30m x .32mm x .25um



ACCUTEST LABORATORIES
JA61582

SII-SSA-0014-004691

C:\msdchem\1\DATA\g4y43\4Y1443.D

Hydrocarbon Range Total Response

Data File Name	**4Y1443.D**
Date Acquired	**11/19/2010 11:06**
Method File	**EPH4Y01.M**
Sample Name	**cc1-20**

#	Name	Ret Time	Target Response	RF for EPH	Avg.RF of EPH	%D
1)	C9	3.58	27749932			
2)	C10	4.32	28562990			
3)	C12	5.52	28458387			
4)	C14	6.76	29722001			
5)	C16	8.42	30491158			
6)	C18	10.30	31202070			
7)	C20	12.18	31912507			
8)	C21	13.08	34096556			
9)	C22	13.95	32905943			
10)	C24	15.60	32727699			
11)	C26	17.10	33440605			
12)	C28	18.33	33599140			
13)	EPH (C9-C28)	11.12	374868988	1561954.12	1448085.276	-7.863407
14)	C30	19.39	33999593			
15)	C32	20.31	33741624			
16)	C34	21.15	34841234			
17)	C36	22.07	32556209			
18)	C38	23.21	31433080			
19)	C40	24.73	30478221			
20)	EPH (>C28-C40)	22.13	197049961	1642083	1478312.428	-11.07821
21)	TOTAL PHC	14.56	571918948	1588663.75	1462273.625	-8.643397

ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y1

Date: 9/16/10

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
LL-546-7	Aliphatics spkd WF	100ppm
-FA		50
-FB		20
-FC		10
-FD		5
-FE		2
LL-920-86	PAs Sp KC	10ppm

Columns: ZB5 RTX-CLP 30m x .32mm x 1.0 (1)

Method EPHNF

Initial Cal. Method EPH4Y01

Injection Volume: 1µL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 9/20/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4Y1 9/16/10	IB				1	1		/	ok	
	2	ICI - 2	Aliphatics spkd			2	1		/	ok	
	3	-5				3	1		/	ok	
	4	-10				4	1		/	ok	
	5	-20				5	1		/	ok	
	6	-50				6	1		/	ok	
	7	-100				7	1		/	ok	
	8	ICV1 - 1000	040 spkd			8	1		/	ok	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows: 1

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

Form: OR016-05

Rev. Date: 10/20/04

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4Y
Method: NJDEP EPH

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4Y5.D	09/17/10 21:16	G4Y1-ICC1	OWENM
Std#2	4Y10.D	09/20/10 15:53	G4Y2-CC1	OWENM
Std#3	4Y31.D	09/21/10 10:52	G4Y2-ECC1	OWENM

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+/- 3*StdDev)
2-Fluorobiphenyl	1	SURR	7.69	7.70	7.69	7.69	0.006	+/- 0.030 [a]
2-Bromonaphthalene	1	SURR	8.86	8.87	8.87	8.87	0.006	+/- 0.030 [a]
o-Terphenyl	1	SURR	12.89	12.91	12.90	12.90	0.010	+/- 0.030
1-Chlorooctadecane	1	SURR	13.74	13.75	13.75	13.75	0.006	+/- 0.030 [a]
C9	1	REG	3.71	3.71	3.71	3.71	0.000	+/- 0.030 [a]
C10	1	REG	4.46	4.46	4.46	4.46	0.000	+/- 0.030 [a]
C12	1	REG	5.66	5.66	5.66	5.66	0.000	+/- 0.030 [a]
C14	1	REG	6.97	6.98	6.97	6.97	0.006	+/- 0.030 [a]
C16	1	REG	8.67	8.68	8.68	8.68	0.006	+/- 0.030 [a]
C18	1	REG	10.58	10.60	10.60	10.59	0.012	+/- 0.035
EPH (C9-C28)	1	REG	11.12	11.12	11.12	11.12	0.000	+/- 0.030 [a]
C20	1	REG	12.48	12.49	12.49	12.49	0.006	+/- 0.030 [a]
C21	1	REG	13.38	13.39	13.40	13.39	0.010	+/- 0.030
C22	1	REG	14.26	14.27	14.27	14.27	0.006	+/- 0.030 [a]
C24	1	REG	15.91	15.92	15.92	15.92	0.006	+/- 0.030 [a]
C26	1	REG	17.38	17.39	17.40	17.39	0.010	+/- 0.030
C28	1	REG	18.60	18.61	18.61	18.61	0.006	+/- 0.030 [a]
C30	1	REG	19.64	19.65	19.65	19.65	0.006	+/- 0.030 [a]
EPH (>C28-C40)	1	REG	19.68	19.68	19.68	19.68	0.000	+/- 0.030 [a]
C32	1	REG	20.56	20.57	20.57	20.57	0.006	+/- 0.030 [a]
C34	1	REG	21.42	21.42	21.42	21.42	0.000	+/- 0.030 [a]
C36	1	REG	22.40	22.41	22.41	22.41	0.006	+/- 0.030 [a]
C38	1	REG	23.65	23.66	23.67	23.66	0.010	+/- 0.030
C40	1	REG	25.33	25.34	25.35	25.34	0.010	+/- 0.030

(a) Default minimum StdDev of .01 minutes employed.

ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y41

Date: 11/16/10

Analyst Signature:

Columns: RTX-CLP

Method EPH-F

Initial Cal. Method EPH101

Injection Volume: 1uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV0926-SA	Alkanes mix	5 ppm
SB	L	2
DC774	DCM (Chem)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/17/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	Y1341	CCI-20				2	1		1	OK	
	342	FD				1	1		1	OK	
	343	JA61362-2	46764-1	EPH		4	5		1	OK	
	344	-4				5	5		1	OK	
	345	-3				6	5		1	OK	
	346	JA61447-1				7	5		1	OK	
	347	-7				8	5		1	OK	
	348	CCI-50				3	1		1	OK	
	349	FD				1	1		1	OK	
	350	OP46762-MB1	46762-1	EPH		9	1		1	OK	
	351	-BS1				10	1		1	OK	
	352	JA61582-1				11	1		1	OK	
	353	-2				12	1		1	OK	
	354	-3				13	1		1	OK	
	355	JA61561-5				14	1		1	OK	
	356	-6				15	1		1	OK	
	357	-7				16	1		1	OK	
	358	-8				17	1		1	OK	
	359	JA60979-1				18	1		1	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05
Rev. Date: 10/20/04

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ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y41

Date: 11/16/10

Analyst Signature:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SIS-46-xx	Aliphatic mix	2 ppm

Columns: RTXCLPII

Method 5EPHNF

Initial Cal. Method EPH4Y01

Injection Volume: 1.0

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 11/17/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4Y1360	JA60574-3	46762-1	EPH-S	S	19	1		1	OK	
	361	-4				20	1		1	OK	
	362	-6				21	1		1	OK	
	363	-7				22	1		1	OK	
	364	-8				23	1		1	OK	
	365	-10				24	1		1	OK	
	366	-11				25	1		1	OK	
	367	-12				26	1		1	OK	
	368	JA61645-1				27	1		1	OK	
	369	-2				28	1		1	OK	
	370	-3				29	1		1	OK	
	371	-4				30	1		1	OK	
	372	OP46762-DUP				31	1		1	OK	
	373	-MS				32	1		1	OK	
	374	-MSD				33	1		1	OK	
	375	cc 1-20				2	1		1	OK	
	376	TB				1	1		1	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05
Rev. Date: 10/20/04

ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y42

Date: 11/17/10

Analyst Signature: Dian

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1-546-80	Aliphatic std	50 ppm

Columns: RTX-CLP II

Method SW4 Ext 1

Initial Cal. Method SW4Y01

Injection Volume: 1 µL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/22/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	441 377	OP46703-MB1 ~~OP46730-MB1~~	46303-1 ~~46730-1~~	Cal 1	S	5	1		/	OK	
	378	-BS1				6	1			not using	RR - bad injection
	379	JA55811-S1R ~~JA60744-~~				7	1		/	OK	
	380	JA61224-1	46724-1			8	1		/	OK	
	381	-2				9	1		/	OK	
	382	-3				10	1		/	OK	
	383	OP46729-MSD				11	1		/	OK	
	384	Cal-S0				3	1		/	OK	
	385	IB-1				1	1		/	OK	
	386	OP46730-MS1	46730-1	Cal 2	S	12	1		/	OK	
	387	-BS1				13	1			not using	RR bad injection
	388	JA60744-1				14	1		/	OK	
	389	-2				15	1		/	OK	
	390	-3				16	1		/	OK	
	391	-4				17	1		/	OK	
	392	-5				18	1		/	OK	
	393	-6				19	1		/	OK	
	394	-7				20	1		/	OK	
	395	-9				21	1		/	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05

Rev. Date: 10/20/04

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ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y42

Date: 11/17/10

Analyst Signature: Dawn

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVL-542-8A	Alpha-tc. std	2ppm

Columns: RTX-1701

Method SPHCat1/2

Initial Cal. Method SP44Y01

Injection Volume: 1µl

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/22/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	241 396	JA60749-10	46730-1	Cal 2	S	22	1		1	OK	
	397	-11				23	1		1	ok	
	398	-12				24	1		1	OK	
	399	-13				25	1		1	OK	
	400	-14				26	1		1	ok	
	401	-15				27	1		1	OK	
	402	-16				28	1		1	ok	
	403	-18				29	1		1	OK	
	404	op46372AbwP	46372A-1	Cal1		30	1		1	OK	
	405	-MS				31	1		1	OK	
	406	-MSD				32	1		1	OK	
	407	op46730-DUP	46730-1	Cal 2	S	33	1		1	OK	
	408	-MS				34	1		1	ok	
	409	-MSD				35	1		1	OK	
	410	Cal-20				50	1		1	OK	
	411	IB-3				1	1		1	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05
Rev. Date: 10/20/04

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ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y43

Date: 11/18/10

Analyst Signature: D Wu N

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV-442-RA	Alpha-BHC	5 ppm

Columns: RTx-CLPII

Method 8ph Cal 1/2

Initial Cal. Method 8ph 4Y01

Injection Volume: 1 µL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/22/10.

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	411 412	OP46776-MB1	46776-1	Cal 1	W	5	1		1	OK	
	413	-BS11				6	1		1	OK	
	414	JA61582-4	46730-1	Cal 2	S	7	1		1	OK	
	415	JA60744-19	46730-1	Cal 2	S	8	1		1	OK	
	416	-20				9	1		1	OK	
	417	-21				10	1		1	OK	
	418	CC 1-57				3	1		1	OK	
	419	IB57				1	1		1	OK	
	420	OP46804-MB1	46804-1		S	11	1		1	OK	
	421	-BS11				12	1		1	OK	
	422	JA61702-1				13	1		1	OK	
	423	-2				14	1		1	OK	
	424	-3				15	1		1	OK	
	425	-4				16	1		1	OK	
	426	JA61703-1				17	1		1	OK	
	427	-2				18	1		1	OK	
	428	JA60744-22	46730-1			19	1		1	OK	
	429	JA61540-6	46776-1	Cal	W	20	1		1	OK	
	430	JA61641-7				21	1		1	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:

1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05
Rev. Date: 10/20/04

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ACCUTEST.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4Y43

Date: 11/18/10

Analyst Signature: Dixon

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV565-88	Aliphatic Mix	2 ppm

Columns: RTx-clpII

Method EPHcat1/2

Initial Cal. Method EPH4Y.1

Injection Volume: 1µl

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 11/22/10

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4Y1431	JA61635-2	46776-1	Cat1	W	22	1		1	OK	
	432	-3				23	1		1	ok	
	433	-4				24	1		1	ok	
	434	-5				25	1		1	ok	
	435	-6				26	1		1	ok	
	436	-7				27	1		1	ok	
	437	-8				28	1		1	ok	
	438	JA61562-11				29	1		1	ok	
	439	JA61561-10				30	1		1	ok	
	440	OP46776-DUP				31	1		1	ok	
	441	-MS				32	1		1	ok	
	442	-MSD				33	1		1	ok	
	443	CC1-20				5	1		1	OK	
	444	IB-3				1	1		1	OK	
	~~44~~										

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst 's correction error

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Form: OR016-05
Rev. Date: 10/20/04

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EXT-SO 10-571 BAL ID B-7

SOLID/LIQUID EXTRACTION

ACCUTEST

BATCH # GC46762-1 RACK# 6

EXTRACTION TIME: 7:10am Sonication Pressurized Fluid (ASE) Soxhlet

EXTRACTION METHOD (circle one) SW846 3550B / CLP / other____ SW846 3545 / CLP / other____ SW846 3540C / other____

EXTRACTION DATE: 11/16/10 ANALYST: GD/AL METHOD: EPHCA11 Water Bath Temp(C) 42° Nitrogen Evap Temp(C)____

Superviser Review Signature Date 11/16/10

Sample #	pH	Sample Bottle #	Analysis Type	Sample Description	Sample Wet Wt. (g)	Decant Y	Decant N	Final Extract Vol(ml)	Final Extract Color	Extract Cleanup GPC	H2SO4	Cu	Florisil		Comments
MB1			EPHCA11	Na2SO4	17.0			2	clear						
BS1				Na2SO4	17.0			2	yellow						
JA61582-2 MS		1		soil	17.0		1	2	brown						
MSD		1		soil	17.0		1	2	brown						
BS D				Na2SO4	17.0			2	yellow						
JA61561-8 Dup MS		1		clay	17.0		1	2	yellow						
~~BS/MSD~~			DRO	Na2SO4	17.0			2	clear						
1 JA61582-1		1	EPHCA11	soil	17.0		1	2	brown						
2 -2		1		soil	17.0		1	2	brown						
3 -3		1		soil	17.0		1	2	brown						
4 JA61561-5		1		clay	17.0		1	2	yellow						
5 -6		1		mud	17.0		1	2	brown						
6 -7		1		clay	17.0		1	2	yellow						
7 -8		1		clay	17.0		1	2	yellow						
8 JA60979-1		1		soil	17.0		1	2	yellow						
9 -3		1		mud	17.0		1	2	yellow						
10 -4		1		soil	17.0		1	2	yellow						
11 -6		1		mud	17.0	1		2	yellow						
12 -7		1		mud	17.0	1		2	yellow						
13 -8		1		sand/mud	17.0		1	2	yellow						
14 -10		1		clay/mud	17.0		1	2	yellow						
15 -11		1		clay/mud	17.0		1	2	yellow						
16 -12		1		clay/mud	17.0		1	2	yellow						
17 JA61649-1		1		sand	17.0		1	2	yellow						
18 -2		1		sand	17.0		1	2	yellow						
19 -3		1		sand	17.0		1	2	yellow						
20 -4		1	9	sand	17.0		1	2	yellow						

COMMENTS: up to 20

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE			
ACID			
PPCB			
HERB			
JOSEPH OP	10SOL31	100	1
WITNESS SIGN: GD/AL			

MATRIX SPIKE DATA

	LOT #	CONC.	AMT ADDED (ML)
BASE			
ACID			
PEST			
PCB			
~~HERB~~ DRO OP	10420136	1000	0.5
JOSEPH OP	10SOL36	100	1
WITNESS SIGN: GD/AL			

SOLVENT DATA

	LOT #	BRAND	AMT X/ML
1:1 MC/ACE OP	10420134	HW/Baker	
METH CHLOR			
HEXANE			
ACETONE			
ETH ETHER			

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULFOP	010-97	Fisher
FILTER PAPER	03203D2	Ahlstrom
COPPER		
FLORISIL		
SULFURIC ACID		

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See back for instructions

Prep Log OP46762 page 1 of 1

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JA61582

8.8.1

EXT-AQ / ° ɣɔɣ

ACCUTEST. LIQUID/LIQUID EXTRACTION

BATCH # GC46776-2 | RACK# 6

EXTRACTION TIME: 7pm Separatory Funnel | Continuous Liquid Liquid

EXTRACT METHOD (circle one) SW846 3510C / EPA 600 series / EPA 500 series / CLP / other _____ | SW846 3520C / CLP / other _____

EXTRACTION DATE: 11/18/10 ANALYST: GJ METHOD: EPHCAT1 | Water Bath Temp(C) 42° | Nitrogen Evap Temp(C) _____

Supervisor Review: Signature _____ Date 11/18/10

	Sample #	Sample Bottle #	Analysis Type	Sample Description	Sample Vol (ml) Oil Wt. (g)	pH Adjust (ml) >11 NaOH	pH Adjust (ml) <2 6N HCl H2SO4	Final Extract Vol(ml)	Final Extract Color	Extract Cleanup GPC	H2SO4	Cu	Florisil		Comments
	MB 2		EPHCAT1	DI H2O	1000		1	1	clear						
	BS 2		↓	↓	1000		1	1	clear						
	~~MS~~														
	~~MSD~~														
	~~BS~~ GJ 11/18/10														
	~~MS~~														
	~~MSD~~														
1	JA61821-16FB	11	EPHCAT1	clear	780		1	1	clear						
2	JA61724-7FB	1		clear	920		1	1	clear						
3	JA61886-1	2		yellow	930		1	1	yellow						
4	-2	2		Lt yellow	1000		1	1	Lt yellow						
5	-3	2	↓	Lt yellow	1000		1	1	clear						
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

SURROGATE SPIKE DATA

	LOT #	CONC. (PPM)	AMT ADDED (ML)
BASE			
ACID			
PPCB			
HERB			
N3 GH 0910-551-31		1 ccppm	1
WITNESS SIGN: GJ			

MATRIX SPIKE DATA

	LOT #	CONC.	AMT ADDED (ML)
BASE			
ACID			
PEST			
PCB			
HERB			
DCB 0910-	426-26	1,ccppm	0.5
WITNESS SIGN: GJ			

SOLVENT DATA

	LOT #	BRAND	AMT X/ML
METH CHLOR	DC047	Hw	3X60
HEXANE			
ACETONE			
ETH ETHER			

REAGENT/FILTER MEDIA

	LOT #	BRAND
SODIUM SULF	0910-98	Fisher
FILTER PAPER	9393054	Whatman
1:1 H2SO4	6N HCl 0911114.10	
~~10N NAOH~~	0910-501-7	Baker
COPPER		
FLORISIL		
SULFURIC ACID		

COMMENTS:

See back for instructions

New Jersey ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

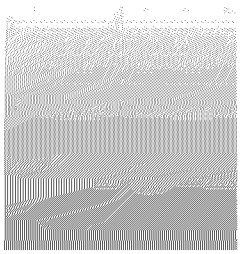
Percent Solids Raw Data Summary

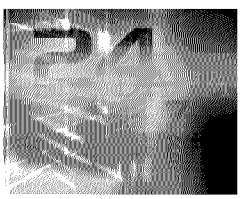
Job Number: JA61582
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: JA61582-1	**Analyzed:** 16-NOV-10 by KH		**Method:** SM18 2540G
ClientID: OFT-E+ 5			
Wet Weight (Total)	32.11	g	
Tare Weight	24.12	g	
Dry Weight (Total)	30.9	g	
Solids, Percent	84.9	%	
Sample: JA61582-2	**Analyzed:** 16-NOV-10 by KH		**Method:** SM18 2540G
ClientID: OFT-NE			
Wet Weight (Total)	29.08	g	
Tare Weight	22.04	g	
Dry Weight (Total)	28.56	g	
Solids, Percent	92.6	%	
Sample: JA61582-3	**Analyzed:** 16-NOV-10 by KH		**Method:** SM18 2540G
ClientID: DUP			
Wet Weight (Total)	27.63	g	
Tare Weight	22.32	g	
Dry Weight (Total)	27.24	g	
Solids, Percent	92.7	%	

New Jersey ACCUTEST LABORATORIES

02/11/11





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

Diesel Release Area, NP000603.0008.00001

Accutest Job Number: JA66701

Sampling Dates: 01/20/11 - 01/21/11

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **386**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Sample Summary

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA66701-1	01/20/11	14:30	RM	01/21/11	AQ	Ground Water	W-RM-012011-MWCD
JA66701-2	01/20/11	15:40	RM	01/21/11	AQ	Ground Water	W-RM-012011-MWCC
JA66701-3	01/20/11	15:50	RM	01/21/11	AQ	Field Blank Water	FB-012011
JA66701-4	01/21/11	10:00	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWCE
JA66701-5	01/21/11	11:15	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWBV
JA66701-6	01/21/11	12:45	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWX
JA66701-7	01/21/11	13:40	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWAY
JA66701-8	01/21/11	14:00	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWCF
JA66701-9	01/21/11	14:00	RM	01/21/11	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis **Job No** JA66701

Site: PSEG-Diesel, Salem, NJ **Report Date** 2/11/2011 10:18:54 A

On 01/21/2011, 7 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA66701 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V3B3109

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66701-2MS, JA66701-2MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V3B3111

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66594-12MS, JA66594-12MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Tert Butyl Ether are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** V3B3115

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66951-1MS, JA66951-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP47853

- All samples were extracted within the recommended method holding time.
- Sample(s) JA66701-1MS, JA66701-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorocyclopentadiene are outside control limits. Outside of in house control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP47853A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66701-1MS, JA66701-1MSD were used as the QC samples indicated.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

New Jersey ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66645.D	1	01/28/11	TLR	n/a	n/a	V3B3111
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	17.1	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	0.90	2.0	0.57	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	0.86	5.0	0.35	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	Indane	17.72	7.5	ug/l	JN
	C4 alkyl benzene	18.10	7.6	ug/l	J
	1H-indene-dihydro-methyl	18.31	6.2	ug/l	J
	C4 alkyl benzene	18.54	5.4	ug/l	J
	C4 alkyl benzene	19.10	11	ug/l	J
	1H-indene-dihydro-methyl	19.15	10	ug/l	J
	Naphthalene tetrahydro	19.37	13	ug/l	J
	1H-Indene-dihydro-dimethyl	19.64	6.5	ug/l	J
91-20-3	Naphthalene	19.94	16	ug/l	JN
	1H-Indene-dihydro-dimethyl	20.08	6.1	ug/l	J
	Naphthalene tetrahydro	20.94	6.6	ug/l	J
	Naphthalene methyl	21.25	7.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene methyl	21.52	18	ug/l	J
	Total TIC, Volatile		121.6	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
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Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		25-112%
321-60-8	2-Fluorobiphenyl	73%		31-106%
1718-51-0	Terphenyl-d14	66%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	9.73	4.3	ug/l	J
	unknown	11.63	4.5	ug/l	J
	Phenol, tert-butyl-	11.77	4.4	ug/l	J
90-12-0	Naphthalene, 1-methyl-	12.08	5.9	ug/l	JN
	unknown	13.81	5.8	ug/l	J
	unknown	15.14	4.2	ug/l	J
	unknown	16.32	4.4	ug/l	J
	unknown	17.09	5.7	ug/l	J
	unknown	19.04	7.3	ug/l	J
	Total TIC, Semi-Volatile		46.5	ug/l	J

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23447.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.362	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	0.687	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	1.54	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		32-135%
321-60-8	2-Fluorobiphenyl	83%		31-121%
1718-51-0	Terphenyl-d14	60%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66732.D	1	01/31/11	TLR	n/a	n/a	V3B3115
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3.1	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	87%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85127.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		25-112%
321-60-8	2-Fluorobiphenyl	78%		31-106%
1718-51-0	Terphenyl-d14	78%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23448.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.844	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.131	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	0.111	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		32-135%
321-60-8	2-Fluorobiphenyl	94%		31-121%
1718-51-0	Terphenyl-d14	78%		10-130%

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66592.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	99%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85140.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	945 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.1	0.42	ug/l	
1912-24-9	Atrazine	ND	5.3	0.41	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.43	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.45	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.44	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.27	ug/l	
86-74-8	Carbazole	ND	1.1	0.17	ug/l	
105-60-2	Caprolactam	ND	2.1	0.21	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.33	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.23	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.31	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.42	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.26	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.22	ug/l	
78-59-1	Isophorone	ND	2.1	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.70	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.25	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	0.30	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.19	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.27	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.23	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		25-112%
321-60-8	2-Fluorobiphenyl	85%		31-106%
1718-51-0	Terphenyl-d14	81%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23449.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	945 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.012	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.012	ug/l	
120-12-7	Anthracene	ND	0.11	0.0089	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.11	0.010	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.11	0.010	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.011	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.014	ug/l	
218-01-9	Chrysene	ND	0.11	0.012	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.020	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.0086	ug/l	
86-73-7	Fluorene	ND	0.11	0.0095	ug/l	
118-74-1	Hexachlorobenzene	ND	0.021	0.011	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.017	ug/l	
91-20-3	Naphthalene	ND	0.11	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.11	0.0099	ug/l	
129-00-0	Pyrene	ND	0.11	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	94%		32-135%
321-60-8	2-Fluorobiphenyl	94%		31-121%
1718-51-0	Terphenyl-d14	81%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66595.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	1.1	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	2.4	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	0.79	2.0	0.57	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.77	1.0	0.23	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	1.3	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	1.3	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85141.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	0.84	1.0	0.66	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		25-112%
321-60-8	2-Fluorobiphenyl	68%		31-106%
1718-51-0	Terphenyl-d14	51%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23450.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.330	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	0.203	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	2.13	0.10	0.012	ug/l	
85-01-8	Phenanthrene	0.110	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		32-135%
321-60-8	2-Fluorobiphenyl	75%		31-121%
1718-51-0	Terphenyl-d14	49%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66596.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	101%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85142.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	71%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23451.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		32-135%
321-60-8	2-Fluorobiphenyl	91%		31-121%
1718-51-0	Terphenyl-d14	75%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66643.D	1	01/28/11	TLR	n/a	n/a	V3B3111
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	95%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-indene-dihydro-trimethyl	20.53	9	ug/l	J
	Total TIC, Volatile		9	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85143.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	76%		31-106%
1718-51-0	Terphenyl-d14	77%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	11.43	9.3	ug/l	J
	alkane	12.06	5	ug/l	J
	unknown	12.18	4.5	ug/l	J
	unknown	12.91	4.7	ug/l	J
	unknown	13.60	5.3	ug/l	J
	cycloalkane	13.80	4.7	ug/l	J
	alkane	13.95	18	ug/l	J
	unknown	14.18	6.6	ug/l	J
	unknown	15.08	5.4	ug/l	J
	unknown	15.52	4.9	ug/l	J
	alkane	16.17	15	ug/l	J
	alkane	16.82	26	ug/l	J
	alkane	17.23	5.1	ug/l	J
	alkane	17.92	18	ug/l	J
	alkane	18.77	5.9	ug/l	J
	Total TIC, Semi-Volatile		138.4	ug/l	J

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23452.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		32-135%
321-60-8	2-Fluorobiphenyl	88%		31-121%
1718-51-0	Terphenyl-d14	75%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66604.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85144.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	1.5	2.0	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	8.7	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		25-112%
321-60-8	2-Fluorobiphenyl	67%		31-106%
1718-51-0	Terphenyl-d14	61%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23453.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		32-135%
321-60-8	2-Fluorobiphenyl	80%		31-121%
1718-51-0	Terphenyl-d14	65%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66605.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85145.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	70%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	16.80	5.4	ug/l	J
	alkane	17.92	5.3	ug/l	J
	Total TIC, Semi-Volatile		10.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23458.D	1	02/01/11	NAP	01/26/11	OP47853A	E4M1023
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	98%		32-135%
321-60-8	2-Fluorobiphenyl	91%		31-121%
1718-51-0	Terphenyl-d14	70%		10-130%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA66701-9	**Date Sampled:**	01/21/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66593.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA66701-9	**Date Sampled:**	01/21/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	99%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	106%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA66701

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 Friends Ln.
City: Newtown State: PA Zip: 18940
Project Contact: Jon Shafer E-mail: jshafer@arcadis-us.com
Phone #: 2676851800 Fax #:
Sampler(s) Name(s): Robert Miller Phone #: 2012734552

Project Information

Project Name: PSEG Diesel Release Area
Street:
City: State:
Project #: NP000603.0008.00001
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs 8260B	SVOCs 8270C	LAB USE ONLY
1	W-RM-012011-MWCD		1/20/11	1430	RM	GW	5	3								X	X	EX18,
2	W-RM-012011-MWCC		1/20/11	1540	RM	GW	5	3								X	X	811
3	FB-012011		1/20/11	1550	RM	GW	4	2								X	X	
4	W-RM-012111-MWCE		1/21/11	1000	RM	GW	5	3								X	X	
5	W-RM-012111-MWBV		1/21/11	1115	RM	GW	5	3								X	X	
6	W-RM-012111-MWX		1/21/11	1245	RM	GW	5	3								X	X	
7	W-RM-012111-MWAY		1/21/11	1340	RM	GW	5	3								X	X	
8	W-RM-012111-MWCF		1/21/11	1400	RM	GW	5	3								X	X	
9	Trip Blank		1/19/11	0900			2	2								X		

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Rec'd at Exton Service Center 1/21/11 @1610
see attached special handling note from Customer

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:
1		1/21/11 1610	1
2	Relinquished By:	01/21/11 1815	Received By: 2 W. Nunez
3	W. Nunez	1/21/11 2315	Received By:
4	Relinquished By:	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5

Custody Seal #: — [ ] Intact [X] Not Intact — Preserved where applicable: [ ] — On Ice: [X] — Cooler Temp: 2°C

4.1

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA66701 Client: Immediate Client Services Action Required: No

Date / Time Received: 1/21/2011 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

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JA66701: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA66701-1	Collected: 20-JAN-11 14:30 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012011-MWCD						
JA66701-1	SW846 8270C	27-JAN-11 16:10	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-1	SW846 8260B	28-JAN-11 16:57	TLR			V8260NJPTCL11+
JA66701-1	SW846 8270C BY SIM	31-JAN-11 17:24	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-2	Collected: 20-JAN-11 15:40 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012011-MWCC						
JA66701-2	SW846 8270C	27-JAN-11 17:56	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-2	SW846 8260B	31-JAN-11 16:24	TLR			V8260NJPTCL11+
JA66701-2	SW846 8270C BY SIM	31-JAN-11 17:47	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-3	Collected: 20-JAN-11 15:50 By: RM		Received: 21-JAN-11		By:	MPC
FB-012011						
JA66701-3	SW846 8260B	27-JAN-11 01:34	TLR			V8260NJPTCL11+
JA66701-3	SW846 8270C	28-JAN-11 17:11	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-3	SW846 8270C BY SIM	31-JAN-11 18:12	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-4	Collected: 21-JAN-11 10:00 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWCE						
JA66701-4	SW846 8260B	27-JAN-11 03:10	TLR			V8260NJPTCL11+
JA66701-4	SW846 8270C	28-JAN-11 17:47	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-4	SW846 8270C BY SIM	31-JAN-11 18:36	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-5	Collected: 21-JAN-11 11:15 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWBV						
JA66701-5	SW846 8260B	27-JAN-11 03:42	TLR			V8260NJPTCL11+
JA66701-5	SW846 8270C	28-JAN-11 18:23	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-5	SW846 8270C BY SIM	31-JAN-11 18:59	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-6	Collected: 21-JAN-11 12:45 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWX						
JA66701-6	SW846 8260B	28-JAN-11 16:25	TLR			V8260NJPTCL11+
JA66701-6	SW846 8270C	28-JAN-11 18:52	LP	26-JAN-11	RSJ	B8270NJTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA66701-6	SW846 8270C BY SIM	31-JAN-11 19:24	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-7	Collected: 21-JAN-11 13:40 By: RM		Received: 21-JAN-11 By: MPC			
W-RM-012111-MWAY						
JA66701-7	SW846 8260B	27-JAN-11 07:57	TLR			V8260NJPTCL11+
JA66701-7	SW846 8270C	28-JAN-11 19:28	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-7	SW846 8270C BY SIM	31-JAN-11 19:47	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-8	Collected: 21-JAN-11 14:00 By: RM		Received: 21-JAN-11 By: MPC			
W-RM-012111-MWCF						
JA66701-8	SW846 8260B	27-JAN-11 08:28	TLR			V8260NJPTCL11+
JA66701-8	SW846 8270C	28-JAN-11 20:05	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-8	SW846 8270C BY SIM	01-FEB-11 09:28	NAP	26-JAN-11	RSJ	B8270SIMNJ
JA66701-9	Collected: 21-JAN-11 14:00 By: RM		Received: 21-JAN-11 By: MPC			
TRIP BLANK						
JA66701-9	SW846 8260B	27-JAN-11 02:06	TLR			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-1.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-1.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-1.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-1.1
JA66701-1.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-1.1
JA66701-1.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-1.1.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-1.1.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument
JA66701-1.1.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-1.1.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-1.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-1.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-1.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-1.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-1.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-1.2
JA66701-1.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-1.2
JA66701-1.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-1.2.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-1.2.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument
JA66701-1.2.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-1.2.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-1.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-1.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-1.3	Secured Storage	Tara Reddington	01/28/11 11:12	Retrieve from Storage
JA66701-1.3	Tara Reddington	GCMS3B	01/28/11 11:12	Load on Instrument
JA66701-1.3	GCMS3B	Tara Reddington	01/31/11 09:39	Unload from Instrument
JA66701-1.3	Tara Reddington	Secured Storage	01/31/11 09:39	Return to Storage
JA66701-1.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-1.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-1.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-1.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-2.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-2.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-2.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-2.2
JA66701-2.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-2.2
JA66701-2.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-2.2.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-2.2.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-2.2.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-2.2.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-2.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-2.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-2.3	Secured Storage	Tara Reddington	01/31/11 10:56	Retrieve from Storage
JA66701-2.3	Tara Reddington	GCMS3B	01/31/11 10:56	Load on Instrument
JA66701-2.3	GCMS3B	Tara Reddington	02/01/11 08:26	Unload from Instrument
JA66701-2.3	Tara Reddington	Secured Storage	02/01/11 08:26	Return to Storage
JA66701-2.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-2.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-2.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-2.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-3.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-3.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-3.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-3.2
JA66701-3.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-3.2
JA66701-3.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-3.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-3.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-3.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-3.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-3.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-3.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-3.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-3.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-4.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-4.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-4.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-4.2
JA66701-4.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-4.2
JA66701-4.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-4.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-4.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-4.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-4.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-4.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-4.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-4.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-4.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-5.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-5.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-5.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-5.1
JA66701-5.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-5.1
JA66701-5.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-5.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-5.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-5.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-5.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-5.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-5.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-5.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-5.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-6.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-6.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-6.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-6.1
JA66701-6.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-6.1
JA66701-6.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-6.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-6.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-6.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-6.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-6.3	Secured Storage	Tara Reddington	01/28/11 11:12	Retrieve from Storage
JA66701-6.3	Tara Reddington	GCMS3B	01/28/11 11:12	Load on Instrument
JA66701-6.3	GCMS3B	Tara Reddington	01/31/11 09:39	Unload from Instrument
JA66701-6.3	Tara Reddington	Secured Storage	01/31/11 09:39	Return to Storage
JA66701-6.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-6.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-6.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-6.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-7.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-7.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-7.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-7.1

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-7.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-7.1
JA66701-7.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-7.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-7.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-7.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-7.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-7.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-7.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-7.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-7.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-8.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-8.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-8.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-8.2
JA66701-8.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-8.2
JA66701-8.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-8.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-8.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-8.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-8.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-8.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-8.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-8.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-8.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-9.2	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-9.2	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-9.2	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-9.2	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-MB	3B66586.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-MB	3B66586.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	105%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-MB	3B66632.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-MB	3B66632.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	105%	76-117%
460-00-4	4-Bromofluorobenzene	104%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-MB	3B66721.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-MB	3B66721.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-BS	3B66587.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	42.8	86	51-151
71-43-2	Benzene	50	50.7	101	75-122
74-97-5	Bromochloromethane	50	55.4	111	78-124
75-27-4	Bromodichloromethane	50	52.3	105	77-128
75-25-2	Bromoform	50	51.4	103	67-141
74-83-9	Bromomethane	50	56.7	113	53-152
78-93-3	2-Butanone (MEK)	50	41.7	83	64-130
75-15-0	Carbon disulfide	50	54.2	108	59-140
56-23-5	Carbon tetrachloride	50	54.0	108	75-148
108-90-7	Chlorobenzene	50	52.6	105	76-124
75-00-3	Chloroethane	50	58.3	117	54-147
67-66-3	Chloroform	50	51.4	103	77-124
74-87-3	Chloromethane	50	50.4	101	46-144
110-82-7	Cyclohexane	50	54.2	108	62-127
124-48-1	Dibromochloromethane	50	50.1	100	76-132
95-50-1	1,2-Dichlorobenzene	50	52.1	104	74-125
541-73-1	1,3-Dichlorobenzene	50	52.2	104	73-124
106-46-7	1,4-Dichlorobenzene	50	52.3	105	71-123
75-71-8	Dichlorodifluoromethane	50	53.4	107	42-152
75-34-3	1,1-Dichloroethane	50	50.2	100	72-124
107-06-2	1,2-Dichloroethane	50	48.9	98	66-150
75-35-4	1,1-Dichloroethene	50	54.5	109	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.8	116	71-119
156-60-5	trans-1,2-Dichloroethene	50	45.9	92	71-123
78-87-5	1,2-Dichloropropane	50	50.8	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	50.3	101	77-124
10061-02-6	trans-1,3-Dichloropropene	50	48.8	98	75-132
100-41-4	Ethylbenzene	50	50.7	101	77-124
76-13-1	Freon 113	50	58.3	117	58-149
591-78-6	2-Hexanone	50	42.5	85	58-136
98-82-8	Isopropylbenzene	50	52.2	104	60-136
79-20-9	Methyl Acetate	50	49.8	100	57-139
108-87-2	Methylcyclohexane	50	55.3	111	73-130
1634-04-4	Methyl Tert Butyl Ether	100	93.0	93	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	49.9	100	63-135
75-09-2	Methylene chloride	50	52.3	105	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-BS	3B66587.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.6	101	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	48.4	97	66-125
127-18-4	Tetrachloroethene	50	57.1	114	70-136
108-88-3	Toluene	50	51.3	103	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.7	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.9	112	67-132
71-55-6	1,1,1-Trichloroethane	50	54.7	109	77-136
79-00-5	1,1,2-Trichloroethane	50	51.5	103	75-123
79-01-6	Trichloroethene	50	55.1	110	79-126
75-69-4	Trichlorofluoromethane	50	57.5	115	56-154
75-01-4	Vinyl chloride	50	54.5	109	56-146
	m,p-Xylene	100	104	104	77-125
95-47-6	o-Xylene	50	53.4	107	76-126
1330-20-7	Xylene (total)	150	157	105	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-BS	3B66633.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63	51-151
71-43-2	Benzene	50	49.8	100	75-122
74-97-5	Bromochloromethane	50	55.8	112	78-124
75-27-4	Bromodichloromethane	50	52.2	104	77-128
75-25-2	Bromoform	50	53.1	106	67-141
74-83-9	Bromomethane	50	49.8	100	53-152
78-93-3	2-Butanone (MEK)	50	39.7	79	64-130
75-15-0	Carbon disulfide	50	53.7	107	59-140
56-23-5	Carbon tetrachloride	50	52.0	104	75-148
108-90-7	Chlorobenzene	50	52.2	104	76-124
75-00-3	Chloroethane	50	50.9	102	54-147
67-66-3	Chloroform	50	50.7	101	77-124
74-87-3	Chloromethane	50	44.0	88	46-144
110-82-7	Cyclohexane	50	52.3	105	62-127
124-48-1	Dibromochloromethane	50	50.8	102	76-132
95-50-1	1,2-Dichlorobenzene	50	52.3	105	74-125
541-73-1	1,3-Dichlorobenzene	50	52.2	104	73-124
106-46-7	1,4-Dichlorobenzene	50	52.3	105	71-123
75-71-8	Dichlorodifluoromethane	50	46.1	92	42-152
75-34-3	1,1-Dichloroethane	50	49.8	100	72-124
107-06-2	1,2-Dichloroethane	50	49.5	99	66-150
75-35-4	1,1-Dichloroethene	50	52.5	105	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.3	115	71-119
156-60-5	trans-1,2-Dichloroethene	50	45.3	91	71-123
78-87-5	1,2-Dichloropropane	50	50.9	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	50.8	102	75-132
100-41-4	Ethylbenzene	50	49.6	99	77-124
76-13-1	Freon 113	50	56.2	112	58-149
591-78-6	2-Hexanone	50	42.1	84	58-136
98-82-8	Isopropylbenzene	50	50.6	101	60-136
79-20-9	Methyl Acetate	50	51.6	103	57-139
108-87-2	Methylcyclohexane	50	54.4	109	73-130
1634-04-4	Methyl Tert Butyl Ether	100	97.9	98	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.9	104	63-135
75-09-2	Methylene chloride	50	52.2	104	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-BS	3B66633.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.1	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.3	99	66-125
127-18-4	Tetrachloroethene	50	51.9	104	70-136
108-88-3	Toluene	50	50.7	101	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.7	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.7	111	67-132
71-55-6	1,1,1-Trichloroethane	50	52.7	105	77-136
79-00-5	1,1,2-Trichloroethane	50	51.9	104	75-123
79-01-6	Trichloroethene	50	53.6	107	79-126
75-69-4	Trichlorofluoromethane	50	51.6	103	56-154
75-01-4	Vinyl chloride	50	46.7	93	56-146
	m,p-Xylene	100	102	102	77-125
95-47-6	o-Xylene	50	52.6	105	76-126
1330-20-7	Xylene (total)	150	155	103	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	103%	72-122%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-BS	3B66722.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	25.9	52	51-151
71-43-2	Benzene	50	48.2	96	75-122
74-97-5	Bromochloromethane	50	53.7	107	78-124
75-27-4	Bromodichloromethane	50	49.4	99	77-128
75-25-2	Bromoform	50	52.5	105	67-141
74-83-9	Bromomethane	50	49.6	99	53-152
78-93-3	2-Butanone (MEK)	50	36.7	73	64-130
75-15-0	Carbon disulfide	50	50.3	101	59-140
56-23-5	Carbon tetrachloride	50	50.1	100	75-148
108-90-7	Chlorobenzene	50	51.6	103	76-124
75-00-3	Chloroethane	50	48.9	98	54-147
67-66-3	Chloroform	50	47.4	95	77-124
74-87-3	Chloromethane	50	40.9	82	46-144
110-82-7	Cyclohexane	50	49.8	100	62-127
124-48-1	Dibromochloromethane	50	49.2	98	76-132
95-50-1	1,2-Dichlorobenzene	50	51.7	103	74-125
541-73-1	1,3-Dichlorobenzene	50	51.5	103	73-124
106-46-7	1,4-Dichlorobenzene	50	51.7	103	71-123
75-71-8	Dichlorodifluoromethane	50	40.8	82	42-152
75-34-3	1,1-Dichloroethane	50	46.2	92	72-124
107-06-2	1,2-Dichloroethane	50	45.3	91	66-150
75-35-4	1,1-Dichloroethene	50	50.5	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	54.8	110	71-119
156-60-5	trans-1,2-Dichloroethene	50	43.1	86	71-123
78-87-5	1,2-Dichloropropane	50	48.1	96	75-120
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	77-124
10061-02-6	trans-1,3-Dichloropropene	50	48.1	96	75-132
100-41-4	Ethylbenzene	50	48.6	97	77-124
76-13-1	Freon 113	50	57.3	115	58-149
591-78-6	2-Hexanone	50	39.3	79	58-136
98-82-8	Isopropylbenzene	50	49.8	100	60-136
79-20-9	Methyl Acetate	50	49.2	98	57-139
108-87-2	Methylcyclohexane	50	53.4	107	73-130
1634-04-4	Methyl Tert Butyl Ether	100	91.4	91	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	48.9	98	63-135
75-09-2	Methylene chloride	50	49.8	100	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-BS	3B66722.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	49.6	99	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	47.8	96	66-125
127-18-4	Tetrachloroethene	50	52.1	104	70-136
108-88-3	Toluene	50	49.1	98	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.6	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	56.1	112	67-132
71-55-6	1,1,1-Trichloroethane	50	49.5	99	77-136
79-00-5	1,1,2-Trichloroethane	50	49.5	99	75-123
79-01-6	Trichloroethene	50	51.5	103	79-126
75-69-4	Trichlorofluoromethane	50	48.2	96	56-154
75-01-4	Vinyl chloride	50	45.2	90	56-146
	m,p-Xylene	100	101	101	77-125
95-47-6	o-Xylene	50	51.9	104	76-126
1330-20-7	Xylene (total)	150	153	102	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	101%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66701-2MS	3B66588.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2MSD	3B66589.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2 [a]	3B66594.D	1	01/27/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	JA66701-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	3.9	J	50	44.2	81	47.0	86	6	44-157/20
71-43-2	Benzene	ND		50	39.8	80	39.9	80	0	38-139/13
74-97-5	Bromochloromethane	ND		50	50.0	100	50.3	101	1	70-129/11
75-27-4	Bromodichloromethane	ND		50	47.6	95	46.9	94	1	70-135/13
75-25-2	Bromoform	ND		50	53.2	106	52.8	106	1	53-139/13
74-83-9	Bromomethane	ND		50	41.8	84	42.8	86	2	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	37.6	75	37.1	74	1	58-140/14
75-15-0	Carbon disulfide	ND		50	27.9	56	28.0	56	0	34-136/21
56-23-5	Carbon tetrachloride	ND		50	32.1	64	31.7	63	1	50-161/18
108-90-7	Chlorobenzene	ND		50	45.7	91	46.2	92	1	65-128/12
75-00-3	Chloroethane	ND		50	38.4	77	39.0	78	2	41-151/18
67-66-3	Chloroform	ND		50	42.0	84	42.2	84	0	66-132/14
74-87-3	Chloromethane	ND		50	34.2	68	34.7	69	1	35-149/22
110-82-7	Cyclohexane	ND		50	26.8	54	25.7	51	4	29-158/18
124-48-1	Dibromochloromethane	ND		50	50.1	100	50.2	100	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.7	99	50.2	100	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.2	94	47.2	94	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	48.4	97	48.5	97	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	24.8	50	23.7	47	5	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	38.2	76	38.4	77	1	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	45.6	91	44.4	89	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	28.1	56	28.1	56	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	42.5	85	43.0	86	1	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	35.9	72	35.9	72	0	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.6	89	44.2	88	1	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.1	94	46.7	93	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.5	93	46.2	92	1	68-134/13
100-41-4	Ethylbenzene	ND		50	40.1	80	40.7	81	1	37-143/13
76-13-1	Freon 113	ND		50	29.3	59	28.7	57	2	33-159/19
591-78-6	2-Hexanone	ND		50	44.8	90	44.2	88	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	38.5	77	39.0	78	1	48-141/15
79-20-9	Methyl Acetate	ND		50	48.0	96	48.1	96	0	46-147/18
108-87-2	Methylcyclohexane	ND		50	29.1	58	28.2	56	3	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	45.7	91	45.6	91	0	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	53.8	108	53.4	107	1	57-141/14
75-09-2	Methylene chloride	ND		50	44.7	89	44.9	90	0	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66701-2MS	3B66588.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2MSD	3B66589.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2 [a]	3B66594.D	1	01/27/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	JA66701-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.8	90	45.0	90	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.9	104	51.7	103	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	36.2	72	36.5	73	1	48-145/15
108-88-3	Toluene	ND		50	40.8	82	40.8	82	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	52.7	105	54.0	108	2	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.6	105	53.5	107	2	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	35.7	71	35.5	71	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	49.6	99	49.0	98	1	70-127/12
79-01-6	Trichloroethene	ND		50	39.1	78	39.5	79	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	29.5	59	28.7	57	3	35-169/23
75-01-4	Vinyl chloride	ND		50	30.9	62	30.6	61	1	34-151/20
	m,p-Xylene	ND		100	82.5	83	83.5	84	1	32-146/13
95-47-6	o-Xylene	ND		50	44.4	89	45.1	90	2	46-141/12
1330-20-7	Xylene (total)	ND		150	127	85	129	86	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-2	Limits
1868-53-7	Dibromofluoromethane	106%	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%	95%		64-135%
2037-26-5	Toluene-D8	103%	102%		76-117%
460-00-4	4-Bromofluorobenzene	105%	105%		72-122%

(a) Sample used for QC purposes only.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66594-12MS	3B66640.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12MSD	3B66641.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66635.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66637.D	10	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	JA66594-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	27.3	55	27.1	54	1	44-157/20
71-43-2	Benzene	ND		50	43.1	86	43.1	86	0	38-139/13
74-97-5	Bromochloromethane	ND		50	49.9	100	50.0	100	0	70-129/11
75-27-4	Bromodichloromethane	ND		50	47.0	94	47.0	94	0	70-135/13
75-25-2	Bromoform	ND		50	52.2	104	52.7	105	1	53-139/13
74-83-9	Bromomethane	ND		50	48.0	96	47.4	95	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	35.9	72	36.2	72	1	58-140/14
75-15-0	Carbon disulfide	ND		50	36.6	73	36.0	72	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	44.5	89	44.6	89	0	50-161/18
108-90-7	Chlorobenzene	ND		50	48.2	96	48.2	96	0	65-128/12
75-00-3	Chloroethane	ND		50	47.1	94	45.9	92	3	41-151/18
67-66-3	Chloroform	ND		50	43.9	88	43.5	87	1	66-132/14
74-87-3	Chloromethane	ND		50	39.2	78	39.3	79	0	35-149/22
110-82-7	Cyclohexane	ND		50	41.7	83	41.3	83	1	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.3	99	49.9	100	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	50.9	102	51.1	102	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	49.3	99	49.5	99	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.5	101	50.3	101	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	41.2	82	40.3	81	2	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	41.2	82	40.6	81	1	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	43.9	88	44.0	88	0	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	40.3	81	39.0	78	3	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	44.5	89	44.3	89	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	39.7	79	39.4	79	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.5	89	44.3	89	0	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.2	94	47.3	95	0	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.1	92	46.4	93	1	68-134/13
100-41-4	Ethylbenzene	ND		50	46.0	92	45.7	91	1	37-143/13
76-13-1	Freon 113	ND		50	47.7	95	47.3	95	1	33-159/19
591-78-6	2-Hexanone	ND		50	43.8	88	43.8	88	0	53-145/17
98-82-8	Isopropylbenzene	ND		50	46.6	93	46.4	93	0	48-141/15
79-20-9	Methyl Acetate	ND		50	49.8	100	49.5	99	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	46.3	93	46.4	93	0	36-156/18
1634-04-4	Methyl Tert Butyl Ether	364	b	50	332	-64*	a 328	-72*	a 1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	52.4	105	52.9	106	1	57-141/14
75-09-2	Methylene chloride	ND		50	45.3	91	44.6	89	2	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66594-12MS	3B66640.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12MSD	3B66641.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66635.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66637.D	10	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	JA66594-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	48.1	96	48.2	96	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.1	102	51.4	103	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	47.4	95	47.6	95	0	48-145/15
108-88-3	Toluene	ND		50	45.0	90	45.0	90	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	53.5	107	55.4	111	3	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	54.3	109	56.0	112	3	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	44.7	89	43.8	88	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.2	96	48.7	97	1	70-127/12
79-01-6	Trichloroethene	ND		50	46.3	93	46.7	93	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	47.3	95	46.4	93	2	35-169/23
75-01-4	Vinyl chloride	ND		50	44.1	88	43.8	88	1	34-151/20
	m,p-Xylene	0.29		100	94.3	94	93.4	93	1	32-146/13
95-47-6	o-Xylene	ND		50	48.2	96	47.9	96	1	46-141/12
1330-20-7	Xylene (total)	0.29		150	143	95	141	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66594-12	JA66594-12	Limits
1868-53-7	Dibromofluoromethane	105%	104%	102%	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	94%	93%	99%	97%	64-135%
2037-26-5	Toluene-D8	102%	103%	105%	104%	76-117%
460-00-4	4-Bromofluorobenzene	104%	104%	104%	103%	72-122%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66951-1MS	3B66729.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1MSD	3B66730.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1	3B66724.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	JA66951-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	24.5	49	26.9	54	9	44-157/20
71-43-2	Benzene	ND		50	44.4	89	44.2	88	0	38-139/13
74-97-5	Bromochloromethane	ND		50	51.5	103	52.9	106	3	70-129/11
75-27-4	Bromodichloromethane	ND		50	46.4	93	47.1	94	1	70-135/13
75-25-2	Bromoform	ND		50	53.0	106	54.1	108	2	53-139/13
74-83-9	Bromomethane	ND		50	48.5	97	48.5	97	0	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	34.7	69	36.0	72	4	58-140/14
75-15-0	Carbon disulfide	ND		50	42.9	86	42.2	84	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	44.6	89	43.6	87	2	50-161/18
108-90-7	Chlorobenzene	ND		50	48.9	98	49.3	99	1	65-128/12
75-00-3	Chloroethane	ND		50	45.1	90	44.5	89	1	41-151/18
67-66-3	Chloroform	ND		50	42.5	85	42.7	85	0	66-132/14
74-87-3	Chloromethane	ND		50	37.7	75	36.8	74	2	35-149/22
110-82-7	Cyclohexane	ND		50	43.9	88	42.7	85	3	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.9	100	51.2	102	3	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.6	99	50.3	101	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	48.2	96	48.7	97	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	49.3	99	50.1	100	2	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	37.4	75	36.1	72	4	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	40.8	82	40.7	81	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	42.6	85	43.1	86	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	45.2	90	44.3	89	2	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.5	91	45.7	91	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	44.1	88	43.7	87	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.9	90	45.6	91	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.1	94	47.7	95	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.7	91	46.2	92	1	68-134/13
100-41-4	Ethylbenzene	ND		50	45.1	90	44.7	89	1	37-143/13
76-13-1	Freon 113	ND		50	49.1	98	47.9	96	2	33-159/19
591-78-6	2-Hexanone	ND		50	41.5	83	42.1	84	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	44.7	89	44.4	89	1	48-141/15
79-20-9	Methyl Acetate	ND		50	47.8	96	48.2	96	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	44.5	89	42.6	85	4	36-156/18
1634-04-4	Methyl Tert Butyl Ether	13.4		50	56.2	86	56.9	87	1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.9	102	51.8	104	2	57-141/14
75-09-2	Methylene chloride	ND		50	47.2	94	47.7	95	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66951-1MS	3B66729.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1MSD	3B66730.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1	3B66724.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	JA66951-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	48.0	96	48.4	97	1	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.4	97	49.1	98	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	48.9	98	48.2	96	1	48-145/15
108-88-3	Toluene	ND		50	45.2	90	45.4	91	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	50.8	102	52.3	105	3	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.9	104	53.3	107	3	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	43.6	87	42.9	86	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.5	97	49.3	99	2	70-127/12
79-01-6	Trichloroethene	ND		50	47.3	95	47.0	94	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	44.3	89	43.2	86	3	35-169/23
75-01-4	Vinyl chloride	ND		50	41.8	84	40.7	81	3	34-151/20
	m,p-Xylene	ND		100	93.7	94	93.1	93	1	32-146/13
95-47-6	o-Xylene	ND		50	48.0	96	48.1	96	0	46-141/12
1330-20-7	Xylene (total)	ND		150	142	95	141	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66951-1	Limits
1868-53-7	Dibromofluoromethane	101%	101%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	86%	85%	91%	64-135%
2037-26-5	Toluene-D8	101%	102%	104%	76-117%
460-00-4	4-Bromofluorobenzene	101%	101%	102%	72-122%

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3095-BFB	**Injection Date:**	01/18/11
Lab File ID:	3B66291.D	**Injection Time:**	12:00
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18276	20.7		Pass
75	30.0 - 60.0% of mass 95	42594	48.4		Pass
95	Base peak, 100% relative abundance	88082	100.0		Pass
96	5.0 - 9.0% of mass 95	6101	6.93		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	77690	88.2		Pass
175	5.0 - 9.0% of mass 174	6080	6.90	(7.83) [a]	Pass
176	95.0 - 101.0% of mass 174	76661	87.0	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5035	5.72	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3095-IC3095	3B66292.D	01/18/11	12:48	00:48	Initial cal 0.5
V3B3095-IC3095	3B66293.D	01/18/11	13:20	01:20	Initial cal 1
V3B3095-IC3095	3B66294.D	01/18/11	13:52	01:52	Initial cal 2
V3B3095-IC3095	3B66296.D	01/18/11	14:55	02:55	Initial cal 10
V3B3095-IC3095	3B66297.D	01/18/11	15:27	03:27	Initial cal 20
V3B3095-ICC3095	3B66298.D	01/18/11	15:58	03:58	Initial cal 50
V3B3095-IC3095	3B66300.D	01/18/11	17:03	05:03	Initial cal 100
V3B3095-IC3095	3B66301.D	01/18/11	17:35	05:35	Initial cal 200
V3B3095-IC3095	3B66304.D	01/18/11	19:11	07:11	Initial cal 5
V3B3095-ICV3095	3B66304A.D	01/18/11	19:42	07:42	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3109-BFB	**Injection Date:**	01/26/11
Lab File ID:	3B66583.D	**Injection Time:**	20:49
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	22898	18.5		Pass
75	30.0 - 60.0% of mass 95	58208	47.1		Pass
95	Base peak, 100% relative abundance	123581	100.0		Pass
96	5.0 - 9.0% of mass 95	8287	6.71		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	111512	90.2		Pass
175	5.0 - 9.0% of mass 174	8304	6.72	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	109378	88.5	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	7227	5.85	(6.61) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3109-CC3095	3B66584.D	01/26/11	21:20	00:31	Continuing cal 50
V3B3109-MB	3B66586.D	01/26/11	22:24	01:35	Method Blank
V3B3109-BS	3B66587.D	01/26/11	22:55	02:06	Blank Spike
JA66701-2MS	3B66588.D	01/26/11	23:27	02:38	Matrix Spike
JA66701-2MSD	3B66589.D	01/26/11	23:59	03:10	Matrix Spike Duplicate
ZZZZZZ	3B66591.D	01/27/11	01:02	04:13	(unrelated sample)
JA66701-3	3B66592.D	01/27/11	01:34	04:45	FB-012011
JA66701-9	3B66593.D	01/27/11	02:06	05:17	TRIP BLANK
JA66701-2	3B66594.D	01/27/11	02:38	05:49	W-RM-012011-MWCC
JA66701-4	3B66595.D	01/27/11	03:10	06:21	W-RM-012111-MWCE
JA66701-5	3B66596.D	01/27/11	03:42	06:53	W-RM-012111-MWBV
ZZZZZZ	3B66597.D	01/27/11	04:14	07:25	(unrelated sample)
ZZZZZZ	3B66598.D	01/27/11	04:46	07:57	(unrelated sample)
ZZZZZZ	3B66599.D	01/27/11	05:18	08:29	(unrelated sample)
ZZZZZZ	3B66600.D	01/27/11	05:49	09:00	(unrelated sample)
ZZZZZZ	3B66601.D	01/27/11	06:21	09:32	(unrelated sample)
ZZZZZZ	3B66602.D	01/27/11	06:53	10:04	(unrelated sample)
JA66701-7	3B66604.D	01/27/11	07:57	11:08	W-RM-012111-MWAY
JA66701-8	3B66605.D	01/27/11	08:28	11:39	W-RM-012111-MWCF

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3111-BFB	**Injection Date:**	01/28/11
Lab File ID:	3B66629.D	**Injection Time:**	08:08
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	21029	20.8		Pass
75	30.0 - 60.0% of mass 95	49200	48.7		Pass
95	Base peak, 100% relative abundance	100968	100.0		Pass
96	5.0 - 9.0% of mass 95	6836	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	90992	90.1		Pass
175	5.0 - 9.0% of mass 174	6978	6.91	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	88285	87.4	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	6109	6.05	(6.92) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3111-CC3095	3B66631.D	01/28/11	09:28	01:20	Continuing cal 20
V3B3111-MB	3B66632.D	01/28/11	10:17	02:09	Method Blank
V3B3111-BS	3B66633.D	01/28/11	10:55	02:47	Blank Spike
JA66594-12	3B66635.D	01/28/11	12:10	04:02	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66636.D	01/28/11	12:42	04:34	(unrelated sample)
JA66594-12	3B66637.D	01/28/11	13:14	05:06	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66638.D	01/28/11	13:46	05:38	(unrelated sample)
JA66594-12MS	3B66640.D	01/28/11	14:51	06:43	Matrix Spike
JA66594-12MSD	3B66641.D	01/28/11	15:22	07:14	Matrix Spike Duplicate
JA66701-6	3B66643.D	01/28/11	16:25	08:17	W-RM-012111-MWX
JA66701-1	3B66645.D	01/28/11	16:57	08:49	W-RM-012011-MWCD
ZZZZZZ	3B66646.D	01/28/11	17:29	09:21	(unrelated sample)
ZZZZZZ	3B66647.D	01/28/11	18:01	09:53	(unrelated sample)
ZZZZZZ	3B66648.D	01/28/11	18:33	10:25	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3115-BFB	**Injection Date:**	01/31/11
Lab File ID:	3B66718.D	**Injection Time:**	08:23
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20874	18.7		Pass
75	30.0 - 60.0% of mass 95	51306	46.0		Pass
95	Base peak, 100% relative abundance	111610	100.0		Pass
96	5.0 - 9.0% of mass 95	7435	6.66		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	105629	94.6		Pass
175	5.0 - 9.0% of mass 174	8284	7.42	(7.84) [a]	Pass
176	95.0 - 101.0% of mass 174	104181	93.3	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	6928	6.21	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3115-CC3095	3B66720.D	01/31/11	09:36	01:13	Continuing cal 20
V3B3115-MB	3B66721.D	01/31/11	10:16	01:53	Method Blank
V3B3115-BS	3B66722.D	01/31/11	10:54	02:31	Blank Spike
JA66951-1	3B66724.D	01/31/11	12:08	03:45	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66725.D	01/31/11	12:40	04:17	(unrelated sample)
ZZZZZZ	3B66726.D	01/31/11	13:12	04:49	(unrelated sample)
ZZZZZZ	3B66727.D	01/31/11	13:43	05:20	(unrelated sample)
ZZZZZZ	3B66728.D	01/31/11	14:15	05:52	(unrelated sample)
JA66951-1MS	3B66729.D	01/31/11	14:48	06:25	Matrix Spike
JA66951-1MSD	3B66730.D	01/31/11	15:20	06:57	Matrix Spike Duplicate
JA66701-2	3B66732.D	01/31/11	16:24	08:01	W-RM-012011-MWCC
ZZZZZZ	3B66735.D	01/31/11	16:56	08:33	(unrelated sample)
ZZZZZZ	3B66736.D	01/31/11	17:27	09:04	(unrelated sample)
ZZZZZZ	3B66737.D	01/31/11	17:59	09:36	(unrelated sample)
ZZZZZZ	3B66738.D	01/31/11	18:31	10:08	(unrelated sample)
ZZZZZZ	3B66739.D	01/31/11	19:02	10:39	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3109-CC3095	**Injection Date:**	01/26/11
Lab File ID:	3B66584.D	**Injection Time:**	21:20
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	146914	8.23	361642	10.67	515334	11.63	498634	14.96	261376	17.43
Upper Limit [a]	293828	8.73	723284	11.17	1030668	12.13	997268	15.46	522752	17.93
Lower Limit [b]	73457	7.73	180821	10.17	257667	11.13	249317	14.46	130688	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3109-MB	151529	8.24	394908	10.67	532853	11.63	506368	14.96	268779	17.43
V3B3109-BS	127107	8.23	345302	10.67	495687	11.63	483048	14.96	252912	17.43
JA66701-2MS	155669	8.23	364519	10.68	514539	11.63	495584	14.96	258861	17.44
JA66701-2MSD	157143	8.24	370907	10.67	524949	11.63	502316	14.96	262215	17.43
ZZZZZZ	147807	8.23	394142	10.67	531088	11.63	506407	14.96	269845	17.43
JA66701-3	146338	8.23	391374	10.68	529061	11.63	507250	14.96	270459	17.43
JA66701-9	143632	8.23	377791	10.67	511393	11.63	489410	14.96	259464	17.43
JA66701-2 [c]	148631	8.23	372820	10.68	509196	11.63	487645	14.96	260879	17.43
JA66701-4	145865	8.24	380302	10.68	512827	11.63	493434	14.96	265065	17.43
JA66701-5	144422	8.23	362875	10.67	495844	11.63	477919	14.96	253738	17.43
ZZZZZZ	157109	8.23	354351	10.68	485343	11.63	476180	14.96	256325	17.43
ZZZZZZ	153116	8.23	364140	10.68	495233	11.63	482656	14.96	256620	17.44
ZZZZZZ	147044	8.23	363901	10.68	499336	11.63	478187	14.96	255009	17.43
ZZZZZZ	146722	8.23	335213	10.68	471968	11.63	463413	14.96	253503	17.43
ZZZZZZ	163581	8.23	413201	10.67	553726	11.63	535303	14.96	285000	17.43
ZZZZZZ	162325	8.23	421610	10.67	566401	11.63	542997	14.96	288472	17.43
JA66701-7	143468	8.23	413764	10.68	552799	11.63	525165	14.96	283519	17.43
JA66701-8	155421	8.23	402654	10.67	541327	11.63	516673	14.96	276807	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample used for QC purposes only.

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3111-CC3095	**Injection Date:**	01/28/11
Lab File ID:	3B66631.D	**Injection Time:**	09:28
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	145948	8.23	336200	10.67	474902	11.63	460201	14.96	244857	17.43
Upper Limit [a]	291896	8.73	672400	11.17	949804	12.13	920402	15.46	489714	17.93
Lower Limit [b]	72974	7.73	168100	10.17	237451	11.13	230101	14.46	122429	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3111-MB	152359	8.23	372948	10.67	501706	11.63	481698	14.96	257846	17.43
V3B3111-BS	140019	8.24	338795	10.67	485588	11.63	472596	14.96	250577	17.43
JA66594-12	147077	8.23	366053	10.67	494697	11.63	480564	14.96	257053	17.43
ZZZZZZ	135328	8.22	357410	10.67	487121	11.63	467529	14.96	251854	17.43
JA66594-12	131351	8.23	384987	10.67	514978	11.63	492878	14.96	266672	17.43
ZZZZZZ	130822	8.23	373966	10.67	506042	11.63	499493	14.96	265524	17.43
JA66594-12MS	149193	8.23	368866	10.67	523752	11.63	501427	14.96	262274	17.43
JA66594-12MSD	156486	8.24	377809	10.68	527151	11.63	504798	14.96	264925	17.43
JA66701-6	140503	8.23	397385	10.67	532346	11.63	500495	14.96	269011	17.43
JA66701-1	189578	8.23	388490	10.67	520262	11.63	496524	14.96	268340	17.43
ZZZZZZ	150488	8.23	398495	10.68	528466	11.63	505310	14.96	273117	17.43
ZZZZZZ	158383	8.22	387275	10.67	535008	11.63	516483	14.96	275680	17.43
ZZZZZZ	149442	8.23	399262	10.67	537154	11.63	522192	14.96	279744	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3115-CC3095	**Injection Date:**	01/31/11
Lab File ID:	3B66720.D	**Injection Time:**	09:36
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	147537	8.23	352174	10.67	485760	11.63	468034	14.95	248574	17.43
Upper Limit [a]	295074	8.73	704348	11.17	971520	12.13	936068	15.45	497148	17.93
Lower Limit [b]	73769	7.73	176087	10.17	242880	11.13	234017	14.45	124287	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3115-MB	141802	8.23	381051	10.67	509120	11.63	479604	14.95	259275	17.43
V3B3115-BS	132451	8.23	350231	10.66	492433	11.63	473898	14.96	250563	17.43
JA66951-1	139728	8.23	379840	10.67	507034	11.63	489356	14.96	262955	17.43
ZZZZZZ	132386	8.23	372988	10.67	500598	11.63	489418	14.96	263360	17.43
ZZZZZZ	137245	8.23	363326	10.67	491531	11.63	474810	14.96	254410	17.43
ZZZZZZ	153089	8.23	344058	10.67	475796	11.63	462699	14.96	255600	17.43
ZZZZZZ	137568	8.23	404404	10.67	535693	11.63	517288	14.96	279704	17.43
JA66951-1MS	137705	8.23	390541	10.67	539206	11.63	518842	14.96	275936	17.43
JA66951-1MSD	140614	8.23	385782	10.67	533266	11.63	511731	14.96	272204	17.43
JA66701-2	142921	8.23	412037	10.67	545967	11.63	520095	14.96	282519	17.43
ZZZZZZ	234462	8.21	394710	10.67	536460	11.63	521393	14.96	283808	17.43
ZZZZZZ	139189	8.23	397324	10.67	524329	11.63	508594	14.96	279088	17.43
ZZZZZZ	129326	8.23	379835	10.67	505105	11.63	488464	14.96	267649	17.43
ZZZZZZ	147782	8.22	375984	10.67	507701	11.63	495842	14.96	276209	17.43
ZZZZZZ	131316	8.23	420062	10.67	546649	11.63	531099	14.95	289751	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA66701-1	3B66645.D	101.0	96.0	104.0	103.0
JA66701-2	3B66732.D	99.0	87.0	103.0	100.0
JA66701-2	3B66594.D				
JA66701-3	3B66592.D	104.0	99.0	104.0	103.0
JA66701-4	3B66595.D	103.0	100.0	105.0	104.0
JA66701-5	3B66596.D	103.0	101.0	104.0	104.0
JA66701-6	3B66643.D	102.0	95.0	102.0	103.0
JA66701-7	3B66604.D	101.0	94.0	103.0	103.0
JA66701-8	3B66605.D	102.0	96.0	104.0	103.0
JA66701-9	3B66593.D	103.0	99.0	105.0	106.0
JA66594-12MS	3B66640.D	105.0	94.0	102.0	104.0
JA66594-12MSD	3B66641.D	104.0	93.0	103.0	104.0
JA66701-2MS	3B66588.D	106.0	96.0	103.0	105.0
JA66701-2MSD	3B66589.D	105.0	95.0	102.0	105.0
JA66951-1MS	3B66729.D	101.0	86.0	101.0	101.0
JA66951-1MSD	3B66730.D	101.0	85.0	102.0	101.0
V3B3109-BS	3B66587.D	107.0	99.0	104.0	102.0
V3B3109-MB	3B66586.D	103.0	99.0	104.0	105.0
V3B3111-BS	3B66633.D	107.0	99.0	103.0	103.0
V3B3111-MB	3B66632.D	103.0	99.0	105.0	104.0
V3B3115-BS	3B66722.D	102.0	91.0	102.0	101.0
V3B3115-MB	3B66721.D	99.0	91.0	103.0	102.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

Response Factor Report MS3B

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Wed Jan 19 12:43:35 2011
Response via : Initial Calibration

Calibration Files
1 =3b66293.D 2 =3b66294.D 100 =3b66300.D 50 =3b66298.D
20 =3b66297.D 200 =3b66301.D 5 =3b66304.D 10 =3b66296.D
0.5 =3b66292.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	----------ISTD----------										
2) ethanol										0.000#	-1.00
3) tertiary butyl alcohol			1.065	1.003	0.896	1.122	0.968	0.999		1.009	7.74
4) 1,4-dioxane			0.087	0.087	0.080	0.087	0.069	0.082		0.082	8.39
5) I pentafluorobenzene	----------ISTD----------										
6) freon 115										0.000#	-1.00
7) freon 23										0.000#	-1.00
8) freon 143a										0.000#	-1.00
9) freon 152a				0.001						0.001#	0.00
10) chlorotrifluoroethene										0.000#	-1.00
11) chlorodifluoromethane	0.375	0.359	0.440	0.470	0.432	0.460	0.403	0.424	0.362	0.414	10.01
12) dichlorodifluoromethane	0.428	0.527	0.630	0.658	0.679	0.636	0.645	0.586		0.599	13.98
13) freon 114										0.000#	-1.00
14) freon 142b										0.000#	-1.00
15) chloromethane	0.709	0.789	0.835	0.891	0.912	0.821	0.913	0.823	1.034	0.859	10.76
16) vinyl chloride	0.510	0.626	0.689	0.716	0.727	0.688	0.746	0.661	0.633	0.666	10.70
17) acetaldehyde										0.000#	-1.00
18) bromomethane	0.314	0.362	0.349	0.350	0.377	0.354	0.422	0.348	0.438	0.368	10.54
19) chloroethane	0.225	0.298	0.339	0.342	0.355	0.338	0.370	0.330		0.325	13.89
20) vinyl bromide	0.283	0.348	0.366	0.371	0.378	0.375	0.360	0.373		0.357	8.80
21) trichlorofluoromethane	0.443	0.566	0.655	0.666	0.700	0.663	0.714	0.626		0.629	14.00
22) PENTANE	0.708	0.582	0.617	0.675	0.643	0.620	0.625	0.677	0.399	0.616	14.57
23) ethyl ether											

	0.254	0.230	0.256	0.266	0.271	0.263	0.251	0.227	0.181	0.244	11.52
24)	freon 123											
										0.000#	-1.00
25)	freon 141b											
										0.000#	-1.00
26)	freon 123a											
										0.000#	-1.00
27)	acrolein											
	0.114	0.109		0.119	0.121		0.106	0.108		0.113	5.38
28)	1,1-dichloroethene											
	0.450	0.389	0.384	0.403	0.426	0.397	0.409	0.342	0.355	0.395	8.41
29)	acetone											
			0.209	0.224	0.318	0.191	0.308	0.234		0.247	21.42
	----- Linear regression ----- Coefficient = 0.9960											
	Response Ratio = 0.02886 + 0.18683 *A											
30)	allyl chloride											
	0.296	0.240	0.277	0.276	0.282	0.285	0.276	0.239		0.271	7.64
31)	acetonitrile											
			0.047	0.048	0.041	0.048	0.035	0.036		0.042	13.78
32)	iodomethane											
	0.774	0.649	0.706	0.726	0.741	0.737	0.685	0.602	0.604	0.691	8.89
33)	iso-butyl alcohol											
	0.012	0.012	0.014	0.015	0.015	0.014	0.015	0.014		0.014	8.07
34)	carbon disulfide											
	1.670	1.444	1.367	1.479	1.532	1.388	1.437	1.253	1.399	1.441	8.04
35)	methylene chloride											
	0.504	0.430	0.460	0.482	0.497	0.480	0.470	0.418	0.390	0.459	8.37
36)	methyl acetate											
			0.075	0.079	0.073	0.079	0.060	0.072		0.073	9.67
37)	methyl tert butyl ether											
	1.560	1.315	1.346	1.438	1.464	1.360	1.395	1.268	1.423	1.397	6.24
38)	trans-1,2-dichloroethene											
	0.495	0.426	0.398	0.430	0.443	0.410	0.426	0.364	0.416	0.423	8.36
39)	di-isopropyl ether											
	1.481	1.379	1.618	1.736	1.684	1.642	1.653	1.766		1.620	8.01
40)	2-butanone											
			0.070	0.073	0.085	0.070	0.080	0.067		0.074	9.38
41)	1,1-dichloroethane											
	0.971	0.834	0.776	0.846	0.886	0.793	0.844	0.731	0.822	0.834	8.22
42)	chloroprene											
	0.600	0.526	0.667	0.708	0.664	0.697	0.638	0.682		0.648	9.23
43)	acrylonitrile											
	0.205	0.180	0.196	0.215	0.219	0.197	0.197	0.196		0.200	6.12
44)	vinyl acetate											
			0.078	0.083	0.076	0.083	0.058	0.071		0.075	12.65
45)	ethyl tert-butyl ether											
	1.381	1.257	1.534	1.616	1.552	1.591	1.514	1.624		1.509	8.45
46)	ethyl acetate											
		0.069	0.074	0.080	0.078	0.076	0.069	0.081		0.075	6.53
47)	2,2-dichloropropane											
	0.787	0.652	0.585	0.652	0.673	0.583	0.638	0.566	0.645	0.643	10.26
48)	cis-1,2-dichloroethene											
	0.571	0.467	0.459	0.488	0.509	0.469	0.482	0.421	0.444	0.479	8.98
49)	propionitrile											
	0.074	0.069	0.075	0.082	0.085	0.077	0.075	0.075	0.075	0.076	6.18
50)	methylacrylate											
	0.498	0.462	0.561	0.610	0.627	0.575	0.537	0.527		0.550	10.08
51)	bromochloromethane											
	0.230	0.208	0.225	0.235	0.238	0.231	0.227	0.204	0.177	0.219	9.01

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

52)	tetrahydrofuran											
		0.231	0.186	0.178	0.199	0.209	0.181	0.191	0.190	0.222	0.199	9.37
53)	chloroform											
		0.898	0.745	0.745	0.801	0.825	0.763	0.783	0.694	0.797	0.784	7.37
54)	t-butyl formate											
		0.404	0.397	0.483	0.516	0.501	0.498	0.470	0.517		0.473	10.03
55)	dibromofluoromethane (s)											
		0.344	0.406	0.384	0.395	0.409	0.414	0.384	0.397	0.426	0.395	6.03
56)	1,2-dichloroethane-d4 (s)											
		0.508	0.552	0.479	0.514	0.537	0.497	0.502	0.541	0.538	0.518	4.69
57)	freon 113											
			0.195	0.291	0.298	0.278	0.305	0.278	0.288		0.276	13.53
58)	methacrylonitrile											
		0.342	0.312	0.339	0.369	0.368	0.350	0.329	0.319	0.354	0.342	5.82
59)	1,1,1-trichloroethane											
		0.697	0.590	0.617	0.656	0.660	0.633	0.605	0.536	0.552	0.616	8.46
60)	Cyclohexane											
		0.755	0.642	0.617	0.665	0.680	0.635	0.626	0.550	0.487	0.629	12.17
61)	tert amyl alcohol											
			0.043	0.059	0.060	0.057	0.061	0.051	0.059		0.056	11.32
62)	iso-octane											
		1.555	1.308	1.554	1.694	1.533	1.590	1.556	1.587		1.547	7.01
63)	I 1,4-difluorobenzene	----------ISTD----------										
64)	tert-amyl ethyl ether											
		0.698	0.800	0.804	0.858	0.878	0.796	0.838	0.848	0.626	0.794	10.29
65)	epichlorohydrin											
		0.028	0.029	0.038	0.040	0.038	0.040	0.037	0.040		0.036	13.20
66)	n-butyl alcohol											
		0.008	0.007	0.009	0.010	0.009	0.010	0.009	0.009		0.009#	12.71
67)	carbon tetrachloride											
		0.455	0.387	0.374	0.398	0.408	0.380	0.389	0.338	0.354	0.387	8.64
68)	1,1-dichloropropene											
		0.491	0.412	0.396	0.426	0.439	0.404	0.418	0.355	0.367	0.412	9.71
69)	hexane											
		0.350	0.299	0.350	0.383	0.352	0.356	0.354	0.360		0.351	6.66
70)	benzene											
		1.483	1.246	1.124	1.210	1.270	1.133	1.245	1.065	1.260	1.226	9.77
71)	tert-amyl methyl ether											
		0.891	0.843	0.894	0.949	0.928	0.916	0.968	0.992	0.736	0.902	8.48
72)	heptane											
		0.212	0.178	0.211	0.230	0.207	0.214	0.214	0.215		0.210	6.92
73)	isopropyl acetate											
		0.533	0.544	0.685	0.719	0.684	0.687	0.653	0.696		0.650	10.97
74)	1,2-dichloroethane											
		0.477	0.417	0.383	0.422	0.442	0.385	0.422	0.392	0.420	0.418	7.12
75)	ethyl acrylate											
			0.388	0.454	0.475	0.475	0.455	0.429	0.458		0.448	6.86
76)	trichloroethene											
		0.348	0.306	0.301	0.319	0.324	0.307	0.313	0.266	0.281	0.307	7.75
77)	2-nitropropane											
				0.007	0.008	0.007	0.007		0.005		0.007#	13.69
78)	2-chloroethyl vinyl ether											
		0.189	0.183	0.220	0.236	0.228	0.222	0.228	0.243	0.172	0.214	11.93
79)	methyl methacrylate											
		0.222	0.201	0.229	0.242	0.249	0.237	0.223	0.217	0.210	0.226	6.87
80)	1,2-dichloropropane											
		0.391	0.330	0.318	0.345	0.359	0.323	0.341	0.302	0.351	0.340	7.69
81)	dibromomethane											
		0.217	0.191	0.197	0.209	0.215	0.202	0.199	0.183	0.206	0.202	5.51

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82)	methylcyclohexane											
	0.461	0.387	0.459	0.493	0.459	0.470	0.470	0.475			0.459	6.80
83)	bromodichloromethane											
	0.482	0.405	0.425	0.454	0.455	0.434	0.433	0.383	0.464		0.437	6.98
84)	cis-1,3-dichloropropene											
	0.608	0.531	0.537	0.576	0.580	0.549	0.547	0.494	0.598		0.558	6.46
85)	toluene-d8 (s)											
	1.121	1.195	1.005	1.062	1.091	1.036	1.093	1.106	1.367		1.119	9.58
86)	4-methyl-2-pentanone											
	0.134	0.130	0.142	0.149	0.153	0.146	0.150	0.133	0.135		0.141	6.04
87)	toluene											
	0.887	0.756	0.720	0.771	0.777	0.730	0.781	0.659	0.813		0.766	8.27
88)	3-methyl-1-butanol											
	0.013	0.010	0.014	0.015	0.014	0.015	0.014	0.015	0.012		0.014	11.47
89)	trans-1,3-dichloropropene											
	0.563	0.506	0.491	0.527	0.531	0.494	0.520	0.471	0.581		0.520	6.69
90)	ethyl methacrylate											
	0.415	0.382	0.435	0.459	0.449	0.445	0.419	0.390			0.424	6.53
91)	1,1,2-trichloroethane											
	0.267	0.251	0.249	0.265	0.264	0.253	0.258	0.233	0.285		0.259	5.64
92)	2-hexanone											
	0.159	0.180	0.138	0.147	0.176	0.138	0.181	0.141	0.137		0.155	12.39
93)	I chlorobenzene-d5	----------ISTD----------										
94)	tetrachloroethene											
	0.325	0.276	0.263	0.278	0.296	0.269	0.317	0.236	0.253		0.279	10.39
95)	3,3-dimethyl-1-butanol											
	0.030	0.024	0.034	0.033	0.032	0.037	0.030	0.033	0.034		0.032	11.16
96)	1,3-dichloropropane											
	0.568	0.512	0.477	0.514	0.541	0.479	0.535	0.474	0.614		0.524	8.90
97)	butyl acetate											
	0.209	0.187	0.229	0.238	0.233	0.239	0.235	0.253			0.228	9.04
98)	dibromochloromethane											
	0.381	0.334	0.347	0.364	0.364	0.357	0.349	0.314	0.447		0.362	10.34
99)	1,2-dibromoethane											
	0.323	0.306	0.317	0.332	0.337	0.323	0.326	0.292	0.352		0.323	5.39
100)	n-butyl ether											
											0.000#	-1.00
101)	chlorobenzene											
	0.949	0.814	0.819	0.854	0.872	0.844	0.832	0.729	0.968		0.853	8.42
102)	1,1,1,2-tetrachloroethane											
	0.355	0.310	0.305	0.320	0.333	0.317	0.323	0.277	0.365		0.323	8.19
103)	ethylbenzene											
	1.752	1.501	1.388	1.491	1.554	1.393	1.514	1.292	1.665		1.505	9.41
104)	m,p-xylene											
	0.660	0.568	0.535	0.566	0.592	0.550	0.580	0.500	0.610		0.573	7.97
105)	o-xylene											
	0.672	0.576	0.567	0.603	0.620	0.582	0.596	0.513	0.656		0.598	8.01
106)	butyl acrylate											
											0.000#	-1.00
107)	styrene											
	1.052	0.907	0.943	0.999	1.026	0.951	0.980	0.869	1.151		0.986	8.51
108)	bromoform											
	0.276	0.246	0.273	0.282	0.281	0.283	0.268	0.239	0.337		0.276	10.06
109)	I 1,4-dichlorobenzene-d	----------ISTD----------										
110)	isopropylbenzene											
	3.417	2.923	2.794	2.991	3.070	2.815	2.992	2.572	3.378		2.995	9.05
111)	4-bromofluorobenzene (s)											
	0.904	0.987	0.779	0.818	0.846	0.834	0.861	0.887			0.865	7.29

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

112)	cyclohexanone										
		0.061	0.054	0.055	0.061	0.049	0.058	0.057		0.056	7.63
113)	bromobenzene										
		0.847	0.747	0.715	0.752	0.772	0.747	0.801	0.669	0.781	11.58
114)	1,1,2,2-tetrachloroethane										
		0.971	0.873	0.818	0.876	0.883	0.839	0.884	0.792	0.867	6.18
115)	trans-1,4-dichloro-2-butene										
		0.233	0.245	0.239	0.262	0.260	0.245	0.259	0.237	0.247	4.56
116)	1,2,3-trichloropropane										
		0.218	0.219	0.206	0.220	0.226	0.210	0.220	0.201	0.215	3.90
117)	n-propylbenzene										
		4.079	3.494	3.206	3.489	3.599	3.194	3.540	3.041	3.992	3.515	9.95
118)	4-ETHYLTOLUENE										
		2.434	2.846	2.768	2.914	2.988	2.763	2.934	2.892	2.225	2.752	9.29
119)	2-chlorotoluene										
		0.804	0.658	0.649	0.682	0.704	0.685	0.697	0.599	0.796	0.697	9.50
120)	4-chlorotoluene										
		2.568	2.166	2.087	2.216	2.244	2.147	2.223	1.889	2.707	2.250	10.96
121)	1,3,5-trimethylbenzene										
		2.774	2.424	2.269	2.407	2.467	2.356	2.429	2.078	2.703	2.434	8.60
122)	tert-butylbenzene										
		2.381	2.097	2.138	2.268	2.302	2.162	2.147	1.857	2.390	2.194	7.56
123)	pentachloroethane										
		0.503	0.448	0.490	0.512	0.500	0.507	0.426	0.426	0.607	0.491	11.30
124)	1,2,4-trimethylbenzene										
		2.819	2.470	2.407	2.570	2.633	2.432	2.570	2.208	2.824	2.548	7.76
125)	sec-butylbenzene										
		3.698	3.169	3.178	3.385	3.425	3.182	3.272	2.795	3.485	3.288	7.72
126)	1,3-dichlorobenzene										
		1.669	1.455	1.427	1.496	1.511	1.465	1.505	1.299	1.803	1.515	9.56
127)	p-isopropyltoluene										
		2.956	2.570	2.616	2.795	2.811	2.616	2.665	2.310	2.836	2.686	7.07
128)	1,4-dichlorobenzene										
		1.628	1.418	1.439	1.497	1.503	1.484	1.451	1.253	1.754	1.492	9.31
129)	benzyl chloride										
		1.825	1.462	1.753	1.854	1.752	1.783	1.750	1.821	1.941	1.771	7.42
130)	1,2-dichlorobenzene										
		1.588	1.419	1.438	1.507	1.536	1.461	1.498	1.285	1.886	1.513	10.83
131)	1,4-DIETHYLBENZENE										
		1.324	1.575	1.640	1.705	1.732	1.628	1.624	1.632	1.197	1.562	11.51
132)	n-butylbenzene										
		1.591	1.405	1.429	1.525	1.553	1.435	1.462	1.259	1.556	1.468	6.95
133)	1,2,4,5-TETRAMETHYLBENZENE										
		2.024	2.334	2.624	2.788	2.808	2.507	2.557	2.617		2.532	10.08
134)	1,2-dibromo-3-chloropropane										
		0.160	0.168	0.174	0.181	0.177	0.173	0.172	0.154		0.170	5.29
135)	1,3,5-trichlorobenzene										
		1.284	1.179	1.257	1.357	1.351	1.234	1.266	1.083	1.375	1.265	7.38
136)	1,2,4-trichlorobenzene										
		1.117	0.964	1.152	1.247	1.225	1.130	1.119	0.972	1.193	1.124	8.88
137)	hexachlorobutadiene										
		0.643	0.571	0.587	0.647	0.638	0.585	0.628	0.508	0.683	0.610	8.62
138)	naphthalene										
		2.288	2.025	2.558	2.741	2.686	2.486	2.463	2.200		2.431	10.07
139)	1,2,3-trichlorobenzene										
		0.982	0.841	1.016	1.112	1.090	1.013	1.008	0.885	1.180	1.014	10.49
140)	hexachloroethane										
		0.495	0.437	0.532	0.553	0.539	0.544	0.479	0.416	0.461	0.495	10.10

(#) = Out of Range ### Number of calibration levels exceeded format ###

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

M3B3095.M Thu Jan 20 12:01:52 2011 MS3B

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\2095initial\3b66304a.D Vial: 15
Acq On : 18 Jan 2011 7:42 pm Operator: tarar1
Sample : icv3095-50 Inst : MS3B
Misc : ms5942,v3b3095,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Wed Jan 19 12:43:35 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	86	0.00	8.25
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.148	-13.8	98	0.00	8.37
4		1,4-dioxane	0.082	0.091	-11.0	89	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.68
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.408	1.4	91	0.00	4.30
12		dichlorodifluoromethane	0.599	0.650	-8.5	103	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.884	-2.9	104	0.00	4.69
16		vinyl chloride	0.666	0.722	-8.4	105	0.00	4.99
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.386	-4.9	115	0.00	5.74
19		chloroethane	0.325	0.357	-9.8	109	0.01	5.95
20		vinyl bromide	0.357	0.367	-2.8	104	0.00	6.36
21		trichlorofluoromethane	0.629	0.690	-9.7	108	0.00	6.51
22		PENTANE	0.616	0.513	16.7	80	0.00	6.57
23		ethyl ether	0.244	0.275	-12.7	108	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.119	-5.3	105	0.00	7.25
28		1,1-dichloroethene	0.395	0.406	-2.8	105	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	50.000	51.772	-3.5	104	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.284	-4.8	107	0.00	8.05
31		acetonitrile	0.042	0.041	2.4	91	0.00	8.04
32		iodomethane	0.691	0.744	-7.7	107	0.00	7.77
33		iso-butyl alcohol	0.014	0.015	-7.1	106	0.00	11.25
34		carbon disulfide	1.441	1.544	-7.1	109	-0.02	7.91
35		methylene chloride	0.459	0.478	-4.1	104	0.00	8.28
36		methyl acetate	0.073	0.080	-9.6	105	0.00	8.04
37		methyl tert butyl ether	1.397	1.391	0.5	101	0.00	8.64

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

38		trans-1,2-dichloroethene	0.423	0.378	10.6	92	0.00	8.69
39		di-isopropyl ether	1.620	1.739	-7.3	105	0.00	9.29
40		2-butanone	0.074	0.070	5.4	100	0.00	10.08
41		1,1-dichloroethane	0.834	0.861	-3.2	106	0.00	9.33
42		chloroprene	0.648	0.664	-2.5	98	0.00	9.44
43		acrylonitrile	0.200	0.211	-5.5	103	0.00	8.65
44		vinyl acetate	0.075	0.087	-16.0	110	0.00	9.31
45		ethyl tert-butyl ether	1.509	1.587	-5.2	103	0.00	9.80
46		ethyl acetate	0.075	0.077	-2.7	101	0.00	10.11
47		2,2-dichloropropane	0.643	0.641	0.3	103	0.00	10.13
48		cis-1,2-dichloroethene	0.479	0.549	-14.6	118	0.00	10.13
49		propionitrile	0.076	0.081	-6.6	103	0.00	10.20
50		methylacrylate	0.550	0.604	-9.8	103	0.00	10.19
51		bromochloromethane	0.219	0.240	-9.6	107	0.00	10.46
52		tetrahydrofuran	0.199	0.194	2.5	102	0.00	10.50
53		chloroform	0.784	0.817	-4.2	107	0.00	10.52
54		t-butyl formate	0.473	0.519	-9.7	105	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.407	-3.0	108	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.518	0.0	105	0.00	11.17
57		freon 113	0.276	0.290	-5.1	101	0.00	7.43
58		methacrylonitrile	0.342	0.368	-7.6	104	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.663	-7.6	106	0.00	10.78
60		Cyclohexane	0.629	0.659	-4.8	104	0.00	10.86
61		tert amyl alcohol	0.056	0.048	14.3	83	0.00	11.12
62		iso-octane	1.547	1.567	-1.3	97	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.821	-3.4	99	0.00	12.14
65		epichlorohydrin	0.036	0.038	-5.6	98	0.00	12.95
66		n-butyl alcohol	0.009	0.009#	0.0	94	0.00	11.77
67		carbon tetrachloride	0.387	0.398	-2.8	104	0.00	10.99
68		1,1-dichloropropene	0.412	0.428	-3.9	104	0.00	10.97
69		hexane	0.351	0.339	3.4	92	0.00	9.02
70		benzene	1.226	1.223	0.2	105	0.00	11.25
71		tert-amyl methyl ether	0.902	0.942	-4.4	103	0.00	11.27
72		heptane	0.210	0.218	-3.8	99	0.00	11.41
73		isopropyl acetate	0.650	0.756	-16.3	109	0.00	11.16
74		1,2-dichloroethane	0.418	0.427	-2.2	105	0.00	11.27
75		ethyl acrylate	0.448	0.460	-2.7	101	0.00	11.98
76		trichloroethene	0.307	0.325	-5.9	106	0.00	11.99
77		2-nitropropane	0.007	0.008#	-14.3	102	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.225	-5.1	99	0.00	12.81
79		methyl methacrylate	0.226	0.238	-5.3	102	0.00	12.26
80		1,2-dichloropropane	0.340	0.348	-2.4	105	0.00	12.27
81		dibromomethane	0.202	0.211	-4.5	104	0.00	12.43
82		methylcyclohexane	0.459	0.471	-2.6	99	0.00	12.21
83		bromodichloromethane	0.437	0.463	-5.9	106	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.569	-2.0	103	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.068	4.6	104	0.00	13.35
86		4-methyl-2-pentanone	0.141	0.154	-9.2	107	0.00	13.14
87		toluene	0.766	0.771	-0.7	104	0.00	13.43
88		3-methyl-1-butanol	0.014	0.014	0.0	99	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.517	0.6	102	0.00	13.64
90		ethyl methacrylate	0.424	0.460	-8.5	104	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.265	-2.3	104	0.00	13.87
92		2-hexanone	0.155	0.145	6.5	102	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.96
94		tetrachloroethene	0.279	0.287	-2.9	106	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.032	0.0	99	0.00	14.23

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

96	1,3-dichloropropane	0.524	0.516	1.5	103	0.00	14.06
97	butyl acetate	0.228	0.238	-4.4	103	0.00	14.11
98	dibromochloromethane	0.362	0.361	0.3	102	0.00	14.35
99	1,2-dibromoethane	0.323	0.335	-3.7	103	0.00	14.51
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.880	-3.2	106	0.00	15.00
102	1,1,1,2-tetrachloroethane	0.323	0.335	-3.7	107	0.00	15.06
103	ethylbenzene	1.505	1.502	0.2	103	0.00	15.04
104	m,p-xylene	0.573	0.579	-1.0	105	0.00	15.15
105	o-xylene	0.598	0.628	-5.0	107	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	0.983	0.3	101	0.00	15.61
108	bromoform	0.276	0.286	-3.6	104	0.00	15.92
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	17.44
110	isopropylbenzene	2.995	3.083	-2.9	106	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.831	3.9	104	0.00	16.19
112	cyclohexanone	0.056	0.045	19.6	84	0.00	16.16
113	bromobenzene	0.781	0.762	2.4	104	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.886	-2.2	104	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.271	-9.7	106	0.00	16.34
116	1,2,3-trichloropropane	0.215	0.224	-4.2	104	0.00	16.38
117	n-propylbenzene	3.515	3.395	3.4	100	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.908	-5.7	102	0.00	16.50
119	2-chlorotoluene	0.697	0.708	-1.6	106	0.00	16.56
120	4-chlorotoluene	2.250	2.188	2.8	101	0.00	16.67
121	1,3,5-trimethylbenzene	2.434	2.463	-1.2	105	0.00	16.55
122	tert-butylbenzene	2.194	2.306	-5.1	104	0.00	16.93
123	pentachloroethane	0.491	0.526	-7.1	105	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.591	-1.7	103	0.00	16.97
125	sec-butylbenzene	3.288	3.377	-2.7	102	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.554	-2.6	106	0.00	17.38
127	p-isopropyltoluene	2.686	2.889	-7.6	106	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.537	-3.0	105	0.00	17.46
129	benzyl chloride	1.771	1.791	-1.1	99	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.561	-3.2	106	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.708	-9.3	103	0.00	17.69
132	n-butylbenzene	1.468	1.545	-5.2	104	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.771	-9.4	102	0.00	18.55
134	1,2-dibromo-3-chloropropa	0.170	0.187	-10.0	106	0.00	18.74
135	1,3,5-trichlorobenzene	1.265	1.324	-4.7	100	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.228	-9.3	101	0.00	19.63
137	hexachlorobutadiene	0.610	0.616	-1.0	98	0.00	19.73
138	naphthalene	2.431	2.668	-9.7	100	0.00	19.94
139	1,2,3-trichlorobenzene	1.014	1.094	-7.9	101	0.00	20.21
140	hexachloroethane	0.495	0.578	-16.8	107	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66298.D M3B3095.M Wed Jan 19 12:55:48 2011 MS3B

SII-SSA-0014-004798

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\3b66584.D Vial: 22
Acq On : 26 Jan 2011 9:20 pm Operator: tarar1
Sample : cc3095-50 Inst : MS3B
Misc : ms7552,v3b3109,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	105	-0.01	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.049	-4.0	110	0.00	8.37
4		1,4-dioxane	0.082	0.095	-15.9	114	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	121	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a	0.001	0.001#	0.0	144	-0.01	4.11
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.425	-2.7	110	0.02	4.32
12		dichlorodifluoromethane	0.599	0.569	5.0	105	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.770	10.4	105	0.00	4.69
16		vinyl chloride	0.666	0.654	1.8	111	0.00	5.00
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.377	-2.4	130	0.01	5.75
19		chloroethane	0.325	0.338	-4.0	120	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.649	-3.2	118	0.00	6.51
22		PENTANE	0.616	0.729	-18.3	131	0.00	6.57
23		ethyl ether	0.244	0.268	-9.8	122	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.096	15.0	98	0.00	7.25
28		1,1-dichloroethene	0.395	0.420	-6.3	126	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	50.000	60.664	-21.3#	138	0.00	7.51
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.273	-0.7	120	0.00	8.05
31		acetonitrile	0.042	0.040	4.8	101	-0.01	8.03
32		iodomethane	0.691	0.783	-13.3	131	0.00	7.77
33		iso-butyl alcohol	0.014	0.014	0.0	114	0.00	11.25
34		carbon disulfide	1.441	1.556	-8.0	127	-0.02	7.91
35		methylene chloride	0.459	0.490	-6.8	123	0.00	8.28
36		methyl acetate	0.073	0.072	1.4	110	0.00	8.04
37		methyl tert butyl ether	1.397	1.378	1.4	116	0.00	8.64

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

38		trans-1,2-dichloroethene	0.423	0.433	-2.4	122	0.00	8.69
39		di-isopropyl ether	1.620	1.508	6.9	105	0.00	9.29
40		2-butanone	0.074	0.080	-8.1	133	0.00	10.08
41		1,1-dichloroethane	0.834	0.822	1.4	118	0.00	9.32
42		chloroprene	0.648	0.633	2.3	108	0.00	9.44
43		acrylonitrile	0.200	0.192	4.0	109	0.00	8.65
44		vinyl acetate	0.075	0.071	5.3	104	0.00	9.30
45		ethyl tert-butyl ether	1.509	1.435	4.9	108	0.00	9.80
46		ethyl acetate	0.075	0.067	10.7	101	0.00	10.11
47		2,2-dichloropropane	0.643	0.597	7.2	111	0.00	10.13
48		cis-1,2-dichloroethene	0.479	0.494	-3.1	123	0.00	10.12
49		propionitrile	0.076	0.073	3.9	108	0.00	10.20
50		methylacrylate	0.550	0.549	0.2	109	0.00	10.19
51		bromochloromethane	0.219	0.243	-11.0	125	0.00	10.46
52		tetrahydrofuran	0.199	0.172	13.6	105	0.00	10.50
53		chloroform	0.784	0.780	0.5	118	0.00	10.52
54		t-butyl formate	0.473	0.431	8.9	101	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.419	-6.1	128	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.505	2.5	119	0.00	11.17
57		freon 113	0.276	0.296	-7.2	120	0.00	7.43
58		methacrylonitrile	0.342	0.324	5.3	107	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.652	-5.8	120	0.00	10.78
60		Cyclohexane	0.629	0.662	-5.2	121	0.00	10.85
61		tert amyl alcohol	0.056	0.053	5.4	106	0.00	11.12
62		iso-octane	1.547	1.472	4.8	105	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	117	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.794	0.0	109	0.00	12.15
65		epichlorohydrin	0.036	0.034	5.6	101	0.00	12.95
66		n-butyl alcohol	0.009	0.009#	0.0	110	0.00	11.77
67		carbon tetrachloride	0.387	0.408	-5.4	120	0.00	10.99
68		1,1-dichloropropene	0.412	0.428	-3.9	118	0.00	10.96
69		hexane	0.351	0.379	-8.0	116	0.00	9.02
70		benzene	1.226	1.223	0.2	119	0.00	11.24
71		tert-amyl methyl ether	0.902	0.870	3.5	108	0.00	11.27
72		heptane	0.210	0.206	1.9	106	0.00	11.41
73		isopropyl acetate	0.650	0.630	3.1	103	0.00	11.16
74		1,2-dichloroethane	0.418	0.403	3.6	112	0.00	11.27
75		ethyl acrylate	0.448	0.435	2.9	107	0.00	11.98
76		trichloroethene	0.307	0.328	-6.8	121	0.00	11.99
77		2-nitropropane	0.007	0.007#	0.0	100	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.211	1.4	105	0.00	12.81
79		methyl methacrylate	0.226	0.236	-4.4	115	0.00	12.26
80		1,2-dichloropropane	0.340	0.335	1.5	114	0.00	12.27
81		dibromomethane	0.202	0.208	-3.0	117	0.00	12.43
82		methylcyclohexane	0.459	0.469	-2.2	112	0.00	12.21
83		bromodichloromethane	0.437	0.446	-2.1	115	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.558	0.0	114	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.155	-3.2	128	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.140	0.7	110	0.00	13.14
87		toluene	0.766	0.777	-1.4	118	0.00	13.42
88		3-methyl-1-butanol	0.014	0.014	0.0	109	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.505	2.9	112	0.00	13.64
90		ethyl methacrylate	0.424	0.441	-4.0	113	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.262	-1.2	116	0.00	13.87
92		2-hexanone	0.155	0.157	-1.3	126	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	14.96
94		tetrachloroethene	0.279	0.309	-10.8	129	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.031	3.1	108	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

96	1,3-dichloropropane	0.524	0.510	2.7	115	0.00	14.06
97	butyl acetate	0.228	0.220	3.5	107	0.00	14.11
98	dibromochloromethane	0.362	0.376	-3.9	119	0.00	14.35
99	1,2-dibromoethane	0.323	0.337	-4.3	118	0.00	14.50
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.878	-2.9	119	0.00	14.99
102	1,1,1,2-tetrachloroethane	0.323	0.331	-2.5	120	0.00	15.05
103	ethylbenzene	1.505	1.506	-0.1	117	0.00	15.04
104	m,p-xylene	0.573	0.583	-1.7	119	0.00	15.15
105	o-xylene	0.598	0.614	-2.7	118	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	1.016	-3.0	118	0.00	15.61
108	bromoform	0.276	0.292	-5.8	120	0.00	15.91
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	117	0.00	17.43
110	isopropylbenzene	2.995	2.994	0.0	117	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.869	-0.5	124	0.00	16.19
112	cyclohexanone	0.056	0.066	-17.9	138	0.00	16.16
113	bromobenzene	0.781	0.785	-0.5	122	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.850	2.0	113	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.212	14.2	95	0.00	16.34
116	1,2,3-trichloropropane	0.215	0.216	-0.5	114	0.00	16.38
117	n-propylbenzene	3.515	3.432	2.4	115	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.776	-0.9	111	0.00	16.50
119	2-chlorotoluene	0.697	0.691	0.9	118	0.00	16.56
120	4-chlorotoluene	2.250	2.194	2.5	115	0.00	16.66
121	1,3,5-trimethylbenzene	2.434	2.371	2.6	115	0.00	16.55
122	tert-butylbenzene	2.194	2.279	-3.9	117	0.00	16.93
123	pentachloroethane	0.491	0.503	-2.4	115	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.562	-0.5	116	0.00	16.97
125	sec-butylbenzene	3.288	3.358	-2.1	116	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.539	-1.6	120	0.00	17.38
127	p-isopropyltoluene	2.686	2.771	-3.2	116	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.524	-2.1	119	0.00	17.46
129	benzyl chloride	1.771	1.614	8.9	101	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.551	-2.5	120	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.609	-3.0	110	0.00	17.69
132	n-butylbenzene	1.468	1.484	-1.1	113	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.605	-2.9	109	0.00	18.54
134	1,2-dibromo-3-chloropropa	0.170	0.165	2.9	106	0.00	18.74
135	1,3,5-trichlorobenzene	1.265	1.367	-8.1	117	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.236	-10.0	115	0.00	19.62
137	hexachlorobutadiene	0.610	0.636	-4.3	115	0.00	19.73
138	naphthalene	2.431	2.582	-6.2	110	0.00	19.93
139	1,2,3-trichlorobenzene	1.014	1.079	-6.4	113	0.00	20.20
140	hexachloroethane	0.495	0.555	-12.1	117	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66298.D M3B3095.M Thu Jan 27 17:45:03 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\3b66631.D Vial: 3
Acq On : 28 Jan 2011 9:28 am Operator: tarar1
Sample : cc3095-20 Inst : MS3B
Misc : ms7528,v3b3111,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	-0.01	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.165	-15.5	129	-0.01	8.36
4		1,4-dioxane	0.082	0.096	-17.1	119	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	114	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.505	-22.0#	133	0.01	4.31
12		dichlorodifluoromethane	0.599	0.581	3.0	98	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.814	5.2	102	-0.01	4.68
16		vinyl chloride	0.666	0.681	-2.3	107	0.00	4.98
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.375	-1.9	113	0.00	5.74
19		chloroethane	0.325	0.339	-4.3	109	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.652	-3.7	106	0.00	6.51
22		PENTANE	0.616	0.868	-40.9#	154	0.01	6.57
23		ethyl ether	0.244	0.261	-7.0	110	0.00	6.96
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.107	5.3	101	0.00	7.25
28		1,1-dichloroethene	0.395	0.417	-5.6	112	-0.02	7.44
		----------	True	Calc.	% Drift	----------		
29		acetone	20.000	24.315	-21.6#	107	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.273	-0.7	110	0.00	8.05
31		acetonitrile	0.042	0.041	2.4	114	-0.02	8.02
32		iodomethane	0.691	0.745	-7.8	115	0.00	7.77
33		iso-butyl alcohol	0.014	0.014	0.0	110	0.00	11.25
34		carbon disulfide	1.441	1.541	-6.9	115	0.00	7.92
35		methylene chloride	0.459	0.467	-1.7	107	0.00	8.28
36		methyl acetate	0.073	0.075	-2.7	117	0.00	8.04
37		methyl tert butyl ether	1.397	1.378	1.4	107	0.00	8.63

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

38		trans-1,2-dichloroethene	0.423	0.421	0.5	109	0.00	8.69
39		di-isopropyl ether	1.620	1.718	-6.0	116	0.00	9.29
40		2-butanone	0.074	0.084	-13.5	112	0.00	10.08
41		1,1-dichloroethane	0.834	0.818	1.9	105	0.00	9.32
42		chloroprene	0.648	0.691	-6.6	119	0.00	9.44
43		acrylonitrile	0.200	0.194	3.0	101	0.00	8.65
44		vinyl acetate	0.075	0.073	2.7	110	0.00	9.32
45		ethyl tert-butyl ether	1.509	1.593	-5.6	117	0.00	9.80
46		ethyl acetate	0.075	0.075	0.0	109	0.00	10.11
47		2,2-dichloropropane	0.643	0.671	-4.4	114	0.00	10.12
48		cis-1,2-dichloroethene	0.479	0.476	0.6	107	0.00	10.12
49		propionitrile	0.076	0.073	3.9	97	0.00	10.19
50		methylacrylate	0.550	0.534	2.9	97	0.00	10.19
51		bromochloromethane	0.219	0.231	-5.5	111	0.00	10.46
52		tetrahydrofuran	0.199	0.182	8.5	99	0.00	10.50
53		chloroform	0.784	0.767	2.2	106	0.00	10.52
54		t-butyl formate	0.473	0.492	-4.0	112	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.415	-5.1	116	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.520	-0.4	111	0.00	11.17
57		freon 113	0.276	0.326	-18.1	134	0.00	7.43
58		methacrylonitrile	0.342	0.315	7.9	98	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.622	-1.0	108	0.00	10.78
60		Cyclohexane	0.629	0.650	-3.3	109	0.00	10.85
61		tert amyl alcohol	0.056	0.056	0.0	110	0.00	11.11
62		iso-octane	1.547	1.710	-10.5	127	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.804	-1.3	101	0.00	12.14
65		epichlorohydrin	0.036	0.038	-5.6	110	0.00	12.95
66		n-butyl alcohol	0.009	0.010#	-11.1	123	0.00	11.77
67		carbon tetrachloride	0.387	0.397	-2.6	108	0.00	10.99
68		1,1-dichloropropene	0.412	0.415	-0.7	105	0.00	10.96
69		hexane	0.351	0.444	-26.5#	140	0.00	9.02
70		benzene	1.226	1.208	1.5	105	0.00	11.24
71		tert-amyl methyl ether	0.902	0.984	-9.1	117	0.00	11.27
72		heptane	0.210	0.245	-16.7	131	0.00	11.41
73		isopropyl acetate	0.650	0.710	-9.2	115	0.00	11.16
74		1,2-dichloroethane	0.418	0.405	3.1	101	0.00	11.26
75		ethyl acrylate	0.448	0.427	4.7	99	0.00	11.98
76		trichloroethene	0.307	0.315	-2.6	108	0.00	11.98
77		2-nitropropane	0.007	0.007#	0.0	102	0.00	12.81
78		2-chloroethyl vinyl ether	0.214	0.237	-10.7	115	0.00	12.81
79		methyl methacrylate	0.226	0.228	-0.9	101	0.00	12.26
80		1,2-dichloropropane	0.340	0.335	1.5	103	0.00	12.26
81		dibromomethane	0.202	0.202	0.0	104	0.00	12.43
82		methylcyclohexane	0.459	0.530	-15.5	128	0.00	12.21
83		bromodichloromethane	0.437	0.428	2.1	104	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.552	1.1	105	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.170	-4.6	119	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.140	0.7	101	0.00	13.14
87		toluene	0.766	0.748	2.3	107	0.00	13.42
88		3-methyl-1-butanol	0.014	0.016	-14.3	124	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.508	2.3	106	0.00	13.64
90		ethyl methacrylate	0.424	0.418	1.4	103	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.254	1.9	106	0.00	13.87
92		2-hexanone	0.155	0.179	-15.5	112	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	112	0.00	14.96
94		tetrachloroethene	0.279	0.287	-2.9	109	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.034	-6.3	117	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

96		1,3-dichloropropane	0.524	0.504	3.8	104	0.00	14.06
97		butyl acetate	0.228	0.250	-9.6	120	0.00	14.11
98		dibromochloromethane	0.362	0.351	3.0	108	0.00	14.35
99		1,2-dibromoethane	0.323	0.322	0.3	107	0.00	14.50
100		n-butyl ether		----------NA----------				
101		chlorobenzene	0.853	0.846	0.8	108	0.00	14.99
102		1,1,1,2-tetrachloroethane	0.323	0.319	1.2	107	0.00	15.05
103		ethylbenzene	1.505	1.483	1.5	107	0.00	15.04
104		m,p-xylene	0.573	0.572	0.2	108	0.00	15.15
105		o-xylene	0.598	0.603	-0.8	109	0.00	15.60
106		butyl acrylate		----------NA----------				
107		styrene	0.986	0.980	0.6	107	0.00	15.61
108		bromoform	0.276	0.272	1.4	108	0.00	15.91
109	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	17.43
110		isopropylbenzene	2.995	2.927	2.3	108	0.00	15.96
111	S	4-bromofluorobenzene (s)	0.865	0.884	-2.2	118	0.00	16.19
112		cyclohexanone	0.056	0.067	-19.6	123	0.00	16.16
113		bromobenzene	0.781	0.757	3.1	111	0.00	16.40
114		1,1,2,2-tetrachloroethane	0.867	0.816	5.9	105	0.00	16.30
115		trans-1,4-dichloro-2-bute	0.247	0.219	11.3	96	0.00	16.33
116		1,2,3-trichloropropane	0.215	0.212	1.4	106	0.00	16.38
117		n-propylbenzene	3.515	3.412	2.9	107	0.00	16.40
118		4-ETHYLTOLUENE	2.752	2.773	-0.8	105	0.00	16.50
119		2-chlorotoluene	0.697	0.679	2.6	109	0.00	16.56
120		4-chlorotoluene	2.250	2.139	4.9	108	0.00	16.67
121		1,3,5-trimethylbenzene	2.434	2.284	6.2	105	0.00	16.55
122		tert-butylbenzene	2.194	2.183	0.5	107	0.00	16.93
123		pentachloroethane	0.491	0.505	-2.9	114	0.00	17.03
124		1,2,4-trimethylbenzene	2.548	2.492	2.2	107	0.00	16.97
125		sec-butylbenzene	3.288	3.244	1.3	107	0.00	17.16
126		1,3-dichlorobenzene	1.515	1.489	1.7	112	0.00	17.38
127		p-isopropyltoluene	2.686	2.682	0.1	108	0.00	17.28
128		1,4-dichlorobenzene	1.492	1.464	1.9	110	0.00	17.46
129		benzyl chloride	1.771	2.072	-17.0	134	0.00	17.58
130		1,2-dichlorobenzene	1.513	1.492	1.4	110	0.00	17.89
131		1,4-DIETHYLBENZENE	1.562	1.572	-0.6	103	0.00	17.68
132		n-butylbenzene	1.468	1.466	0.1	107	0.00	17.73
133		1,2,4,5-TETRAMETHYLBENZEN	2.532	2.567	-1.4	103	0.00	18.54
134		1,2-dibromo-3-chloropropa	0.170	0.157	7.6	101	0.00	18.73
135		1,3,5-trichlorobenzene	1.265	1.314	-3.9	110	0.00	18.93
136		1,2,4-trichlorobenzene	1.124	1.174	-4.4	108	0.00	19.62
137		hexachlorobutadiene	0.610	0.624	-2.3	111	0.00	19.73
138		naphthalene	2.431	2.455	-1.0	103	0.00	19.93
139		1,2,3-trichlorobenzene	1.014	1.027	-1.3	107	0.00	20.20
140		hexachloroethane	0.495	0.516	-4.2	108	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66297.D M3B3095.M Mon Jan 31 10:24:27 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\v3b3115-v3b3116\3b66720.D Vial: 3
Acq On : 31 Jan 2011 9:36 am Operator: tarar1
Sample : cc3095-20 Inst : MS3B
Misc : ms7750,v3b3115,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	-0.02	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	0.913	9.5	102	-0.01	8.36
4		1,4-dioxane	0.082	0.089	-8.5	111	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	120	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.415	-0.2	115	0.01	4.31
12		dichlorodifluoromethane	0.599	0.514	14.2	91	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.723	15.8	95	-0.01	4.68
16		vinyl chloride	0.666	0.619	7.1	102	-0.01	4.98
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.364	1.1	115	0.00	5.74
19		chloroethane	0.325	0.314	3.4	106	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.609	3.2	104	0.00	6.50
22		PENTANE	0.616	0.733	-19.0	136	0.00	6.57
23		ethyl ether	0.244	0.259	-6.1	115	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.095	15.9	94	0.00	7.25
28		1,1-dichloroethene	0.395	0.412	-4.3	116	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	20.000	19.461	2.7	95	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.258	4.8	109	0.00	8.05
31		acetonitrile	0.042	0.033	21.4#	96	-0.01	8.03
32		iodomethane	0.691	0.763	-10.4	123	0.00	7.77
33		iso-butyl alcohol	0.014	0.013	7.1	108	0.00	11.25
34		carbon disulfide	1.441	1.516	-5.2	118	-0.02	7.91
35		methylene chloride	0.459	0.465	-1.3	112	0.00	8.27
36		methyl acetate	0.073	0.066	9.6	109	0.00	8.04
37		methyl tert butyl ether	1.397	1.323	5.3	108	0.00	8.63

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

38		trans-1,2-dichloroethene	0.423	0.428	-1.2	115	0.00	8.69
39		di-isopropyl ether	1.620	1.427	11.9	101	0.00	9.29
40		2-butanone	0.074	0.078	-5.4	109	0.00	10.09
41		1,1-dichloroethane	0.834	0.796	4.6	107	0.00	9.32
42		chloroprene	0.648	0.578	10.8	104	0.00	9.43
43		acrylonitrile	0.200	0.190	5.0	104	0.00	8.65
44		vinyl acetate	0.075	0.063	16.0	99	0.00	9.31
45		ethyl tert-butyl ether	1.509	1.348	10.7	104	0.00	9.80
46		ethyl acetate	0.075	0.063	16.0	97	0.00	10.10
47		2,2-dichloropropane	0.643	0.646	-0.5	115	0.00	10.12
48		cis-1,2-dichloroethene	0.479	0.479	0.0	113	0.00	10.12
49		propionitrile	0.076	0.070	7.9	99	0.00	10.19
50		methylacrylate	0.550	0.520	5.5	99	0.00	10.19
51		bromochloromethane	0.219	0.238	-8.7	119	0.00	10.46
52		tetrahydrofuran	0.199	0.172	13.6	99	0.00	10.50
53		chloroform	0.784	0.747	4.7	108	0.00	10.52
54		t-butyl formate	0.473	0.428	9.5	102	0.00	10.54
55	S	dibromofluoromethane (s)	0.395	0.402	-1.8	118	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.479	7.5	107	0.00	11.17
57		freon 113	0.276	0.296	-7.2	127	-0.01	7.42
58		methacrylonitrile	0.342	0.302	11.7	98	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.600	2.6	109	0.00	10.77
60		Cyclohexane	0.629	0.650	-3.3	114	-0.01	10.85
61		tert amyl alcohol		----------NA----------				
62		iso-octane	1.547	1.474	4.7	115	-0.01	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	113	0.00	11.63
64		tert-amyl ethyl ether		----------NA----------				
65		epichlorohydrin	0.036	0.034	5.6	102	0.00	12.94
66		n-butyl alcohol	0.009	0.009#	0.0	109	0.00	11.77
67		carbon tetrachloride	0.387	0.397	-2.6	110	0.00	10.99
68		1,1-dichloropropene	0.412	0.417	-1.2	107	0.00	10.96
69		hexane	0.351	0.392	-11.7	126	0.00	9.02
70		benzene	1.226	1.226	0.0	109	0.00	11.24
71		tert-amyl methyl ether	0.902	0.873	3.2	106	0.00	11.27
72		heptane	0.210	0.217	-3.3	118	0.00	11.41
73		isopropyl acetate	0.650	0.566	12.9	94	0.00	11.16
74		1,2-dichloroethane	0.418	0.393	6.0	100	0.00	11.26
75		ethyl acrylate		----------NA----------				
76		trichloroethene	0.307	0.318	-3.6	111	0.00	11.98
77		2-nitropropane	0.007	0.006#	14.3	88	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.207	3.3	103	0.00	12.80
79		methyl methacrylate	0.226	0.222	1.8	101	0.00	12.25
80		1,2-dichloropropane	0.340	0.339	0.3	107	0.00	12.26
81		dibromomethane	0.202	0.205	-1.5	108	0.00	12.43
82		methylcyclohexane	0.459	0.485	-5.7	119	0.00	12.20
83		bromodichloromethane	0.437	0.429	1.8	107	0.00	12.56
84		cis-1,3-dichloropropene	0.558	0.552	1.1	108	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.160	-3.7	120	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.135	4.3	100	0.00	13.13
87		toluene	0.766	0.753	1.7	110	0.00	13.42
88		3-methyl-1-butanol	0.014	0.014	0.0	108	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.499	4.0	106	0.00	13.64
90		ethyl methacrylate	0.424	0.412	2.8	104	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.254	1.9	109	0.00	13.87
92		2-hexanone	0.155	0.165	-6.5	106	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	114	0.00	14.95
94		tetrachloroethene	0.279	0.296	-6.1	114	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.028	12.5	100	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

96		1,3-dichloropropane	0.524	0.505	3.6	106	0.00	14.05
97		butyl acetate	0.228	0.213	6.6	104	0.00	14.11
98		dibromochloromethane	0.362	0.359	0.8	112	0.00	14.34
99		1,2-dibromoethane	0.323	0.327	-1.2	111	0.00	14.50
100		n-butyl ether		----------NA----------				
101		chlorobenzene	0.853	0.873	-2.3	114	0.00	14.99
102		1,1,1,2-tetrachloroethane	0.323	0.327	-1.2	112	0.00	15.05
103		ethylbenzene	1.505	1.496	0.6	109	0.00	15.04
104		m,p-xylene	0.573	0.588	-2.6	113	0.00	15.15
105		o-xylene	0.598	0.611	-2.2	112	0.00	15.60
106		butyl acrylate		----------NA----------				
107		styrene	0.986	1.003	-1.7	111	0.00	15.61
108		bromoform	0.276	0.278	-0.7	113	0.00	15.91
109	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.00	17.43
110		isopropylbenzene	2.995	2.971	0.8	111	0.00	15.96
111	S	4-bromofluorobenzene (s)	0.865	0.873	-0.9	119	0.00	16.19
112		cyclohexanone	0.056	0.053	5.4	100	0.00	16.16
113		bromobenzene	0.781	0.785	-0.5	117	0.00	16.40
114		1,1,2,2-tetrachloroethane	0.867	0.819	5.5	107	0.00	16.30
115		trans-1,4-dichloro-2-bute	0.247	0.213	13.8	94	0.00	16.33
116		1,2,3-trichloropropane	0.215	0.211	1.9	107	0.00	16.38
117		n-propylbenzene	3.515	3.434	2.3	110	0.00	16.39
118		4-ETHYLTOLUENE		----------NA----------				
119		2-chlorotoluene	0.697	0.701	-0.6	114	0.00	16.56
120		4-chlorotoluene	2.250	2.156	4.2	110	0.00	16.66
121		1,3,5-trimethylbenzene	2.434	2.491	-2.3	116	0.00	16.55
122		tert-butylbenzene	2.194	2.191	0.1	109	0.00	16.93
123		pentachloroethane	0.491	0.512	-4.3	118	0.00	17.02
124		1,2,4-trimethylbenzene	2.548	2.515	1.3	110	0.00	16.97
125		sec-butylbenzene	3.288	3.283	0.2	110	0.00	17.15
126		1,3-dichlorobenzene	1.515	1.531	-1.1	116	0.00	17.37
127		p-isopropyltoluene	2.686	2.722	-1.3	111	0.00	17.28
128		1,4-dichlorobenzene	1.492	1.520	-1.9	116	0.00	17.46
129		benzyl chloride	1.771	1.840	-3.9	121	0.00	17.58
130		1,2-dichlorobenzene	1.513	1.531	-1.2	115	0.00	17.89
131		1,4-DIETHYLBENZENE		----------NA----------				
132		n-butylbenzene	1.468	1.455	0.9	108	0.00	17.72
133		1,2,4,5-TETRAMETHYLBENZEN		----------NA----------				
134		1,2-dibromo-3-chloropropa	0.170	0.153	10.0	99	-0.01	18.73
135		1,3,5-trichlorobenzene	1.265	1.373	-8.5	117	0.00	18.93
136		1,2,4-trichlorobenzene	1.124	1.226	-9.1	115	0.00	19.62
137		hexachlorobutadiene	0.610	0.647	-6.1	116	0.00	19.73
138		naphthalene	2.431	2.478	-1.9	106	0.00	19.93
139		1,2,3-trichlorobenzene	1.014	1.057	-4.2	111	0.00	20.20
140		hexachloroethane	0.495	0.530	-7.1	113	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66297.D M3B3095.M Tue Feb 01 12:17:07 2011 MS3B

SII-SSA-0014-004807

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-1
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 11:53:19 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

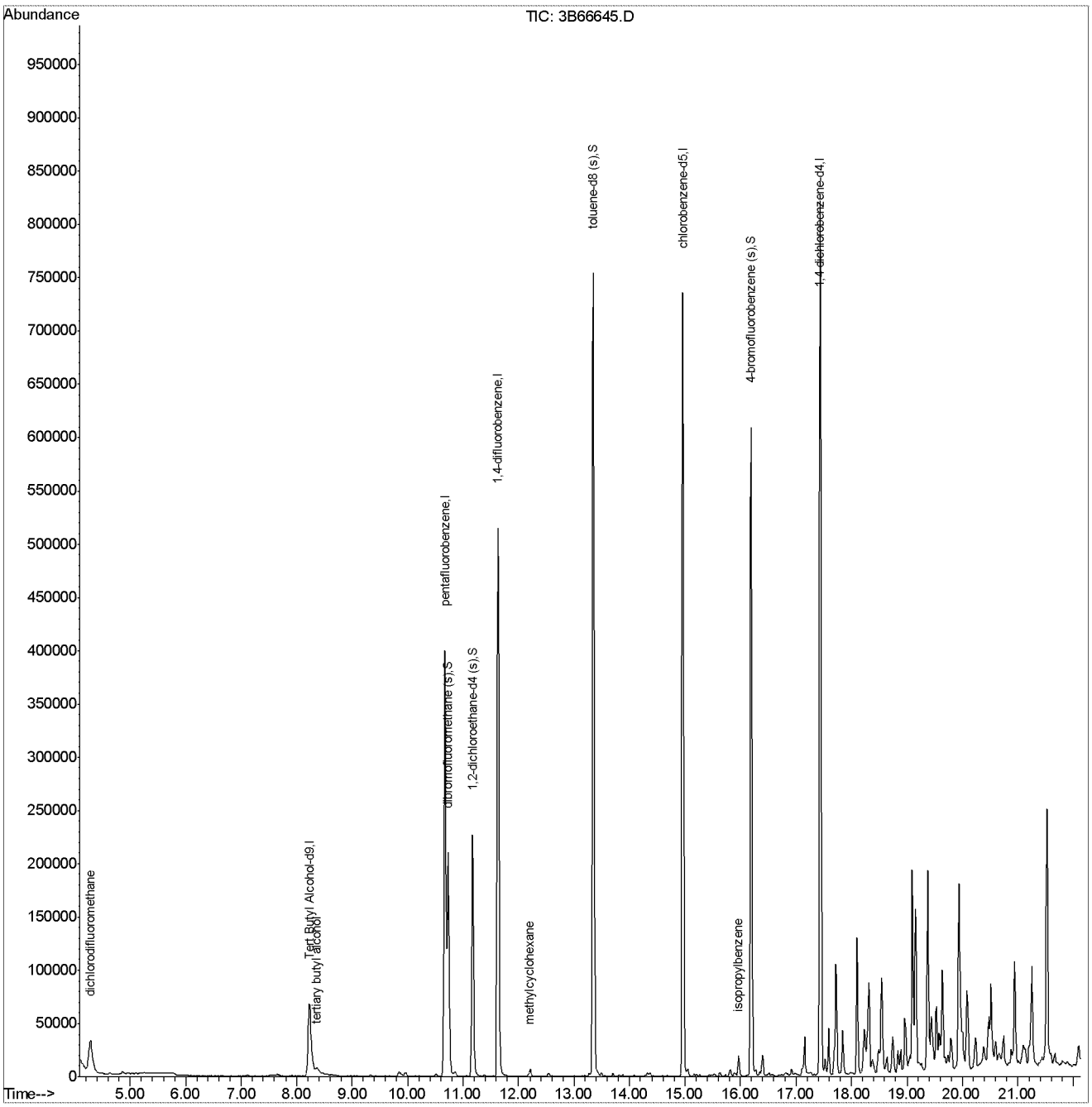
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	189578	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	388490	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	520262	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	496524	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	268340	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	154911	50.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.84%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	194118	48.20	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.40%			
85) toluene-d8 (s)	13.34	98	604281	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.76%			
111) 4-bromofluorobenzene (s)	16.19	95	239358	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.16%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	8.36	59	11215	29.32	ug/L	85
12) dichlorodifluoromethane	4.28	85	79709	17.14	ug/L	100
82) methylcyclohexane	12.21	83	4110	0.86	ug/L	90
110) isopropylbenzene	15.96	105	14510	0.90	ug/L	99

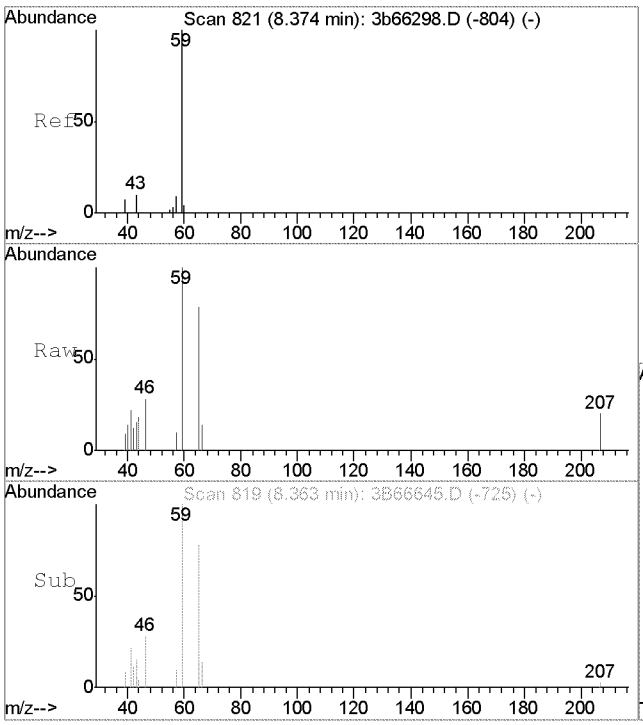
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-1
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 11:53:19 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

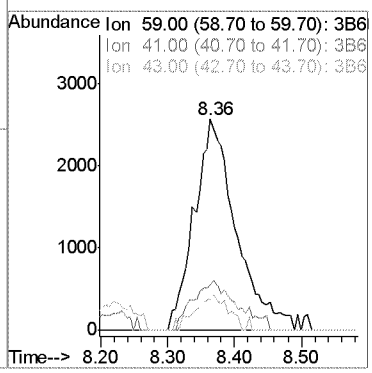


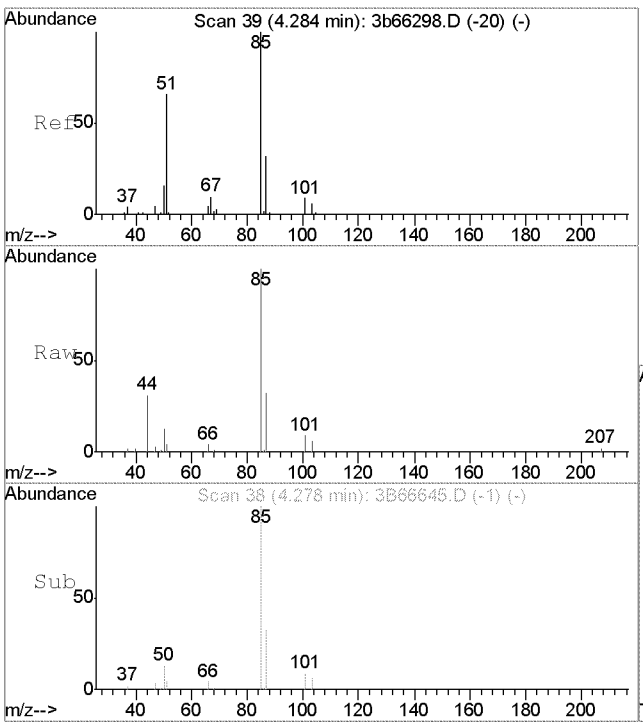


#3
tertiary butyl alcohol
Concen: 29.32 ug/L
RT: 8.36 min Scan# 819
Delta R.T. -0.01 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 59 Resp: 11215

Ion	Ratio	Lower	Upper
59	100		
41	21.6	2.9	62.9
43	14.8	0.0	43.4

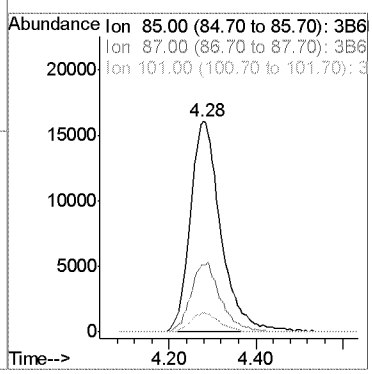


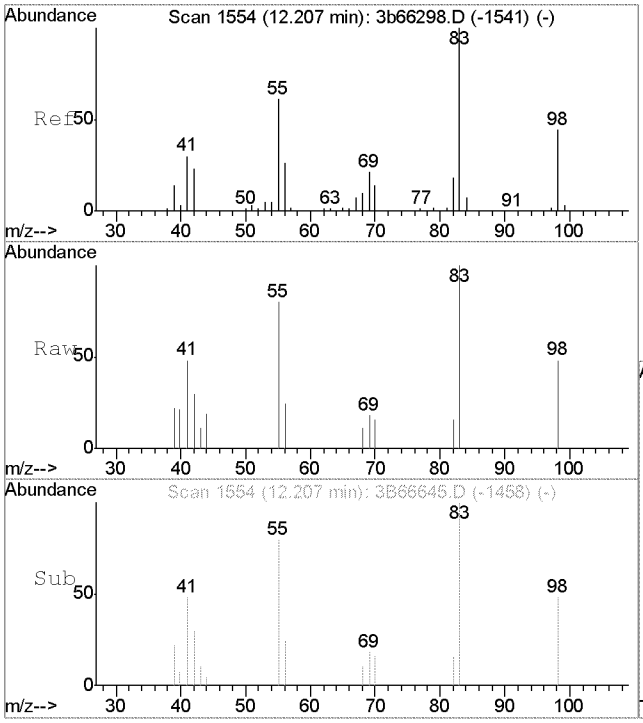


#12
dichlorodifluoromethane
Concen: 17.14 ug/L
RT: 4.28 min Scan# 38
Delta R.T. -0.01 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 85 Resp: 79709

Ion	Ratio	Lower	Upper
85	100		
87	31.8	1.9	61.9
101	9.2	0.0	38.9

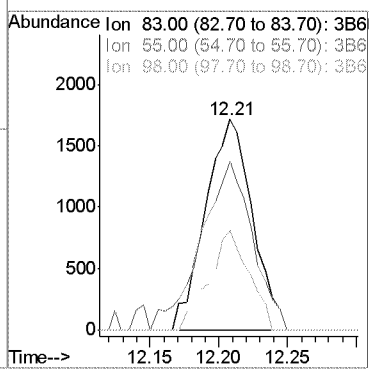


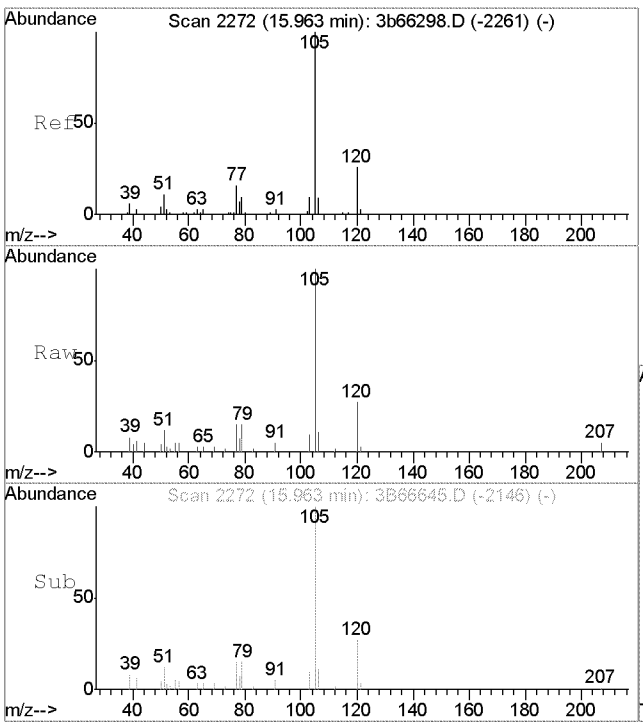


#82
methylcyclohexane
Concen: 0.86 ug/L
RT: 12.21 min Scan# 1554
Delta R.T. -0.00 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 83 Resp: 4110

Ion	Ratio	Lower	Upper
83	100		
55	80.3	61.4	121.4
98	47.6	13.9	73.9

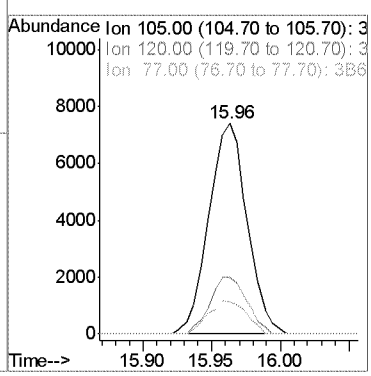




#110
isopropylbenzene
Concen: 0.90 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion:105 Resp: 14510

Ion	Ratio	Lower	Upper
105	100		
120	26.9	0.0	56.1
77	15.5	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.284	26	39	116	rVB2	32353	186666	11.86%	1.203%
2	4.848	142	147	259	rBV8	2431	23215	1.47%	0.150%
3	6.182	399	402	453	rVV3	258	1889	0.12%	0.012%
4	6.642	477	490	521	rVB3	245	1500	0.10%	0.010%
5	7.547	654	663	675	rVV4	1069	4772	0.30%	0.031%
6	7.647	675	682	717	rVB5	1914	7462	0.47%	0.048%
7	8.227	779	793	893	rVV	67583	351170	22.30%	2.264%
8	9.326	997	1003	1011	rVB2	839	1806	0.11%	0.012%
9	9.849	1092	1103	1116	rBV3	3936	13944	0.89%	0.090%
10	9.958	1116	1124	1140	rVB4	3625	9446	0.60%	0.061%
11	10.508	1224	1229	1247	rVV4	1797	4473	0.28%	0.029%
12	10.670	1247	1260	1267	rVV	399304	1027104	65.23%	6.620%
13	10.727	1267	1271	1288	rVV	209971	471118	29.92%	3.037%
14	10.848	1288	1294	1310	rVB5	4376	13650	0.87%	0.088%
15	11.052	1326	1333	1340	rVB4	1071	1596	0.10%	0.010%
16	11.167	1340	1355	1390	rBV	226765	538593	34.21%	3.472%
17	11.381	1390	1396	1406	rVB4	1188	2908	0.18%	0.019%
18	11.538	1417	1426	1432	rVB2	800	1986	0.13%	0.013%
19	11.627	1432	1443	1485	rBV	514523	1169635	74.28%	7.539%
20	12.207	1534	1554	1564	rBV4	7394	19837	1.26%	0.128%
21	12.542	1610	1618	1626	rVB	2982	7625	0.48%	0.049%
22	13.191	1738	1742	1749	rVB5	1441	2837	0.18%	0.018%
23	13.274	1752	1758	1760	rVV2	2532	3740	0.24%	0.024%
24	13.342	1760	1771	1796	rVV	753610	1573008	99.90%	10.139%
25	13.505	1796	1802	1807	rVV4	2726	6420	0.41%	0.041%
26	13.541	1807	1809	1826	rVV4	756	2497	0.16%	0.016%
27	13.703	1833	1840	1847	rVB4	2981	5334	0.34%	0.034%
28	13.813	1854	1861	1866	rVV3	1087	2122	0.13%	0.014%
29	13.871	1866	1872	1883	rVB3	1474	2933	0.19%	0.019%
30	14.080	1905	1912	1920	rBV3	834	2025	0.13%	0.013%
31	14.320	1948	1958	1963	rBV5	3276	7703	0.49%	0.050%
32	14.368	1963	1967	1975	rVB4	2916	5053	0.32%	0.033%
33	14.681	2020	2027	2032	rVV3	1150	2011	0.13%	0.013%
34	14.959	2068	2080	2092	rVV	735674	1459730	92.71%	9.409%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	15.047	2093	2097	2114	rVV4	6724	14759	0.94%	0.095%
36	15.157	2114	2118	2124	rVV6	2187	4024	0.26%	0.026%
37	15.210	2124	2128	2134	rVV4	1352	2767	0.18%	0.018%
38	15.262	2134	2138	2145	rVB4	1448	2494	0.16%	0.016%
39	15.434	2165	2171	2176	rBV3	1329	2190	0.14%	0.014%
40	15.523	2181	2188	2197	rVB4	1909	4779	0.30%	0.031%
41	15.628	2200	2208	2219	rVB8	3419	6895	0.44%	0.044%
42	15.727	2219	2227	2231	rBV4	1540	2288	0.15%	0.015%
43	15.811	2235	2243	2252	rVB4	6221	14199	0.90%	0.092%
44	15.895	2252	2259	2265	rBV7	2781	6754	0.43%	0.044%
45	15.963	2265	2272	2293	rVB	18878	38967	2.47%	0.251%
46	16.188	2300	2315	2328	rBV	608211	1158712	73.59%	7.469%
47	16.350	2340	2346	2349	rBV5	3817	6830	0.43%	0.044%
48	16.397	2349	2355	2367	rVB	19530	37142	2.36%	0.239%
49	16.507	2367	2376	2384	rBV8	2124	5304	0.34%	0.034%
50	16.559	2384	2386	2405	rVB7	1342	3572	0.23%	0.023%
51	16.695	2405	2412	2419	rBV6	1094	2708	0.17%	0.017%
52	16.815	2428	2435	2447	rBV5	2837	8416	0.53%	0.054%
53	16.915	2447	2454	2461	rBV6	5325	11115	0.71%	0.072%
54	16.977	2461	2466	2482	rVB8	2178	6749	0.43%	0.044%
55	17.155	2482	2500	2517	rBV	36120	92084	5.85%	0.594%
56	17.270	2517	2522	2530	rVB6	2397	4588	0.29%	0.030%
57	17.432	2540	2553	2565	rBV	820771	1574564	100.00%	10.149%
58	17.527	2565	2571	2576	rVB2	12249	21198	1.35%	0.137%
59	17.589	2576	2583	2592	rVB2	43593	82900	5.26%	0.534%
60	17.720	2594	2608	2623	rBV3	103739	236805	15.04%	1.526%
61	17.840	2623	2631	2653	rVB2	40625	78685	5.00%	0.507%
62	17.987	2653	2659	2672	rVB2	2100	6978	0.44%	0.045%
63	18.102	2672	2681	2694	rBV	128009	239177	15.19%	1.542%
64	18.233	2694	2706	2711	rBV3	41758	104483	6.64%	0.673%
65	18.311	2711	2721	2729	rVV2	80393	196179	12.46%	1.265%
66	18.374	2729	2733	2746	rVB8	12203	31124	1.98%	0.201%
67	18.489	2746	2755	2759	rBV	21655	54127	3.44%	0.349%
68	18.541	2759	2765	2777	rVB2	84880	170492	10.83%	1.099%
69	18.635	2777	2783	2795	rVB3	14467	29564	1.88%	0.191%
70	18.740	2795	2803	2815	rVB2	33273	69702	4.43%	0.449%
71	18.834	2815	2821	2826	rBV	20256	38821	2.47%	0.250%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	18.886	2826	2831	2838	rVB	18298	30082	1.91%	0.194%
73	18.965	2838	2846	2855	rBV5	47771	107801	6.85%	0.695%
74	19.049	2855	2862	2864	rVV5	10031	17268	1.10%	0.111%
75	19.096	2864	2871	2877	rVV	184284	359591	22.84%	2.318%
76	19.153	2877	2882	2913	rVB	150871	328587	20.87%	2.118%
77	19.373	2913	2924	2932	rBV2	186414	397193	25.23%	2.560%
78	19.436	2932	2936	2948	rVV4	44796	123418	7.84%	0.796%
79	19.530	2948	2954	2959	rVV2	54379	105046	6.67%	0.677%
80	19.577	2959	2963	2968	rVV4	29367	65638	4.17%	0.423%
81	19.640	2968	2975	2990	rVV	88470	203727	12.94%	1.313%
82	19.739	2990	2994	2999	rVV2	8352	12480	0.79%	0.080%
83	19.791	2999	3004	3022	rVB2	26202	53369	3.39%	0.344%
84	19.938	3022	3032	3052	rBV2	171804	513686	32.62%	3.311%
85	20.079	3052	3059	3079	rVB4	70987	190396	12.09%	1.227%
86	20.236	3079	3089	3111	rBV	27478	77600	4.93%	0.500%
87	20.382	3111	3117	3127	rVV9	13240	30526	1.94%	0.197%
88	20.471	3127	3134	3138	rVV2	41974	92396	5.87%	0.596%
89	20.513	3138	3142	3152	rVV2	72635	148363	9.42%	0.956%
90	20.597	3152	3158	3165	rVV	18394	33367	2.12%	0.215%
91	20.660	3165	3170	3178	rVV2	6977	16331	1.04%	0.105%
92	20.738	3178	3185	3207	rVB2	25595	54798	3.48%	0.353%
93	20.884	3207	3213	3217	rBV3	12471	25078	1.59%	0.162%
94	20.942	3217	3224	3243	rVB	95300	207464	13.18%	1.337%
95	21.099	3243	3254	3268	rVB6	17935	73733	4.68%	0.475%
96	21.251	3268	3283	3311	rBV2	91738	241042	15.31%	1.554%
97	21.434	3311	3318	3322	rBV7	6079	12868	0.82%	0.083%
98	21.522	3322	3335	3356	rVB	238534	582099	36.97%	3.752%
99	21.664	3356	3362	3436	rVB6	12085	59675	3.79%	0.385%
100	22.093	3436	3444	3448	rBV3	18693	42625	2.71%	0.275%

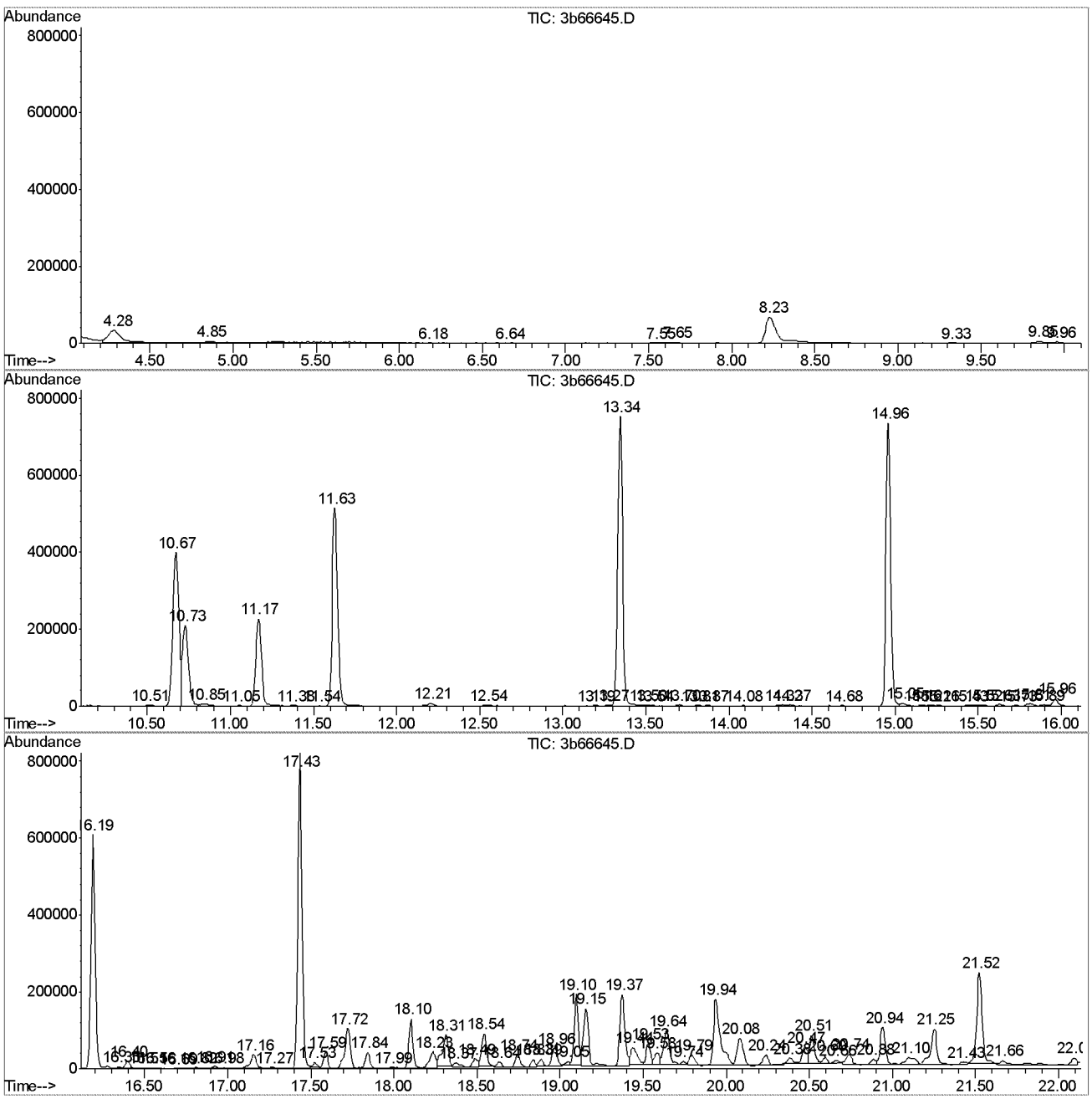
Sum of corrected areas: 15514190

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

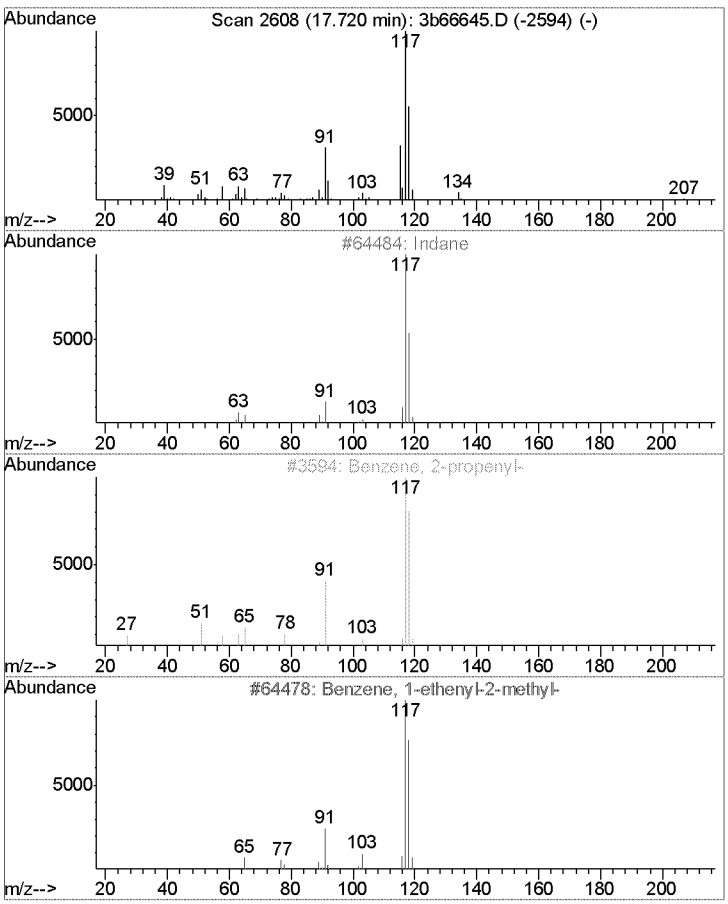
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

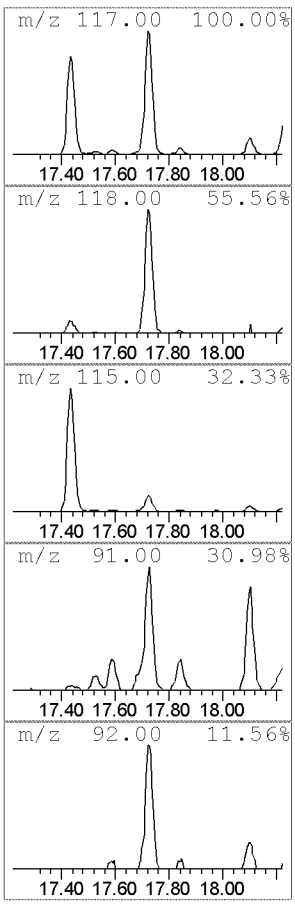
****

Peak Number 1 Indane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.72	7.52 ug/L	236805	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	81
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	68
3	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	68
4	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	68
5	Indane	118	C9H10	000496-11-7	53





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

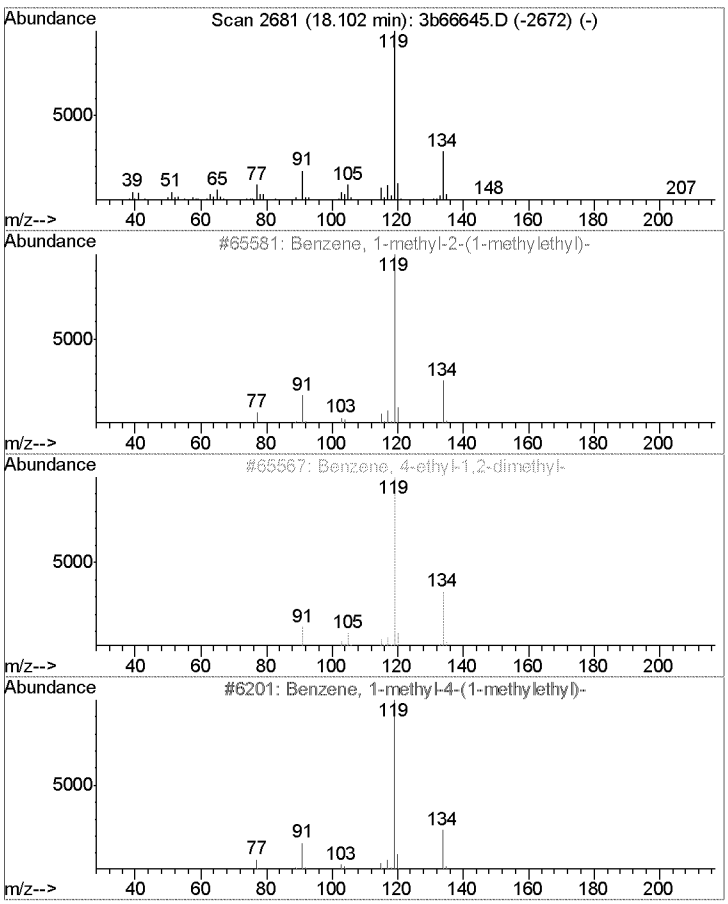
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

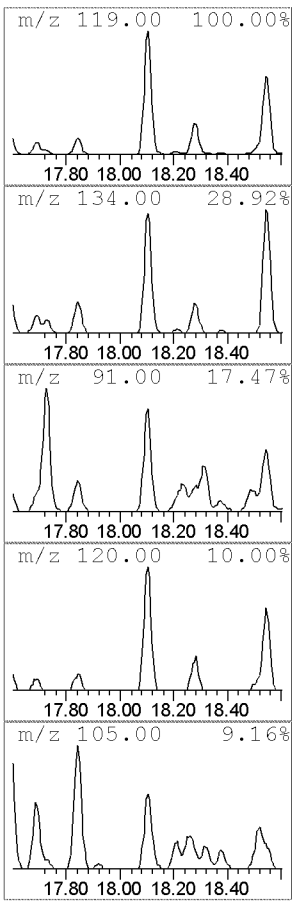
****

Peak Number 2 Benzene, 1-methyl-2-(1-meth... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.10	7.60 ug/L	239177	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	93





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

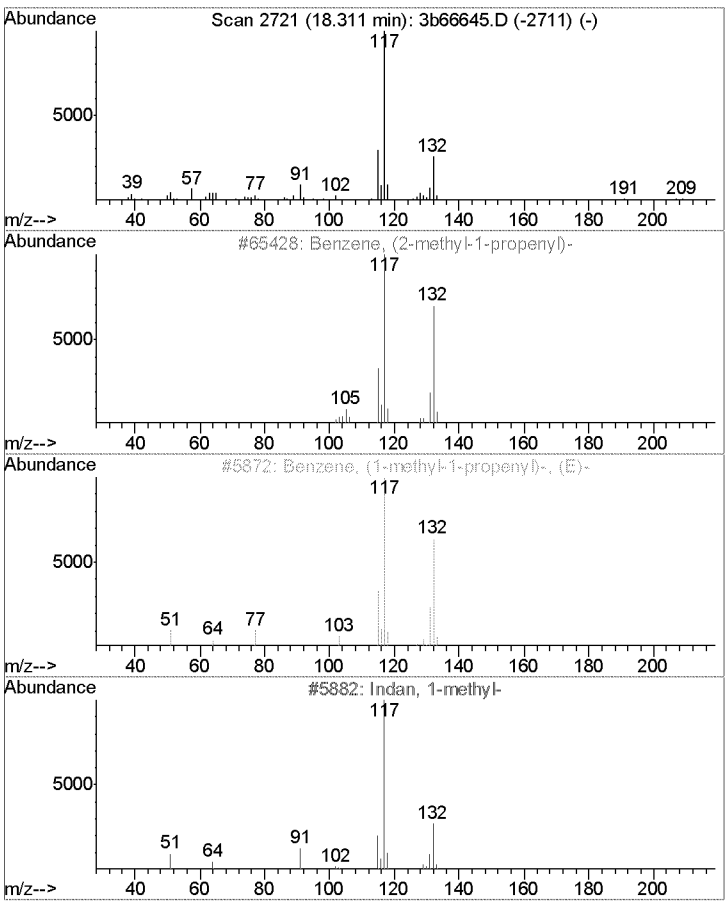
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

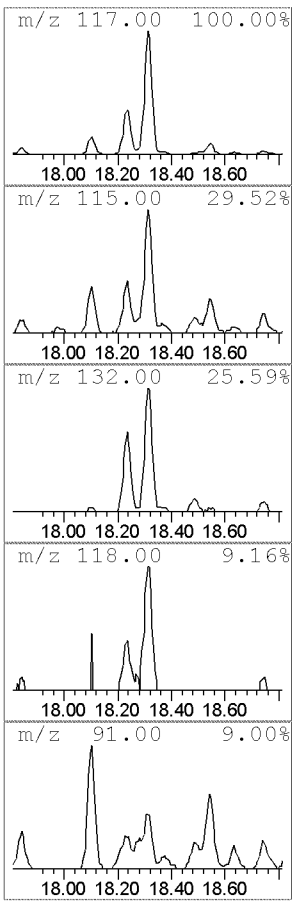
****

Peak Number 3 Benzene, (2-methyl-1-propen... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.31	6.23 ug/L	196179	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	91
2	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	91
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	86





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

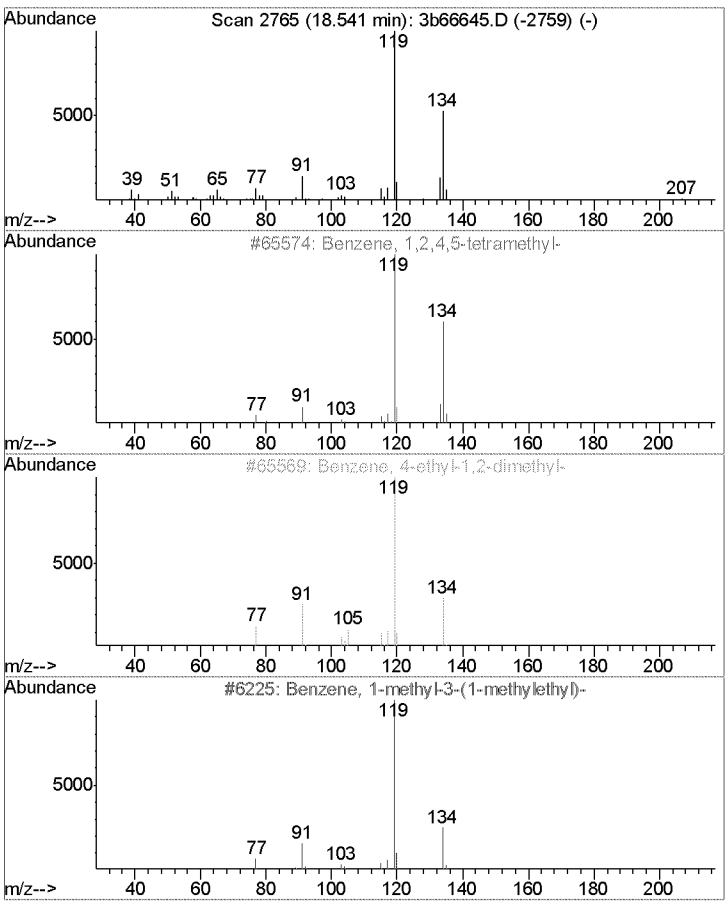
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

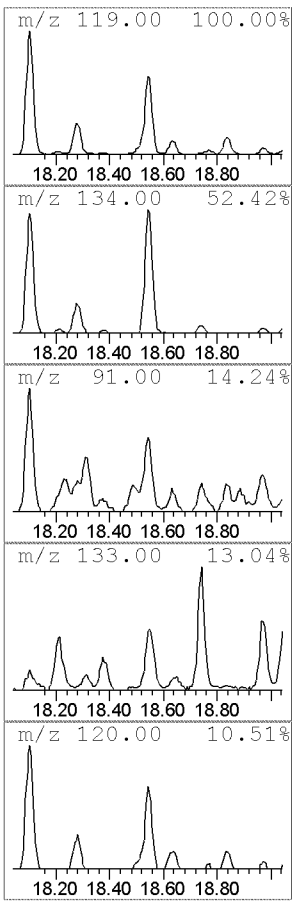
****

Peak Number 4 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.54	5.41 ug/L	170492	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	91
5	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	91





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

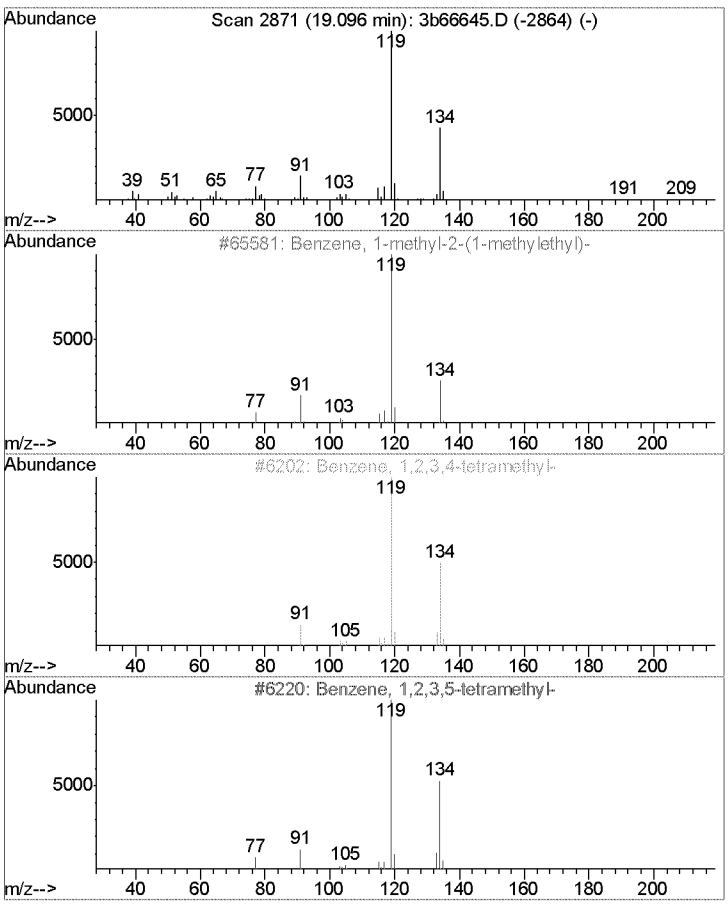
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

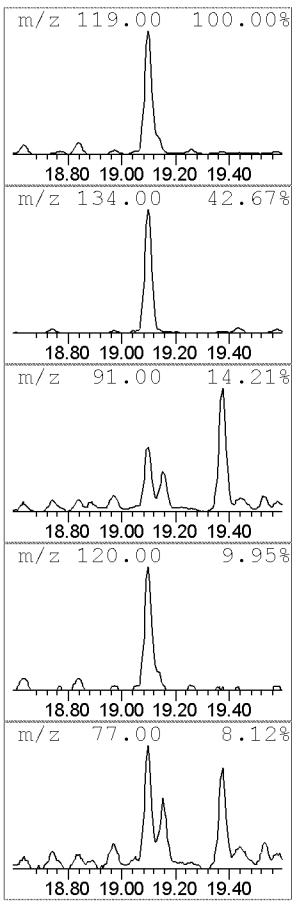
****

Peak Number 5 Benzene, 1-methyl-2-(1-meth... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.10	11.42 ug/L	359591	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	94





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

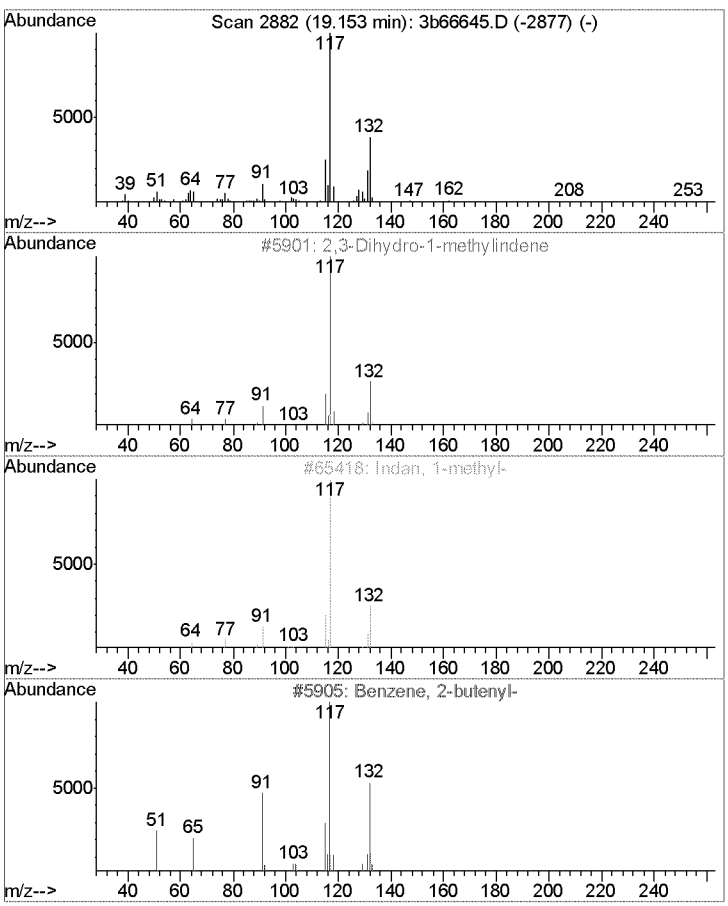
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

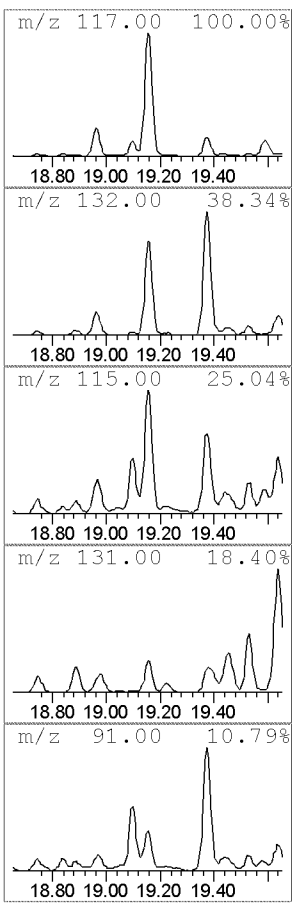
****

Peak Number 6 2,3-Dihydro-1-methylindene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.15	10.43 ug/L	328587	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	91
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	Benzene, 2-butenyl-	132	C10H12	001560-06-1	86
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	86
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	81





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

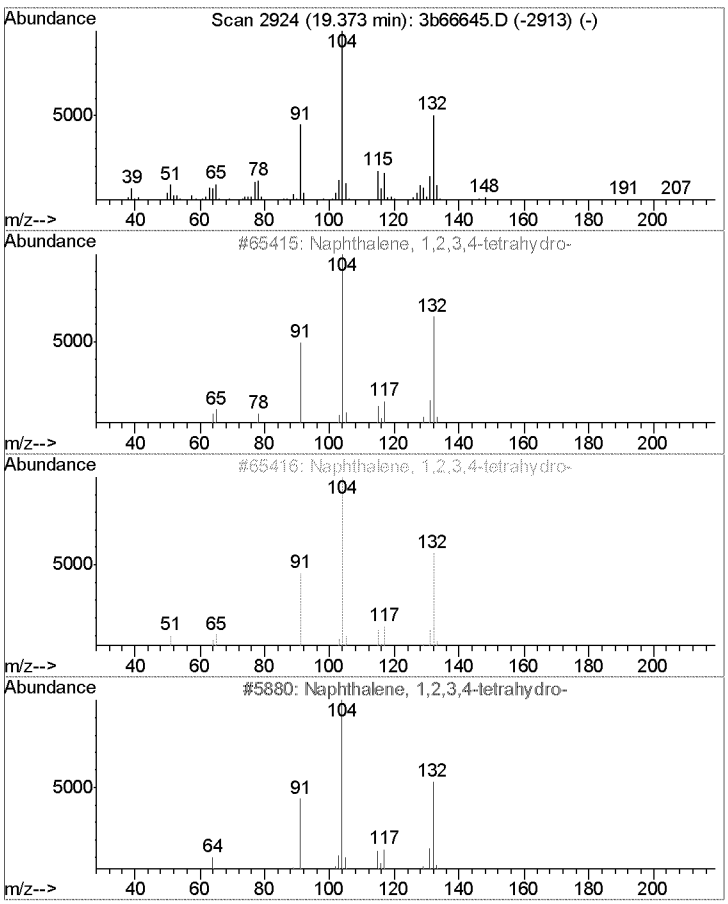
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

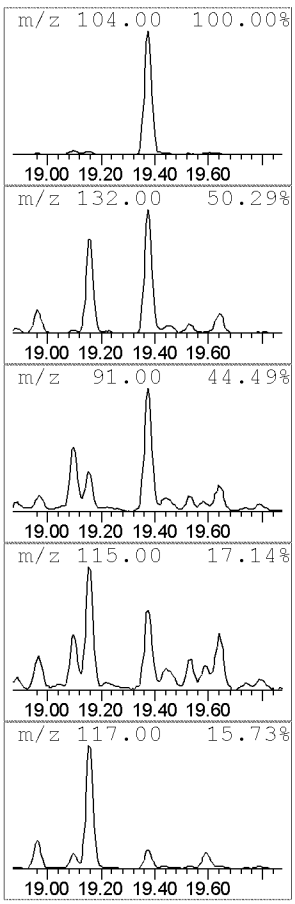
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.37	12.61 ug/L	397193	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
3	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	95
4	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	94
5	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	93





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

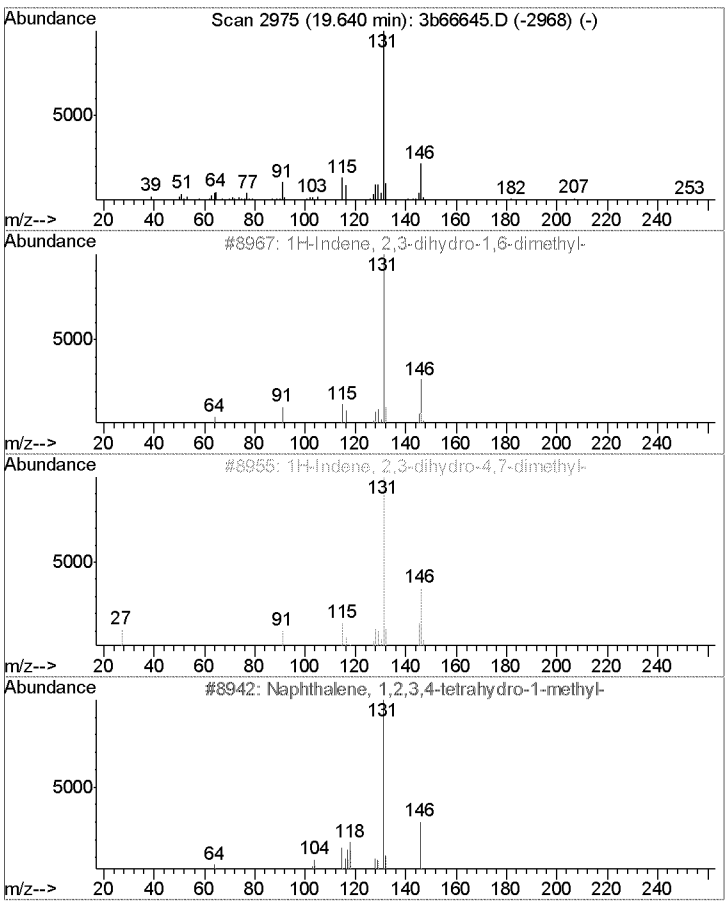
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

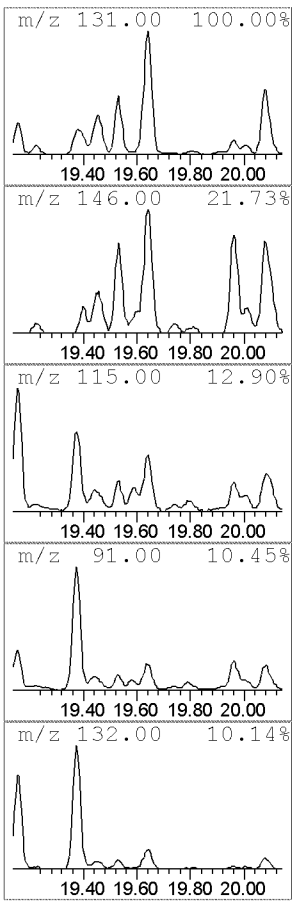
****

Peak Number 8 1H-Indene, 2,3-dihydro-1,6-... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.64	6.47 ug/L	203727	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-1,6-dimet...	146	C11H14	017059-48-2	91
2	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	87
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	87
4	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	86
5	1H-Indene, 2,3-dihydro-1,1-dimet...	146	C11H14	004912-92-9	83





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

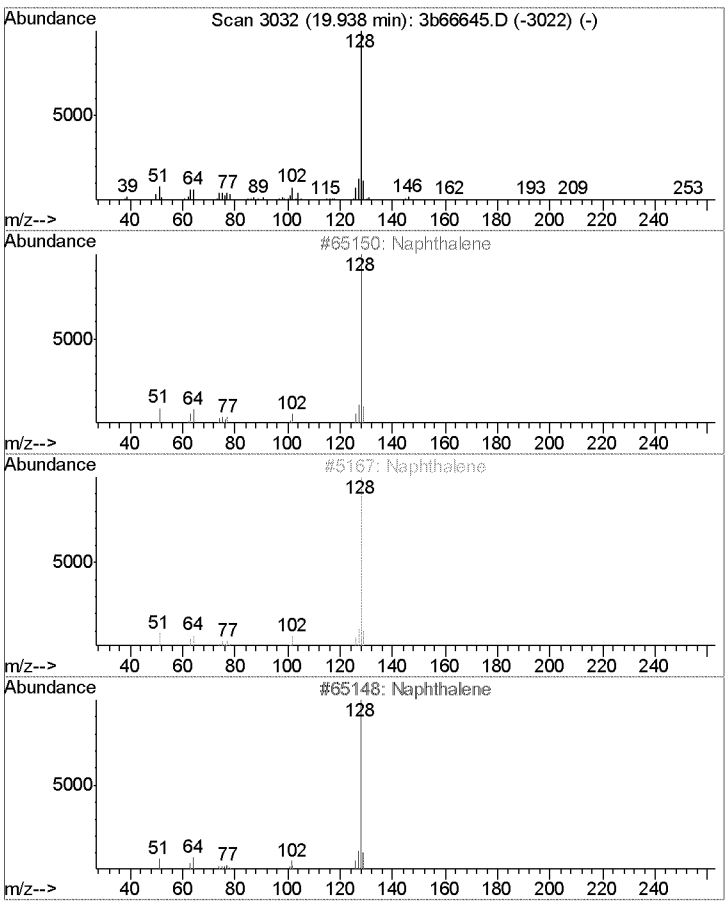
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

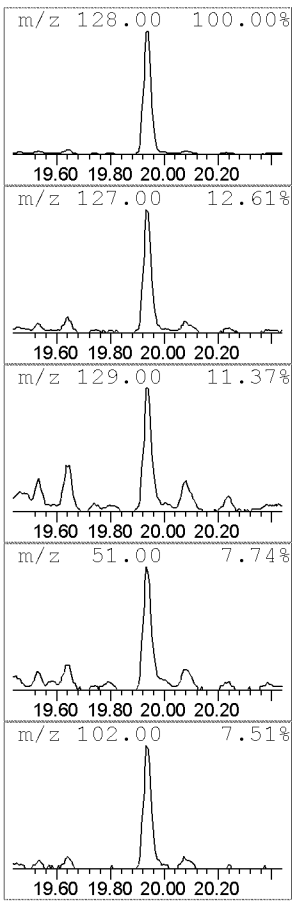
****

Peak Number 9 Naphthalene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.94	16.31 ug/L	513686	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	94
2	Naphthalene	128	C10H8	000091-20-3	94
3	Naphthalene	128	C10H8	000091-20-3	94
4	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	90
5	Azulene	128	C10H8	000275-51-4	90





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

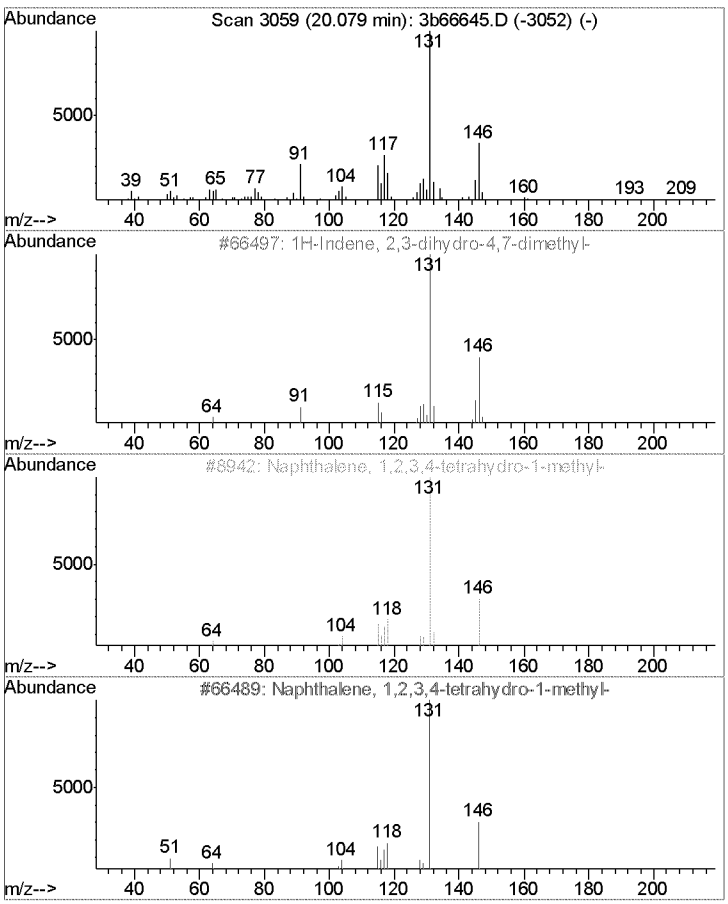
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

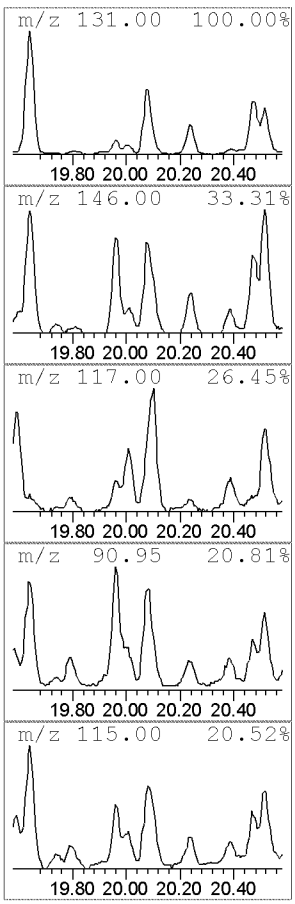
****

Peak Number 10 1H-Indene, 2,3-dihydro-4,7-... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.08	6.05 ug/L	190396	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	94
2	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	93
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	91
4	1H-Indene, 2,3-dihydro-1,2-dimet...	146	C11H14	017057-82-8	91
5	Benzene, (2-methyl-1-butenyl)-	146	C11H14	056253-64-6	87





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

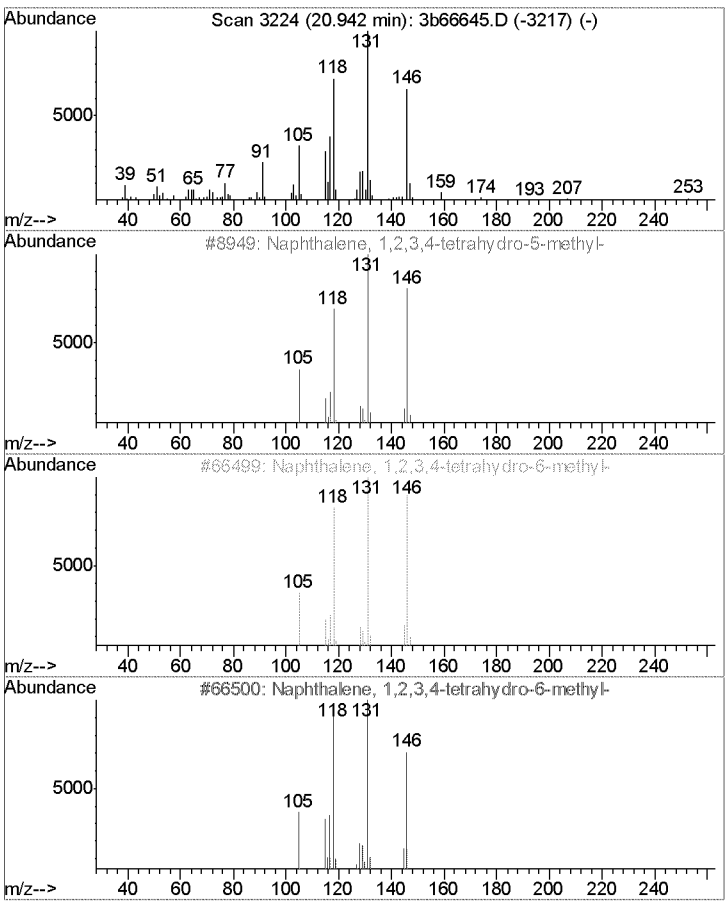
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

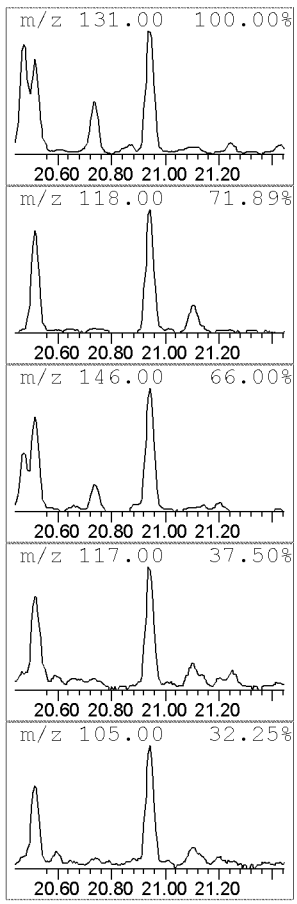
****

Peak Number 11 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.94	6.59 ug/L	207464	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	002809-64-5	94
2	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	94
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	91
4	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	002809-64-5	87
5	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	87





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

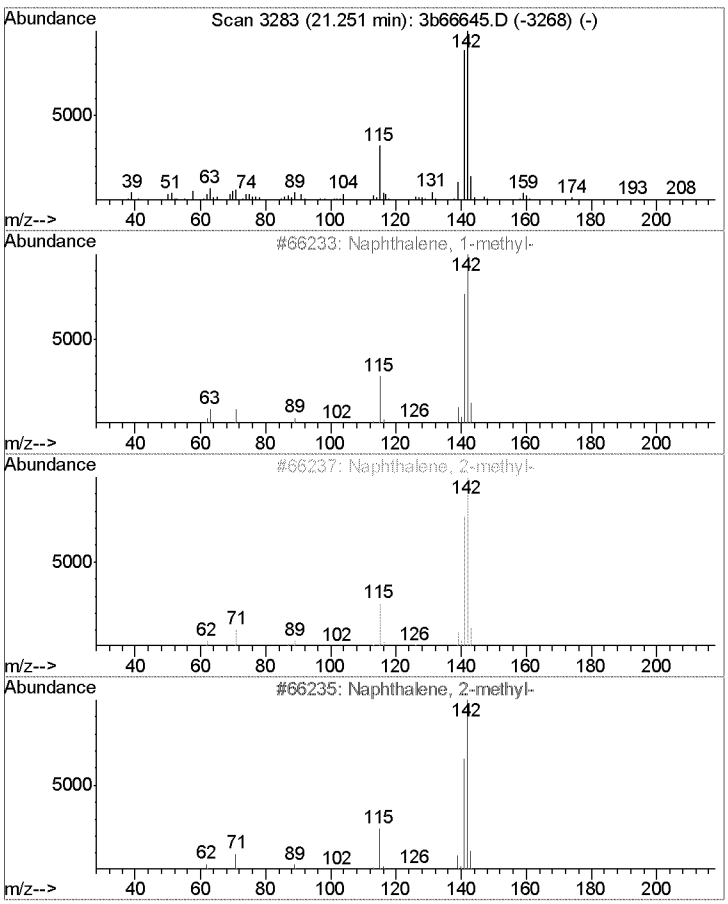
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

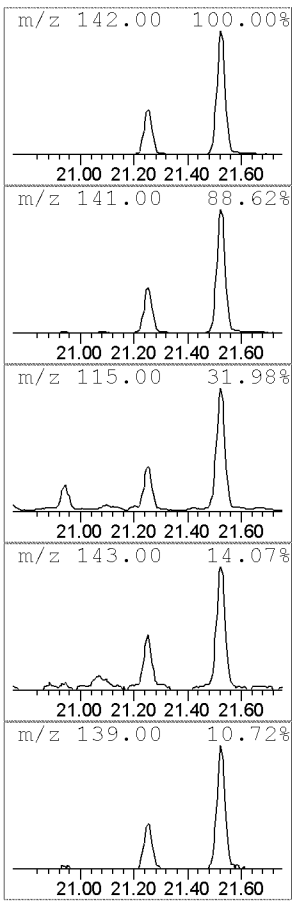
****

Peak Number 12 Naphthalene, 1-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.25	7.65 ug/L	241042	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	93
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	93
3	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	90
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	90
5	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	90





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

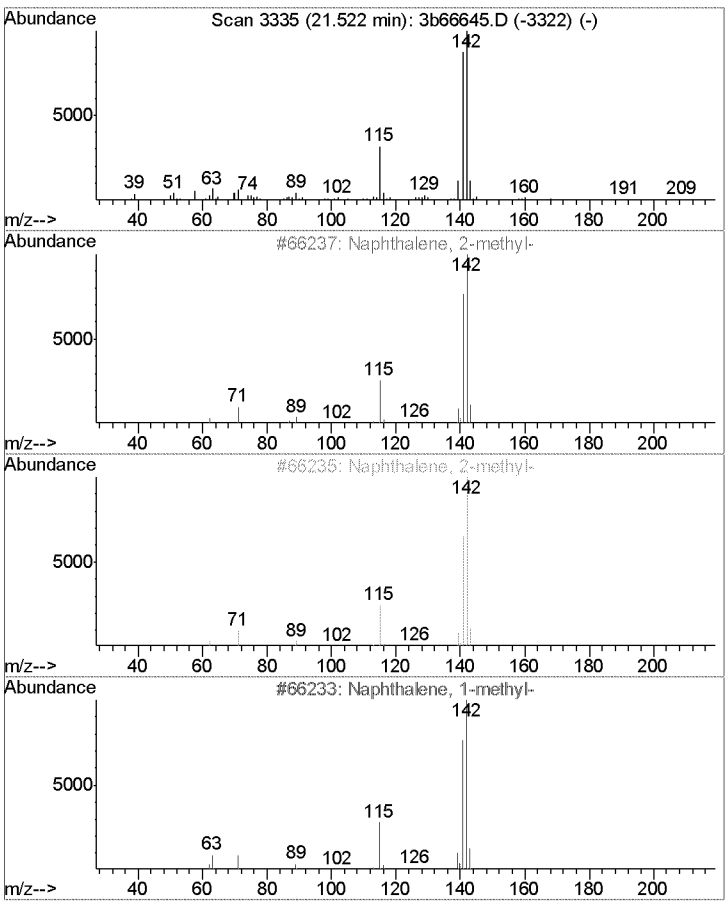
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

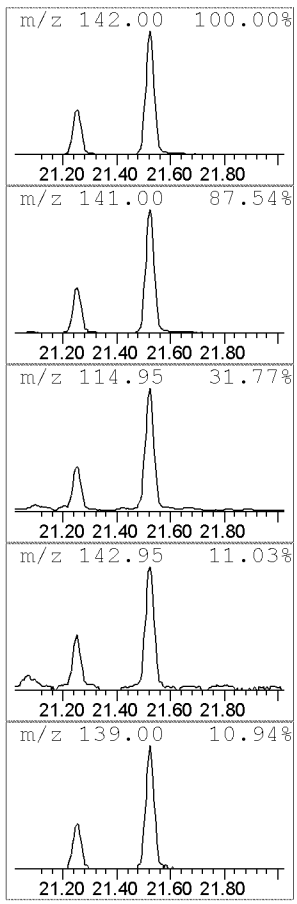
****

Peak Number 13 Naphthalene, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.52	18.48 ug/L	582099	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
5	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Indane	17.72	7.5	ug/L	236805	5	17.43	1574560	50.0
Benzene, 1-methyl...	18.10	7.6	ug/L	239177	5	17.43	1574560	50.0
Benzene, (2-methy...	18.31	6.2	ug/L	196179	5	17.43	1574560	50.0
Benzene, 1,2,4,5-...	18.54	5.4	ug/L	170492	5	17.43	1574560	50.0
Benzene, 1-methyl...	19.10	11.4	ug/L	359591	5	17.43	1574560	50.0
2,3-Dihydro-1-met...	19.15	10.4	ug/L	328587	5	17.43	1574560	50.0
Naphthalene, 1,2,...	19.37	12.6	ug/L	397193	5	17.43	1574560	50.0
1H-Indene, 2,3-di...	19.64	6.5	ug/L	203727	5	17.43	1574560	50.0
Naphthalene	19.94	16.3	ug/L	513686	5	17.43	1574560	50.0
1H-Indene, 2,3-di...	20.08	6.0	ug/L	190396	5	17.43	1574560	50.0
Naphthalene, 1,2,...	20.94	6.6	ug/L	207464	5	17.43	1574560	50.0
Naphthalene, 1-me...	21.25	7.7	ug/L	241042	5	17.43	1574560	50.0
Naphthalene, 2-me...	21.52	18.5	ug/L	582099	5	17.43	1574560	50.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 12:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

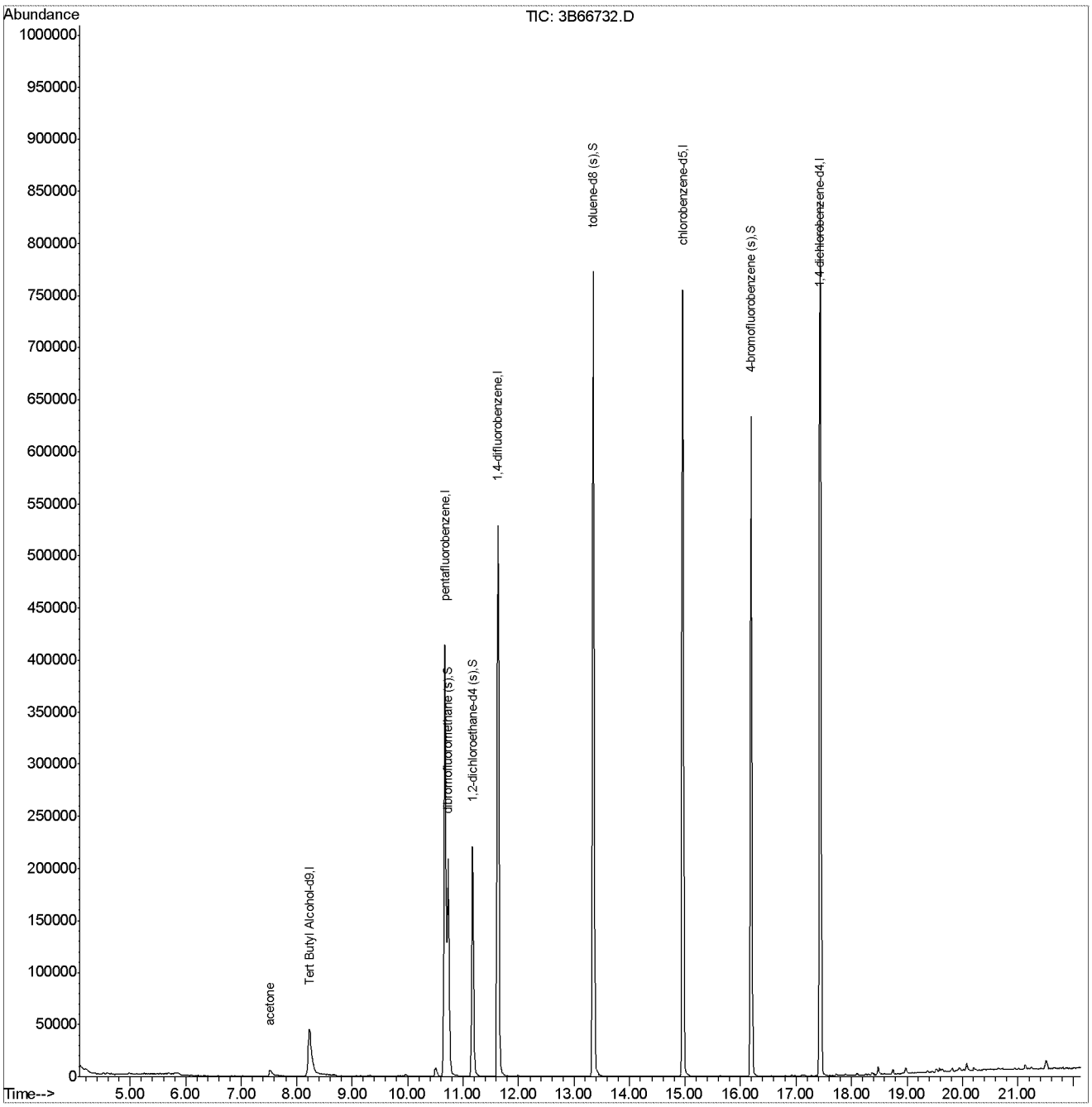
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	142921	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	412037	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	545967	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	520095	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	282519	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	160696	49.31	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.62%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	185136	43.34	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 86.68%			
85) toluene-d8 (s)	13.34	98	631439	51.66	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.32%			
111) 4-bromofluorobenzene (s)	16.19	95	244383	50.02	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.04%			
Target Compounds						Qvalue
29) acetone	7.52	43	16696	3.12	ug/L	98

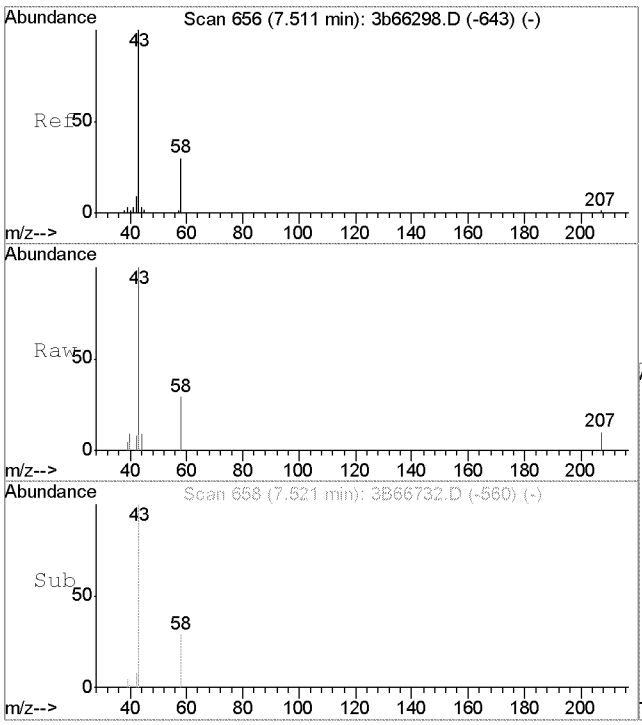
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 12:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

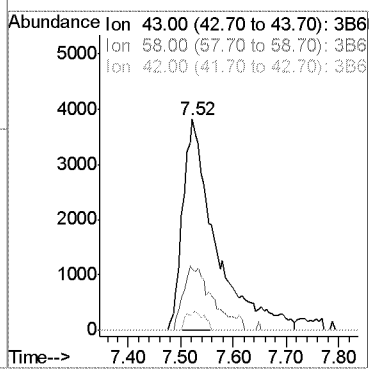




#29
acetone
Concen: 3.12 ug/L
RT: 7.52 min Scan# 658
Delta R.T. 0.01 min
Lab File: 3B66732.D
Acq: 31 Jan 2011 4:24 pm

Tgt Ion: 43 Resp: 16696

Ion	Ratio	Lower	Upper
43	100		
58	29.0	0.2	60.2
42	8.4	0.0	39.0



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.985	78	173	226	rVB7	1279	14830	0.92%	0.153%
2	6.324	427	429	442	rVV2	364	992	0.06%	0.010%
3	6.591	442	480	525	rVB3	418	6336	0.39%	0.065%
4	6.983	540	555	560	rBV3	280	908	0.06%	0.009%
5	7.025	560	563	569	rVV2	432	425	0.03%	0.004%
6	7.072	569	572	581	rVB3	232	455	0.03%	0.005%
7	7.349	622	625	635	rVB3	279	614	0.04%	0.006%
8	7.464	635	647	649	rBV3	239	583	0.04%	0.006%
9	7.521	649	658	681	rBV2	5380	22090	1.37%	0.227%
10	7.762	701	704	707	rVB3	425	429	0.03%	0.004%
11	7.867	718	724	727	rVB3	282	486	0.03%	0.005%
12	7.914	727	733	749	rBV3	294	1219	0.08%	0.013%
13	8.228	778	793	900	rVB2	44394	245192	15.18%	2.524%
14	8.798	900	902	930	rBV3	330	1175	0.07%	0.012%
15	9.315	994	1001	1014	rVB2	604	1847	0.11%	0.019%
16	9.394	1014	1016	1026	rBV2	209	378	0.02%	0.004%
17	9.525	1035	1041	1069	rBV3	320	1350	0.08%	0.014%
18	9.713	1076	1077	1091	rBV3	343	530	0.03%	0.005%
19	9.833	1096	1100	1102	rBV2	410	456	0.03%	0.005%
20	9.964	1118	1125	1134	rVB4	1539	4049	0.25%	0.042%
21	10.084	1146	1148	1154	rVB2	362	303	0.02%	0.003%
22	10.152	1154	1161	1170	rVB3	331	885	0.05%	0.009%
23	10.508	1220	1229	1247	rBV2	7553	20720	1.28%	0.213%
24	10.670	1247	1260	1267	rVV	414248	1065096	65.94%	10.964%
25	10.728	1267	1271	1313	rVB	209448	489604	30.31%	5.040%
26	10.958	1313	1315	1318	rBV2	359	316	0.02%	0.003%
27	11.005	1321	1324	1326	rBV	247	279	0.02%	0.003%
28	11.094	1334	1341	1344	rBV3	331	657	0.04%	0.007%
29	11.167	1344	1355	1392	rBV	220309	523085	32.38%	5.384%
30	11.392	1392	1398	1403	rVB3	291	613	0.04%	0.006%
31	11.538	1421	1426	1431	rVB2	488	519	0.03%	0.005%
32	11.627	1431	1443	1487	rBV	528588	1184354	73.32%	12.191%
33	11.925	1499	1500	1504	rVB2	445	367	0.02%	0.004%
34	11.978	1504	1510	1519	rBV2	1360	2982	0.18%	0.031%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	12.203	1550	1553	1555	rBV2	404	280	0.02%	0.003%
36	12.407	1590	1592	1597	rBV2	307	291	0.02%	0.003%
37	12.443	1597	1599	1604	rVB2	291	316	0.02%	0.003%
38	12.679	1639	1644	1646	rBV2	322	381	0.02%	0.004%
39	12.757	1653	1659	1662	rBV2	385	402	0.02%	0.004%
40	12.919	1684	1690	1691	rVV2	301	317	0.02%	0.003%
41	13.024	1707	1710	1713	rVB2	341	355	0.02%	0.004%
42	13.118	1725	1728	1731	rVV2	287	310	0.02%	0.003%
43	13.154	1731	1735	1739	rVV2	391	611	0.04%	0.006%
44	13.343	1759	1771	1810	rVV	772973	1613222	99.87%	16.606%
45	13.557	1810	1812	1821	rVV4	684	1652	0.10%	0.017%
46	13.620	1821	1824	1828	rVV2	400	524	0.03%	0.005%
47	13.693	1833	1838	1840	rVV2	210	346	0.02%	0.004%
48	13.730	1843	1845	1852	rVB3	243	410	0.03%	0.004%
49	13.881	1866	1874	1878	rVB4	361	982	0.06%	0.010%
50	13.939	1878	1885	1889	rBV2	257	581	0.04%	0.006%
51	14.007	1896	1898	1903	rVB3	283	393	0.02%	0.004%
52	14.101	1912	1916	1920	rBV2	259	423	0.03%	0.004%
53	14.164	1927	1928	1941	rVB3	401	1250	0.08%	0.013%
54	14.269	1944	1948	1958	rVB2	290	816	0.05%	0.008%
55	14.336	1958	1961	1966	rBV2	254	429	0.03%	0.004%
56	14.488	1987	1990	1996	rVB3	320	577	0.04%	0.006%
57	14.540	1996	2000	2001	rBV2	269	333	0.02%	0.003%
58	14.582	2005	2008	2011	rVB2	287	329	0.02%	0.003%
59	14.645	2011	2020	2022	rVB2	370	772	0.05%	0.008%
60	14.676	2022	2026	2028	rBV3	311	394	0.02%	0.004%
61	14.734	2033	2037	2041	rVB2	252	350	0.02%	0.004%
62	14.781	2041	2046	2054	rVB3	306	792	0.05%	0.008%
63	14.860	2054	2061	2067	rBV3	305	901	0.06%	0.009%
64	14.959	2069	2080	2106	rBV	755036	1488365	92.14%	15.320%
65	15.267	2136	2139	2144	rBV3	301	335	0.02%	0.003%
66	15.398	2159	2164	2168	rVB3	207	374	0.02%	0.004%
67	15.435	2168	2171	2175	rBV3	387	402	0.02%	0.004%
68	15.634	2206	2209	2222	rBV4	504	699	0.04%	0.007%
69	15.906	2254	2261	2264	rBV3	239	373	0.02%	0.004%
70	15.958	2269	2271	2278	rVV3	425	640	0.04%	0.007%
71	16.021	2278	2283	2303	rVV3	234	867	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	16.188	2305	2315	2344	rVB	633563	1187585	73.52%	12.224%
73	16.402	2352	2356	2362	rVB3	403	378	0.02%	0.004%
74	16.554	2380	2385	2394	rVB3	499	731	0.05%	0.008%
75	16.633	2398	2400	2407	rVV3	211	280	0.02%	0.003%
76	16.674	2407	2408	2431	rVB3	328	1178	0.07%	0.012%
77	16.810	2431	2434	2436	rBV3	430	297	0.02%	0.003%
78	16.931	2450	2457	2463	rBV5	906	2055	0.13%	0.021%
79	16.983	2463	2467	2475	rVB4	676	1361	0.08%	0.014%
80	17.156	2486	2500	2519	rVB4	1031	3834	0.24%	0.039%
81	17.276	2519	2523	2535	rBV4	568	1244	0.08%	0.013%
82	17.433	2543	2553	2582	rBV	840092	1615342	100.00%	16.627%
83	17.731	2604	2610	2619	rVB4	1464	2478	0.15%	0.026%
84	17.841	2628	2631	2635	rBV2	502	492	0.03%	0.005%
85	17.893	2637	2641	2653	rVB5	1059	1907	0.12%	0.020%
86	18.055	2653	2672	2674	rBV4	356	1300	0.08%	0.013%
87	18.097	2676	2680	2704	rVB6	1715	4560	0.28%	0.047%
88	18.301	2708	2719	2728	rVB7	744	2002	0.12%	0.021%
89	18.369	2728	2732	2747	rBV7	2056	5198	0.32%	0.054%
90	18.484	2747	2754	2774	rBV	7982	17404	1.08%	0.179%
91	18.599	2774	2776	2798	rVB6	922	3105	0.19%	0.032%
92	18.740	2798	2803	2827	rBV4	4476	11397	0.71%	0.117%
93	18.923	2836	2838	2843	rBV3	431	478	0.03%	0.005%
94	18.981	2843	2849	2867	rVV4	5271	11279	0.70%	0.116%
95	19.541	2950	2956	2960	rBV2	2458	3972	0.25%	0.041%
96	19.588	2960	2965	3002	rVV4	3405	11584	0.72%	0.119%
97	19.954	3002	3035	3053	rVV4	3228	14542	0.90%	0.150%
98	20.079	3053	3059	3079	rVB3	7187	13358	0.83%	0.138%
99	20.210	3079	3084	3257	rBV3	2814	59199	3.66%	0.609%
100	21.502	3325	3331	3448	rBV3	7505	21431	1.33%	0.221%

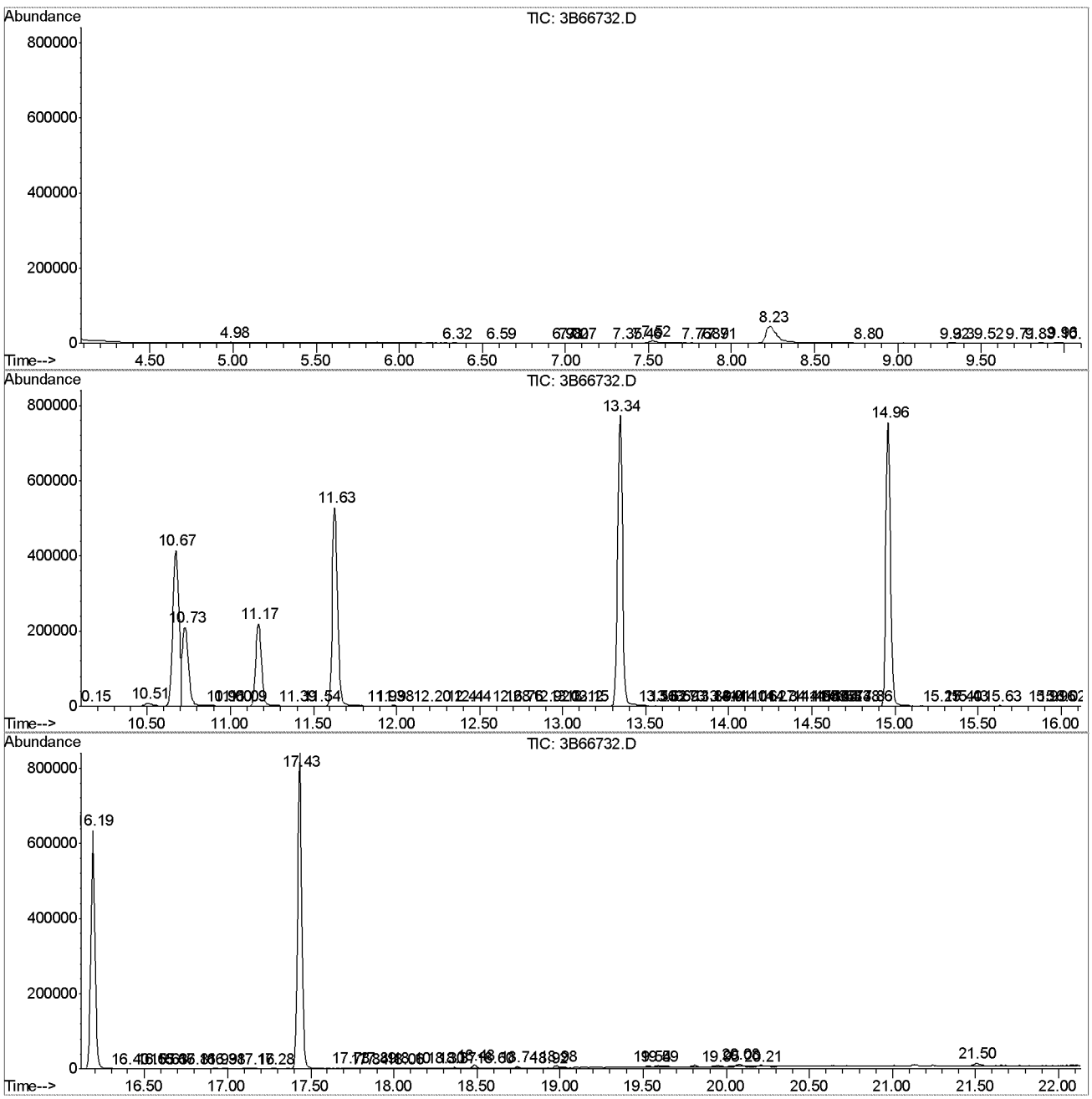
Sum of corrected areas: 9714889

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66594.D
Acq On : 27 Jan 2011 2:38 am
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 28 09:15:15 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Fri Jan 28 08:45:50 2011
Response via : Initial Calibration

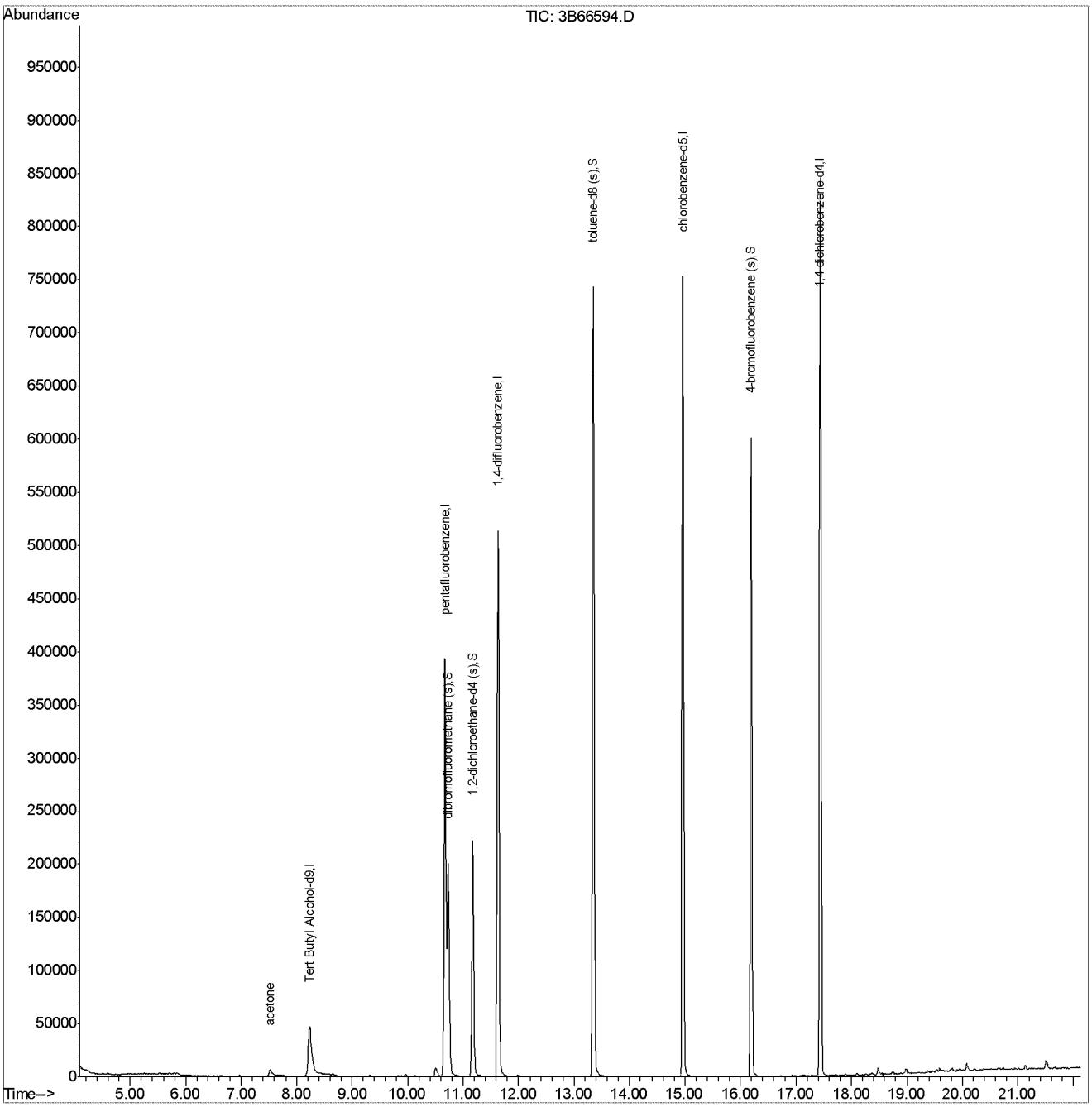
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	148631	500.00	ug/L	-0.01
5) pentafluorobenzene	10.68	168	372820	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	509196	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	487645	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	260879	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	151580	51.41	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.82%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	193889	50.16	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.32%			
85) toluene-d8 (s)	13.34	98	596673	52.34	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.68%			
111) 4-bromofluorobenzene (s)	16.19	95	235279	52.15	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.30%			
Target Compounds						Qvalue
29) acetone	7.52	43	16160	3.88	ug/L	99

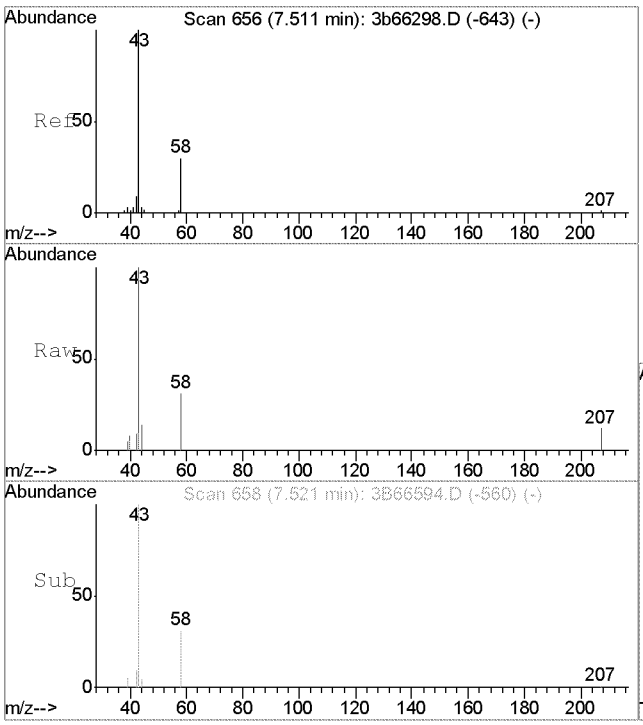
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66594.D
Acq On : 27 Jan 2011 2:38 am
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 28 09:15:15 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Fri Jan 28 08:45:50 2011
Response via : Initial Calibration

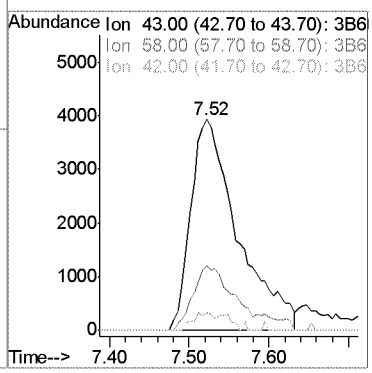




#29
acetone
Concen: 3.88 ug/L
RT: 7.52 min Scan# 658
Delta R.T. 0.01 min
Lab File: 3B66594.D
Acq: 27 Jan 2011 2:38 am

Tgt Ion: 43 Resp: 16160

Ion	Ratio	Lower	Upper
43	100		
58	30.9	0.2	60.2
42	8.5	0.0	39.0



6.1.3
6

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 28 08:27:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	146338	500.00	ug/L	-0.01
5) pentafluorobenzene	10.68	168	391374	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	529061	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	507250	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	270459	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	161249	52.10	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.20%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	201100	49.56	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.12%			
85) toluene-d8 (s)	13.34	98	614511	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.76%			
111) 4-bromofluorobenzene (s)	16.19	95	241225	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.16%			

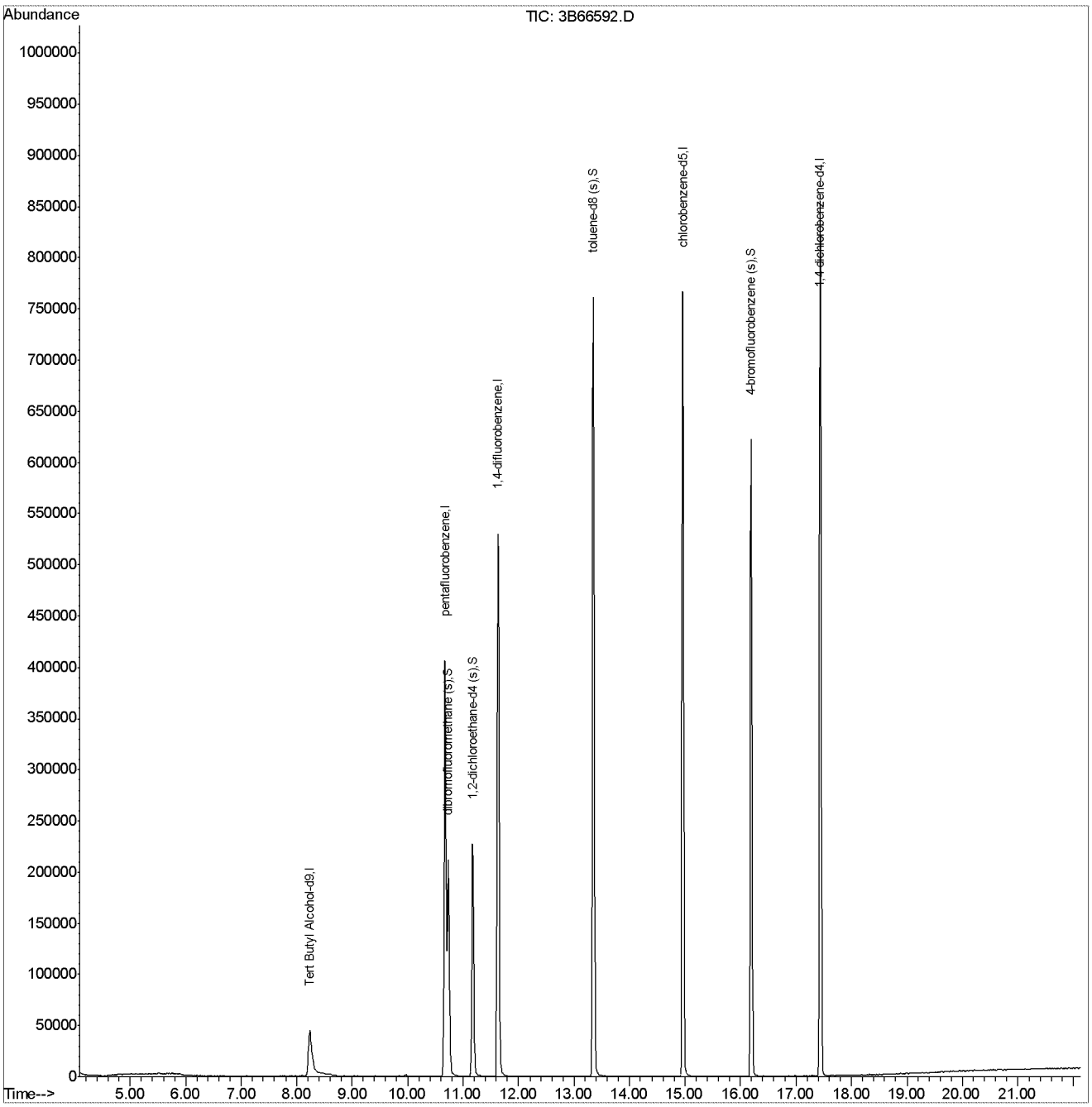
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 28 08:27:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.655	93	110	113	rBV4	1001	3863	0.24%	0.037%
2	4.687	113	116	125	rBV3	696	1897	0.12%	0.018%
3	5.173	192	209	241	rBV6	879	4687	0.29%	0.045%
4	5.414	252	255	263	rBV5	753	1509	0.09%	0.015%
5	6.470	448	457	474	rBV3	269	1024	0.06%	0.010%
6	6.569	474	476	497	rVV3	237	642	0.04%	0.006%
7	6.690	497	499	511	rVB3	251	296	0.02%	0.003%
8	6.773	511	515	518	rVB3	270	374	0.02%	0.004%
9	6.800	518	520	524	rBV2	193	286	0.02%	0.003%
10	6.857	530	531	540	rBV2	278	475	0.03%	0.005%
11	7.134	582	584	601	rVB3	315	1090	0.07%	0.011%
12	7.229	601	602	608	rBV3	269	448	0.03%	0.004%
13	7.621	675	677	680	rBV2	287	270	0.02%	0.003%
14	7.647	680	682	691	rVV3	232	370	0.02%	0.004%
15	7.704	691	693	700	rVB2	280	385	0.02%	0.004%
16	7.908	730	732	742	rVB3	304	439	0.03%	0.004%
17	7.976	742	745	757	rVB3	301	418	0.03%	0.004%
18	8.050	757	759	767	rBV2	285	341	0.02%	0.003%
19	8.233	779	794	914	rVV	44796	260565	16.17%	2.527%
20	8.871	914	916	929	rVV3	302	735	0.05%	0.007%
21	8.949	929	931	938	rVV3	305	445	0.03%	0.004%
22	9.033	938	947	960	rVV3	387	1375	0.09%	0.013%
23	9.111	960	962	974	rVV3	314	804	0.05%	0.008%
24	9.232	978	985	989	rVB3	281	493	0.03%	0.005%
25	9.404	993	1018	1086	rVV3	383	4607	0.29%	0.045%
26	9.765	1086	1087	1102	rVV3	330	854	0.05%	0.008%
27	9.849	1102	1103	1109	rVB2	393	595	0.04%	0.006%
28	9.974	1119	1127	1138	rVB3	1332	3410	0.21%	0.033%
29	10.288	1184	1187	1194	rVB3	257	423	0.03%	0.004%
30	10.388	1194	1206	1220	rVV3	270	1102	0.07%	0.011%
31	10.513	1220	1230	1238	rVB3	253	603	0.04%	0.006%
32	10.670	1248	1260	1267	rBV	405742	1027394	63.75%	9.963%
33	10.733	1267	1272	1313	rVV	211535	516459	32.05%	5.008%
34	10.979	1313	1319	1323	rVB	297	508	0.03%	0.005%

M3B3095.M Fri Jan 28 09:38:03 2011 MS3B

SII-SSA-0014-004844

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.172	1342	1356	1392	rVV	227004	554056	34.38%	5.373%
36	11.371	1392	1394	1400	rVB3	442	419	0.03%	0.004%
37	11.465	1407	1412	1416	rBV	280	345	0.02%	0.003%
38	11.627	1429	1443	1484	rBV	530161	1197056	74.28%	11.608%
39	11.852	1484	1486	1490	rVV2	554	656	0.04%	0.006%
40	11.889	1490	1493	1496	rVV2	351	466	0.03%	0.005%
41	12.333	1577	1578	1585	rVV2	250	342	0.02%	0.003%
42	12.412	1592	1593	1597	rBV2	326	283	0.02%	0.003%
43	12.490	1604	1608	1611	rBV2	309	381	0.02%	0.004%
44	12.548	1616	1619	1624	rVB2	387	349	0.02%	0.003%
45	12.909	1685	1688	1690	rVB2	327	322	0.02%	0.003%
46	12.961	1693	1698	1703	rVB3	331	582	0.04%	0.006%
47	13.055	1713	1716	1725	rVB3	326	687	0.04%	0.007%
48	13.139	1729	1732	1738	rVB3	381	601	0.04%	0.006%
49	13.175	1738	1739	1746	rBV2	334	453	0.03%	0.004%
50	13.343	1755	1771	1826	rBV	761182	1611543	100.00%	15.627%
51	13.646	1826	1829	1835	rVV3	348	549	0.03%	0.005%
52	13.683	1835	1836	1846	rVV3	288	538	0.03%	0.005%
53	13.798	1846	1858	1859	rVB3	250	617	0.04%	0.006%
54	13.840	1863	1866	1868	rBV3	383	407	0.03%	0.004%
55	13.944	1871	1886	1888	rVB3	210	712	0.04%	0.007%
56	14.012	1888	1899	1900	rVB3	310	817	0.05%	0.008%
57	14.033	1900	1903	1905	rBV2	256	277	0.02%	0.003%
58	14.070	1905	1910	1913	rVB3	272	506	0.03%	0.005%
59	14.106	1913	1917	1923	rBV	267	588	0.04%	0.006%
60	14.153	1923	1926	1928	rVB2	307	319	0.02%	0.003%
61	14.174	1928	1930	1933	rBV2	320	365	0.02%	0.004%
62	14.200	1933	1935	1938	rBV2	223	269	0.02%	0.003%
63	14.242	1938	1943	1946	rVB3	335	499	0.03%	0.005%
64	14.347	1957	1963	1965	rBV	333	411	0.03%	0.004%
65	14.399	1970	1973	1980	rVB3	219	295	0.02%	0.003%
66	14.478	1985	1988	1996	rVB2	387	770	0.05%	0.007%
67	14.556	1996	2003	2006	rBV3	420	872	0.05%	0.008%
68	14.598	2006	2011	2013	rBV3	252	371	0.02%	0.004%
69	14.624	2013	2016	2023	rVB	366	549	0.03%	0.005%
70	14.697	2023	2030	2034	rBV3	336	723	0.04%	0.007%
71	14.729	2034	2036	2044	rVV2	240	419	0.03%	0.004%

SII-SSA-0014-004845

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.797	2044	2049	2052	rVV2	237	441	0.03%	0.004%
73	14.959	2068	2080	2115	rVB	766549	1508202	93.59%	14.625%
74	15.147	2115	2116	2122	rBV2	597	940	0.06%	0.009%
75	15.351	2151	2155	2163	rVB2	170	393	0.02%	0.004%
76	15.424	2163	2169	2184	rVB2	361	1530	0.09%	0.015%
77	15.524	2184	2188	2191	rBV2	268	473	0.03%	0.005%
78	15.566	2191	2196	2205	rBV3	215	556	0.03%	0.005%
79	15.628	2205	2208	2211	rBV2	263	265	0.02%	0.003%
80	15.790	2237	2239	2248	rVB2	203	301	0.02%	0.003%
81	15.848	2248	2250	2256	rVB2	321	355	0.02%	0.003%
82	15.953	2256	2270	2275	rVB3	279	1123	0.07%	0.011%
83	16.094	2275	2297	2300	rBV2	426	1620	0.10%	0.016%
84	16.188	2306	2315	2347	rVB	621942	1178156	73.11%	11.424%
85	16.402	2354	2356	2368	rBV2	389	436	0.03%	0.004%
86	16.580	2387	2390	2421	rVB3	271	803	0.05%	0.008%
87	16.868	2442	2445	2465	rBV3	368	1071	0.07%	0.010%
88	16.988	2465	2468	2470	rVB3	482	452	0.03%	0.004%
89	17.077	2470	2485	2489	rVB3	320	1175	0.07%	0.011%
90	17.156	2489	2500	2508	rBV3	357	1496	0.09%	0.015%
91	17.375	2537	2542	2543	rBV	531	506	0.03%	0.005%
92	17.433	2543	2553	2581	rVV	854727	1603575	99.51%	15.550%
93	17.731	2607	2610	2629	rBV4	551	2253	0.14%	0.022%
94	17.835	2629	2630	2640	rVV4	500	1131	0.07%	0.011%
95	17.940	2640	2650	2673	rVV5	627	3638	0.23%	0.035%
96	18.134	2674	2687	2690	rVB4	604	2119	0.13%	0.021%
97	18.306	2718	2720	2725	rVB3	417	442	0.03%	0.004%
98	18.510	2725	2759	2765	rBV4	755	4723	0.29%	0.046%
99	18.662	2775	2788	2795	rBV5	610	2144	0.13%	0.021%
100	22.103	2795	3446	3448	rVV7	6725	773649	48.01%	7.502%

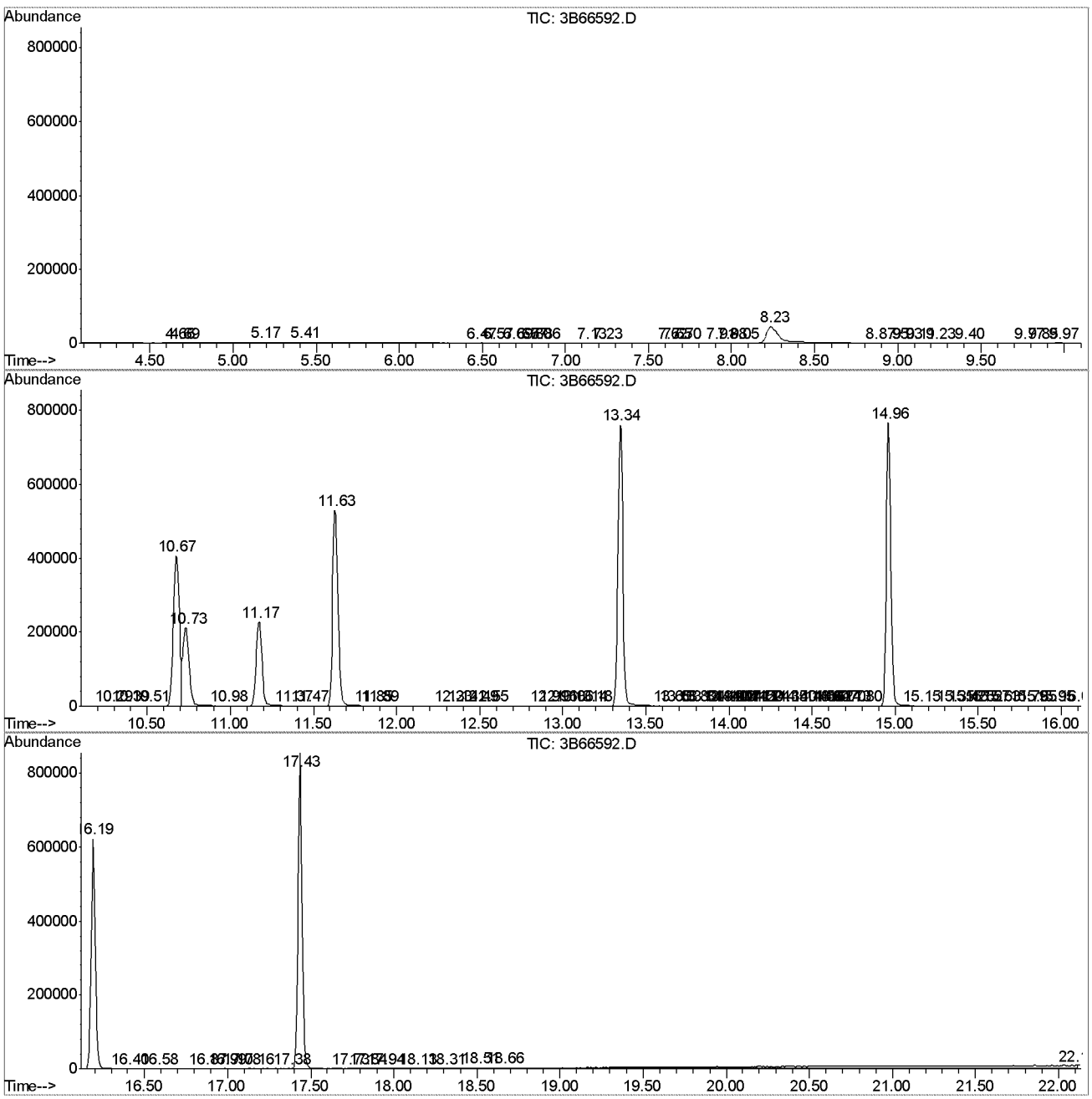
Sum of corrected areas: 10312568

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 28 09:16:32 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

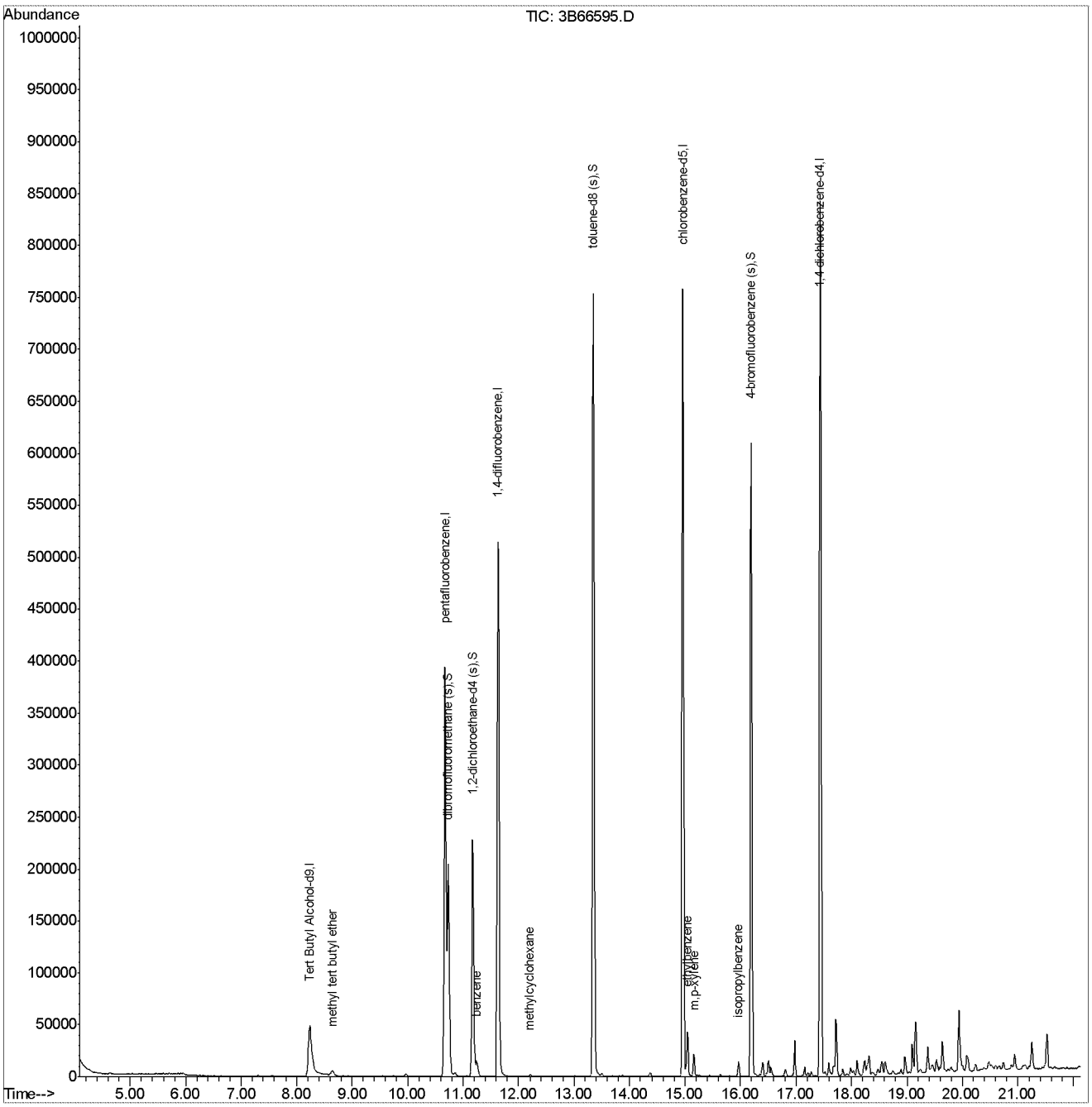
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	145865	500.00	ug/L	0.00
5) pentafluorobenzene	10.68	168	380302	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	512827	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	493434	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	265065	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	155095	51.57	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.14%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	198050	50.23	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.46%			
85) toluene-d8 (s)	13.35	98	604317	52.63	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 105.26%			
111) 4-bromofluorobenzene (s)	16.19	95	237929	51.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.82%			
Target Compounds						Qvalue
37) methyl tert butyl ether	8.64	73	8160	0.77	ug/L	98
70) benzene	11.24	78	14142	1.12	ug/L	98
82) methylcyclohexane	12.21	83	1242	0.26	ug/L	96
103) ethylbenzene	15.04	91	35567	2.39	ug/L	99
104) m,p-xylene	15.16	106	7524	1.33	ug/L	93
110) isopropylbenzene	15.96	105	12536	0.79	ug/L	97

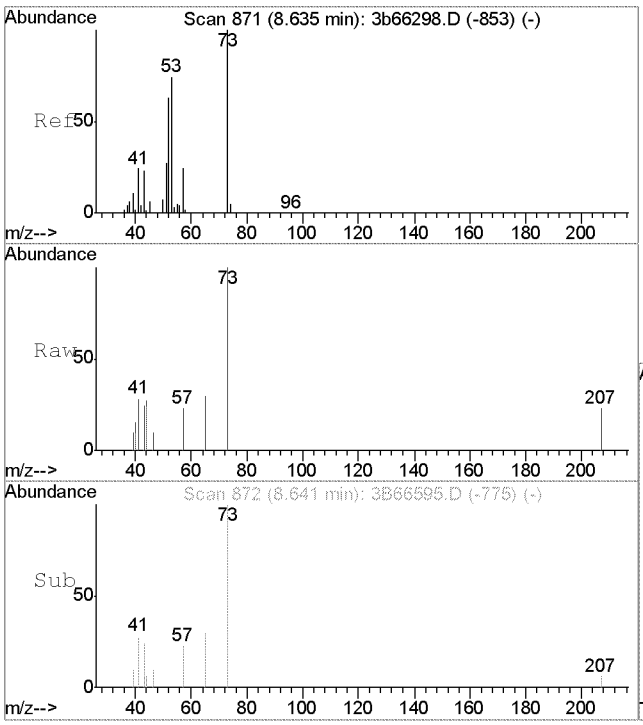
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 28 09:16:32 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

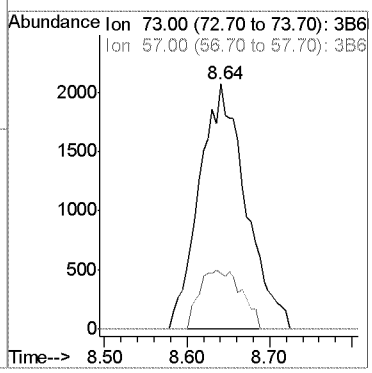


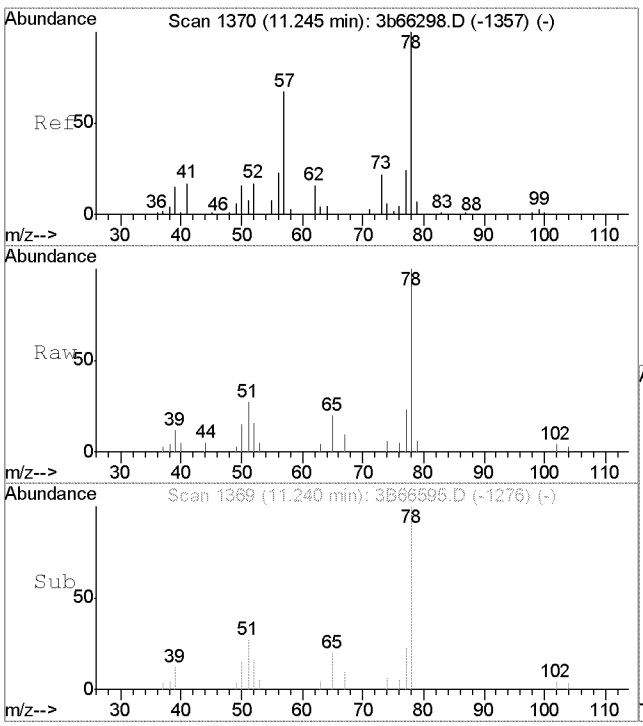


#37
methyl tert butyl ether
Concen: 0.77 ug/L
RT: 8.64 min Scan# 872
Delta R.T. 0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 73 Resp: 8160

Ion	Ratio	Lower	Upper
73	100		
57	22.6	0.0	53.8

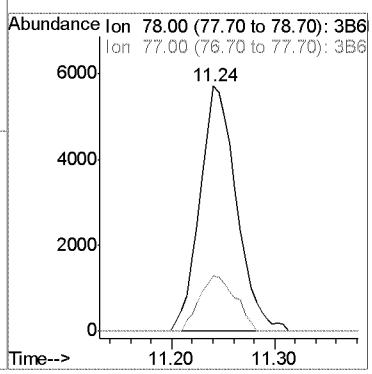


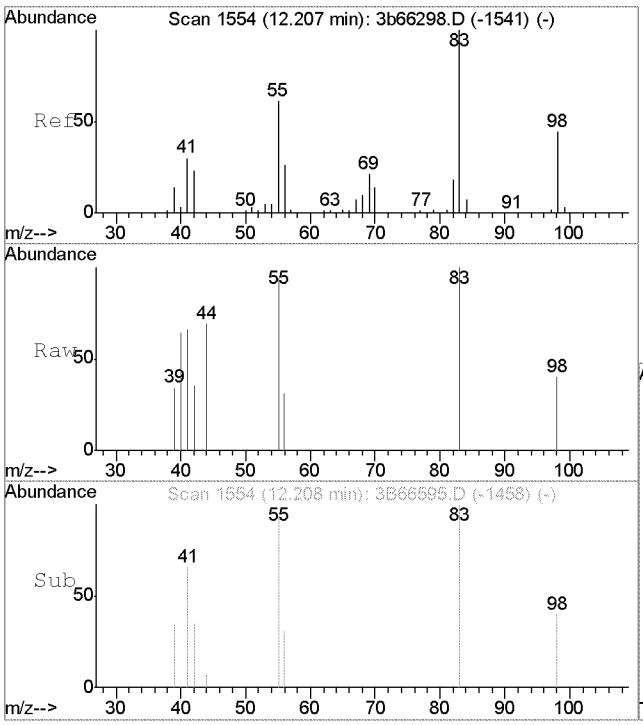


#70
benzene
Concen: 1.12 ug/L
RT: 11.24 min Scan# 1369
Delta R.T. -0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 78 Resp: 14142

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	53.9

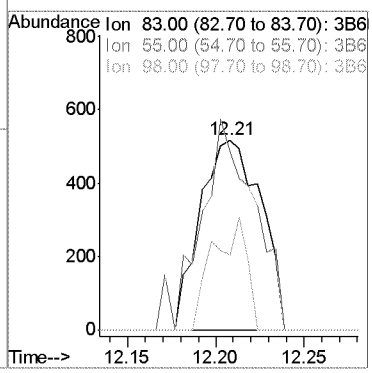


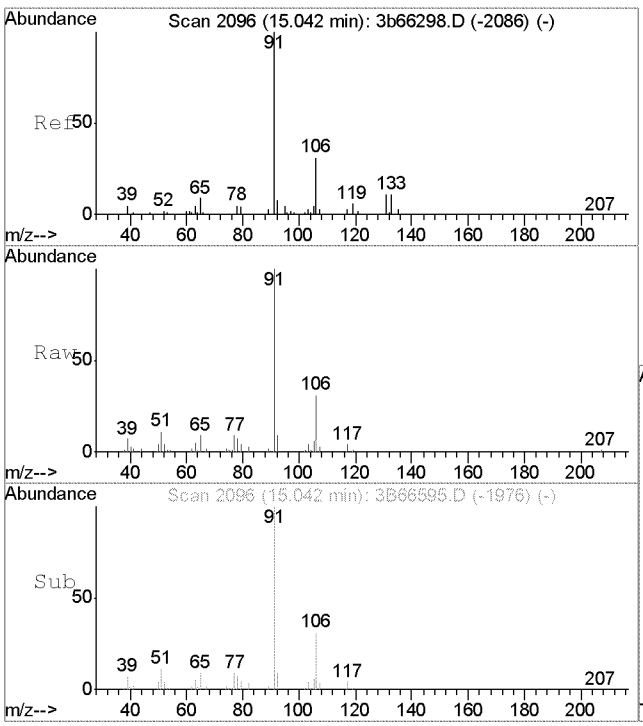


#82
methylcyclohexane
Concen: 0.26 ug/L
RT: 12.21 min Scan# 1554
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 83 Resp: 1242

Ion	Ratio	Lower	Upper
83	100		
55	93.8	61.4	121.4
98	39.8	13.9	73.9

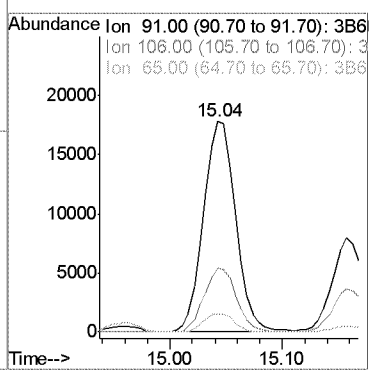


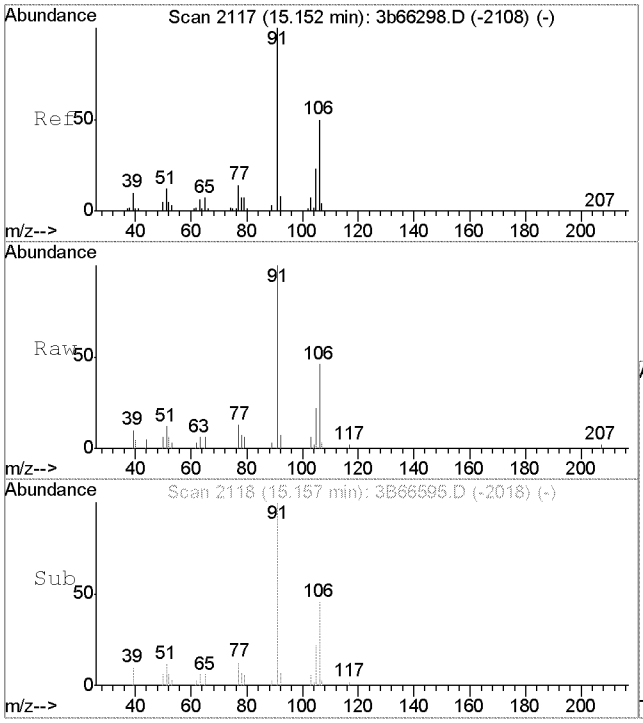


#103
ethylbenzene
Concen: 2.39 ug/L
RT: 15.04 min Scan# 2096
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 91 Resp: 35567

Ion	Ratio	Lower	Upper
91	100		
106	30.8	0.9	60.9
65	8.8	0.0	39.4

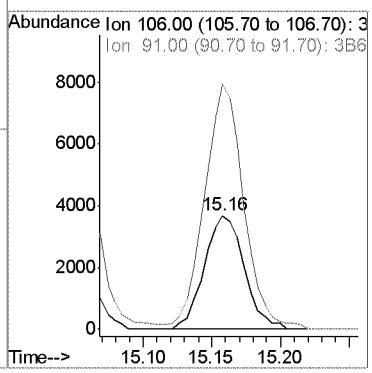


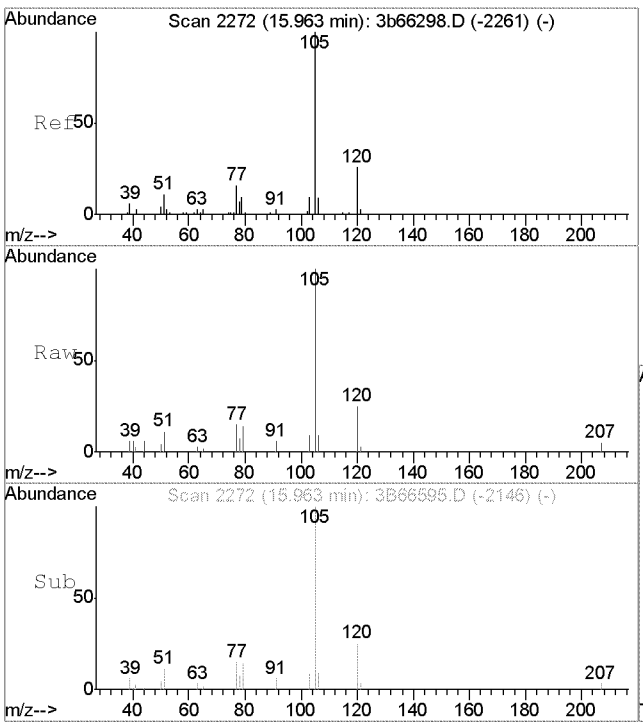


#104
m,p-xylene
Concen: 1.33 ug/L
RT: 15.16 min Scan# 2118
Delta R.T. 0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion:106 Resp: 7524

Ion	Ratio	Lower	Upper
106	100		
91	211.1	171.1	231.1

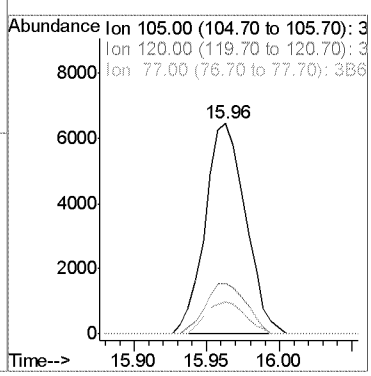




#110
isopropylbenzene
Concen: 0.79 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion:105 Resp: 12536

Ion	Ratio	Lower	Upper
105	100		
120	24.5	0.0	56.1
77	15.2	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.215	139	217	242	rBV7	1220	19509	1.22%	0.178%
2	7.260	567	608	615	rBV3	320	2726	0.17%	0.025%
3	7.317	615	619	625	rVV2	369	636	0.04%	0.006%
4	7.537	660	661	696	rVB3	408	1591	0.10%	0.015%
5	7.856	719	722	731	rVB2	390	801	0.05%	0.007%
6	7.955	731	741	745	rBV2	390	805	0.05%	0.007%
7	8.233	779	794	861	rBV2	48431	260522	16.25%	2.377%
8	8.651	861	874	896	rVB4	4988	22804	1.42%	0.208%
9	8.777	896	898	909	rBV2	278	608	0.04%	0.006%
10	8.928	925	927	952	rBV3	257	544	0.03%	0.005%
11	9.075	952	955	979	rVV3	265	1284	0.08%	0.012%
12	9.341	1004	1006	1022	rBV3	260	731	0.05%	0.007%
13	9.430	1022	1023	1036	rBV3	237	567	0.04%	0.005%
14	9.551	1044	1046	1083	rBV3	396	1178	0.07%	0.011%
15	9.969	1117	1126	1138	rBV4	2114	5330	0.33%	0.049%
16	10.157	1160	1162	1179	rVV2	314	728	0.05%	0.007%
17	10.283	1183	1186	1203	rVB3	247	833	0.05%	0.008%
18	10.675	1247	1261	1267	rBV	394039	1005379	62.72%	9.174%
19	10.727	1267	1271	1292	rVB	201876	478564	29.85%	4.367%
20	11.046	1325	1332	1334	rBV	795	777	0.05%	0.007%
21	11.167	1342	1355	1366	rBV	227728	541979	33.81%	4.945%
22	11.240	1366	1369	1394	rVB2	15220	36521	2.28%	0.333%
23	11.627	1433	1443	1489	rVB	514450	1175771	73.35%	10.729%
24	12.208	1545	1554	1568	rVB5	2187	5032	0.31%	0.046%
25	12.961	1694	1698	1703	rBV3	522	662	0.04%	0.006%
26	13.013	1703	1708	1716	rVB2	1104	1627	0.10%	0.015%
27	13.102	1723	1725	1730	rBV2	370	614	0.04%	0.006%
28	13.212	1741	1746	1749	rVB2	350	548	0.03%	0.005%
29	13.342	1758	1771	1796	rBV	753970	1591686	99.29%	14.524%
30	13.499	1796	1801	1813	rVB5	2179	5416	0.34%	0.049%
31	13.693	1835	1838	1855	rBV4	748	1668	0.10%	0.015%
32	13.818	1855	1862	1866	rVV5	829	1480	0.09%	0.014%
33	13.866	1866	1871	1883	rVB3	1575	3707	0.23%	0.034%
34	14.368	1959	1967	1976	rBV3	3102	6879	0.43%	0.063%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	14.477	1985	1988	1997	rVB2	312	758	0.05%	0.007%
36	14.749	2034	2040	2043	rBV2	359	806	0.05%	0.007%
37	14.959	2070	2080	2090	rBV	758052	1472876	91.88%	13.440%
38	15.042	2090	2096	2111	rVV	42922	87748	5.47%	0.801%
39	15.157	2111	2118	2127	rVV	21460	41742	2.60%	0.381%
40	15.210	2127	2128	2134	rVV3	1173	1864	0.12%	0.017%
41	15.267	2134	2139	2146	rVV4	906	1506	0.09%	0.014%
42	15.445	2162	2173	2180	rVV4	750	1698	0.11%	0.015%
43	15.518	2184	2187	2194	rBV3	284	483	0.03%	0.004%
44	15.633	2200	2209	2221	rVB4	1578	2823	0.18%	0.026%
45	15.743	2227	2230	2240	rVB3	255	520	0.03%	0.005%
46	15.806	2240	2242	2251	rBV3	535	482	0.03%	0.004%
47	15.958	2264	2271	2287	rBV	14286	26727	1.67%	0.244%
48	16.188	2306	2315	2339	rVV	609063	1161911	72.48%	10.602%
49	16.355	2339	2347	2349	rVV6	1731	3449	0.22%	0.031%
50	16.397	2349	2355	2364	rVV	13583	24069	1.50%	0.220%
51	16.507	2364	2376	2380	rVV	15125	30423	1.90%	0.278%
52	16.549	2380	2384	2395	rVB2	9248	16790	1.05%	0.153%
53	16.753	2420	2423	2427	rBV4	477	482	0.03%	0.004%
54	16.810	2427	2434	2452	rVB	6199	11726	0.73%	0.107%
55	16.925	2452	2456	2458	rBV2	690	917	0.06%	0.008%
56	16.978	2458	2466	2487	rVB	34280	61395	3.83%	0.560%
57	17.155	2487	2500	2507	rBV	8245	16958	1.06%	0.155%
58	17.213	2507	2511	2517	rVB	2488	4341	0.27%	0.040%
59	17.276	2517	2523	2531	rBV3	4421	7472	0.47%	0.068%
60	17.344	2531	2536	2544	rVB2	337	591	0.04%	0.005%
61	17.433	2544	2553	2567	rBV	842167	1603050	100.00%	14.627%
62	17.527	2567	2571	2577	rVB3	3230	5226	0.33%	0.048%
63	17.589	2577	2583	2593	rBV2	11963	24564	1.53%	0.224%
64	17.720	2593	2608	2624	rVB3	53933	124262	7.75%	1.134%
65	17.840	2624	2631	2638	rBV2	6254	10676	0.67%	0.097%
66	17.924	2638	2647	2653	rVB4	1649	4184	0.26%	0.038%
67	17.987	2653	2659	2663	rBV3	7131	12910	0.81%	0.118%
68	18.034	2663	2668	2675	rVB5	4254	9498	0.59%	0.087%
69	18.102	2675	2681	2692	rVB	13932	25665	1.60%	0.234%
70	18.238	2696	2707	2711	rBV2	14627	31889	1.99%	0.291%
71	18.316	2711	2722	2730	rVB2	17281	44048	2.75%	0.402%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	18.369	2730	2732	2745	rVB7	2264	3891	0.24%	0.036%
73	18.479	2747	2753	2760	rBV4	5430	13153	0.82%	0.120%
74	18.547	2760	2766	2772	rVV2	10927	19899	1.24%	0.182%
75	18.604	2772	2777	2797	rVB2	12572	32281	2.01%	0.295%
76	18.740	2797	2803	2813	rBV4	3470	7853	0.49%	0.072%
77	18.839	2817	2822	2825	rVB5	1693	2094	0.13%	0.019%
78	18.892	2826	2832	2839	rVB4	4798	8379	0.52%	0.076%
79	18.965	2839	2846	2855	rBV3	16522	35576	2.22%	0.325%
80	19.038	2855	2860	2864	rBV5	1509	2664	0.17%	0.024%
81	19.096	2864	2871	2877	rBV	28225	51935	3.24%	0.474%
82	19.159	2877	2883	2894	rVV	48217	92352	5.76%	0.843%
83	19.237	2894	2898	2917	rVB	3552	5778	0.36%	0.053%
84	19.378	2917	2925	2933	rBV2	24361	53213	3.32%	0.486%
85	19.462	2933	2941	2948	rVB7	6557	18388	1.15%	0.168%
86	19.530	2948	2954	2961	rBV2	11266	21553	1.34%	0.197%
87	19.587	2961	2965	2968	rVV4	4169	6884	0.43%	0.063%
88	19.640	2968	2975	2990	rVB	29165	60816	3.79%	0.555%
89	19.739	2991	2994	3000	rVV3	2071	2852	0.18%	0.026%
90	19.797	3000	3005	3024	rVB6	3677	6470	0.40%	0.059%
91	19.938	3024	3032	3052	rBV	58435	143560	8.96%	1.310%
92	20.084	3052	3060	3083	rVV6	14402	40687	2.54%	0.371%
93	20.236	3083	3089	3130	rVV9	5478	22663	1.41%	0.207%
94	20.471	3130	3134	3154	rVV3	7986	30755	1.92%	0.281%
95	20.597	3154	3158	3179	rVV6	4236	18649	1.16%	0.170%
96	20.733	3179	3184	3211	rVV4	7185	15704	0.98%	0.143%
97	20.885	3211	3213	3218	rVV5	3704	6398	0.40%	0.058%
98	20.942	3218	3224	3276	rVV3	13783	48729	3.04%	0.445%
99	21.256	3276	3284	3326	rVV	25204	58406	3.64%	0.533%
100	21.523	3326	3335	3448	rVB	32624	71543	4.46%	0.653%

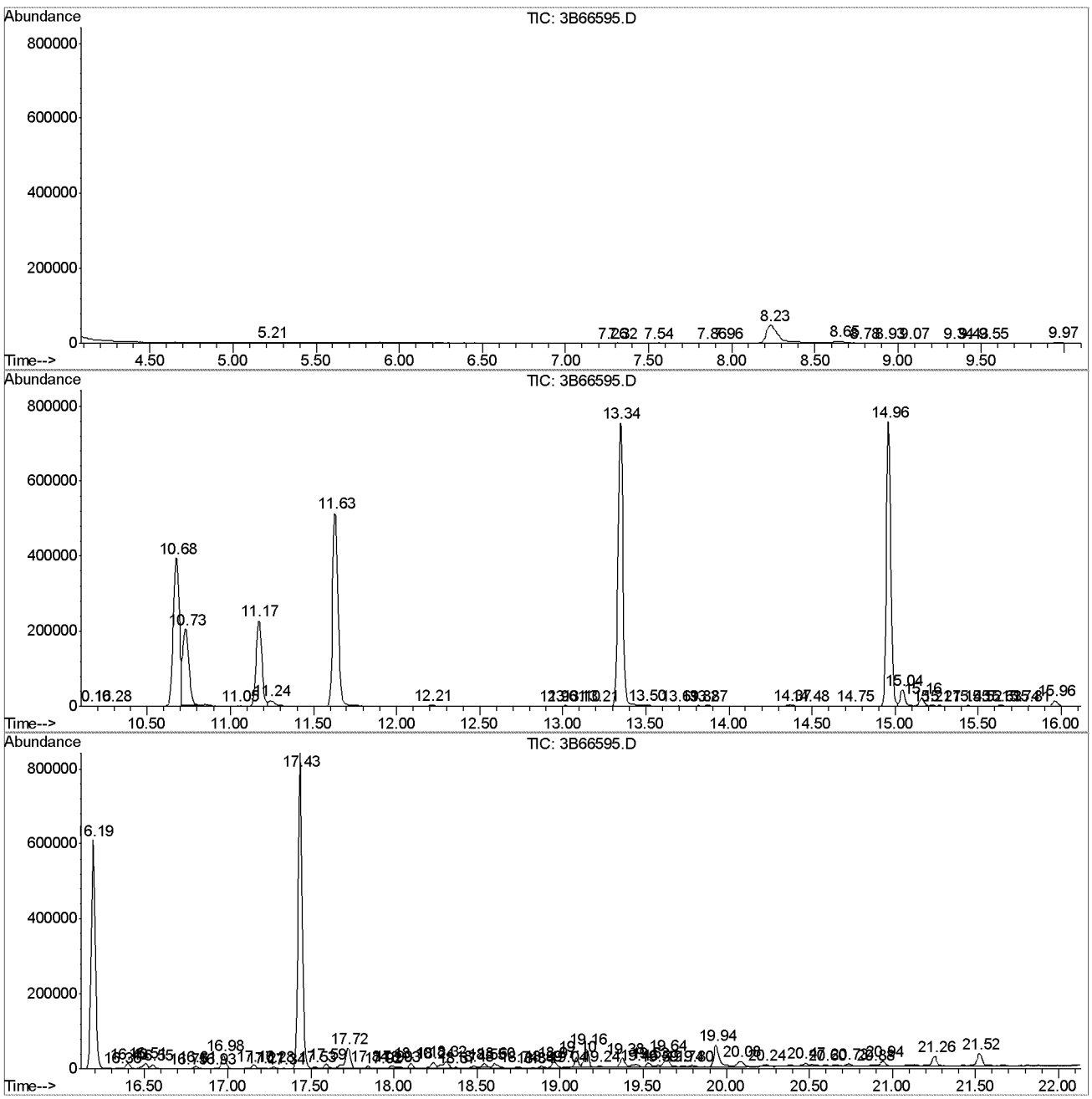
Sum of corrected areas: 10959161

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 28 09:17:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	144422	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	362875	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	495844	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	477919	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	253738	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	147817	51.51	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.02%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	189861	50.47	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.94%			
85) toluene-d8 (s)	13.34	98	576506	51.93	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.86%			
111) 4-bromofluorobenzene (s)	16.19	95	228545	52.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.16%			

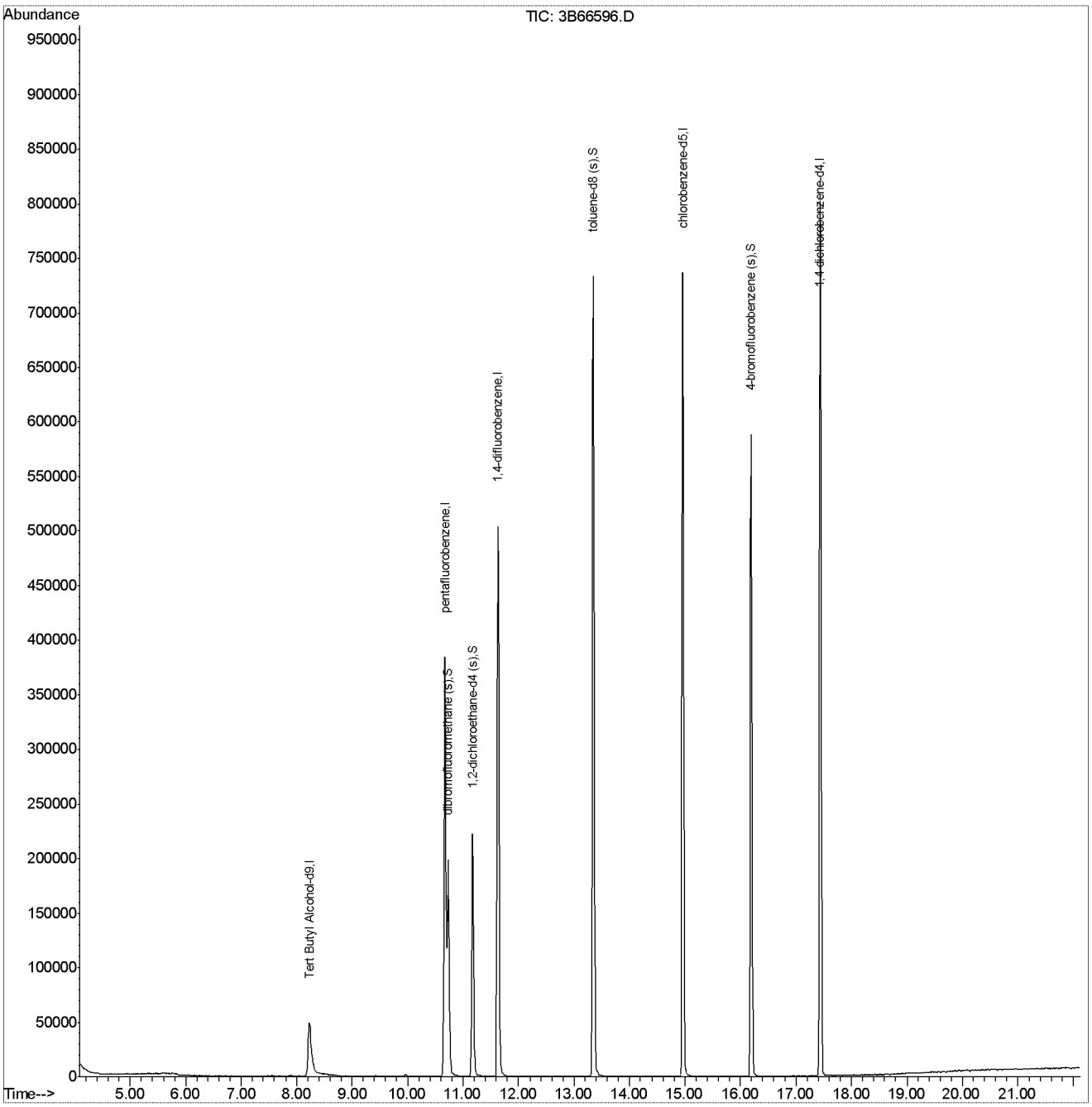
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 28 09:17:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.932	160	163	212	rBV6	707	6574	0.43%	0.073%
2	5.502	270	272	365	rVB5	2310	41212	2.70%	0.455%
3	6.208	405	407	410	rVB2	393	284	0.02%	0.003%
4	6.418	445	447	467	rVB3	188	345	0.02%	0.004%
5	6.596	474	481	485	rBV3	398	547	0.04%	0.006%
6	6.632	485	488	514	rVB3	280	1041	0.07%	0.012%
7	6.920	541	543	549	rBV3	285	364	0.02%	0.004%
8	6.972	549	553	565	rVB3	253	827	0.05%	0.009%
9	7.087	569	575	584	rVB3	196	433	0.03%	0.005%
10	7.479	649	650	658	rBV2	278	334	0.02%	0.004%
11	7.553	659	664	669	rVV2	328	452	0.03%	0.005%
12	7.589	669	671	691	rVB3	351	774	0.05%	0.009%
13	7.908	728	732	755	rVB3	423	1338	0.09%	0.015%
14	8.227	779	793	890	rVB2	48221	257933	16.93%	2.851%
15	8.960	931	933	938	rBB3	213	232	0.02%	0.003%
16	8.996	938	940	943	rBV2	269	244	0.02%	0.003%
17	9.022	943	945	956	rVV3	222	504	0.03%	0.006%
18	9.085	956	957	990	rVV2	227	897	0.06%	0.010%
19	9.320	990	1002	1019	rVV2	150	327	0.02%	0.004%
20	9.493	1033	1035	1077	rBV3	246	1372	0.09%	0.015%
21	9.744	1077	1083	1096	rVB3	412	1298	0.09%	0.014%
22	9.823	1096	1098	1102	rBV3	310	352	0.02%	0.004%
23	9.864	1102	1106	1118	rBV3	396	946	0.06%	0.010%
24	9.959	1118	1124	1137	rVB	1544	3425	0.22%	0.038%
25	10.330	1194	1195	1202	rVB2	275	320	0.02%	0.004%
26	10.403	1202	1209	1218	rBB3	189	561	0.04%	0.006%
27	10.508	1223	1229	1242	rBV2	257	539	0.04%	0.006%
28	10.670	1248	1260	1267	rBV	384343	978980	64.25%	10.820%
29	10.727	1267	1271	1306	rVV	198249	456238	29.94%	5.042%
30	10.926	1306	1309	1315	rVB3	477	610	0.04%	0.007%
31	10.984	1315	1320	1325	rVB	361	409	0.03%	0.005%
32	11.041	1325	1331	1333	rBV2	283	325	0.02%	0.004%
33	11.167	1341	1355	1388	rBV	222617	524725	34.44%	5.799%
34	11.350	1388	1390	1399	rVV2	587	1007	0.07%	0.011%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.434	1399	1406	1412	rVB2	260	510	0.03%	0.006%
36	11.627	1428	1443	1488	rBV	503728	1134989	74.49%	12.544%
37	11.868	1488	1489	1493	rVB2	383	392	0.03%	0.004%
38	11.909	1496	1497	1501	rBV2	266	260	0.02%	0.003%
39	12.009	1509	1516	1521	rVB2	204	374	0.02%	0.004%
40	12.098	1526	1533	1541	rVB2	200	340	0.02%	0.004%
41	12.370	1583	1585	1593	rVV3	321	478	0.03%	0.005%
42	12.432	1596	1597	1601	rVB2	281	218	0.01%	0.002%
43	12.579	1622	1625	1630	rBV2	195	217	0.01%	0.002%
44	12.856	1673	1678	1679	rBV2	268	325	0.02%	0.004%
45	12.940	1690	1694	1701	rBV2	314	489	0.03%	0.005%
46	13.044	1712	1714	1721	rVB3	343	598	0.04%	0.007%
47	13.092	1721	1723	1729	rBV2	361	523	0.03%	0.006%
48	13.180	1736	1740	1745	rVB3	317	628	0.04%	0.007%
49	13.248	1747	1753	1754	rVB	252	319	0.02%	0.004%
50	13.343	1756	1771	1804	rBV	733486	1523660	100.00%	16.839%
51	13.625	1823	1825	1830	rBV2	172	261	0.02%	0.003%
52	13.672	1833	1834	1847	rVB3	267	821	0.05%	0.009%
53	13.761	1847	1851	1858	rBV3	311	700	0.05%	0.008%
54	13.866	1865	1871	1877	rVB2	229	554	0.04%	0.006%
55	13.996	1894	1896	1899	rBV2	269	314	0.02%	0.003%
56	14.028	1899	1902	1903	rVB2	305	232	0.02%	0.003%
57	14.070	1908	1910	1914	rVB2	254	282	0.02%	0.003%
58	14.101	1914	1916	1919	rBV	233	226	0.01%	0.002%
59	14.158	1924	1927	1929	rVV	386	341	0.02%	0.004%
60	14.190	1930	1933	1937	rVB3	319	473	0.03%	0.005%
61	14.253	1942	1945	1950	rVV2	375	504	0.03%	0.006%
62	14.373	1964	1968	1970	rBV2	390	427	0.03%	0.005%
63	14.399	1971	1973	1980	rVB2	222	383	0.03%	0.004%
64	14.566	2002	2005	2008	rBV2	204	225	0.01%	0.002%
65	14.593	2008	2010	2013	rVB2	270	236	0.02%	0.003%
66	14.640	2014	2019	2022	rVB2	327	475	0.03%	0.005%
67	14.676	2022	2026	2029	rBV3	332	499	0.03%	0.006%
68	14.749	2033	2040	2042	rBV2	275	511	0.03%	0.006%
69	14.770	2042	2044	2049	rVB2	362	398	0.03%	0.004%
70	14.833	2049	2056	2064	rVB2	592	1463	0.10%	0.016%
71	14.901	2064	2069	2070	rBV2	384	476	0.03%	0.005%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.959	2070	2080	2105	rBV	736673	1433324	94.07%	15.841%
73	15.157	2114	2118	2130	rVV2	411	900	0.06%	0.010%
74	15.262	2130	2138	2140	rBV3	180	357	0.02%	0.004%
75	15.351	2153	2155	2160	rBV2	231	319	0.02%	0.004%
76	15.445	2160	2173	2180	rVV3	218	682	0.04%	0.008%
77	15.612	2183	2205	2216	rVB3	205	1226	0.08%	0.014%
78	15.696	2216	2221	2225	rBV3	165	308	0.02%	0.003%
79	15.743	2225	2230	2231	rBV2	249	225	0.01%	0.002%
80	15.827	2243	2246	2253	rVB3	240	390	0.03%	0.004%
81	15.916	2255	2263	2271	rBV3	235	675	0.04%	0.007%
82	15.968	2271	2273	2279	rVB2	356	484	0.03%	0.005%
83	16.031	2279	2285	2294	rBV3	286	924	0.06%	0.010%
84	16.109	2299	2300	2305	rBV2	257	308	0.02%	0.003%
85	16.188	2305	2315	2341	rVV	587872	1117074	73.32%	12.346%
86	16.653	2393	2404	2407	rBV3	228	487	0.03%	0.005%
87	16.946	2457	2460	2472	rBV4	324	749	0.05%	0.008%
88	17.056	2472	2481	2492	rVV3	308	961	0.06%	0.011%
89	17.119	2492	2493	2502	rVB2	429	637	0.04%	0.007%
90	17.349	2514	2537	2539	rVB3	288	1119	0.07%	0.012%
91	17.375	2539	2542	2544	rBV3	340	344	0.02%	0.004%
92	17.433	2544	2553	2610	rVV	801792	1515698	99.48%	16.751%
93	17.757	2610	2615	2618	rVB2	514	409	0.03%	0.005%
94	17.846	2629	2632	2634	rBV	411	390	0.03%	0.004%
95	18.050	2669	2671	2676	rBV2	718	665	0.04%	0.007%
96	18.092	2676	2679	2684	rVB4	561	768	0.05%	0.008%
97	18.181	2684	2696	2700	rBV4	671	1752	0.11%	0.019%
98	18.254	2703	2710	2715	rBV4	518	992	0.07%	0.011%
99	18.311	2718	2721	2762	rVV5	871	3786	0.25%	0.042%
100	18.866	2816	2827	2830	rBV4	790	2419	0.16%	0.027%

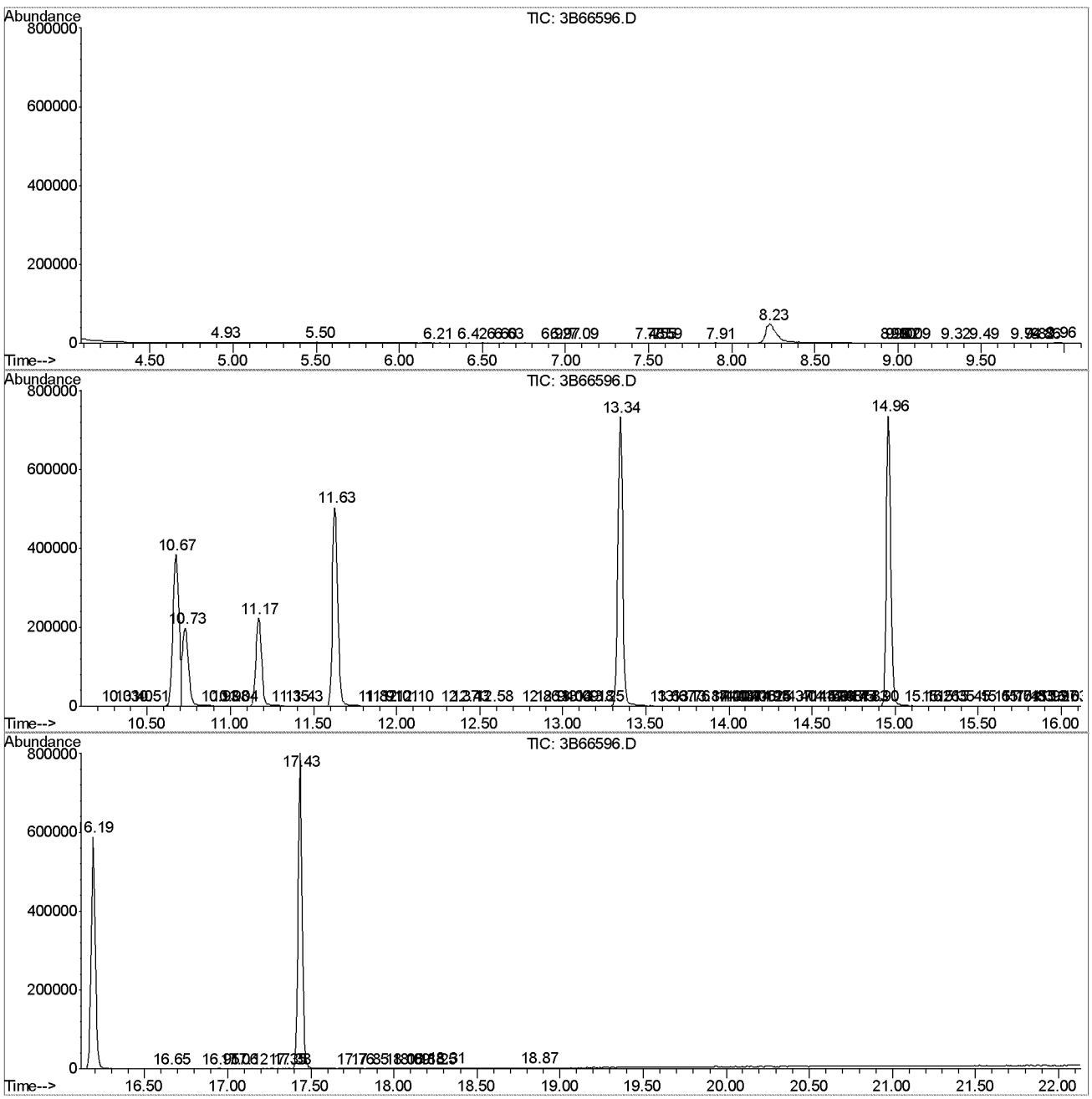
Sum of corrected areas: 9048262

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 31 10:30:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

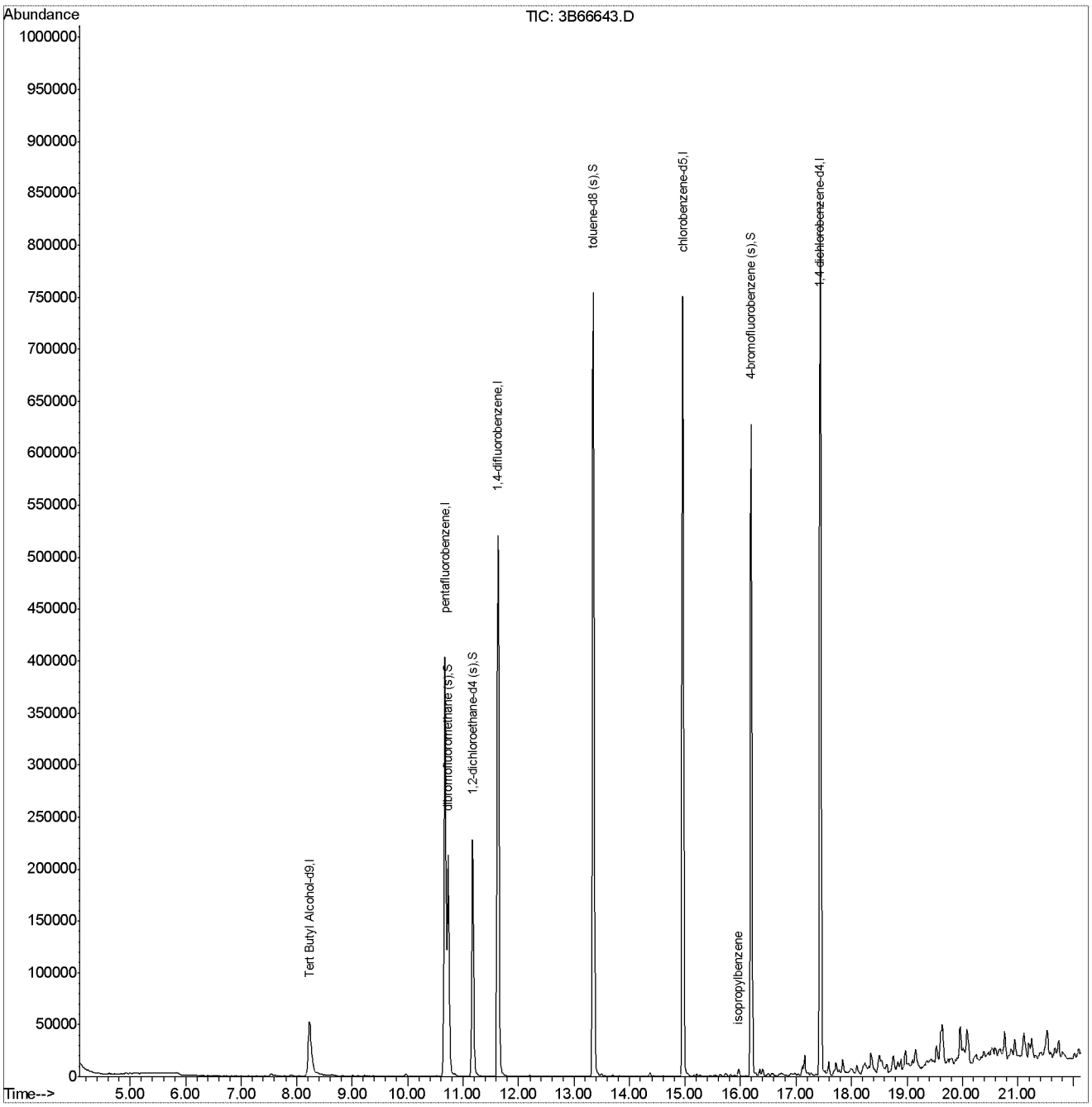
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	140503	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	397385	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	532346	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	500495	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	269011	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	159921	50.89	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.78%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	196046	47.58	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.16%			
85) toluene-d8 (s)	13.34	98	609884	51.17	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.34%			
111) 4-bromofluorobenzene (s)	16.19	95	240499	51.70	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.40%			
Target Compounds						Qvalue
110) isopropylbenzene	15.96	105	6481	0.40	ug/L	97

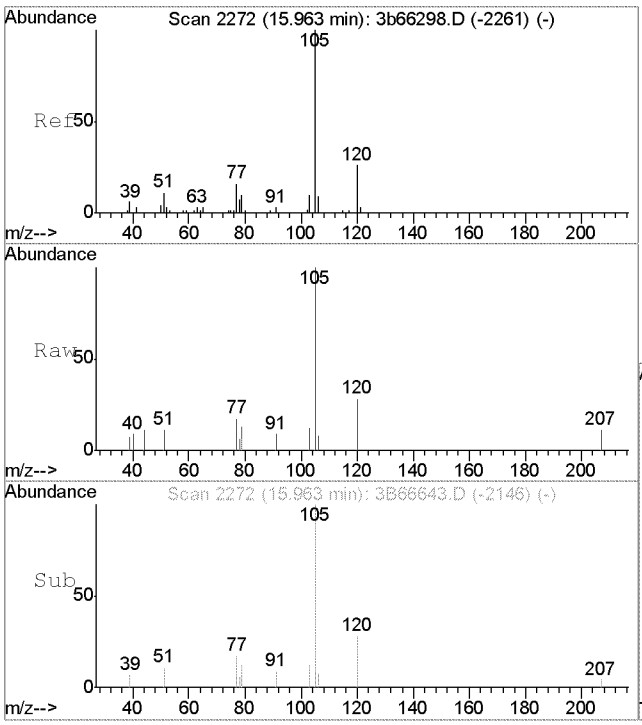
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 31 10:30:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

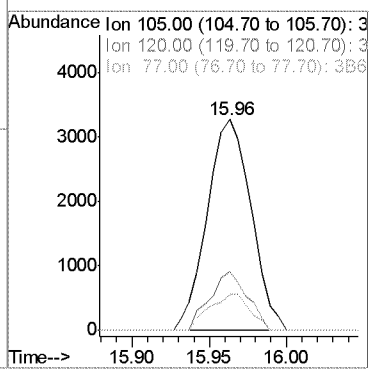




#110
isopropylbenzene
Concen: 0.40 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66643.D
Acq: 28 Jan 2011 4:25 pm

Tgt Ion:105 Resp: 6481

Ion	Ratio	Lower	Upper
105	100		
120	27.9	0.0	56.1
77	17.1	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.093	382	385	441	rVB3	958	4677	0.29%	0.043%
2	6.527	467	468	497	rBV3	289	1023	0.06%	0.009%
3	6.690	497	499	519	rVV3	314	851	0.05%	0.008%
4	6.826	519	525	535	rVB3	276	640	0.04%	0.006%
5	7.124	578	582	606	rVB3	336	1351	0.09%	0.012%
6	7.542	653	662	692	rVB4	1398	6512	0.41%	0.059%
7	7.903	724	731	748	rVB3	626	2423	0.15%	0.022%
8	8.227	776	793	851	rBV	51655	251514	15.83%	2.296%
9	8.640	866	872	904	rVB4	1277	5645	0.36%	0.052%
10	8.834	908	909	936	rBV3	248	923	0.06%	0.008%
11	9.106	955	961	969	rVB2	318	722	0.05%	0.007%
12	9.833	1092	1100	1105	rBV3	283	695	0.04%	0.006%
13	9.875	1105	1108	1116	rVB2	380	625	0.04%	0.006%
14	9.959	1116	1124	1153	rVB4	2118	6696	0.42%	0.061%
15	10.523	1228	1232	1245	rVV3	589	1418	0.09%	0.013%
16	10.670	1248	1260	1267	rVV	403658	1042953	65.65%	9.523%
17	10.727	1267	1271	1305	rVV	212898	494618	31.13%	4.516%
18	11.167	1341	1355	1395	rBV	227890	545417	34.33%	4.980%
19	11.627	1432	1443	1474	rVV	520382	1190543	74.94%	10.870%
20	12.202	1546	1553	1560	rBV5	1263	2233	0.14%	0.020%
21	12.610	1626	1631	1637	rVB2	512	756	0.05%	0.007%
22	12.924	1688	1691	1699	rVB3	387	630	0.04%	0.006%
23	13.018	1702	1709	1716	rVB5	695	1530	0.10%	0.014%
24	13.154	1730	1735	1738	rBV3	589	899	0.06%	0.008%
25	13.280	1753	1759	1761	rVV3	683	1101	0.07%	0.010%
26	13.342	1761	1771	1796	rVV	753915	1587286	99.91%	14.493%
27	13.499	1796	1801	1809	rVV6	2214	5263	0.33%	0.048%
28	13.552	1809	1811	1825	rVV3	690	1929	0.12%	0.018%
29	13.703	1833	1840	1845	rVV4	944	1875	0.12%	0.017%
30	13.818	1854	1862	1869	rBV4	830	1972	0.12%	0.018%
31	13.996	1894	1896	1906	rVB3	527	998	0.06%	0.009%
32	14.085	1909	1913	1918	rVV3	520	887	0.06%	0.008%
33	14.127	1918	1921	1927	rVV2	281	666	0.04%	0.006%
34	14.200	1933	1935	1941	rVV2	476	675	0.04%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	14.268	1941	1948	1951	rVV2	307	715	0.05%	0.007%
36	14.315	1956	1957	1960	rVV2	680	753	0.05%	0.007%
37	14.368	1960	1967	1974	rVB5	3290	7345	0.46%	0.067%
38	14.430	1974	1979	1983	rBV4	798	1282	0.08%	0.012%
39	14.608	2009	2013	2018	rVB4	1093	1321	0.08%	0.012%
40	14.833	2052	2056	2064	rVV2	490	762	0.05%	0.007%
41	14.959	2068	2080	2114	rVV	750335	1472951	92.71%	13.449%
42	15.157	2114	2118	2124	rVV2	1189	1958	0.12%	0.018%
43	15.220	2124	2130	2134	rVV3	1730	3037	0.19%	0.028%
44	15.257	2134	2137	2144	rVV5	960	1681	0.11%	0.015%
45	15.435	2166	2171	2175	rVV2	817	1259	0.08%	0.011%
46	15.466	2175	2177	2181	rVV2	785	837	0.05%	0.008%
47	15.518	2181	2187	2189	rVV4	643	1232	0.08%	0.011%
48	15.539	2189	2191	2199	rVV4	1102	2177	0.14%	0.020%
49	15.639	2199	2210	2220	rVV5	1765	3365	0.21%	0.031%
50	15.733	2220	2228	2238	rVV5	2727	6282	0.40%	0.057%
51	15.811	2238	2243	2253	rVV5	1598	3088	0.19%	0.028%
52	15.890	2253	2258	2266	rVV4	1064	2314	0.15%	0.021%
53	15.963	2266	2272	2284	rVB2	6969	13703	0.86%	0.125%
54	16.104	2296	2299	2303	rVB3	838	686	0.04%	0.006%
55	16.188	2305	2315	2338	rBV	627145	1172145	73.78%	10.702%
56	16.345	2338	2345	2351	rVV4	6422	13102	0.82%	0.120%
57	16.397	2351	2355	2365	rVB	6684	12735	0.80%	0.116%
58	16.491	2365	2373	2381	rBV5	1996	4895	0.31%	0.045%
59	16.575	2381	2389	2405	rVB7	2624	7464	0.47%	0.068%
60	16.700	2405	2413	2415	rBV5	1525	2655	0.17%	0.024%
61	16.732	2415	2419	2443	rVB9	2355	10521	0.66%	0.096%
62	16.915	2443	2454	2462	rBV7	2367	8628	0.54%	0.079%
63	16.983	2462	2467	2471	rVB5	1571	2371	0.15%	0.022%
64	17.019	2471	2474	2484	rVB5	1025	2401	0.15%	0.022%
65	17.113	2484	2492	2495	rBV5	8956	16777	1.06%	0.153%
66	17.155	2495	2500	2509	rVB	17587	32866	2.07%	0.300%
67	17.270	2518	2522	2535	rVB5	2181	3300	0.21%	0.030%
68	17.365	2535	2540	2545	rBV6	1036	1855	0.12%	0.017%
69	17.433	2545	2553	2576	rBV	841076	1588730	100.00%	14.506%
70	17.589	2576	2583	2594	rVB3	13247	26877	1.69%	0.245%
71	17.725	2594	2609	2616	rBV4	12252	34149	2.15%	0.312%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	17.778	2616	2619	2625	rVB6	1859	2637	0.17%	0.024%
73	17.840	2625	2631	2649	rVB6	13043	27122	1.71%	0.248%
74	17.956	2650	2653	2655	rBV4	1055	1175	0.07%	0.011%
75	17.997	2655	2661	2673	rVB4	4290	14131	0.89%	0.129%
76	18.097	2673	2680	2694	rVB4	8807	20643	1.30%	0.188%
77	18.238	2694	2707	2718	rBV10	11057	48324	3.04%	0.441%
78	18.311	2718	2721	2724	rBV3	2786	2718	0.17%	0.025%
79	18.353	2724	2729	2748	rVB7	18663	47990	3.02%	0.438%
80	18.500	2748	2757	2778	rBV9	16076	78043	4.91%	0.713%
81	18.630	2778	2782	2798	rVB2	6820	9668	0.61%	0.088%
82	18.751	2798	2805	2815	rBV10	14795	36872	2.32%	0.337%
83	18.834	2815	2821	2826	rBV2	7847	16614	1.05%	0.152%
84	18.887	2827	2831	2837	rVB	9354	12945	0.81%	0.118%
85	18.970	2837	2847	2866	rBV7	17681	56460	3.55%	0.516%
86	19.101	2866	2872	2876	rBV2	5610	11231	0.71%	0.103%
87	19.159	2876	2883	2916	rVB2	15254	23811	1.50%	0.217%
88	19.430	2916	2935	2948	rBV2	5797	39098	2.46%	0.357%
89	19.535	2948	2955	2962	rBV3	15735	35058	2.21%	0.320%
90	19.640	2962	2975	3029	rBV3	33579	101809	6.41%	0.930%
91	19.959	3029	3036	3053	rBV4	29678	87719	5.52%	0.801%
92	20.079	3053	3059	3078	rVB4	32912	105153	6.62%	0.960%
93	20.534	3078	3146	3183	rBV4	14489	285855	17.99%	2.610%
94	20.759	3183	3189	3219	rVB4	21776	41694	2.62%	0.381%
95	20.942	3219	3224	3248	rVB8	14909	28791	1.81%	0.263%
96	21.104	3248	3255	3268	rVB4	23795	74192	4.67%	0.677%
97	21.198	3268	3273	3278	rBV2	14230	31174	1.96%	0.285%
98	21.664	3358	3362	3370	rBV4	7048	16770	1.06%	0.153%
99	21.732	3370	3375	3439	rVB4	16101	42736	2.69%	0.390%
100	22.093	3439	3444	3448	rBV5	7653	15775	0.99%	0.144%

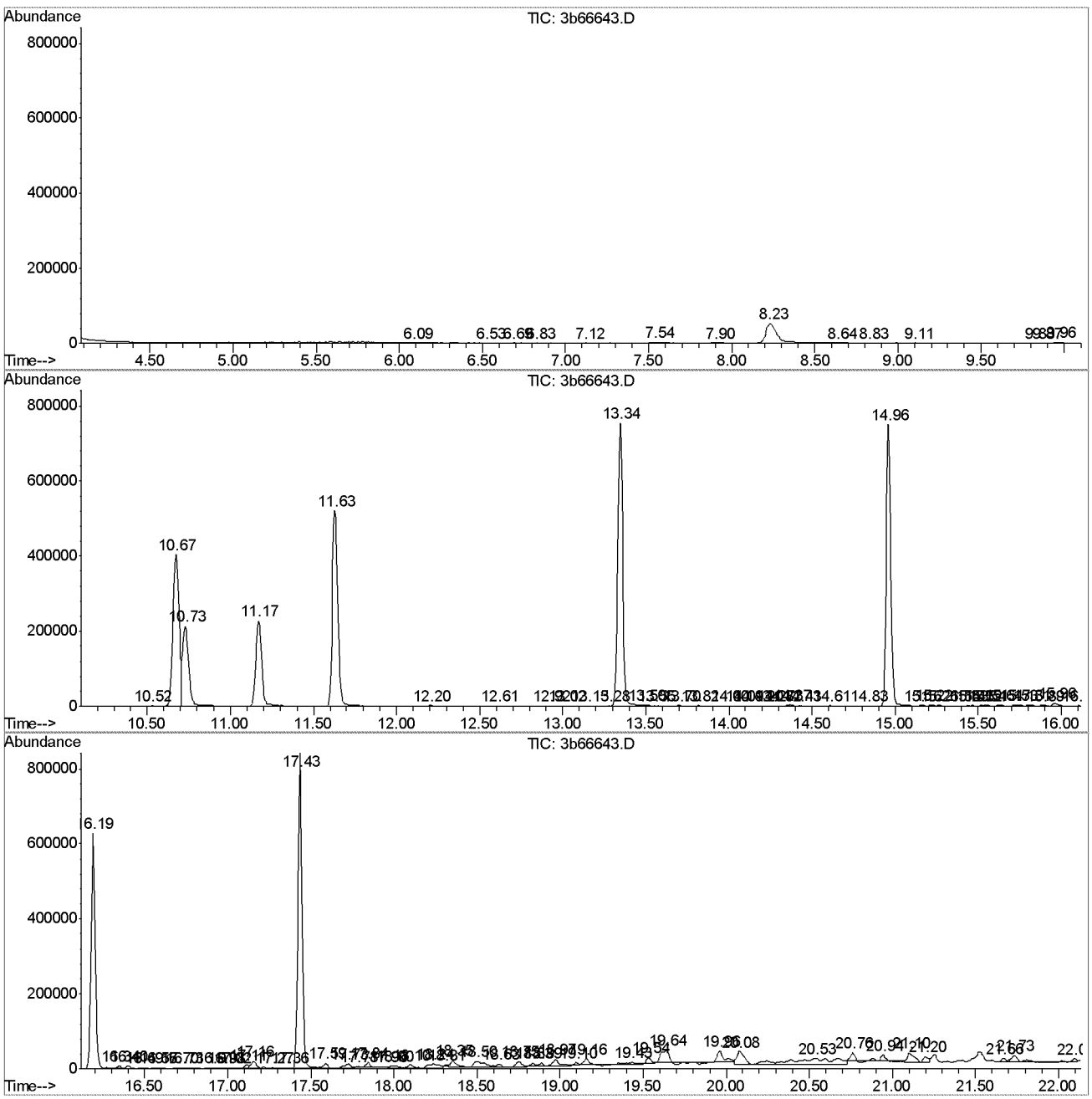
Sum of corrected areas: 10952373

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

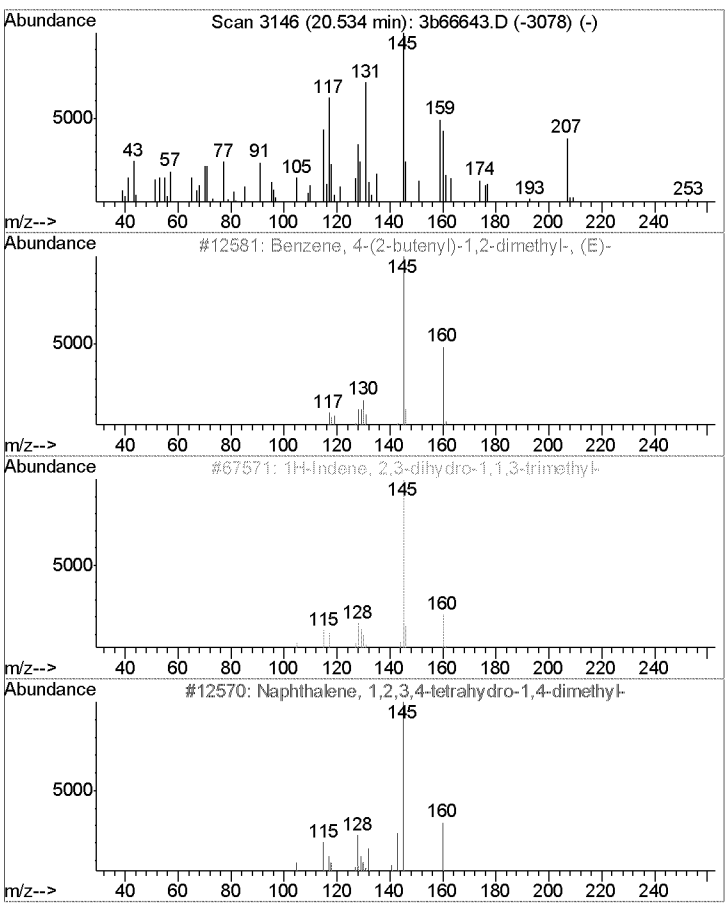
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

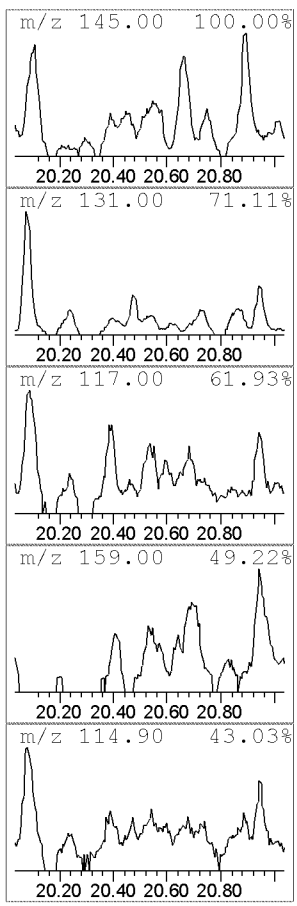
****

Peak Number 1 Benzene, 4-(2-butenyl)-1,2-... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.53	9.00 ug/L	285855	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-(2-butenyl)-1,2-dimet...	160	C12H16	054340-86-2	47
2	1H-Indene, 2,3-dihydro-1,1,3-tri...	160	C12H16	002613-76-5	46
3	Naphthalene, 1,2,3,4-tetrahydro-...	160	C12H16	004175-54-6	43
4	1H-Indene, 2,3-dihydro-1,5,7-tri...	160	C12H16	054340-88-4	35
5	1H-Inden-1-one, 2,3-dihydro-3,3-...	160	C11H12O	026465-81-6	35





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Benzene, 4-(2-but...	20.53	9.0	ug/L	285855	5	17.43	1588730	50.0

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 28 09:35:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	143468	500.00	ug/L	-0.02
5) pentafluorobenzene	10.68	168	413764	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	552799	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	525165	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	283519	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	165334	50.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.06%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	202658	47.24	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.48%			
85) toluene-d8 (s)	13.34	98	638678	51.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.20%			
111) 4-bromofluorobenzene (s)	16.19	95	253323	51.67	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.34%			

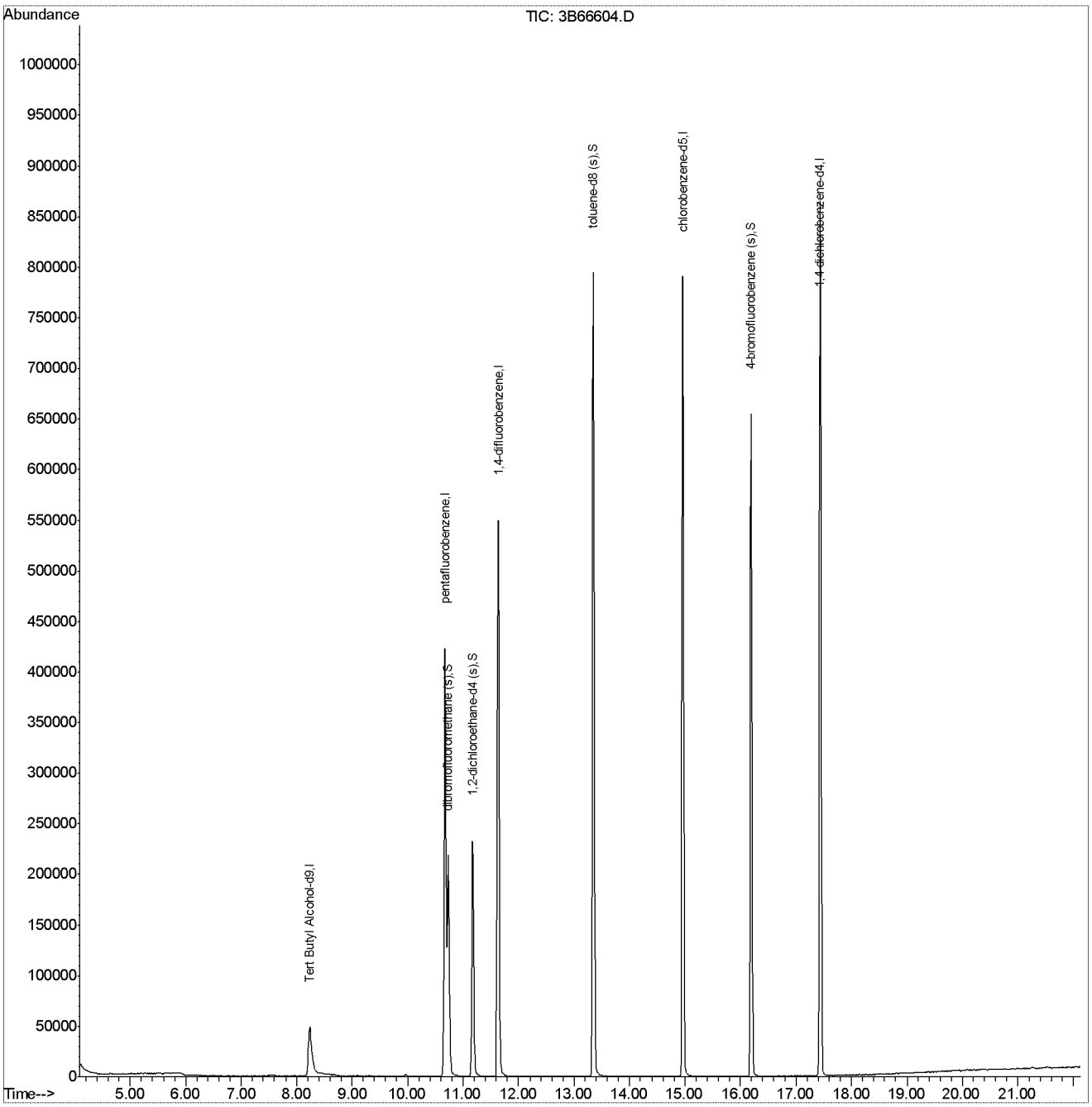
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 28 09:35:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.676	100	114	190	rBV7	1031	10002	0.60%	0.093%
2	7.286	609	613	620	rBV3	258	539	0.03%	0.005%
3	7.542	654	662	683	rVB3	796	3328	0.20%	0.031%
4	7.778	693	707	721	rBV2	434	1460	0.09%	0.014%
5	7.976	744	745	754	rBV2	337	288	0.02%	0.003%
6	8.118	769	772	775	rVB2	414	344	0.02%	0.003%
7	8.233	780	794	897	rVV2	48778	272759	16.45%	2.523%
8	8.792	897	901	913	rVV3	354	629	0.04%	0.006%
9	8.860	913	914	926	rVB3	221	432	0.03%	0.004%
10	9.169	971	973	977	rVB3	394	319	0.02%	0.003%
11	9.211	977	981	986	rVB2	309	544	0.03%	0.005%
12	9.253	986	989	997	rBV3	501	825	0.05%	0.008%
13	9.300	997	998	1006	rBV	363	379	0.02%	0.004%
14	9.488	1018	1034	1037	rBV3	325	977	0.06%	0.009%
15	9.509	1037	1038	1044	rVV2	246	296	0.02%	0.003%
16	9.582	1044	1052	1057	rVB3	188	304	0.02%	0.003%
17	9.807	1092	1095	1106	rBV3	337	702	0.04%	0.006%
18	9.906	1106	1114	1117	rVV3	300	614	0.04%	0.006%
19	9.959	1117	1124	1142	rVV4	1399	4346	0.26%	0.040%
20	10.063	1143	1144	1156	rVV3	304	833	0.05%	0.008%
21	10.157	1156	1162	1201	rVV4	433	2771	0.17%	0.026%
22	10.408	1204	1210	1215	rVV2	376	648	0.04%	0.006%
23	10.503	1215	1228	1248	rVV3	288	1703	0.10%	0.016%
24	10.670	1248	1260	1267	rVV	422886	1075767	64.88%	9.952%
25	10.728	1267	1271	1313	rVB	218820	528843	31.89%	4.892%
26	10.952	1313	1314	1324	rVB2	363	791	0.05%	0.007%
27	11.010	1324	1325	1334	rVB3	407	878	0.05%	0.008%
28	11.078	1334	1338	1340	rBV2	386	404	0.02%	0.004%
29	11.172	1340	1356	1391	rBV	232952	562203	33.91%	5.201%
30	11.360	1391	1392	1396	rVV	443	422	0.03%	0.004%
31	11.392	1396	1398	1402	rVB2	435	357	0.02%	0.003%
32	11.444	1405	1408	1411	rBV2	237	267	0.02%	0.002%
33	11.528	1419	1424	1430	rVB2	435	549	0.03%	0.005%
34	11.632	1430	1444	1484	rBV	549460	1241100	74.85%	11.482%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.852	1484	1486	1503	rVB2	431	1204	0.07%	0.011%
36	12.035	1515	1521	1525	rVB2	210	294	0.02%	0.003%
37	12.082	1525	1530	1534	rBV2	269	445	0.03%	0.004%
38	12.182	1544	1549	1553	rVB	359	344	0.02%	0.003%
39	12.281	1562	1568	1570	rBV2	245	268	0.02%	0.002%
40	12.338	1578	1579	1588	rVB2	228	347	0.02%	0.003%
41	12.401	1588	1591	1599	rBV2	218	416	0.03%	0.004%
42	12.511	1610	1612	1615	rVB2	382	358	0.02%	0.003%
43	12.542	1615	1618	1620	rBV	438	456	0.03%	0.004%
44	12.589	1624	1627	1630	rBV	218	307	0.02%	0.003%
45	12.710	1645	1650	1652	rBV	317	396	0.02%	0.004%
46	12.820	1668	1671	1673	rVV2	276	300	0.02%	0.003%
47	12.893	1677	1685	1687	rBV2	279	465	0.03%	0.004%
48	12.945	1689	1695	1697	rVV2	246	423	0.03%	0.004%
49	12.977	1697	1701	1706	rVV2	413	559	0.03%	0.005%
50	13.045	1710	1714	1716	rBV2	381	491	0.03%	0.005%
51	13.065	1716	1718	1724	rVB2	292	446	0.03%	0.004%
52	13.128	1728	1730	1733	rBV2	349	334	0.02%	0.003%
53	13.165	1733	1737	1746	rBV2	309	793	0.05%	0.007%
54	13.238	1746	1751	1755	rVB3	300	495	0.03%	0.005%
55	13.269	1755	1757	1760	rBV2	311	399	0.02%	0.004%
56	13.343	1760	1771	1810	rVV	794708	1658090	100.00%	15.339%
57	13.573	1810	1815	1828	rVB4	702	1729	0.10%	0.016%
58	13.714	1833	1842	1847	rVV3	188	447	0.03%	0.004%
59	13.792	1855	1857	1864	rBV3	224	279	0.02%	0.003%
60	13.897	1874	1877	1884	rVB3	342	745	0.04%	0.007%
61	13.955	1884	1888	1889	rBV3	378	392	0.02%	0.004%
62	13.970	1889	1891	1898	rVV3	400	634	0.04%	0.006%
63	14.049	1898	1906	1907	rVB3	338	605	0.04%	0.006%
64	14.064	1907	1909	1914	rBV2	488	639	0.04%	0.006%
65	14.106	1914	1917	1921	rBV3	274	479	0.03%	0.004%
66	14.143	1921	1924	1928	rVB3	313	414	0.02%	0.004%
67	14.185	1928	1932	1943	rBV2	319	850	0.05%	0.008%
68	14.321	1956	1958	1961	rVB2	392	355	0.02%	0.003%
69	14.352	1961	1964	1967	rBV2	333	415	0.03%	0.004%
70	14.389	1967	1971	1973	rVB3	423	516	0.03%	0.005%
71	14.404	1973	1974	1986	rBV3	369	1247	0.08%	0.012%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.525	1990	1997	1999	rVB3	307	634	0.04%	0.006%
73	14.556	1999	2003	2012	rBV	330	887	0.05%	0.008%
74	14.661	2022	2023	2028	rVB2	334	375	0.02%	0.003%
75	14.713	2031	2033	2041	rBV2	353	692	0.04%	0.006%
76	14.776	2041	2045	2066	rVV3	347	1904	0.11%	0.018%
77	14.959	2066	2080	2114	rVV	790987	1546832	93.29%	14.310%
78	15.158	2114	2118	2121	rVB3	626	842	0.05%	0.008%
79	15.341	2151	2153	2162	rVB3	235	417	0.03%	0.004%
80	15.398	2162	2164	2172	rVB2	221	415	0.03%	0.004%
81	15.456	2172	2175	2178	rBV3	194	260	0.02%	0.002%
82	15.905	2238	2261	2263	rBV3	310	1166	0.07%	0.011%
83	16.188	2304	2315	2342	rVB	654661	1226646	73.98%	11.348%
84	16.366	2342	2349	2353	rBV2	308	810	0.05%	0.007%
85	16.397	2353	2355	2358	rVB3	269	255	0.02%	0.002%
86	16.418	2358	2359	2362	rBV	360	294	0.02%	0.003%
87	16.721	2413	2417	2426	rBV3	295	740	0.04%	0.007%
88	16.868	2441	2445	2453	rVB2	265	521	0.03%	0.005%
89	16.967	2461	2464	2488	rVB4	492	1779	0.11%	0.016%
90	17.223	2511	2513	2522	rBV3	387	571	0.03%	0.005%
91	17.276	2522	2523	2528	rVB2	428	400	0.02%	0.004%
92	17.339	2529	2535	2540	rVV3	346	585	0.04%	0.005%
93	17.433	2544	2553	2578	rVV	864791	1656237	99.89%	15.322%
94	17.569	2578	2579	2584	rVB3	609	775	0.05%	0.007%
95	17.851	2630	2633	2636	rBV3	498	553	0.03%	0.005%
96	17.898	2637	2642	2660	rVV4	821	3152	0.19%	0.029%
97	18.034	2660	2668	2675	rVB4	549	1350	0.08%	0.012%
98	18.154	2690	2691	2702	rBV4	402	743	0.04%	0.007%
99	18.348	2725	2728	2749	rBV5	962	2798	0.17%	0.026%
100	22.014	2749	3429	3447	rBV8	7856	962853	58.07%	8.907%

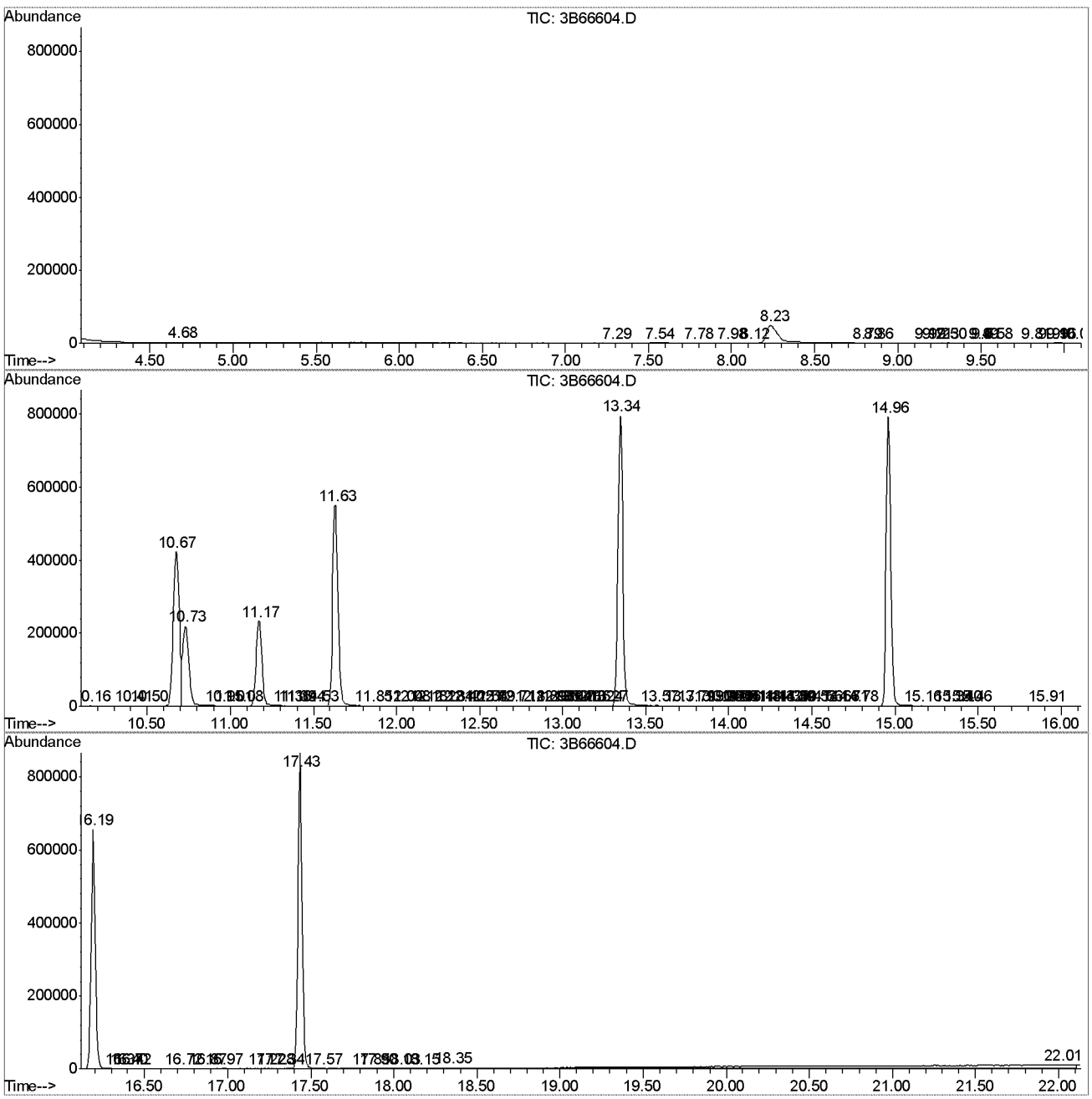
Sum of corrected areas: 10809485

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 28 09:35:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Wed Jan 26 10:59:35 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	155421	500.00	ug/L	-0.01
5) pentafluorobenzene	10.67	168	402654	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	541327	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	516673	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	276807	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	163105	51.22	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.44%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	200404	48.01	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.02%			
85) toluene-d8 (s)	13.34	98	629918	51.97	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.94%			
111) 4-bromofluorobenzene (s)	16.19	95	246669	51.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.06%			

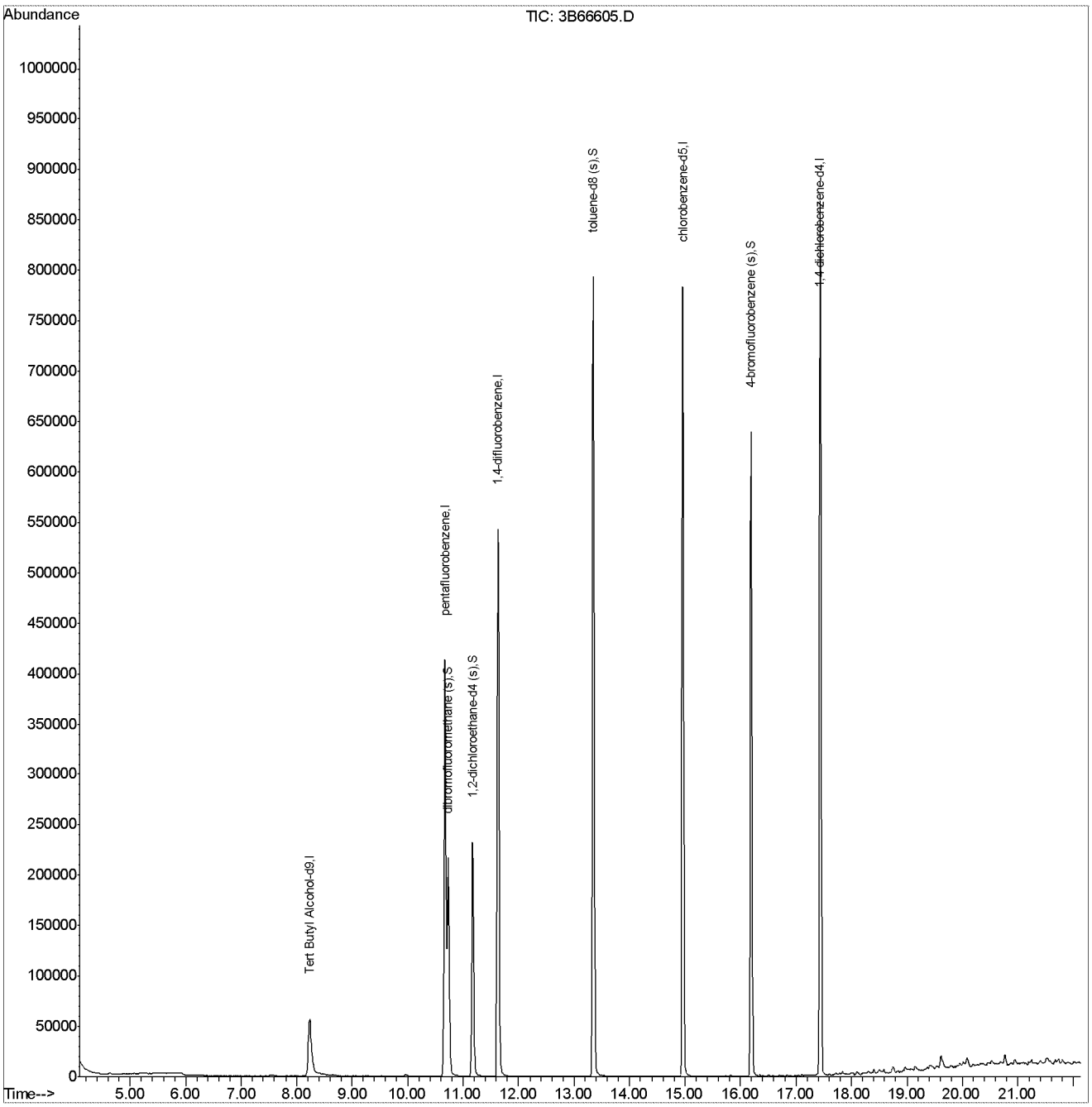
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 28 09:35:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Wed Jan 26 10:59:35 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.177	399	401	461	rVB3	617	5300	0.32%	0.053%
2	6.496	461	462	485	rBV2	466	1581	0.10%	0.016%
3	7.349	617	625	645	rVB3	277	1179	0.07%	0.012%
4	7.542	652	662	709	rBV4	795	3929	0.24%	0.040%
5	7.825	715	716	722	rVB2	389	419	0.03%	0.004%
6	8.018	722	753	766	rBV3	390	3054	0.19%	0.031%
7	8.112	766	771	774	rVV3	335	336	0.02%	0.003%
8	8.233	778	794	892	rVV2	56420	285813	17.47%	2.885%
9	8.756	892	894	901	rVV3	278	417	0.03%	0.004%
10	8.850	901	912	916	rVB3	242	546	0.03%	0.006%
11	8.923	925	926	938	rVB3	391	821	0.05%	0.008%
12	9.253	987	989	994	rVB3	468	404	0.02%	0.004%
13	9.284	994	995	1001	rBV3	348	457	0.03%	0.005%
14	9.457	1018	1028	1031	rBV2	308	732	0.04%	0.007%
15	9.525	1039	1041	1053	rVB3	427	1023	0.06%	0.010%
16	9.603	1053	1056	1064	rBV	341	621	0.04%	0.006%
17	9.749	1076	1084	1110	rVB3	316	1527	0.09%	0.015%
18	9.912	1110	1115	1118	rBV2	298	371	0.02%	0.004%
19	9.959	1118	1124	1137	rVB2	1454	3920	0.24%	0.040%
20	10.063	1137	1144	1154	rVB3	259	769	0.05%	0.008%
21	10.147	1158	1160	1164	rVB3	299	349	0.02%	0.004%
22	10.173	1164	1165	1173	rBV3	322	419	0.03%	0.004%
23	10.231	1173	1176	1183	rBV3	231	429	0.03%	0.004%
24	10.466	1218	1221	1230	rBV2	309	515	0.03%	0.005%
25	10.670	1245	1260	1267	rBV	412891	1056498	64.59%	10.663%
26	10.727	1267	1271	1307	rVB	216514	510484	31.21%	5.152%
27	11.167	1342	1355	1388	rBV	232428	555141	33.94%	5.603%
28	11.345	1388	1389	1393	rVB3	495	458	0.03%	0.005%
29	11.371	1393	1394	1403	rBV2	357	463	0.03%	0.005%
30	11.538	1418	1426	1431	rVB3	504	934	0.06%	0.009%
31	11.627	1431	1443	1475	rBV	542588	1224412	74.86%	12.357%
32	11.978	1506	1510	1514	rBV2	299	421	0.03%	0.004%
33	12.103	1530	1534	1538	rBV2	384	442	0.03%	0.004%
34	12.323	1572	1576	1583	rVB2	306	484	0.03%	0.005%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	12.453	1596	1601	1605	rBV2	313	570	0.03%	0.006%
36	12.532	1609	1616	1619	rBV	463	706	0.04%	0.007%
37	12.705	1644	1649	1657	rVB2	267	479	0.03%	0.005%
38	12.762	1657	1660	1664	rBV2	447	382	0.02%	0.004%
39	12.814	1667	1670	1673	rBV	278	394	0.02%	0.004%
40	12.982	1692	1702	1704	rVB2	306	693	0.04%	0.007%
41	13.029	1707	1711	1715	rBV3	350	467	0.03%	0.005%
42	13.118	1723	1728	1734	rBV3	297	674	0.04%	0.007%
43	13.222	1744	1748	1751	rBV2	223	346	0.02%	0.003%
44	13.343	1760	1771	1806	rVV	792870	1635696	100.00%	16.508%
45	13.531	1806	1807	1836	rVB4	612	2350	0.14%	0.024%
46	14.033	1899	1903	1912	rBV3	320	828	0.05%	0.008%
47	14.106	1916	1917	1926	rVV2	233	500	0.03%	0.005%
48	14.195	1931	1934	1939	rBV2	310	554	0.03%	0.006%
49	14.227	1939	1940	1949	rVB2	313	570	0.03%	0.006%
50	14.310	1949	1956	1958	rVB3	332	619	0.04%	0.006%
51	14.363	1962	1966	1972	rBV2	489	914	0.06%	0.009%
52	14.446	1972	1982	1986	rBV3	273	900	0.06%	0.009%
53	14.499	1986	1992	1998	rVB2	342	806	0.05%	0.008%
54	14.556	1998	2003	2005	rBV2	232	369	0.02%	0.004%
55	14.682	2020	2027	2035	rVB4	708	2265	0.14%	0.023%
56	14.760	2035	2042	2050	rBV3	448	1529	0.09%	0.015%
57	14.865	2055	2062	2063	rVB3	327	519	0.03%	0.005%
58	14.959	2069	2080	2126	rVB	783210	1521941	93.05%	15.360%
59	15.388	2159	2162	2177	rBV3	185	576	0.04%	0.006%
60	15.518	2186	2187	2194	rVB2	341	584	0.04%	0.006%
61	15.592	2194	2201	2203	rBV3	316	629	0.04%	0.006%
62	15.618	2203	2206	2212	rVV3	247	376	0.02%	0.004%
63	15.733	2223	2228	2235	rBV3	484	568	0.03%	0.006%
64	15.822	2239	2245	2253	rBV3	850	1779	0.11%	0.018%
65	15.900	2258	2260	2271	rVB2	401	457	0.03%	0.005%
66	15.963	2271	2272	2278	rBV2	370	518	0.03%	0.005%
67	16.188	2304	2315	2340	rBV	639240	1202549	73.52%	12.137%
68	16.350	2340	2346	2353	rVV4	1344	2932	0.18%	0.030%
69	16.413	2353	2358	2368	rVB2	656	1235	0.08%	0.012%
70	16.517	2372	2378	2384	rVB3	636	1257	0.08%	0.013%
71	16.591	2384	2392	2402	rBV3	532	1434	0.09%	0.014%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	16.685	2407	2410	2422	rBV3	490	1362	0.08%	0.014%
73	16.826	2434	2437	2445	rVV2	505	1024	0.06%	0.010%
74	16.884	2445	2448	2461	rVB3	412	721	0.04%	0.007%
75	16.983	2461	2467	2475	rVB3	949	1418	0.09%	0.014%
76	17.035	2475	2477	2487	rVB3	451	751	0.05%	0.008%
77	17.108	2487	2491	2496	rBV4	1249	1864	0.11%	0.019%
78	17.155	2496	2500	2509	rBV4	979	2658	0.16%	0.027%
79	17.213	2509	2511	2520	rVB4	830	1665	0.10%	0.017%
80	17.433	2537	2553	2579	rBV	867773	1633960	99.89%	16.491%
81	17.584	2579	2582	2592	rVB7	1481	3719	0.23%	0.038%
82	17.663	2594	2597	2599	rBV3	874	922	0.06%	0.009%
83	17.726	2604	2609	2618	rVV5	1523	2577	0.16%	0.026%
84	17.788	2618	2621	2625	rVV3	1117	1376	0.08%	0.014%
85	17.835	2625	2630	2640	rVV9	2899	5374	0.33%	0.054%
86	18.008	2657	2663	2675	rVB8	1791	5200	0.32%	0.052%
87	18.102	2675	2681	2693	rVB6	3041	6582	0.40%	0.066%
88	18.202	2693	2700	2711	rBV7	1998	6769	0.41%	0.068%
89	18.317	2711	2722	2727	rBV6	1877	5713	0.35%	0.058%
90	18.358	2727	2730	2733	rBV4	1309	1633	0.10%	0.016%
91	18.400	2733	2738	2748	rVB8	3941	8449	0.52%	0.085%
92	18.494	2748	2756	2769	rBV10	3618	14002	0.86%	0.141%
93	18.578	2769	2772	2798	rVB7	3027	1974	0.12%	0.020%
94	18.745	2798	2804	2815	rVB9	5539	13337	0.82%	0.135%
95	18.834	2815	2821	2836	rBV8	1994	7860	0.48%	0.079%
96	18.970	2836	2847	2877	rBV8	4941	26321	1.61%	0.266%
97	19.159	2877	2883	2929	rBV8	3036	11475	0.70%	0.116%
98	19.614	2964	2970	3055	rBV8	10446	47362	2.90%	0.478%
99	20.770	3185	3191	3220	rVB5	7969	10933	0.67%	0.110%
100	20.937	3220	3223	3330	rBV5	3999	26625	1.63%	0.269%

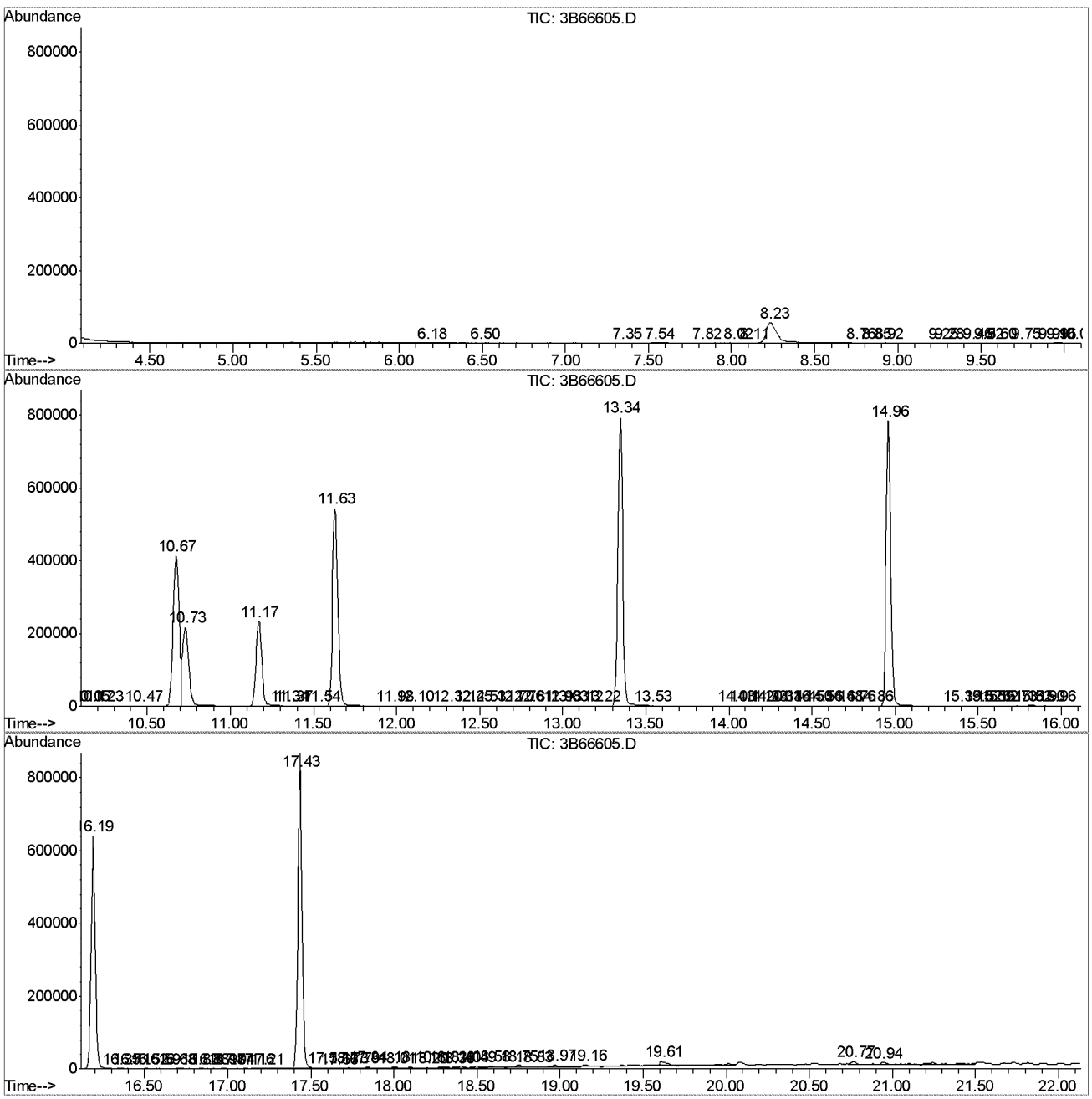
Sum of corrected areas: 9908259

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 28 08:44:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	143632	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	377791	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	511393	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	489410	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	259464	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	154451	51.69	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.38%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	194265	49.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.20%			
85) toluene-d8 (s)	13.34	98	600747	52.47	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.94%			
111) 4-bromofluorobenzene (s)	16.19	95	236695	52.75	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 105.50%			

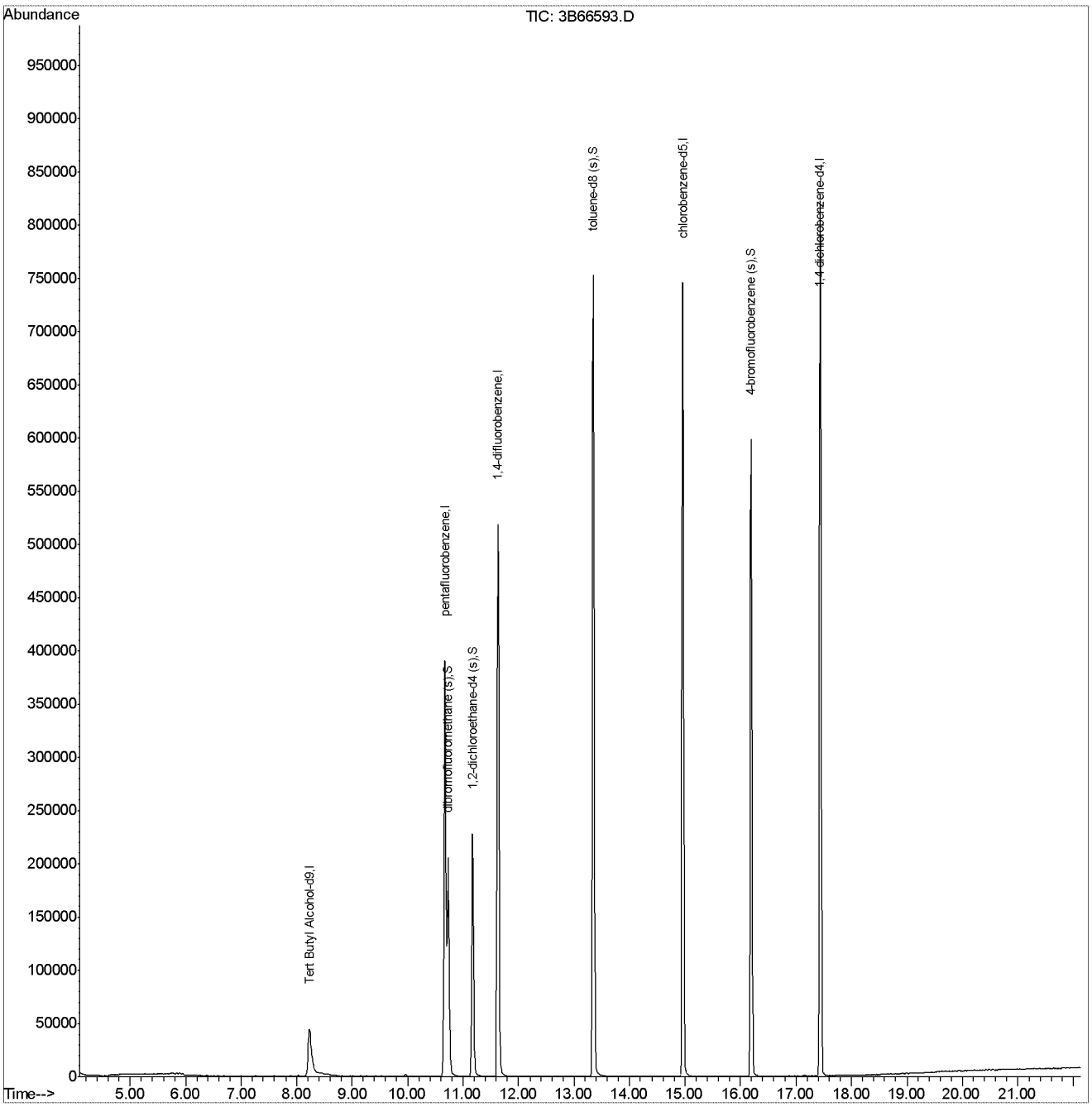
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 28 08:44:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.624	95	104	105	rBV2	785	1268	0.08%	0.013%
2	5.105	105	196	221	rVV5	1379	35176	2.23%	0.353%
3	6.601	478	482	488	rVB3	249	478	0.03%	0.005%
4	6.690	497	499	516	rVB3	245	709	0.04%	0.007%
5	6.899	534	539	546	rBV3	298	608	0.04%	0.006%
6	7.365	627	628	637	rVB2	275	400	0.03%	0.004%
7	7.506	637	655	659	rBV3	309	1116	0.07%	0.011%
8	7.595	670	672	687	rVB2	356	717	0.05%	0.007%
9	7.804	709	712	723	rBV2	235	453	0.03%	0.005%
10	8.029	754	755	777	rBV3	352	1112	0.07%	0.011%
11	8.228	777	793	893	rVV2	44236	248863	15.79%	2.495%
12	8.766	893	896	904	rVV2	325	624	0.04%	0.006%
13	8.819	904	906	913	rVV3	322	489	0.03%	0.005%
14	8.871	913	916	925	rVV2	271	587	0.04%	0.006%
15	8.960	925	933	941	rVV3	313	674	0.04%	0.007%
16	9.012	941	943	947	rVV	362	259	0.02%	0.003%
17	9.049	947	950	968	rVV3	312	1174	0.07%	0.012%
18	9.153	968	970	985	rVV2	516	728	0.05%	0.007%
19	9.258	985	990	1010	rVV3	399	1255	0.08%	0.013%
20	9.425	1010	1022	1029	rVB3	378	1011	0.06%	0.010%
21	9.478	1029	1032	1036	rBV3	278	344	0.02%	0.003%
22	9.624	1048	1060	1062	rBV3	152	406	0.03%	0.004%
23	9.964	1118	1125	1141	rVB3	1431	4172	0.26%	0.042%
24	10.152	1153	1161	1171	rVV3	203	447	0.03%	0.004%
25	10.293	1171	1188	1191	rVV3	205	516	0.03%	0.005%
26	10.456	1214	1219	1223	rVV2	193	296	0.02%	0.003%
27	10.497	1223	1227	1233	rVV2	246	426	0.03%	0.004%
28	10.539	1233	1235	1240	rVV2	231	360	0.02%	0.004%
29	10.576	1240	1242	1248	rVV3	286	463	0.03%	0.005%
30	10.670	1248	1260	1267	rVV	390470	1015414	64.42%	10.182%
31	10.728	1267	1271	1313	rVB2	205603	474842	30.12%	4.761%
32	11.083	1333	1339	1343	rBV2	351	386	0.02%	0.004%
33	11.167	1343	1355	1395	rVB	227418	537968	34.13%	5.394%
34	11.627	1429	1443	1483	rBV	518414	1167506	74.06%	11.707%

M3B3095.M Fri Jan 28 09:38:12 2011 MS3B

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.868	1487	1489	1495	rVV2	487	648	0.04%	0.006%
36	12.124	1536	1538	1542	rBV2	272	274	0.02%	0.003%
37	12.234	1554	1559	1563	rBV	304	369	0.02%	0.004%
38	12.480	1602	1606	1614	rBV2	300	558	0.04%	0.006%
39	12.542	1614	1618	1622	rVB2	330	290	0.02%	0.003%
40	12.699	1643	1648	1649	rVB2	242	294	0.02%	0.003%
41	12.767	1658	1661	1668	rVB3	236	435	0.03%	0.004%
42	12.841	1672	1675	1678	rVV2	300	339	0.02%	0.003%
43	12.898	1682	1686	1690	rVV3	364	515	0.03%	0.005%
44	12.935	1690	1693	1697	rVB2	397	335	0.02%	0.003%
45	13.034	1709	1712	1713	rVB2	330	263	0.02%	0.003%
46	13.076	1717	1720	1724	rVB2	296	306	0.02%	0.003%
47	13.191	1740	1742	1746	rVB2	315	339	0.02%	0.003%
48	13.243	1750	1752	1754	rBV2	394	364	0.02%	0.004%
49	13.343	1758	1771	1820	rBV	752708	1576360	100.00%	15.806%
50	13.609	1820	1822	1824	rVV	398	322	0.02%	0.003%
51	13.630	1824	1826	1829	rVB	286	281	0.02%	0.003%
52	13.735	1840	1846	1850	rBV2	311	584	0.04%	0.006%
53	13.777	1850	1854	1857	rVV3	182	299	0.02%	0.003%
54	13.902	1872	1878	1882	rVV	245	495	0.03%	0.005%
55	13.939	1882	1885	1887	rVB2	249	258	0.02%	0.003%
56	14.033	1897	1903	1905	rVB2	320	358	0.02%	0.004%
57	14.080	1905	1912	1916	rBV2	263	539	0.03%	0.005%
58	14.122	1916	1920	1925	rVV2	204	395	0.03%	0.004%
59	14.153	1925	1926	1933	rVB2	309	364	0.02%	0.004%
60	14.232	1940	1941	1945	rBV3	258	288	0.02%	0.003%
61	14.258	1945	1946	1954	rVB3	239	470	0.03%	0.005%
62	14.336	1954	1961	1963	rBV3	328	562	0.04%	0.006%
63	14.394	1965	1972	1976	rVB2	284	599	0.04%	0.006%
64	14.420	1976	1977	1983	rBV	308	453	0.03%	0.005%
65	14.499	1991	1992	2001	rVB3	337	626	0.04%	0.006%
66	14.567	2001	2005	2007	rBV2	289	345	0.02%	0.003%
67	14.603	2007	2012	2016	rVV2	249	472	0.03%	0.005%
68	14.666	2019	2024	2026	rVV2	250	382	0.02%	0.004%
69	14.708	2030	2032	2034	rVV	293	257	0.02%	0.003%
70	14.755	2034	2041	2043	rVV3	351	561	0.04%	0.006%
71	14.797	2047	2049	2058	rVB3	297	632	0.04%	0.006%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.880	2061	2065	2069	rBV2	401	724	0.05%	0.007%
73	14.959	2069	2080	2113	rBV	745393	1459215	92.57%	14.632%
74	15.257	2123	2137	2143	rBV3	162	611	0.04%	0.006%
75	15.372	2157	2159	2165	rVB3	295	489	0.03%	0.005%
76	15.430	2165	2170	2180	rBV3	316	985	0.06%	0.010%
77	15.492	2180	2182	2197	rVV3	305	859	0.05%	0.009%
78	15.602	2197	2203	2205	rVB3	250	300	0.02%	0.003%
79	15.675	2205	2217	2222	rBV3	236	715	0.05%	0.007%
80	15.743	2228	2230	2238	rVB3	297	394	0.02%	0.004%
81	15.811	2238	2243	2249	rVV2	214	309	0.02%	0.003%
82	15.858	2249	2252	2258	rVB2	190	373	0.02%	0.004%
83	16.188	2305	2315	2342	rVB	597832	1152055	73.08%	11.552%
84	16.376	2347	2351	2354	rBV2	270	353	0.02%	0.004%
85	16.549	2381	2384	2396	rBV2	227	533	0.03%	0.005%
86	16.643	2396	2402	2412	rVB3	283	713	0.05%	0.007%
87	16.721	2412	2417	2427	rBV3	259	618	0.04%	0.006%
88	17.041	2473	2478	2497	rBV3	421	1340	0.09%	0.013%
89	17.271	2497	2522	2531	rBV3	379	2081	0.13%	0.021%
90	17.433	2542	2553	2593	rBV	821772	1548078	98.21%	15.523%
91	17.652	2593	2595	2600	rVB3	326	291	0.02%	0.003%
92	17.747	2607	2613	2628	rBV4	408	1325	0.08%	0.013%
93	17.841	2628	2631	2634	rBV2	383	350	0.02%	0.004%
94	18.113	2656	2683	2685	rBV3	645	2340	0.15%	0.023%
95	18.301	2718	2719	2723	rBV3	434	371	0.02%	0.004%
96	18.379	2728	2734	2745	rBV3	491	1447	0.09%	0.015%
97	18.693	2791	2794	2796	rBV3	615	512	0.03%	0.005%
98	18.709	2796	2797	2811	rVV5	923	2046	0.13%	0.021%
99	18.923	2811	2838	2840	rVV4	1008	4218	0.27%	0.042%
100	22.103	2840	3446	3448	rVV8	6277	696749	44.20%	6.986%

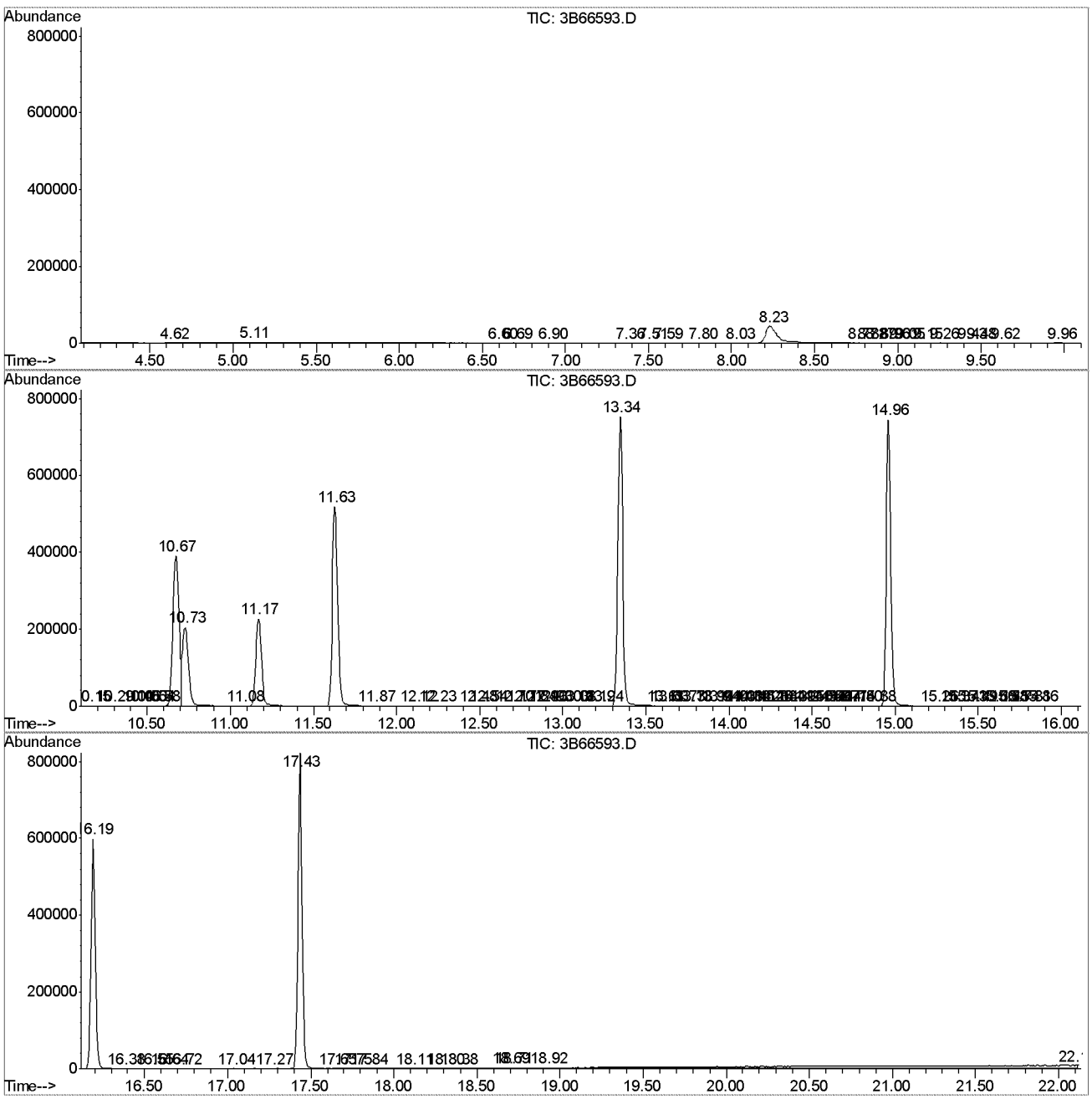
Sum of corrected areas: 9972872

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 17:46:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	151529	500.00	ug/L	0.00
5) pentafluorobenzene	10.67	168	394908	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	532853	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	506368	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	268779	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	161168	51.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.20%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	202165	49.38	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 98.76%			
85) toluene-d8 (s)	13.34	98	620774	52.03	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.06%			
111) 4-bromofluorobenzene (s)	16.19	95	243118	52.31	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.62%			

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.2.1 6

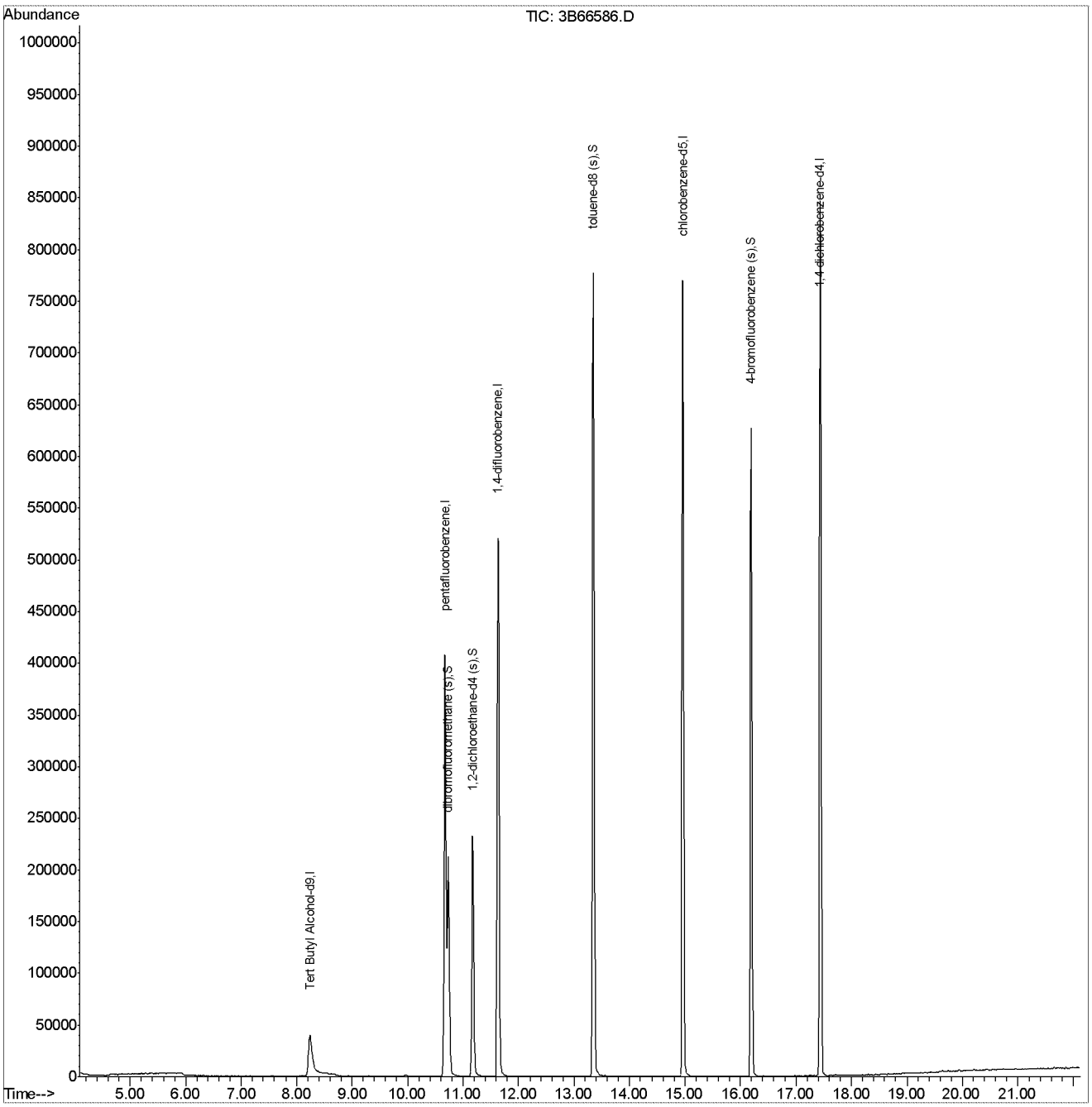
ACCUTEST LABORATORIES JA66701

SII-SSA-0014-004896

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 17:46:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.692	96	117	125	rBV5	1418	7620	0.47%	0.079%
2	5.529	273	277	335	rVV5	1080	16769	1.03%	0.175%
3	5.848	335	338	415	rVB4	2593	19592	1.21%	0.204%
4	6.402	442	444	465	rBV2	301	1008	0.06%	0.011%
5	6.517	465	466	476	rVB2	299	460	0.03%	0.005%
6	6.638	487	489	493	rVB3	241	239	0.01%	0.002%
7	6.716	493	504	521	rVB2	298	1367	0.08%	0.014%
8	7.223	599	601	613	rVB3	253	474	0.03%	0.005%
9	7.333	613	622	624	rBV3	182	362	0.02%	0.004%
10	8.055	757	760	762	rVB	365	277	0.02%	0.003%
11	8.112	762	771	775	rBV3	379	801	0.05%	0.008%
12	8.149	775	778	780	rVV	392	369	0.02%	0.004%
13	8.238	780	795	897	rVV2	40104	261068	16.06%	2.723%
14	8.787	897	900	906	rVB3	304	409	0.03%	0.004%
15	8.902	912	922	926	rVB3	148	353	0.02%	0.004%
16	8.939	926	929	934	rBV3	306	340	0.02%	0.004%
17	9.729	1078	1080	1084	rBV2	201	259	0.02%	0.003%
18	9.765	1084	1087	1116	rVV3	304	1484	0.09%	0.015%
19	9.964	1116	1125	1134	rVV5	1239	3550	0.22%	0.037%
20	10.016	1134	1135	1158	rVB2	225	818	0.05%	0.009%
21	10.215	1169	1173	1187	rVB2	356	807	0.05%	0.008%
22	10.320	1191	1193	1196	rVB2	261	259	0.02%	0.003%
23	10.341	1196	1197	1214	rBV3	236	868	0.05%	0.009%
24	10.545	1233	1236	1244	rVB2	311	580	0.04%	0.006%
25	10.592	1244	1245	1248	rVV2	259	250	0.02%	0.003%
26	10.670	1248	1260	1267	rVV	407269	1033536	63.59%	10.778%
27	10.733	1267	1272	1316	rVB	212597	516115	31.76%	5.382%
28	10.984	1316	1320	1322	rBV2	231	249	0.02%	0.003%
29	11.005	1322	1324	1329	rVB2	255	275	0.02%	0.003%
30	11.172	1345	1356	1398	rBV	232586	558014	34.33%	5.819%
31	11.408	1398	1401	1404	rVB2	269	250	0.02%	0.003%
32	11.476	1411	1414	1420	rVB2	322	293	0.02%	0.003%
33	11.538	1420	1426	1431	rBV2	245	389	0.02%	0.004%
34	11.627	1431	1443	1487	rVV	520603	1208464	74.35%	12.603%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.863	1487	1488	1495	rVV2	473	749	0.05%	0.008%
36	11.915	1495	1498	1501	rVB2	521	360	0.02%	0.004%
37	12.046	1520	1523	1530	rVB2	292	336	0.02%	0.004%
38	12.103	1530	1534	1537	rVB	315	298	0.02%	0.003%
39	12.135	1537	1540	1549	rBV2	155	277	0.02%	0.003%
40	12.271	1564	1566	1572	rVB2	372	391	0.02%	0.004%
41	12.328	1572	1577	1579	rBV2	197	265	0.02%	0.003%
42	12.401	1589	1591	1599	rVB2	214	266	0.02%	0.003%
43	12.574	1620	1624	1630	rVB2	333	272	0.02%	0.003%
44	12.684	1641	1645	1648	rBV	302	341	0.02%	0.004%
45	12.715	1648	1651	1655	rVB2	382	414	0.03%	0.004%
46	12.752	1655	1658	1664	rBV2	396	510	0.03%	0.005%
47	12.867	1675	1680	1682	rBV	414	323	0.02%	0.003%
48	12.909	1682	1688	1692	rVV3	343	685	0.04%	0.007%
49	12.987	1699	1703	1709	rBV	314	401	0.02%	0.004%
50	13.081	1719	1721	1725	rBV2	263	260	0.02%	0.003%
51	13.139	1727	1732	1736	rBV3	326	626	0.04%	0.007%
52	13.259	1751	1755	1757	rVB2	292	277	0.02%	0.003%
53	13.343	1759	1771	1808	rVV	776801	1625282	100.00%	16.949%
54	13.547	1808	1810	1825	rVB4	795	1922	0.12%	0.020%
55	13.803	1838	1859	1862	rBV3	282	1185	0.07%	0.012%
56	13.861	1866	1870	1871	rBV2	336	330	0.02%	0.003%
57	13.918	1877	1881	1885	rVB2	315	413	0.03%	0.004%
58	13.960	1888	1889	1893	rBV3	300	322	0.02%	0.003%
59	14.038	1902	1904	1908	rBV2	280	328	0.02%	0.003%
60	14.096	1908	1915	1916	rVV2	317	557	0.03%	0.006%
61	14.148	1916	1925	1927	rVB3	305	749	0.05%	0.008%
62	14.185	1931	1932	1936	rBV2	406	409	0.03%	0.004%
63	14.211	1936	1937	1941	rVB3	297	239	0.01%	0.002%
64	14.274	1947	1949	1957	rVB2	293	428	0.03%	0.004%
65	14.394	1971	1972	1976	rBV2	248	263	0.02%	0.003%
66	14.457	1982	1984	1991	rVB3	383	874	0.05%	0.009%
67	14.509	1991	1994	1997	rBV2	344	451	0.03%	0.005%
68	14.567	1997	2005	2007	rBV3	401	884	0.05%	0.009%
69	14.635	2013	2018	2021	rBV3	440	589	0.04%	0.006%
70	14.666	2022	2024	2028	rVV2	294	375	0.02%	0.004%
71	14.718	2031	2034	2037	rVB2	331	413	0.03%	0.004%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.760	2040	2042	2046	rBV	375	411	0.03%	0.004%
73	14.875	2057	2064	2065	rBV2	312	483	0.03%	0.005%
74	14.959	2070	2080	2117	rVV	769320	1505888	92.65%	15.704%
75	15.168	2117	2120	2123	rVB3	330	308	0.02%	0.003%
76	15.335	2150	2152	2164	rVB3	319	762	0.05%	0.008%
77	15.466	2170	2177	2180	rVB3	270	461	0.03%	0.005%
78	15.513	2182	2186	2193	rVB3	225	428	0.03%	0.004%
79	16.031	2282	2285	2298	rBV3	181	428	0.03%	0.004%
80	16.130	2298	2304	2305	rVV3	184	244	0.02%	0.003%
81	16.188	2305	2315	2352	rVB	626468	1184668	72.89%	12.354%
82	16.408	2352	2357	2368	rBV3	469	1043	0.06%	0.011%
83	16.633	2383	2400	2402	rVB2	197	788	0.05%	0.008%
84	16.795	2402	2431	2433	rBV3	257	1604	0.10%	0.017%
85	16.946	2452	2460	2461	rBV3	185	375	0.02%	0.004%
86	16.973	2461	2465	2478	rVB4	805	1582	0.10%	0.016%
87	17.061	2478	2482	2485	rBV3	338	529	0.03%	0.006%
88	17.281	2521	2524	2526	rVB3	555	432	0.03%	0.005%
89	17.323	2530	2532	2540	rVB4	462	661	0.04%	0.007%
90	17.375	2540	2542	2544	rBV2	477	420	0.03%	0.004%
91	17.433	2544	2553	2581	rVV	846336	1589875	97.82%	16.580%
92	17.590	2581	2583	2585	rVB2	539	397	0.02%	0.004%
93	17.689	2598	2602	2605	rBV2	632	613	0.04%	0.006%
94	17.726	2605	2609	2640	rVV4	973	4139	0.25%	0.043%
95	17.904	2640	2643	2655	rVB4	600	1774	0.11%	0.019%
96	18.071	2674	2675	2680	rVB	448	275	0.02%	0.003%
97	18.291	2715	2717	2727	rBV4	750	1616	0.10%	0.017%
98	18.468	2727	2751	2753	rVV3	612	2770	0.17%	0.029%
99	18.667	2786	2789	2794	rVB3	848	916	0.06%	0.010%
100	18.814	2794	2817	2820	rBV5	921	4152	0.26%	0.043%

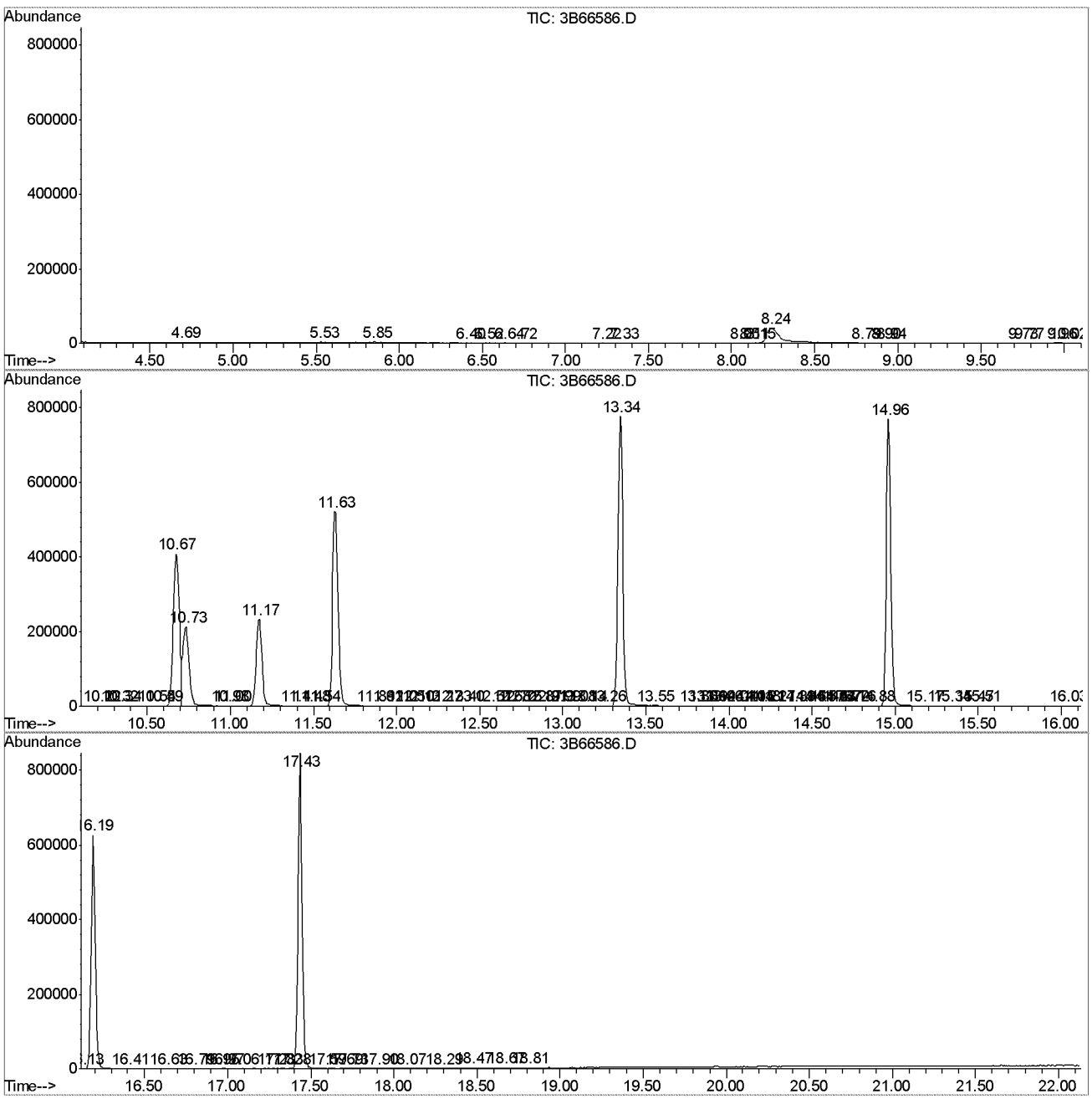
Sum of corrected areas: 9589074

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 10:25:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	152359	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	372948	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	501706	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	481698	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	257846	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	151266	51.29	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.58%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	191317	49.48	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 98.96%			
85) toluene-d8 (s)	13.34	98	588918	52.43	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.86%			
111) 4-bromofluorobenzene (s)	16.19	95	231122	51.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.66%			

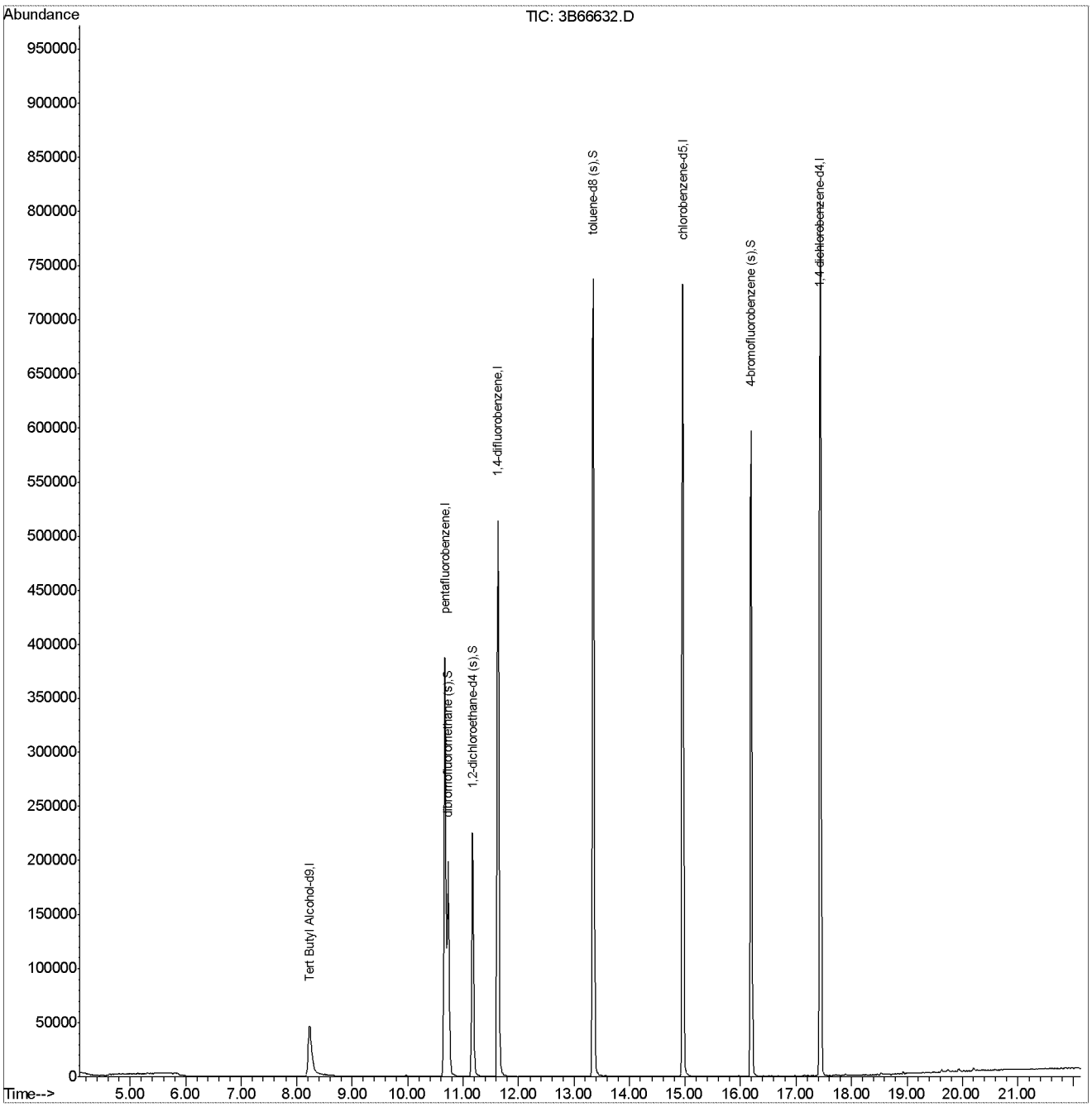
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 10:25:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.629	92	105	118	rBV4	1617	7821	0.51%	0.084%
2	4.864	148	150	173	rBV5	961	2987	0.19%	0.032%
3	5.769	321	323	394	rVB6	2822	23731	1.53%	0.255%
4	6.402	443	444	483	rBV3	351	2366	0.15%	0.025%
5	6.685	494	498	502	rBV2	341	520	0.03%	0.006%
6	6.716	502	504	514	rVV2	338	822	0.05%	0.009%
7	6.779	514	516	524	rVV	470	625	0.04%	0.007%
8	6.841	524	528	533	rVV2	309	527	0.03%	0.006%
9	6.899	533	539	544	rVV3	212	440	0.03%	0.005%
10	6.930	544	545	571	rVV3	251	915	0.06%	0.010%
11	7.119	579	581	586	rBV	357	317	0.02%	0.003%
12	7.150	586	587	593	rVV3	246	357	0.02%	0.004%
13	7.218	593	600	608	rVV3	223	691	0.04%	0.007%
14	7.276	608	611	627	rVB3	354	1153	0.07%	0.012%
15	7.370	627	629	637	rBV2	306	640	0.04%	0.007%
16	7.417	637	638	648	rBV2	271	399	0.03%	0.004%
17	7.600	665	673	680	rVB3	240	683	0.04%	0.007%
18	7.987	745	747	755	rBV2	276	481	0.03%	0.005%
19	8.227	778	793	892	rVB2	46357	260294	16.82%	2.796%
20	8.751	892	893	911	rVB3	218	693	0.04%	0.007%
21	8.860	911	914	930	rVB3	393	1634	0.11%	0.018%
22	8.954	930	932	943	rBV3	456	1274	0.08%	0.014%
23	9.336	997	1005	1007	rVB3	338	784	0.05%	0.008%
24	9.352	1007	1008	1012	rBV	320	375	0.02%	0.004%
25	9.478	1029	1032	1037	rVB2	208	323	0.02%	0.003%
26	9.556	1045	1047	1057	rVB3	342	662	0.04%	0.007%
27	9.645	1062	1064	1068	rVB2	310	341	0.02%	0.004%
28	9.734	1078	1081	1084	rBV	275	362	0.02%	0.004%
29	9.791	1089	1092	1100	rBV2	311	583	0.04%	0.006%
30	9.844	1100	1102	1108	rVB2	492	474	0.03%	0.005%
31	9.912	1109	1115	1116	rVB2	339	331	0.02%	0.004%
32	9.969	1116	1126	1134	rBV4	1210	3534	0.23%	0.038%
33	10.377	1201	1204	1213	rBV2	324	533	0.03%	0.006%
34	10.670	1244	1260	1267	rBV	387021	1001996	64.74%	10.764%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	10.728	1267	1271	1309	rVV	198464	460354	29.74%	4.945%
36	10.937	1309	1311	1314	rVB2	316	329	0.02%	0.004%
37	10.963	1314	1316	1326	rBV	234	308	0.02%	0.003%
38	11.094	1335	1341	1344	rBV2	219	355	0.02%	0.004%
39	11.167	1344	1355	1396	rVV	225145	529351	34.20%	5.687%
40	11.423	1400	1404	1411	rBV2	242	472	0.03%	0.005%
41	11.627	1428	1443	1488	rBV	513255	1138184	73.54%	12.227%
42	12.176	1544	1548	1554	rBV2	336	386	0.02%	0.004%
43	12.694	1645	1647	1650	rVB	411	320	0.02%	0.003%
44	12.814	1667	1670	1673	rVB2	375	439	0.03%	0.005%
45	12.846	1673	1676	1678	rBV2	358	377	0.02%	0.004%
46	12.872	1678	1681	1686	rVB3	331	436	0.03%	0.005%
47	12.945	1692	1695	1699	rBV2	351	545	0.04%	0.006%
48	13.081	1717	1721	1723	rVB2	331	471	0.03%	0.005%
49	13.102	1723	1725	1729	rBV	302	366	0.02%	0.004%
50	13.191	1739	1742	1746	rVB2	327	348	0.02%	0.004%
51	13.233	1749	1750	1753	rVB2	350	312	0.02%	0.003%
52	13.343	1759	1771	1808	rBV	737580	1547704	100.00%	16.626%
53	13.552	1808	1811	1825	rVB3	1123	2717	0.18%	0.029%
54	13.834	1860	1865	1868	rVB3	278	459	0.03%	0.005%
55	13.871	1868	1872	1876	rVB2	297	490	0.03%	0.005%
56	14.200	1928	1935	1937	rVB2	261	499	0.03%	0.005%
57	14.268	1946	1948	1955	rVB2	258	323	0.02%	0.003%
58	14.347	1959	1963	1970	rBV3	309	683	0.04%	0.007%
59	14.394	1970	1972	1975	rBV2	292	308	0.02%	0.003%
60	14.436	1979	1980	1986	rVV2	262	389	0.03%	0.004%
61	14.478	1986	1988	1991	rVV	388	354	0.02%	0.004%
62	14.640	2012	2019	2021	rBB2	245	408	0.03%	0.004%
63	14.666	2021	2024	2026	rBV3	313	353	0.02%	0.004%
64	14.828	2050	2055	2057	rVB3	302	470	0.03%	0.005%
65	14.865	2057	2062	2069	rBV3	313	748	0.05%	0.008%
66	14.959	2069	2080	2103	rBV	732265	1433547	92.62%	15.400%
67	15.158	2115	2118	2131	rVB3	349	618	0.04%	0.007%
68	15.388	2160	2162	2177	rVB3	211	563	0.04%	0.006%
69	15.513	2177	2186	2189	rVV2	182	400	0.03%	0.004%
70	15.566	2190	2196	2208	rVB2	208	681	0.04%	0.007%
71	15.848	2230	2250	2251	rVB3	198	753	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	15.963	2270	2272	2286	rVV2	652	967	0.06%	0.010%
73	16.041	2286	2287	2293	rVB2	259	321	0.02%	0.003%
74	16.078	2293	2294	2306	rBV3	214	555	0.04%	0.006%
75	16.188	2306	2315	2341	rVB	596534	1128626	72.92%	12.124%
76	16.402	2353	2356	2369	rBV3	505	1106	0.07%	0.012%
77	16.512	2372	2377	2381	rVV4	413	754	0.05%	0.008%
78	16.559	2381	2386	2404	rVV3	594	1534	0.10%	0.016%
79	16.674	2404	2408	2426	rVV4	494	1164	0.08%	0.013%
80	16.847	2426	2441	2451	rVB3	208	983	0.06%	0.011%
81	17.114	2462	2492	2496	rBV3	420	1588	0.10%	0.017%
82	17.150	2496	2499	2508	rVB3	459	833	0.05%	0.009%
83	17.213	2508	2511	2518	rBV2	407	424	0.03%	0.005%
84	17.276	2518	2523	2538	rVB4	752	1882	0.12%	0.020%
85	17.433	2540	2553	2580	rVB	809084	1528986	98.79%	16.425%
86	17.584	2580	2582	2599	rBV4	660	1746	0.11%	0.019%
87	17.689	2599	2602	2605	rBV3	817	1066	0.07%	0.011%
88	17.726	2605	2609	2624	rVB5	1415	3266	0.21%	0.035%
89	17.835	2624	2630	2631	rBV3	472	717	0.05%	0.008%
90	17.856	2632	2634	2639	rBV3	461	705	0.05%	0.008%
91	17.898	2639	2642	2656	rVV5	1034	2555	0.17%	0.027%
92	17.982	2656	2658	2662	rVB3	385	383	0.02%	0.004%
93	18.249	2692	2709	2711	rBV2	746	2724	0.18%	0.029%
94	18.463	2748	2750	2758	rBV4	813	1280	0.08%	0.014%
95	18.547	2758	2766	2777	rVV4	1354	4192	0.27%	0.045%
96	18.845	2799	2823	2832	rBV5	958	5225	0.34%	0.056%
97	18.923	2835	2838	2846	rBV7	2084	3890	0.25%	0.042%
98	19.624	2968	2972	2989	rBV7	2232	4121	0.27%	0.044%
99	19.734	2989	2993	3028	rBV8	1460	5424	0.35%	0.058%
100	22.072	3078	3440	3447	rBV9	2912	156249	10.10%	1.679%

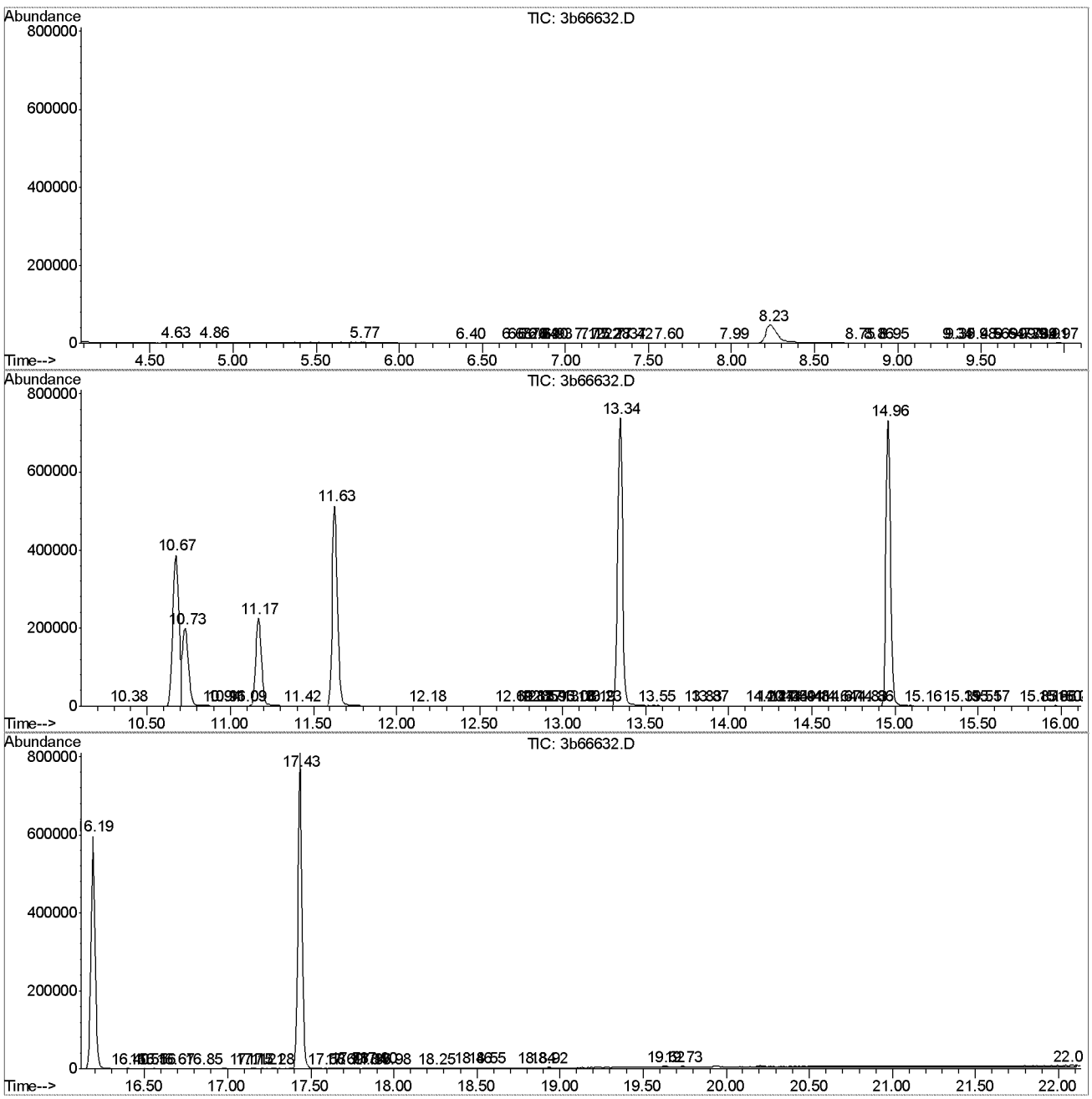
Sum of corrected areas: 9308754

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



ACCUTEST LABORATORIES
JA66701

SII-SSA-0014-004908

Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 12:17:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	141802	500.00	ug/L	-0.01
5) pentafluorobenzene	10.67	168	381051	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	509120	50.00	ug/L	0.00
93) chlorobenzene-d5	14.95	117	479604	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	259275	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.72	113	149122	49.48	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.96%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	180390	45.66	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 91.32%			
85) toluene-d8 (s)	13.34	98	587347	51.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.06%			
111) 4-bromofluorobenzene (s)	16.19	95	227669	50.78	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 101.56%			

Target Compounds	Qvalue

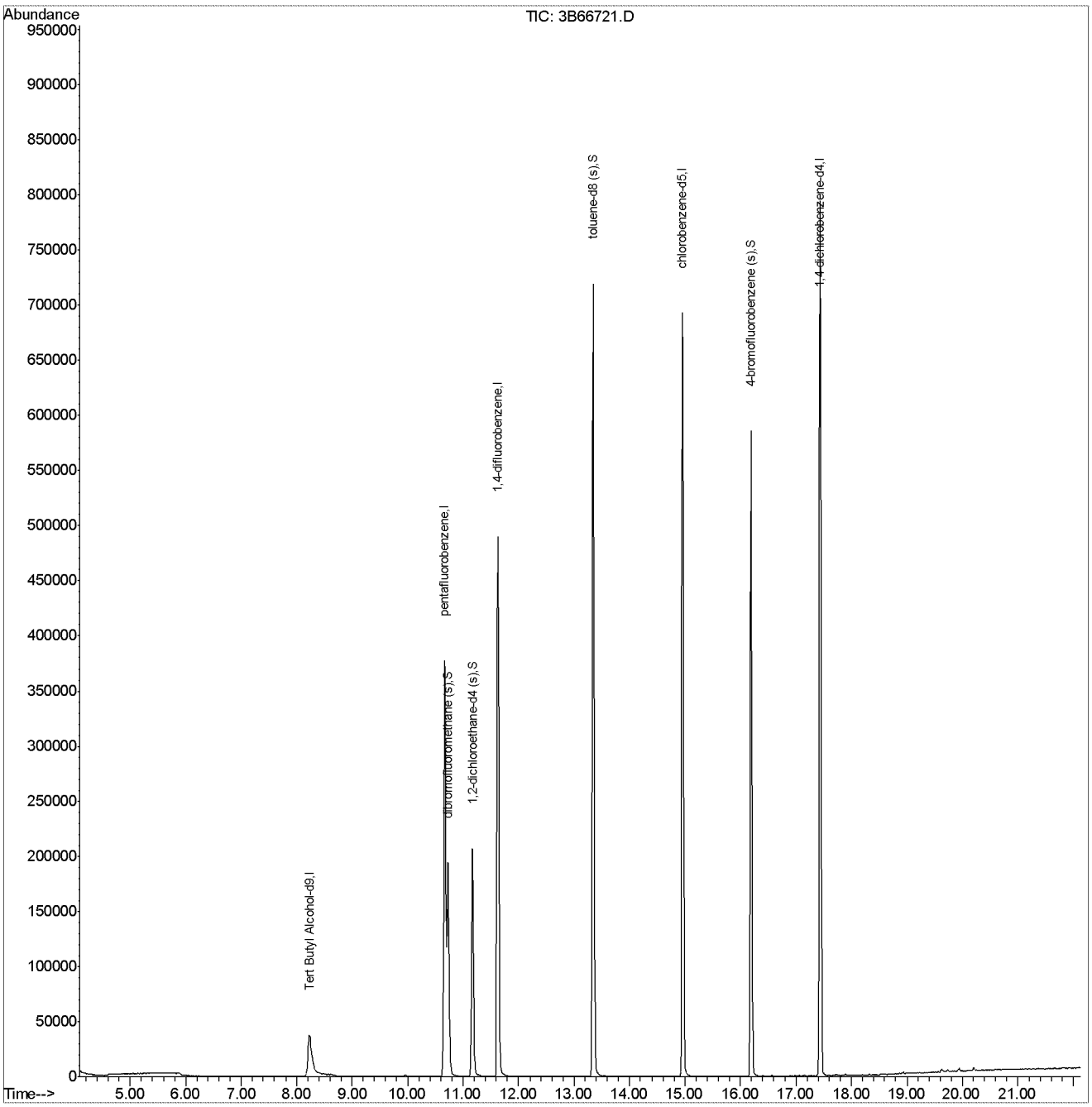
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 12:17:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

6.2.5 6



ACCUTEST LABORATORIES JA66701

SII-SSA-0014-004911

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.603	94	100	104	rBV3	813	1890	0.12%	0.021%
2	4.634	104	106	115	rVV4	842	2001	0.13%	0.022%
3	5.126	157	200	230	rBV8	970	13189	0.87%	0.144%
4	6.407	443	445	458	rBV2	302	815	0.05%	0.009%
5	6.528	466	468	482	rBV3	302	598	0.04%	0.007%
6	6.909	540	541	549	rBV2	246	557	0.04%	0.006%
7	7.014	554	561	584	rVV3	318	1766	0.12%	0.019%
8	7.145	584	586	600	rVV	277	726	0.05%	0.008%
9	7.229	600	602	609	rVV3	260	364	0.02%	0.004%
10	7.286	609	613	622	rVV2	143	360	0.02%	0.004%
11	7.406	633	636	652	rBV3	433	1892	0.12%	0.021%
12	7.720	694	696	700	rVB2	346	416	0.03%	0.005%
13	7.752	700	702	709	rBV2	333	618	0.04%	0.007%
14	7.799	709	711	721	rVV2	328	770	0.05%	0.008%
15	7.882	721	727	728	rVV2	307	450	0.03%	0.005%
16	7.914	728	733	749	rVB4	487	1698	0.11%	0.019%
17	8.024	749	754	756	rBV	341	448	0.03%	0.005%
18	8.065	759	762	776	rVV3	301	1001	0.07%	0.011%
19	8.227	776	793	871	rVV2	37597	237368	15.60%	2.593%
20	8.641	871	872	890	rVB4	1439	4718	0.31%	0.052%
21	8.928	920	927	928	rBV2	293	575	0.04%	0.006%
22	9.059	945	952	960	rVB3	244	826	0.05%	0.009%
23	9.226	982	984	1002	rVB3	173	543	0.04%	0.006%
24	9.362	1002	1010	1013	rVB3	182	402	0.03%	0.004%
25	9.593	1051	1054	1063	rVB3	179	381	0.03%	0.004%
26	9.854	1097	1104	1109	rVV	451	527	0.03%	0.006%
27	9.953	1117	1123	1144	rVB4	1282	3346	0.22%	0.037%
28	10.126	1151	1156	1165	rVB3	207	414	0.03%	0.005%
29	10.267	1181	1183	1189	rVB3	305	582	0.04%	0.006%
30	10.346	1194	1198	1201	rVV2	359	513	0.03%	0.006%
31	10.414	1210	1211	1217	rVV	287	461	0.03%	0.005%
32	10.456	1217	1219	1225	rVV3	340	661	0.04%	0.007%
33	10.492	1225	1226	1232	rVV	427	570	0.04%	0.006%
34	10.586	1239	1244	1247	rVV3	327	506	0.03%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	10.665	1247	1259	1266	rVV	377152	973099	63.94%	10.630%
36	10.722	1266	1270	1301	rVV	193984	475593	31.25%	5.195%
37	10.895	1301	1303	1309	rVV4	868	1253	0.08%	0.014%
38	10.932	1309	1310	1319	rVB2	459	491	0.03%	0.005%
39	11.167	1342	1355	1389	rBV	206921	506772	33.30%	5.536%
40	11.350	1389	1390	1393	rVV	539	376	0.02%	0.004%
41	11.376	1393	1395	1400	rVB2	317	507	0.03%	0.006%
42	11.627	1432	1443	1474	rBV	489932	1121890	73.72%	12.255%
43	12.276	1564	1567	1572	rBV2	336	473	0.03%	0.005%
44	12.307	1572	1573	1581	rVB2	303	389	0.03%	0.004%
45	12.427	1591	1596	1599	rVV2	296	338	0.02%	0.004%
46	12.522	1609	1614	1615	rBV2	300	364	0.02%	0.004%
47	12.542	1615	1618	1621	rVB2	349	361	0.02%	0.004%
48	12.888	1680	1684	1687	rBV2	339	421	0.03%	0.005%
49	12.914	1687	1689	1692	rVB2	328	379	0.02%	0.004%
50	12.966	1692	1699	1702	rBV	355	951	0.06%	0.010%
51	13.055	1715	1716	1723	rVB2	315	589	0.04%	0.006%
52	13.154	1731	1735	1742	rBV3	323	834	0.05%	0.009%
53	13.343	1760	1771	1809	rBV	718972	1521929	100.00%	16.625%
54	13.829	1862	1864	1870	rVB3	333	594	0.04%	0.006%
55	13.876	1870	1873	1875	rBV2	375	420	0.03%	0.005%
56	13.991	1888	1895	1898	rBV	324	524	0.03%	0.006%
57	14.106	1911	1917	1922	rBV3	294	658	0.04%	0.007%
58	14.248	1937	1944	1947	rVB2	285	570	0.04%	0.006%
59	14.289	1947	1952	1955	rVB2	263	444	0.03%	0.005%
60	14.326	1955	1959	1961	rBV	301	410	0.03%	0.004%
61	14.399	1969	1973	1979	rVB2	244	601	0.04%	0.007%
62	14.462	1979	1985	1986	rBV2	276	388	0.03%	0.004%
63	14.525	1989	1997	1998	rBV2	354	528	0.03%	0.006%
64	14.561	2003	2004	2009	rBV2	280	413	0.03%	0.005%
65	14.812	2046	2052	2055	rVB2	346	663	0.04%	0.007%
66	14.844	2055	2058	2062	rBV2	294	452	0.03%	0.005%
67	14.870	2062	2063	2068	rVB2	292	397	0.03%	0.004%
68	14.954	2068	2079	2111	rBV	692757	1392717	91.51%	15.214%
69	15.137	2111	2114	2130	rVB3	455	1735	0.11%	0.019%
70	15.252	2135	2136	2147	rBV3	375	990	0.07%	0.011%
71	15.372	2147	2159	2161	rBV3	201	526	0.03%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	15.430	2161	2170	2175	rBV3	217	466	0.03%	0.005%
73	15.592	2187	2201	2202	rVB2	198	515	0.03%	0.006%
74	16.188	2304	2315	2344	rVB	584733	1109923	72.93%	12.124%
75	16.392	2351	2354	2361	rVB2	370	674	0.04%	0.007%
76	16.502	2374	2375	2381	rBV2	219	342	0.02%	0.004%
77	16.554	2381	2385	2396	rVB5	551	925	0.06%	0.010%
78	16.748	2418	2422	2440	rBV3	303	1095	0.07%	0.012%
79	16.920	2453	2455	2462	rVB4	500	505	0.03%	0.006%
80	16.988	2462	2468	2473	rBV3	424	795	0.05%	0.009%
81	17.051	2478	2480	2485	rVB2	422	468	0.03%	0.005%
82	17.150	2496	2499	2507	rVB2	501	930	0.06%	0.010%
83	17.265	2519	2521	2529	rBV4	677	1223	0.08%	0.013%
84	17.318	2529	2531	2538	rVV	252	376	0.02%	0.004%
85	17.365	2538	2540	2543	rVV2	535	698	0.05%	0.008%
86	17.433	2543	2553	2578	rVB	793684	1504093	98.83%	16.430%
87	17.574	2578	2580	2583	rBV2	491	408	0.03%	0.004%
88	17.652	2594	2595	2603	rVV3	509	795	0.05%	0.009%
89	17.731	2603	2610	2616	rVB3	1207	2435	0.16%	0.027%
90	17.820	2624	2627	2633	rBV2	476	791	0.05%	0.009%
91	17.893	2636	2641	2644	rVV4	1104	1324	0.09%	0.014%
92	17.977	2653	2657	2660	rBV2	580	1012	0.07%	0.011%
93	18.374	2730	2733	2755	rBV6	707	2698	0.18%	0.029%
94	18.604	2755	2777	2783	rBV4	804	4174	0.27%	0.046%
95	18.766	2784	2808	2810	rVV5	561	1904	0.13%	0.021%
96	18.934	2835	2840	2847	rVB4	2124	3623	0.24%	0.040%
97	19.588	2888	2965	2967	rBV10	1903	23864	1.57%	0.261%
98	19.629	2967	2973	3027	rVV10	3623	23919	1.57%	0.261%
99	19.943	3027	3033	3078	rVV9	3359	19326	1.27%	0.211%
100	22.093	3080	3444	3448	rVV9	1923	153109	10.06%	1.673%

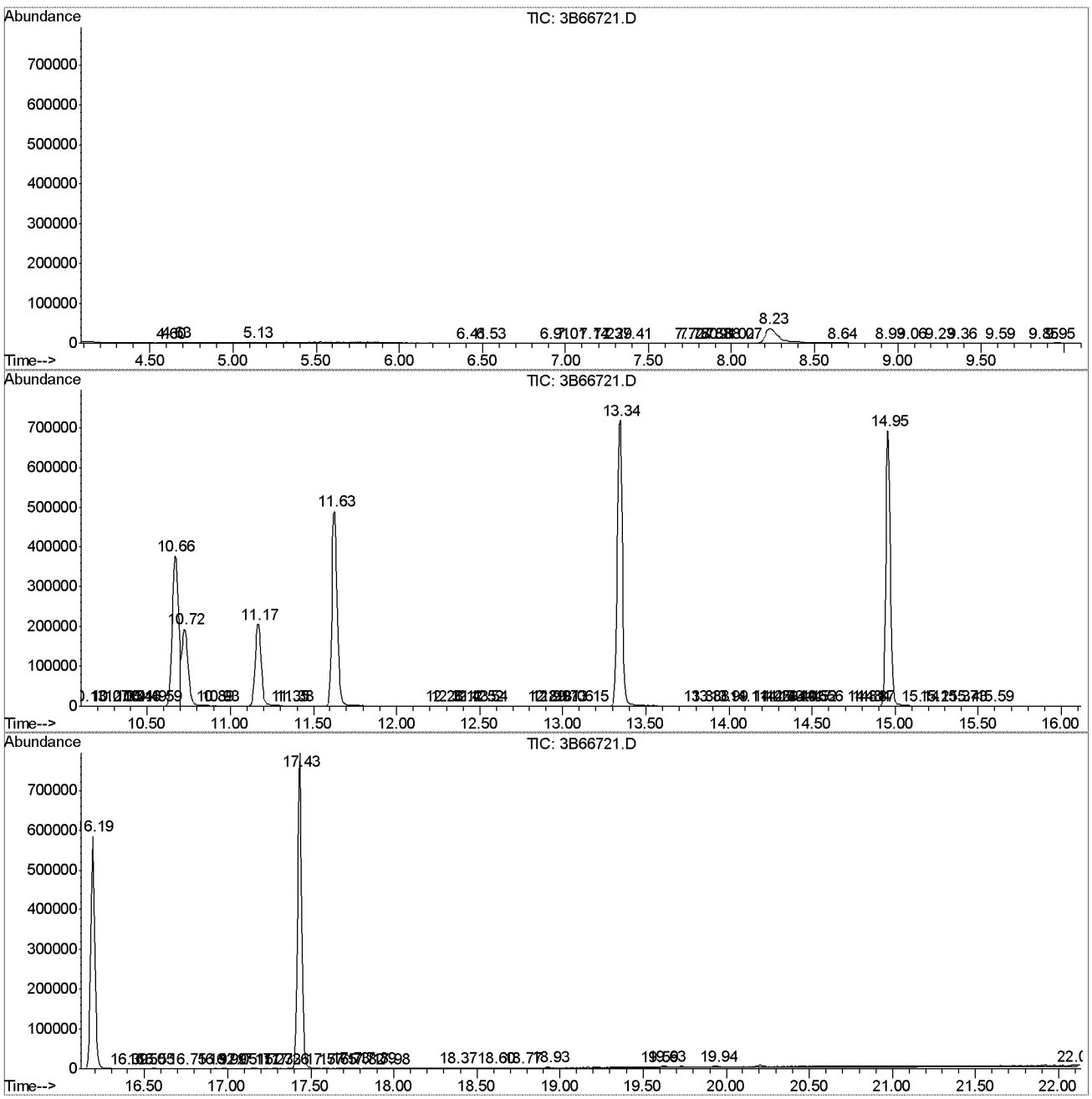
Sum of corrected areas: 9154401

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MB1	R85118.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MB1	R85118.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	88%	25-112%
321-60-8	2-Fluorobiphenyl	82%	31-106%
1718-51-0	Terphenyl-d14	92%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-MB1	4M23430.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	102%	32-135%
321-60-8	2-Fluorobiphenyl	96%	31-121%
1718-51-0	Terphenyl-d14	109%	10-130%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-BS1	R85119.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	46.8	94	46-113
1912-24-9	Atrazine	50	56.9	114	55-127
100-52-7	Benzaldehyde	50	56.3	113	31-130
101-55-3	4-Bromophenyl phenyl ether	50	47.3	95	55-121
85-68-7	Butyl benzyl phthalate	50	42.2	84	55-132
92-52-4	1,1'-Biphenyl	50	44.9	90	43-107
91-58-7	2-Chloronaphthalene	50	41.0	82	39-108
106-47-8	4-Chloroaniline	50	35.9	72	34-103
86-74-8	Carbazole	50	45.4	91	63-122
105-60-2	Caprolactam	50	3.8	8	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	42.5	85	43-119
111-44-4	bis(2-Chloroethyl)ether	50	39.3	79	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	42.1	84	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	46.1	92	50-117
121-14-2	2,4-Dinitrotoluene	50	46.3	93	56-124
606-20-2	2,6-Dinitrotoluene	50	48.3	97	55-128
91-94-1	3,3'-Dichlorobenzidine	50	39.1	78	42-116
132-64-9	Dibenzofuran	50	43.5	87	53-109
84-74-2	Di-n-butyl phthalate	50	45.2	90	58-130
117-84-0	Di-n-octyl phthalate	50	46.4	93	55-133
84-66-2	Diethyl phthalate	50	42.5	85	52-123
131-11-3	Dimethyl phthalate	50	39.4	79	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.6	89	57-134
87-68-3	Hexachlorobutadiene	50	42.4	85	11-100
77-47-4	Hexachlorocyclopentadiene	100	126	126* [a]	5-120
67-72-1	Hexachloroethane	50	39.7	79	13-88
78-59-1	Isophorone	50	46.1	92	43-120
91-57-6	2-Methylnaphthalene	50	39.7	79	33-103
88-74-4	2-Nitroaniline	50	48.5	97	48-132
99-09-2	3-Nitroaniline	50	39.5	79	48-115
100-01-6	4-Nitroaniline	50	37.1	74	51-125
98-95-3	Nitrobenzene	50	40.6	81	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	48.7	97	41-121
86-30-6	N-Nitrosodiphenylamine	50	42.7	85	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	43.8	88	18-130

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-BS1	R85119.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	87%	25-112%
321-60-8	2-Fluorobiphenyl	81%	31-106%
1718-51-0	Terphenyl-d14	87%	14-122%

(a) Outside of in house control limits.

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-BS12	4M23431.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.976	98	53-125
208-96-8	Acenaphthylene	1	1.04	104	51-111
120-12-7	Anthracene	1	1.12	112	62-134
56-55-3	Benzo(a)anthracene	1	1.03	103	46-142
50-32-8	Benzo(a)pyrene	1	0.842	84	49-132
205-99-2	Benzo(b)fluoranthene	1	1.01	101	36-167
191-24-2	Benzo(g,h,i)perylene	1	1.02	102	43-149
207-08-9	Benzo(k)fluoranthene	1	0.936	94	27-173
218-01-9	Chrysene	1	1.14	114	59-137
53-70-3	Dibenzo(a,h)anthracene	1	0.845	85	47-149
206-44-0	Fluoranthene	1	1.02	102	57-126
86-73-7	Fluorene	1	1.00	100	58-126
118-74-1	Hexachlorobenzene	1	0.954	95	36-140
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.888	89	51-151
91-20-3	Naphthalene	1	0.944	94	40-130
85-01-8	Phenanthrene	1	1.00	100	52-130
129-00-0	Pyrene	1	1.07	107	60-134

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	100%	32-135%
321-60-8	2-Fluorobiphenyl	98%	31-121%
1718-51-0	Terphenyl-d14	110%	10-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
OP47853-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
JA66701-1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	JA66701-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		100	94.5	95	92.5	93	2	25-127/35
1912-24-9	Atrazine	ND		100	128	128	123	123	4	40-133/27
100-52-7	Benzaldehyde	ND		100	108	108	109	109	1	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		100	92.0	92	95.9	96	4	47-123/28
85-68-7	Butyl benzyl phthalate	ND		100	89.3	89	86.5	87	3	47-137/27
92-52-4	1,1'-Biphenyl	ND		100	87.2	87	90.9	91	4	36-113/32
91-58-7	2-Chloronaphthalene	ND		100	82.6	83	85.5	86	3	35-110/32
106-47-8	4-Chloroaniline	ND		100	75.0	75	72.9	73	3	22-98/36
86-74-8	Carbazole	ND		100	92.5	93	99.1	99	7	54-127/26
105-60-2	Caprolactam	ND		100	22.7	23	21.2	21	7	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		100	85.3	85	85.4	85	0	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		100	79.8	80	77.5	78	3	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	84.7	85	82.5	83	3	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	97.0	97	97.0	97	0	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		100	102	102	96.1	96	6	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		100	102	102	99.4	99	3	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		100	69.0	69	70.5	71	2	17-119/36
132-64-9	Dibenzofuran	ND		100	89.5	90	88.8	89	1	44-114/30
84-74-2	Di-n-butyl phthalate	ND		100	90.6	91	93.8	94	3	49-134/26
117-84-0	Di-n-octyl phthalate	ND		100	95.9	96	92.1	92	4	46-140/25
84-66-2	Diethyl phthalate	ND		100	90.0	90	86.3	86	4	46-123/27
131-11-3	Dimethyl phthalate	ND		100	74.9	75	71.7	72	4	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	89.4	89	89.9	90	1	49-141/27
87-68-3	Hexachlorobutadiene	ND		100	89.3	89	90.4	90	1	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		200	227	114	239	120	5	4-124/39
67-72-1	Hexachloroethane	ND		100	85.0	85	82.8	83	3	16-86/39
78-59-1	Isophorone	ND		100	92.7	93	93.4	93	1	33-117/36
91-57-6	2-Methylnaphthalene	ND		100	85.6	86	85.1	85	1	22-117/37
88-74-4	2-Nitroaniline	ND		100	104	104	102	102	2	37-135/29
99-09-2	3-Nitroaniline	ND		100	85.6	86	82.8	83	3	34-115/28
100-01-6	4-Nitroaniline	ND		100	85.4	85	86.2	86	1	36-128/30
98-95-3	Nitrobenzene	ND		100	80.1	80	81.0	81	1	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		100	101	101	96.9	97	4	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		100	87.2	87	88.6	89	2	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	86.4	86	92.1	92	6	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
OP47853-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
JA66701-1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-1	Limits
4165-60-0	Nitrobenzene-d5	86%	86%	81%	25-112%
321-60-8	2-Fluorobiphenyl	78%	83%	73%	31-106%
1718-51-0	Terphenyl-d14	67%	69%	66%	14-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853A	ER3223
OP47853A-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853A	ER3223
JA66701-1	4M23447.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	JA66701-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.362		100	88.1	88	89.4	89	1	51-125/22
208-96-8	Acenaphthylene	ND		100	84.8	85	86.6	87	2	46-113/22
120-12-7	Anthracene	ND		100	89.7	90	93.0	93	4	59-131/23
56-55-3	Benzo(a)anthracene	ND		100	84.7	85	88.3	88	4	53-127/23
50-32-8	Benzo(a)pyrene	ND		100	92.1	92	92.7	93	1	49-135/23
205-99-2	Benzo(b)fluoranthene	ND		100	84.4	84	93.5	94	10	42-140/30
191-24-2	Benzo(g,h,i)perylene	ND		100	98.0	98	99.4	99	1	37-146/25
207-08-9	Benzo(k)fluoranthene	ND		100	94.1	94	72.0	72	27	41-141/34
218-01-9	Chrysene	ND		100	85.1	85	86.8	87	2	54-129/21
53-70-3	Dibenzo(a,h)anthracene	ND		100	97.9	98	98.3	98	0	38-146/25
206-44-0	Fluoranthene	ND		100	89.6	90	102	102	13	56-129/22
86-73-7	Fluorene	0.687		100	96.6	96	94.3	94	2	58-126/25
118-74-1	Hexachlorobenzene	ND		100	88.7	89	91.7	92	3	52-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	97.0	97	98.1	98	1	36-150/25
91-20-3	Naphthalene	1.54		100	87.7	86	87.0	85	1	38-121/25
85-01-8	Phenanthrene	ND		100	89.3	89	91.1	91	2	57-127/23
129-00-0	Pyrene	ND		100	93.6	94	85.6	86	9	51-128/23

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-1	Limits
4165-60-0	Nitrobenzene-d5	86%	86%	80%	32-135%
321-60-8	2-Fluorobiphenyl	78%	83%	83%	31-121%
1718-51-0	Terphenyl-d14	67%	69%	60%	10-130%

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1016-DFTPP	**Injection Date:**	01/21/11
Lab File ID:	4M23284.D	**Injection Time:**	09:44
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33290	33.3		Pass
68	Less than 2.0% of mass 69	510	0.51	(1.63) [a]	Pass
69	Mass 69 relative abundance	31340	31.4		Pass
70	Less than 2.0% of mass 69	102	0.10	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47020	47.1		Pass
197	Less than 1.0% of mass 198	366	0.37		Pass
198	Base peak, 100% relative abundance	99900	100.0		Pass
199	5.0 - 9.0% of mass 198	6849	6.86		Pass
275	10.0 - 30.0% of mass 198	19792	19.8		Pass
365	1.0 - 100.0% of mass 198	2508	2.51		Pass
441	Present, but less than mass 443	11432	11.4	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	77293	77.4		Pass
443	17.0 - 23.0% of mass 442	15327	15.3	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1016-IC1016	4M23287.D	01/21/11	13:00	03:16	Initial cal 5
E4M1016-ICC1016	4M23288.D	01/21/11	13:27	03:43	Initial cal 1
E4M1016-IC1016	4M23289.D	01/21/11	13:51	04:07	Initial cal .01
E4M1016-IC1016	4M23290.D	01/21/11	14:15	04:31	Initial cal .02
E4M1016-IC1016	4M23291.D	01/21/11	14:39	04:55	Initial cal .05
E4M1016-IC1016	4M23293.D	01/21/11	15:58	06:14	Initial cal .2
E4M1016-IC1016	4M23294.D	01/21/11	16:22	06:38	Initial cal .5
E4M1016-IC1016	4M23295.D	01/21/11	16:46	07:02	Initial cal 2.5
E4M1016-IC1016	4M23292.D	01/21/11	17:10	07:26	Initial cal .1
E4M1016-ICV1016	4M23296.D	01/21/11	17:34	07:50	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1022-DFTPP	**Injection Date:**	01/31/11
Lab File ID:	4M23424.D	**Injection Time:**	07:54
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20231	56.9		Pass
68	Less than 2.0% of mass 69	258	0.73	(1.58) [a]	Pass
69	Mass 69 relative abundance	16315	45.9		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	18709	52.6		Pass
197	Less than 1.0% of mass 198	111	0.31		Pass
198	Base peak, 100% relative abundance	35568	100.0		Pass
199	5.0 - 9.0% of mass 198	2548	7.16		Pass
275	10.0 - 30.0% of mass 198	6478	18.2		Pass
365	1.0 - 100.0% of mass 198	787	2.21		Pass
441	Present, but less than mass 443	3512	9.87	(74.1) [b]	Pass
442	40.0 - 100.0% of mass 198	24128	67.8		Pass
443	17.0 - 23.0% of mass 442	4742	13.3	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1022-CC1016	4M23425.D	01/31/11	08:05	00:11	Continuing cal 1
OP47887A-MB1	4M23426.D	01/31/11	08:40	00:46	Method Blank
ZZZZZZ	4M23428.D	01/31/11	09:27	01:33	(unrelated sample)
ZZZZZZ	4M23429.D	01/31/11	09:51	01:57	(unrelated sample)
OP47853A-MB1	4M23430.D	01/31/11	10:15	02:21	Method Blank
OP47853A-BS12	4M23431.D	01/31/11	10:38	02:44	Blank Spike
OP47900A-MB1	4M23432.D	01/31/11	11:02	03:08	Method Blank
OP47900A-BS12	4M23433.D	01/31/11	11:26	03:32	Blank Spike
ZZZZZZ	4M23434.D	01/31/11	11:50	03:56	(unrelated sample)
ZZZZZZ	4M23435.D	01/31/11	12:13	04:19	(unrelated sample)
ZZZZZZ	4M23436.D	01/31/11	12:37	04:43	(unrelated sample)
ZZZZZZ	4M23437.D	01/31/11	13:01	05:07	(unrelated sample)
ZZZZZZ	4M23438.D	01/31/11	13:25	05:31	(unrelated sample)
JA66969-5A	4M23441.D	01/31/11	15:00	07:06	(used for QC only; not part of job JA66701)
ZZZZZZ	4M23442.D	01/31/11	15:24	07:30	(unrelated sample)
ZZZZZZ	4M23443.D	01/31/11	15:48	07:54	(unrelated sample)
ZZZZZZ	4M23444.D	01/31/11	16:12	08:18	(unrelated sample)
ZZZZZZ	4M23446.D	01/31/11	16:59	09:05	(unrelated sample)
JA66701-1	4M23447.D	01/31/11	17:24	09:30	W-RM-012011-MWCD

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1022-DFTPP	**Injection Date:**	01/31/11
Lab File ID:	4M23424.D	**Injection Time:**	07:54
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JA66701-2	4M23448.D	01/31/11	17:47	09:53	W-RM-012011-MWCC
JA66701-3	4M23449.D	01/31/11	18:12	10:18	FB-012011
JA66701-4	4M23450.D	01/31/11	18:36	10:42	W-RM-012111-MWCE
JA66701-5	4M23451.D	01/31/11	18:59	11:05	W-RM-012111-MWBV
JA66701-6	4M23452.D	01/31/11	19:24	11:30	W-RM-012111-MWX
JA66701-7	4M23453.D	01/31/11	19:47	11:53	W-RM-012111-MWAY

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1023-DFTPP	**Injection Date:**	02/01/11
Lab File ID:	4M23456.D	**Injection Time:**	08:51
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18173	50.9		Pass
68	Less than 2.0% of mass 69	242	0.68	(1.60) [a]	Pass
69	Mass 69 relative abundance	15102	42.3		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	18400	51.6		Pass
197	Less than 1.0% of mass 198	77	0.22		Pass
198	Base peak, 100% relative abundance	35669	100.0		Pass
199	5.0 - 9.0% of mass 198	2399	6.73		Pass
275	10.0 - 30.0% of mass 198	6596	18.5		Pass
365	1.0 - 100.0% of mass 198	857	2.40		Pass
441	Present, but less than mass 443	3621	10.2	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	24907	69.8		Pass
443	17.0 - 23.0% of mass 442	4876	13.7	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1023-CC1016	4M23457.D	02/01/11	09:03	00:12	Continuing cal .5
JA66701-8	4M23458.D	02/01/11	09:28	00:37	W-RM-012111-MWCF
ZZZZZZ	4M23459.D	02/01/11	09:59	01:08	(unrelated sample)
OP47923-MB1	4M23460.D	02/01/11	13:36	04:45	Method Blank
OP47923-BS1	4M23461.D	02/01/11	13:59	05:08	Blank Spike
OP47923-MS	4M23462.D	02/01/11	14:23	05:32	Matrix Spike
OP47923-MSD	4M23463.D	02/01/11	14:47	05:56	Matrix Spike Duplicate
JA67088-1	4M23464.D	02/01/11	15:11	06:20	(used for QC only; not part of job JA66701)
ZZZZZZ	4M23465.D	02/01/11	15:35	06:44	(unrelated sample)
ZZZZZZ	4M23466.D	02/01/11	16:00	07:09	(unrelated sample)
ZZZZZZ	4M23467.D	02/01/11	16:23	07:32	(unrelated sample)
ZZZZZZ	4M23468.D	02/01/11	16:47	07:56	(unrelated sample)
ZZZZZZ	4M23469.D	02/01/11	17:12	08:21	(unrelated sample)
ZZZZZZ	4M23470.D	02/01/11	17:36	08:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3151-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83633.D	**Injection Time:**	14:32
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28061	32.8		Pass
68	Less than 2.0% of mass 69	193	0.23	(0.58) [a]	Pass
69	Mass 69 relative abundance	33117	38.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	49981	58.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85475	100.0		Pass
199	5.0 - 9.0% of mass 198	5967	6.98		Pass
275	10.0 - 30.0% of mass 198	20633	24.1		Pass
365	1.0 - 100.0% of mass 198	2654	3.11		Pass
441	Present, but less than mass 443	13020	15.2	(77.0) [b]	Pass
442	40.0 - 100.0% of mass 198	84667	99.1		Pass
443	17.0 - 23.0% of mass 442	16907	19.8	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3151-IC3151	R83635.D	11/15/10	14:42	00:10	Initial cal 1
ER3151-IC3151	R83634.D	11/15/10	15:23	00:51	Initial cal 100
ER3151-IC3151	R83636.D	11/15/10	16:01	01:29	Initial cal 80
ER3151-IC3151	R83637.D	11/15/10	16:37	02:05	Initial cal 2
ER3151-IC3151	R83639.D	11/15/10	17:09	02:37	Initial cal 5
ER3151-IC3151	R83640.D	11/15/10	17:48	03:16	Initial cal 10
ER3151-ICC3151	R83638.D	11/15/10	18:22	03:50	Initial cal 50
ER3151-IC3151	R83641.D	11/15/10	18:58	04:26	Initial cal 25

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3152-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83642.D	**Injection Time:**	22:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22024	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25432	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37435	55.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	67512	100.0		Pass
199	5.0 - 9.0% of mass 198	4664	6.91		Pass
275	10.0 - 30.0% of mass 198	16603	24.6		Pass
365	1.0 - 100.0% of mass 198	2164	3.21		Pass
441	Present, but less than mass 443	9844	14.6	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	67437	99.9		Pass
443	17.0 - 23.0% of mass 442	13161	19.5	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3152-IC3152	R83643.D	11/15/10	23:00	00:23	Initial cal 100
ER3152-IC3152	R83644.D	11/15/10	23:36	00:59	Initial cal 80
ER3152-ICC3152	R83645.D	11/16/10	00:12	01:35	Initial cal 50
ER3152-IC3152	R83646.D	11/16/10	00:48	02:11	Initial cal 25
ER3152-IC3152	R83647.D	11/16/10	01:24	02:47	Initial cal 10
ER3152-IC3152	R83648.D	11/16/10	01:53	03:16	Initial cal 5
ER3152-IC3152	R83649.D	11/16/10	02:29	03:52	Initial cal 2
ER3152-IC3152	R83650.D	11/16/10	03:06	04:29	Initial cal 1
ER3152-ICV3151	R83651.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3152	R83651A.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3151	R83652.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3152	R83652A.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3151	R83653.D	11/16/10	04:54	06:17	Initial cal verification 50
ER3152-ICV3151	R83655.D	11/16/10	06:07	07:30	Initial cal verification 50
ER3152-ICV3152	R83655A.D	11/16/10	06:07	07:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3223-DFTPP	**Injection Date:**	01/27/11
Lab File ID:	R85115.D	**Injection Time:**	11:13
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57144	37.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	63325	41.2		Pass
70	Less than 2.0% of mass 69	220	0.14	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	86253	56.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	153885	100.0		Pass
199	5.0 - 9.0% of mass 198	10498	6.82		Pass
275	10.0 - 30.0% of mass 198	42064	27.3		Pass
365	1.0 - 100.0% of mass 198	5479	3.56		Pass
441	Present, but less than mass 443	22618	14.7	(74.5) [b]	Pass
442	40.0 - 100.0% of mass 198	151213	98.3		Pass
443	17.0 - 23.0% of mass 442	30376	19.7	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3223-CC3151	R85116.D	01/27/11	11:32	00:19	Continuing cal 50
ER3223-CC3152	R85117.D	01/27/11	12:03	00:50	Continuing cal 25
OP47853-MB1	R85118.D	01/27/11	12:39	01:26	Method Blank
OP47853-BS1	R85119.D	01/27/11	13:15	02:02	Blank Spike
ZZZZZZ	R85120.D	01/27/11	13:51	02:38	(unrelated sample)
ZZZZZZ	R85121.D	01/27/11	14:27	03:14	(unrelated sample)
ZZZZZZ	R85122.D	01/27/11	15:03	03:50	(unrelated sample)
ZZZZZZ	R85123.D	01/27/11	15:33	04:20	(unrelated sample)
JA66701-1	R85124.D	01/27/11	16:10	04:57	W-RM-012011-MWCD
OP47853-MS	R85125.D	01/27/11	16:46	05:33	Matrix Spike
OP47853A-MS	R85125.D	01/27/11	16:46	05:33	Matrix Spike
OP47853-MSD	R85126.D	01/27/11	17:27	06:14	Matrix Spike Duplicate
OP47853A-MSD	R85126.D	01/27/11	17:27	06:14	Matrix Spike Duplicate
JA66701-2	R85127.D	01/27/11	17:56	06:43	W-RM-012011-MWCC
ZZZZZZ	R85128.D	01/27/11	18:32	07:19	(unrelated sample)
ZZZZZZ	R85129.D	01/27/11	19:09	07:56	(unrelated sample)
ZZZZZZ	R85130.D	01/27/11	19:45	08:32	(unrelated sample)
ZZZZZZ	R85131.D	01/27/11	20:21	09:08	(unrelated sample)
ZZZZZZ	R85132.D	01/27/11	20:57	09:44	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3223-DFTPP	**Injection Date:**	01/27/11
Lab File ID:	R85115.D	**Injection Time:**	11:13
Instrument ID:	GCMSR		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	R85133.D	01/27/11	21:35	10:22	(unrelated sample)
ZZZZZZ	R85134.D	01/27/11	22:11	10:58	(unrelated sample)
ZZZZZZ	R85135.D	01/27/11	22:47	11:34	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3224-DFTPP	**Injection Date:**	01/28/11
Lab File ID:	R85137.D	**Injection Time:**	15:39
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	43475	42.6		Pass
68	Less than 2.0% of mass 69	624	0.61	(1.34) [a]	Pass
69	Mass 69 relative abundance	46719	45.8		Pass
70	Less than 2.0% of mass 69	142	0.14	(0.30) [a]	Pass
127	40.0 - 60.0% of mass 198	60779	59.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	101965	100.0		Pass
199	5.0 - 9.0% of mass 198	6986	6.85		Pass
275	10.0 - 30.0% of mass 198	26181	25.7		Pass
365	1.0 - 100.0% of mass 198	3051	2.99		Pass
441	Present, but less than mass 443	11365	11.1	(73.8) [b]	Pass
442	40.0 - 100.0% of mass 198	78883	77.4		Pass
443	17.0 - 23.0% of mass 442	15406	15.1	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3224-CC3151	R85138.D	01/28/11	15:59	00:20	Continuing cal 25
ER3224-CC3152	R85139.D	01/28/11	16:35	00:56	Continuing cal 25
JA66701-3	R85140.D	01/28/11	17:11	01:32	FB-012011
JA66701-4	R85141.D	01/28/11	17:47	02:08	W-RM-012111-MWCE
JA66701-5	R85142.D	01/28/11	18:23	02:44	W-RM-012111-MWBV
JA66701-6	R85143.D	01/28/11	18:52	03:13	W-RM-012111-MWX
JA66701-7	R85144.D	01/28/11	19:28	03:49	W-RM-012111-MWAY
JA66701-8	R85145.D	01/28/11	20:05	04:26	W-RM-012111-MWCF
ZZZZZZ	R85146.D	01/28/11	20:41	05:02	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1022-CC1016	**Injection Date:**	01/31/11
Lab File ID:	4M23425.D	**Injection Time:**	08:05
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	28088	6.79	20362	9.07	32939	12.38	31370	15.47
Upper Limit [a]	56176	7.29	40724	9.57	65878	12.88	62740	15.97
Lower Limit [b]	14044	6.29	10181	8.57	16470	11.88	15685	14.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP47887A-MB1	24593	6.77	17021	9.06	26576	12.37	25149	15.46
ZZZZZZ	34371	6.79	24104	9.07	38413	12.39	36728	15.48
ZZZZZZ	23767	6.79	16530	9.07	25751	12.39	23177	15.48
OP47853A-MB1	26558	6.79	18655	9.09	30014	12.40	28495	15.49
OP47853A-BS12	24689	6.79	17577	9.09	27883	12.40	27392	15.49
OP47900A-MB1	25983	6.79	17723	9.09	28645	12.39	26099	15.49
OP47900A-BS12	27138	6.79	18477	9.07	29843	12.39	29231	15.49
ZZZZZZ	25282	6.79	19687	9.09	31282	12.40	33849	15.48
ZZZZZZ	27327	6.79	20235	9.07	32705	12.38	33705	15.47
ZZZZZZ	24464	6.79	18485	9.07	28801	12.39	30040	15.48
ZZZZZZ	26664	6.79	19264	9.07	31114	12.39	32359	15.47
ZZZZZZ	25909	6.79	19479	9.07	30308	12.39	31060	15.48
JA66969-5A	23965	6.79	17255	9.07	28050	12.39	29658	15.48
ZZZZZZ	25154	6.79	19008	9.07	29751	12.38	32202	15.47
ZZZZZZ	26825	6.79	19175	9.07	30543	12.39	33542	15.47
ZZZZZZ	24085	6.79	18281	9.07	30124	12.38	31496	15.47
ZZZZZZ	29896	6.79	24766	9.07	36749	12.39	39493	15.48
JA66701-1	33724	6.79	26029	9.07	42614	12.39	45538	15.48
JA66701-2	28531	6.79	23017	9.07	36185	12.39	38525	15.48
JA66701-3	30951	6.79	23309	9.07	37487	12.39	38407	15.48
JA66701-4	28425	6.79	22466	9.07	35277	12.39	36614	15.48
JA66701-5	27548	6.79	20087	9.07	33237	12.40	33846	15.49
JA66701-6	31496	6.79	24176	9.07	40150	12.39	42477	15.48
JA66701-7	28797	6.79	20783	9.07	33919	12.39	35715	15.48

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1023-CC1016	**Injection Date:**	02/01/11
Lab File ID:	4M23457.D	**Injection Time:**	09:03
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21899	6.79	16200	9.07	24938	12.38	24754	15.47
Upper Limit [a]	43798	7.29	32400	9.57	49876	12.88	49508	15.97
Lower Limit [b]	10950	6.29	8100	8.57	12469	11.88	12377	14.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
JA66701-8	28614	6.79	22516	9.07	35856	12.38	36758	15.46
ZZZZZZ	43174[c]	6.82	32168[c]	9.13	38744[c]	12.44	44781[c]	15.46
OP47923-MB1	21799	6.79	16188	9.07	23954	12.38	22192	15.46
OP47923-BS1	25881	6.79	17024	9.07	25526	12.38	24444	15.46
OP47923-MS	23107	6.79	16879	9.07	24610	12.37	25523	15.46
OP47923-MSD	22259	6.79	16031	9.07	24338	12.37	24263	15.46
JA67088-1	22093	6.79	16487	9.07	24651	12.37	24629	15.46
ZZZZZZ	22770	6.79	16487	9.06	24950	12.37	26399	15.46
ZZZZZZ	23470	6.79	16684	9.07	24872	12.37	25360	15.46
ZZZZZZ	21983	6.79	15811	9.07	24138	12.37	25732	15.46
ZZZZZZ	25367	6.79	18039	9.07	28238	12.37	30848	15.46
ZZZZZZ	24608	6.79	17269	9.05	26127	12.37	28802	15.46
ZZZZZZ	23032	6.79	16529	9.07	25872	12.38	30134	15.46

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard added twice.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3223-CC3151	**Injection Date:**	01/27/11
Lab File ID:	R85116.D	**Injection Time:**	11:32
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	355326	7.43	1300377	10.20	775048	14.31	1315798	17.77	1638871	22.12	1340332	23.63
Upper Limit [a]	710652	7.93	2600754	10.70	1550096	14.81	2631596	18.27	3277742	22.62	2680664	24.13
Lower Limit [b]	177663	6.93	650189	9.70	387524	13.81	657899	17.27	819436	21.62	670166	23.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP47853-MB1	265301	7.43	949334	10.19	544343	14.31	888779	17.76	1004996	22.11	996067	23.62
OP47853-BS1	290982	7.43	1055993	10.19	639369	14.31	1055845	17.77	1217790	22.11	1111772	23.63
ZZZZZZ	260859	7.43	931492	10.19	536187	14.31	892324	17.76	973601	22.11	964965	23.63
ZZZZZZ	301552	7.42	1143205	10.19	708681	14.31	1167766	17.76	1044985	22.11	830411	23.62
ZZZZZZ	258072	7.43	944165	10.19	558530	14.30	912165	17.76	1083076	22.11	1017954	23.62
ZZZZZZ	314244	7.43	1146605	10.19	691506	14.31	1154896	17.77	1383048	22.11	1207995	23.63
JA66701-1	269928	7.42	956703	10.19	572271	14.31	1026273	17.77	1263634	22.11	1015205	23.63
OP47853-MS	284277	7.42	1071637	10.19	687755	14.31	1252288	17.77	1179882	22.12	993967	23.63
OP47853A-MS	284277	7.42	1071637	10.19	687755	14.31	1252288	17.77	1179882	22.12	993967	23.63
OP47853-MSD	275233	7.43	992342	10.19	595381	14.31	1011622	17.77	1202944	22.11	1064539	23.63
OP47853A-MSD	275233	7.43	992342	10.19	595381	14.31	1011622	17.77	1202944	22.11	1064539	23.63
JA66701-2	303533	7.43	1103967	10.19	642128	14.31	1057882	17.77	1132845	22.11	1084564	23.63
ZZZZZZ	355461	7.44	1266098	10.22	905760	14.43	1201902	17.92	1333248	22.13	1145803	23.64
ZZZZZZ	252595	7.43	912943	10.19	551195	14.31	906445	17.77	1024011	22.11	994582	23.63
ZZZZZZ	291320	7.43	1068952	10.19	628437	14.31	1001538	17.76	1077796	22.11	1016047	23.63
ZZZZZZ	266012	7.42	948798	10.19	548529	14.31	896229	17.77	1069507	22.11	1018394	23.63
ZZZZZZ	304380	7.43	1164455	10.19	714017	14.31	1213013	17.77	1097506	22.11	939875	23.63
ZZZZZZ	280047	7.43	1004608	10.19	585291	14.31	968009	17.76	1070829	22.11	1075871	23.63
ZZZZZZ	263786	7.43	949921	10.19	564281	14.31	972258	17.77	1115324	22.11	956544	23.63
ZZZZZZ	327297	7.43	1153866	10.19	685533	14.31	1151902	17.77	1233458	22.11	1195315	23.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3224-CC3151	**Injection Date:**	01/28/11
Lab File ID:	R85138.D	**Injection Time:**	15:59
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	375445	7.43	1309344	10.20	783066	14.31	1272584	17.78	1415220	22.11	1200884	23.63
Upper Limit [a]	750890	7.93	2618688	10.70	1566132	14.81	2545168	18.28	2830440	22.61	2401768	24.13
Lower Limit [b]	187723	6.93	654672	9.70	391533	13.81	636292	17.28	707610	21.61	600442	23.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
JA66701-3	298758	7.43	1044118	10.19	584532	14.31	887909	17.76	861655	22.10	775629	23.62
JA66701-4	298967	7.42	1042679	10.19	576651	14.31	856818	17.76	897218	22.10	763285	23.62
JA66701-5	302488	7.42	1035374	10.19	578517	14.31	846574	17.76	881025	22.10	788822	23.62
JA66701-6	316195	7.42	1084094	10.19	668964	14.31	1086595	17.77	1160109	22.10	932103	23.62
JA66701-7	313571	7.42	1099645	10.18	627129	14.30	982814	17.76	987860	22.10	833059	23.62
JA66701-8	313837	7.42	1092112	10.19	641229	14.30	1063552	17.77	1104835	22.10	927406	23.62
ZZZZZZ	336657	7.42	1265829	10.20	836106	14.34	1324437	17.81	1227978	22.11	876879	23.62

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA66701-1	R85124.D	81.0	73.0	66.0
JA66701-2	R85127.D	82.0	78.0	78.0
JA66701-3	R85140.D	91.0	85.0	81.0
JA66701-4	R85141.D	74.0	68.0	51.0
JA66701-5	R85142.D	85.0	80.0	71.0
JA66701-6	R85143.D	83.0	76.0	77.0
JA66701-7	R85144.D	75.0	67.0	61.0
JA66701-8	R85145.D	90.0	80.0	70.0
OP47853-BS1	R85119.D	87.0	81.0	87.0
OP47853-MB1	R85118.D	88.0	82.0	92.0
OP47853-MS	R85125.D	86.0	78.0	67.0
OP47853-MSD	R85126.D	86.0	83.0	69.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA66701-1	4M23447.D	80.0	83.0	60.0
JA66701-2	4M23448.D	91.0	94.0	78.0
JA66701-3	4M23449.D	94.0	94.0	81.0
JA66701-4	4M23450.D	78.0	75.0	49.0
JA66701-5	4M23451.D	90.0	91.0	75.0
JA66701-6	4M23452.D	81.0	88.0	75.0
JA66701-7	4M23453.D	79.0	80.0	65.0
JA66701-8	4M23458.D	98.0	91.0	70.0
OP47853A-BS12	4M23431.D	100.0	98.0	110.0
OP47853A-MB1	4M23430.D	102.0	96.0	109.0
OP47853A-MS	R85125.D	86.0	78.0	67.0
OP47853A-MSD	R85126.D	86.0	83.0	69.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-135%
S2 = 2-Fluorobiphenyl	31-121%
S3 = Terphenyl-d14	10-130%

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Initial Calibration

Calibration Files
0.05=4m23291.D .2 =4m23293.D 2.5 =4m23295.D .02 =4m23290.D
.1 =4m23292.D 1 =4m23288.D .01 =4m23289.D .5 =4m23294.D
5 =4m23287.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.614	0.610	0.578	0.604	0.604	0.590		0.575	0.558	0.592	3.34
3) Phenol-d5	0.771	0.763	0.694	0.761	0.795	0.746		0.740	0.615	0.736	7.71
4) Phenol	0.761	0.825	0.795	0.721	0.793	0.840		0.759	0.929	0.803	7.92
5) bis(2-Chloroethyl)ether	0.822	0.802	0.779	0.912	0.783	0.757	1.004	0.744	0.758	0.818	10.56
6) Nitrobenzene-d5	0.590	0.611	0.600	0.551	0.589	0.596		0.590	0.570	0.587	3.17
7) Naphthalene	1.926	1.856	1.675	1.901	1.851	1.691		1.687	1.661	1.781	6.32
8) Hexachlorobutadiene		0.316	0.283		0.328	0.287		0.298	0.277	0.298	6.71
9) 2-Methylnaphthalene	1.520	1.346	1.397	1.509	1.343	1.372	1.868	1.322	1.352	1.448	11.97
10) 1-Methylnaphthalene	1.450	1.431	1.269	1.475	1.365	1.351		1.296	1.255	1.362	6.19
11) 2-Fluorobiphenyl	1.430	1.397	1.287	1.374	1.383	1.280		1.298	1.313	1.345	4.26
12) I Fluorene-d10	ISTD										
13) Acenaphthylene	2.355	2.183	2.225	2.585	2.243	2.203		1.993	2.333	2.265	7.49
14) Acenaphthene	1.777	1.681	1.594	2.043	1.698	1.624		1.517	1.598	1.691	9.60
15) Fluorene	1.377	1.277	1.184	1.569	1.326	1.191		1.139	1.190	1.282	11.03
16) 2,6-Dinitrotoluene		0.388	0.582		0.384	0.568		0.418	0.682	0.504	24.67
----- Linear regression ----- Coefficient = 0.9953											
Response Ratio = -0.02627 + 0.68713 *A											
17) 2,4,6-Tribromophenol		0.135	0.172		0.129	0.168		0.146	0.181	0.155	13.83
18) Hexachlorobenzene	0.536	0.461	0.413	0.587	0.499	0.416		0.423	0.420	0.469	13.91
19) Pentachlorophenol	0.155	0.140	0.220	0.282	0.155	0.214		0.151	0.262	0.197	27.88
----- Linear regression ----- Coefficient = 0.9936											
Response Ratio = -0.03525 + 0.25937 *A											
20) Phenanthrene											

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

```
      2.032 1.826 1.725 2.438 1.942 1.701       1.654 1.757        1.884   13.66
21)  Anthracene
      1.687 1.389 1.590 1.987 1.356 1.562       1.277 1.673        1.565   14.55
22)  2,4-Dinitrotoluene
            0.342 0.679       0.301 0.596       0.391 0.735        0.507   36.65
            ----- Linear regression -----  Coefficient =  0.9983
              Response Ratio = -0.03017 + 0.75147 *A


23) I   Fluoranthene-d10      ----------------ISTD---------------------
24)  Fluoranthene
      1.482 1.176 1.099       1.282 1.141       1.073 1.118        1.196   11.99
25)  Pyrene
      1.137 1.026 1.115 1.371 1.030 1.092       0.974 1.137        1.110   10.88
26)  Terphenyl-d14
      0.432 0.441 0.377 0.536 0.405 0.419       0.420 0.416        0.431   10.79
27)  Benzo[a]anthracene
      0.629 0.531 0.797       0.540 0.709       0.542 0.813        0.652   18.81
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.01678 + 0.82341 *A

28)  Chrysene
      0.888 0.774 0.772       0.742 0.884       0.710 0.881        0.807    9.32
29)  bis(2-Ethylhexyl)phthalate
      0.327 0.247 0.348       0.357 0.290       0.220 0.497        0.327   27.83
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = 0.00237 + 0.20009 *A + 0.23586 *A^2


30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
      0.319 0.258 0.327       0.280 0.306       0.271 0.329        0.298    9.62
32)  Benzo[k]fluoranthene
      0.302 0.207 0.255       0.271 0.281       0.231 0.286        0.262   12.66
33)  Benzo[a]pyrene
            1.506 1.258       1.889 1.394       1.293 1.289        1.438   16.62
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.01149 + 1.27359 *A

34)  Indeno[1,2,3-cd]pyrene
      1.027 0.746 1.097       0.762 1.036       0.778 1.252        0.957   20.56
            ----- Linear regression -----  Coefficient =  0.9961
              Response Ratio = -0.03593 + 1.25236 *A

35)  Dibenz[a,h]anthracene
      0.736 0.555 0.856       0.602 0.796       0.573 0.973        0.727   21.78
            ----- Linear regression -----  Coefficient =  0.9962
              Response Ratio = -0.02925 + 0.97470 *A

36)  Benzo[g,h,i]perylene
      1.308 0.968 1.096       1.019 1.091       0.962 1.160        1.086   11.20
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M1016SIM.M        Mon Jan 24 15:30:58 2011   RPT1
```

7.1.1

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICV1016
Lab FileID: 4M23296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1016\4m23296.D Vial: 11
Acq On : 21 Jan 2011 5:34 pm Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1016,acid Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 08:13:52 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	68	0.00	6.77
4	t	Phenol	0.803	0.921	-14.7	75	0.00	3.57
12	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	9.07
19	t	Pentachlorophenol	5.000	5.009	-0.2	73	0.00	10.40
23	I	Fluoranthene-d10	1.000	1.000	0.0	64	0.00	12.38
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 08:29:16 2011 RPT1

7.7.2

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1017\4m23300.D Vial: 3
Acq On : 24 Jan 2011 10:50 am Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1017 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.02	6.79
5	t	bis(2-Chloroethyl)ether	0.818	0.702	14.2	75	0.00	3.62
7	t	Naphthalene	1.781	1.785	-0.2	86	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.321	-7.7	91	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.236	14.6	73	0.00	6.67
12	I	Fluorene-d10	1.000	1.000	0.0	70	0.00	9.07
13	t	Acenaphthylene	2.265	2.256	0.4	71	0.00	8.03
14	t	Acenaphthene	1.691	1.774	-4.9	76	0.00	8.33
15	t	Fluorene	1.282	1.315	-2.6	77	0.01	9.12
18	t	Hexachlorobenzene	0.469	0.447	4.7	75	0.02	10.11
20	t	Phenanthrene	1.884	1.826	3.1	75	0.02	10.57
21	t	Anthracene	1.565	1.469	6.1	65	0.00	10.63
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	61	0.01	12.39
24	t	Fluoranthene	1.196	1.223	-2.3	65	0.01	12.41
25	t	Pyrene	1.110	1.137	-2.4	63	0.00	12.70
		----------	True	Calc.	% Drift		----------	
27	t	Benzo[a]anthracene	1.000	0.943	5.7	61	0.02	14.16
		----------	AvgRF	CCRF	% Dev		----------	
28	t	Chrysene	0.807	0.947	-17.3	65	0.00	14.19
		----------	True	Calc.	% Drift		----------	
29		bis(2-Ethylhexyl)phthalat	1.000	1.148	-14.8	66	0.00	14.43
		----------	AvgRF	CCRF	% Dev		----------	
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	61	0.01	15.48
31	t	Benzo[b]fluoranthene	0.298	0.280	6.0	56	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.256	2.3	56	0.01	15.24

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	1.000	0.934	6.6	54	0.00	15.49
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	56	0.01	16.38
35	t	Dibenz[a,h]anthracene	1.000	0.893	10.7	58	0.01	16.41

			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.066	1.8	59	0.01	16.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 15:33:12 2011 RPT1

7.7.3

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1022-CC1016
Lab FileID: 4M23425.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1022\4m23425.D Vial: 2
Acq On : 31 Jan 2011 8:05 am Operator: ninap
Sample : cc1016-1 Inst : MS4M
Misc : op47830a,e4m1022 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	0.02	6.79
2	S	2-Fluorophenol	0.592	0.576	2.7	105	0.00	2.47
3	S	Phenol-d5	0.736	0.716	2.7	103	0.02	3.57
4	t	Phenol	0.803	0.759	5.5	97	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.965	-18.0	137	0.00	3.62
6	S	Nitrobenzene-d5	0.587	0.586	0.2	105	0.01	4.63
7	t	Naphthalene	1.781	1.610	9.6	102	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.284	4.7	106	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.358	6.2	106	0.00	6.67
10	t	1-Methylnaphthalene	1.362	1.206	11.5	96	0.00	6.82
11	S	2-Fluorobiphenyl	1.345	1.308	2.8	109	0.02	7.34
12	I	Fluorene-d10	1.000	1.000	0.0	100	0.00	9.07
13	t	Acenaphthylene	2.265	2.553	-12.7	116	0.00	8.03
14	t	Acenaphthene	1.691	1.741	-3.0	107	0.00	8.33
15	t	Fluorene	1.282	1.258	1.9	106	0.01	9.12
		----------	True	Calc.	% Drift	----------		
16	t	2,6-Dinitrotoluene	1.000	1.089	-8.9	113	0.00	8.14
		----------	AvgRF	CCRF	% Dev	----------		
17	S	2,4,6-Tribromophenol	0.155	0.182	-17.4	108	0.00	9.52
18	t	Hexachlorobenzene	0.469	0.458	2.3	110	0.00	10.09
		----------	True	Calc.	% Drift	----------		
19	t	Pentachlorophenol	5.000	8.860	-77.2#	202	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
20	t	Phenanthrene	1.884	1.755	6.8	103	0.00	10.56
21	t	Anthracene	1.565	1.634	-4.4	104	0.00	10.63
		----------	True	Calc.	% Drift	----------		
22	t	2,4-Dinitrotoluene	1.000	0.987	1.3	104	0.02	8.73
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	102	0.00	12.38
24	t	Fluoranthene	1.196	1.135	5.1	102	0.00	12.40
25	t	Pyrene	1.110	1.084	2.3	102	0.00	12.69
26	S	Terphenyl-d14	0.431	0.394	8.6	96	0.00	13.03
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1022-CC1016
Lab FileID: 4M23425.D

27	t	Benzo[a]anthracene	1.000	1.191	-19.1	132	0.00	14.14
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.737	8.7	85	0.00	14.19
		----------	True	Calc.	% Drift	----------		
29		bis(2-Ethylhexyl)phthalat	1.000	1.680	-68.0#	180	-0.02	14.42
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	105	0.00	15.47
31	t	Benzo[b]fluoranthene	0.298	0.256	14.1	87	0.00	15.21
32	t	Benzo[k]fluoranthene	0.262	0.281	-7.3	105	0.00	15.23
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	1.000	0.916	8.4	91	0.00	15.48
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.952	4.8	106	0.00	16.37
35	t	Dibenz[a,h]anthracene	1.000	0.907	9.3	101	-0.01	16.39
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	1.094	-0.7	105	0.00	16.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 31 15:29:05 2011 RPT1

7.7.4

SII-SSA-0014-004948

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1023-CC1016
Lab FileID: 4M23457.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1023\4m23457.D Vial: 2
Acq On : 1 Feb 2011 9:03 am Operator: ninap
Sample : cc1016-.5 Inst : MS4M
Misc : op47830a,e4m1023 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	93	0.02	6.79
2	S	2-Fluorophenol	0.592	0.634	-7.1	102	0.00	2.47
3	S	Phenol-d5	0.736	0.737	-0.1	92	0.02	3.57
4	t	Phenol	0.803	0.893	-11.2	109	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.798	2.4	100	0.00	3.62
6	S	Nitrobenzene-d5	0.587	0.614	-4.6	96	0.01	4.63
7	t	Naphthalene	1.781	1.774	0.4	98	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.309	-3.7	96	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.419	2.0	100	0.00	6.67
10	t	1-Methylnaphthalene	1.362	1.356	0.4	97	0.00	6.82
11	S	2-Fluorobiphenyl	1.345	1.406	-4.5	101	0.00	7.32
12	I	Fluorene-d10	1.000	1.000	0.0	88	0.00	9.07
13	t	Acenaphthylene	2.265	2.516	-11.1	110	0.00	8.03
14	t	Acenaphthene	1.691	1.798	-6.3	104	0.00	8.33
15	t	Fluorene	1.282	1.302	-1.6	100	0.00	9.10
		----------	True	Calc.	% Drift	----------		
16	t	2,6-Dinitrotoluene	0.500	0.523	-4.6	107	0.00	8.14
		----------	AvgRF	CCRF	% Dev	----------		
17	S	2,4,6-Tribromophenol	0.155	0.183	-18.1	110	0.00	9.52
18	t	Hexachlorobenzene	0.469	0.475	-1.3	98	0.00	10.09
		----------	True	Calc.	% Drift	----------		
19	t	Pentachlorophenol	2.500	4.878	-95.1#	261	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
20	t	Phenanthrene	1.884	1.848	1.9	98	0.00	10.56
21	t	Anthracene	1.565	1.616	-3.3	111	-0.02	10.62
		----------	True	Calc.	% Drift	----------		
22	t	2,4-Dinitrotoluene	0.500	0.525	-5.0	123	0.00	8.71
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	86	0.00	12.38
24	t	Fluoranthene	1.196	1.187	0.8	95	-0.01	12.39
25	t	Pyrene	1.110	1.182	-6.5	105	-0.01	12.68
26	S	Terphenyl-d14	0.431	0.415	3.7	85	0.00	13.03
		----------	True	Calc.	% Drift	----------		

7.7.5

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1023-CC1016
Lab FileID: 4M23457.D

27	t	Benzo[a]anthracene	0.500	0.566	-13.2	127	0.00	14.14
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.943	-16.9	115	-0.02	14.18
		----------	True	Calc.	% Drift	----------		
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	97	0.00	15.47
31	t	Benzo[b]fluoranthene	0.298	0.277	7.0	99	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.216	17.6	90	-0.01	15.22
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	0.500	0.445	11.0	92	0.00	15.48
34	t	Indeno[1,2,3-cd]pyrene	0.500	0.440	12.0	101	-0.01	16.36
35	t	Dibenz[a,h]anthracene	0.500	0.403	19.4	93	-0.01	16.39
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	0.948	12.7	95	0.00	16.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23294.D M4M1016SIM.M Tue Feb 01 10:30:22 2011 RPT1

7.7.5

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Feb 01 19:17:15 2011
Response via : Initial Calibration

Calibration Files
2 =R83637.D 5 =R83639.D 100 =R83634.D 50 =R83638.D
1 =R83635.D 10 =R83640.D 80 =R83636.D 25 =R83641.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.596	0.621	0.558	0.582	0.609	0.629	0.566	0.599	0.595	4.20
3) Pyridine	1.200	1.355	1.305	1.377	1.184	1.431	1.343	1.413	1.326	6.92
4) N-Nitrosodim	0.409	0.454	0.430	0.452	0.362	0.477	0.440	0.473	0.437	8.59
5) 2-Fluorophen	1.051	1.208	1.177	1.228	1.152	1.281	1.210	1.273	1.198	6.13
6) Indene	1.762	1.935	1.784	1.903	1.933	2.025	1.834	1.983	1.895	4.95
7) Cumene	2.610	2.815	2.485	2.648	2.889	2.905	2.544	2.797	2.712	5.93
8) Phenol-d5	1.320	1.507	1.316	1.420	1.403	1.558	1.375	1.511	1.426	6.35
9) Phenol	1.575	1.762	1.528	1.686	1.748	1.838	1.596	1.782	1.690	6.61
10) Aniline	1.895	2.053	1.667	2.001	2.063	2.093	1.697	2.107	1.947	9.06
11) bis(2-Chloro	1.139	1.288	1.119	1.208	1.251	1.333	1.159	1.286	1.223	6.42
12) 2-Chlorophen	1.295	1.442	1.337	1.417	1.394	1.498	1.385	1.472	1.405	4.79
13) Decane	1.085	1.181	0.963	1.076	1.163	1.203	1.005	1.142	1.102	7.78
14) 1,3-Dichloro	1.509	1.630	1.475	1.563	1.628	1.655	1.504	1.617	1.573	4.41
15) 1,4-Dichloro	1.507	1.663	1.481	1.586	1.704	1.697	1.515	1.623	1.597	5.54
16) Benzyl alcoh	0.723	0.859	0.814	0.888	0.712	0.927	0.847	0.926	0.837	9.93
17) 1,2-Dichloro	1.420	1.560	1.352	1.475	1.574	1.595	1.412	1.547	1.492	6.04
18) Acetophenone	1.600	1.780	1.613	1.733	1.755	1.858	1.659	1.809	1.726	5.41
19) 2-Methylphen	0.875	0.975	0.909	0.981	0.900	1.011	0.932	1.020	0.950	5.67
20) 2,2'-oxybis(	0.417	0.467	0.435	0.465	0.456	0.487	0.445	0.483	0.457	5.22
21) 3&4-Methylph	0.846	1.014	0.921	1.013	0.885	1.072	0.971	1.063	0.973	8.50
22) n-Nitroso-di	0.674	0.756	0.666	0.739	0.684	0.788	0.695	0.784	0.723	6.88
23) Hexachloroet	0.401	0.445	0.415	0.447	0.433	0.468	0.428	0.460	0.437	5.15
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.332	0.377	0.349	0.368	0.353	0.392	0.360	0.377	0.364	5.18
26) Nitrobenzene	0.183	0.206	0.192	0.202	0.197	0.216	0.197	0.208	0.200	5.13
27) Quinoline	0.604	0.700	0.666	0.698	0.658	0.733	0.682	0.714	0.682	5.84
28) Isophorone	0.591	0.654	0.585	0.627	0.625	0.684	0.601	0.653	0.628	5.55
29) 2-Nitropheno	0.172	0.206	0.201	0.213	0.184	0.222	0.208	0.220	0.203	8.61
30) 2,4-Dimethyl	0.293	0.331	0.321	0.349	0.314	0.334	0.326	0.360	0.329	6.27
31) Benzoic acid			0.215	0.195		0.115	0.216	0.167	0.182	23.33
----- Linear regression ----- Coefficient = 0.9989										
Response Ratio = -0.03508 + 0.22970 *A										
32) bis(2-Chloro	0.374	0.434	0.382	0.404	0.418	0.447	0.392	0.429	0.410	6.43
33) 2,4-Dichloro	0.245	0.293	0.287	0.299	0.260	0.313	0.293	0.311	0.288	8.28
34) 2,6-Dichloro	0.253	0.300	0.275	0.290	0.272	0.314	0.282	0.303	0.286	6.91
35) 1,3,5-Trichl	0.324	0.356	0.304	0.323	0.347	0.362	0.312	0.337	0.333	6.25
36) 1,2,4-Trichl	0.299	0.339	0.301	0.319	0.343	0.345	0.307	0.330	0.323	5.81
37) 1,2,3-Trichl	0.297	0.334	0.293	0.311	0.330	0.339	0.302	0.322	0.316	5.59
38) Naphthalene	1.107	1.222	0.949	1.068	1.265	1.242	0.996	1.150	1.125	10.32
39) 4-Chloroanil	0.437	0.512	0.424	0.481	0.492	0.537	0.442	0.518	0.481	8.74
40) 2,3-Dichloro	0.308	0.364	0.331	0.344	0.338	0.383	0.337	0.364	0.346	6.73
41) Caprolactam	0.116	0.142	0.149	0.153	0.112	0.153	0.152	0.153	0.141	12.25
42) Hexachlorobu	0.149	0.168	0.152	0.159	0.161	0.173	0.155	0.165	0.160	5.08

7.7.6

7

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

43)	4-Chloro-3-m	0.234	0.288	0.292	0.304	0.232	0.312	0.299	0.312	0.284	11.51
44)	2-Methylnaph	0.739	0.834	0.698	0.762	0.824	0.859	0.717	0.813	0.781	7.64
45)	1-Methylnaph	0.711	0.792	0.666	0.727	0.769	0.807	0.683	0.769	0.741	6.94
46)	Dimethylnaph	0.589	0.686	0.590	0.645	0.647	0.716	0.613	0.680	0.646	7.18
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.187	0.138	0.218	0.216		0.176	0.212	0.200	0.192	14.91
49)	2,4,6-Trichl	0.270	0.330	0.337	0.346	0.279	0.358	0.342	0.353	0.327	10.25
50)	2,4,5-Trichl		0.262	0.297	0.308		0.305	0.305	0.303	0.297	5.86
51)	2-Fluorobiph	1.313	1.493	1.282	1.388	1.465	1.539	1.325	1.459	1.408	6.71
52)	2-Chloronaph	1.128	1.244	1.076	1.161	1.247	1.302	1.107	1.219	1.185	6.68
53)	Biphenyl	1.520	1.740	1.437	1.567	1.764	1.778	1.490	1.661	1.620	8.26
54)	2-Nitroanili	0.252	0.319	0.307	0.330	0.244	0.349	0.317	0.336	0.307	12.55
55)	Dimethylphth	1.201	1.383	1.175	1.272	1.319	1.438	1.221	1.349	1.295	7.19
56)	Acenaphthyle	1.782	2.051	1.696	1.890	1.894	2.158	1.780	2.016	1.908	8.21
57)	2,6-Dinitrot	0.244	0.294	0.302	0.315	0.240	0.320	0.310	0.322	0.294	11.25
58)	3-Nitroanili	0.263	0.354	0.388	0.402		0.398	0.397	0.403	0.372	13.69
59)	Acenaphthene	1.190	1.338	1.163	1.247	1.361	1.382	1.203	1.301	1.273	6.60
60)	2,4-Dinitrop		0.018	0.157	0.139		0.059	0.160	0.111	0.107	53.62
	----- Linear regression ----- Coefficient = 0.9975										
	Response Ratio = -0.05587 + 0.16902 *A										
61)	4-Nitropheno		0.082	0.157	0.155		0.119	0.158	0.144	0.136	22.22
	----- Linear regression ----- Coefficient = 0.9999										
	Response Ratio = -0.00999 + 0.16197 *A										
62)	Dibenzofuran	1.604	1.809	1.524	1.662	1.800	1.882	1.578	1.748	1.701	7.50
63)	2,4-Dinitrot	0.319	0.412	0.416	0.437	0.295	0.452	0.429	0.447	0.401	14.96
64)	2,3,4,6-Tetr	0.185	0.258	0.301	0.305		0.293	0.307	0.304	0.279	16.04
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00332 + 0.30506 *A										
65)	Diethylphtha	1.345	1.511	1.299	1.432	1.599	1.553	1.359	1.473	1.446	7.37
66)	Fluorene	1.253	1.406	1.249	1.351	1.352	1.485	1.284	1.412	1.349	6.21
67)	4-Chlorophen	0.551	0.625	0.557	0.581	0.590	0.638	0.563	0.602	0.588	5.42
68)	4-Nitroanili		0.356	0.395	0.408		0.400	0.403	0.412	0.396	5.09
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-			0.143	0.141		0.100	0.147	0.130	0.132	14.60
71)	n-Nitrosodip	0.548	0.642	0.581	0.616	0.624	0.663	0.591	0.643	0.613	6.22
72)	1,2-Diphenyl	0.716	0.802	0.774	0.769	0.770	0.832	0.796	0.799	0.782	4.36
73)	2,4,6-Tribro		0.097	0.121	0.116		0.110	0.120	0.114	0.113	7.86
74)	4-Bromopheny	0.187	0.220	0.223	0.226	0.187	0.234	0.223	0.231	0.216	8.61
75)	Hexachlorobe	0.218	0.250	0.249	0.247	0.250	0.256	0.248	0.255	0.246	4.86
76)	Pentachlorop	0.108	0.100	0.164	0.154		0.128	0.163	0.144	0.137	19.12
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.01762 + 0.16671 *A										
77)	Phenanthrene	1.178	1.273	1.041	1.107	1.342	1.285	1.066	1.191	1.185	9.22
78)	Anthracene	1.122	1.272	1.090	1.180	1.266	1.305	1.121	1.250	1.201	6.91
79)	Carbazole	1.006	1.172	1.039	1.116	1.081	1.221	1.066	1.168	1.109	6.66
80)	Di-n-butylph	1.270	1.539	1.252	1.399	1.434	1.606	1.293	1.539	1.416	9.64
81)	Fluoranthene	1.048	1.221	1.032	1.119	1.206	1.272	1.069	1.206	1.147	7.94
82)	Octadecane	0.442	0.518	0.379	0.432	0.476	0.541	0.399	0.495	0.460	12.43
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.203	1.321	1.026	1.142	1.313	1.345	1.064	1.270	1.210	10.10
85)	Butyl steara	0.313	0.385		0.292		0.386		0.350	0.345	12.24
86)	Terphenyl-d1	0.705	0.798	0.690	0.745	0.760	0.834	0.706	0.793	0.754	6.87
87)	Butylbenzylp	0.570	0.673	0.567	0.644	0.653	0.719	0.594	0.702	0.640	9.07

7.7.6

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

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 88) Benzo[a]anth 1.078 1.161 0.927 1.060 1.259 1.207 0.982 1.153 1.103  10.21
 89) 3,3'-Dichlor 0.339 0.407 0.398 0.439       0.436 0.419 0.442 0.412   8.81
 90) Chrysene     1.067 1.179 0.927 1.032 1.232 1.217 0.975 1.117 1.093  10.28
 91) bis(2-Ethylh 0.807 0.986 0.782 0.902       1.039 0.812 1.006 0.905  11.79

 92) I   Perylene-d12          ----------------ISTD--------------------
 93) Di-n-octylph 1.178 1.594 1.427 1.596       1.799 1.472 1.737 1.543  13.51
 94) Benzo[b]fluo 1.037 1.137 1.635 1.264 1.124 1.253 1.723 1.252 1.303  18.88
          ----- Quadratic regression -----               Coefficient =  0.9925
               Response Ratio = -0.01149 + 1.14974 *A + 0.21778 *A^2

 95) Benzo[k]fluo 1.143 1.401       1.260 1.381 1.403 0.814 1.323 1.246  17.02
          ----- Quadratic regression -----               Coefficient =  0.9935
               Response Ratio = -0.04948 + 1.85273 *A + -0.50029 *A^2

 96) Benzo[a]pyre 0.925 1.103 1.161 1.166 1.048 1.244 1.162 1.207 1.127   8.96
 97) Indeno[1,2,3 0.953 1.197 1.188 1.390 1.046 1.329 1.346 1.354 1.226  12.99
 98) Dibenz(a,h)a 0.664 0.852 0.898 1.004 0.736 0.963 0.991 0.993 0.888  14.45
 99) Dibenz[a,h]a 0.774 0.981 0.990 1.130 0.845 1.093 1.113 1.115 1.005  13.39
100) 7,12-Dimethy       0.448 0.619 0.614       0.500 0.616 0.608 0.567  13.09
101) Benzo[g,h,i] 0.800 0.986 0.825 1.085 0.892 1.087 0.979 1.091 0.968  12.21


 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MR3151.M          Thu Feb 03 12:41:02 2011   NJMSR
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7.7.6

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICC3152
Lab FileID: R83645.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	1.019	0.981	0.761	0.688	0.956	0.604	0.830	0.834		18.98
----- Quadratic regression ----- Coefficient = 0.9994										
Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2										
104) I Acenaphthene-d10a	ISTD									
105) 1,2,4,5-Tetr	0.558	0.537	0.435	0.500	0.409	0.512	0.477	0.523	0.494	10.35
106) Atrazine	0.156	0.166	0.157	0.178	0.172	0.172	0.181	0.169		5.81
107) t Chrysene-d12a	ISTD									
108) Benzidine	0.441	0.614	0.387	0.499	0.669	0.429	0.476	0.502		20.48
----- Quadratic regression ----- Coefficient = 0.9973										
Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2										

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Tue Nov 16 13:42:25 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83651.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.01	7.61
3	t	Pyridine	1.326	1.290	2.7	116	-0.05	3.22
4	t	N-Nitrosodimethylamine	0.437	0.436	0.2	120	-0.02	3.25
11	t	bis(2-Chloroethyl)ether	1.223	1.122	8.3	115	-0.02	7.20
14	t	1,3-Dichlorobenzene	1.573	1.409	10.4	112	-0.02	7.53
15	t	1,4-Dichlorobenzene	1.597	1.442	9.7	113	0.00	7.65
16	t	Benzyl alcohol	0.837	0.843	-0.7	118	0.00	8.00
17	t	1,2-Dichlorobenzene	1.492	1.352	9.4	114	-0.01	8.03
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.440	3.7	117	0.00	8.34
22	t	n-Nitroso-di-n-propylamin	0.723	0.719	0.6	121	-0.02	8.63
23	t	Hexachloroethane	0.437	0.414	5.3	115	0.00	8.67
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	10.39
26	t	Nitrobenzene	0.200	0.185	7.5	113	-0.01	8.89
28	t	Isophorone	0.628	0.582	7.3	115	-0.02	9.42
		----------	AvgRF	CCRF	% Dev		----------	
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	118	0.00	10.00
36	t	1,2,4-Trichlorobenzene	0.323	0.294	9.0	114	0.00	10.32
38	t	Naphthalene	1.125	0.985	12.4	114	0.00	10.44
42	t	Hexachlorobutadiene	0.160	0.152	5.0	118	0.00	10.91
44	t	2-Methylnaphthalene	0.781	0.657	15.9	106	0.00	12.04
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	14.52
48	t	Hexachlorocyclopentadiene	0.192	0.192	0.0	112	0.00	12.60
52	t	2-Chloronaphthalene	1.185	1.042	12.1	113	0.00	13.16
54	t	2-Nitroaniline	0.307	0.296	3.6	113	0.00	13.54
55	t	Dimethylphthalate	1.295	1.131	12.7	112	0.00	14.13
56	t	Acenaphthylene	1.908	1.533	19.7	102	0.00	14.14
57	t	2,6-Dinitrotoluene	0.294	0.290	1.4	116	0.00	14.25
58	t	3-Nitroaniline	0.372	0.327	12.1	102	0.00	14.55
59	t	Acenaphthene	1.273	1.137	10.7	115	0.00	14.60
		----------	AvgRF	CCRF	% Dev		----------	
62	t	Dibenzofuran	1.701	1.525	10.3	115	0.00	14.98
63	t	2,4-Dinitrotoluene	0.401	0.382	4.7	110	0.00	15.16
		----------	AvgRF	CCRF	% Dev		----------	
65	t	Diethylphthalate	1.446	1.291	10.7	113	-0.01	15.83
66	t	Fluorene	1.349	1.244	7.8	116	0.00	15.79

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

67	t	4-Chlorophenyl-phenylethe	0.588	0.536	8.8	116	0.00	15.87
68	t	4-Nitroaniline	0.396	0.372	6.1	115	-0.01	16.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	17.98
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	114	0.00	16.19
72	t	1,2-Diphenylhydrazine	0.782	0.699	10.6	116	0.00	16.24
74	t	4-Bromophenyl-phenylether	0.216	0.207	4.2	117	0.00	17.01
75	t	Hexachlorobenzene	0.246	0.229	6.9	119	0.00	17.29
		----------	AvgRF	CCRF	% Dev		----------	
77	t	Phenanthrene	1.185	1.042	12.1	121	0.00	18.04
78	t	Anthracene	1.201	1.074	10.6	117	0.00	18.15
79	t	Carbazole	1.109	1.048	5.5	120	0.00	18.60
80	t	Di-n-butylphthalate	1.416	1.242	12.3	114	0.00	19.56
81	t	Fluoranthene	1.147	1.006	12.3	115	0.00	20.36
83	I	Chrysene-d12	1.000	1.000	0.0	127	0.00	22.25
84	t	Pyrene	1.210	1.044	13.7	116	0.00	20.68
87	t	Butylbenzylphthalate	0.640	0.571	10.8	112	0.00	21.67
88	t	Benzo[a]anthracene	1.103	0.958	13.1	114	0.00	22.23
90	t	Chrysene	1.093	0.938	14.2	115	0.00	22.28
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.799	11.7	112	0.00	22.37
92	I	Perylene-d12	1.000	1.000	0.0	131	0.00	23.79
93	t	Di-n-octylphthalate	1.543	1.370	11.2	113	0.00	22.98
		----------	True	Calc.	% Drift		----------	
94	t	Benzo[b]fluoranthene	50.000	40.294	19.4	114	0.00	23.37
95	t	Benzo[k]fluoranthene	50.000	40.077	19.8	109	0.00	23.40
		----------	AvgRF	CCRF	% Dev		----------	
96	t	Benzo[a]pyrene	1.127	1.030	8.6	116	0.00	23.73
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.285	-4.8	121	0.00	25.17
99	t	Dibenz[a,h]anthracene	1.005	1.041	-3.6	121	0.00	25.18
101	t	Benzo[g,h,i]perylene	0.968	1.037	-7.1	126	0.00	25.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:46:13 2010 NJMSR

SII-SSA-0014-004956

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83651A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83651A.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	0.01	14.52
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.446	9.7	122	0.00	12.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:52:58 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83652.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83652.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.01	7.61
2	t	1,4-Dioxane	0.595	0.546	8.2	111	-0.06	2.77
6	t	Indene	1.895	1.809	4.5	113	-0.01	8.19
7	t	Cumene	2.712	2.285	15.7	102	-0.02	6.13
13	t	Decane	1.102	0.975	11.5	107	-0.02	7.41
18	t	Acetophenone	1.726	1.825	-5.7	125	-0.02	8.54
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.01	10.38
27	t	Quinoline	0.682	0.724	-6.2	119	-0.03	11.21
40	t	2,3-Dichloroaniline	0.346	0.335	3.2	111	0.00	12.81
41	t	Caprolactam	0.141	0.143	-1.4	107	-0.09	11.39
45	t	1-Methylnaphthalene	0.741	0.698	5.8	110	0.00	12.29
46	t	Dimethylnaphthalene	0.646	0.655	-1.4	116	0.00	13.53
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	14.52
53	t	Biphenyl	1.620	1.527	5.7	113	0.00	13.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	17.98
82	t	Octadecane	0.460	0.455	1.1	122	0.00	18.03
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	22.24
92	I	Perylene-d12	1.000	1.000	0.0	100	0.00	23.78
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.379	33.2#	62	-0.02	23.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:50:51 2010 NJMSR

7.7.10

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83652A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83652A.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	117	0.00	7.61
		True	Calc.	% Drift			
103	Benzaldehyde	50.000	59.481	-19.0	152	0.00	6.76
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	127	0.00	14.52
106	Atrazine	0.169	0.185	-9.5	132	0.01	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Nov 18 16:21:44 2010 NJMSR

7.7.11

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83653.D Vial: 12
Acq On : 16 Nov 2010 4:54 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	137	0.00	7.62
9	t	Phenol	1.690	1.465	13.3	119	0.00	7.10
12	t	2-Chlorophenol	1.405	1.344	4.3	130	0.00	7.26
19	t	2-Methylphenol	0.950	1.098	-15.6	154	0.00	8.31
21	t	3&4-Methylphenol	0.973	1.156	-18.8	156	0.00	8.64
24	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	10.39
29	t	2-Nitrophenol	0.203	0.201	1.0	124	0.00	9.60
30	t	2,4-Dimethylphenol	0.329	0.323	1.8	122	0.00	9.80
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	48.929	2.1	133	0.04	10.22
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.288	0.277	3.8	122	0.00	10.14
34	t	2,6-Dichlorophenol	0.286	0.283	1.0	129	0.00	10.67
43	t	4-Chloro-3-methylphenol	0.284	0.281	1.1	122	-0.03	11.87
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	14.52
49	t	2,4,6-Trichlorophenol	0.327	0.329	-0.6	121	0.00	12.81
50	t	2,4,5-Trichlorophenol	0.312	0.370	-18.6	153	-0.02	12.88
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.410	3.6	108	-0.02	14.76
61	t	4-Nitrophenol	50.000	45.760	8.5	115	-0.01	15.04
		----------	True	Calc.	% Drift	----------		
64		2,3,4,6-Tetrachlorophenol	50.000	44.407	11.2	112	0.00	15.41
69	I	Phenanthrene-d10	1.000	1.000	0.0	129	0.00	17.99
70	t	4,6-Dinitro-2-methylpheno	0.132	0.125	5.3	115	-0.02	16.09
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	93.330	6.7	118	-0.01	17.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

R83645.D MR3151.M Wed Nov 17 15:34:26 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83655.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83655.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	132	-0.01	22.24
89 t	3,3'-Dichlorobenzidine	0.412	0.409	0.7	123	0.00	22.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:01:54 2010 NJMSR

ACCUTEST LABORATORIES

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83655A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83655A.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 t	Chrysene-d12a	1.000	1.000	0.0	148	0.00	22.24
		True	Calc.	% Drift			
108 t	Benzidine	50.000	101.157	-102.3#	232	0.00	20.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:26:56 2010 NJMSR

7.7.14

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3153-ICV3151
Lab FileID: R83659.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3153\R83659.D Vial: 4
Acq On : 16 Nov 2010 5:43 pm Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3153,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	7.62
10	t	Aniline	1.947	1.742	10.5	131	0.00	7.07
24	I	Naphthalene-d8	1.000	1.000	0.0	135	0.00	10.40
39	t	4-Chloroaniline	0.481	0.472	1.9	133	0.00	10.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Wed Nov 17 13:22:13 2010 NJMSR

7.7.15

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85116.D Vial: 2
Acq On : 27 Jan 2011 11:32 am Operator: ninap
Sample : cc3151-50 Inst : MSR
Misc : op47575,er3223 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.19	7.43
2	t	1,4-Dioxane	0.595	0.498	16.3	78	-0.15	2.68
3	t	Pyridine	1.326	1.196	9.8	79	-0.16	3.11
4	t	N-Nitrosodimethylamine	0.437	0.528	-20.8#	107	-0.16	3.11
5	S	2-Fluorophenol	1.198	1.059	11.6	79	-0.13	5.16
6	t	Indene	1.895	1.745	7.9	84	-0.20	8.01
7	t	Cumene	2.712	2.478	8.6	85	-0.19	5.97
8	S	Phenol-d5	1.426	1.302	8.7	84	-0.13	6.94
9	t	Phenol	1.690	1.428	15.5	77	-0.14	6.96
10	t	Aniline	1.947	1.342	31.1#	61	-0.18	6.88
11	t	bis(2-Chloroethyl)ether	1.223	1.032	15.6	78	-0.18	7.03
12	t	2-Chlorophenol	1.405	1.287	8.4	83	-0.17	7.10
13	t	Decane	1.102	1.071	2.8	91	-0.19	7.23
14	t	1,3-Dichlorobenzene	1.573	1.430	9.1	84	-0.20	7.35
15	t	1,4-Dichlorobenzene	1.597	1.469	8.0	85	-0.19	7.46
16	t	Benzyl alcohol	0.837	0.811	3.1	83	-0.17	7.83
17	t	1,2-Dichlorobenzene	1.492	1.359	8.9	84	-0.20	7.84
18	t	Acetophenone	1.726	1.584	8.2	83	-0.19	8.36
19	t	2-Methylphenol	0.950	0.860	9.5	80	-0.15	8.17
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.408	10.7	80	-0.19	8.16
21	t	3&4-Methylphenol	0.973	0.944	3.0	85	-0.15	8.49
22	t	n-Nitroso-di-n-propylamin	0.723	0.728	-0.7	90	-0.19	8.46
23	t	Hexachloroethane	0.437	0.445	-1.8	91	-0.20	8.48
24	I	Naphthalene-d8	1.000	1.000	0.0	92	-0.20	10.20
25	S	Nitrobenzene-d5	0.364	0.342	6.0	86	-0.20	8.67
26	t	Nitrobenzene	0.200	0.176	12.0	80	-0.20	8.71
27	t	Quinoline	0.682	0.656	3.8	87	-0.20	11.04
28	t	Isophorone	0.628	0.563	10.4	83	-0.20	9.24
29	t	2-Nitrophenol	0.203	0.193	4.9	83	-0.20	9.42
30	t	2,4-Dimethylphenol	0.329	0.308	6.4	81	-0.16	9.64
			True	Calc.	% Drift			
31	t	Benzoic acid	50.000	38.100	23.8#	69	-0.11	10.07
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.347	15.4	79	-0.19	9.82
33	t	2,4-Dichlorophenol	0.288	0.280	2.8	86	-0.16	9.98
34	t	2,6-Dichlorophenol	0.286	0.273	4.5	87	-0.18	10.50
35	t	1,3,5-Trichlorobenzene	0.333	0.301	9.6	86	-0.20	9.42
36	t	1,2,4-Trichlorobenzene	0.323	0.295	8.7	85	-0.20	10.12
37	t	1,2,3-Trichlorobenzene	0.316	0.297	6.0	88	-0.20	10.67

7.7.16
7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

38	t	Naphthalene	1.125	0.993	11.7	86	-0.20	10.24
39	t	4-Chloroaniline	0.481	0.410	14.8	79	-0.18	10.49
40	t	2,3-Dichloroaniline	0.346	0.337	2.6	90	-0.20	12.61
41	t	Caprolactam	0.141	0.136	3.5	82	-0.18	11.29
42	t	Hexachlorobutadiene	0.160	0.164	-2.5	95	-0.20	10.71
43	t	4-Chloro-3-methylphenol	0.284	0.296	-4.2	90	-0.14	11.76
44	t	2-Methylnaphthalene	0.781	0.714	8.6	86	-0.21	11.84
45	t	1-Methylnaphthalene	0.741	0.677	8.6	86	-0.20	12.09
46	t	Dimethylnaphthalene	0.646	0.632	2.2	90	-0.20	13.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	-0.21	14.31
48	t	Hexachlorocyclopentadiene	0.192	0.196	-2.1	88	-0.21	12.40
49	t	2,4,6-Trichlorophenol	0.327	0.330	-0.9	93	-0.18	12.64
50	t	2,4,5-Trichlorophenol	0.312	0.288	7.7	91	-0.16	12.75
51	S	2-Fluorobiphenyl	1.408	1.270	9.8	89	-0.20	12.81
52	t	2-Chloronaphthalene	1.185	1.060	10.5	89	-0.21	12.96
53	t	Biphenyl	1.620	1.454	10.2	91	-0.20	12.99
54	t	2-Nitroaniline	0.307	0.325	-5.9	96	-0.19	13.36
55	t	Dimethylphthalate	1.295	1.190	8.1	91	-0.20	13.93
56	t	Acenaphthylene	1.908	1.733	9.2	90	-0.21	13.94
57	t	2,6-Dinitrotoluene	0.294	0.292	0.7	90	-0.20	14.05
58	t	3-Nitroaniline	0.372	0.353	5.1	86	-0.19	14.36
59	t	Acenaphthene	1.273	1.120	12.0	88	-0.21	14.39
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	97.173	2.8	99	-0.18	14.60
61	t	4-Nitrophenol	50.000	49.885	0.2	96	-0.11	14.94
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.535	9.8	90	-0.21	14.78
63	t	2,4-Dinitrotoluene	0.401	0.414	-3.2	93	-0.20	14.96
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	50.000	46.819	6.4	91	-0.19	15.23
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.335	7.7	91	-0.21	15.64
66	t	Fluorene	1.349	1.248	7.5	90	-0.21	15.59
67	t	4-Chlorophenyl-phenylethe	0.588	0.572	2.7	96	-0.21	15.66
68	t	4-Nitroaniline	0.396	0.357	9.8	85	-0.19	15.84
69	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.22	17.77
70	t	4,6-Dinitro-2-methylpheno	0.132	0.133	-0.8	97	-0.19	15.92
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	91	-0.20	15.99
72	t	1,2-Diphenylhydrazine	0.782	0.751	4.0	100	-0.21	16.03
73	S	2,4,6-Tribromophenol	0.113	0.114	-0.9	100	-0.21	16.21
74	t	4-Bromophenyl-phenylether	0.216	0.208	3.7	95	-0.21	16.79
75	t	Hexachlorobenzene	0.246	0.227	7.7	94	-0.22	17.08
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	88.323	11.7	93	-0.19	17.56
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.040	12.2	96	-0.22	17.83
78	t	Anthracene	1.201	1.057	12.0	92	-0.22	17.93
79	t	Carbazole	1.109	1.019	8.1	94	-0.20	18.40
80	t	Di-n-butylphthalate	1.416	1.281	9.5	94	-0.16	19.40
81	t	Fluoranthene	1.147	1.121	2.3	103	-0.15	20.21
82	t	Octadecane	0.460	0.393	14.6	93	-0.21	17.83

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

83	I	Chrysene-d12	1.000	1.000	0.0	123	-0.13	22.12
84	t	Pyrene	1.210	0.968	20.0	104	-0.15	20.53
85		Butyl stearate	0.345	0.262	24.1#	110	-0.13	21.61
86	S	Terphenyl-d14	0.754	0.666	11.7	110	-0.14	20.84
87	t	Butylbenzylphthalate	0.640	0.554	13.4	106	-0.13	21.54
88	t	Benzo[a]anthracene	1.103	0.968	12.2	112	-0.13	22.09
89	t	3,3'-Dichlorobenzidine	0.412	0.397	3.6	111	-0.13	22.10
90	t	Chrysene	1.093	0.929	15.0	111	-0.13	22.15
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.827	8.6	113	-0.12	22.24
92	I	Perylene-d12	1.000	1.000	0.0	108	-0.15	23.63
93	t	Di-n-octylphthalate	1.543	1.528	1.0	103	-0.12	22.86
		----------	True	Calc.	% Drift			----------
94	t	Benzo[b]fluoranthene	50.000	42.989	14.0	101	-0.14	23.23
95	t	Benzo[k]fluoranthene	50.000	46.254	7.5	97	-0.14	23.27
		----------	AvgRF	CCRF	% Dev			----------
96	t	Benzo[a]pyrene	1.127	1.041	7.6	96	-0.15	23.57
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.203	1.9	93	-0.21	24.96
98	t	Dibenz(a,h)acridine	0.888	0.853	3.9	92	-0.20	24.64
99	t	Dibenz[a,h]anthracene	1.005	0.982	2.3	94	-0.22	24.96
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.510	10.1	89	-0.15	23.25
101	t	Benzo[g,h,i]perylene	0.968	0.950	1.9	94	-0.24	25.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Jan 27 19:45:51 2011 NJMSR

7.7.16

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3152
Lab FileID: R85117.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85117.D Vial: 3
Acq On : 27 Jan 2011 12:03 pm Operator: ninap
Sample : cc3152-25 Inst : MSR
Misc : op47575,er3223 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	-0.18	7.43
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	20.690	17.2	53	-0.17	6.59
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	63	-0.21	14.30
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.517	-4.7	62	-0.20	12.33
106	Atrazine	0.169	0.185	-9.5	65	-0.21	17.40
107 t	Chrysene-d12a	1.000	1.000	0.0	71	-0.13	22.10
		True	Calc.	% Drift			
108 t	Benzidine	25.000	24.172	3.3	77	-0.14	20.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Jan 27 19:46:44 2011 NJMSR

7.7.17

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85138.D Vial: 2
Acq On : 28 Jan 2011 3:59 pm Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47575,er3224 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	-0.19	7.43
2	t	1,4-Dioxane	0.595	0.570	4.2	92	-0.18	2.65
3	t	Pyridine	1.326	1.200	9.5	82	-0.18	3.10
4	t	N-Nitrosodimethylamine	0.437	0.600	-37.3#	122	-0.16	3.11
5	S	2-Fluorophenol	1.198	1.177	1.8	89	-0.12	5.17
6	t	Indene	1.895	1.915	-1.1	93	-0.19	8.01
7	t	Cumene	2.712	2.781	-2.5	96	-0.20	5.96
8	S	Phenol-d5	1.426	1.436	-0.7	91	-0.13	6.94
9	t	Phenol	1.690	1.572	7.0	85	-0.13	6.97
10	t	Aniline	1.947	1.484	23.8#	68	-0.18	6.88
11	t	bis(2-Chloroethyl)ether	1.223	1.171	4.3	88	-0.18	7.03
12	t	2-Chlorophenol	1.405	1.431	-1.9	93	-0.18	7.10
13	t	Decane	1.102	1.172	-6.4	99	-0.19	7.23
14	t	1,3-Dichlorobenzene	1.573	1.586	-0.8	94	-0.20	7.35
15	t	1,4-Dichlorobenzene	1.597	1.641	-2.8	97	-0.19	7.46
16	t	Benzyl alcohol	0.837	0.881	-5.3	91	-0.18	7.83
17	t	1,2-Dichlorobenzene	1.492	1.528	-2.4	95	-0.19	7.84
18	t	Acetophenone	1.726	1.717	0.5	91	-0.19	8.36
19	t	2-Methylphenol	0.950	0.932	1.9	88	-0.14	8.18
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.448	2.0	89	-0.19	8.16
21	t	3&4-Methylphenol	0.973	0.996	-2.4	90	-0.14	8.50
22	t	n-Nitroso-di-n-propylamin	0.723	0.789	-9.1	97	-0.19	8.46
23	t	Hexachloroethane	0.437	0.490	-12.1	102	-0.20	8.48
24	I	Naphthalene-d8	1.000	1.000	0.0	94	-0.19	10.20
25	S	Nitrobenzene-d5	0.364	0.388	-6.6	96	-0.19	8.67
26	t	Nitrobenzene	0.200	0.197	1.5	89	-0.19	8.71
27	t	Quinoline	0.682	0.702	-2.9	92	-0.21	11.02
28	t	Isophorone	0.628	0.641	-2.1	92	-0.19	9.24
29	t	2-Nitrophenol	0.203	0.205	-1.0	87	-0.19	9.42
30	t	2,4-Dimethylphenol	0.329	0.326	0.9	85	-0.16	9.64
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	17.032	31.9#	56	-0.16	10.01
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	85	-0.19	9.82
33	t	2,4-Dichlorophenol	0.288	0.309	-7.3	93	-0.16	9.99
34	t	2,6-Dichlorophenol	0.286	0.308	-7.7	95	-0.18	10.49
35	t	1,3,5-Trichlorobenzene	0.333	0.353	-6.0	98	-0.20	9.43
36	t	1,2,4-Trichlorobenzene	0.323	0.337	-4.3	95	-0.20	10.13
37	t	1,2,3-Trichlorobenzene	0.316	0.337	-6.6	98	-0.20	10.67

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

38	t	Naphthalene	1.125	1.158	-2.9	94	-0.20	10.24
39	t	4-Chloroaniline	0.481	0.461	4.2	83	-0.19	10.49
40	t	2,3-Dichloroaniline	0.346	0.373	-7.8	96	-0.19	12.62
41	t	Caprolactam	0.141	0.137	2.8	84	-0.23	11.24
42	t	Hexachlorobutadiene	0.160	0.189	-18.1	108	-0.20	10.71
43	t	4-Chloro-3-methylphenol	0.284	0.323	-13.7	97	-0.15	11.75
44	t	2-Methylnaphthalene	0.781	0.812	-4.0	93	-0.20	11.85
45	t	1-Methylnaphthalene	0.741	0.766	-3.4	93	-0.20	12.09
46	t	Dimethylnaphthalene	0.646	0.706	-9.3	97	-0.20	13.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	-0.21	14.31
48	t	Hexachlorocyclopentadiene	0.192	0.175	8.9	86	-0.21	12.40
49	t	2,4,6-Trichlorophenol	0.327	0.341	-4.3	95	-0.18	12.64
50	t	2,4,5-Trichlorophenol	0.312	0.286	8.3	93	-0.15	12.75
51	S	2-Fluorobiphenyl	1.408	1.439	-2.2	97	-0.20	12.81
52	t	2-Chloronaphthalene	1.185	1.194	-0.8	97	-0.21	12.96
53	t	Biphenyl	1.620	1.638	-1.1	97	-0.20	12.99
54	t	2-Nitroaniline	0.307	0.334	-8.8	98	-0.19	13.36
55	t	Dimethylphthalate	1.295	1.337	-3.2	98	-0.20	13.93
56	t	Acenaphthylene	1.908	1.962	-2.8	96	-0.21	13.93
57	t	2,6-Dinitrotoluene	0.294	0.317	-7.8	97	-0.20	14.05
58	t	3-Nitroaniline	0.372	0.339	8.9	83	-0.20	14.35
59	t	Acenaphthene	1.273	1.284	-0.9	97	-0.21	14.39
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	37.196	25.6#	72	-0.19	14.59
61	t	4-Nitrophenol	25.000	21.966	12.1	86	-0.10	14.95
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.716	-0.9	97	-0.22	14.77
63	t	2,4-Dinitrotoluene	0.401	0.432	-7.7	95	-0.20	14.96
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	21.644	13.4	84	-0.19	15.23
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.485	-2.7	99	-0.21	15.63
66	t	Fluorene	1.349	1.383	-2.5	97	-0.22	15.58
67	t	4-Chlorophenyl-phenylethe	0.588	0.624	-6.1	102	-0.21	15.66
68	t	4-Nitroaniline	0.396	0.289	27.0#	69	-0.21	15.82
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	-0.21	17.78
70	t	4,6-Dinitro-2-methylpheno	0.132	0.095	28.0#	72	-0.20	15.91
71	t	n-Nitrosodiphenylamine	0.613	0.619	-1.0	96	-0.21	15.98
72	t	1,2-Diphenylhydrazine	0.782	0.772	1.3	96	-0.21	16.02
73	S	2,4,6-Tribromophenol	0.113	0.112	0.9	98	-0.21	16.21
74	t	4-Bromophenyl-phenylether	0.216	0.233	-7.9	101	-0.21	16.79
75	t	Hexachlorobenzene	0.246	0.260	-5.7	102	-0.22	17.08
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	37.055	25.9#	75	-0.20	17.56
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.208	-1.9	101	-0.22	17.82
78	t	Anthracene	1.201	1.197	0.3	95	-0.22	17.93
79	t	Carbazole	1.109	1.048	5.5	89	-0.21	18.39
80	t	Di-n-butylphthalate	1.416	1.518	-7.2	98	-0.16	19.39
81	t	Fluoranthene	1.147	1.237	-7.8	102	-0.15	20.21
82	t	Octadecane	0.460	0.453	1.5	91	-0.21	17.82

7.7.18
7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.13	22.11
84	t	Pyrene	1.210	1.167	3.6	100	-0.15	20.53
85		Butyl stearate	0.345	0.347	-0.6	108	-0.13	21.60
86	S	Terphenyl-d14	0.754	0.783	-3.8	108	-0.14	20.83
87	t	Butylbenzylphthalate	0.640	0.660	-3.1	103	-0.13	21.54
88	t	Benzo[a]anthracene	1.103	1.140	-3.4	108	-0.13	22.09
89	t	3,3'-Dichlorobenzidine	0.412	0.407	1.2	101	-0.13	22.10
90	t	Chrysene	1.093	1.084	0.8	106	-0.13	22.14
91	t	bis(2-Ethylhexyl)phthalat	0.905	1.012	-11.8	110	-0.13	22.24
92	I	Perylene-d12	1.000	1.000	0.0	97	-0.15	23.63
93	t	Di-n-octylphthalate	1.543	1.840	-19.2	102	-0.13	22.86
		----------	True	Calc.	% Drift	----------		
94	t	Benzo[b]fluoranthene	25.000	29.060	-16.2	116	-0.15	23.22
95	t	Benzo[k]fluoranthene	25.000	20.526	17.9	90	-0.15	23.26
		----------	AvgRF	CCRF	% Dev	----------		
96	t	Benzo[a]pyrene	1.127	1.161	-3.0	93	-0.16	23.56
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.156	5.7	83	-0.23	24.93
98	t	Dibenz(a,h)acridine	0.888	0.864	2.7	84	-0.22	24.62
99	t	Dibenz[a,h]anthracene	1.005	0.956	4.9	83	-0.25	24.94
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.531	6.3	84	-0.15	23.24
101	t	Benzo[g,h,i]perylene	0.968	0.883	8.8	78	-0.26	25.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Fri Jan 28 20:49:09 2011 NJMSR

7.7.18

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3152
Lab FileID: R85139.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85139.D Vial: 3
Acq On : 28 Jan 2011 4:35 pm Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47575,er3224 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	84	-0.19	7.42
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	22.599	9.6	80	-0.18	6.58
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	82	-0.20	14.31
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.533	-7.9	83	-0.20	12.33
106	Atrazine	0.169	0.182	-7.7	82	-0.20	17.41
107 t	Chrysene-d12a	1.000	1.000	0.0	86	-0.13	22.11
		True	Calc.	% Drift			
108 t	Benzidine	25.000	17.362	30.6#	69	-0.14	20.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Fri Jan 28 20:50:02 2011 NJMSR

7.7.19

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:54 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

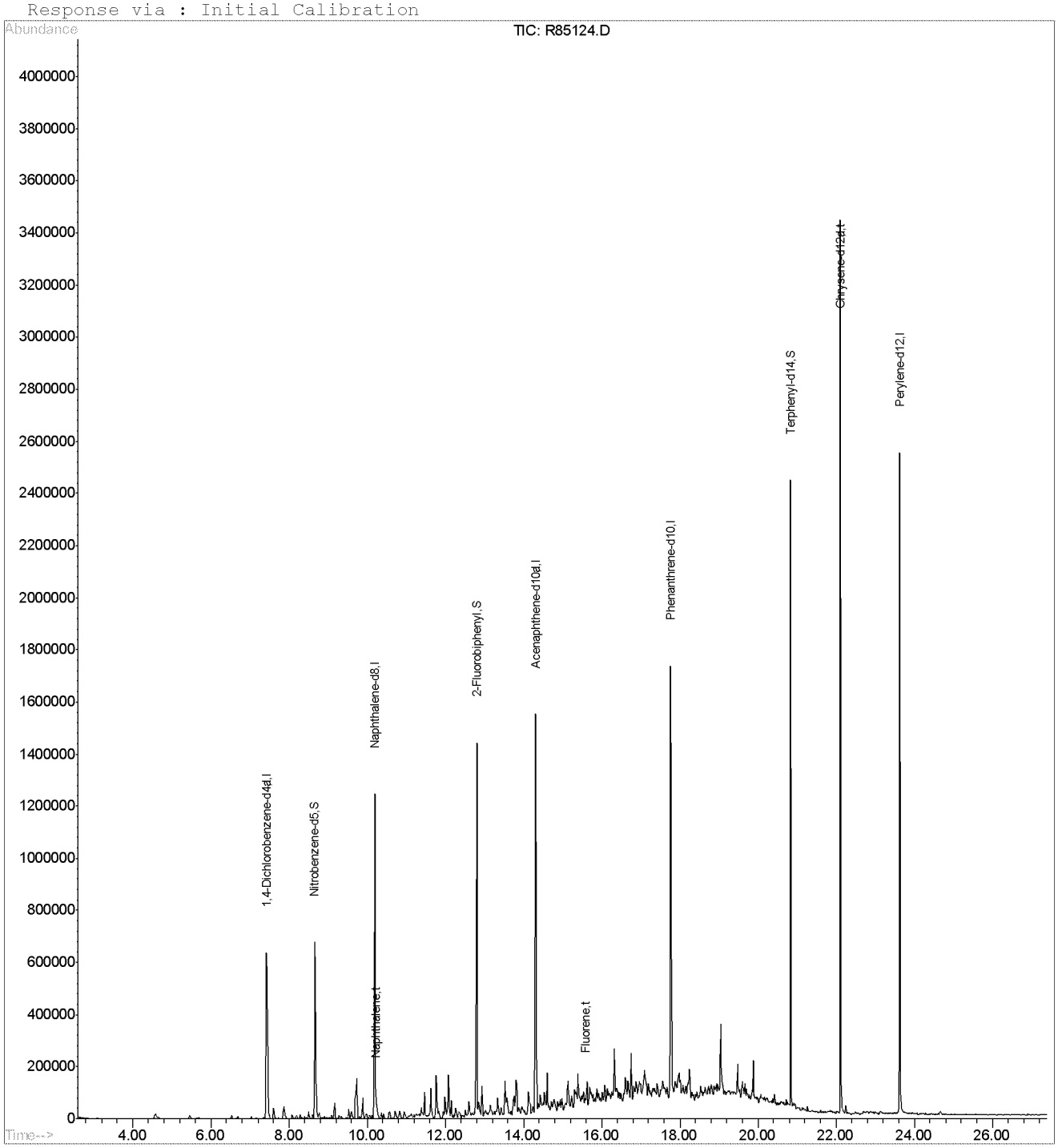
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	269928	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	956703	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	572271	40.00	ppb	-0.21
69) Phenanthrene-d10	17.77	188	1026273	40.00	ppb	-0.22
83) Chrysene-d12	22.11	240	1263634	40.00	ppb	-0.14
92) Perylene-d12	23.63	264	1015205	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	269928	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	572271	40.00	ppb	-0.20
107) Chrysene-d12a	22.11	240	1263634	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	353916	40.71	ppb	-0.20
Spiked Amount 50.000			Recovery =	81.42%		
51) 2-Fluorobiphenyl	12.80	172	734648	36.47	ppb	-0.21
Spiked Amount 50.000			Recovery =	72.94%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	783161	32.88	ppb	-0.14
Spiked Amount 50.000			Recovery =	65.76%		
Target Compounds						Qvalue
38) Naphthalene	10.23	128	43318	1.61	ppb	99
66) Fluorene	15.57	166	12451	0.65	ppb	98

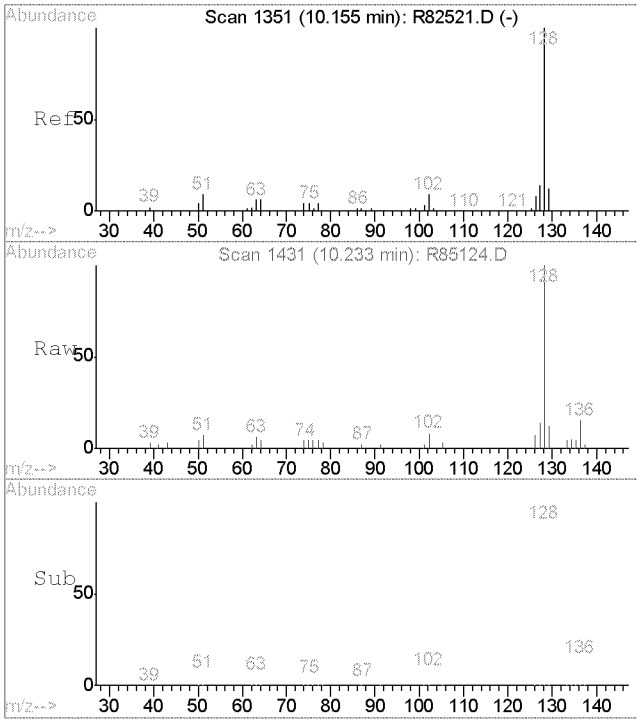
(#) = qualifier out of range (m) = manual integration
R85124.D MR3151.M Thu Jan 27 19:54:27 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:54 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

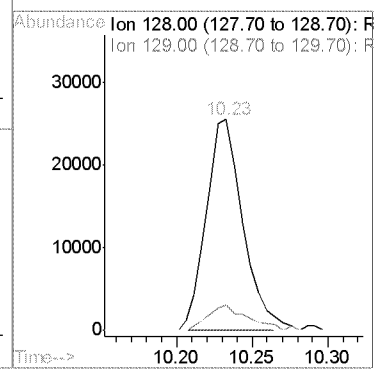


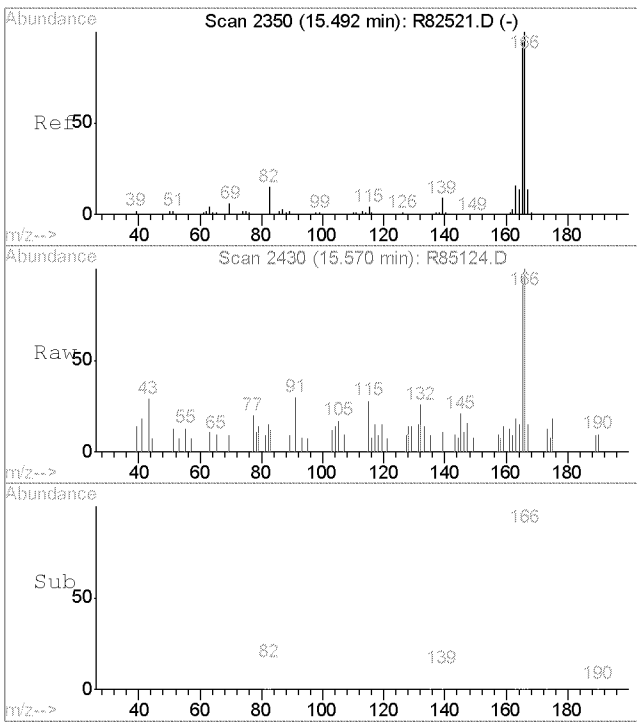


#38
Naphthalene
Concen: 1.61 ppb
RT: 10.23 min Scan# 1431
Delta R.T. -0.21 min
Lab File: R85124.D
Acq: 27 Jan 2011 4:10 pm

Tgt Ion:128 Resp: 43318

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	41.9
127	13.6	0.0	44.0

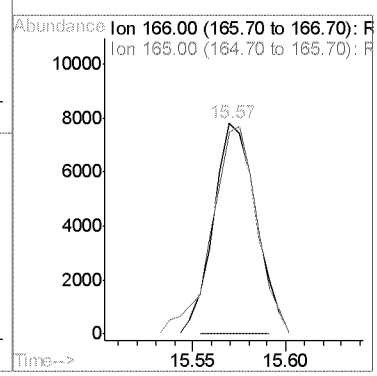




#66
Fluorene
Concen: 0.65 ppb
RT: 15.57 min Scan# 2430
Delta R.T. -0.23 min
Lab File: R85124.D
Acq: 27 Jan 2011 4:10 pm

Tgt Ion:166 Resp: 12451

Ion	Ratio	Lower	Upper
166	100		
165	92.5	64.6	124.6
167	15.4	0.0	43.7



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.570	361	371	381	rBV2	21133	73003	2.00%	0.218%
2	7.423	897	905	926	rBV	637095	1547847	42.40%	4.630%
3	7.599	930	938	952	rBV	40926	82438	2.26%	0.247%
4	7.861	976	987	994	rBV	48104	107310	2.94%	0.321%
5	8.662	1130	1137	1152	rBV	677984	1290996	35.36%	3.861%
6	9.154	1222	1229	1239	rVB	59751	104641	2.87%	0.313%
7	9.522	1291	1298	1304	rVV4	37032	63276	1.73%	0.189%
8	9.597	1304	1312	1324	rVB7	27282	76066	2.08%	0.228%
9	9.699	1324	1331	1333	rBV2	97402	159022	4.36%	0.476%
10	9.725	1333	1336	1345	rVB	154535	227057	6.22%	0.679%
11	9.880	1354	1365	1373	rVB2	81262	154854	4.24%	0.463%
12	10.190	1415	1423	1446	rVV	1245064	2129616	58.33%	6.370%
13	10.564	1482	1493	1504	rBV5	27154	71963	1.97%	0.215%
14	10.719	1509	1522	1532	rVV6	28821	66878	1.83%	0.200%
15	10.831	1532	1543	1555	rVB5	29082	69123	1.89%	0.207%
16	10.938	1555	1563	1575	rBV8	23418	75097	2.06%	0.225%
17	11.120	1580	1597	1600	rBV10	16630	58800	1.61%	0.176%
18	11.381	1639	1646	1650	rBV3	34748	67473	1.85%	0.202%
19	11.456	1655	1660	1668	rVV	94005	126072	3.45%	0.377%
20	11.627	1682	1692	1705	rVB2	114828	240389	6.58%	0.719%
21	11.766	1713	1718	1727	rVV	156224	232609	6.37%	0.696%
22	11.985	1754	1759	1767	rVV2	72088	129555	3.55%	0.387%
23	12.076	1767	1776	1783	rVB	160671	313665	8.59%	0.938%
24	12.145	1783	1789	1797	rVB	65893	106589	2.92%	0.319%
25	12.263	1804	1811	1820	rVB7	35255	75249	2.06%	0.225%
26	12.354	1820	1828	1836	rVB7	21811	61968	1.70%	0.185%
27	12.503	1851	1856	1862	rBV4	27946	53327	1.46%	0.159%
28	12.599	1869	1874	1884	rVB8	52996	90506	2.48%	0.271%
29	12.802	1902	1912	1918	rVV	1423790	2358854	64.61%	7.055%
30	12.850	1918	1921	1931	rVB6	47638	86545	2.37%	0.259%
31	12.936	1931	1937	1943	rVB	113155	167507	4.59%	0.501%
32	13.150	1973	1977	1990	rVV8	37033	88356	2.42%	0.264%
33	13.331	2000	2011	2022	rVB7	67328	170160	4.66%	0.509%
34	13.417	2022	2027	2036	rBV7	29708	59588	1.63%	0.178%
35	13.524	2040	2047	2052	rVV	129913	239796	6.57%	0.717%
36	13.572	2052	2056	2066	rVV3	64349	158006	4.33%	0.473%
37	13.748	2081	2089	2093	rBV5	74861	171277	4.69%	0.512%
38	13.812	2093	2101	2109	rVV4	132900	353490	9.68%	1.057%

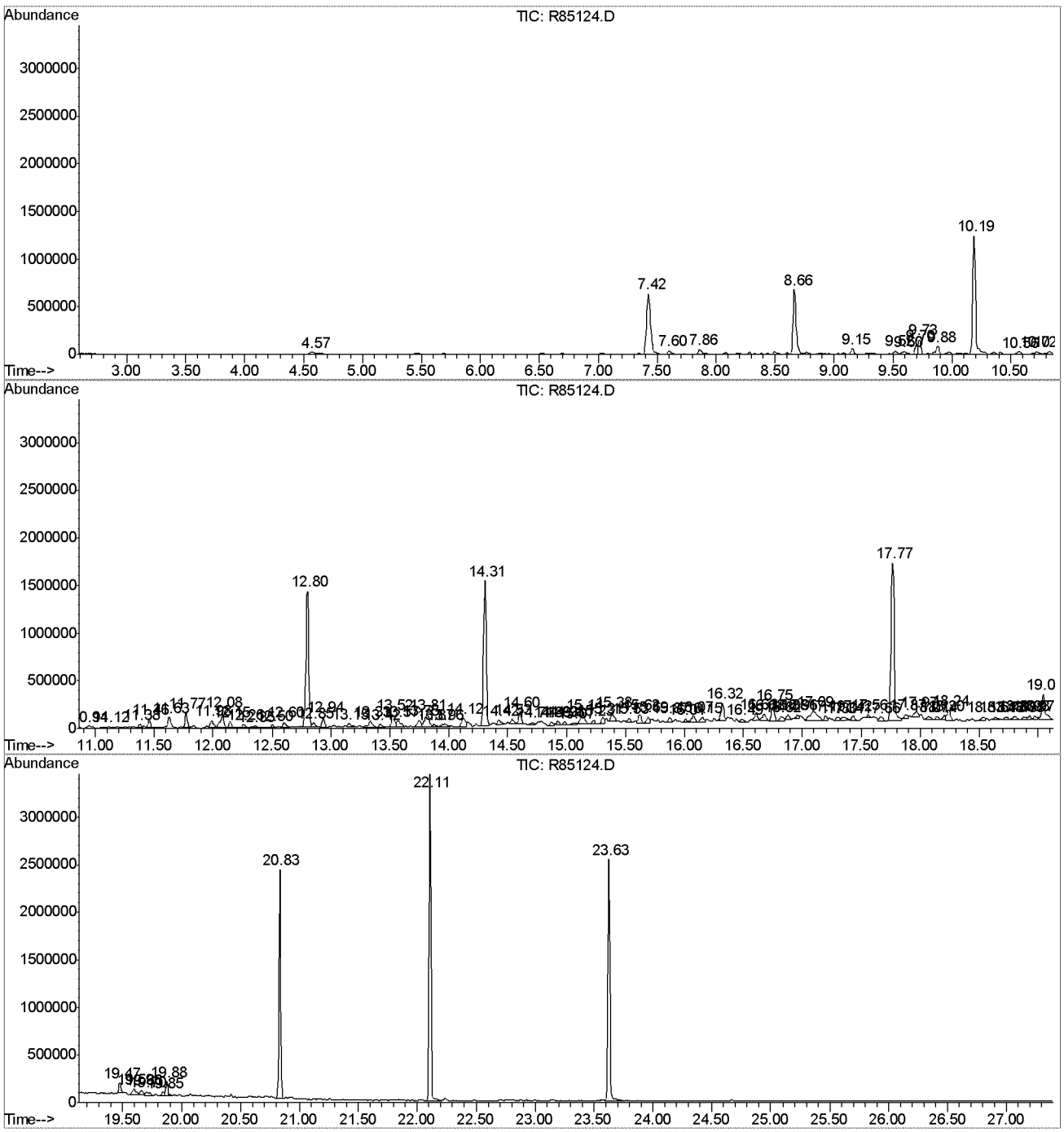
39	13.871	2109	2112	2121	rVV8	24527	53916	1.48%	0.161%
40	13.956	2121	2128	2138	rVV8	28121	94836	2.60%	0.284%
41	14.122	2151	2159	2164	rBV6	89816	205288	5.62%	0.614%
42	14.309	2185	2194	2201	rBV	1528379	2428714	66.53%	7.264%
43	14.421	2211	2215	2225	rVV7	50344	116434	3.19%	0.348%
44	14.533	2232	2236	2243	rVV6	52952	94317	2.58%	0.282%
45	14.603	2243	2249	2256	rVB2	133280	215433	5.90%	0.644%
46	14.715	2262	2270	2273	rBV7	32581	63267	1.73%	0.189%
47	14.864	2293	2298	2304	rBV5	36549	74701	2.05%	0.223%
48	14.928	2305	2310	2314	rVB5	36914	57819	1.58%	0.173%
49	14.982	2314	2320	2326	rVB10	42288	69764	1.91%	0.209%
50	15.067	2326	2336	2340	rBV10	24815	71540	1.96%	0.214%
51	15.137	2340	2349	2357	rVB7	99115	254163	6.96%	0.760%
52	15.233	2358	2367	2372	rBV8	41619	77854	2.13%	0.233%
53	15.308	2374	2381	2384	rBV6	67891	136997	3.75%	0.410%
54	15.383	2391	2395	2404	rBV5	98800	184655	5.06%	0.552%
55	15.527	2417	2422	2427	rVB8	42356	80250	2.20%	0.240%
56	15.618	2434	2439	2445	rVB5	87409	157928	4.33%	0.472%
57	15.687	2446	2452	2456	rBV3	64944	116023	3.18%	0.347%
58	15.869	2480	2486	2492	rBV5	52799	110267	3.02%	0.330%
59	16.008	2507	2512	2517	rBV6	37071	64054	1.75%	0.192%
60	16.072	2517	2524	2531	rVB10	62501	142428	3.90%	0.426%
61	16.152	2531	2539	2543	rBV7	49051	118237	3.24%	0.354%
62	16.323	2562	2571	2577	rVV3	182837	323517	8.86%	0.968%
63	16.494	2597	2603	2609	rVB3	29226	65456	1.79%	0.196%
64	16.606	2618	2624	2629	rVB6	69923	112706	3.09%	0.337%
65	16.675	2630	2637	2644	rVB3	65263	142050	3.89%	0.425%
66	16.750	2644	2651	2657	rVB3	174156	288135	7.89%	0.862%
67	16.820	2658	2664	2670	rBV3	48324	123531	3.38%	0.369%
68	16.878	2670	2675	2681	rVB8	47430	86065	2.36%	0.257%
69	16.958	2684	2690	2693	rBV7	40125	77191	2.11%	0.231%
70	17.092	2702	2715	2730	rVB7	98496	425265	11.65%	1.272%
71	17.194	2730	2734	2739	rBV4	48646	78276	2.14%	0.234%
72	17.295	2749	2753	2758	rBV7	35954	73599	2.02%	0.220%
73	17.343	2759	2762	2773	rVB10	29752	73461	2.01%	0.220%
74	17.423	2773	2777	2786	rVB10	51161	97232	2.66%	0.291%
75	17.557	2797	2802	2807	rVV6	37021	60759	1.66%	0.182%
76	17.664	2818	2822	2831	rVB9	42334	93413	2.56%	0.279%
77	17.765	2833	2841	2855	rBV2	1658515	2962739	81.15%	8.861%
78	17.872	2856	2861	2866	rBV7	39957	78878	2.16%	0.236%
79	17.974	2871	2880	2884	rBV7	57289	148642	4.07%	0.445%
80	18.070	2894	2898	2906	rVB9	35282	70199	1.92%	0.210%
81	18.144	2906	2912	2916	rVV8	33562	61748	1.69%	0.185%
82	18.203	2918	2923	2925	rVV5	49889	81740	2.24%	0.244%
83	18.241	2925	2930	2938	rVB4	107152	220219	6.03%	0.659%
84	18.534	2978	2985	2988	rBV4	34773	54649	1.50%	0.163%
85	18.641	3002	3005	3011	rVV7	33615	52268	1.43%	0.156%
86	18.727	3015	3021	3027	rVV10	33122	68665	1.88%	0.205%
87	18.802	3027	3035	3044	rVB10	41322	97538	2.67%	0.292%
88	18.882	3044	3050	3054	rBV8	34648	69125	1.89%	0.207%
89	18.930	3055	3059	3062	rVV5	42609	64742	1.77%	0.194%
90	18.967	3063	3066	3072	rVV8	39490	76219	2.09%	0.228%
91	19.042	3073	3080	3096	rVB3	267909	543798	14.90%	1.626%
92	19.475	3156	3161	3167	rBV3	112237	157704	4.32%	0.472%
93	19.592	3176	3183	3191	rBV10	61324	149528	4.10%	0.447%
94	19.662	3191	3196	3200	rVV5	52679	86312	2.36%	0.258%
95	19.699	3200	3203	3214	rVB10	38358	85580	2.34%	0.256%

96	19.849	3225	3231	3232	rBV4	38583	56721	1.55%	0.170%
97	19.875	3232	3236	3244	rVB	144916	176157	4.83%	0.527%
98	20.832	3409	3415	3422	rVB	2403618	2565047	70.26%	7.672%
99	22.108	3646	3654	3672	rVB	3433479	3650801	100.00%	10.919%
100	23.625	3931	3938	3959	rVB	2534869	3036397	83.17%	9.082%

Sum of corrected areas: 33433925

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85124.D
Operator : ninap
Acquired : 27 Jan 2011 4:10 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-1
Misc Info : op47853,er3223,1000
Vial Number: 10
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

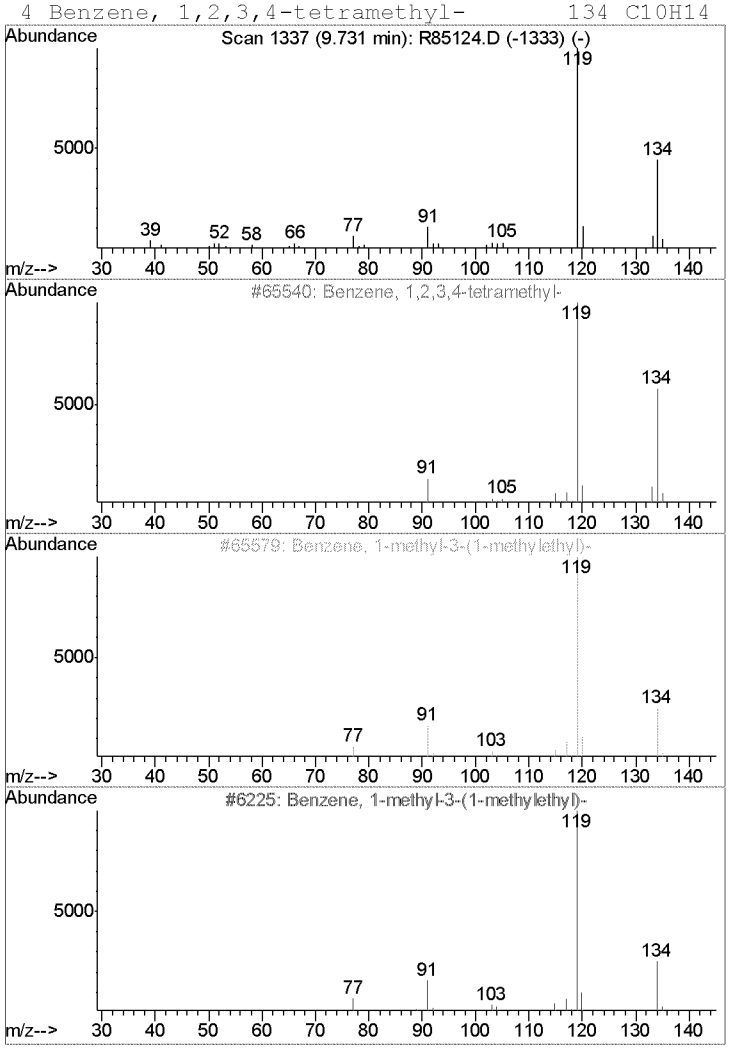
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

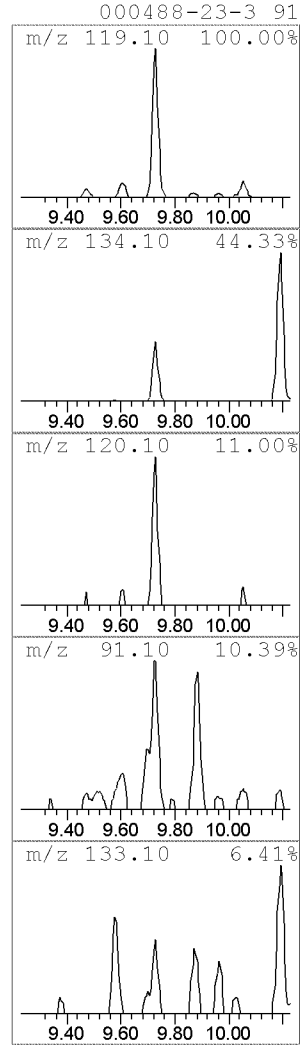
****

Peak Number 1 C4 alkyl benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.73	4.26 ppb	227057	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

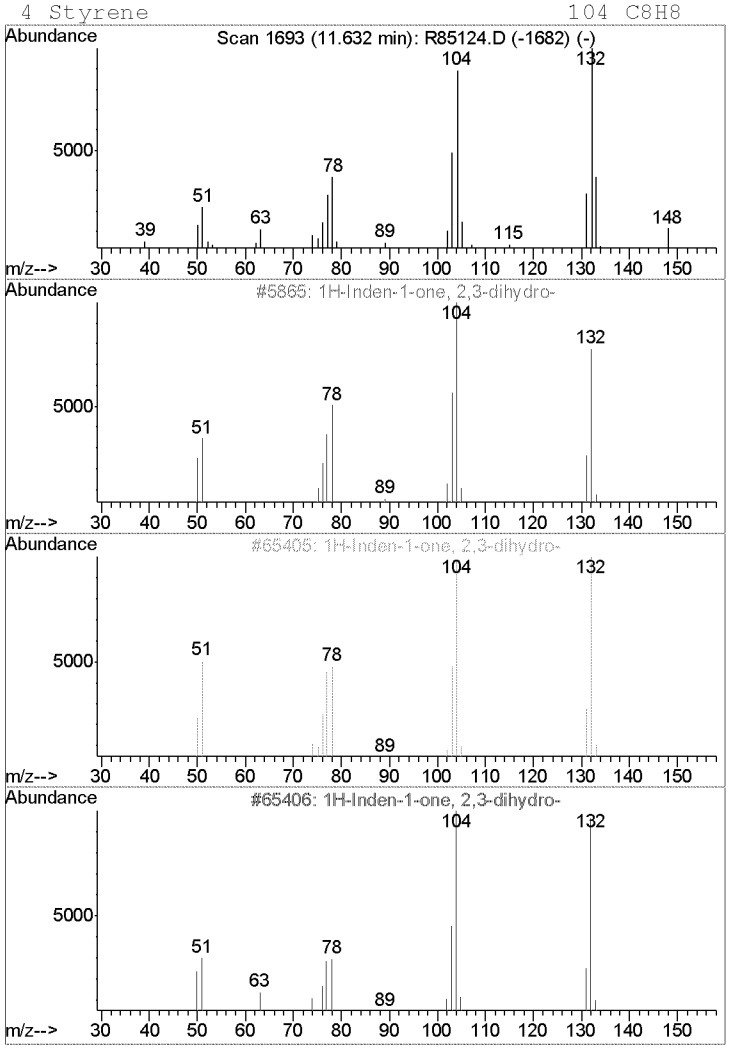
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

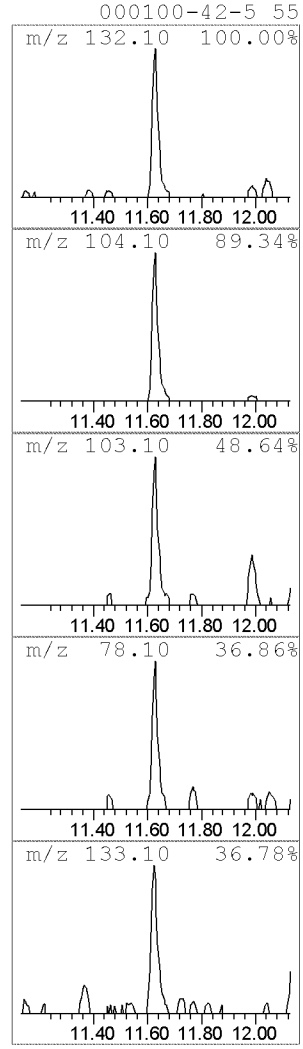
****

Peak Number 2 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.63	4.52 ppb	240389	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	95
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	93
4	Styrene	104	C8H8	000100-42-5	55





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

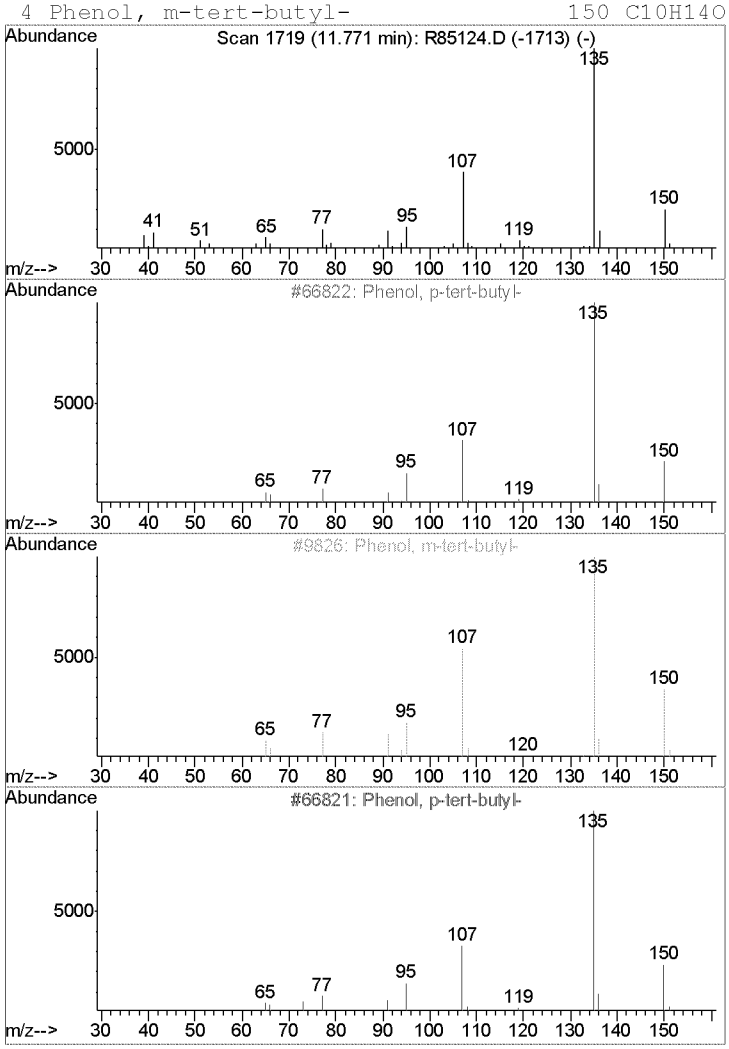
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

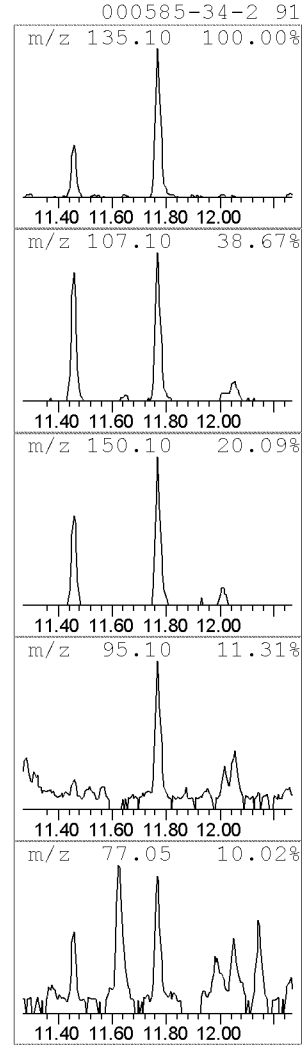
****

Peak Number 3 Phenol, tert-butyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.77	4.37 ppb	232609	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	93
2	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	92
3	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	91
4	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

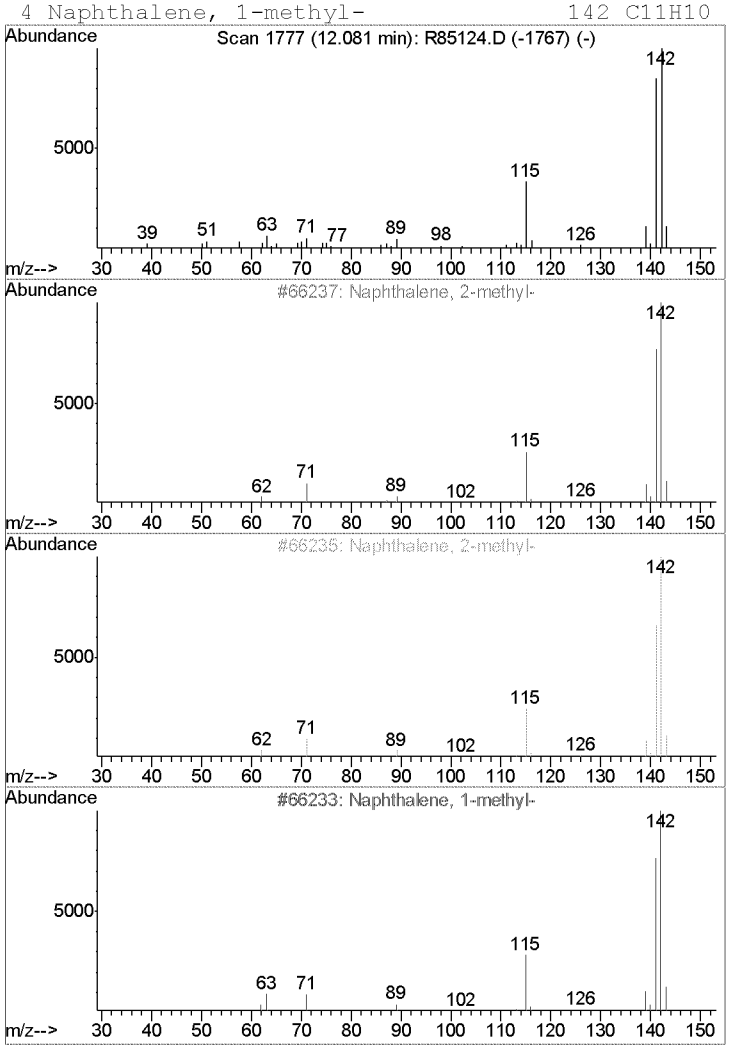
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

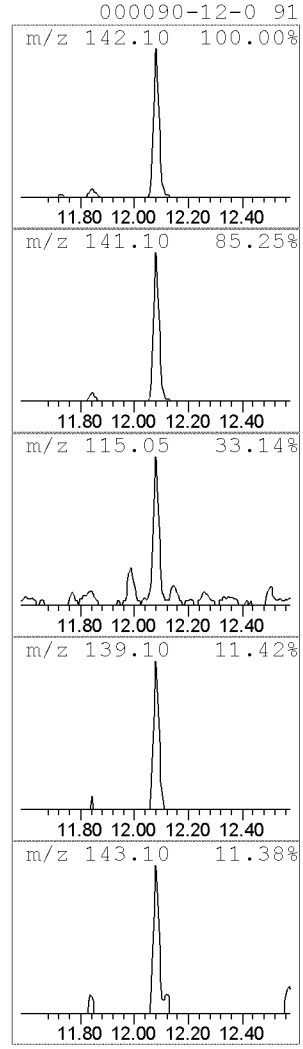
****

Peak Number 4 Naphthalene, 1-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.08	5.89 ppb	313665	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91





8.1.2 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

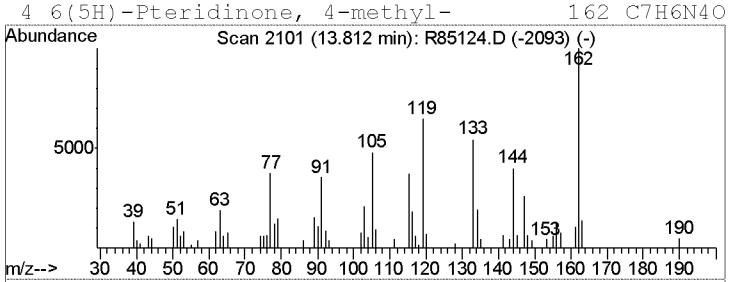
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

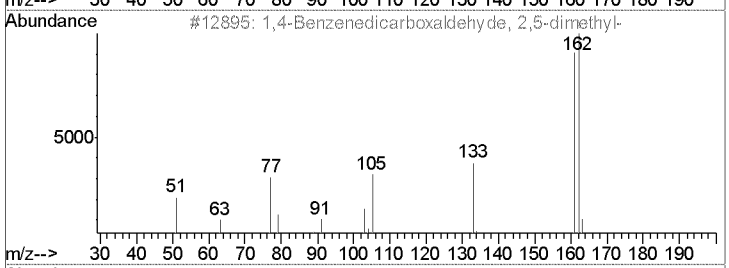
****

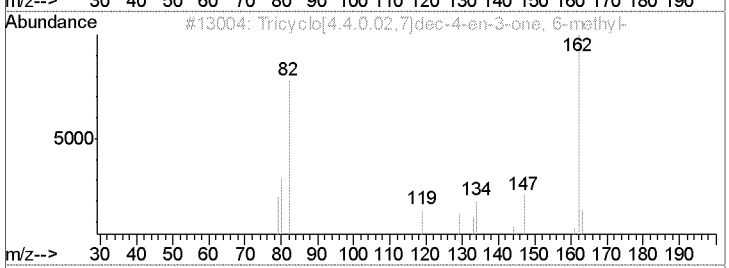
Peak Number 5 unknown Concentration Rank 3

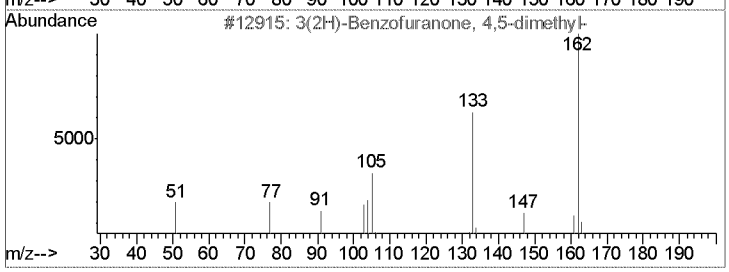
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.81	5.82 ppb	353490	Acenaphthene-d10	14.31

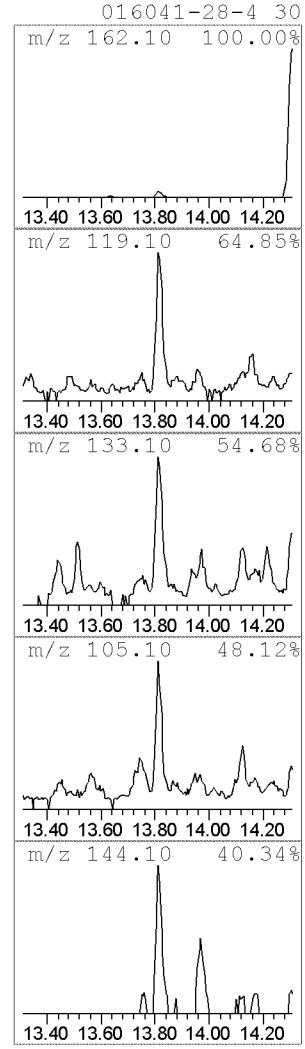
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Benzenedicarboxaldehyde, 2,5...	162	C10H10O2	007044-92-0	50
2	Tricyclo[4.4.0.02,7]dec-4-en-3-o...	162	C11H14O	006518-50-9	46
3	3(2H)-Benzofuranone, 4,5-dimethyl-	162	C10H10O2	020895-42-5	46
4	6(5H)-Pteridinone, 4-methyl-	162	C7H6N4O	016041-28-4	30











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

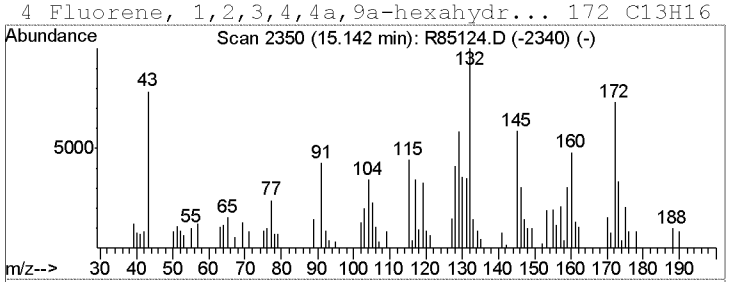
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

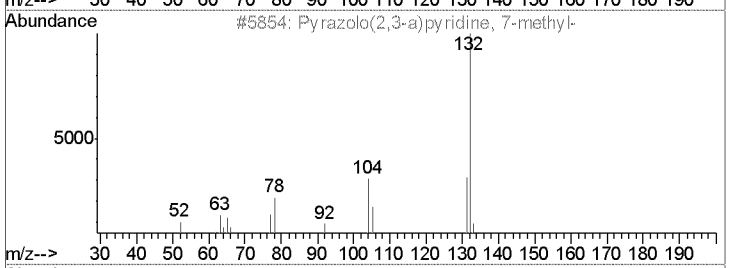
****

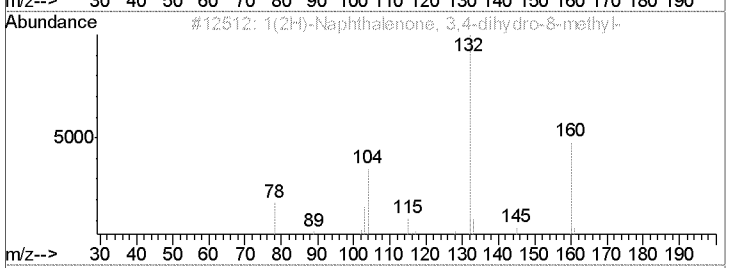
Peak Number 6 unknown Concentration Rank 9

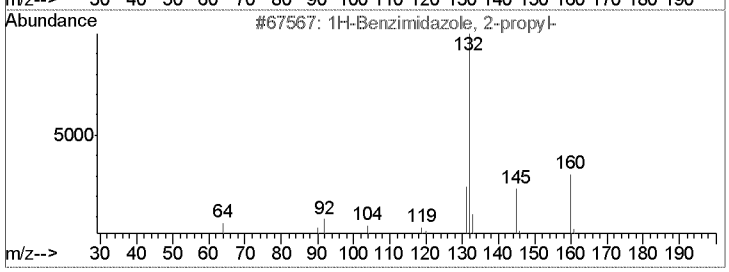
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.14	4.19 ppb	254163	Acenaphthene-d10a	14.31

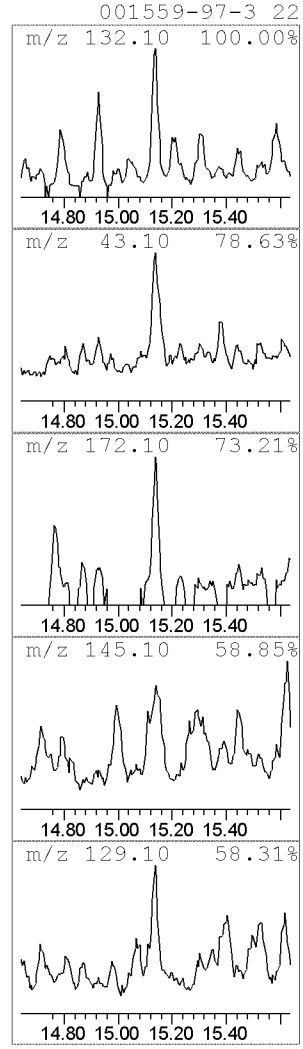
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	47
2	1(2H)-Naphthalenone, 3,4-dihydro...	160	C11H12O	051015-28-2	35
3	1H-Benzimidazole, 2-propyl-	160	C10H12N2	005465-29-2	30
4	Fluorene, 1,2,3,4,4a,9a-hexahydr...	172	C13H16	001559-97-3	22











8.1.2

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

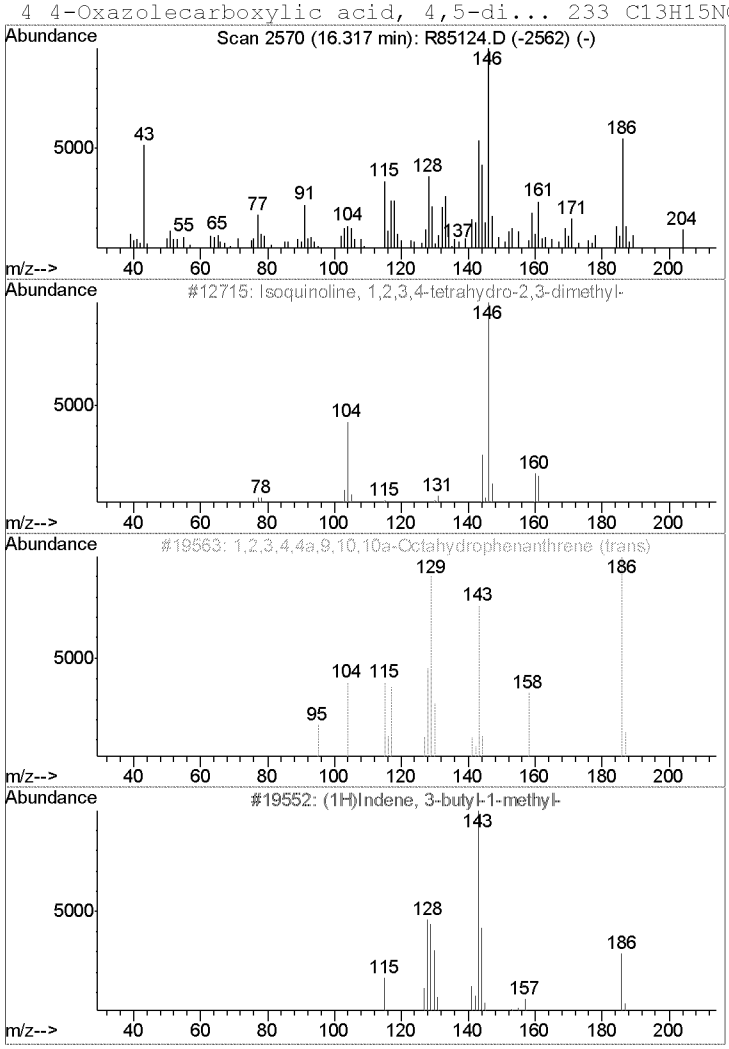
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

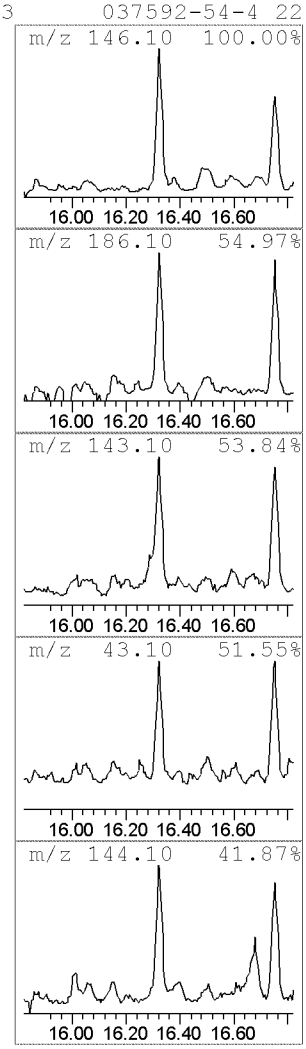
****

Peak Number 7 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.32	4.37 ppb	323517	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isoquinoline, 1,2,3,4-tetrahydro...	161	C11H15N	054365-72-9	35
2	1,2,3,4,4a,9,10,10a-Octahydrophe...	186	C14H18	020480-67-5	35
3	(1H)Indene, 3-butyl-1-methyl-	186	C14H18	000000-00-0	27
4	4-Oxazolecarboxylic acid, 4,5-di...	233	C13H15NO3	037592-54-4	22





8.1.2 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

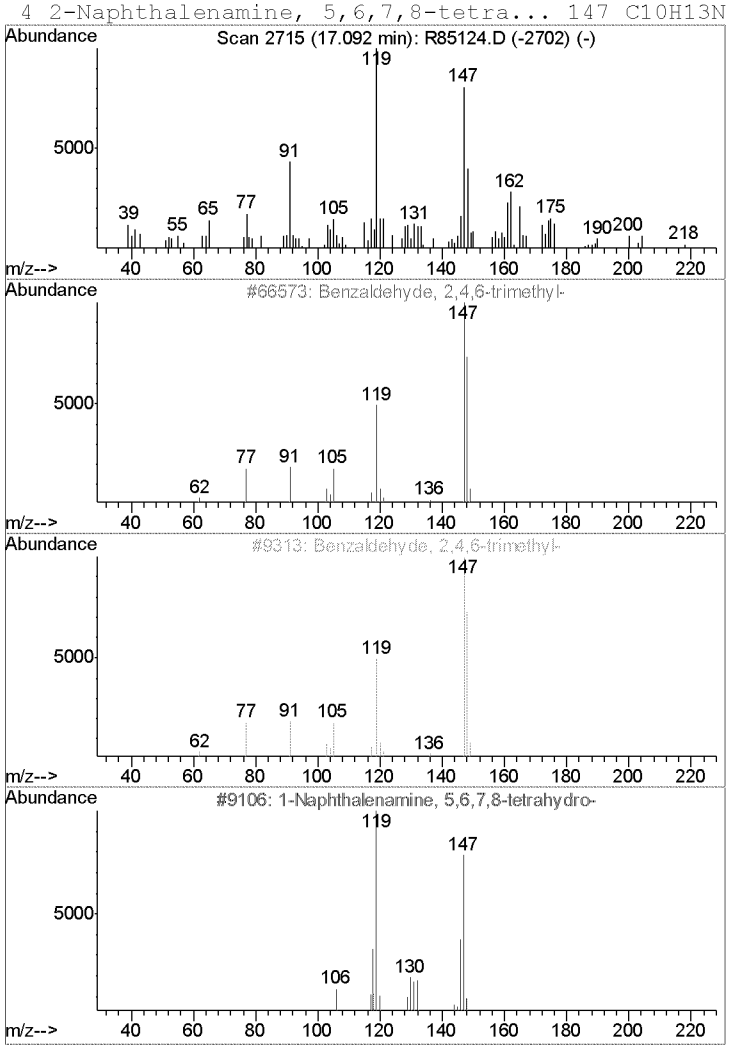
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

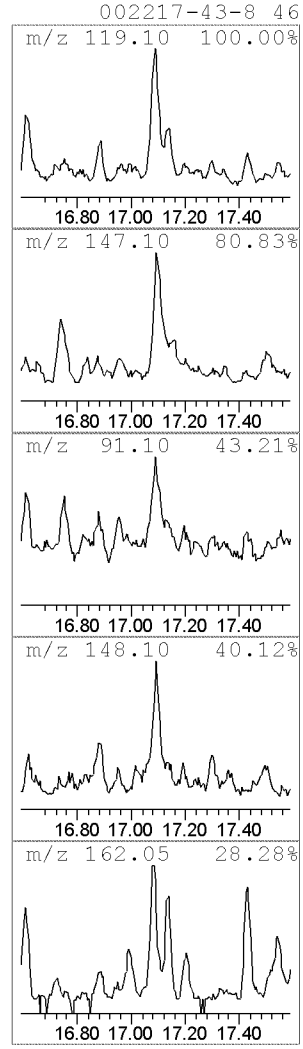
****

Peak Number 8 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.09	5.74 ppb	425265	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde, 2,4,6-trimethyl-	148	C10H12O	000487-68-3	58
2	Benzaldehyde, 2,4,6-trimethyl-	148	C10H12O	000487-68-3	58
3	1-Naphthalenamine, 5,6,7,8-tetra...	147	C10H13N	002217-41-6	55
4	2-Naphthalenamine, 5,6,7,8-tetra...	147	C10H13N	002217-43-8	46





Library Search Compound Report

```
Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D            Vial: 10
Acq On    : 27 Jan 2011    4:10 pm                   Operator: ninap
Sample    : ja66701-1                                Inst    : MSR
Misc      : op47853,er3223,1000                      Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title        : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library      : C:\DATABASE\NBS75K.L
 ****************************************************************
 Peak Number  9  unknown                          Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ----------------------------------------------------------------------
  19.04    7.34 ppb        543798    Phenanthrene-d10           17.77

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ----------------------------------------------------------------------------
  1 Pyrimidine, 5-phenyl-2-carboxyli... 200 C11H8N2O2      085386-20-5 15
  2 (3H,6H)Thieno[3,4-c]isoxazole, 3... 171 C8H13NOS       000000-00-0 14
  3 Silane, ethylmethyl-1-naphthalenyl- 200 C13H16Si       074685-82-8 12
  4 9E,10a-Dihydroxy-1,2,3,4,4a,9,10... 304 C16H20N2O4     053447-07-7 12
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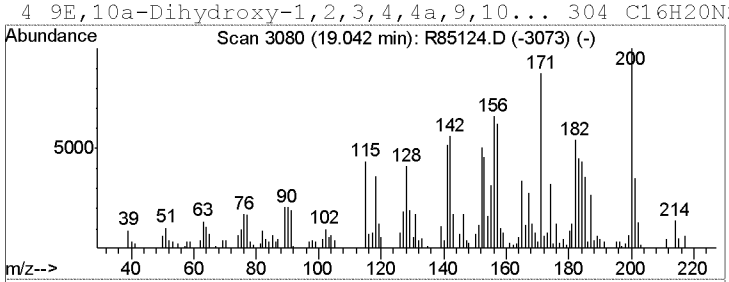
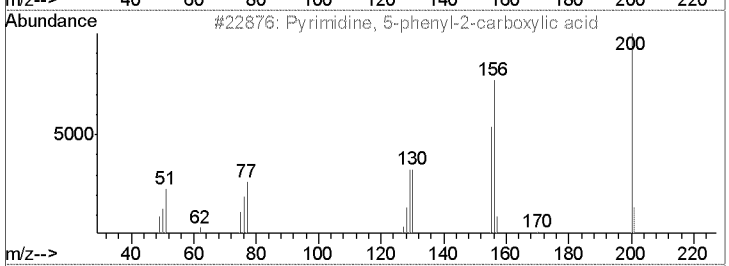
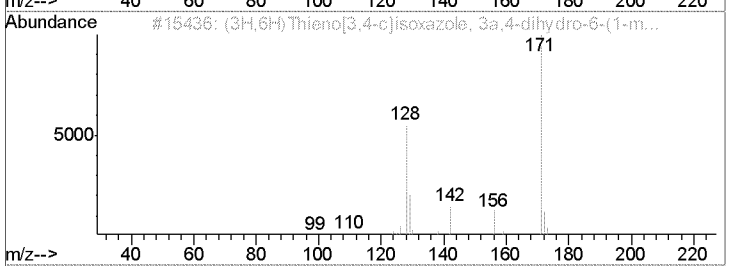
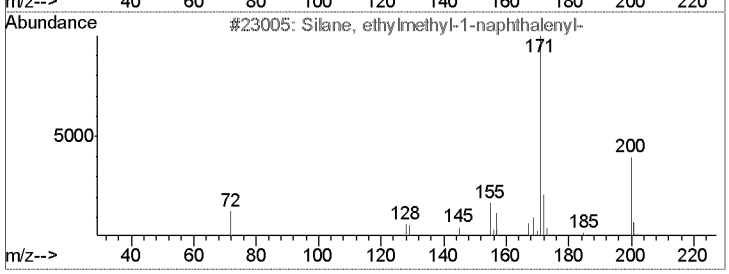
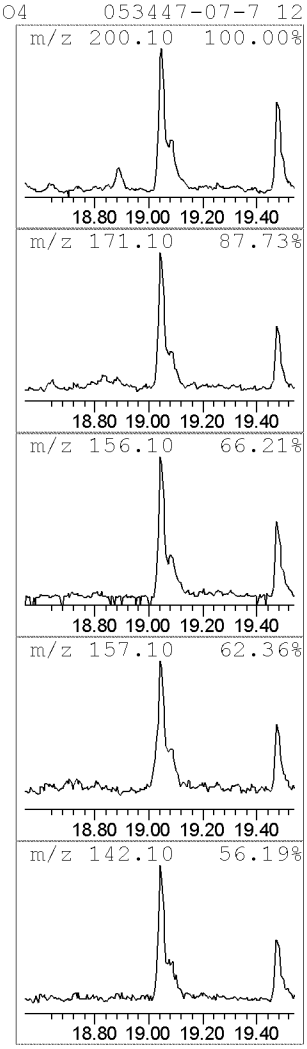










Tentatively Identified Compound (LSC) summary

Operator ID: ninap Date Acquired: 27 Jan 2011 4:10 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85124.D
Name: ja66701-1
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
C4 alkyl benzene	9.73	4.3	ppb	227057	3	10.19	2129620	40.0
unknown	11.63	4.5	ppb	240389	3	10.19	2129620	40.0
Phenol, tert-butyl-	11.77	4.4	ppb	232609	3	10.19	2129620	40.0
Naphthalene, 1-me...	12.08	5.9	ppb	313665	3	10.19	2129620	40.0
unknown	13.81	5.8	ppb	353490	4	14.31	2428710	40.0
unknown	15.14	4.2	ppb	254163	5	14.31	2428710	40.0
unknown	16.32	4.4	ppb	323517	6	17.77	2962740	40.0
unknown	17.09	5.7	ppb	425265	6	17.77	2962740	40.0
unknown	19.04	7.3	ppb	543798	6	17.77	2962740	40.0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:59 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

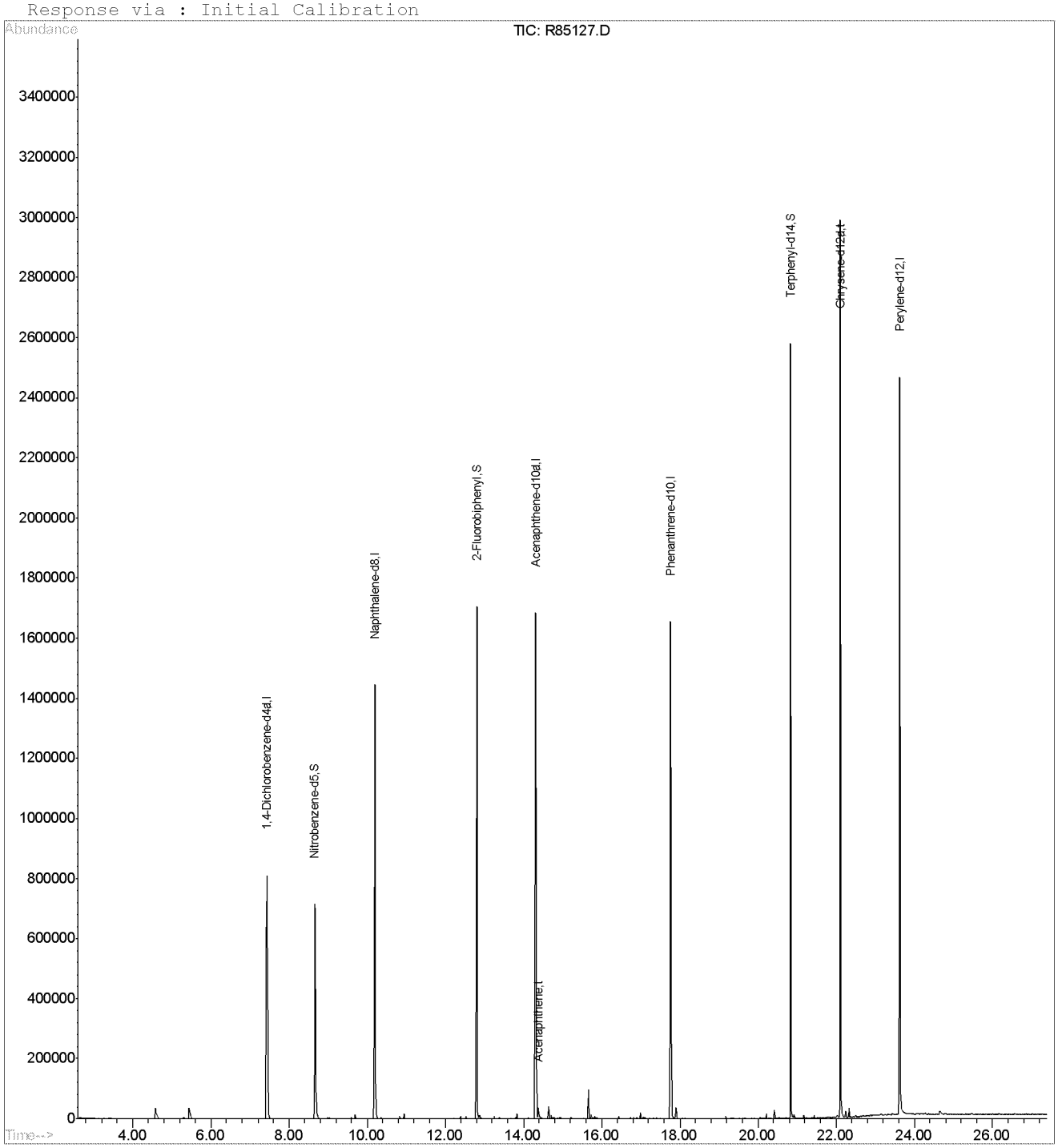
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	303533	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	1103967	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	642128	40.00	ppb	-0.22
69) Phenanthrene-d10	17.77	188	1057882	40.00	ppb	-0.22
83) Chrysene-d12	22.11	240	1132845	40.00	ppb	-0.14
92) Perylene-d12	23.63	264	1084564	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.43	152	303533	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	642128	40.00	ppb	-0.21
107) Chrysene-d12a	22.11	240	1132845	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	412600	41.12	ppb	-0.20
Spiked Amount 50.000			Recovery =	82.24%		
51) 2-Fluorobiphenyl	12.80	172	880407	38.95	ppb	-0.21
Spiked Amount 50.000			Recovery =	77.90%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	830878	38.91	ppb	-0.14
Spiked Amount 50.000			Recovery =	77.82%		
Target Compounds						Qvalue
59) Acenaphthene	14.38	153	15971	0.78	ppb	94

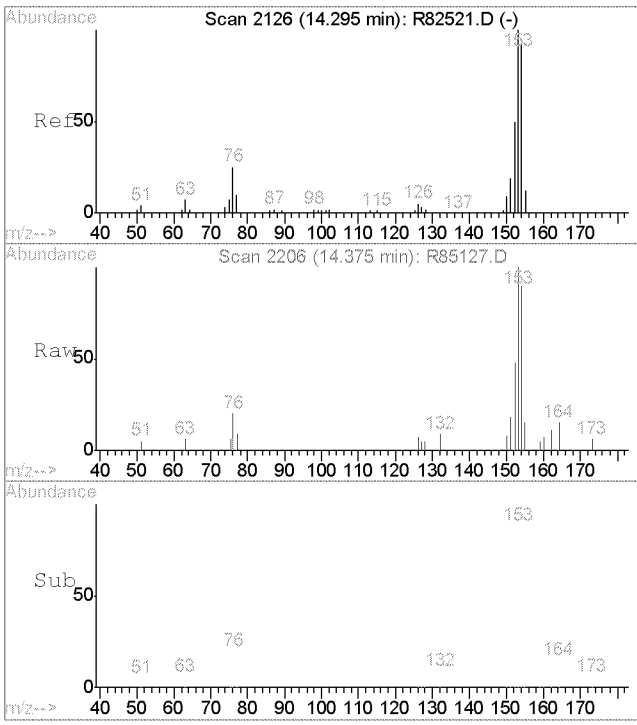
(#) = qualifier out of range (m) = manual integration
R85127.D MR3151.M Thu Jan 27 20:00:05 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:59 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

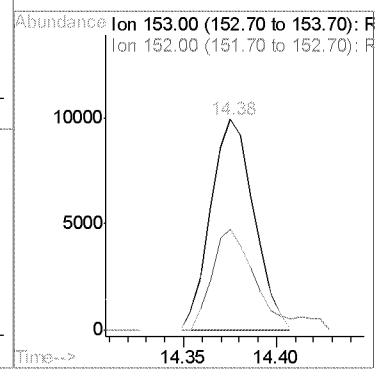




#59
Acenaphthene
Concen: 0.78 ppb
RT: 14.38 min Scan# 2206
Delta R.T. -0.22 min
Lab File: R85127.D
Acq: 27 Jan 2011 5:56 pm

Tgt Ion:153 Resp: 15971

Ion	Ratio	Lower	Upper
153	100		
152	44.9	19.9	79.9
154	90.2	65.1	125.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.578	363	372	400	rBB2	35090	102652	3.20%	0.434%
2	5.299	500	507	517	rBB	6366	15469	0.48%	0.065%
3	5.443	526	534	551	rBB2	35930	93233	2.91%	0.394%
4	7.430	897	906	928	rBV	810774	1704787	53.18%	7.202%
5	8.664	1130	1137	1163	rBV	715854	1214930	37.90%	5.132%
6	8.990	1192	1198	1202	rBV2	6952	9423	0.29%	0.040%
7	9.028	1202	1205	1212	rVB2	7424	9137	0.29%	0.039%
8	9.605	1307	1313	1315	rBV	4871	5474	0.17%	0.023%
9	9.695	1323	1330	1335	rBB	16105	21688	0.68%	0.092%
10	10.192	1414	1423	1439	rBV	1444874	2252736	70.27%	9.516%
11	10.352	1447	1453	1459	rVB3	4911	8894	0.28%	0.038%
12	10.401	1459	1462	1470	rBB	2080	3987	0.12%	0.017%
13	10.828	1536	1542	1549	rBB2	9295	13552	0.42%	0.057%
14	10.945	1556	1564	1569	rBB	18985	27870	0.87%	0.118%
15	12.217	1799	1802	1808	rVB3	4119	7046	0.22%	0.030%
16	12.382	1828	1833	1838	rVB	9846	13473	0.42%	0.057%
17	12.527	1853	1860	1870	rBB2	8420	12544	0.39%	0.053%
18	12.660	1879	1885	1889	rBB2	4433	5522	0.17%	0.023%
19	12.805	1903	1912	1921	rBV	1707026	2533953	79.04%	10.704%
20	12.874	1921	1925	1930	rVV3	10389	16334	0.51%	0.069%
21	12.943	1932	1938	1941	rVV2	2214	4480	0.14%	0.019%
22	13.162	1973	1979	1985	rBB	2722	4310	0.13%	0.018%
23	13.248	1990	1995	2000	rBB	7576	9153	0.29%	0.039%
24	13.371	2012	2018	2025	rBB	7323	13436	0.42%	0.057%
25	13.681	2072	2076	2084	rBB2	4027	6641	0.21%	0.028%
26	13.793	2092	2097	2100	rBV	6803	9583	0.30%	0.040%
27	13.830	2100	2104	2111	rVB3	17708	26711	0.83%	0.113%
28	14.113	2152	2157	2161	rBV2	4855	5419	0.17%	0.023%
29	14.306	2185	2193	2201	rBV	1683950	2627034	81.95%	11.097%
30	14.375	2201	2206	2212	rVV	38850	64521	2.01%	0.273%
31	14.412	2212	2213	2218	rVV	8903	8039	0.25%	0.034%
32	14.455	2218	2221	2232	rVB	5683	10956	0.34%	0.046%
33	14.605	2245	2249	2251	rBV2	4135	5378	0.17%	0.023%
34	14.642	2251	2256	2262	rVB	40554	55499	1.73%	0.234%
35	14.706	2262	2268	2272	rBV	11350	16762	0.52%	0.071%
36	14.754	2273	2277	2281	rVV2	5775	9459	0.30%	0.040%
37	14.792	2281	2284	2291	rVB2	4871	8023	0.25%	0.034%
38	14.867	2292	2298	2305	rBB3	4060	8727	0.27%	0.037%

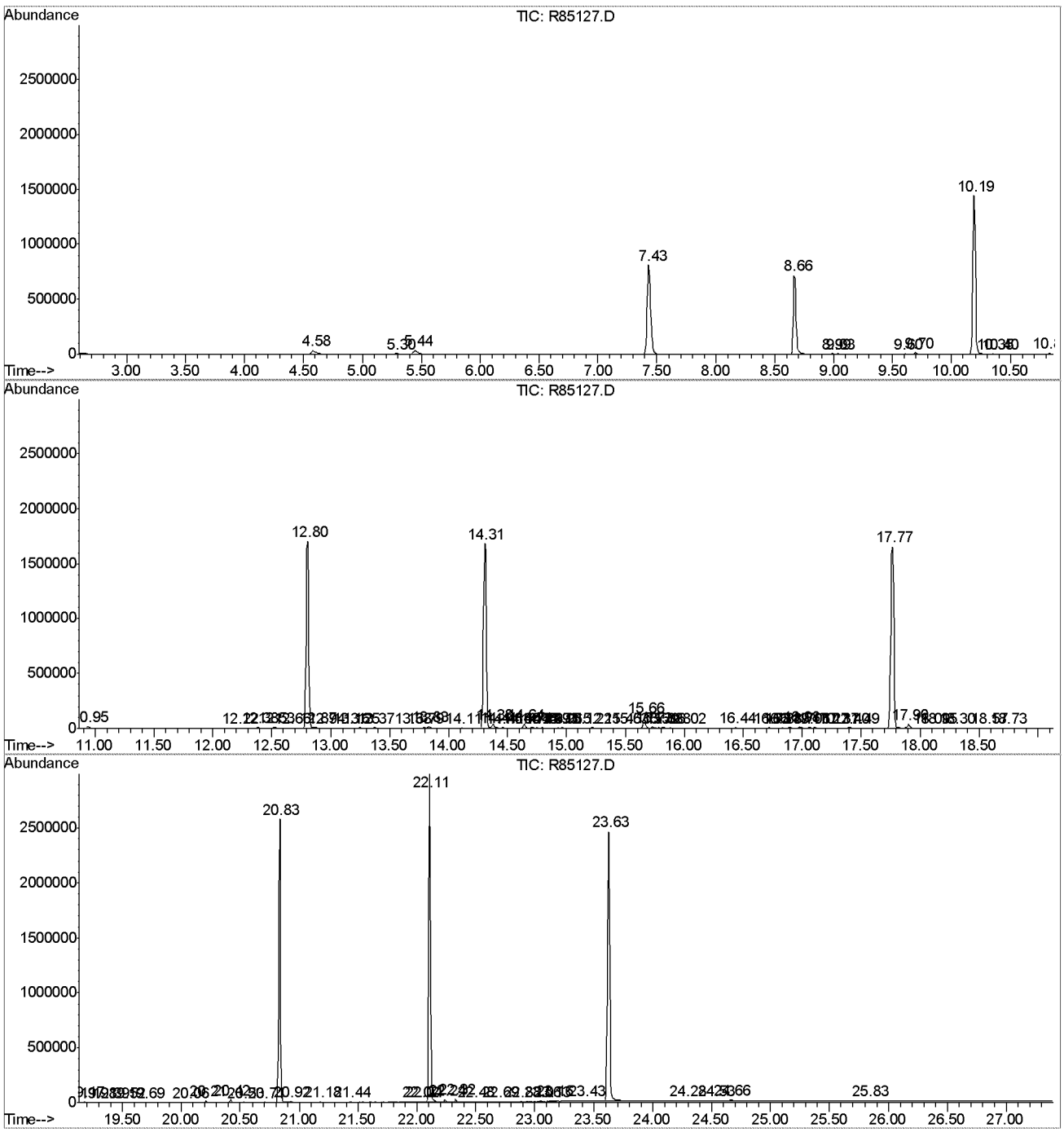
39	14.925	2305	2309	2313	rBV	6576	8318	0.26%	0.035%
40	14.963	2313	2316	2321	rVB	6149	7472	0.23%	0.032%
41	15.123	2342	2346	2350	rBV	3309	4525	0.14%	0.019%
42	15.219	2358	2364	2371	rBB2	7160	12179	0.38%	0.051%
43	15.465	2406	2410	2415	rBB	4208	5068	0.16%	0.021%
44	15.534	2420	2423	2429	rBB	3133	4578	0.14%	0.019%
45	15.657	2440	2446	2454	rVV	98816	150352	4.69%	0.635%
46	15.732	2454	2460	2464	rVV	14025	22637	0.71%	0.096%
47	15.785	2467	2470	2472	rVV2	5781	7228	0.23%	0.031%
48	15.817	2472	2476	2485	rVB2	8162	14938	0.47%	0.063%
49	15.882	2485	2488	2493	rBB2	5404	6231	0.19%	0.026%
50	16.015	2507	2513	2518	rBB2	3851	5004	0.16%	0.021%
51	16.437	2586	2592	2597	rVB2	9024	10827	0.34%	0.046%
52	16.726	2640	2646	2655	rBB2	5087	10236	0.32%	0.043%
53	16.806	2656	2661	2663	rBV3	4052	5839	0.18%	0.025%
54	16.827	2663	2665	2670	rVB	5018	5326	0.17%	0.022%
55	16.891	2670	2677	2687	rBV2	7126	17210	0.54%	0.073%
56	16.982	2687	2694	2702	rVV3	19681	29524	0.92%	0.125%
57	17.062	2702	2709	2714	rVV4	5581	13685	0.43%	0.058%
58	17.105	2714	2717	2724	rVB3	6788	9725	0.30%	0.041%
59	17.222	2731	2739	2744	rBV2	3815	6990	0.22%	0.030%
60	17.308	2750	2755	2760	rBV	3920	7537	0.24%	0.032%
61	17.399	2768	2772	2779	rBV	4997	8671	0.27%	0.037%
62	17.490	2782	2789	2799	rBV3	4034	10710	0.33%	0.045%
63	17.767	2832	2841	2856	rBV2	1656830	2764395	86.23%	11.678%
64	17.901	2856	2866	2875	rVV6	37092	66736	2.08%	0.282%
65	18.088	2896	2901	2906	rBV2	3769	4308	0.13%	0.018%
66	18.147	2907	2912	2917	rVB4	3318	5543	0.17%	0.023%
67	18.302	2935	2941	2947	rBB	2434	3850	0.12%	0.016%
68	18.574	2988	2992	3001	rVB3	3965	6694	0.21%	0.028%
69	18.734	3015	3022	3025	rBV	1774	3993	0.12%	0.017%
70	19.172	3098	3104	3110	rBV3	9057	14022	0.44%	0.059%
71	19.285	3121	3125	3129	rBV3	2798	4504	0.14%	0.019%
72	19.391	3137	3145	3150	rVB2	3152	4217	0.13%	0.018%
73	19.525	3165	3170	3173	rVB2	3955	4503	0.14%	0.019%
74	19.685	3193	3200	3203	rBV3	1652	3841	0.12%	0.016%
75	20.064	3264	3271	3276	rBV	5046	7500	0.23%	0.032%
76	20.209	3289	3298	3304	rVB2	15776	18655	0.58%	0.079%
77	20.417	3330	3337	3344	rBV3	29623	32551	1.02%	0.138%
78	20.529	3353	3358	3365	rBV3	3698	7160	0.22%	0.030%
79	20.706	3387	3391	3399	rVV3	3199	4611	0.14%	0.019%
80	20.834	3406	3415	3427	rBV	2579473	2771152	86.44%	11.706%
81	20.925	3427	3432	3446	rVB4	13753	22589	0.70%	0.095%
82	21.181	3474	3480	3485	rVB3	7610	7937	0.25%	0.034%
83	21.437	3524	3528	3532	rVB	8972	7499	0.23%	0.032%
84	22.020	3632	3637	3639	rVV5	4109	6579	0.21%	0.028%
85	22.041	3639	3641	3646	rVB4	6303	6349	0.20%	0.027%
86	22.105	3646	3653	3671	rBV	2989801	3192612	99.59%	13.487%
87	22.239	3673	3678	3687	rVB	23240	28815	0.90%	0.122%
88	22.324	3687	3694	3701	rBV	30235	33234	1.04%	0.140%
89	22.484	3720	3724	3728	rVB5	4803	4924	0.15%	0.021%
90	22.693	3758	3763	3770	rBV4	3533	6004	0.19%	0.025%
91	22.880	3794	3798	3804	rBV4	4123	6072	0.19%	0.026%
92	23.056	3828	3831	3836	rVB4	2402	4574	0.14%	0.019%
93	23.131	3842	3845	3847	rVV2	4047	4154	0.13%	0.018%
94	23.158	3847	3850	3856	rVB5	4210	5248	0.16%	0.022%
95	23.430	3897	3901	3904	rBV3	4340	6324	0.20%	0.027%

96	23.628	3929	3938	3959	rBV	2452433	3205820	100.00%	13.542%
97	24.279	4051	4060	4063	rBV6	4883	11132	0.35%	0.047%
98	24.525	4105	4106	4112	rBV6	2798	4009	0.13%	0.017%
99	24.659	4126	4131	4144	rVB2	12776	23676	0.74%	0.100%
100	25.829	4345	4350	4355	rBV6	2784	5028	0.16%	0.021%

Sum of corrected areas: 23672459

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85127.D
Operator : larisap
Acquired : 27 Jan 2011 5:56 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-2
Misc Info : op47853,er3223,1000
Vial Number: 13
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 27 Jan 2011 5:56 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85127.D
Name: ja66701-2
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:51 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

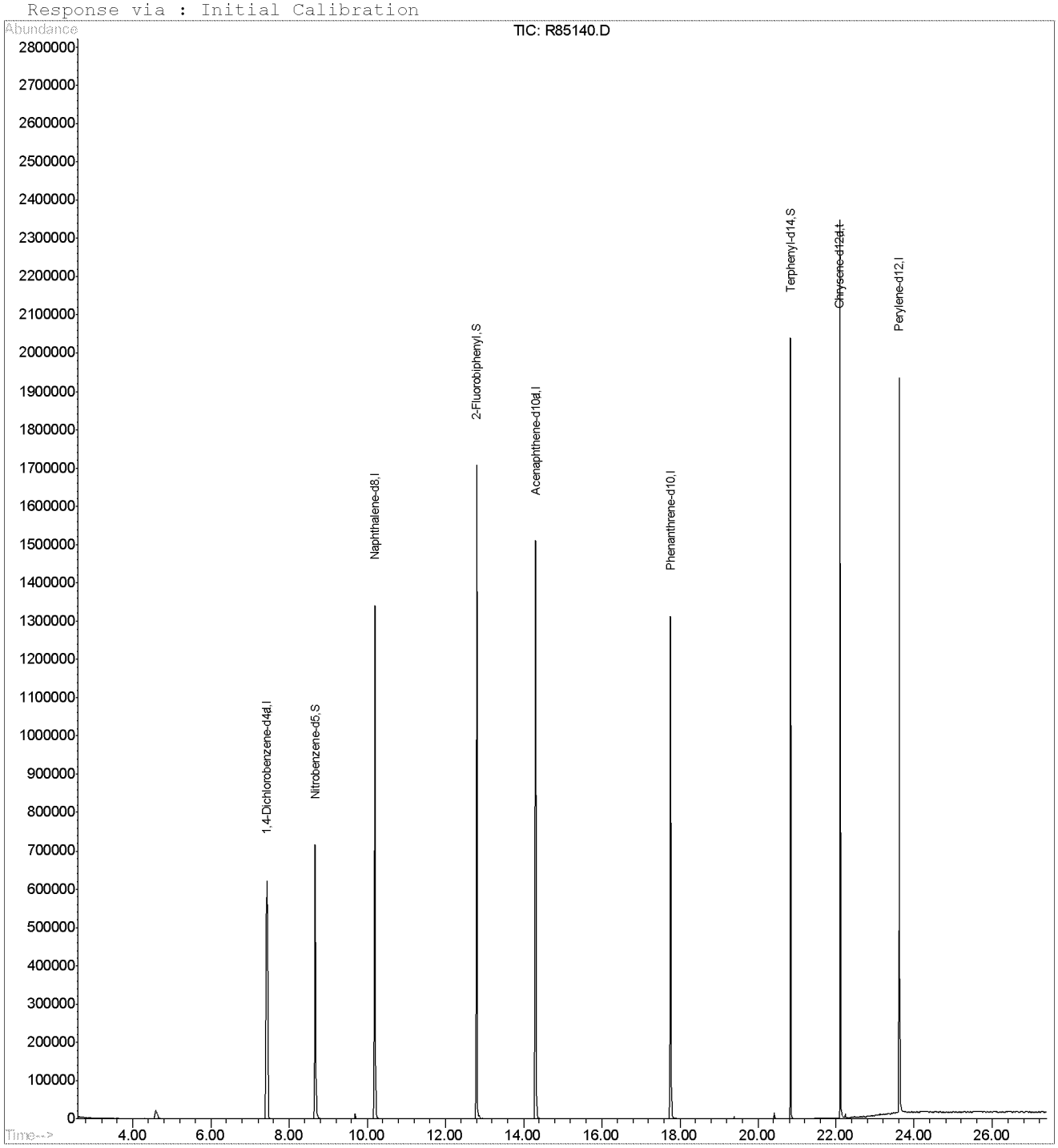
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	298758	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	1044118	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	584532	40.00	ppb	-0.21
69) Phenanthrene-d10	17.76	188	887909	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	861655	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	775629	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.43	152	298758	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	584532	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	861655	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.67	82	429722	45.29	ppb	-0.20
Spiked Amount 50.000			Recovery =	90.58%		
51) 2-Fluorobiphenyl	12.80	172	870819	42.32	ppb	-0.21
Spiked Amount 50.000			Recovery =	84.64%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	657105	40.46	ppb	-0.14
Spiked Amount 50.000			Recovery =	80.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85140.D MR3151.M Fri Jan 28 20:51:31 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:51 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.630	5	8	17	rVB3	1713	2648	0.11%	0.014%
2	3.026	80	82	86	rBV3	1024	1690	0.07%	0.009%
3	3.175	107	110	115	rVB3	974	1837	0.07%	0.009%
4	3.576	181	185	189	rBV	1348	1875	0.08%	0.010%
5	3.811	228	229	237	rBV	1240	2905	0.12%	0.015%
6	3.955	246	256	257	rBV2	745	1899	0.08%	0.010%
7	4.212	302	304	310	rVB2	1656	2483	0.10%	0.013%
8	4.297	316	320	322	rBV	1363	1600	0.06%	0.008%
9	4.468	349	352	356	rBV	1284	1885	0.08%	0.010%
10	4.586	365	374	400	rVB2	23735	100324	4.03%	0.516%
11	4.890	424	431	434	rBB	1166	1616	0.06%	0.008%
12	7.428	896	906	928	rBB2	623297	1672212	67.21%	8.593%
13	8.667	1130	1138	1167	rBV	716342	1259671	50.63%	6.473%
14	8.849	1171	1172	1181	rVB	1200	1490	0.06%	0.008%
15	9.693	1324	1330	1336	rBB	13854	19702	0.79%	0.101%
16	10.190	1414	1423	1446	rBV	1340880	2129789	85.61%	10.945%
17	12.802	1903	1912	1923	rBV	1708483	2487884	100.00%	12.785%
18	12.866	1923	1924	1932	rVV	8279	12163	0.49%	0.063%
19	12.930	1932	1936	1945	rVV2	1970	5606	0.23%	0.029%
20	13.144	1973	1976	1980	rBB	2806	2297	0.09%	0.012%
21	14.308	2185	2194	2224	rBB	1510364	2401887	96.54%	12.343%
22	17.482	2784	2788	2795	rBB	2421	4174	0.17%	0.021%
23	17.765	2828	2841	2858	rBV2	1314488	2302910	92.57%	11.834%
24	17.882	2858	2863	2873	rVV	3341	8669	0.35%	0.045%
25	17.957	2876	2877	2886	rVB2	1161	2145	0.09%	0.011%
26	18.577	2986	2993	2998	rBB	1418	2207	0.09%	0.011%
27	18.625	2999	3002	3009	rBB	652	1479	0.06%	0.008%
28	19.389	3138	3145	3151	rVB	6915	9724	0.39%	0.050%
29	20.014	3257	3262	3265	rBV	746	1699	0.07%	0.009%
30	20.420	3333	3338	3342	rVB	16028	15289	0.61%	0.079%
31	20.831	3406	3415	3435	rBV	2040195	2123890	85.37%	10.914%
32	22.102	3647	3653	3669	rBV	2348236	2380021	95.66%	12.230%
33	22.231	3673	3677	3684	rVB	10954	11097	0.45%	0.057%
34	22.311	3689	3692	3695	rBV2	1562	1872	0.08%	0.010%
35	22.599	3742	3746	3748	rBV3	1693	1989	0.08%	0.010%
36	22.754	3772	3775	3777	rBV3	1347	1740	0.07%	0.009%
37	22.776	3777	3779	3784	rBV3	1444	2299	0.09%	0.012%
38	22.936	3805	3809	3811	rVB3	2827	2851	0.11%	0.015%

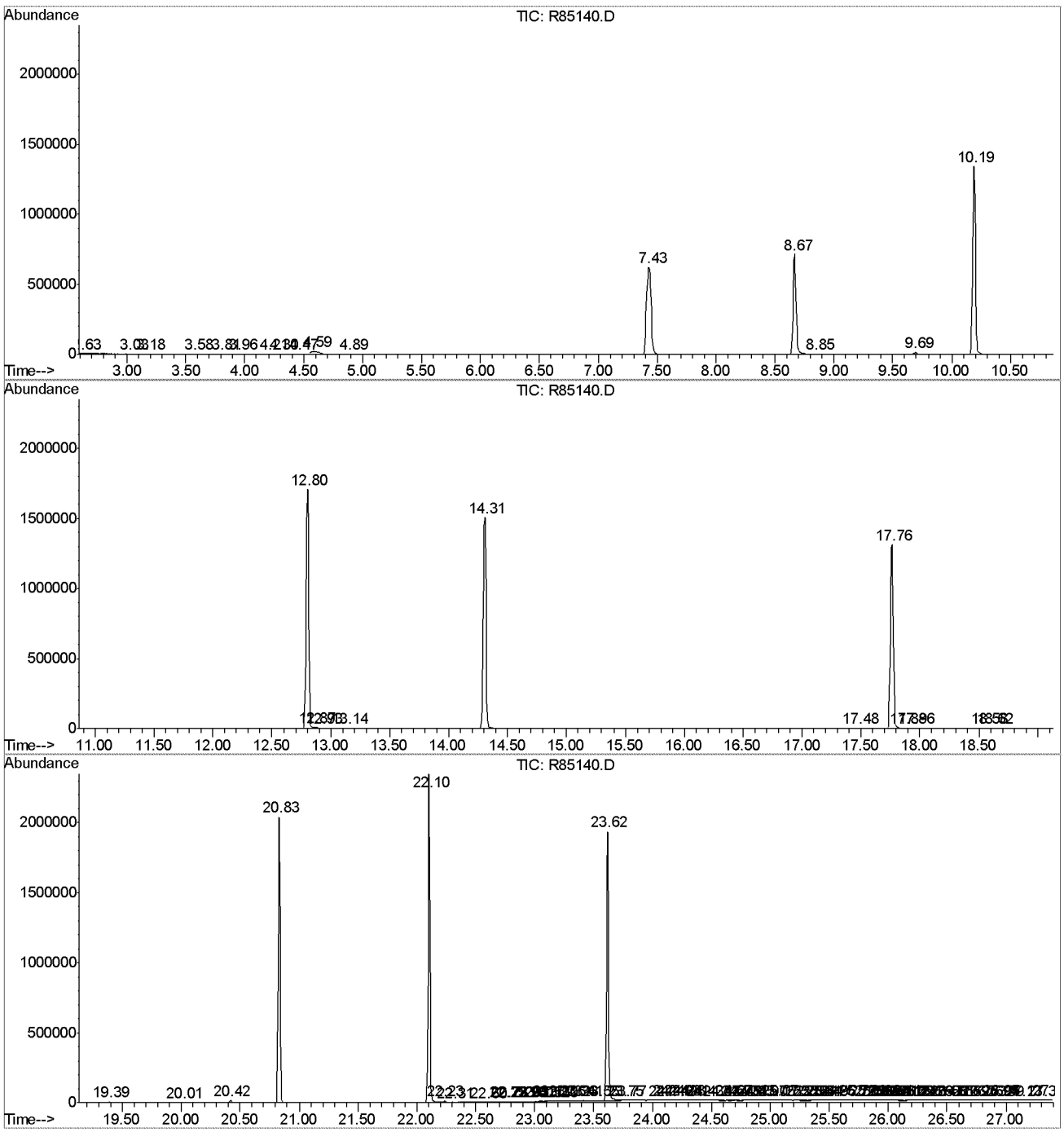
39	22.952	3811	3812	3814	rBV	1958	1549	0.06%	0.008%
40	23.005	3816	3822	3824	rBV4	2836	4468	0.18%	0.023%
41	23.053	3824	3831	3834	rBV4	1707	3649	0.15%	0.019%
42	23.101	3834	3840	3841	rBV3	2940	3702	0.15%	0.019%
43	23.128	3841	3845	3849	rBV2	4558	6526	0.26%	0.034%
44	23.198	3854	3858	3859	rVB3	1879	1620	0.07%	0.008%
45	23.262	3866	3870	3873	rVB3	2040	2064	0.08%	0.011%
46	23.358	3884	3888	3894	rVB6	2276	4375	0.18%	0.022%
47	23.411	3894	3898	3902	rBV3	4216	6960	0.28%	0.036%
48	23.550	3918	3924	3930	rVV7	1294	2488	0.10%	0.013%
49	23.620	3930	3937	3959	rBV	1921583	2286930	91.92%	11.752%
50	23.753	3959	3962	3965	rVB3	2619	3568	0.14%	0.018%
51	23.775	3965	3966	3968	rBV2	2174	1590	0.06%	0.008%
52	24.106	4027	4028	4033	rVV4	1801	2211	0.09%	0.011%
53	24.143	4033	4035	4040	rVV4	3326	4388	0.18%	0.023%
54	24.175	4040	4041	4045	rVV3	2083	2857	0.11%	0.015%
55	24.245	4046	4054	4057	rVV7	3599	8254	0.33%	0.042%
56	24.277	4057	4060	4063	rVV4	3790	5445	0.22%	0.028%
57	24.309	4063	4066	4071	rVV6	3816	5826	0.23%	0.030%
58	24.426	4081	4088	4092	rVB8	1728	3346	0.13%	0.017%
59	24.571	4114	4115	4124	rVB6	2797	4474	0.18%	0.023%
60	24.672	4128	4134	4140	rVV4	3781	7933	0.32%	0.041%
61	24.731	4143	4145	4148	rVB4	1605	1545	0.06%	0.008%
62	24.752	4148	4149	4153	rBV4	1572	1679	0.07%	0.009%
63	24.811	4159	4160	4163	rBV3	1959	1514	0.06%	0.008%
64	24.870	4168	4171	4174	rBV4	1805	2071	0.08%	0.011%
65	24.966	4186	4189	4191	rBV4	1536	1677	0.07%	0.009%
66	25.046	4201	4204	4205	rBV3	2089	1634	0.07%	0.008%
67	25.067	4207	4208	4211	rBV3	2792	1952	0.08%	0.010%
68	25.276	4243	4247	4255	rVB6	2846	8150	0.33%	0.042%
69	25.334	4255	4258	4260	rBV4	2530	3040	0.12%	0.016%
70	25.356	4260	4262	4266	rVV5	1729	2038	0.08%	0.010%
71	25.415	4271	4273	4275	rBV3	1935	1642	0.07%	0.008%
72	25.441	4275	4278	4280	rVB3	2138	1559	0.06%	0.008%
73	25.489	4285	4287	4291	rBV4	1824	2224	0.09%	0.011%
74	25.559	4296	4300	4303	rVV4	984	1712	0.07%	0.009%
75	25.724	4329	4331	4336	rVB5	2284	3009	0.12%	0.015%
76	25.815	4346	4348	4351	rVB4	2935	2772	0.11%	0.014%
77	25.853	4351	4355	4359	rBV5	2663	4529	0.18%	0.023%
78	25.906	4363	4365	4372	rVB6	2559	3870	0.16%	0.020%
79	25.954	4372	4374	4377	rBV4	2335	2704	0.11%	0.014%
80	25.976	4377	4378	4382	rVB4	2026	1570	0.06%	0.008%
81	26.018	4382	4386	4388	rBV4	1822	2004	0.08%	0.010%
82	26.045	4390	4391	4396	rVV4	2133	2737	0.11%	0.014%
83	26.109	4400	4403	4408	rVB4	3637	5319	0.21%	0.027%
84	26.147	4408	4410	4412	rBV3	1896	1770	0.07%	0.009%
85	26.184	4412	4417	4422	rBV5	1516	2600	0.10%	0.013%
86	26.227	4422	4425	4426	rBV3	2358	1574	0.06%	0.008%
87	26.243	4426	4428	4431	rBV3	1575	1822	0.07%	0.009%
88	26.387	4453	4455	4458	rBV3	1619	2138	0.09%	0.011%
89	26.467	4467	4470	4476	rVB5	2154	3667	0.15%	0.019%
90	26.504	4476	4477	4481	rVB4	1501	1610	0.06%	0.008%
91	26.552	4481	4486	4488	rBV4	2415	3945	0.16%	0.020%
92	26.686	4508	4511	4514	rBV4	2074	2495	0.10%	0.013%
93	26.766	4522	4526	4529	rBV6	1361	1919	0.08%	0.010%
94	26.830	4535	4538	4539	rBV3	1796	1803	0.07%	0.009%
95	26.937	4555	4558	4559	rBV3	1966	1752	0.07%	0.009%

96	26.948	4559	4560	4565	rVB4	2693	2758	0.11%	0.014%
97	26.985	4565	4567	4570	rBV4	2098	1473	0.06%	0.008%
98	27.135	4593	4595	4600	rVV4	1743	2145	0.09%	0.011%
99	27.322	4628	4630	4634	rBV4	2071	2180	0.09%	0.011%
100	27.370	4636	4639	4640	rBV2	2038	1531	0.06%	0.008%

Sum of corrected areas: 19459874

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85140.D
Operator : larisap
Acquired : 28 Jan 2011 5:11 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-3
Misc Info : op47853,er3224,945
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 5:11 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85140.D
Name: ja66701-3
Misc: op47853,er3224,945
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.6
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:52 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

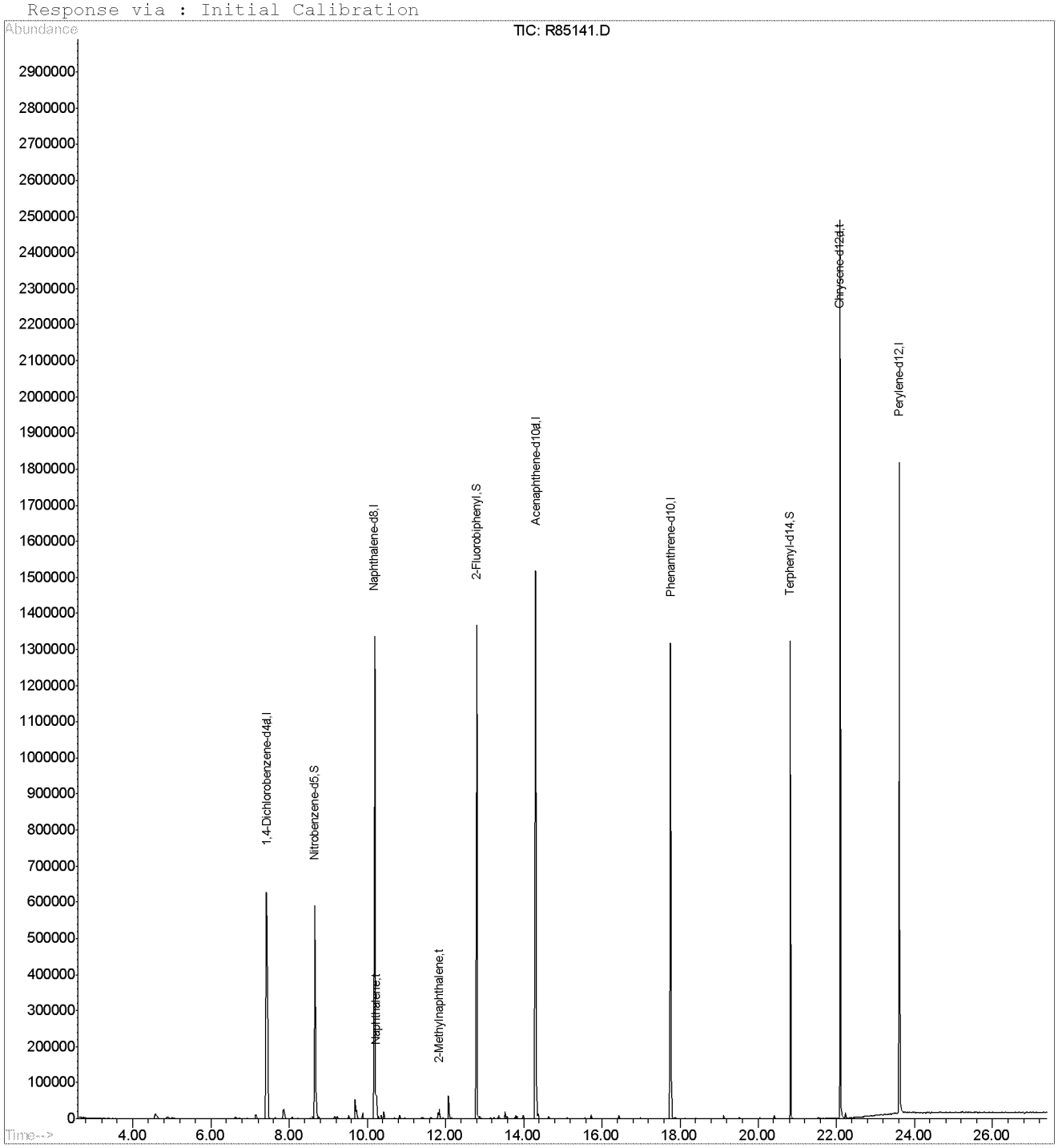
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	298967	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1042679	40.00	ppb	-0.21
47) Acenaphthene-d10	14.31	164	576651	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	856818	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	897218	40.00	ppb	-0.15
92) Perylene-d12	23.62	264	763285	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	298967	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	576651	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	897218	40.00	ppb	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	350440	36.98	ppb	-0.20
Spiked Amount 50.000			Recovery =	73.96%		
51) 2-Fluorobiphenyl	12.80	172	689909	33.99	ppb	-0.21
Spiked Amount 50.000			Recovery =	67.98%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	431455	25.51	ppb	-0.15
Spiked Amount 50.000			Recovery =	51.02%		
Target Compounds						Qvalue
38) Naphthalene	10.23	128	64432	2.20	ppb	96
44) 2-Methylnaphthalene	11.84	142	17063	0.84	ppb	96

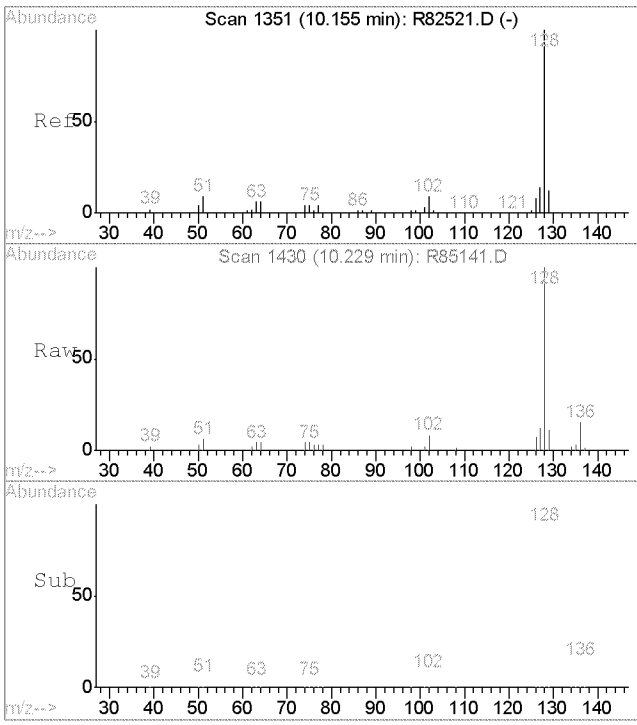
(#) = qualifier out of range (m) = manual integration
R85141.D MR3151.M Fri Jan 28 20:52:37 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:52 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration

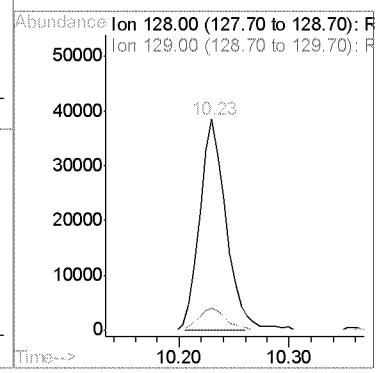


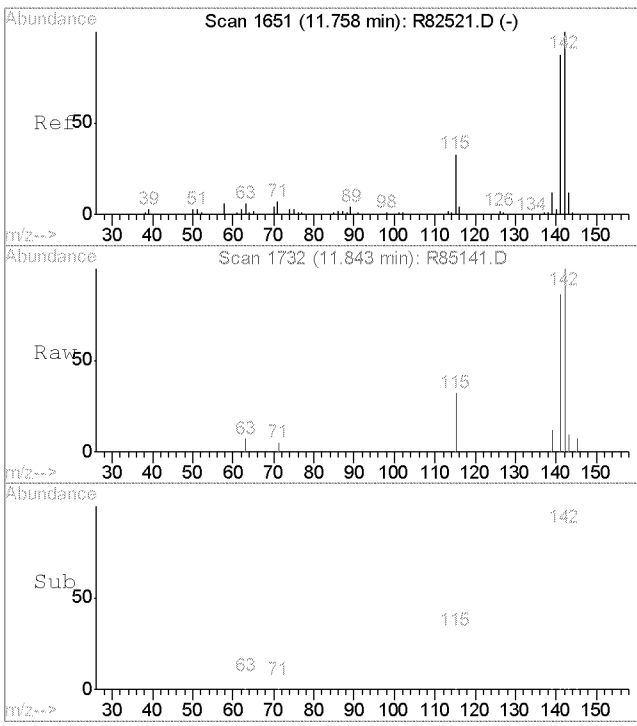


#38
Naphthalene
Concen: 2.20 ppb
RT: 10.23 min Scan# 1430
Delta R.T. -0.21 min
Lab File: R85141.D
Acq: 28 Jan 2011 5:47 pm

Tgt Ion:128 Resp: 64432

Ion	Ratio	Lower	Upper
128	100		
129	10.5	0.0	41.9
127	12.4	0.0	44.0

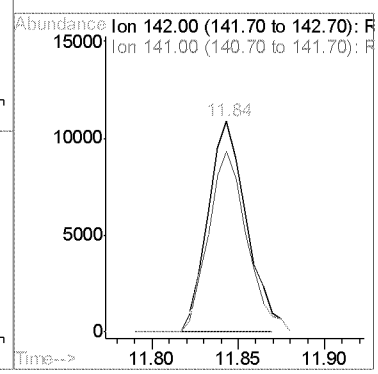




#44
2-Methylnaphthalene
Concen: 0.84 ppb
RT: 11.84 min Scan# 1732
Delta R.T. -0.21 min
Lab File: R85141.D
Acq: 28 Jan 2011 5:47 pm

Tgt Ion:142 Resp: 17063

Ion	Ratio	Lower	Upper
142	100		
141	85.6	57.0	117.0
115	26.6	3.1	63.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.572	364	371	396	rVB3	15538	66702	2.68%	0.354%
2	4.861	419	425	435	rBV2	5965	20953	0.84%	0.111%
3	5.005	446	452	460	rBV2	3257	9302	0.37%	0.049%
4	5.085	466	467	475	rVB2	2828	3626	0.15%	0.019%
5	5.961	625	631	643	rBB	1685	4431	0.18%	0.023%
6	6.458	721	724	735	rBB	1349	3344	0.13%	0.018%
7	6.634	748	757	767	rBB	5075	13844	0.56%	0.073%
8	6.720	768	773	783	rBB2	2844	7585	0.30%	0.040%
9	6.928	806	812	818	rBB	1440	3796	0.15%	0.020%
10	7.152	847	854	863	rBB2	13590	29219	1.17%	0.155%
11	7.419	896	904	922	rBV	629118	1694309	68.04%	8.982%
12	7.638	937	945	956	rBB2	5720	15878	0.64%	0.084%
13	7.863	980	987	1000	rBB	26999	62150	2.50%	0.329%
14	8.082	1022	1028	1037	rBB2	5930	11693	0.47%	0.062%
15	8.178	1040	1046	1051	rBV	2700	4719	0.19%	0.025%
16	8.226	1051	1055	1060	rVB	2846	4372	0.18%	0.023%
17	8.285	1061	1066	1070	rBB	2624	3244	0.13%	0.017%
18	8.531	1107	1112	1116	rBV2	3656	5465	0.22%	0.029%
19	8.605	1121	1126	1130	rBB2	7209	10159	0.41%	0.054%
20	8.664	1130	1137	1152	rBV	590302	1067604	42.87%	5.660%
21	8.766	1152	1156	1166	rVB2	5747	12202	0.49%	0.065%
22	8.995	1195	1199	1205	rVB2	2041	3411	0.14%	0.018%
23	9.156	1222	1229	1236	rBB2	8208	14348	0.58%	0.076%
24	9.225	1237	1242	1248	rBB2	7026	10970	0.44%	0.058%
25	9.524	1291	1298	1304	rBB2	9464	15111	0.61%	0.080%
26	9.599	1305	1312	1317	rBB3	2161	4225	0.17%	0.022%
27	9.695	1324	1330	1334	rBV2	54120	83347	3.35%	0.442%
28	9.727	1334	1336	1343	rVB	23887	27963	1.12%	0.148%
29	9.882	1360	1365	1373	rBB2	17259	23158	0.93%	0.123%
30	10.187	1414	1422	1439	rBV	1337661	2261209	90.80%	11.987%
31	10.288	1439	1441	1448	rVV3	7951	10072	0.40%	0.053%
32	10.358	1448	1454	1459	rVV2	10309	16292	0.65%	0.086%
33	10.422	1459	1466	1473	rVB2	18734	28370	1.14%	0.150%
34	10.694	1512	1517	1526	rBB2	5191	9106	0.37%	0.048%
35	10.833	1537	1543	1548	rBB2	9795	13716	0.55%	0.073%
36	10.967	1560	1568	1577	rBB3	5106	9506	0.38%	0.050%
37	11.186	1604	1609	1614	rBB	3561	4952	0.20%	0.026%
38	11.383	1641	1646	1650	rBV2	5289	7390	0.30%	0.039%

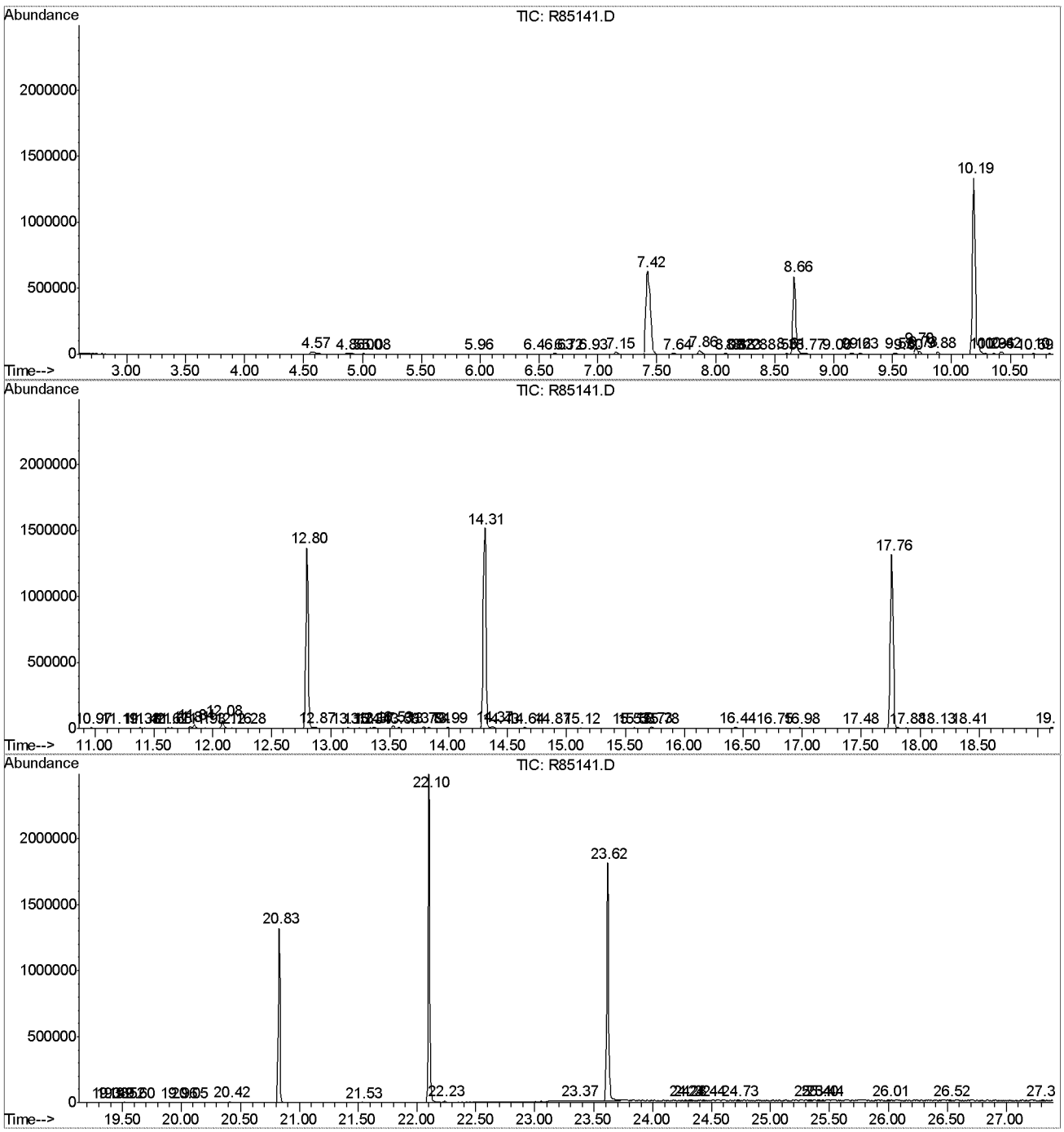
39	11.421	1650	1653	1659	rVB3	3848	5237	0.21%	0.028%
40	11.618	1681	1690	1693	rBV3	4948	9059	0.36%	0.048%
41	11.650	1693	1696	1702	rVB	6024	7814	0.31%	0.041%
42	11.805	1721	1725	1729	rBV3	17159	27472	1.10%	0.146%
43	11.843	1729	1732	1740	rVB	28080	40452	1.62%	0.214%
44	11.934	1744	1749	1754	rBB	4086	4570	0.18%	0.024%
45	12.078	1770	1776	1786	rBB	64442	99413	3.99%	0.527%
46	12.158	1787	1791	1798	rBV2	4229	6690	0.27%	0.035%
47	12.275	1809	1813	1819	rBB	2226	3494	0.14%	0.019%
48	12.799	1903	1911	1920	rBV	1369829	1970341	79.12%	10.445%
49	12.868	1921	1924	1931	rVB3	7512	10456	0.42%	0.055%
50	13.146	1971	1976	1982	rBV4	5399	9259	0.37%	0.049%
51	13.242	1989	1994	1999	rBB	4247	5895	0.24%	0.031%
52	13.339	2006	2012	2013	rBV	3952	5306	0.21%	0.028%
53	13.371	2013	2018	2025	rVB2	9412	15778	0.63%	0.084%
54	13.526	2042	2047	2053	rBV2	19004	28227	1.13%	0.150%
55	13.579	2053	2057	2062	rVB	6842	9073	0.36%	0.048%
56	13.793	2091	2097	2101	rBV	11095	16227	0.65%	0.086%
57	13.835	2101	2105	2110	rVB2	7307	10109	0.41%	0.054%
58	13.990	2129	2134	2140	rBB	8828	11483	0.46%	0.061%
59	14.305	2182	2193	2201	rBV	1519584	2367294	95.06%	12.550%
60	14.370	2201	2205	2212	rVV3	14287	27723	1.11%	0.147%
61	14.428	2212	2216	2223	rVB	3012	5452	0.22%	0.029%
62	14.642	2250	2256	2263	rBB2	6767	9946	0.40%	0.053%
63	14.866	2293	2298	2305	rVB2	1806	3620	0.15%	0.019%
64	15.118	2341	2345	2351	rBB	4637	7115	0.29%	0.038%
65	15.534	2419	2423	2427	rBV	2898	3784	0.15%	0.020%
66	15.577	2427	2431	2438	rVB	4224	6750	0.27%	0.036%
67	15.727	2452	2459	2465	rBB	13146	18974	0.76%	0.101%
68	15.780	2466	2469	2474	rBV	2461	3983	0.16%	0.021%
69	16.437	2584	2592	2596	rBB2	10466	13150	0.53%	0.070%
70	16.747	2645	2650	2656	rBB	2382	3315	0.13%	0.018%
71	16.977	2688	2693	2699	rBB2	6161	7748	0.31%	0.041%
72	17.479	2783	2787	2793	rBV	2177	3675	0.15%	0.019%
73	17.762	2829	2840	2857	rBV2	1320317	2227574	89.45%	11.809%
74	17.879	2857	2862	2870	rVV	3951	8665	0.35%	0.046%
75	18.130	2906	2909	2915	rBB2	3475	4157	0.17%	0.022%
76	18.408	2957	2961	2968	rBV	2576	5386	0.22%	0.029%
77	19.119	3090	3094	3102	rBB	9295	13975	0.56%	0.074%
78	19.381	3138	3143	3147	rBV3	3117	5230	0.21%	0.028%
79	19.418	3147	3150	3154	rVB	3200	4582	0.18%	0.024%
80	19.519	3165	3169	3174	rVB2	4602	6576	0.26%	0.035%
81	19.600	3177	3184	3190	rVV	3309	4222	0.17%	0.022%
82	19.963	3249	3252	3258	rVB	2860	3240	0.13%	0.017%
83	20.054	3258	3269	3274	rVB3	3798	8177	0.33%	0.043%
84	20.417	3333	3337	3342	rVB2	8798	8949	0.36%	0.047%
85	20.828	3408	3414	3431	rVB	1324308	1395184	56.02%	7.396%
86	21.533	3543	3546	3554	rVB	4444	4005	0.16%	0.021%
87	22.100	3646	3652	3668	rBV	2490593	2490307	100.00%	13.202%
88	22.233	3673	3677	3687	rVB2	14211	15057	0.60%	0.080%
89	23.371	3887	3890	3895	rBV5	2075	2934	0.12%	0.016%
90	23.617	3928	3936	3957	rBV	1804130	2242808	90.06%	11.890%
91	24.285	4056	4061	4063	rVB6	2352	3056	0.12%	0.016%
92	24.322	4063	4068	4072	rBV6	2868	5235	0.21%	0.028%
93	24.440	4085	4090	4092	rBV4	3185	4081	0.16%	0.022%
94	24.728	4140	4144	4147	rBV5	1755	3011	0.12%	0.016%
95	25.337	4254	4258	4261	rBV5	2807	4072	0.16%	0.022%

96	25.401	4268	4270	4275	rVB4	2776	2923	0.12%	0.015%
97	25.444	4275	4278	4281	rBV4	2914	3252	0.13%	0.017%
98	26.010	4379	4384	4386	rBV5	2786	3209	0.13%	0.017%
99	26.518	4478	4479	4484	rBV4	2386	2927	0.12%	0.016%
100	27.308	4624	4627	4631	rVB5	3853	3647	0.15%	0.019%

Sum of corrected areas: 18863068

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85141.D
Operator : larisap
Acquired : 28 Jan 2011 5:47 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-4
Misc Info : op47853,er3224,1000
Vial Number: 5
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 5:47 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85141.D
Name: ja66701-4
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.8

8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:53 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

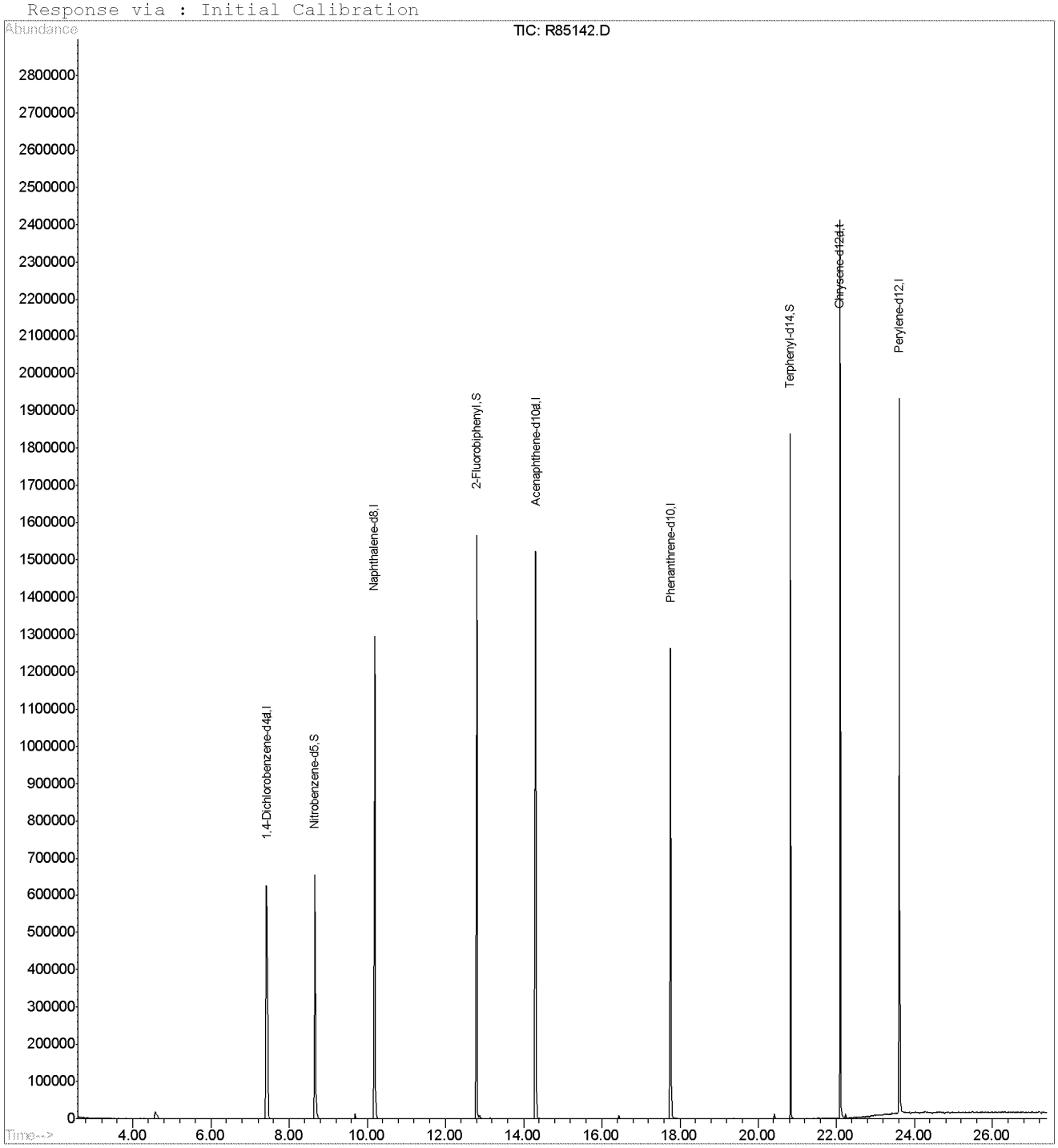
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	302488	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1035374	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	578517	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	846574	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	881025	40.00	ppb	-0.15
92) Perylene-d12	23.62	264	788822	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	302488	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	578517	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	881025	40.00	ppb	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	400619	42.58	ppb	-0.20
Spiked Amount 50.000			Recovery =	85.16%		
51) 2-Fluorobiphenyl	12.80	172	814721	40.01	ppb	-0.21
Spiked Amount 50.000			Recovery =	80.02%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	589909	35.52	ppb	-0.15
Spiked Amount 50.000			Recovery =	71.04%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85142.D MR3151.M Fri Jan 28 20:53:10 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:53 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



ACCUTEST LABORATORIES JA66701

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.730	25	26	34	rVB3	1241	1830	0.07%	0.010%
2	3.050	83	86	96	rBV3	1105	3057	0.13%	0.016%
3	3.574	180	184	190	rVB2	935	2090	0.09%	0.011%
4	3.953	253	255	261	rVB2	1453	2235	0.09%	0.012%
5	4.017	261	267	271	rBV2	1381	2818	0.12%	0.015%
6	4.215	298	304	309	rVB	1540	2979	0.12%	0.016%
7	4.300	316	320	325	rVB2	1802	3081	0.13%	0.016%
8	4.354	325	330	332	rBV	1092	1774	0.07%	0.009%
9	4.423	340	343	349	rVB	1170	1669	0.07%	0.009%
10	4.573	363	371	398	rBB3	19545	88915	3.64%	0.470%
11	7.420	896	904	931	rBB	628026	1691151	69.20%	8.931%
12	8.665	1129	1137	1169	rBB	655999	1174570	48.07%	6.203%
13	9.691	1323	1329	1335	rBB2	15135	21957	0.90%	0.116%
14	10.187	1414	1422	1459	rBB	1295431	2127703	87.07%	11.237%
15	12.800	1903	1911	1921	rBV	1567780	2318358	94.87%	12.244%
16	12.869	1921	1924	1933	rVV2	8642	16681	0.68%	0.088%
17	12.939	1933	1937	1943	rVV2	2545	6012	0.25%	0.032%
18	12.987	1944	1946	1952	rVB2	1759	2830	0.12%	0.015%
19	13.142	1972	1975	1980	rBB	3831	3642	0.15%	0.019%
20	14.306	2184	2193	2211	rBV	1523025	2355325	96.38%	12.439%
21	14.408	2211	2212	2226	rVB	2357	5266	0.22%	0.028%
22	16.438	2587	2592	2596	rBB3	8808	10089	0.41%	0.053%
23	16.731	2640	2647	2651	rBB	2477	2674	0.11%	0.014%
24	16.801	2658	2660	2663	rBB	2534	1780	0.07%	0.009%
25	17.485	2782	2788	2794	rBB2	2423	4173	0.17%	0.022%
26	17.762	2829	2840	2856	rBV2	1264818	2191443	89.68%	11.574%
27	17.885	2856	2863	2867	rVV	3320	8113	0.33%	0.043%
28	17.923	2867	2870	2875	rVV2	3342	5169	0.21%	0.027%
29	18.585	2990	2994	2998	rBB	1849	2838	0.12%	0.015%
30	18.900	3050	3053	3061	rVB	678	1809	0.07%	0.010%
31	19.386	3138	3144	3149	rVB2	2605	4284	0.18%	0.023%
32	20.418	3330	3337	3342	rBV	14278	13564	0.56%	0.072%
33	20.829	3407	3414	3437	rBV	1837978	1917687	78.47%	10.128%
34	21.534	3540	3546	3549	rBV3	2966	3633	0.15%	0.019%
35	21.662	3560	3570	3571	rBV2	943	2814	0.12%	0.015%
36	22.100	3644	3652	3670	rVV	2412533	2443701	100.00%	12.906%
37	22.234	3674	3677	3685	rVB2	12206	12028	0.49%	0.064%
38	22.480	3719	3723	3728	rVB3	2447	2908	0.12%	0.015%

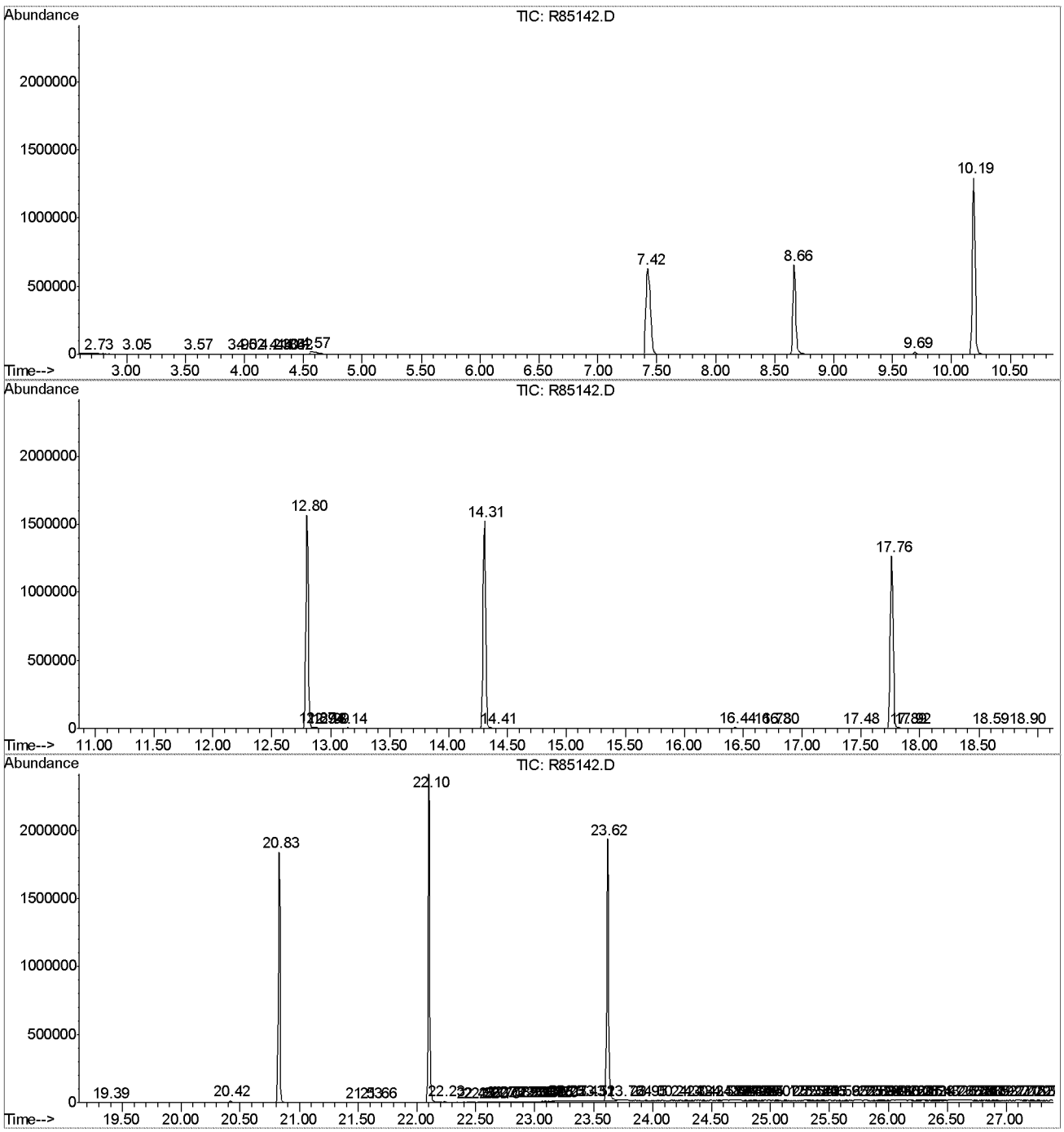
39	22.533	3728	3733	3738	rBV3	2276	4410	0.18%	0.023%
40	22.602	3743	3746	3749	rBV	1373	1865	0.08%	0.010%
41	22.704	3755	3765	3766	rBV3	1316	2923	0.12%	0.015%
42	22.731	3766	3770	3773	rVB3	1352	1662	0.07%	0.009%
43	22.773	3773	3778	3779	rBV4	1567	2124	0.09%	0.011%
44	22.854	3790	3793	3798	rBV3	2653	4836	0.20%	0.026%
45	22.928	3804	3807	3809	rBV2	2349	1882	0.08%	0.010%
46	23.003	3818	3821	3823	rVB4	2040	2034	0.08%	0.011%
47	23.067	3826	3833	3835	rVV5	2613	3797	0.16%	0.020%
48	23.094	3835	3838	3840	rVV3	2334	2334	0.10%	0.012%
49	23.121	3840	3843	3844	rVV3	2299	1897	0.08%	0.010%
50	23.153	3846	3849	3851	rBV2	3573	3824	0.16%	0.020%
51	23.195	3851	3857	3860	rVV5	2293	3902	0.16%	0.021%
52	23.249	3860	3867	3868	rVV5	2693	4247	0.17%	0.022%
53	23.270	3870	3871	3876	rVB4	2383	1829	0.07%	0.010%
54	23.334	3880	3883	3884	rBV3	2312	2019	0.08%	0.011%
55	23.425	3896	3900	3904	rBV4	2935	3669	0.15%	0.019%
56	23.505	3912	3915	3918	rBV3	1735	1690	0.07%	0.009%
57	23.617	3926	3936	3951	rBV	1919184	2306340	94.38%	12.180%
58	23.756	3960	3962	3966	rVB4	1323	1657	0.07%	0.009%
59	23.949	3996	3998	4002	rVB3	1784	1893	0.08%	0.010%
60	23.997	4002	4007	4011	rBV6	1729	2855	0.12%	0.015%
61	24.296	4056	4063	4067	rVV6	2290	4908	0.20%	0.026%
62	24.333	4067	4070	4072	rVB3	2089	1649	0.07%	0.009%
63	24.429	4086	4088	4092	rVB5	2472	3147	0.13%	0.017%
64	24.579	4111	4116	4119	rBV6	2193	2825	0.12%	0.015%
65	24.675	4132	4134	4139	rVB5	2692	2567	0.11%	0.014%
66	24.793	4152	4156	4159	rBV5	2118	3302	0.14%	0.017%
67	24.835	4159	4164	4166	rVV5	2604	3975	0.16%	0.021%
68	24.878	4166	4172	4174	rVB6	2671	4530	0.19%	0.024%
69	24.900	4174	4176	4179	rBV5	1568	1760	0.07%	0.009%
70	24.937	4179	4183	4184	rBV4	1929	2334	0.10%	0.012%
71	25.065	4201	4207	4208	rBV4	2130	3788	0.16%	0.020%
72	25.119	4214	4217	4223	rVB4	2482	3170	0.13%	0.017%
73	25.327	4254	4256	4260	rVB5	2513	2481	0.10%	0.013%
74	25.364	4260	4263	4265	rBV3	1661	1751	0.07%	0.009%
75	25.402	4267	4270	4274	rBV5	2282	3220	0.13%	0.017%
76	25.460	4274	4281	4283	rVV6	1588	2509	0.10%	0.013%
77	25.589	4302	4305	4308	rVV3	1954	1801	0.07%	0.010%
78	25.653	4313	4317	4319	rVB4	1787	1969	0.08%	0.010%
79	25.883	4357	4360	4361	rBV3	2074	1740	0.07%	0.009%
80	25.936	4365	4370	4371	rVV4	1476	2002	0.08%	0.011%
81	25.963	4371	4375	4379	rVB5	2925	3608	0.15%	0.019%
82	25.989	4379	4380	4384	rBV4	2234	2212	0.09%	0.012%
83	26.102	4400	4401	4406	rVB4	1318	1781	0.07%	0.009%
84	26.208	4418	4421	4424	rVB3	1961	1859	0.08%	0.010%
85	26.267	4424	4432	4434	rBV5	1821	2703	0.11%	0.014%
86	26.315	4440	4441	4445	rVB4	3514	2756	0.11%	0.015%
87	26.390	4449	4455	4459	rBV7	1913	3752	0.15%	0.020%
88	26.433	4459	4463	4465	rVV3	2295	2349	0.10%	0.012%
89	26.470	4466	4470	4474	rVV5	2154	2222	0.09%	0.012%
90	26.732	4516	4519	4521	rVB4	2800	3119	0.13%	0.016%
91	26.753	4521	4523	4524	rBV2	2508	1772	0.07%	0.009%
92	26.796	4528	4531	4533	rVV3	2262	1855	0.08%	0.010%
93	26.849	4538	4541	4544	rVB5	2476	2423	0.10%	0.013%
94	26.887	4544	4548	4551	rBV5	1792	2254	0.09%	0.012%
95	26.930	4551	4556	4561	rBV4	2099	3758	0.15%	0.020%

96	27.165	4596	4600	4602	rVB5	1708	2042	0.08%	0.011%
97	27.202	4605	4607	4610	rVV4	3232	2848	0.12%	0.015%
98	27.223	4610	4611	4616	rVB4	2506	3022	0.12%	0.016%
99	27.271	4616	4620	4624	rBV5	3346	4706	0.19%	0.025%
100	27.314	4627	4628	4631	rVV2	3106	2110	0.09%	0.011%

Sum of corrected areas: 18934918

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85142.D
Operator : larisap
Acquired : 28 Jan 2011 6:23 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-5
Misc Info : op47853,er3224,1000
Vial Number: 6
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 6:23 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85142.D
Name: ja66701-5
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.10
8

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:54 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

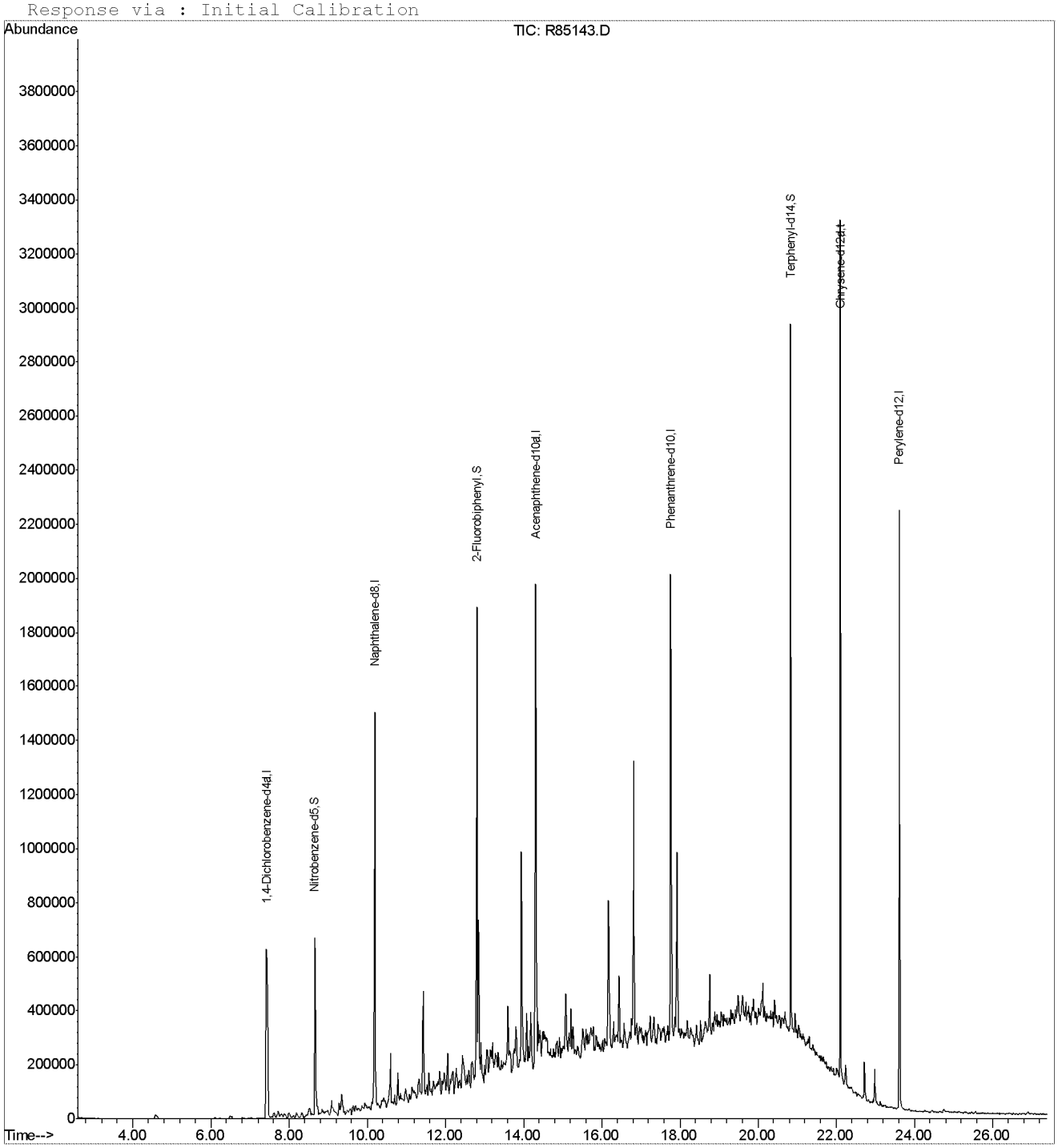
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	316195	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1084094	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	668964	40.00	ppb	-0.21
69) Phenanthrene-d10	17.77	188	1086595	40.00	ppb	-0.22
83) Chrysene-d12	22.10	240	1160109	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	932103	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	316195	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	668964	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	1160109	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	408140	41.43	ppb	-0.20
Spiked Amount 50.000			Recovery =	82.86%		
51) 2-Fluorobiphenyl	12.80	172	891759	37.87	ppb	-0.21
Spiked Amount 50.000			Recovery =	75.74%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	839330	38.39	ppb	-0.14
Spiked Amount 50.000			Recovery =	76.78%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
R85143.D MR3151.M Tue Feb 08 15:17:08 2011 RPT1

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:54 2011 Quant Results File: MR3151.RES

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.560	363	369	391	rBV4	16516	73241	2.16%	0.160%
2	7.418	895	904	925	rBV	626290	1824230	53.75%	3.980%
3	7.718	950	960	969	rVV4	23130	61909	1.82%	0.135%
4	7.995	1003	1012	1023	rBV6	19474	63061	1.86%	0.138%
5	8.188	1041	1048	1061	rBV8	22250	69408	2.05%	0.151%
6	8.519	1099	1110	1119	rBV8	25573	80700	2.38%	0.176%
7	8.663	1129	1137	1156	rBV	655482	1253550	36.93%	2.735%
8	9.085	1206	1216	1237	rBV9	54977	207886	6.13%	0.454%
9	9.283	1246	1253	1257	rBV3	47161	90055	2.65%	0.196%
10	9.342	1257	1264	1275	rVV6	77700	242548	7.15%	0.529%
11	9.555	1298	1304	1312	rVB5	23366	72939	2.15%	0.159%
12	9.635	1312	1319	1326	rBV5	35724	87771	2.59%	0.191%
13	10.191	1412	1423	1435	rVB	1456177	2464397	72.61%	5.377%
14	10.586	1479	1497	1504	rBV	199004	445208	13.12%	0.971%
15	10.779	1526	1533	1541	rBV5	119823	261816	7.71%	0.571%
16	10.982	1562	1571	1585	rVB5	52254	159003	4.68%	0.347%
17	11.153	1594	1603	1608	rBV7	48104	141894	4.18%	0.310%
18	11.329	1625	1636	1647	rBV6	67429	234380	6.91%	0.511%
19	11.430	1647	1655	1660	rBV	385132	574403	16.92%	1.253%
20	11.527	1668	1673	1679	rVB4	42776	82586	2.43%	0.180%
21	11.580	1679	1683	1690	rBV5	84633	134183	3.95%	0.293%
22	11.692	1698	1704	1711	rBV5	57996	150490	4.43%	0.328%
23	11.852	1729	1734	1741	rVB3	90014	170915	5.04%	0.373%
24	11.922	1742	1747	1750	rBV7	50500	84076	2.48%	0.183%
25	11.970	1751	1756	1764	rVB7	66872	162611	4.79%	0.355%
26	12.055	1764	1772	1778	rVB2	149092	307669	9.07%	0.671%
27	12.114	1778	1783	1786	rBV6	56697	91610	2.70%	0.200%
28	12.178	1787	1795	1802	rVB9	84417	277892	8.19%	0.606%
29	12.269	1803	1812	1822	rBV7	91837	277234	8.17%	0.605%
30	12.365	1823	1830	1834	rVB5	32371	65661	1.93%	0.143%
31	12.435	1835	1843	1847	rBV4	123303	266223	7.84%	0.581%
32	12.542	1859	1863	1869	rBV8	40579	64860	1.91%	0.142%
33	12.600	1869	1874	1881	rVB7	67224	124987	3.68%	0.273%
34	12.680	1881	1889	1898	rBV7	98587	332024	9.78%	0.724%
35	12.803	1904	1912	1916	rVV	1751833	2711608	79.89%	5.916%
36	12.846	1916	1920	1927	rVV	591686	913642	26.92%	1.993%
37	12.910	1927	1932	1944	rVB6	149562	345514	10.18%	0.754%
38	12.996	1944	1948	1953	rBV4	66629	126473	3.73%	0.276%

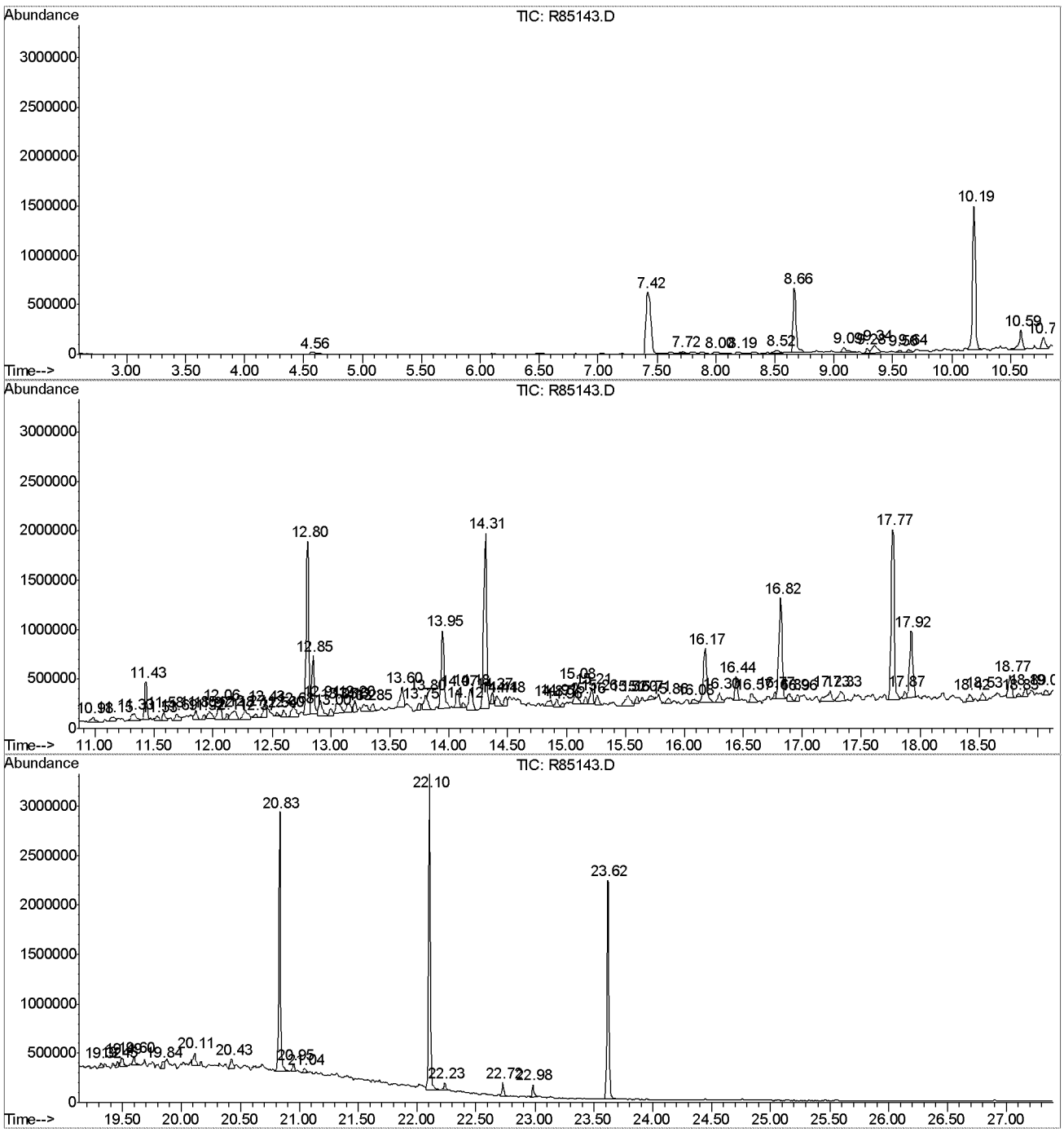
39	13.049	1953	1958	1969	rVV7	96680	299720	8.83%	0.654%
40	13.145	1970	1976	1982	rVV8	90522	253798	7.48%	0.554%
41	13.204	1983	1987	1991	rVV	114020	182477	5.38%	0.398%
42	13.279	1997	2001	2011	rVV9	68133	210413	6.20%	0.459%
43	13.354	2011	2015	2022	rVB2	65546	117226	3.45%	0.256%
44	13.605	2052	2062	2066	rBV4	202736	391649	11.54%	0.854%
45	13.749	2083	2089	2092	rBV7	77886	148197	4.37%	0.323%
46	13.802	2094	2099	2110	rVB4	151575	347326	10.23%	0.758%
47	13.947	2119	2126	2138	rVB	778831	1327903	39.13%	2.897%
48	14.075	2143	2150	2155	rBV3	181325	304404	8.97%	0.664%
49	14.123	2155	2159	2163	rBV5	54086	69832	2.06%	0.152%
50	14.182	2164	2170	2181	rVB5	209534	487265	14.36%	1.063%
51	14.310	2184	2194	2201	rBV	1779075	2971011	87.54%	6.482%
52	14.369	2201	2205	2208	rBV2	111800	149763	4.41%	0.327%
53	14.411	2209	2213	2221	rVB5	97622	202978	5.98%	0.443%
54	14.481	2221	2226	2229	rBV6	92860	157615	4.64%	0.344%
55	14.865	2288	2298	2302	rBV7	58193	151380	4.46%	0.330%
56	14.913	2303	2307	2312	rVB6	79221	125053	3.68%	0.273%
57	14.961	2313	2316	2320	rBV4	41274	67469	1.99%	0.147%
58	15.079	2332	2338	2348	rVB6	213114	400881	11.81%	0.875%
59	15.159	2349	2353	2357	rVV4	72710	113053	3.33%	0.247%
60	15.213	2357	2363	2367	rVV	164662	281744	8.30%	0.615%
61	15.261	2368	2372	2379	rVB4	100089	159293	4.69%	0.348%
62	15.517	2410	2420	2430	rBV5	107870	365037	10.76%	0.796%
63	15.597	2430	2435	2439	rBV3	78249	116557	3.43%	0.254%
64	15.715	2452	2457	2463	rVV9	38700	92268	2.72%	0.201%
65	15.859	2480	2484	2491	rBV7	55256	115642	3.41%	0.252%
66	16.083	2520	2526	2534	rBV7	40054	110694	3.26%	0.242%
67	16.174	2535	2543	2557	rVB	547645	1137664	33.52%	2.482%
68	16.297	2560	2566	2573	rBV5	94802	185607	5.47%	0.405%
69	16.436	2587	2592	2598	rVB	247358	336623	9.92%	0.734%
70	16.569	2612	2617	2627	rBV7	90406	215431	6.35%	0.470%
71	16.767	2649	2654	2655	rVV4	73453	85422	2.52%	0.186%
72	16.815	2655	2663	2671	rVV	1020930	1955293	57.61%	4.266%
73	16.890	2673	2677	2685	rVB8	76037	156588	4.61%	0.342%
74	16.959	2685	2690	2693	rBV3	62896	113579	3.35%	0.248%
75	17.232	2726	2741	2749	rBV9	111054	386557	11.39%	0.843%
76	17.328	2750	2759	2767	rVB5	98969	293997	8.66%	0.641%
77	17.766	2833	2841	2852	rBV2	1726199	3005977	88.57%	6.558%
78	17.868	2856	2860	2863	rVV5	70807	103161	3.04%	0.225%
79	17.921	2863	2870	2879	rVB	666072	1325121	39.04%	2.891%
80	18.418	2958	2963	2970	rBV8	77332	172318	5.08%	0.376%
81	18.530	2980	2984	2990	rVB2	78320	132685	3.91%	0.289%
82	18.765	3021	3028	3036	rVB2	223936	442089	13.03%	0.965%
83	18.835	3037	3041	3047	rBV9	36445	68767	2.03%	0.150%
84	18.893	3047	3052	3056	rBV5	76587	133818	3.94%	0.292%
85	19.064	3080	3084	3091	rBV7	55911	99447	2.93%	0.217%
86	19.315	3127	3131	3135	rBV7	49512	68907	2.03%	0.150%
87	19.454	3154	3157	3160	rVV3	55781	81099	2.39%	0.177%
88	19.492	3161	3164	3173	rVB3	93002	164352	4.84%	0.359%
89	19.598	3180	3184	3193	rVB5	78246	135693	4.00%	0.296%
90	19.839	3225	3229	3232	rBV5	70301	115326	3.40%	0.252%
91	20.111	3276	3280	3287	rVB2	127671	201851	5.95%	0.440%
92	20.427	3334	3339	3343	rBV7	95243	179187	5.28%	0.391%
93	20.833	3408	3415	3429	rVB	2623926	2941915	86.68%	6.419%
94	20.950	3433	3437	3441	rVB3	74910	96544	2.84%	0.211%
95	21.041	3450	3454	3459	rBV7	48992	84712	2.50%	0.185%

96	22.104	3647	3653	3671	rVB	3200299	3393965	100.00%	7.405%
97	22.232	3672	3677	3684	rVB	76016	100027	2.95%	0.218%
98	22.724	3765	3769	3778	rVB	142399	172085	5.07%	0.375%
99	22.980	3813	3817	3826	rVB	125217	154374	4.55%	0.337%
100	23.616	3929	3936	3956	rVB	2216161	2775373	81.77%	6.055%

Sum of corrected areas: 45834859

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85143.D
Operator : larisap
Acquired : 28 Jan 2011 6:52 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-6
Misc Info : op47853,er3224,1000
Vial Number: 7
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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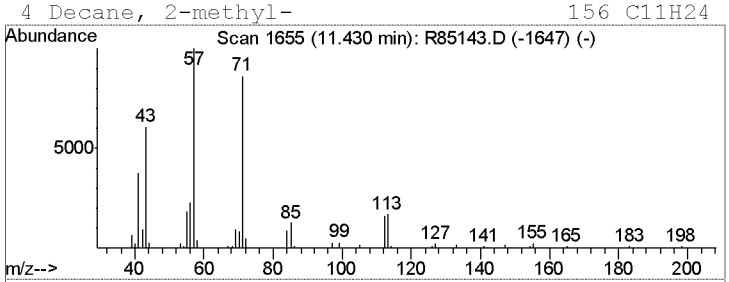
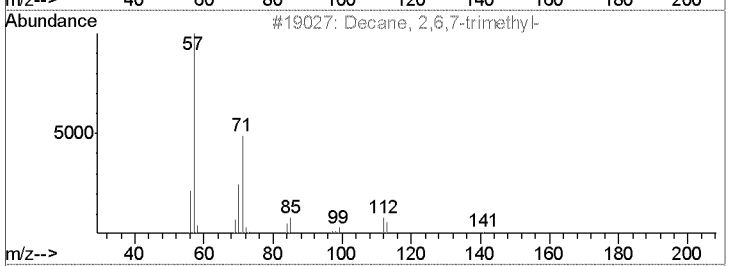
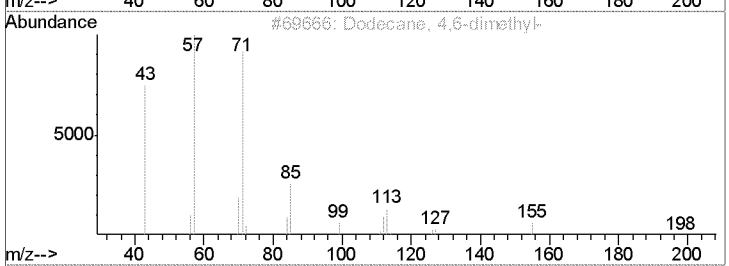
Peak Number 1 alkane Concentration Rank 5

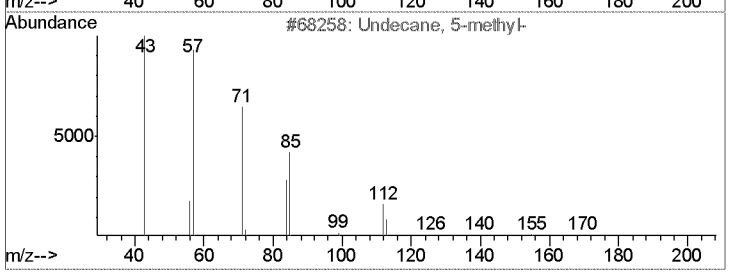
R.T.	EstConc	Area	Relative to ISTD	R.T.
11.43	9.32 ppb	574403	Naphthalene-d8	10.19

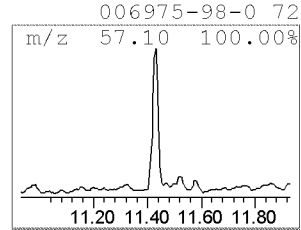
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,6,7-trimethyl-	184	C13H28	062108-25-2	83
2	Dodecane, 4,6-dimethyl-	198	C14H30	061141-72-8	72
3	Undecane, 5-methyl-	170	C12H26	001632-70-8	72
4	Decane, 2-methyl-	156	C11H24	006975-98-0	72

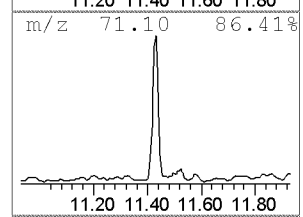


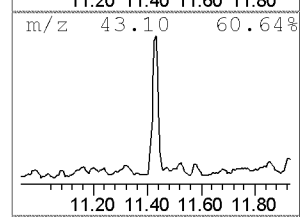


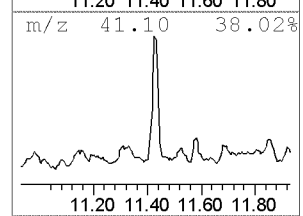


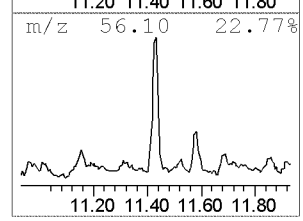












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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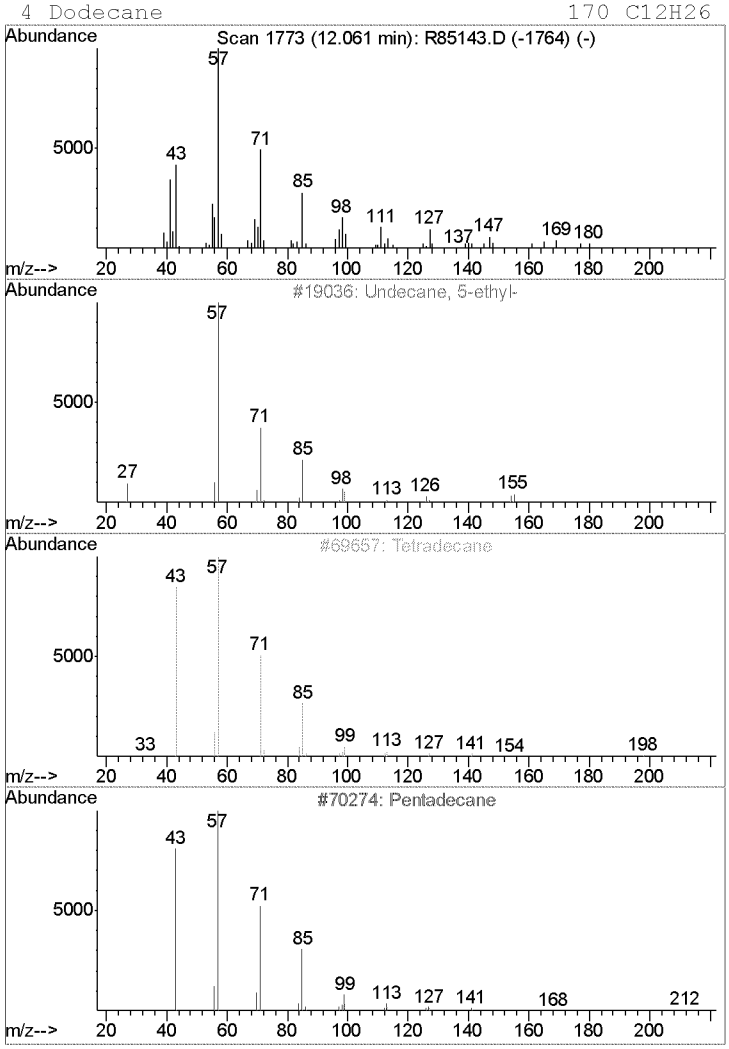
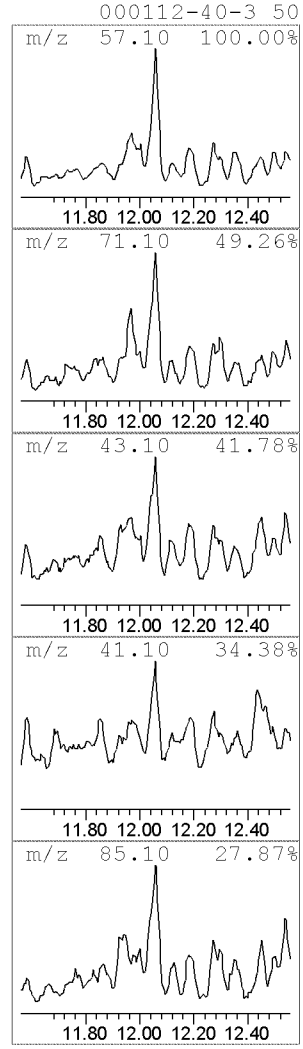
Peak Number 2 alkane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.06	4.99 ppb	307669	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 5-ethyl-	184	C13H28	017453-94-0	53
2	Tetradecane	198	C14H30	000629-59-4	50
3	Pentadecane	212	C15H32	000629-62-9	50
4	Dodecane	170	C12H26	000112-40-3	50





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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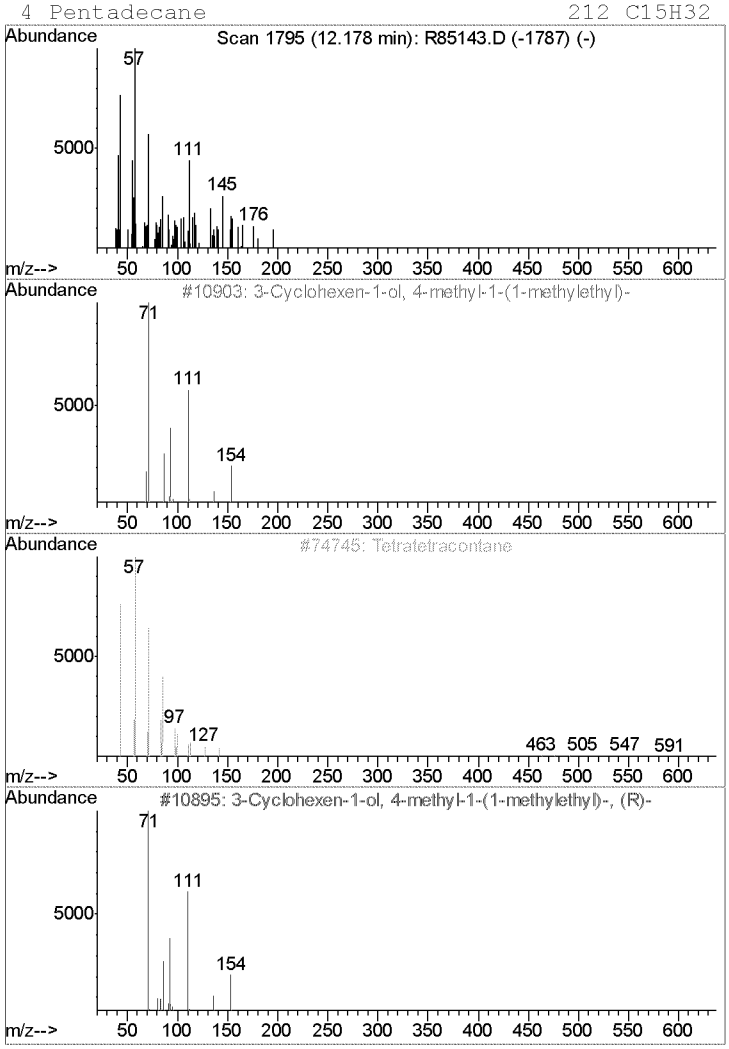
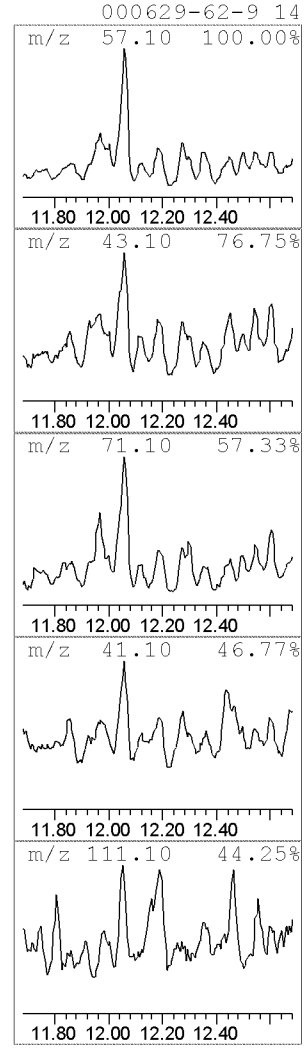
Peak Number 3 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.18	4.51 ppb	277892	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexen-1-ol, 4-methyl-1-(1...	154	C10H18O	000562-74-3	30
2	Tetratetracontane	619	C44H90	007098-22-8	22
3	3-Cyclohexen-1-ol, 4-methyl-1-(1...	154	C10H18O	020126-76-5	18
4	Pentadecane	212	C15H32	000629-62-9	14





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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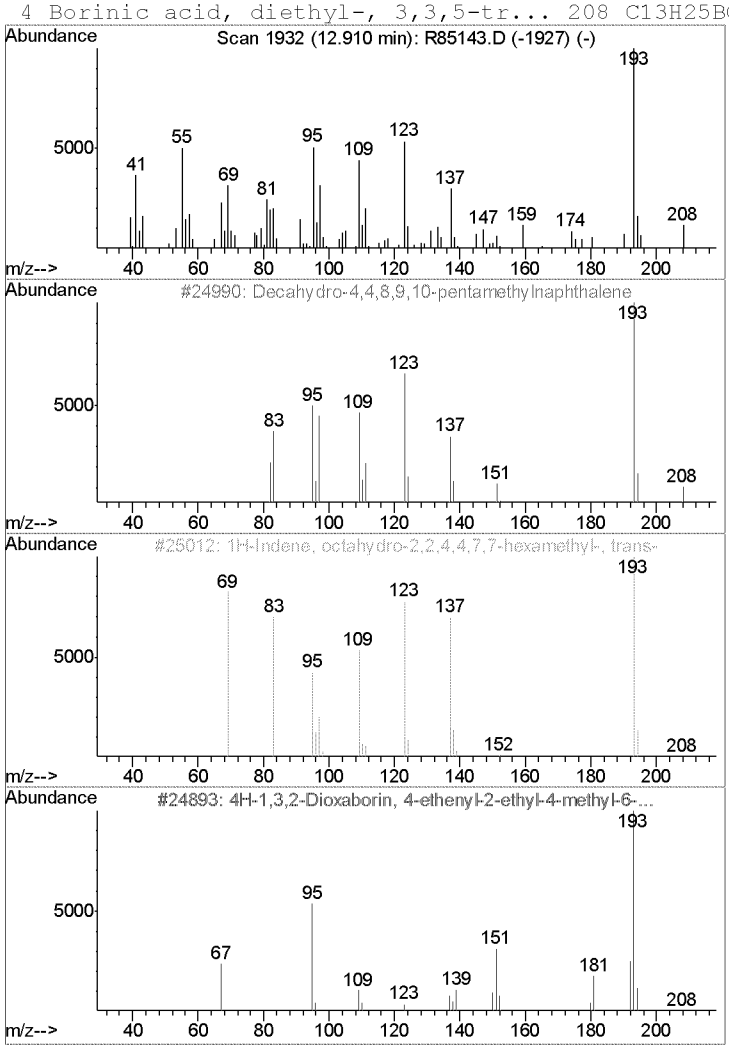
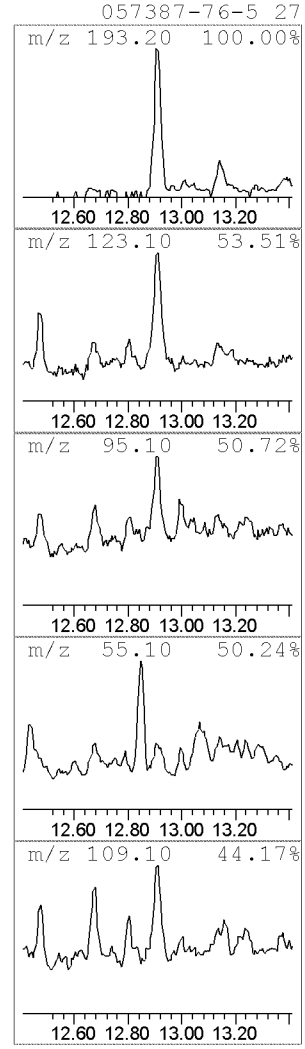
Peak Number 4 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.91	4.65 ppb	345514	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	000000-00-0	90
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	42
3	4H-1,3,2-Dioxaborin, 4-ethenyl-2...	208	C12H21BO2	074630-04-9	38
4	Borinic acid, diethyl-, 3,3,5-tr...	208	C13H25BO	057387-76-5	27





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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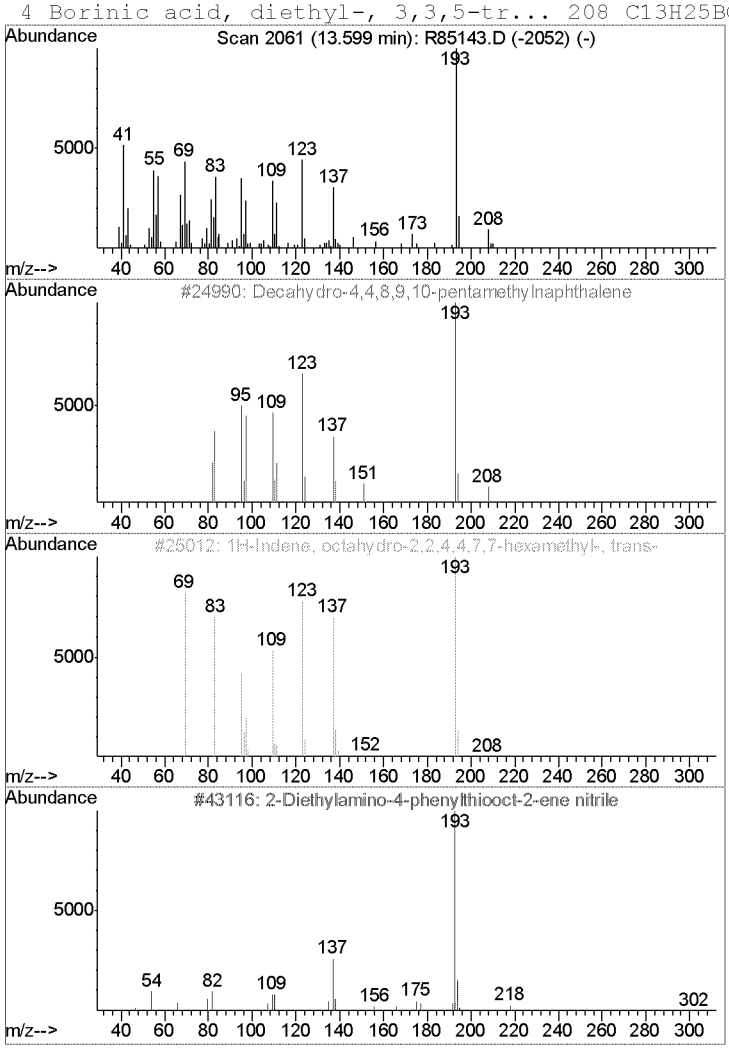
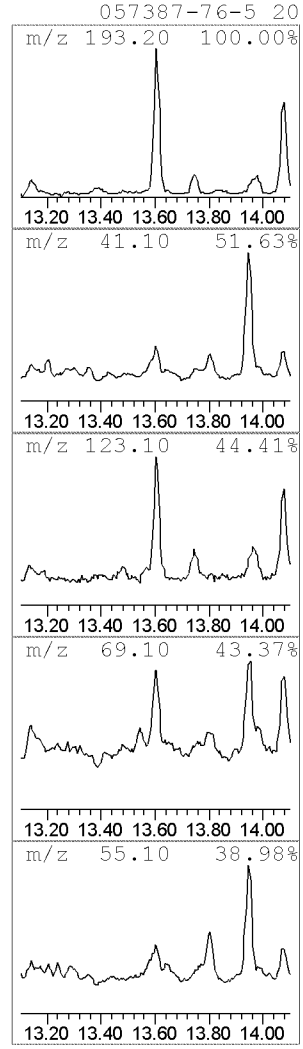
Peak Number 5 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.60	5.27 ppb	391649	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	000000-00-0	87
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	38
3	2-Diethylamino-4-phenylthiooct-2...	302	C18H26N2S	000000-00-0	25
4	Borinic acid, diethyl-, 3,3,5-tr...	208	C13H25BO	057387-76-5	20





8.1.12 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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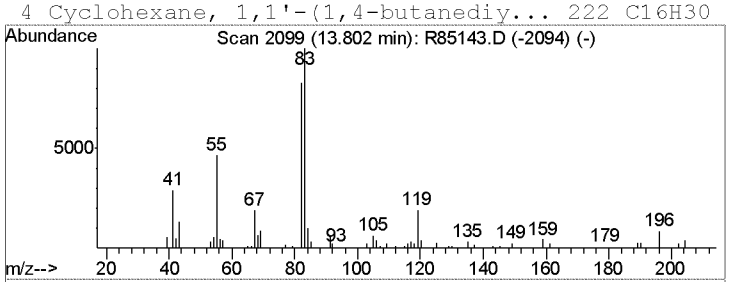
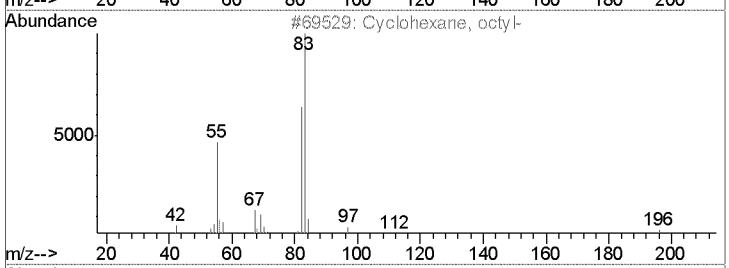
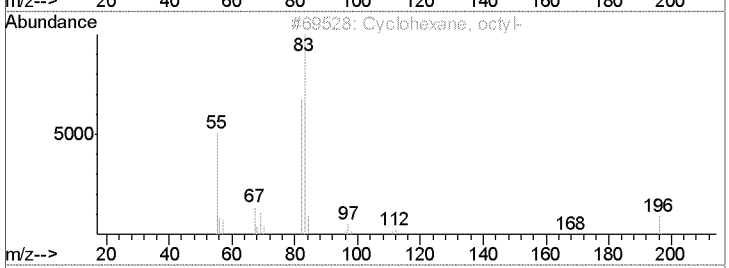
Peak Number 6 cycloalkane/alkene Concentration Rank 14

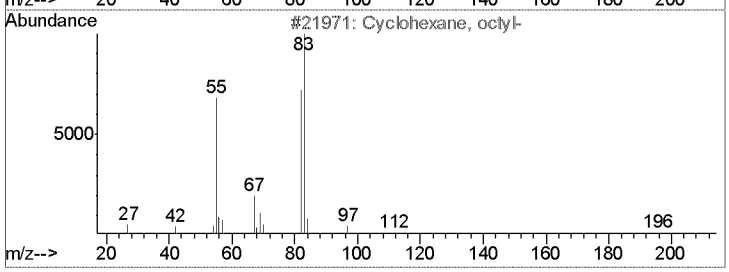
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.80	4.68 ppb	347326	Acenaphthene-d10	14.31

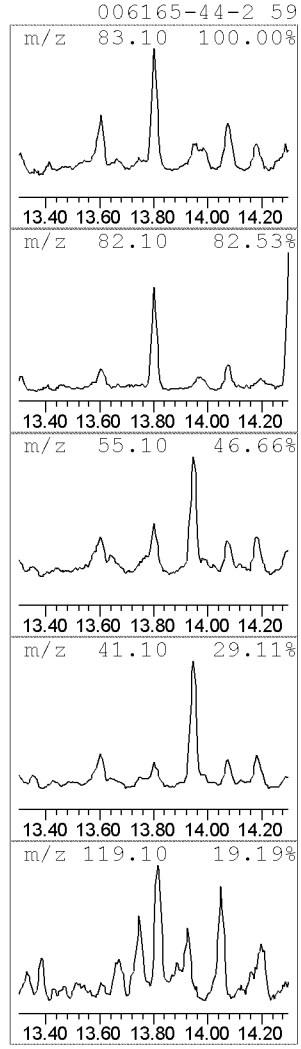
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
2	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
3	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
4	Cyclohexane, 1,1'-(1,4-butanediy...	222	C16H30	006165-44-2	59











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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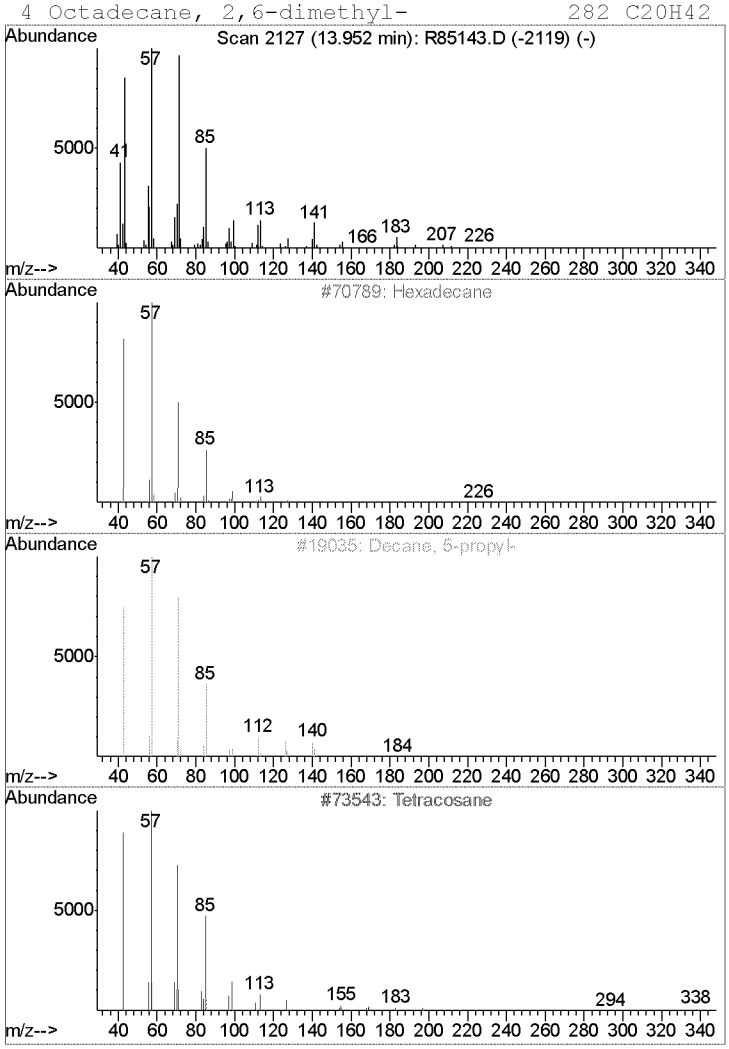
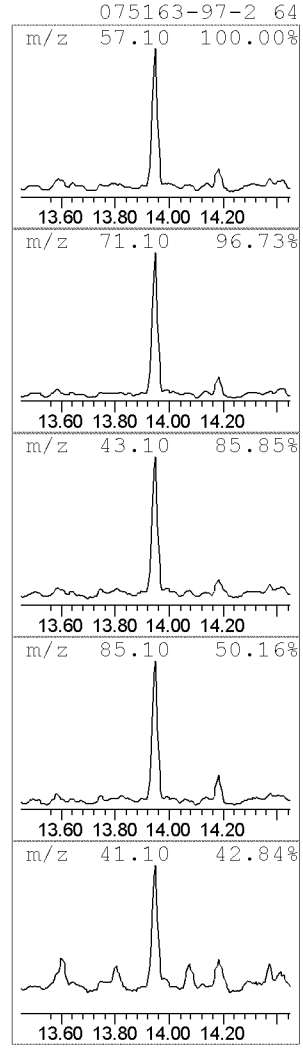
Peak Number 7 alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.95	17.88 ppb	1327900	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	76
2	Decane, 5-propyl-	184	C13H28	017312-62-8	74
3	Tetracosane	338	C24H50	000646-31-1	72
4	Octadecane, 2,6-dimethyl-	282	C20H42	075163-97-2	64





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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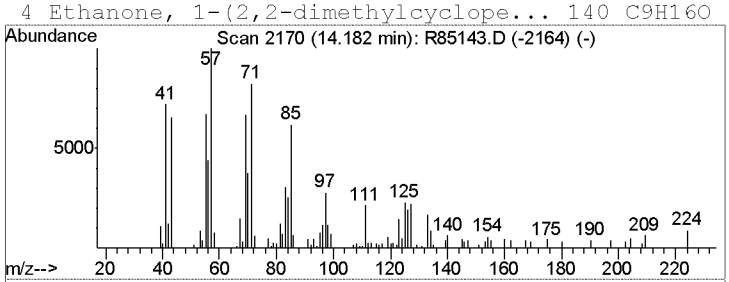
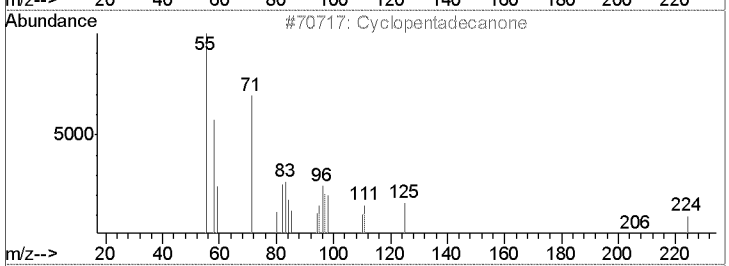
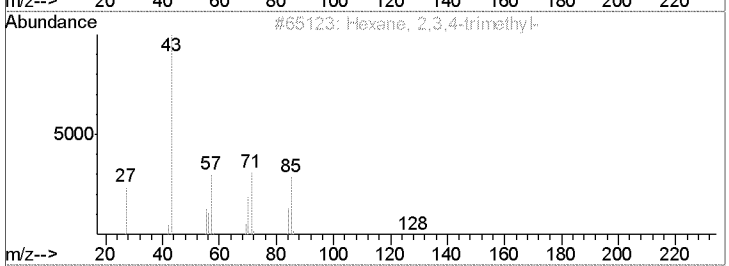
Peak Number 8 unknown Concentration Rank 7

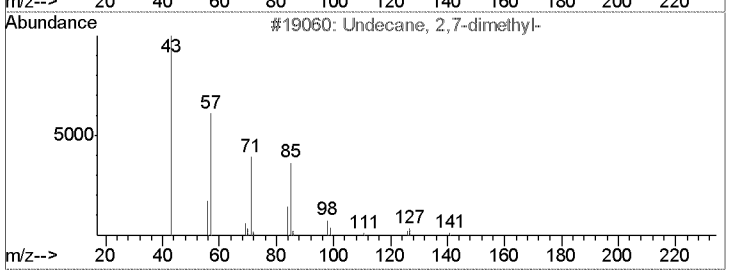
R.T.	EstConc	Area	Relative to ISTD	R.T.
14.18	6.56 ppb	487265	Acenaphthene-d10	14.31

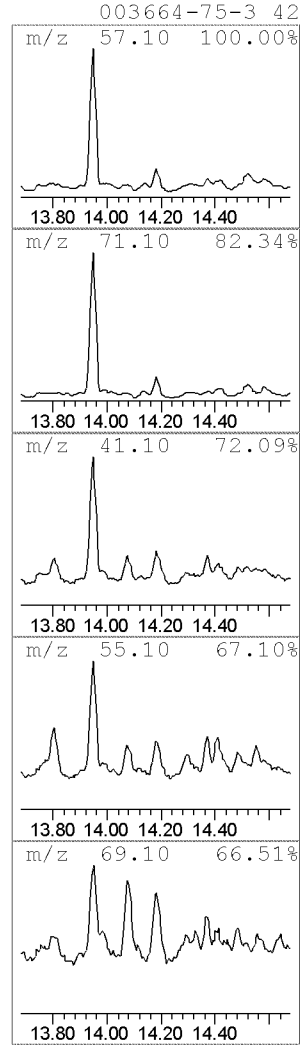
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentadecanone	224	C15H28O	000502-72-7	49
2	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	46
3	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	46
4	Ethanone, 1-(2,2-dimethylcyclope...	140	C9H16O	003664-75-3	42











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

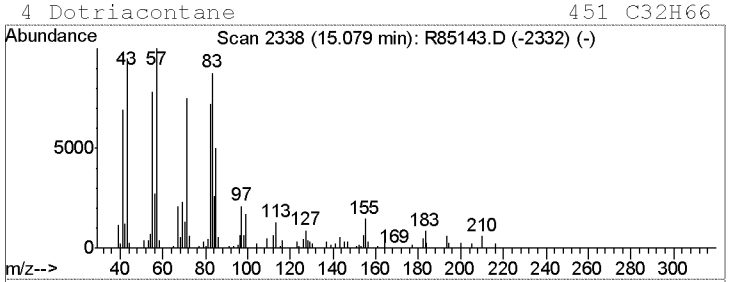
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

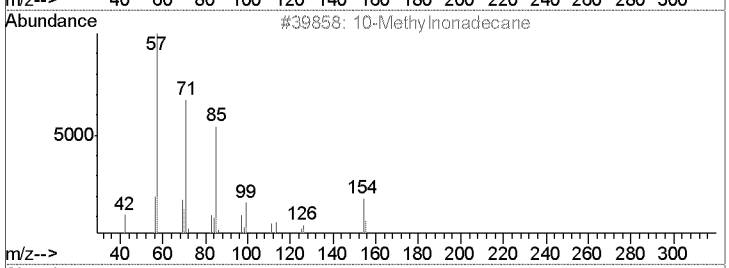
****

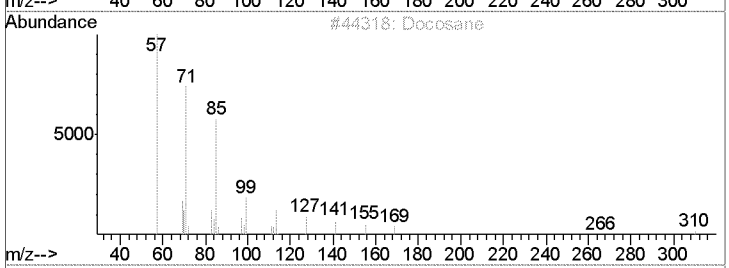
Peak Number 9 alkane Concentration Rank 9

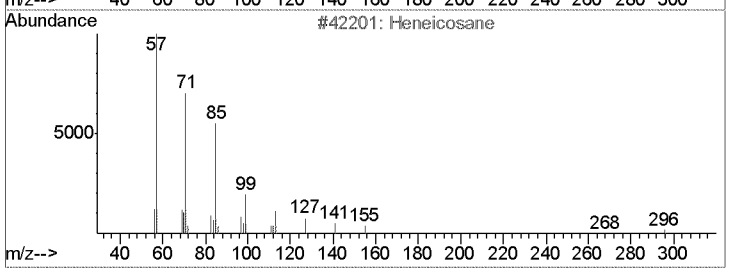
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.08	5.40 ppb	400881	Acenaphthene-d10a	14.31

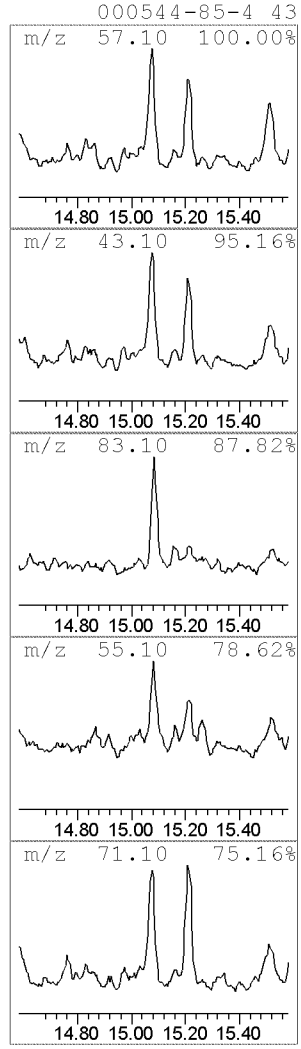
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10-Methylnonadecane	282	C20H42	000000-00-0	46
2	Docosane	310	C22H46	000629-97-0	43
3	Heneicosane	296	C21H44	000629-94-7	43
4	Dotriacontane	451	C32H66	000544-85-4	43











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

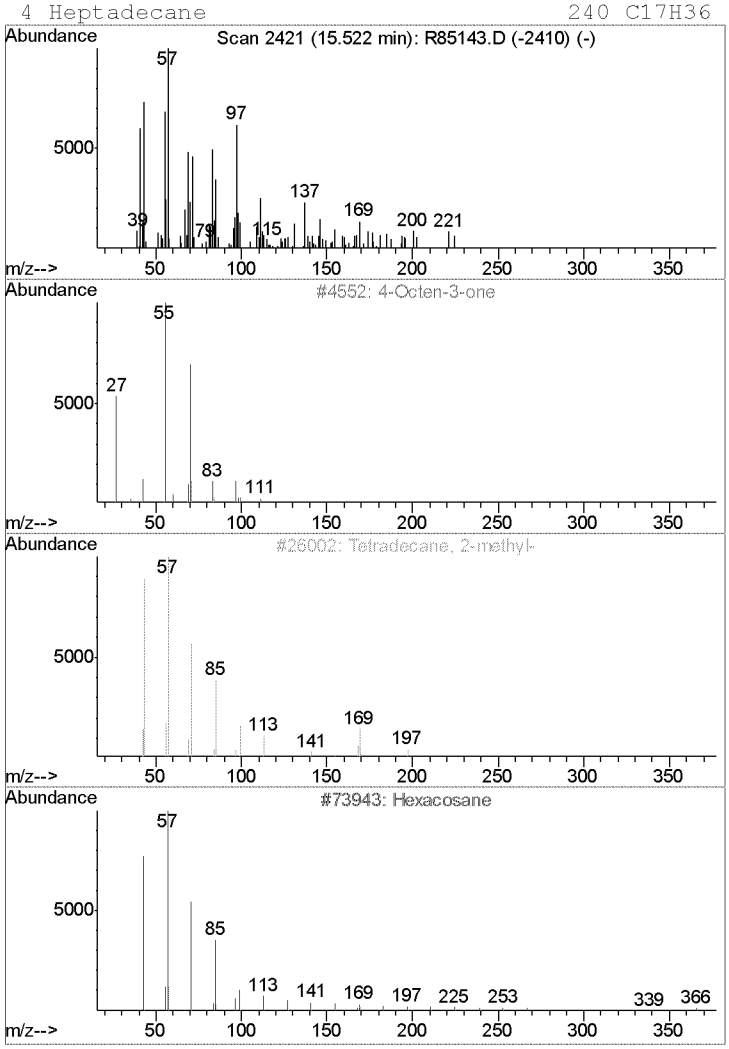
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

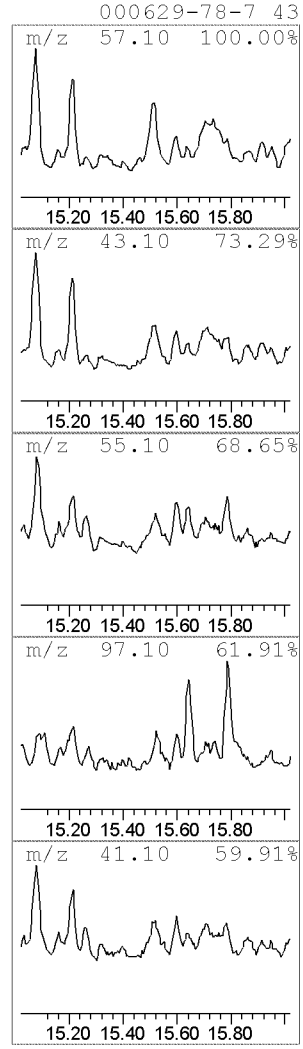
****

Peak Number 10 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.52	4.91 ppb	365037	Acenaphthene-d10a	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Octen-3-one	126	C8H14O	014129-48-7	52
2	Tetradecane, 2-methyl-	212	C15H32	001560-95-8	43
3	Hexacosane	366	C26H54	000630-01-3	43
4	Heptadecane	240	C17H36	000629-78-7	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

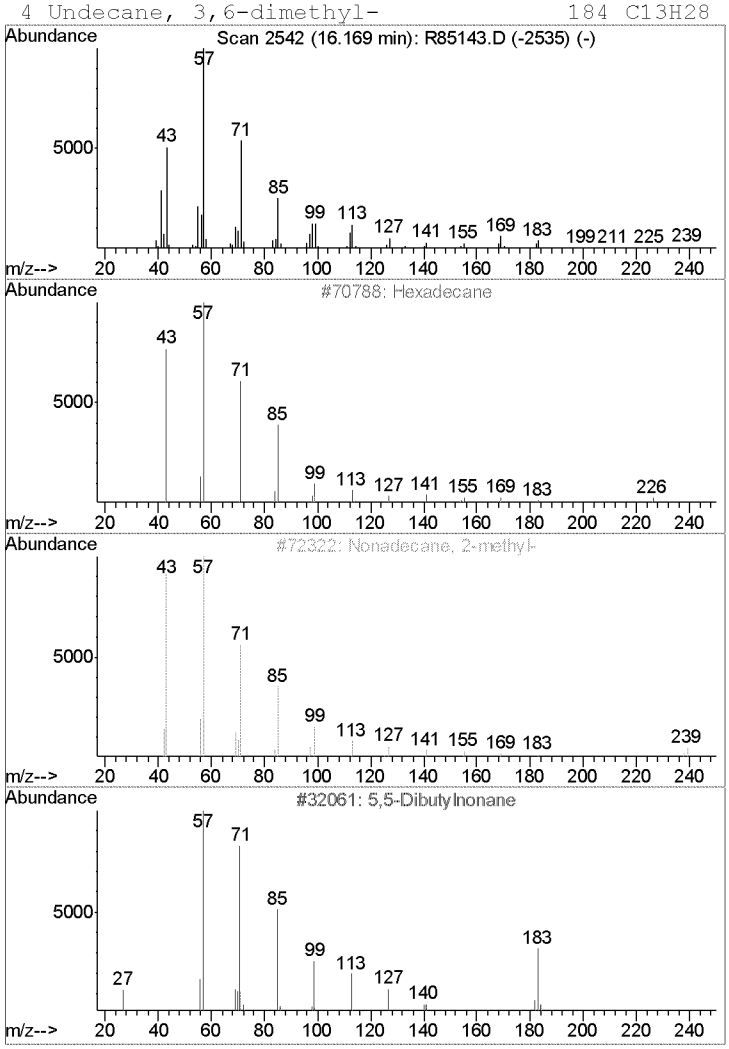
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

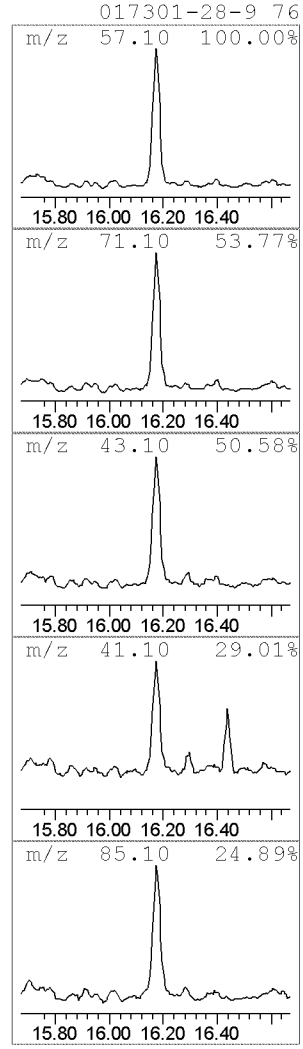
****

Peak Number 11 alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.17	15.14 ppb	1137660	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	80
2	Nonadecane, 2-methyl-	282	C20H42	001560-86-7	80
3	5,5-Dibutylnonane	240	C17H36	000000-00-0	78
4	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	76





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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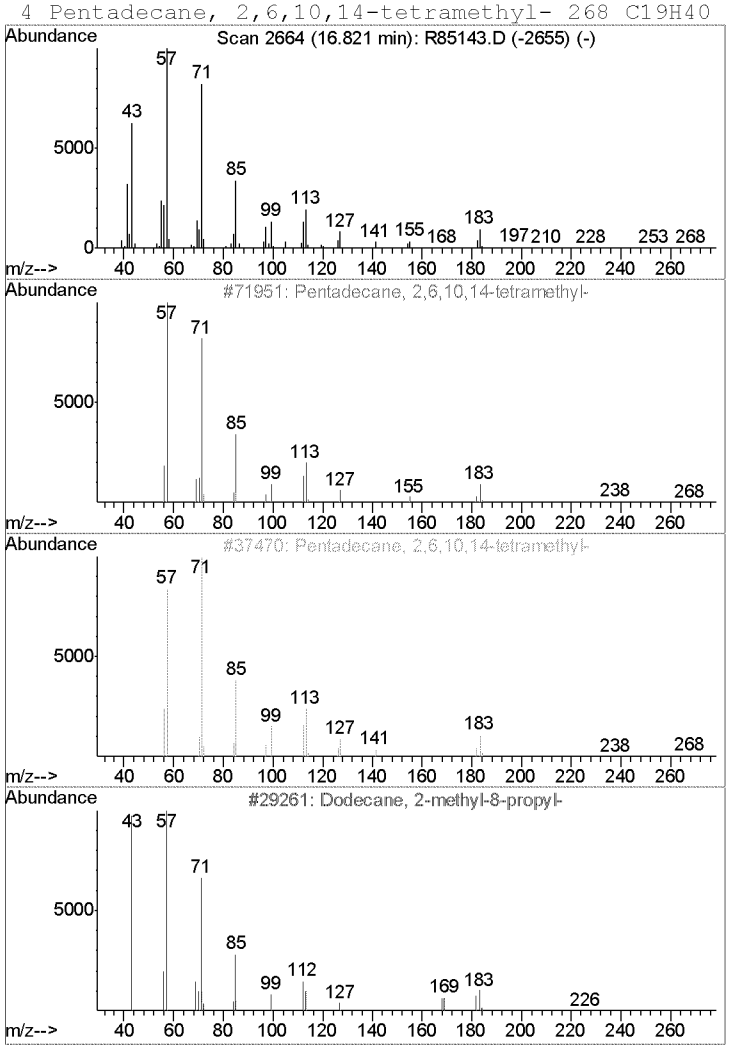
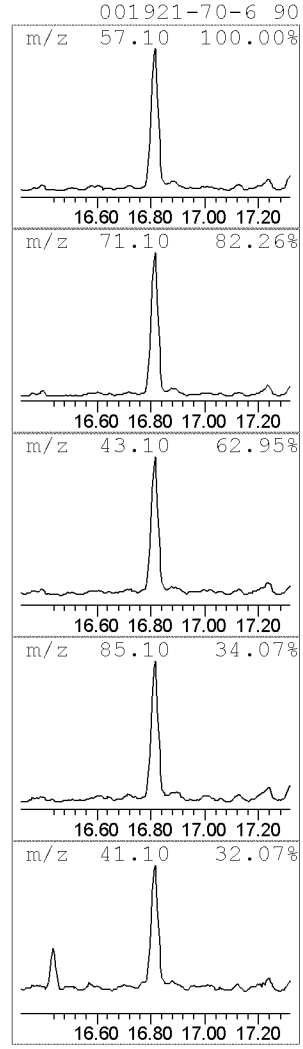
Peak Number 12 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.82	26.02 ppb	1955290	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90
3	Dodecane, 2-methyl-8-propyl-	226	C16H34	055045-07-3	90
4	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90





8.1.12 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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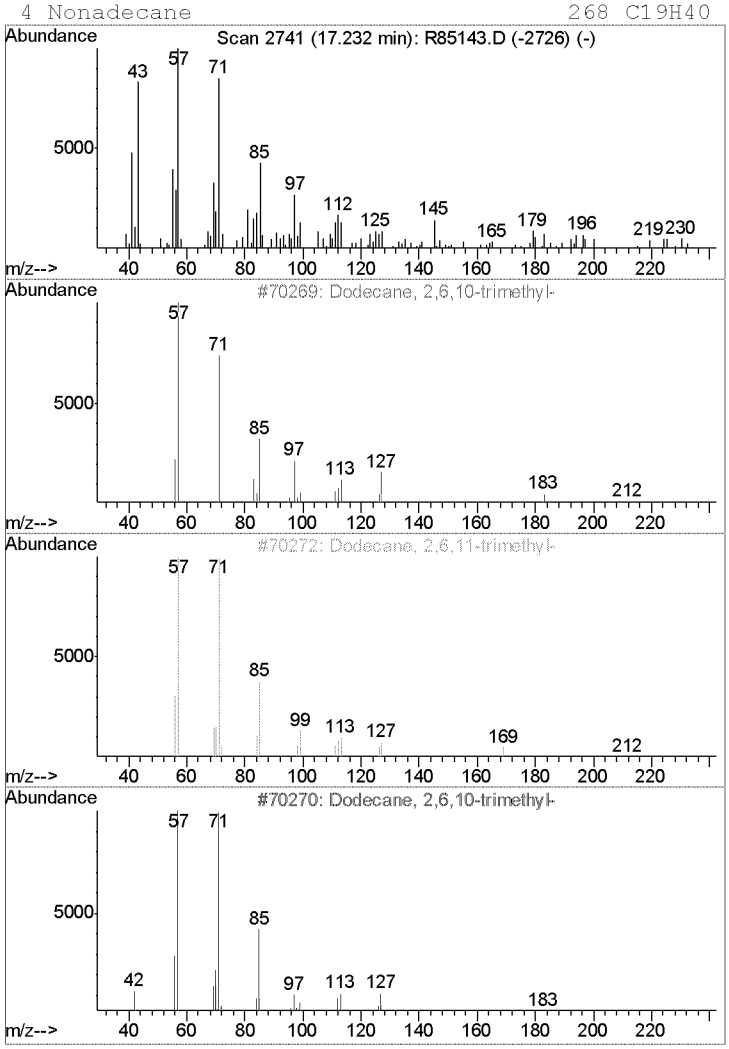
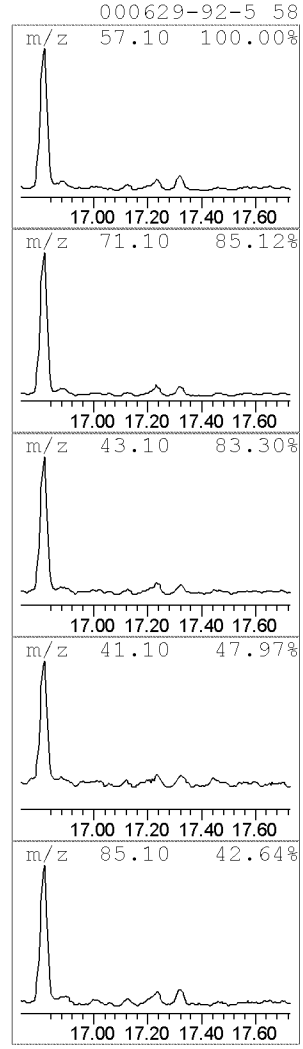
Peak Number 13 alkane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.23	5.14 ppb	386557	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	74
2	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	58
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	58
4	Nonadecane	268	C19H40	000629-92-5	58





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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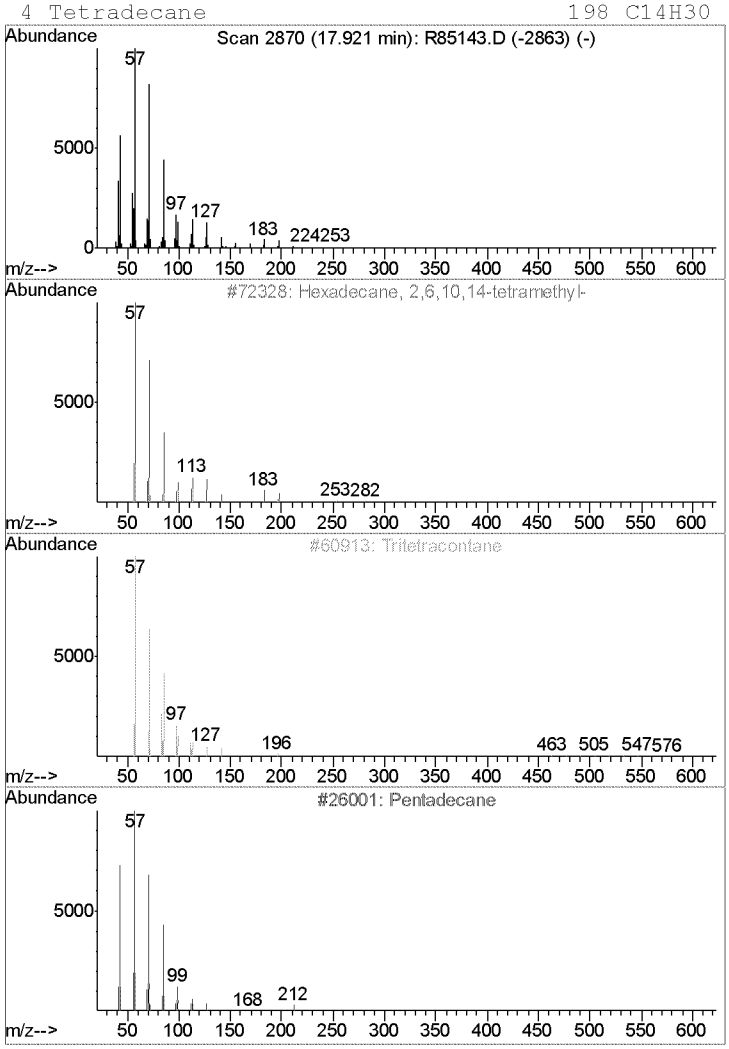
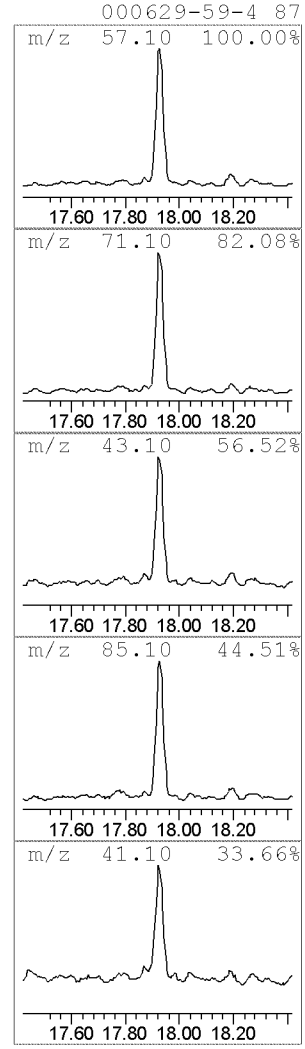
Peak Number 14 alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.92	17.63 ppb	1325120	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90
2	Tritetracontane	605	C43H88	007098-21-7	90
3	Pentadecane	212	C15H32	000629-62-9	87
4	Tetradecane	198	C14H30	000629-59-4	87





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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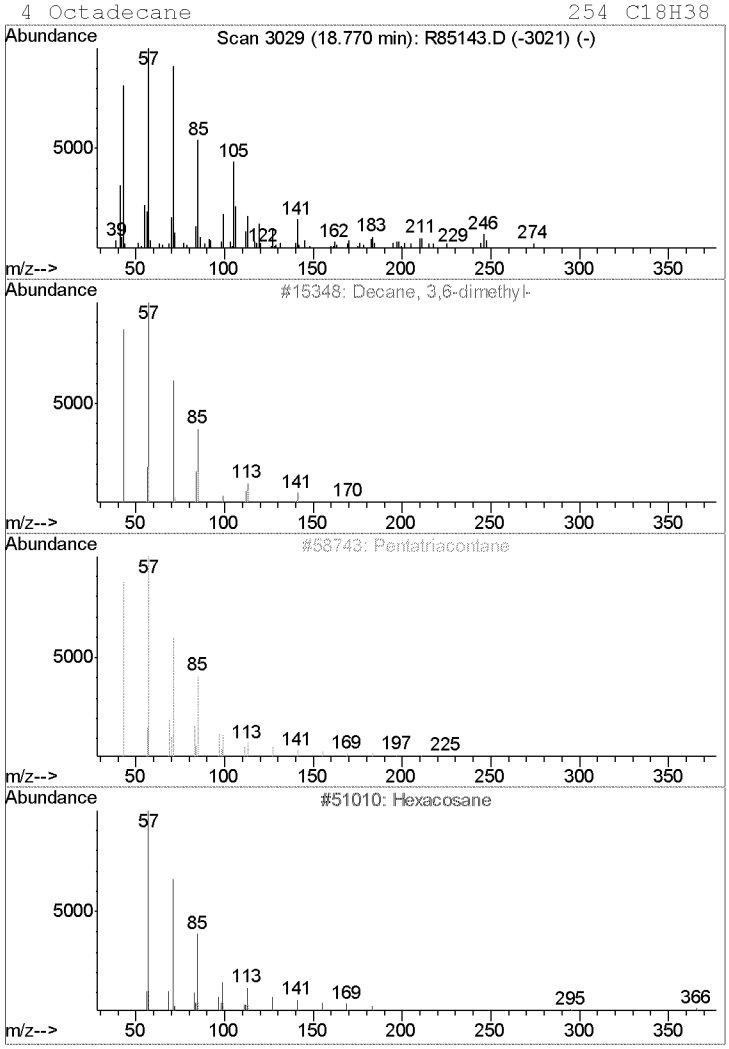
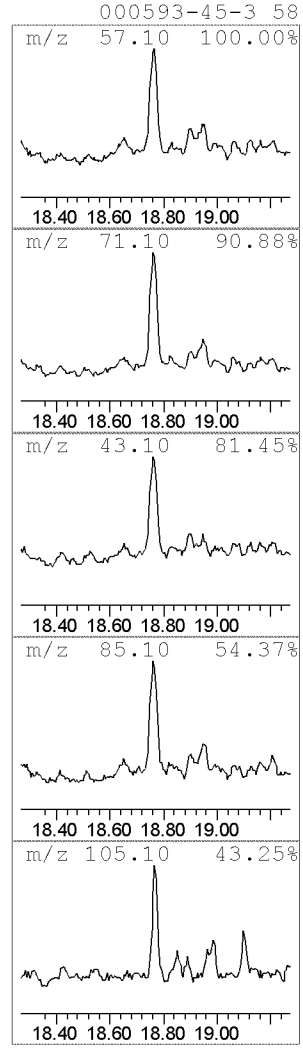
Peak Number 15 alkane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.77	5.88 ppb	442089	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3,6-dimethyl-	170	C12H26	017312-53-7	62
2	Pentatriacontane	493	C35H72	000630-07-9	59
3	Hexacosane	366	C26H54	000630-01-3	59
4	Octadecane	254	C18H38	000593-45-3	58





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 6:52 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85143.D
Name: ja66701-6
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
alkane	11.43	9.3	ppb	574403	3	10.19	2464400	40.0
alkane	12.06	5.0	ppb	307669	3	10.19	2464400	40.0
unknown	12.18	4.5	ppb	277892	3	10.19	2464400	40.0
unknown	12.91	4.7	ppb	345514	4	14.31	2971010	40.0
unknown	13.60	5.3	ppb	391649	4	14.31	2971010	40.0
cycloalkane/alkene	13.80	4.7	ppb	347326	4	14.31	2971010	40.0
alkane	13.95	17.9	ppb	1327900	4	14.31	2971010	40.0
unknown	14.18	6.6	ppb	487265	4	14.31	2971010	40.0
alkane	15.08	5.4	ppb	400881	5	14.31	2971010	40.0
unknown	15.52	4.9	ppb	365037	5	14.31	2971010	40.0
alkane	16.17	15.1	ppb	1137660	6	17.77	3005980	40.0
alkane	16.82	26.0	ppb	1955290	6	17.77	3005980	40.0
alkane	17.23	5.1	ppb	386557	6	17.77	3005980	40.0
alkane	17.92	17.6	ppb	1325120	6	17.77	3005980	40.0
alkane	18.77	5.9	ppb	442089	6	17.77	3005980	40.0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:55 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

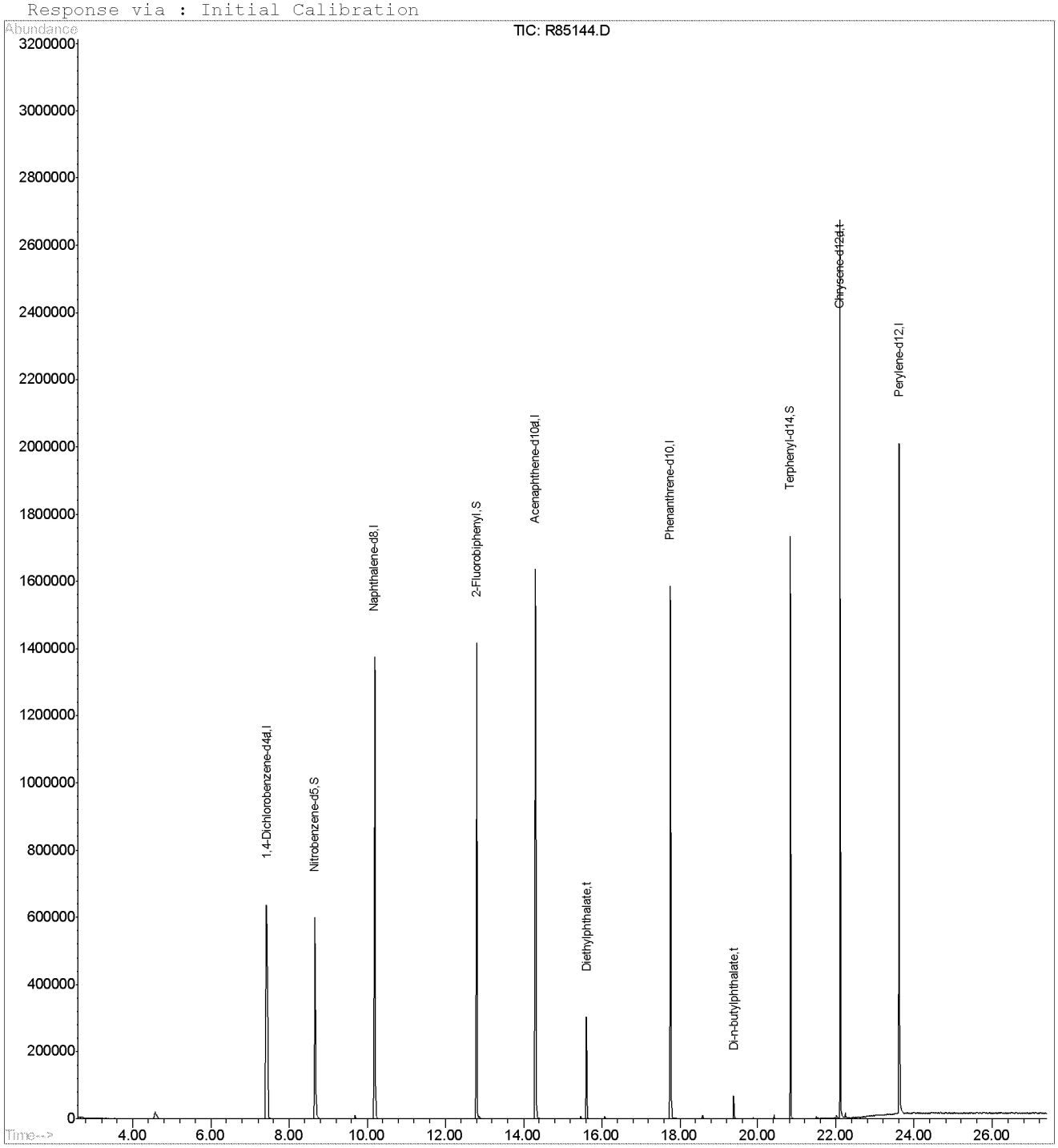
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	313571	40.00	ppb	-0.20
24) Naphthalene-d8	10.18	136	1099645	40.00	ppb	-0.21
47) Acenaphthene-d10	14.30	164	627129	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	982814	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	987860	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	833059	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	313571	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.30	164	627129	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	987860	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	374183	37.44	ppb	-0.20
Spiked Amount 50.000			Recovery =	74.88%		
51) 2-Fluorobiphenyl	12.80	172	744539	33.73	ppb	-0.21
Spiked Amount 50.000			Recovery =	67.46%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	571207	30.68	ppb	-0.15
Spiked Amount 50.000			Recovery =	61.36%		
Target Compounds						Qvalue
65) Diethylphthalate	15.61	149	196912	8.68	ppb	96
80) Di-n-butylphthalate	19.38	149	50729	1.46	ppb	98

(#) = qualifier out of range (m) = manual integration
R85144.D MR3151.M Fri Jan 28 20:55:19 2011 NJMSR

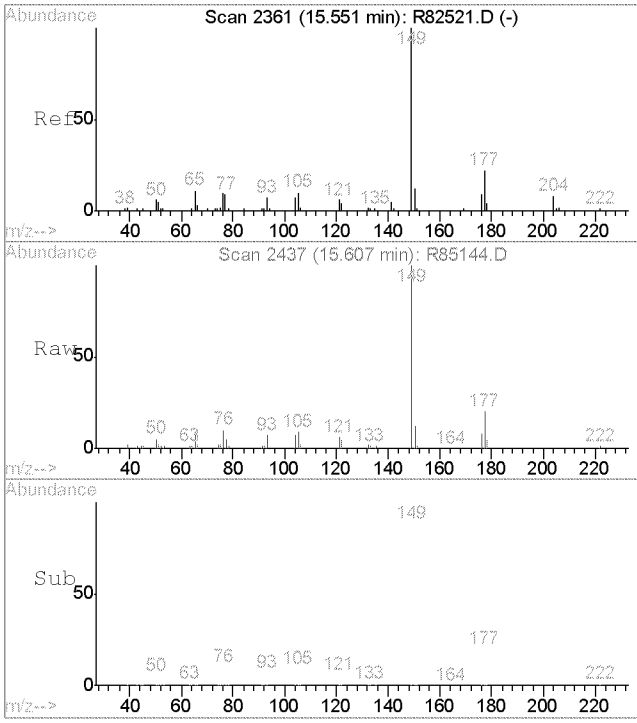
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:55 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



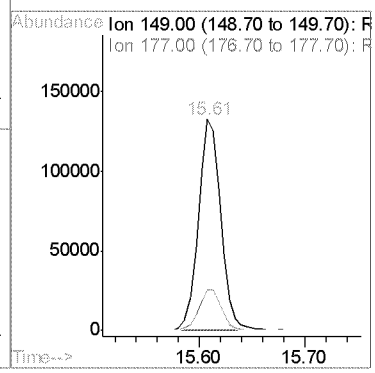
ACCUTEST LABORATORIES JA66701

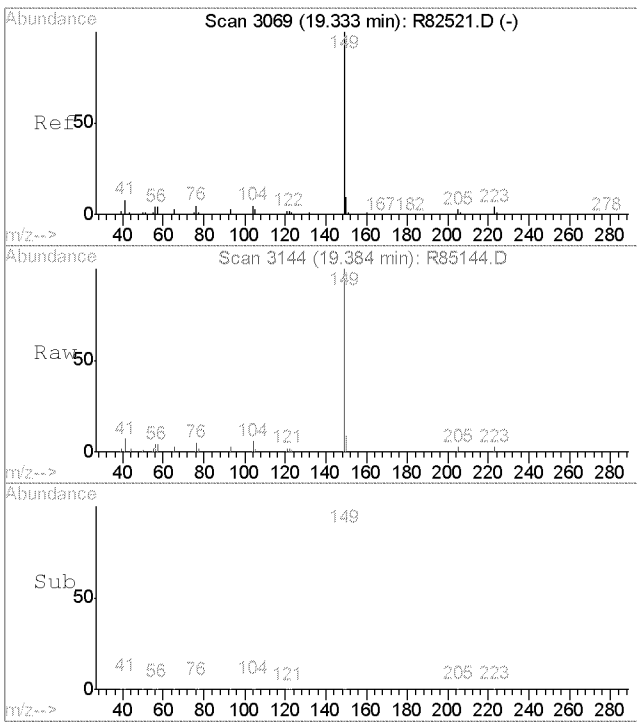


#65
Diethylphthalate
Concen: 8.68 ppb
RT: 15.61 min Scan# 2437
Delta R.T. -0.23 min
Lab File: R85144.D
Acq: 28 Jan 2011 7:28 pm

Tgt Ion:149 Resp: 196912

Ion	Ratio	Lower	Upper
149	100		
177	19.7	0.0	52.1
150	11.7	0.0	42.3

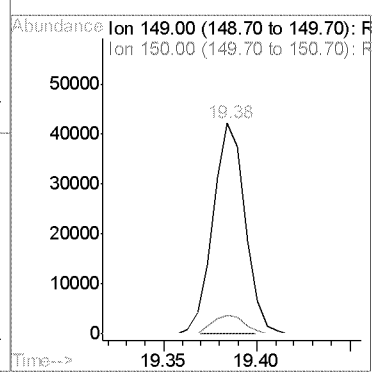




#80
Di-n-butylphthalate
Concen: 1.46 ppb
RT: 19.38 min Scan# 3144
Delta R.T. -0.18 min
Lab File: R85144.D
Acq: 28 Jan 2011 7:28 pm

Tgt Ion:149 Resp: 50729

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.7
104	5.5	0.0	35.0



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.722	23	25	33	rVB2	1540	2568	0.09%	0.013%
2	2.850	45	49	54	rVB2	1313	1969	0.07%	0.010%
3	4.191	294	300	305	rBV2	1374	2140	0.08%	0.011%
4	4.474	349	353	358	rBB	1170	2058	0.07%	0.010%
5	4.565	363	370	397	rBV2	20193	85082	3.06%	0.418%
6	7.418	896	904	932	rBB2	637015	1751317	62.99%	8.600%
7	7.738	958	964	968	rBB	1903	2786	0.10%	0.014%
8	8.662	1130	1137	1174	rBB	600039	1089735	39.20%	5.351%
9	9.688	1324	1329	1335	rBB	11660	14513	0.52%	0.071%
10	10.185	1414	1422	1453	rBV	1376027	2242415	80.65%	11.011%
11	12.797	1903	1911	1921	rBV	1418067	2104096	75.68%	10.332%
12	12.867	1921	1924	1933	rVV3	9287	17483	0.63%	0.086%
13	12.936	1933	1937	1941	rVV	2187	4258	0.15%	0.021%
14	14.058	2141	2147	2149	rBV	1893	2729	0.10%	0.013%
15	14.111	2153	2157	2162	rBB	2082	1962	0.07%	0.010%
16	14.304	2184	2193	2210	rBV	1636633	2575305	92.63%	12.646%
17	14.405	2210	2212	2230	rVB2	2322	7034	0.25%	0.035%
18	15.463	2405	2410	2416	rBB	8770	11899	0.43%	0.058%
19	15.607	2428	2437	2455	rBB	303362	444350	15.98%	2.182%
20	16.083	2519	2526	2533	rBB3	8414	12493	0.45%	0.061%
21	17.482	2781	2788	2795	rBB	2906	4878	0.18%	0.024%
22	17.760	2832	2840	2856	rBV2	1586558	2572274	92.52%	12.631%
23	17.899	2859	2866	2874	rVV2	3975	11157	0.40%	0.055%
24	18.577	2986	2993	2999	rBV	11684	16872	0.61%	0.083%
25	19.384	3134	3144	3150	rVB	68445	79456	2.86%	0.390%
26	19.865	3231	3234	3240	rVB	4532	4297	0.15%	0.021%
27	20.415	3332	3337	3342	rBV	11485	11219	0.40%	0.055%
28	20.826	3408	3414	3433	rBV	1735737	1844209	66.33%	9.056%
29	21.478	3530	3536	3540	rVB2	7065	6476	0.23%	0.032%
30	21.532	3540	3546	3551	rBV2	4548	5704	0.21%	0.028%
31	21.596	3551	3558	3565	rBV3	3100	4871	0.18%	0.024%
32	21.975	3621	3629	3633	rBV3	4603	6890	0.25%	0.034%
33	22.023	3633	3638	3645	rVB2	7704	12079	0.43%	0.059%
34	22.103	3647	3653	3671	rBV	2676043	2780273	100.00%	13.652%
35	22.231	3672	3677	3684	rVV	14239	16311	0.59%	0.080%
36	22.344	3694	3698	3704	rVB4	1523	2215	0.08%	0.011%
37	22.541	3729	3735	3736	rVV3	1500	1976	0.07%	0.010%
38	22.616	3747	3749	3751	rBV2	2662	2414	0.09%	0.012%

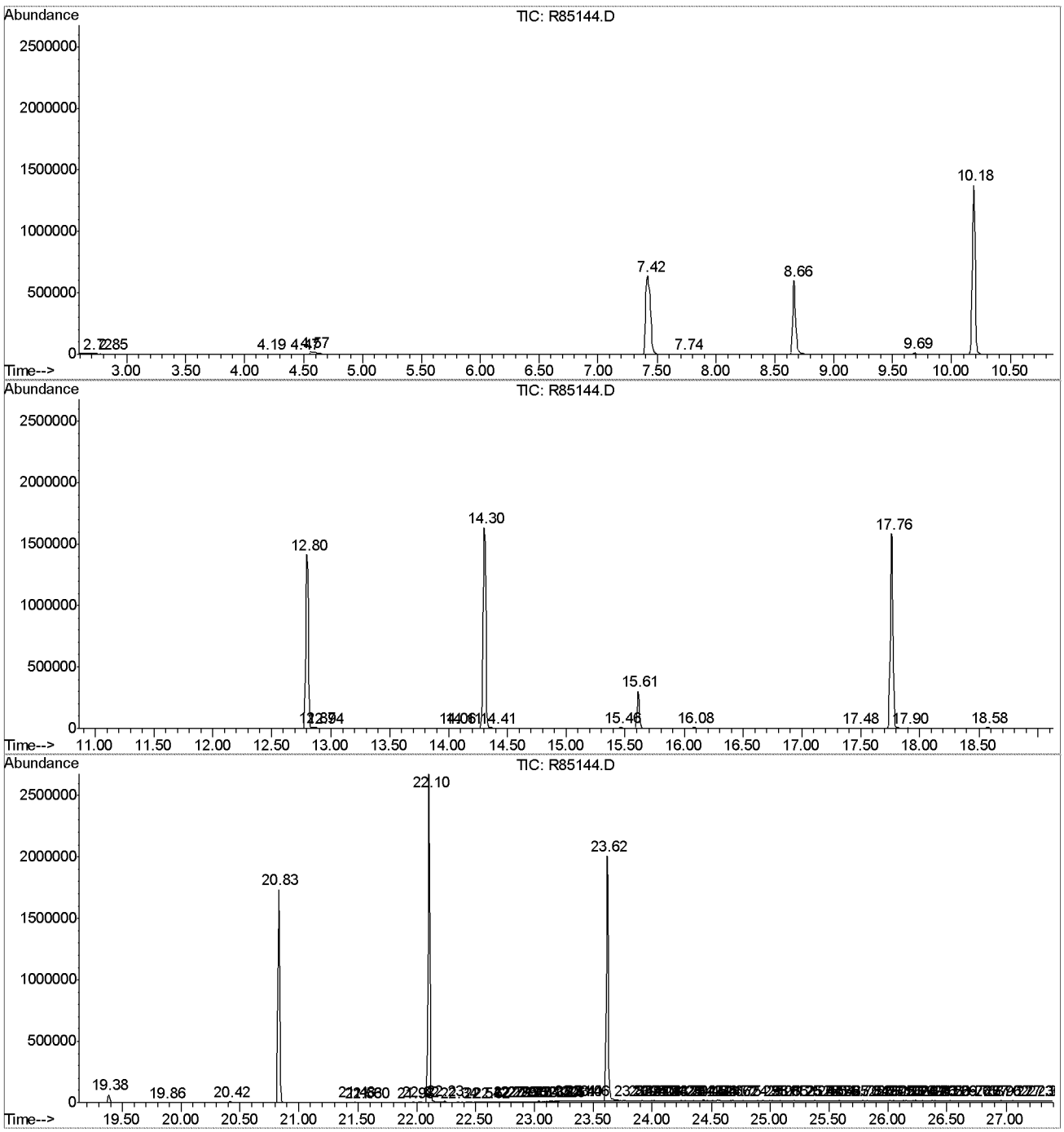
39	22.792	3774	3782	3783	rBV2	2603	3006	0.11%	0.015%
40	22.851	3789	3793	3797	rBV3	2439	2673	0.10%	0.013%
41	22.910	3800	3804	3807	rBV3	2552	2320	0.08%	0.011%
42	22.947	3807	3811	3813	rBV4	2275	3472	0.12%	0.017%
43	23.038	3823	3828	3831	rVV5	2594	2793	0.10%	0.014%
44	23.118	3842	3843	3847	rBV3	2964	3610	0.13%	0.018%
45	23.150	3847	3849	3852	rVB2	3418	3111	0.11%	0.015%
46	23.204	3852	3859	3860	rBV4	3189	5868	0.21%	0.029%
47	23.257	3866	3869	3871	rVB2	2734	2428	0.09%	0.012%
48	23.311	3876	3879	3882	rVV5	2689	2313	0.08%	0.011%
49	23.401	3890	3896	3897	rBV3	3072	4146	0.15%	0.020%
50	23.412	3897	3898	3902	rVV3	2042	2064	0.07%	0.010%
51	23.460	3906	3907	3911	rVV3	1923	2102	0.08%	0.010%
52	23.615	3928	3936	3956	rVV	1995880	2438932	87.72%	11.976%
53	23.818	3968	3974	3978	rVB5	1557	2820	0.10%	0.014%
54	23.936	3994	3996	3999	rVV3	1934	2136	0.08%	0.010%
55	23.973	3999	4003	4005	rVV4	2070	2655	0.10%	0.013%
56	24.010	4008	4010	4015	rVV5	2920	3662	0.13%	0.018%
57	24.080	4022	4023	4028	rVV5	2046	2740	0.10%	0.013%
58	24.133	4028	4033	4037	rVV4	1743	3847	0.14%	0.019%
59	24.245	4051	4054	4056	rVB4	3329	2007	0.07%	0.010%
60	24.277	4056	4060	4062	rBV3	2502	2963	0.11%	0.015%
61	24.299	4062	4064	4070	rVV5	1478	2743	0.10%	0.013%
62	24.432	4086	4089	4094	rBV5	2167	2899	0.10%	0.014%
63	24.464	4094	4095	4100	rVB4	2517	2132	0.08%	0.010%
64	24.513	4100	4104	4107	rVB5	3392	4109	0.15%	0.020%
65	24.539	4107	4109	4110	rBV	2540	2069	0.07%	0.010%
66	24.614	4120	4123	4127	rBV5	1947	3200	0.12%	0.016%
67	24.662	4129	4132	4134	rBV2	3127	2377	0.09%	0.012%
68	24.721	4140	4143	4145	rVB4	2063	2043	0.07%	0.010%
69	24.753	4145	4149	4150	rBV4	2104	2071	0.07%	0.010%
70	24.983	4188	4192	4193	rBV4	1920	1939	0.07%	0.010%
71	25.084	4210	4211	4214	rBV3	2898	2011	0.07%	0.010%
72	25.111	4214	4216	4220	rVV5	1920	1972	0.07%	0.010%
73	25.148	4220	4223	4228	rVB4	1595	2174	0.08%	0.011%
74	25.255	4241	4243	4247	rVV4	2036	2054	0.07%	0.010%
75	25.437	4274	4277	4278	rBV3	3011	2470	0.09%	0.012%
76	25.453	4278	4280	4282	rVV3	2241	2465	0.09%	0.012%
77	25.544	4292	4297	4301	rVB7	2350	4349	0.16%	0.021%
78	25.586	4301	4305	4307	rBV4	3013	3242	0.12%	0.016%
79	25.666	4319	4320	4326	rBV5	1240	2036	0.07%	0.010%
80	25.757	4334	4337	4339	rBV4	2087	2193	0.08%	0.011%
81	25.843	4351	4353	4358	rBV6	1982	2085	0.07%	0.010%
82	25.971	4373	4377	4379	rBV4	1495	2097	0.08%	0.010%
83	26.046	4387	4391	4393	rBV4	2650	2815	0.10%	0.014%
84	26.099	4396	4401	4403	rVB4	1721	2555	0.09%	0.013%
85	26.131	4403	4407	4408	rBV5	2560	2816	0.10%	0.014%
86	26.238	4425	4427	4432	rVB5	2036	2735	0.10%	0.013%
87	26.291	4434	4437	4439	rVB2	2153	2285	0.08%	0.011%
88	26.324	4439	4443	4444	rBV4	1949	2054	0.07%	0.010%
89	26.398	4454	4457	4460	rBV4	2538	2761	0.10%	0.014%
90	26.425	4460	4462	4466	rVB3	1853	2113	0.08%	0.010%
91	26.527	4478	4481	4484	rBV3	2858	2779	0.10%	0.014%
92	26.585	4489	4492	4495	rBV4	2377	2848	0.10%	0.014%
93	26.697	4512	4513	4517	rVB4	2217	2263	0.08%	0.011%
94	26.751	4517	4523	4525	rBV4	1818	3105	0.11%	0.015%
95	26.874	4544	4546	4555	rVB5	1897	3120	0.11%	0.015%

96	26.959	4561	4562	4567	rBV5	2612	2073	0.07%	0.010%
97	27.023	4572	4574	4578	rBV5	2081	3043	0.11%	0.015%
98	27.232	4609	4613	4621	rVB8	2010	4060	0.15%	0.020%
99	27.296	4621	4625	4626	rVB3	2052	2220	0.08%	0.011%
100	27.328	4626	4631	4632	rBV5	2233	2994	0.11%	0.015%

Sum of corrected areas: 20364800

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85144.D
Operator : larisap
Acquired : 28 Jan 2011 7:28 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-7
Misc Info : op47853,er3224,1000
Vial Number: 8
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 7:28 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85144.D
Name: ja66701-7
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:56 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

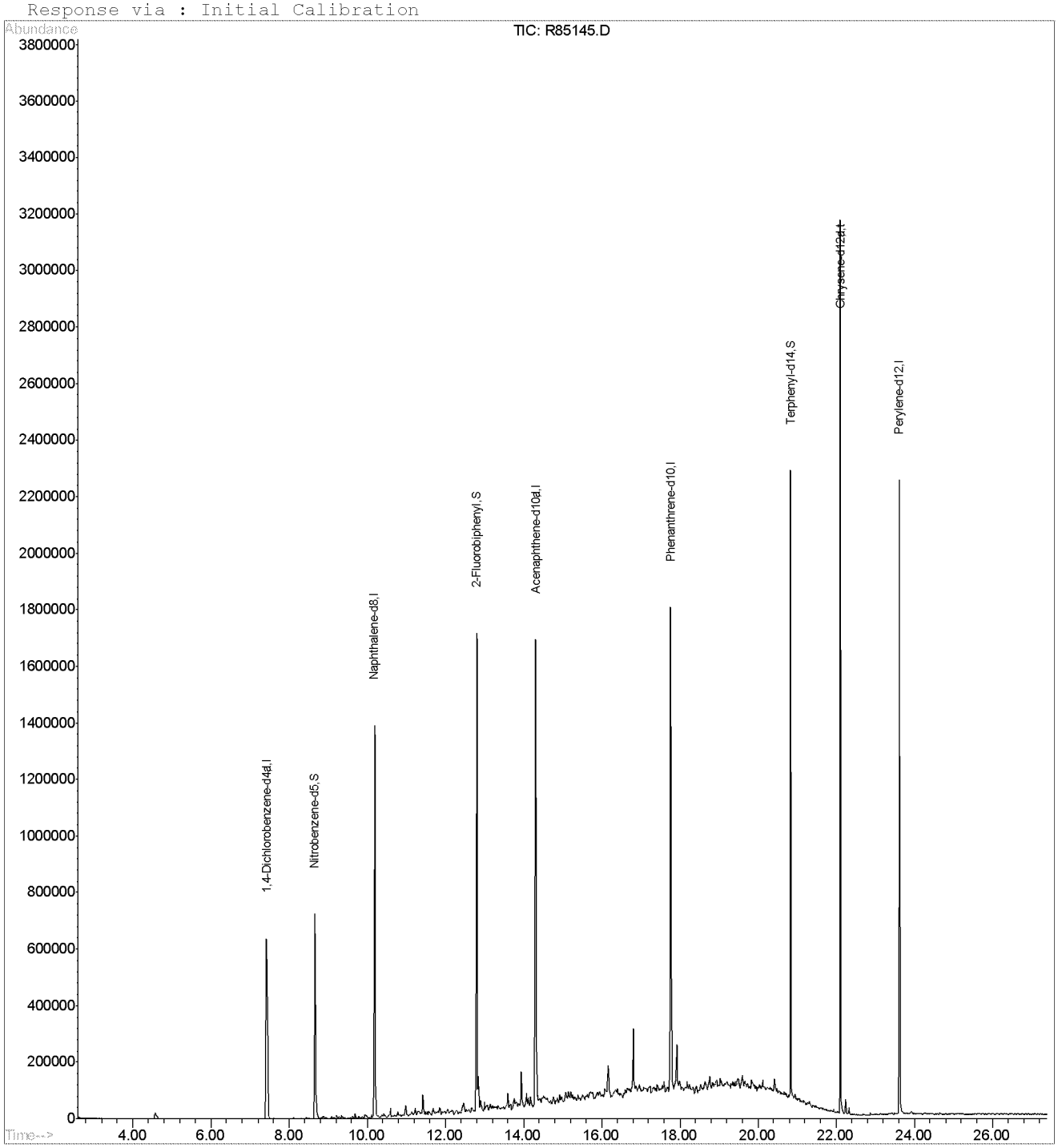
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	313837	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1092112	40.00	ppb	-0.21
47) Acenaphthene-d10	14.30	164	641229	40.00	ppb	-0.22
69) Phenanthrene-d10	17.77	188	1063552	40.00	ppb	-0.22
83) Chrysene-d12	22.10	240	1104835	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	927406	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	313837	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.30	164	641229	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	1104835	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	448389	45.18	ppb	-0.20
Spiked Amount 50.000			Recovery =	90.36%		
51) 2-Fluorobiphenyl	12.80	172	905254	40.10	ppb	-0.21
Spiked Amount 50.000			Recovery =	80.20%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	727434	34.93	ppb	-0.14
Spiked Amount 50.000			Recovery =	69.86%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85145.D MR3151.M Fri Jan 28 20:56:12 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:56 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.560	362	369	396	rBV2	22372	84732	2.70%	0.307%
2	7.418	896	904	933	rBB	638110	1765862	56.30%	6.399%
3	8.663	1127	1137	1159	rBV	725320	1336650	42.61%	4.844%
4	9.341	1256	1264	1276	rVB6	10362	24805	0.79%	0.090%
5	9.694	1324	1330	1339	rVB4	14194	24576	0.78%	0.089%
6	9.945	1369	1377	1382	rBV4	11304	23094	0.74%	0.084%
7	10.185	1411	1422	1435	rVV	1385733	2308463	73.60%	8.366%
8	10.586	1479	1497	1503	rBV5	31641	72974	2.33%	0.264%
9	10.773	1527	1532	1541	rBV4	17159	38675	1.23%	0.140%
10	10.981	1562	1571	1585	rVB6	39009	81558	2.60%	0.296%
11	11.136	1592	1600	1607	rBV8	8505	22276	0.71%	0.081%
12	11.232	1613	1618	1622	rVB3	25606	37661	1.20%	0.136%
13	11.291	1622	1629	1630	rBV2	14116	26049	0.83%	0.094%
14	11.425	1649	1654	1660	rVB	68843	96421	3.07%	0.349%
15	11.574	1679	1682	1690	rBV7	12120	24240	0.77%	0.088%
16	11.681	1696	1702	1711	rBV6	22360	45972	1.47%	0.167%
17	11.857	1729	1735	1743	rVB5	25966	57763	1.84%	0.209%
18	11.964	1751	1755	1764	rVB7	8753	21855	0.70%	0.079%
19	12.055	1764	1772	1779	rVB4	17267	41816	1.33%	0.152%
20	12.172	1790	1794	1802	rVB7	16252	37110	1.18%	0.134%
21	12.269	1803	1812	1817	rBV7	15311	42997	1.37%	0.156%
22	12.461	1833	1848	1857	rBV7	37989	133972	4.27%	0.486%
23	12.536	1858	1862	1868	rVV9	11507	23029	0.73%	0.083%
24	12.595	1870	1873	1881	rVB8	12984	24362	0.78%	0.088%
25	12.680	1881	1889	1896	rBV8	16821	50120	1.60%	0.182%
26	12.797	1904	1911	1917	rBV	1692961	2655719	84.67%	9.624%
27	12.840	1917	1919	1926	rVV	122664	175457	5.59%	0.636%
28	12.899	1926	1930	1941	rVB7	39577	94354	3.01%	0.342%
29	12.995	1942	1948	1952	rBV7	31868	52711	1.68%	0.191%
30	13.065	1953	1961	1968	rVB9	16472	46848	1.49%	0.170%
31	13.139	1970	1975	1982	rBV9	20323	39557	1.26%	0.143%
32	13.358	2010	2016	2021	rVB10	12551	22423	0.71%	0.081%
33	13.599	2046	2061	2066	rBV6	57953	133475	4.26%	0.484%
34	13.668	2066	2074	2079	rVB9	20916	56521	1.80%	0.205%
35	13.754	2081	2090	2095	rBV7	38357	101203	3.23%	0.367%
36	13.941	2118	2125	2137	rVB	126557	248758	7.93%	0.901%
37	14.069	2143	2149	2153	rBV5	41365	63477	2.02%	0.230%
38	14.112	2153	2157	2163	rVB8	28527	47562	1.52%	0.172%

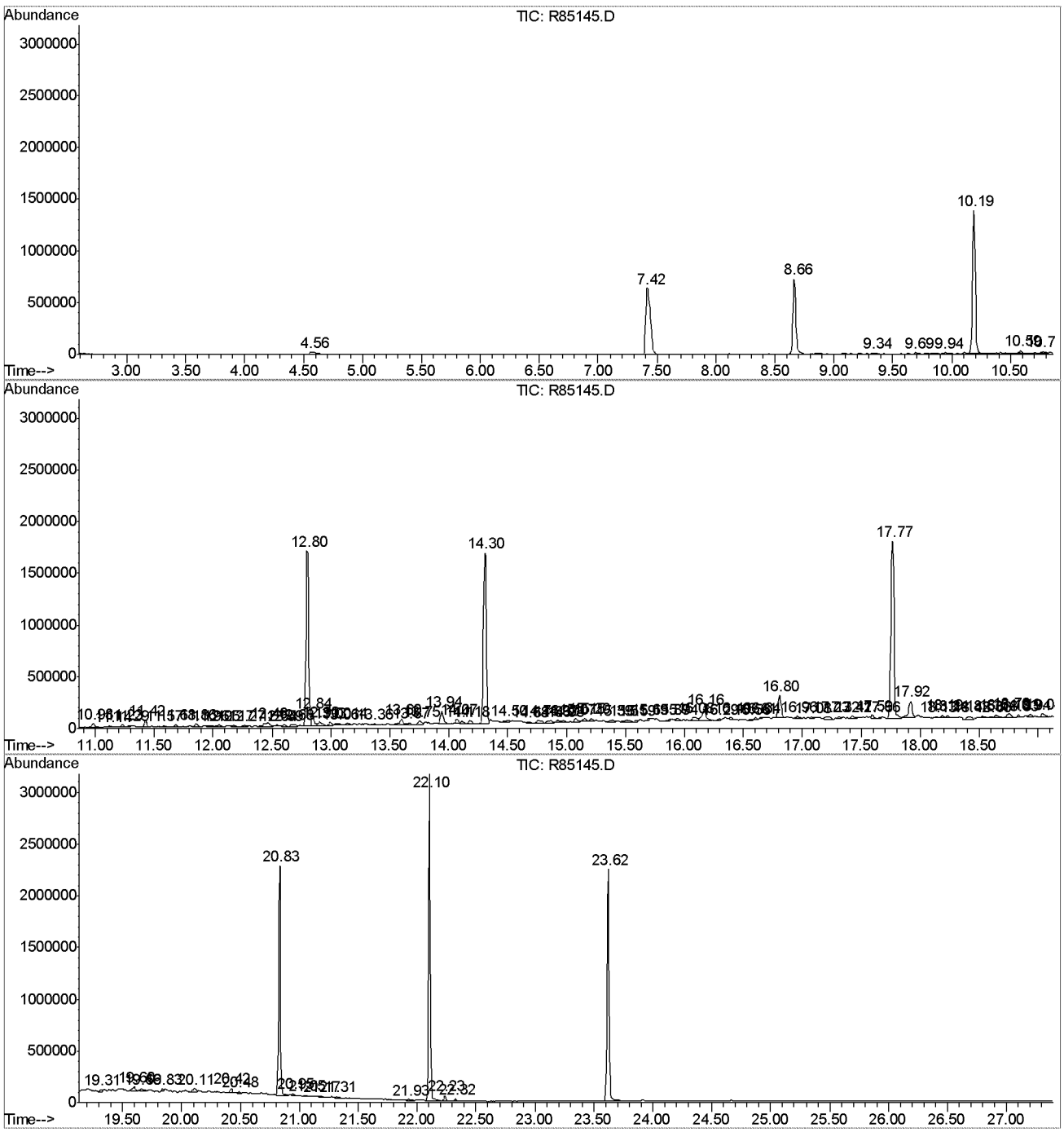
39	14.176	2164	2169	2179	rVB8	35372	76970	2.45%	0.279%
40	14.304	2183	2193	2201	rBV	1650295	2713583	86.51%	9.834%
41	14.496	2219	2229	2234	rBV	23095	76299	2.43%	0.277%
42	14.678	2260	2263	2272	rVB8	11092	20074	0.64%	0.073%
43	14.763	2272	2279	2287	rBV8	25570	68417	2.18%	0.248%
44	14.865	2288	2298	2304	rBV8	21332	58314	1.86%	0.211%
45	14.924	2304	2309	2313	rBV8	26228	44850	1.43%	0.163%
46	14.977	2314	2319	2326	rVB8	18427	36918	1.18%	0.134%
47	15.073	2333	2337	2345	rBV8	32880	69842	2.23%	0.253%
48	15.153	2346	2352	2357	rVB9	25559	41145	1.31%	0.149%
49	15.201	2357	2361	2369	rBV10	26098	51327	1.64%	0.186%
50	15.388	2389	2396	2401	rBV10	19926	45841	1.46%	0.166%
51	15.506	2409	2418	2429	rVB10	20727	64051	2.04%	0.232%
52	15.586	2430	2433	2436	rBV5	15533	24341	0.78%	0.088%
53	15.688	2447	2452	2454	rBV4	19456	27092	0.86%	0.098%
54	15.875	2480	2487	2488	rBV7	19248	33006	1.05%	0.120%
55	15.944	2495	2500	2506	rVB9	15861	33319	1.06%	0.121%
56	16.083	2520	2526	2534	rBV9	25899	75600	2.41%	0.274%
57	16.163	2534	2541	2554	rVB	114227	267733	8.54%	0.970%
58	16.291	2561	2565	2568	rBV5	13715	19749	0.63%	0.072%
59	16.398	2582	2585	2589	rVB6	18692	22501	0.72%	0.082%
60	16.558	2611	2615	2619	rBV6	14160	31148	0.99%	0.113%
61	16.606	2620	2624	2627	rVV6	14342	20492	0.65%	0.074%
62	16.639	2628	2630	2634	rBV4	16038	21250	0.68%	0.077%
63	16.804	2654	2661	2669	rBV	214022	399202	12.73%	1.447%
64	16.959	2686	2690	2697	rVB9	25546	47901	1.53%	0.174%
65	17.077	2709	2712	2717	rBV7	12401	20212	0.64%	0.073%
66	17.231	2731	2741	2747	rVB7	27169	84823	2.70%	0.307%
67	17.317	2752	2757	2761	rBV6	17863	36589	1.17%	0.133%
68	17.418	2772	2776	2785	rBV6	23085	53737	1.71%	0.195%
69	17.595	2806	2809	2816	rVB8	34668	51846	1.65%	0.188%
70	17.659	2818	2821	2824	rBV5	15770	20456	0.65%	0.074%
71	17.766	2831	2841	2855	rBV2	1713136	2934817	93.56%	10.636%
72	17.915	2855	2869	2877	rBV	160316	387277	12.35%	1.403%
73	18.134	2906	2910	2915	rBV7	12461	24802	0.79%	0.090%
74	18.188	2916	2920	2925	rVV7	28138	39964	1.27%	0.145%
75	18.236	2925	2929	2934	rVB8	18457	28856	0.92%	0.105%
76	18.423	2956	2964	2970	rBV8	25498	69044	2.20%	0.250%
77	18.530	2979	2984	2993	rBV8	19836	44051	1.40%	0.160%
78	18.604	2994	2998	3001	rBV5	10666	18390	0.59%	0.067%
79	18.642	3001	3005	3016	rVB5	30903	79648	2.54%	0.289%
80	18.759	3019	3027	3034	rVB2	42476	91578	2.92%	0.332%
81	18.834	3038	3041	3045	rVV5	17414	25274	0.81%	0.092%
82	18.936	3055	3060	3065	rVB8	25221	48354	1.54%	0.175%
83	19.037	3075	3079	3090	rVB8	28248	64545	2.06%	0.234%
84	19.310	3127	3130	3134	rBV5	20732	36019	1.15%	0.131%
85	19.598	3178	3184	3189	rVB10	39483	71132	2.27%	0.258%
86	19.657	3193	3195	3203	rVB9	19683	34555	1.10%	0.125%
87	19.833	3225	3228	3231	rBV4	27916	34140	1.09%	0.124%
88	20.111	3274	3280	3284	rBV7	31179	55626	1.77%	0.202%
89	20.415	3333	3337	3345	rBV8	45872	67860	2.16%	0.246%
90	20.485	3348	3350	3354	rVB5	20062	19701	0.63%	0.071%
91	20.832	3409	3415	3429	rVB	2222589	2470860	78.77%	8.954%
92	20.950	3433	3437	3441	rVB7	19036	23471	0.75%	0.085%
93	21.051	3451	3456	3462	rVB10	11577	25917	0.83%	0.094%
94	21.174	3477	3479	3487	rVB9	14903	26136	0.83%	0.095%
95	21.313	3502	3505	3513	rVB8	15483	23050	0.73%	0.084%

96	21.933	3616	3621	3629	rVB3	13301	25593	0.82%	0.093%
97	22.104	3646	3653	3671	rBV	3162984	3136692	100.00%	11.367%
98	22.232	3671	3677	3685	rVB	52267	56763	1.81%	0.206%
99	22.323	3690	3694	3700	rVB	25841	28640	0.91%	0.104%
100	23.621	3930	3937	3958	rBV	2242541	2757911	87.92%	9.994%

Sum of corrected areas: 27594391

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85145.D
Operator : larisap
Acquired : 28 Jan 2011 8:05 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-8
Misc Info : op47853,er3224,1000
Vial Number: 9
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

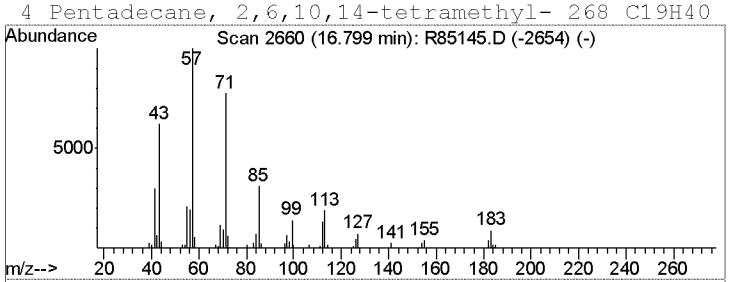
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

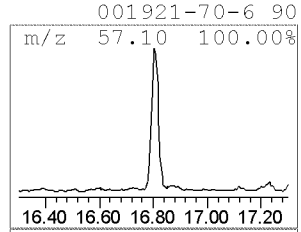
****

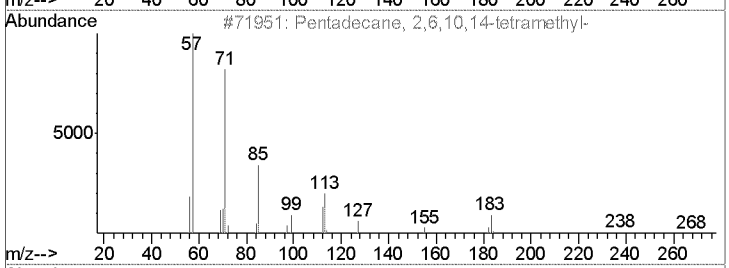
Peak Number 1 alkane Concentration Rank 1

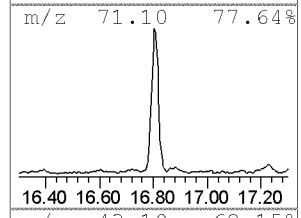
R.T.	EstConc	Area	Relative to ISTD	R.T.
16.80	5.44 ppb	399202	Phenanthrene-d10	17.77

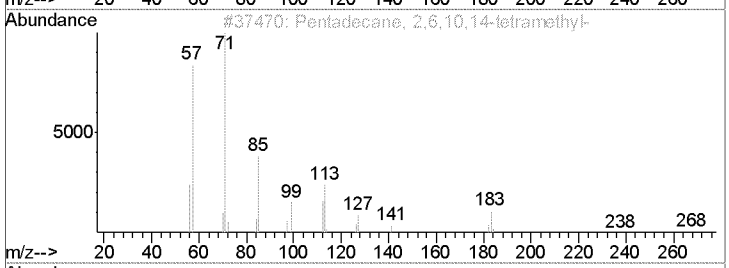
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
3	Decane, 2-methyl-	156	C11H24	006975-98-0	90
4	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90

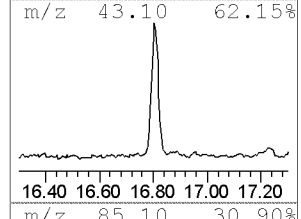


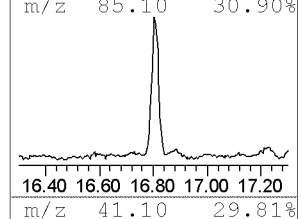


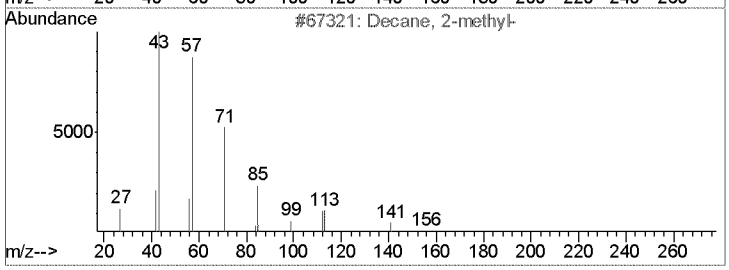


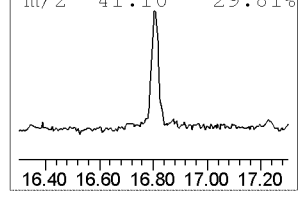












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

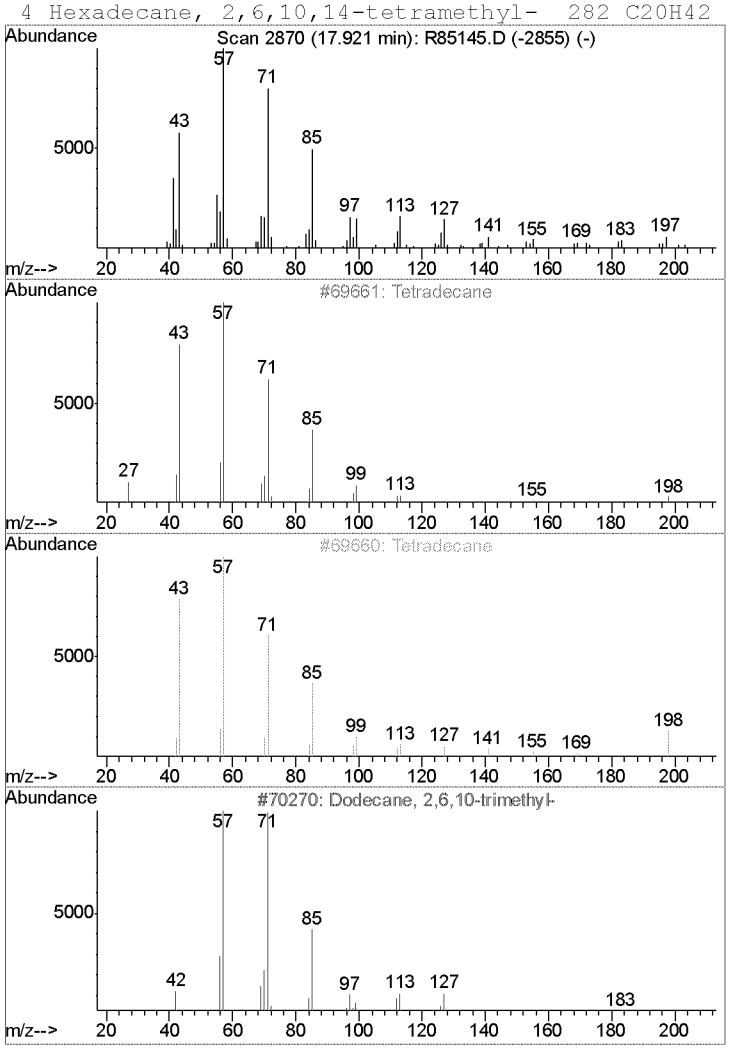
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

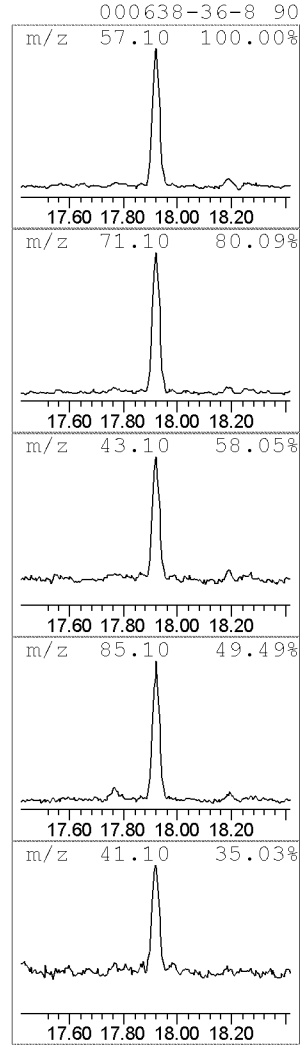
****

Peak Number 2 alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.92	5.28 ppb	387277	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	91
2	Tetradecane	198	C14H30	000629-59-4	91
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	90
4	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90





8.1.16 8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 8:05 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85145.D
Name: ja66701-8
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
alkane	16.80	5.4	ppb	399202	6	17.77	2934820	40.0
alkane	17.92	5.3	ppb	387277	6	17.77	2934820	40.0

8.1.16
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23447.D
Acq On : 31 Jan 2011 5:24 pm
Operator : ninap
Sample : ja66701-1
Misc : op47853a,e4m1022,1000
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 11:30:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

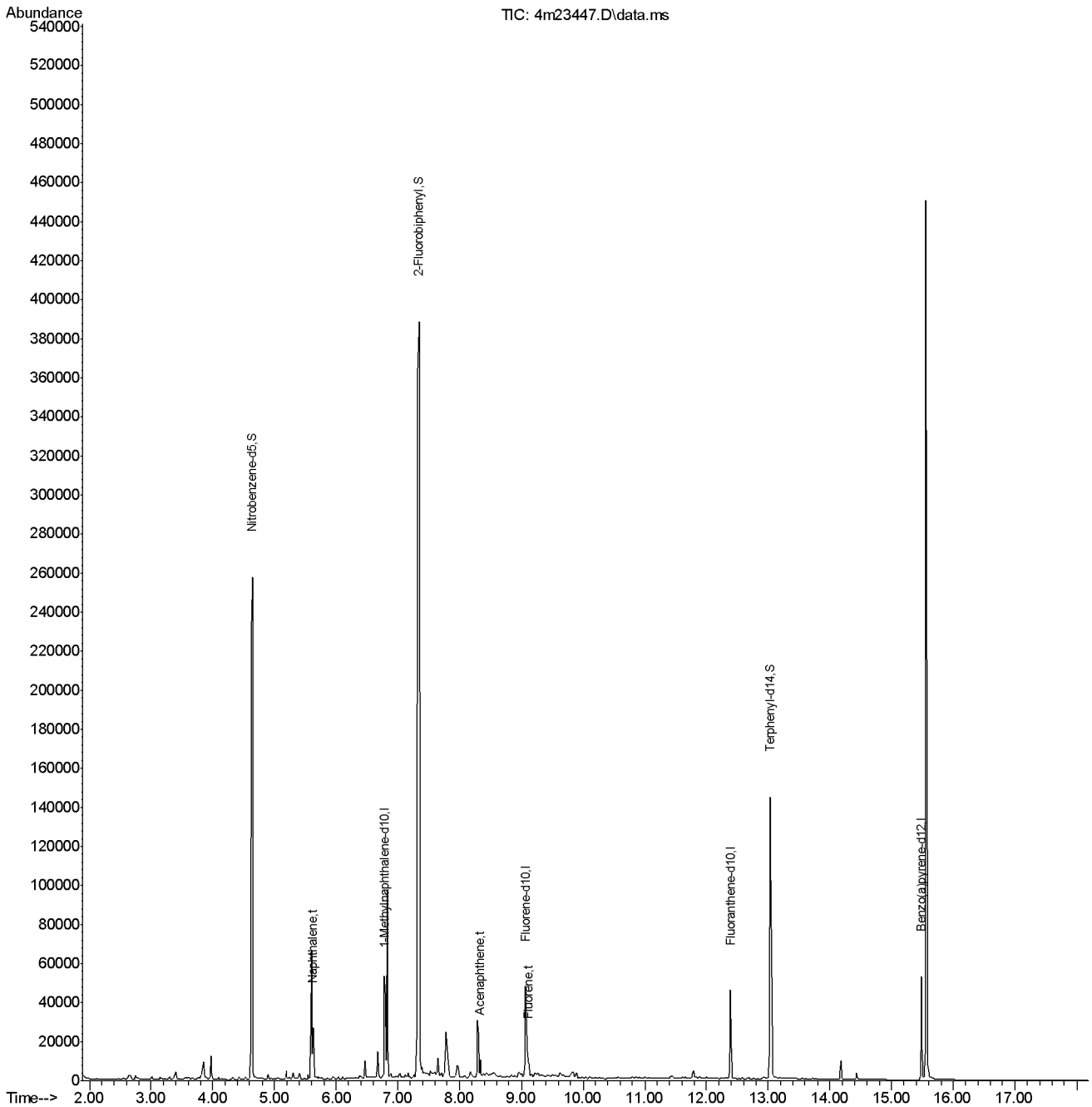
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	33724	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	26029	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	42614	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	45538	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	198669	40.14	ppb	0.01
Spiked Amount 50.000			Recovery =	80.28%		
11) 2-Fluorobiphenyl	7.338	172	469000	41.35	ppb	0.02
Spiked Amount 50.000			Recovery =	82.70%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	136714	29.79	ppb	0.00
Spiked Amount 50.000			Recovery =	59.58%		
Target Compounds						Qvalue
7) Naphthalene	5.625	128	23142	1.54	ppb	99
14) Acenaphthene	8.328	153	3983	0.36	ppb	88
15) Fluorene	9.117	166	5732	0.69	ppb	72

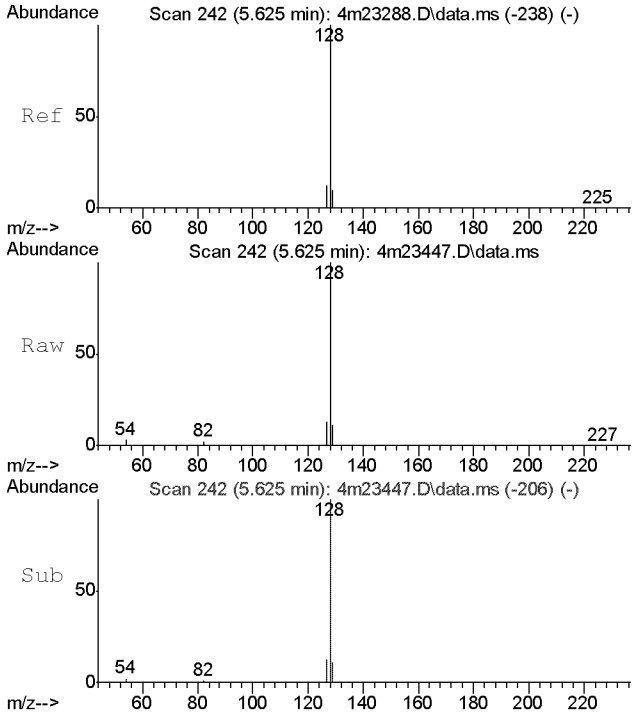
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23447.D
Acq On : 31 Jan 2011 5:24 pm
Operator : ninap
Sample : ja66701-1
Misc : op47853a,e4m1022,1000
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 11:30:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

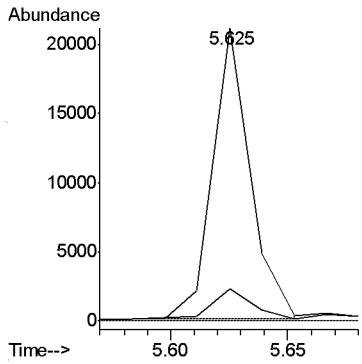


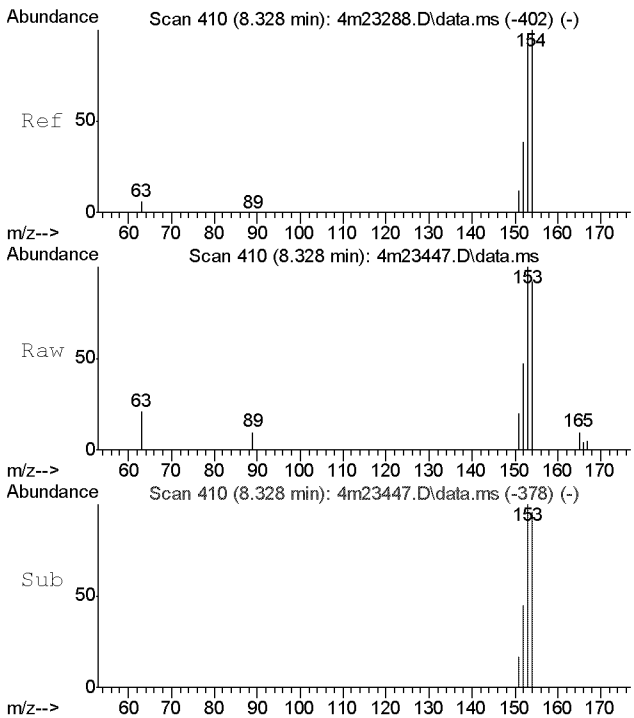


#7
Naphthalene
Concen: 1.54 ppb
RT: 5.625 min Scan# 242
Delta R.T. -0.000 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:128 Resp: 23142

Ion	Ratio	Lower	Upper
128	100		
129	10.0	0.0	40.4
122	0.0	0.0	30.0

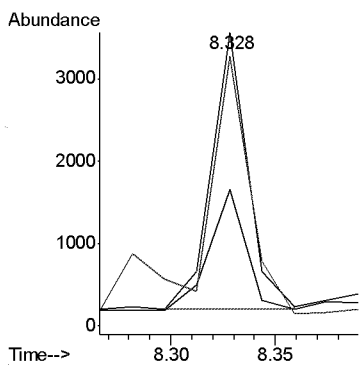


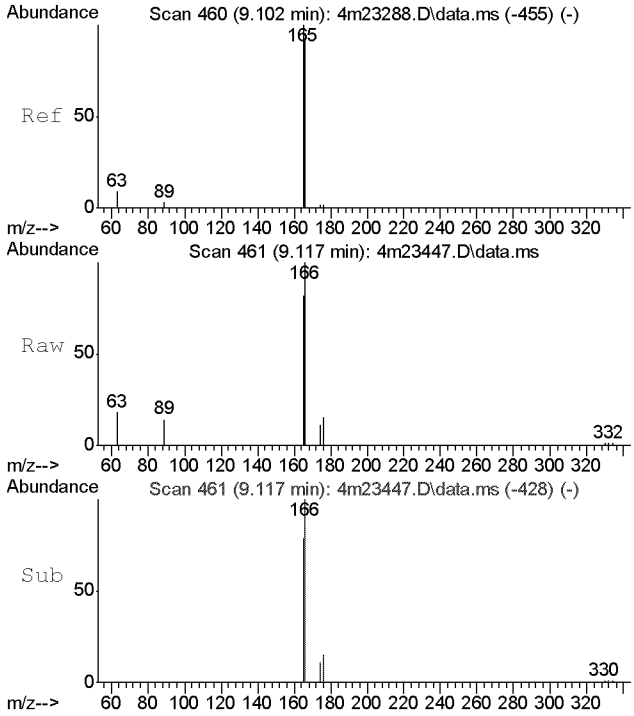


#14
Acenaphthene
Concen: 0.36 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:153 Resp: 3983

Ion	Ratio	Lower	Upper
153	100		
152	43.9	9.6	69.6
154	87.6	71.6	131.6

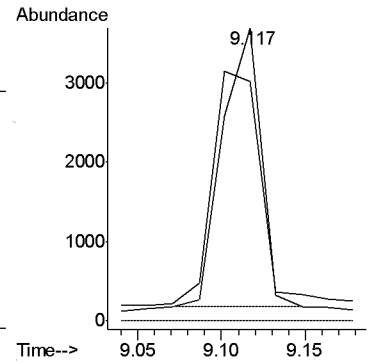




#15
Fluorene
Concen: 0.69 ppb
RT: 9.117 min Scan# 461
Delta R.T. 0.015 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:166 Resp: 5732

Ion	Ratio	Lower	Upper
166	100		
165	78.1	77.3	137.3
167	0.0	0.0	30.0



8.1.17
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23448.D
Acq On : 31 Jan 2011 5:47 pm
Operator : ninap
Sample : ja66701-2
Misc : op47853a,e4m1022,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 01 11:31:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

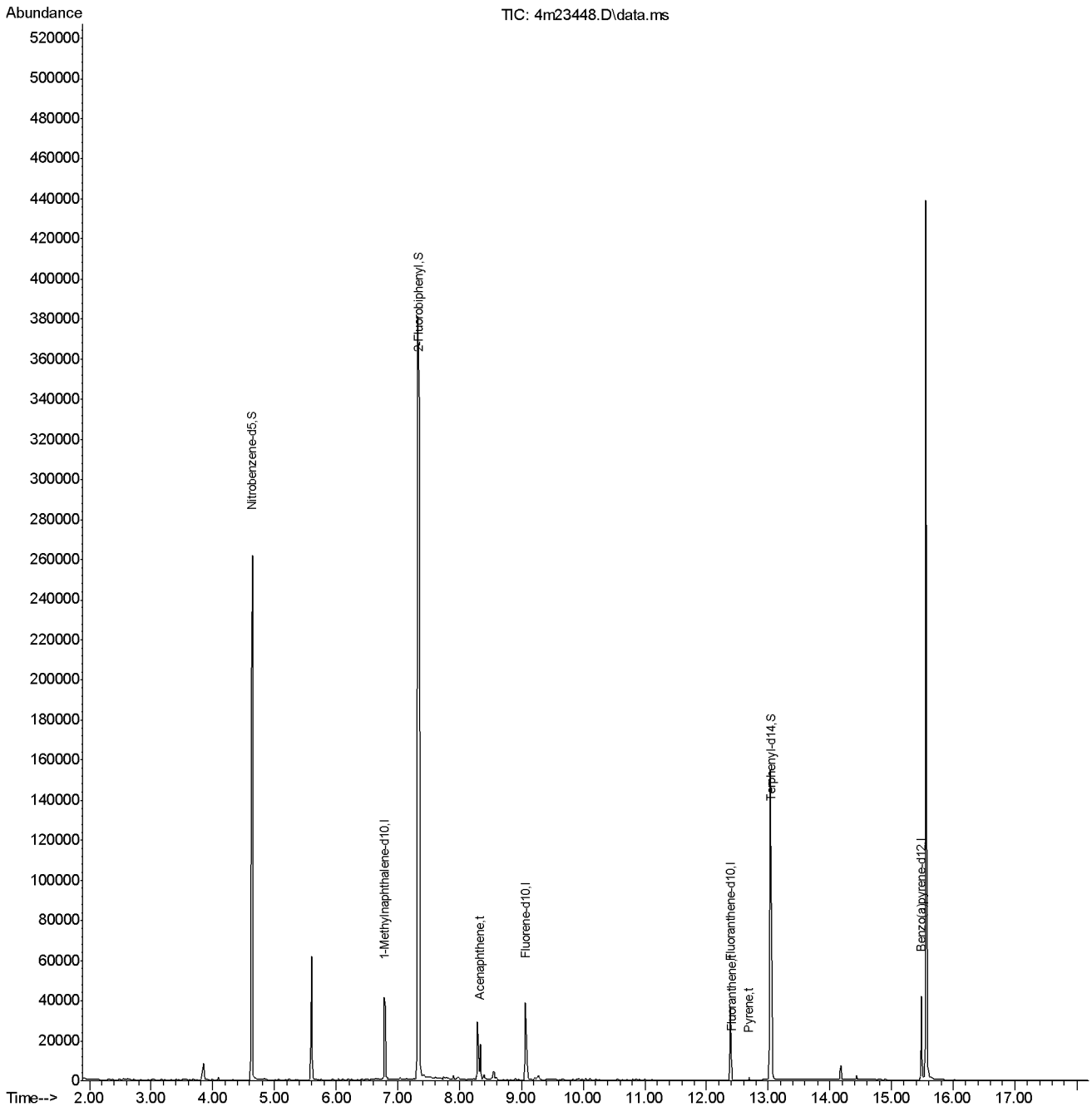
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28531	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	23017	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	36185	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	38525	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	189504	45.26	ppb	0.01
Spiked Amount 50.000			Recovery =	90.52%		
11) 2-Fluorobiphenyl	7.338	172	448991	46.79	ppb	0.02
Spiked Amount 50.000			Recovery =	93.58%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	152423	39.11	ppb	0.02
Spiked Amount 50.000			Recovery =	78.22%		
Target Compounds						Qvalue
14) Acenaphthene	8.328	153	8214	0.84	ppb	91
24) Fluoranthene	12.409	202	1413	0.13	ppb	95
25) Pyrene	12.690	202	1119	0.11	ppb	100

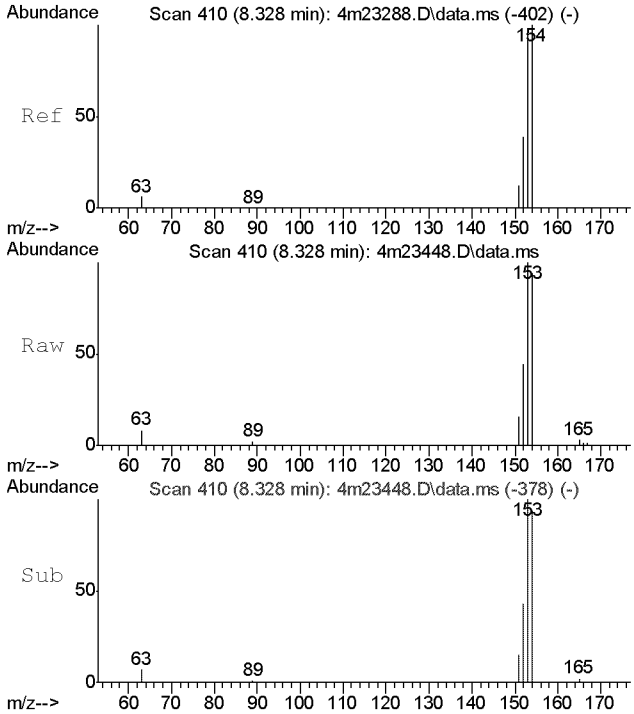
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23448.D
Acq On : 31 Jan 2011 5:47 pm
Operator : ninap
Sample : ja66701-2
Misc : op47853a,e4m1022,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 01 11:31:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

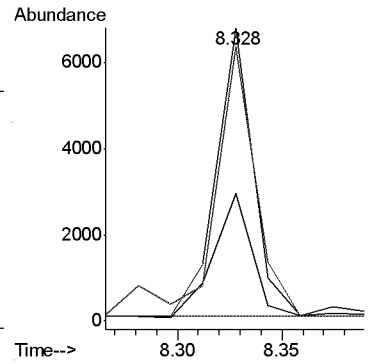


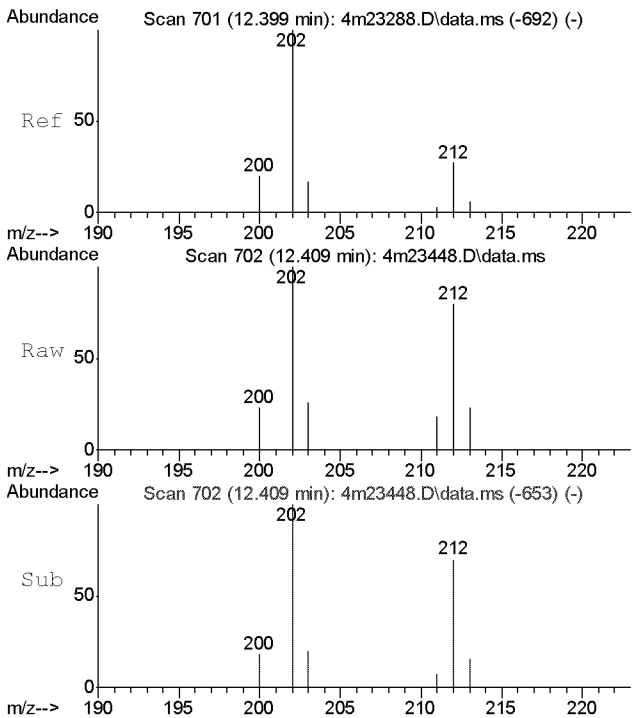


#14
Acenaphthene
Concen: 0.84 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:153 Resp: 8214

Ion	Ratio	Lower	Upper
153	100		
152	42.9	9.6	69.6
154	91.5	71.6	131.6

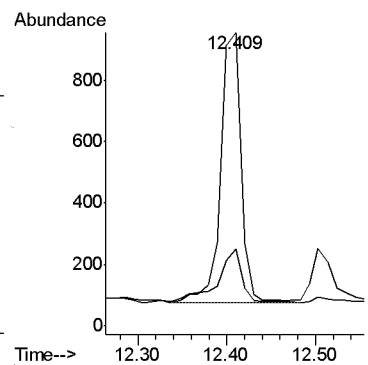


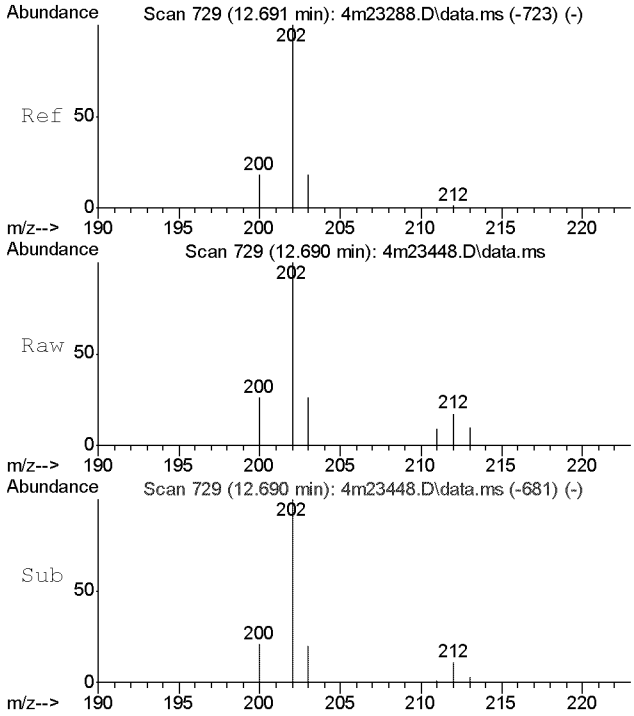


#24
Fluoranthene
Concen: 0.13 ppb
RT: 12.409 min Scan# 702
Delta R.T. 0.010 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:202 Resp: 1413

Ion	Ratio	Lower	Upper
202	100		
203	19.2	0.0	47.1

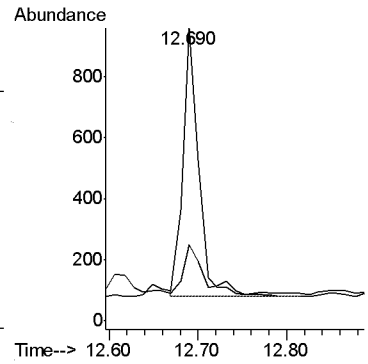




#25
Pyrene
Concen: 0.11 ppb
RT: 12.690 min Scan# 729
Delta R.T. -0.001 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:202 Resp: 1119

Ion	Ratio	Lower	Upper
202	100		
203	18.3	0.0	48.5



8.1.18

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23449.D
Acq On : 31 Jan 2011 6:12 pm
Operator : ninap
Sample : ja66701-3
Misc : op47853a,e4m1022,945
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 01 11:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

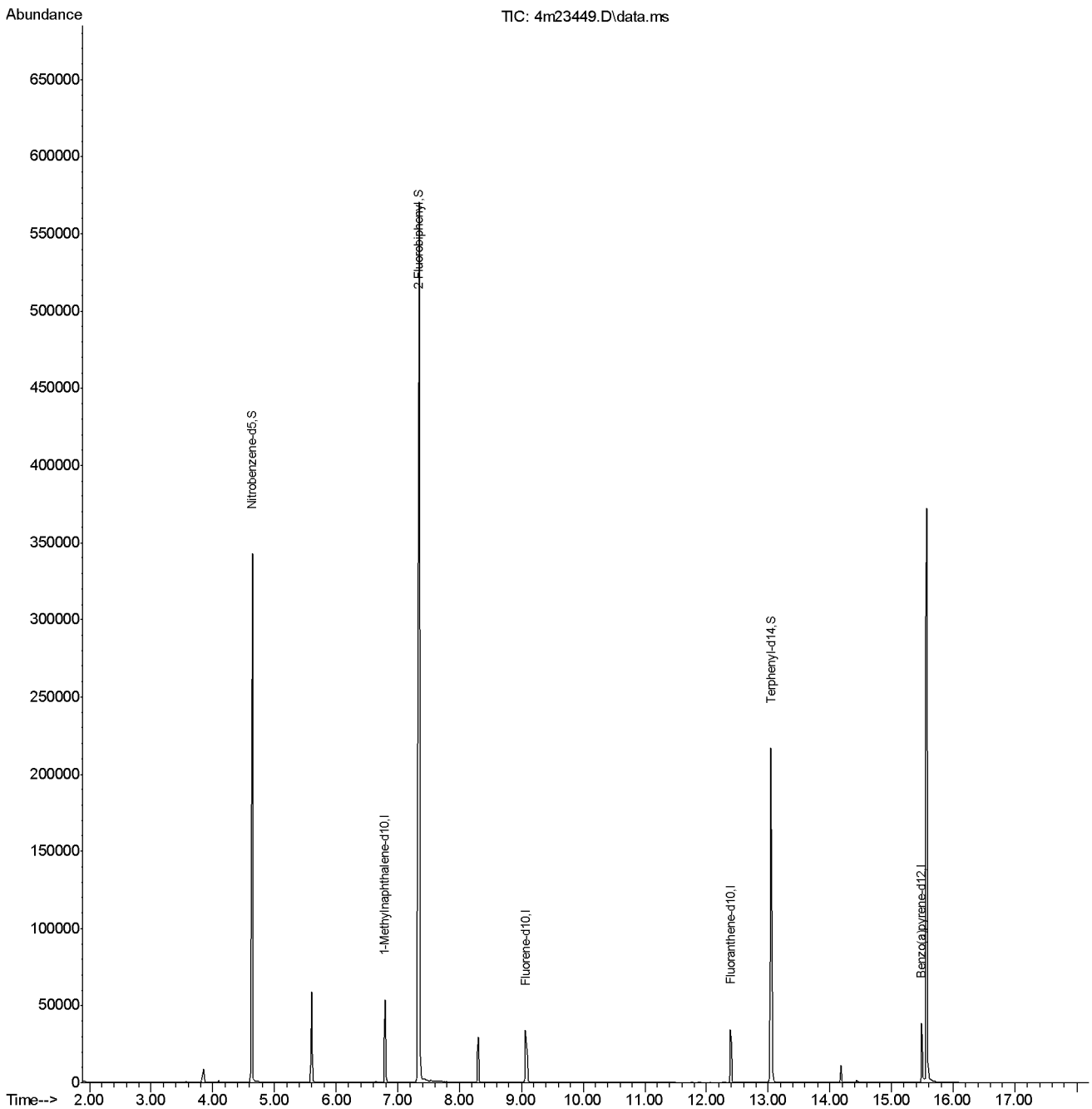
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	30951	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	23309	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	37487	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	38407	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	213888	47.09	ppb	0.01
Spiked Amount 50.000			Recovery =	94.18%		
11) 2-Fluorobiphenyl	7.338	172	491588	47.23	ppb	0.02
Spiked Amount 50.000			Recovery =	94.46%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	163921	40.60	ppb	0.02
Spiked Amount 50.000			Recovery =	81.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23449.D
Acq On : 31 Jan 2011 6:12 pm
Operator : ninap
Sample : ja66701-3
Misc : op47853a,e4m1022,945
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 01 11:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23450.D
Acq On : 31 Jan 2011 6:36 pm
Operator : ninap
Sample : ja66701-4
Misc : op47853a,e4m1022,1000
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 01 11:32:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

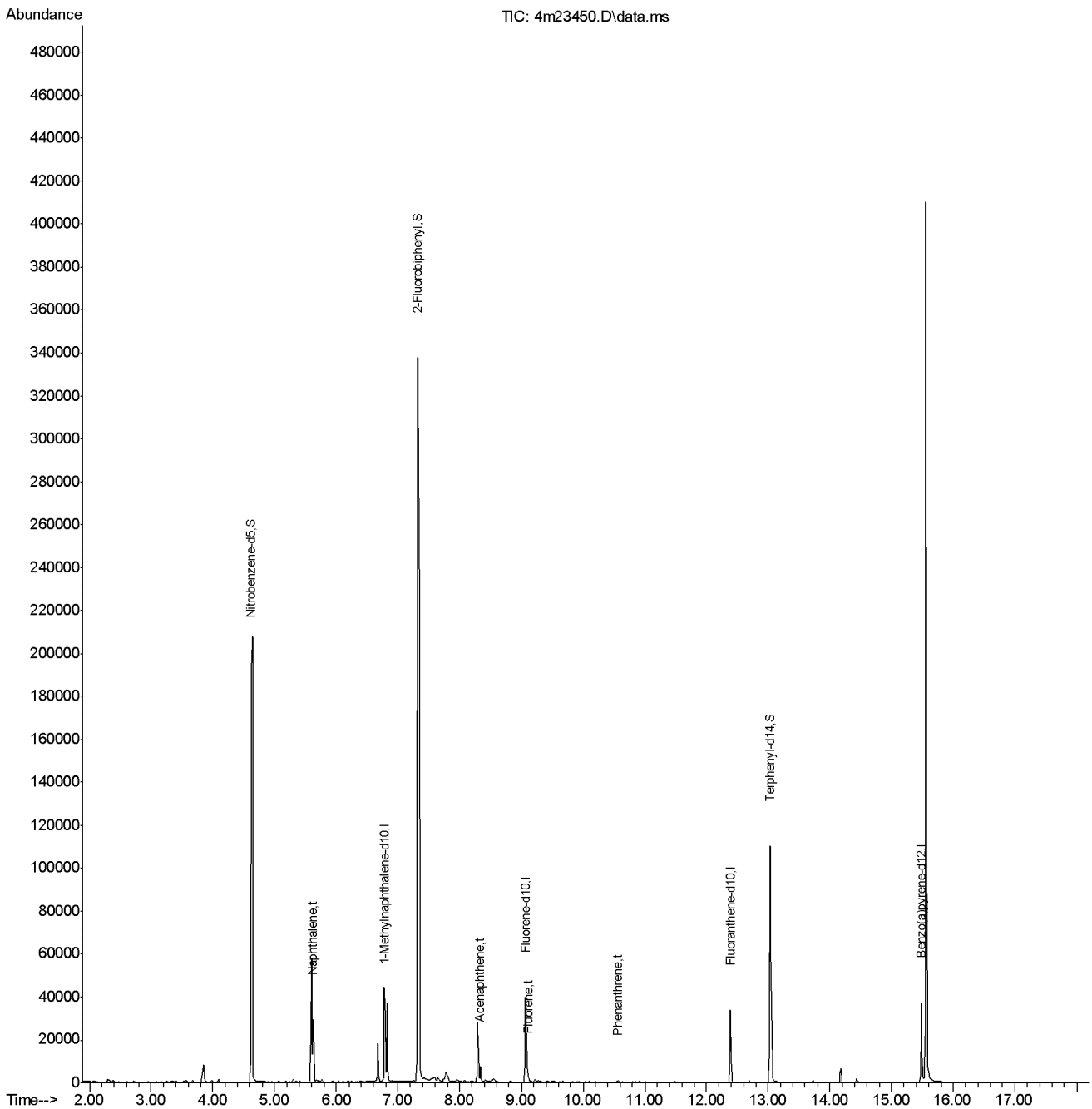
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28425	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	22466	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	35277	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	36614	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.618	82	162295	38.91	ppb	0.00
Spiked Amount 50.000			Recovery =	77.82%		
11) 2-Fluorobiphenyl	7.321	172	358629	37.51	ppb	0.00
Spiked Amount 50.000			Recovery =	75.02%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	93842	24.70	ppb	0.00
Spiked Amount 50.000			Recovery =	49.40%		
Target Compounds						Qvalue
7) Naphthalene	5.625	128	26954	2.13	ppb	99
14) Acenaphthene	8.328	153	3135	0.33	ppb	91
15) Fluorene	9.117	166	1459	0.20	ppb #	66
20) Phenanthrene	10.571	178	1167	0.11	ppb	91

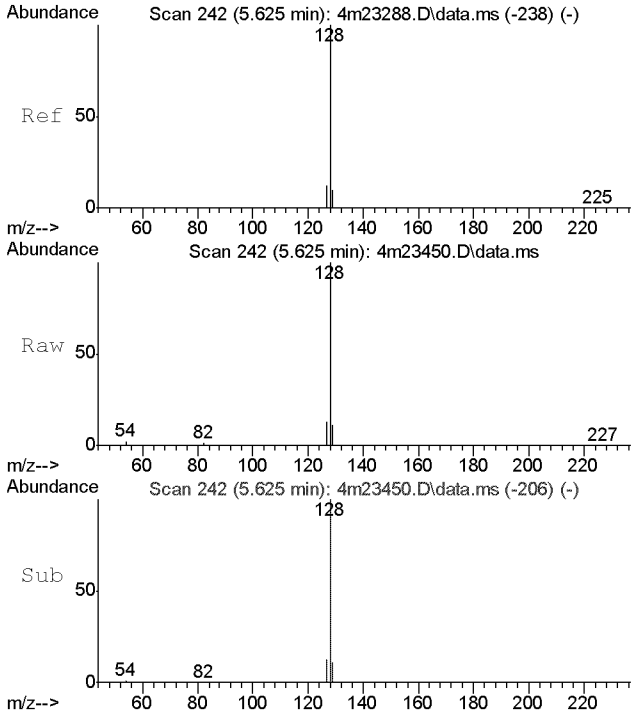
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23450.D
Acq On : 31 Jan 2011 6:36 pm
Operator : ninap
Sample : ja66701-4
Misc : op47853a,e4m1022,1000
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 01 11:32:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

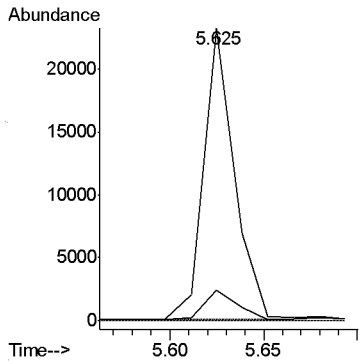


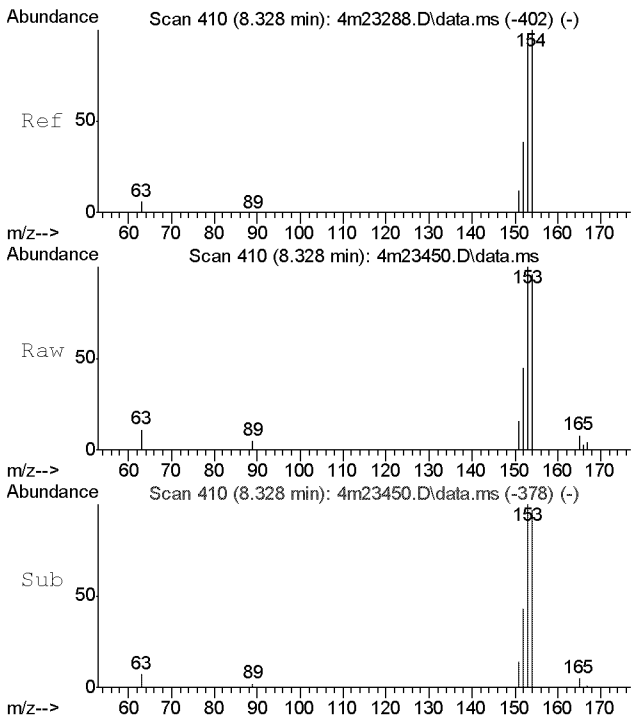


#7
Naphthalene
Concen: 2.13 ppb
RT: 5.625 min Scan# 242
Delta R.T. -0.000 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:128 Resp: 26954

Ion	Ratio	Lower	Upper
128	100		
129	10.1	0.0	40.4
122	0.0	0.0	30.0

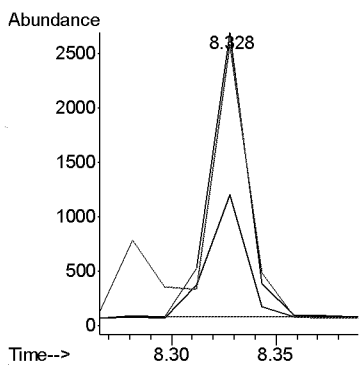


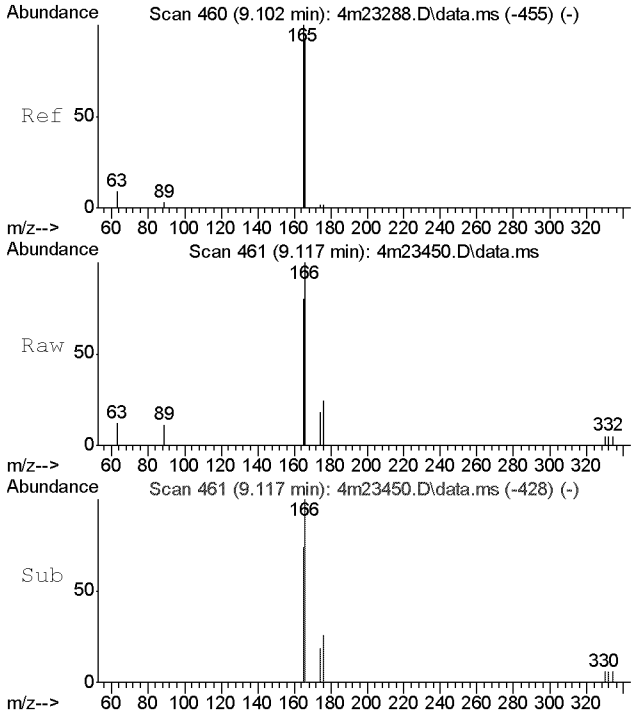


#14
Acenaphthene
Concen: 0.33 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:153 Resp: 3135

Ion	Ratio	Lower	Upper
153	100		
152	43.3	9.6	69.6
154	90.9	71.6	131.6

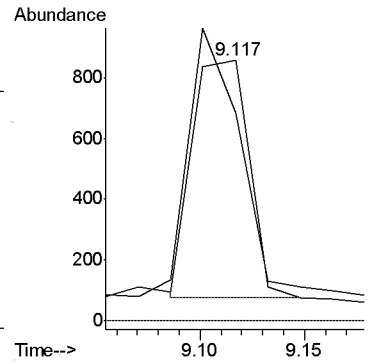


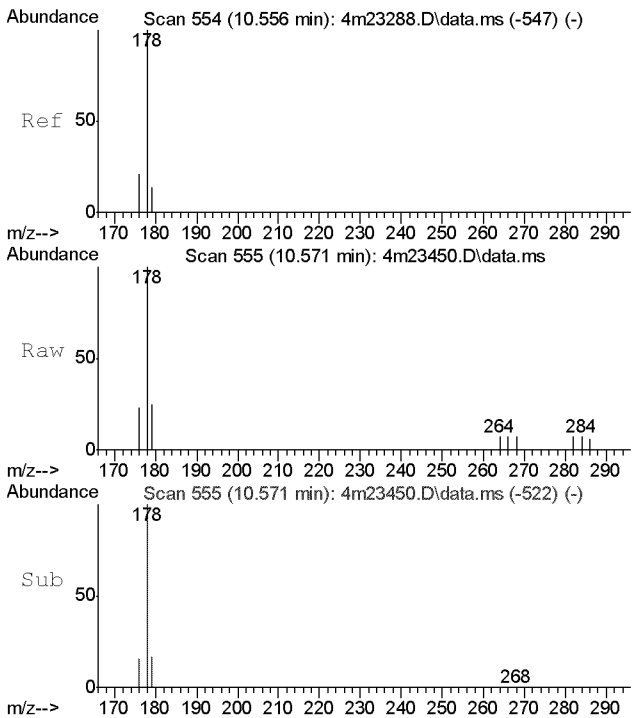


#15
Fluorene
Concen: 0.20 ppb
RT: 9.117 min Scan# 461
Delta R.T. 0.015 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:166 Resp: 1459

Ion	Ratio	Lower	Upper
166	100		
165	72.3	77.3	137.3#
167	0.0	0.0	30.0

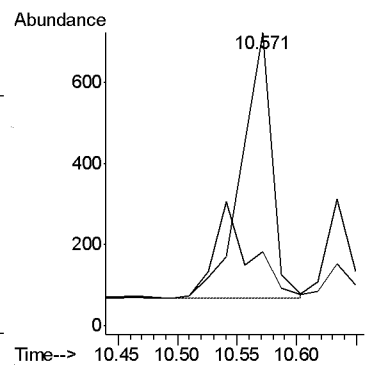




#20
Phenanthrene
Concen: 0.11 ppb
RT: 10.571 min Scan# 555
Delta R.T. 0.015 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:178 Resp: 1167

Ion	Ratio	Lower	Upper
178	100		
179	17.2	0.0	43.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23451.D
Acq On : 31 Jan 2011 6:59 pm
Operator : ninap
Sample : ja66701-5
Misc : op47853a,e4m1022,1000
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 11:33:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

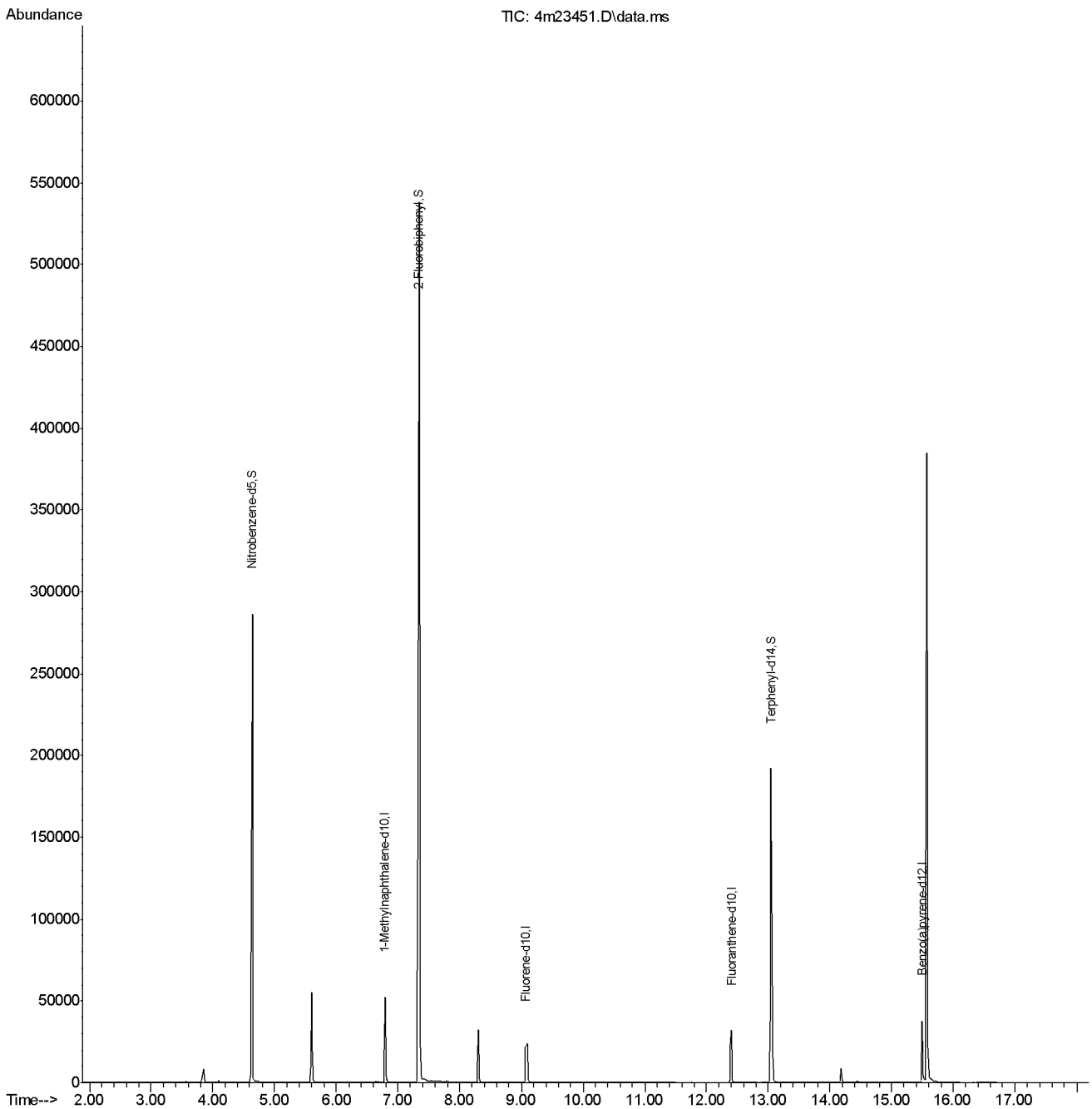
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	27548	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	20087	4.00	ppb	0.00
23) Fluoranthene-d10	12.399	212	33237	4.00	ppb	0.02
30) Benzo(a)pyrene-d12	15.494	264	33846	4.00	ppb	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	181743	44.96	ppb	0.01
Spiked Amount 50.000			Recovery =	89.92%		
11) 2-Fluorobiphenyl	7.338	172	423779	45.74	ppb	0.02
Spiked Amount 50.000			Recovery =	91.48%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	133394	37.27	ppb	0.02
Spiked Amount 50.000			Recovery =	74.54%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23451.D
Acq On : 31 Jan 2011 6:59 pm
Operator : ninap
Sample : ja66701-5
Misc : op47853a,e4m1022,1000
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 11:33:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



8.1.21
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23452.D
Acq On : 31 Jan 2011 7:24 pm
Operator : ninap
Sample : ja66701-6
Misc : op47853a,e4m1022,1000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 14:59:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

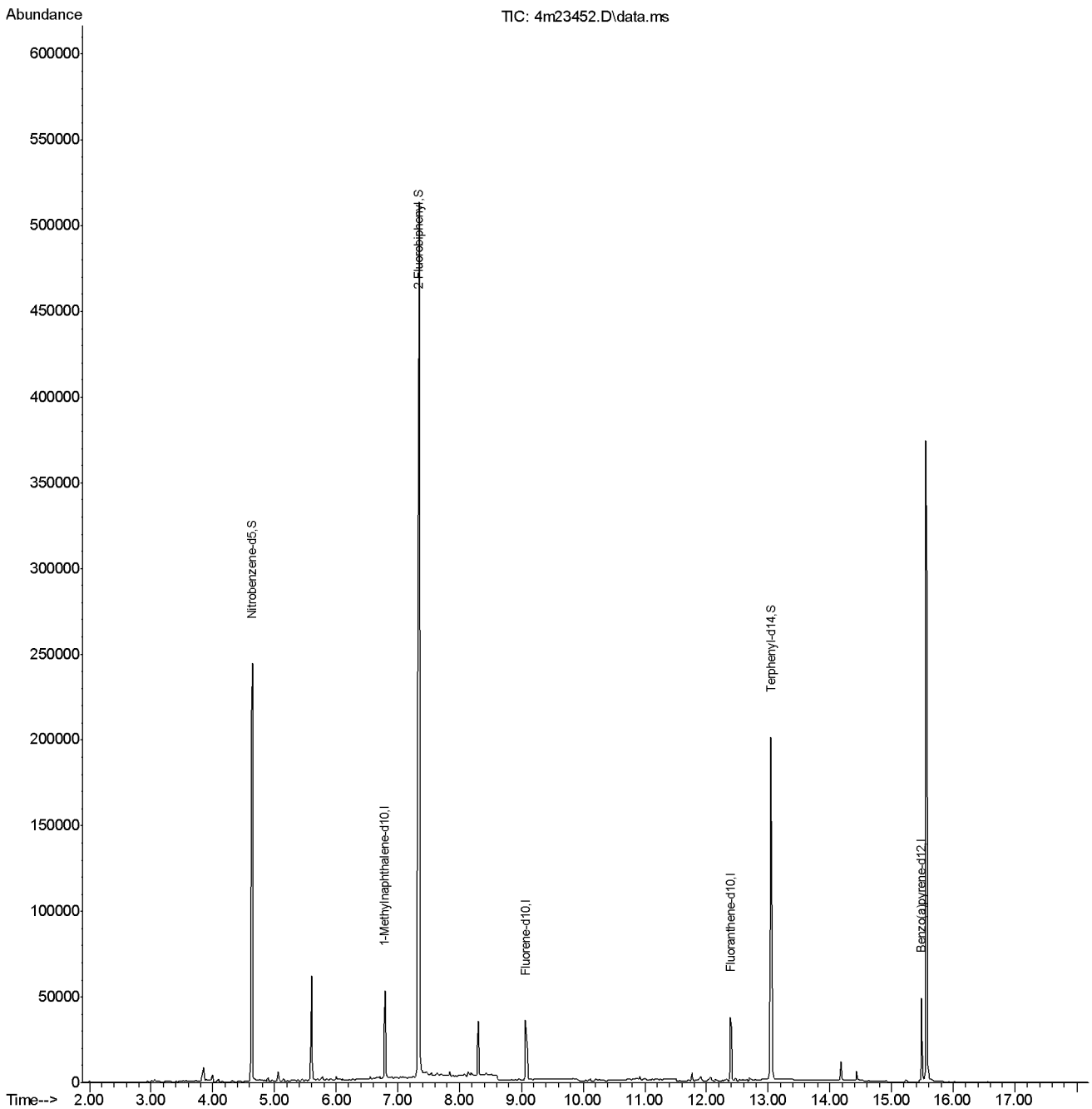
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	31496	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	24176	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	40150	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	42477	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	186190	40.28	ppb	0.01
Spiked Amount 50.000			Recovery =	80.56%		
11) 2-Fluorobiphenyl	7.338	172	465132	43.91	ppb	0.02
Spiked Amount 50.000			Recovery =	87.82%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	161546	37.36	ppb	0.02
Spiked Amount 50.000			Recovery =	74.72%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23452.D
Acq On : 31 Jan 2011 7:24 pm
Operator : ninap
Sample : ja66701-6
Misc : op47853a,e4m1022,1000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 14:59:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23453.D
Acq On : 31 Jan 2011 7:47 pm
Operator : ninap
Sample : ja66701-7
Misc : op47853a,e4m1022,1000
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 01 11:34:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

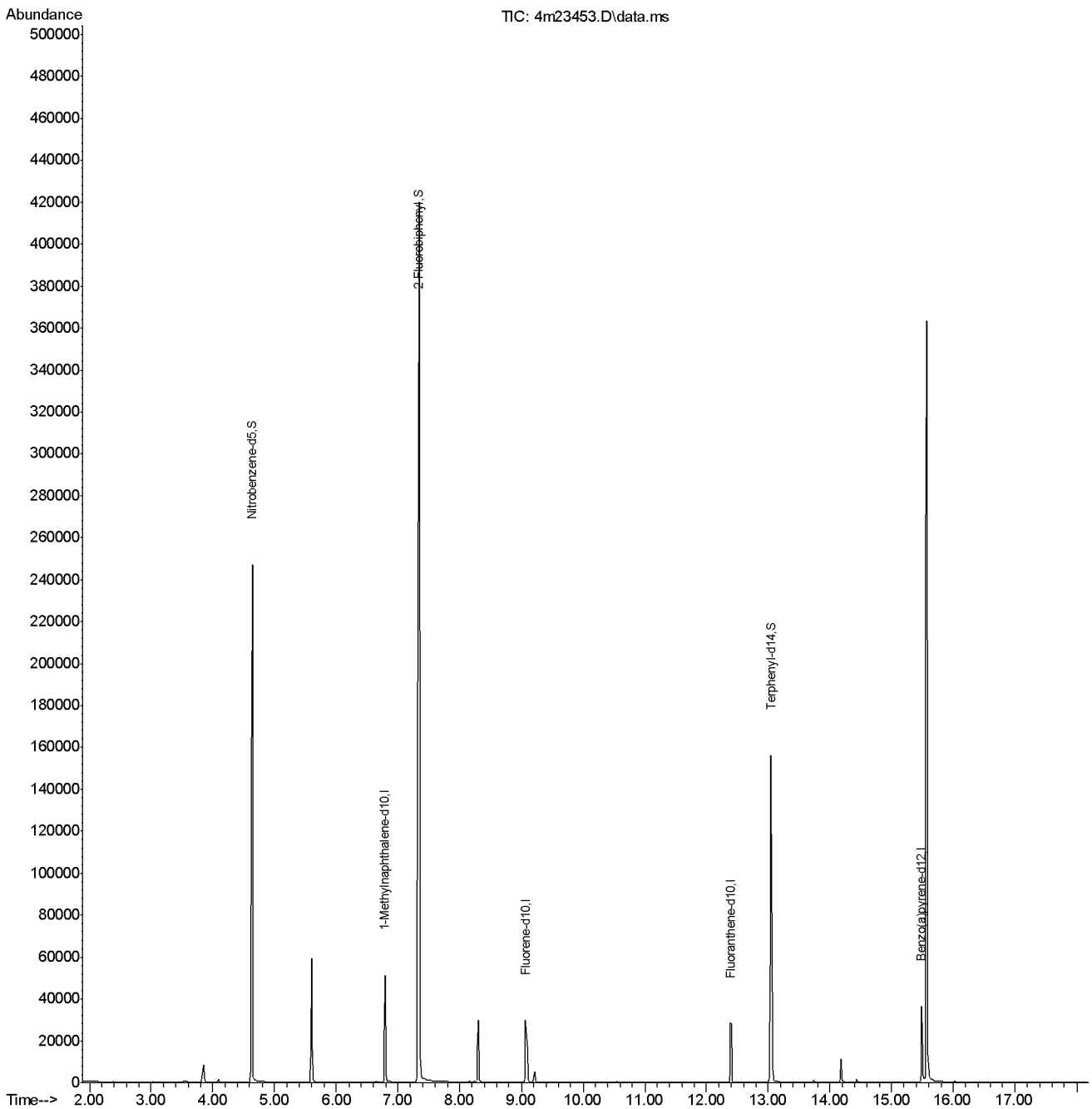
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28797	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	20783	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	33919	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	35715	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	167709	39.68	ppb	0.01
Spiked Amount 50.000			Recovery =	79.36%		
11) 2-Fluorobiphenyl	7.338	172	386355	39.89	ppb	0.02
Spiked Amount 50.000			Recovery =	79.78%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	119147	32.62	ppb	0.02
Spiked Amount 50.000			Recovery =	65.24%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23453.D
Acq On : 31 Jan 2011 7:47 pm
Operator : ninap
Sample : ja66701-7
Misc : op47853a,e4m1022,1000
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 01 11:34:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1023\
Data File : 4m23458.D
Acq On : 1 Feb 2011 9:28 am
Operator : ninap
Sample : ja66701-8
Misc : op47853a,e4m1023,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 10:30:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

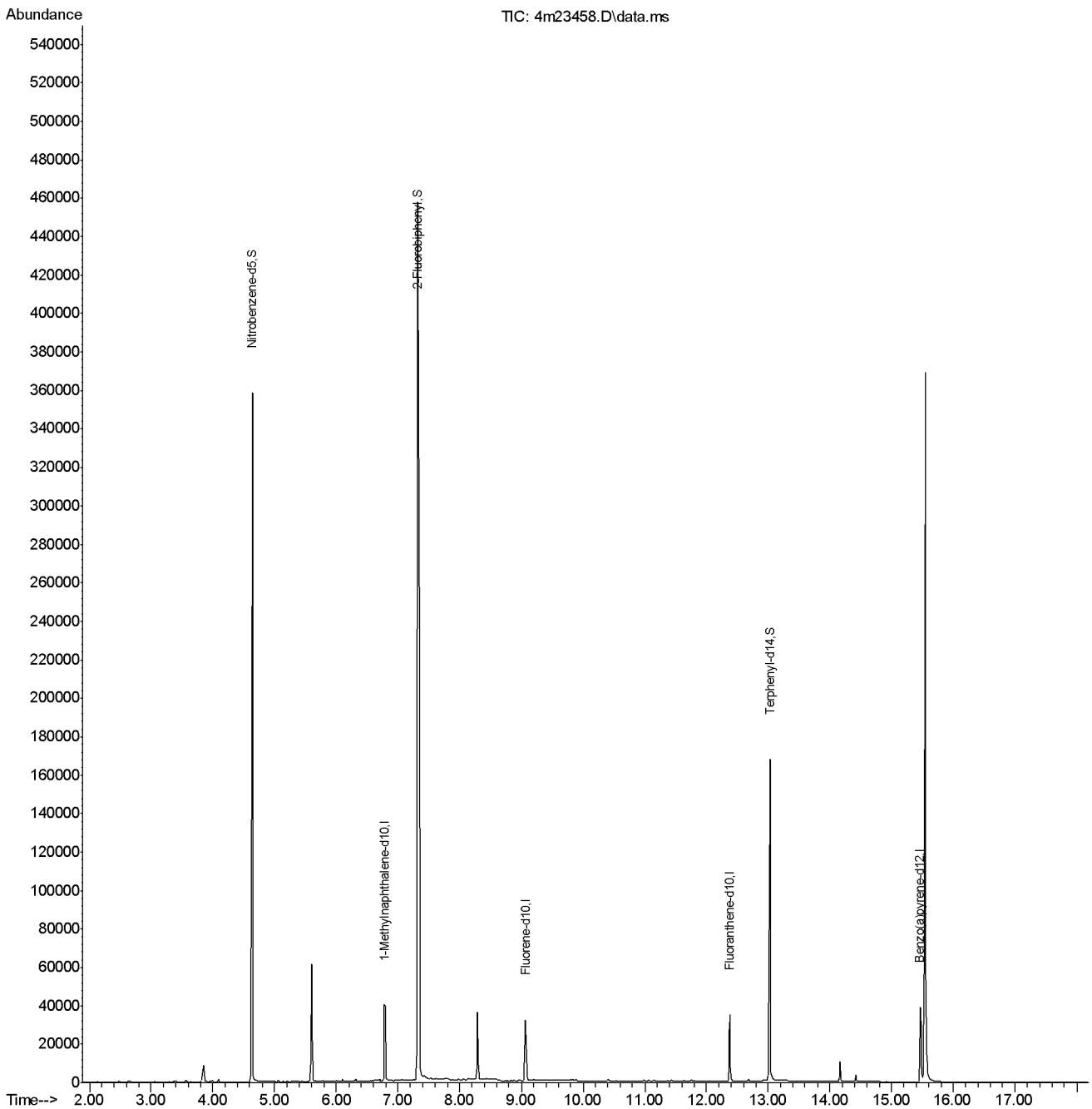
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28614	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	22516	4.00	ppb	0.00
23) Fluoranthene-d10	12.378	212	35856	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.463	264	36758	4.00	ppb	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	206379	49.15	ppb	0.01
Spiked Amount 50.000			Recovery =	98.30%		
11) 2-Fluorobiphenyl	7.321	172	439152	45.63	ppb	0.00
Spiked Amount 50.000			Recovery =	91.26%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	135534	35.10	ppb	0.00
Spiked Amount 50.000			Recovery =	70.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1023\
Data File : 4m23458.D
Acq On : 1 Feb 2011 9:28 am
Operator : ninap
Sample : ja66701-8
Misc : op47853a,e4m1023,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 10:30:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23430.D
Acq On : 31 Jan 2011 10:15 am
Operator : ninap
Sample : op47853a-mb1
Misc : op47853a,e4m1022,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 15:39:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

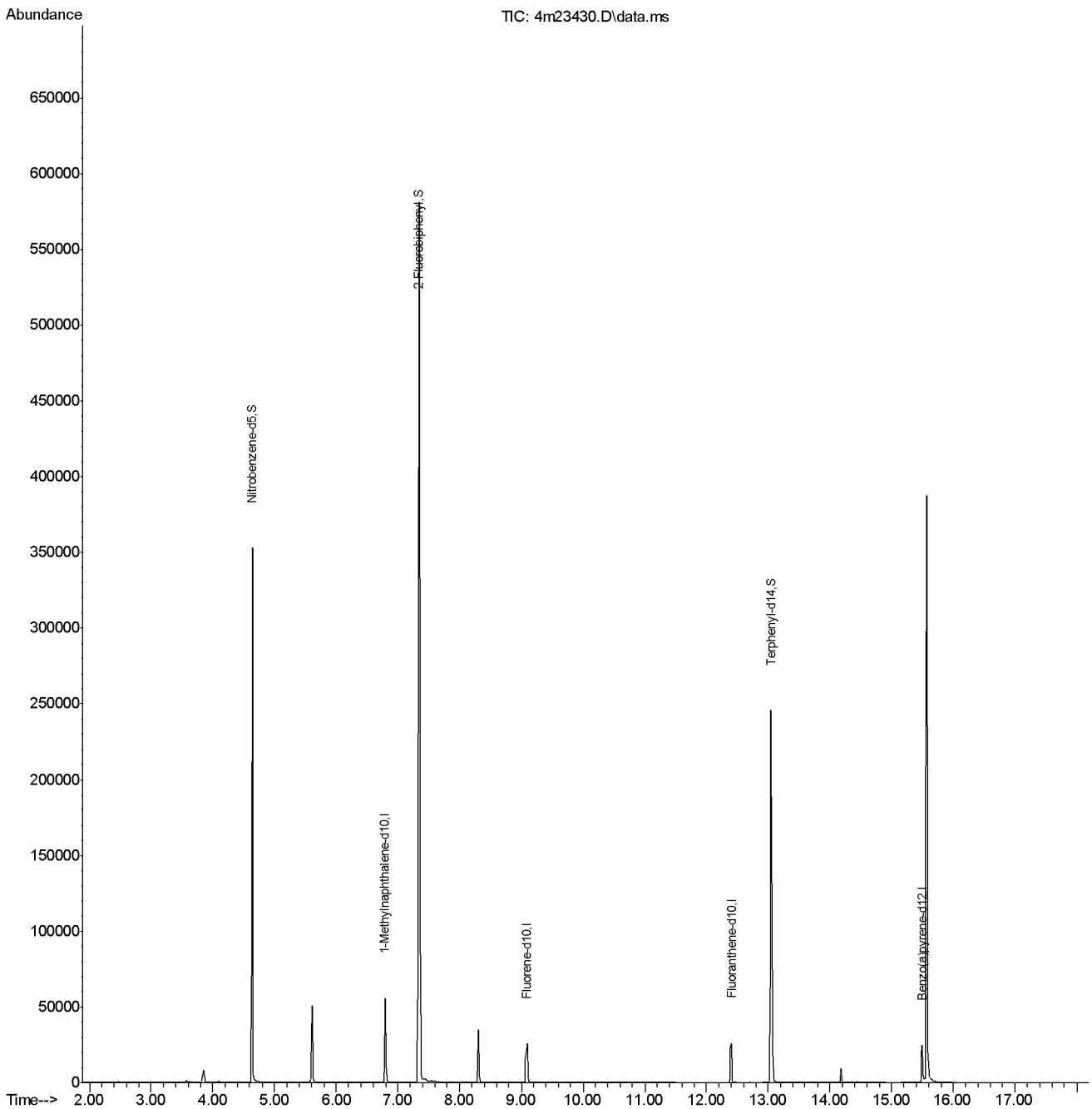
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	26558	4.00	ppb	0.02
12) Fluorene-d10	9.086	174	18655	4.00	ppb	0.02
23) Fluoranthene-d10	12.399	212	30014	4.00	ppb	0.02
30) Benzo(a)pyrene-d12	15.494	264	28495	4.00	ppb	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	198989	51.06	ppb	0.01
Spiked Amount 50.000			Recovery =	102.12%		
11) 2-Fluorobiphenyl	7.338	172	430030	48.15	ppb	0.02
Spiked Amount 50.000			Recovery =	96.30%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	175458	54.28	ppb	0.02
Spiked Amount 50.000			Recovery =	108.56%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23430.D
Acq On : 31 Jan 2011 10:15 am
Operator : ninap
Sample : op47853a-mb1
Misc : op47853a,e4m1022,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 15:39:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:47 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

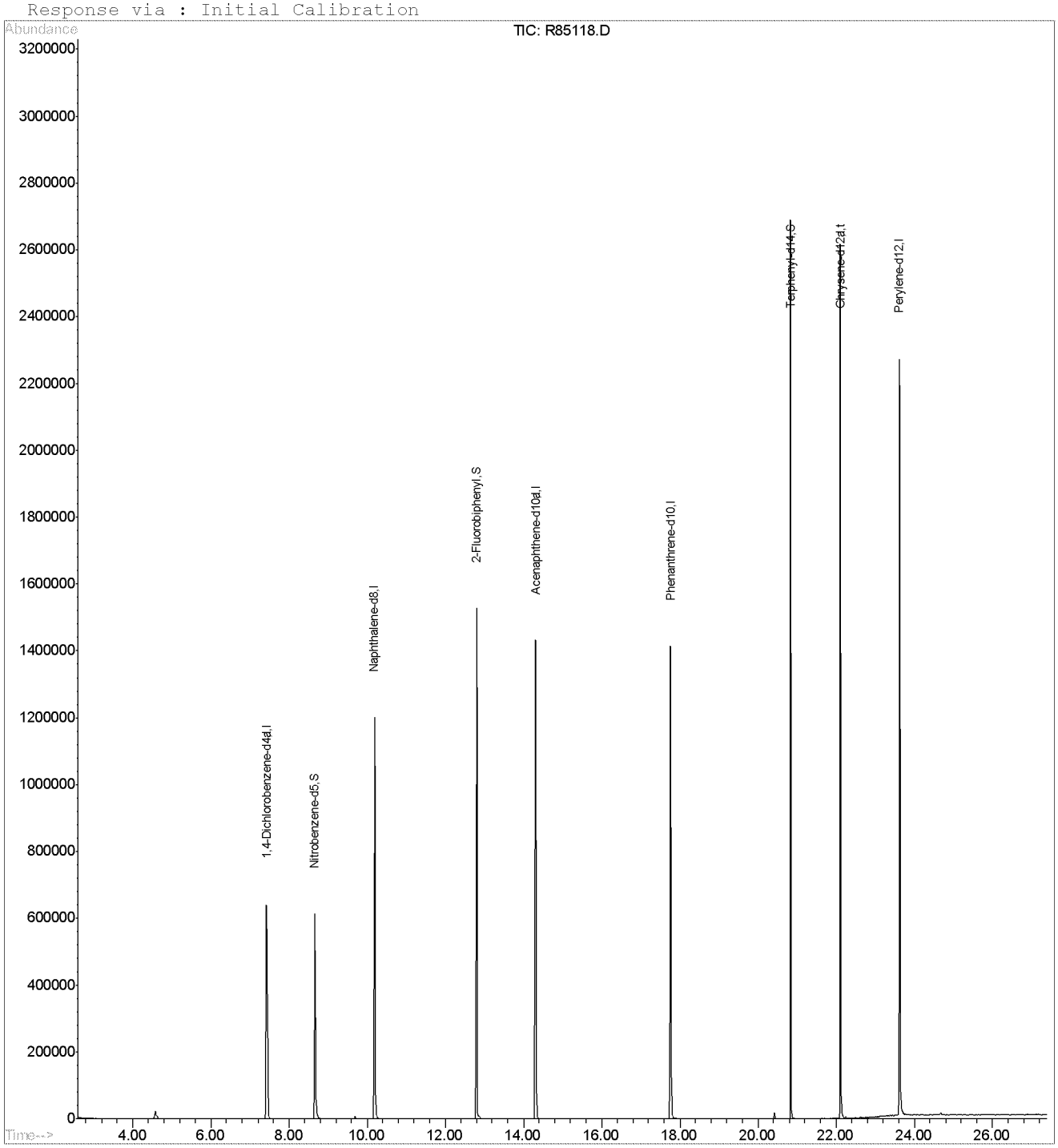
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	265301	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	949334	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	544343	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	888779	40.00	ppb	-0.23
83) Chrysene-d12	22.11	240	1004996	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	996067	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.43	152	265301	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	544343	40.00	ppb	-0.20
107) Chrysene-d12a	22.11	240	1004996	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	377850	43.80	ppb	-0.20
Spiked Amount 50.000			Recovery =	87.60%		
51) 2-Fluorobiphenyl	12.80	172	781761	40.80	ppb	-0.21
Spiked Amount 50.000			Recovery =	81.60%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	869768	45.92	ppb	-0.14
Spiked Amount 50.000			Recovery =	91.84%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85118.D MR3151.M Thu Jan 27 19:47:21 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:47 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



R85118.D MR3151.M Thu Jan 27 19:47:21 2011 NJMSR Page 2

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.671	11	15	18	rVB2	1056	1549	0.05%	0.008%
2	3.440	155	159	164	rBV2	1849	2421	0.08%	0.012%
3	4.081	272	279	283	rVB	1062	2066	0.07%	0.010%
4	4.573	362	371	394	rBV3	24993	87754	2.98%	0.435%
5	7.425	896	905	932	rBB	641796	1477715	50.20%	7.319%
6	8.665	1130	1137	1164	rBV	615063	1091106	37.07%	5.404%
7	8.836	1168	1169	1177	rVB	936	1646	0.06%	0.008%
8	9.690	1323	1329	1334	rBB2	8089	10751	0.37%	0.053%
9	10.187	1414	1422	1448	rBV	1202392	1930830	65.59%	9.563%
10	12.800	1903	1911	1921	rBV	1528660	2238501	76.04%	11.086%
11	12.869	1921	1924	1933	rVV3	8931	16506	0.56%	0.082%
12	12.938	1933	1937	1944	rVV2	1537	3959	0.13%	0.020%
13	12.986	1944	1946	1957	rVB2	1184	1985	0.07%	0.010%
14	14.306	2184	2193	2217	rBV	1433655	2219234	75.39%	10.991%
15	14.440	2217	2218	2226	rVB	1710	1890	0.06%	0.009%
16	17.485	2784	2788	2795	rBB	2084	3491	0.12%	0.017%
17	17.762	2831	2840	2858	rBV2	1413670	2293085	77.90%	11.357%
18	17.885	2858	2863	2873	rVV2	3232	9631	0.33%	0.048%
19	18.067	2894	2897	2901	rVB	1229	1647	0.06%	0.008%
20	19.039	3075	3079	3083	rBV	698	1574	0.05%	0.008%
21	20.423	3330	3338	3343	rVB2	17464	17723	0.60%	0.088%
22	20.834	3407	3415	3439	rBV	2691129	2835500	96.32%	14.043%
23	21.769	3584	3590	3591	rBV2	821	1572	0.05%	0.008%
24	22.106	3647	3653	3674	rBV	2617407	2783217	94.55%	13.784%
25	22.239	3674	3678	3682	rVB	5663	5208	0.18%	0.026%
26	22.485	3720	3724	3727	rBV	2224	2514	0.09%	0.012%
27	22.693	3759	3763	3768	rBV3	2883	3070	0.10%	0.015%
28	22.827	3786	3788	3792	rBV2	1587	1853	0.06%	0.009%
29	23.014	3820	3823	3827	rBV3	2044	2340	0.08%	0.012%
30	23.046	3827	3829	3833	rVV2	1185	1570	0.05%	0.008%
31	23.105	3838	3840	3844	rVV2	1878	2821	0.10%	0.014%
32	23.137	3844	3846	3851	rVV4	1831	2525	0.09%	0.013%
33	23.185	3851	3855	3857	rVV4	1796	2115	0.07%	0.010%
34	23.243	3860	3866	3869	rVV3	2189	3618	0.12%	0.018%
35	23.281	3869	3873	3876	rVV3	2435	3697	0.13%	0.018%
36	23.308	3876	3878	3880	rVV3	2310	2391	0.08%	0.012%
37	23.340	3880	3884	3888	rVV5	2346	4021	0.14%	0.020%
38	23.388	3888	3893	3897	rVV5	2542	4405	0.15%	0.022%

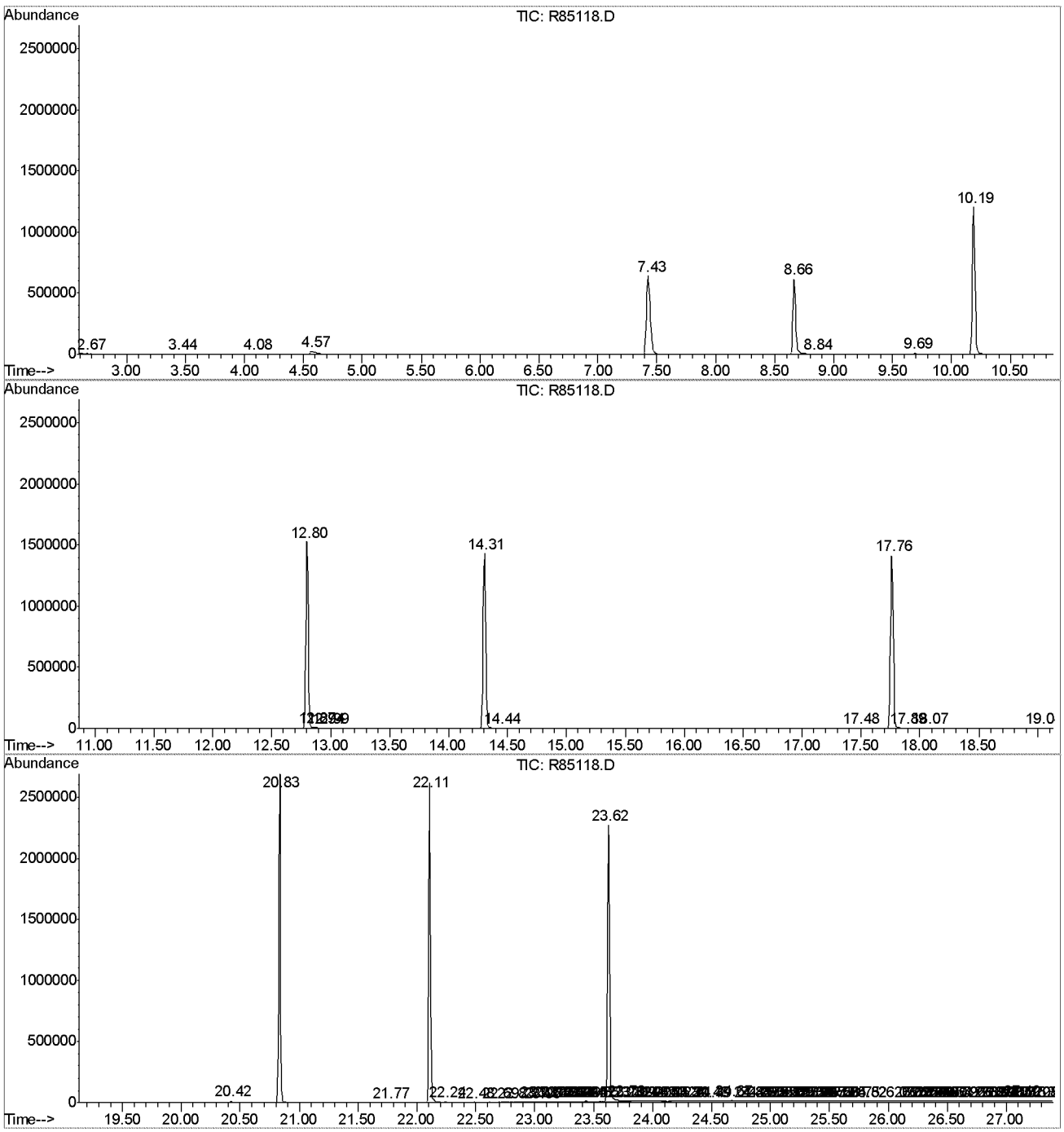
39	23.436	3897	3902	3906	rVV4	3664	6793	0.23%	0.034%
40	23.484	3910	3911	3915	rVV4	2014	2168	0.07%	0.011%
41	23.516	3915	3917	3920	rVV4	2002	2607	0.09%	0.013%
42	23.548	3920	3923	3926	rVV4	2840	3480	0.12%	0.017%
43	23.623	3929	3937	3960	rVV	2263739	2943716	100.00%	14.579%
44	23.762	3960	3963	3968	rVV4	4374	8540	0.29%	0.042%
45	23.810	3968	3972	3973	rVV4	3025	4076	0.14%	0.020%
46	23.820	3973	3974	3980	rVV4	2421	3846	0.13%	0.019%
47	23.922	3985	3993	3995	rBV5	1981	3730	0.13%	0.018%
48	23.959	3995	4000	4001	rBV4	1380	1595	0.05%	0.008%
49	24.050	4016	4017	4023	rBV4	1612	2075	0.07%	0.010%
50	24.103	4023	4027	4031	rVB3	2223	3655	0.12%	0.018%
51	24.146	4031	4035	4037	rBV3	2587	3056	0.10%	0.015%
52	24.226	4049	4050	4055	rVB5	1675	1824	0.06%	0.009%
53	24.264	4055	4057	4059	rBV3	2129	1894	0.06%	0.009%
54	24.301	4062	4064	4067	rVB2	2471	2086	0.07%	0.010%
55	24.477	4092	4097	4099	rBV4	1637	1852	0.06%	0.009%
56	24.493	4099	4100	4106	rBV5	1054	1555	0.05%	0.008%
57	24.670	4127	4133	4140	rBV4	6269	10958	0.37%	0.054%
58	24.835	4163	4164	4170	rBV3	2592	2923	0.10%	0.014%
59	24.889	4170	4174	4175	rBV2	1485	1591	0.05%	0.008%
60	24.953	4183	4186	4189	rBV4	2337	2229	0.08%	0.011%
61	25.017	4196	4198	4200	rBV2	2073	2055	0.07%	0.010%
62	25.049	4202	4204	4207	rVV3	2061	2347	0.08%	0.012%
63	25.081	4207	4210	4214	rVB3	2620	2482	0.08%	0.012%
64	25.145	4219	4222	4225	rVV3	2139	2714	0.09%	0.013%
65	25.193	4228	4231	4235	rVV5	2284	2610	0.09%	0.013%
66	25.305	4246	4252	4255	rVV6	2376	2993	0.10%	0.015%
67	25.338	4257	4258	4262	rVB4	2038	2281	0.08%	0.011%
68	25.370	4262	4264	4266	rBV3	1991	1791	0.06%	0.009%
69	25.386	4266	4267	4270	rVB3	2415	1563	0.05%	0.008%
70	25.407	4270	4271	4276	rBV3	1291	1596	0.05%	0.008%
71	25.466	4279	4282	4288	rVV5	1181	1747	0.06%	0.009%
72	25.530	4292	4294	4297	rVB3	1991	1919	0.07%	0.010%
73	25.573	4297	4302	4303	rBV3	1987	2741	0.09%	0.014%
74	25.583	4303	4304	4310	rVB2	2259	2582	0.09%	0.013%
75	25.637	4310	4314	4319	rBV5	1936	3911	0.13%	0.019%
76	25.754	4331	4336	4338	rVB4	1051	1668	0.06%	0.008%
77	25.818	4346	4348	4354	rVB4	2086	2091	0.07%	0.010%
78	26.053	4389	4392	4394	rVB3	1996	1626	0.06%	0.008%
79	26.192	4417	4418	4421	rBV3	1800	1670	0.06%	0.008%
80	26.256	4426	4430	4432	rVV3	1837	2257	0.08%	0.011%
81	26.294	4434	4437	4439	rVV4	2098	2640	0.09%	0.013%
82	26.342	4443	4446	4450	rVV4	2151	3306	0.11%	0.016%
83	26.385	4450	4454	4457	rVV5	2941	4274	0.15%	0.021%
84	26.422	4459	4461	4464	rVB3	2798	2238	0.08%	0.011%
85	26.465	4467	4469	4471	rVV3	1707	1731	0.06%	0.009%
86	26.497	4472	4475	4479	rVV4	1850	3326	0.11%	0.016%
87	26.540	4479	4483	4485	rVV4	2197	3085	0.10%	0.015%
88	26.588	4485	4492	4494	rVB6	2785	4278	0.15%	0.021%
89	26.828	4535	4537	4540	rBV3	2405	2115	0.07%	0.010%
90	26.871	4543	4545	4548	rBV3	1761	1692	0.06%	0.008%
91	26.897	4548	4550	4553	rVV3	2445	1811	0.06%	0.009%
92	26.924	4553	4555	4561	rVB4	1489	1924	0.07%	0.010%
93	26.978	4561	4565	4569	rBV3	2237	3063	0.10%	0.015%
94	27.047	4574	4578	4580	rVB4	1806	1917	0.07%	0.009%
95	27.079	4580	4584	4586	rVB5	2047	2434	0.08%	0.012%

96	27.122	4588	4592	4594	rBV4	3508	3369	0.11%	0.017%
97	27.165	4598	4600	4604	rVB2	3191	2828	0.10%	0.014%
98	27.202	4604	4607	4609	rBV3	2105	2351	0.08%	0.012%
99	27.277	4618	4621	4623	rVB3	2192	2241	0.08%	0.011%
100	27.309	4623	4627	4630	rBV6	2438	2477	0.08%	0.012%

Sum of corrected areas: 20191494

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85118.D
Operator : ninap
Acquired : 27 Jan 2011 12:39 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: op47853-mb1
Misc Info : op47853,er3223,1000
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



ACCUTEST LABORATORIES
JA66701

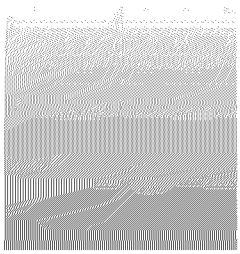
Tentatively Identified Compound (LSC) summary

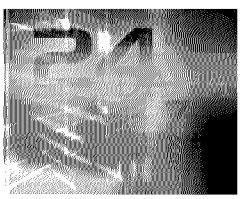
Operator ID: ninap Date Acquired: 27 Jan 2011 12:39 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85118.D
Name: op47853-mb1
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

New Jersey
ACCUTEST
LABORATORIES

03/04/11





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

NP000603.0009

Accutest Job Number: JA68506

Sampling Dates: 02/17/11 - 02/18/11

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **395**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA68506-1	02/17/11	12:05	FSF	02/18/11	AQ	Ground Water	CG
JA68506-2	02/17/11	13:45	FSF	02/18/11	AQ	Ground Water	CD
JA68506-3	02/17/11	13:50	FSF	02/18/11	AQ	Ground Water	CD-DUP
JA68506-4	02/17/11	14:55	FSF	02/18/11	AQ	Ground Water	CE
JA68506-5	02/17/11	15:25	FSF	02/18/11	AQ	Field Blank Water	FB-02172011
JA68506-6	02/18/11	10:40	FSF	02/18/11	AQ	Ground Water	CC
JA68506-7	02/18/11	11:30	FSF	02/18/11	AQ	Ground Water	CF
JA68506-8	02/18/11	11:45	FSF	02/18/11	AQ	Field Blank Water	FB-02182011
JA68506-9	02/18/11	11:45	FSF	02/18/11	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA68506
Site:	PSEG-Diesel, Salem, NJ	**Report Date**	3/4/2011 5:34:33 PM

On 02/18/2011, 6 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.6 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA68506 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V2B3591

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68307-4MS, JA68307-4MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V2C3633

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68481-8MS, JA68481-8MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V2C3637

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA68506-4MS, JA68506-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP48193

- All samples were extracted within the recommended method holding time.
- Sample(s) JA68506-1MS, JA68506-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 4-Bromophenyl phenyl ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Carbazole, Di-n-butyl phthalate, Dimethyl phthalate are outside control limits. Outside of in house control limits.
- RPD(s) for MS/MSD for 1,1'-Biphenyl, 1,2,4,5-Tetrachlorobenzene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Methylnaphthalene, 2-Nitroaniline, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Bromophenyl phenyl ether, 4-Chloroaniline, 4-Chlorophenyl phenyl ether, 4-Nitroaniline, Acetophenone, Atrazine, Benzaldehyde, bis(2-Chloroethoxy)methane, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Caprolactam, Carbazole, Di-n-butyl phthalate, Di-n-octyl phthalate, Dibenzofuran, Diethyl phthalate, Dimethyl phthalate, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Isophorone, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Nitrobenzene are outside control limits for sample OP48193-MSD. Analytical precision exceeds standard laboratory control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP48193A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68506-1MS, JA68506-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Fluoranthene, Fluorene, Hexachlorobenzene, Phenanthrene, Pyrene are outside control limits. Outside of in house control limits.
- RPD(s) for MS/MSD for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Hexachlorobenzene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits for sample OP48193A-MSD. Analytical precision exceeds standard laboratory control limits.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

New Jersey
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LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B80129.D	1	02/23/11	DR	n/a	n/a	V2B3591
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	0.34	1.0	0.23	ug/l	J
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		76-120%
17060-07-0	1,2-Dichloroethane-D4	102%		64-135%
2037-26-5	Toluene-D8	99%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		25-112%
321-60-8	2-Fluorobiphenyl	69%		31-106%
1718-51-0	Terphenyl-d14	45%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4.1	ug/l	J
	Internal standard added for SIM test	5.03	4.9	ug/l	J
	Internal standard added for SIM test	10.14	4.7	ug/l	J
	unknown	11.15	4.7	ug/l	J
	Internal standard added for SIM test	13.22	4.8	ug/l	J
	Internal standard added for SIM test	16.24	4.5	ug/l	J
	Total TIC, Semi-Volatile		4.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23778.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	0.442	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		32-135%
321-60-8	2-Fluorobiphenyl	76%		31-121%
1718-51-0	Terphenyl-d14	69%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B80130.D	1	02/23/11	DR	n/a	n/a	V2B3591
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	2.2	5.0	0.92	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	101%		76-117%
460-00-4	4-Bromofluorobenzene	98%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	cycloalkane/alkene	18.77	7.7	ug/l	J
	Naphthalene methyl	20.77	6.6	ug/l	J
	Total TIC, Volatile		14.3	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54992.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		25-112%
321-60-8	2-Fluorobiphenyl	72%		31-106%
1718-51-0	Terphenyl-d14	36%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.86	5	ug/l	J
	Internal standard added for SIM test	5.03	5	ug/l	J
	1H-Inden-1-one, -dihydro-	7.51	12	ug/l	J
	Phenol, -tert-butyl-	7.54	9.7	ug/l	J
	Internal standard added for SIM test	7.78	4.7	ug/l	J
	unknown	8.98	10	ug/l	J
	unknown	10.03	4.7	ug/l	J
	Internal standard added for SIM test	10.14	5.7	ug/l	J
	unknown	10.66	4	ug/l	J
	unknown	10.95	6.3	ug/l	J
	unknown	12.38	6.9	ug/l	J
	unknown	12.40	10	ug/l	J
	Internal standard added for SIM test	13.22	5.3	ug/l	J
	Internal standard added for SIM test	16.24	4.7	ug/l	J
	Total TIC, Semi-Volatile		68.6	ug/l	J

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23779.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.223	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	0.287	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		32-135%
321-60-8	2-Fluorobiphenyl	88%		31-121%
1718-51-0	Terphenyl-d14	58%		10-130%

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79682.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.6	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	4.1	5.0	0.92	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	18.43	5.4	ug/l	J
	Naphthalene, tetrahydro-	18.68	5.7	ug/l	J
91-20-3	Naphthalene	19.22	5.5	ug/l	JN
	Total TIC, Volatile		16.6	ug/l	J

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54993.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	79%		31-106%
1718-51-0	Terphenyl-d14	38%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.86	5.4	ug/l	J
	Internal standard added for SIM test	5.03	4.7	ug/l	J
	unknown	5.43	4.2	ug/l	J
	1H-Inden-1-one, -dihydro-	7.51	13	ug/l	J
	Phenol, -tert-butyl-	7.55	9.8	ug/l	J
	unknown	8.98	13	ug/l	J
	unknown	10.03	4.3	ug/l	J
	Internal standard added for SIM test	10.14	5.8	ug/l	J
	unknown	10.66	6.9	ug/l	J
	unknown	10.96	7.7	ug/l	J
	unknown	12.38	6.7	ug/l	J
	unknown	12.40	9.6	ug/l	J
	unknown	12.68	4.2	ug/l	J
	Internal standard added for SIM test	13.22	4.5	ug/l	J
	Internal standard added for SIM test	16.24	4.2	ug/l	J
	Total TIC, Semi-Volatile		84.8	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23780.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.229	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	0.258	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	102%		32-135%
321-60-8	2-Fluorobiphenyl	98%		31-121%
1718-51-0	Terphenyl-d14	60%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.6	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54994.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	75%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	5.5	ug/l	J
	Internal standard added for SIM test	5.03	4.1	ug/l	J
	Internal standard added for SIM test	10.14	4.6	ug/l	J
	Internal standard added for SIM test	13.22	4.4	ug/l	J
	Internal standard added for SIM test	16.24	4.4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23781.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	103%		32-135%
321-60-8	2-Fluorobiphenyl	100%		31-121%
1718-51-0	Terphenyl-d14	105%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79594.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54984.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	64%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4	ug/l	J
	Internal standard added for SIM test	5.03	4.2	ug/l	J
	Internal standard added for SIM test	13.22	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23782.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	105%		32-135%
321-60-8	2-Fluorobiphenyl	106%		31-121%
1718-51-0	Terphenyl-d14	105%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79681.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	25.0	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54995.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	64%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	13.22	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23783.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.281	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		32-135%
321-60-8	2-Fluorobiphenyl	108%		31-121%
1718-51-0	Terphenyl-d14	99%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79680.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	105%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54996.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	66%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.03	4.1	ug/l	J
	Internal standard added for SIM test	10.14	4.5	ug/l	J
	Internal standard added for SIM test	13.22	4.7	ug/l	J
	Internal standard added for SIM test	16.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23796.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	97%		32-135%
321-60-8	2-Fluorobiphenyl	107%		31-121%
1718-51-0	Terphenyl-d14	98%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79595.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54985.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	86%		31-106%
1718-51-0	Terphenyl-d14	65%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4.2	ug/l	J
	Internal standard added for SIM test	10.14	4.3	ug/l	J
	Internal standard added for SIM test	13.22	4.5	ug/l	J
	Internal standard added for SIM test	16.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23785.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		32-135%
321-60-8	2-Fluorobiphenyl	114%		31-121%
1718-51-0	Terphenyl-d14	99%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA68506-9	**Date Sampled:**	02/18/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79596.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA68506-9	**Date Sampled:**	02/18/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

PAGE ___ OF ___

FED-EX Tracking #: | Bottle Order Control #:
Acutest Quote #: | Acutest Job #: JA68506

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 FRIENDS LN
City: NEWTOWN State: PA Zip: 18940
Project Contact: Jon Shafer E-mail:
Phone #: 267-685-1800 Fax #: 267-685-1201
Sampler(s) Name(s): Frank Straker Phone #:

Project Information

Project Name: PSEG - DIESEL
Street:
City: SALEM State: NJ
Project #: NP000603.0009
Client Purchase Order #:
Project Manager: BRAD PIERCE

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

8260B (VOC) | 8270C (SVOC)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Acutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	CG		2-17-11	1205	FS	GW	5	3				2				EX 9, 2274
2	CD			1345												
3	CD-DUP			1350												
4	CE			1455												
5	FB-02172011			1525		AQ	4	2								
6	CC		2-18-11	1040			5	3				2				
7	CF			1130			5	3				2				
8	FB-02182011			1145		AQ	4	2				2				
9	TRIP BLANK		2-16-11	0800		AQ	2	2								

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Approved By (Acutest PM) / Date:

Emergency & Rush T/A data available VIA Leblink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		2-18-11 1525	1	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [X] Cooler Temp: 4.6, 3.0C

1A

4.1.4

JA68506: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA68506 Client: Immediate Client Services Action Required: No

Date / Time Received: 2/18/2011 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA68506: Chain of Custody
Page 2 of 3

Job Change Order: JA68506_2/24/2011

Requested Date:	2/24/2011	**Received Date:**	2/18/2011
Account Name:	Arcadis	**Due Date:**	3/11/2011
Project Description:	PSEG-Diesel, Salem, NJ	**Deliverable:**	REDT2
CSR:	MM	**TAT (Days):**	13

Sample #:
JA68506-all

Change: Please change the TAT to 13 days; due 3/3/11.

Above Changes Per: Jonathan Shafer **Date:** 2/24/2011

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

JA68506: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA68506-1 CG	Collected: 17-FEB-11 12:05 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-1	SW846 8270C BY SIM	22-FEB-11 10:05	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-1	SW846 8270C	22-FEB-11 12:26	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-1	SW846 8260B	23-FEB-11 12:40	DR			V8260NJPTCL11+
JA68506-2 CD	Collected: 17-FEB-11 13:45 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-2	SW846 8270C BY SIM	22-FEB-11 10:29	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-2	SW846 8270C	22-FEB-11 13:52	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-2	SW846 8260B	23-FEB-11 13:11	DR			V8260NJPTCL11+
JA68506-3 CD-DUP	Collected: 17-FEB-11 13:50 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-3	SW846 8270C BY SIM	22-FEB-11 10:53	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-3	SW846 8270C	22-FEB-11 14:21	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-3	SW846 8260B	28-FEB-11 14:42	DR			V8260NJPTCL11+
JA68506-4 CE	Collected: 17-FEB-11 14:55 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-4	SW846 8270C BY SIM	22-FEB-11 11:17	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-4	SW846 8270C	22-FEB-11 14:50	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-4	SW846 8260B	28-FEB-11 13:09	DR			V8260NJPTCL11+
JA68506-5 FB-02172011	Collected: 17-FEB-11 15:25 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-5	SW846 8270C	22-FEB-11 10:04	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-5	SW846 8270C BY SIM	22-FEB-11 11:40	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-5	SW846 8260B	24-FEB-11 19:32	DR			V8260NJPTCL11+
JA68506-6 CC	Collected: 18-FEB-11 10:40 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-6	SW846 8270C BY SIM	22-FEB-11 12:04	NAP	21-FEB-11		B8270SIMNJ
JA68506-6	SW846 8270C	22-FEB-11 15:19	NAP	21-FEB-11	HQ	B8270NJTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA68506-6	SW846 8260B	28-FEB-11 14:11	DR			V8260NJPTCL11+
JA68506-7	Collected: 18-FEB-11 11:30 By: FSF		Received: 18-FEB-11 By: MPC			
CF						
JA68506-7	SW846 8270C	22-FEB-11 15:47	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-7	SW846 8270C BY SIM	22-FEB-11 17:18	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-7	SW846 8260B	28-FEB-11 13:40	DR			V8260NJPTCL11+
JA68506-8	Collected: 18-FEB-11 11:45 By: FSF		Received: 18-FEB-11 By: MPC			
FB-02182011						
JA68506-8	SW846 8270C	22-FEB-11 10:32	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-8	SW846 8270C BY SIM	22-FEB-11 12:52	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-8	SW846 8260B	24-FEB-11 20:02	DR			V8260NJPTCL11+
JA68506-9	Collected: 18-FEB-11 11:45 By: FSF		Received: 18-FEB-11 By: MPC			
TRIP BLANK						
JA68506-9	SW846 8260B	24-FEB-11 20:33	DR			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-1.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-1.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-1.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-1.1
JA68506-1.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-1.1
JA68506-1.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-1.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-1.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-1.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-1.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-1.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-1.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-1.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-1.2
JA68506-1.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-1.2
JA68506-1.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-1.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-1.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-1.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-1.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-1.3	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-1.3	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-1.3	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-1.3	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-1.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-1.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-1.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-1.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-1.4	Secured Storage	Dezaree Reis	02/23/11 15:54	Retrieve from Storage
JA68506-1.4	Dezaree Reis	GCMS2B	02/23/11 15:54	Load on Instrument
JA68506-1.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-1.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-2.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-2.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-2.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-2.1
JA68506-2.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-2.1
JA68506-2.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-2.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-2.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-2.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-2.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-2.3	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-2.3	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-2.3	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-2.3	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-2.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-2.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-2.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-2.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-2.4	Secured Storage	Dezaree Reis	02/23/11 15:54	Retrieve from Storage
JA68506-2.4	Dezaree Reis	GCMS2B	02/23/11 15:54	Load on Instrument
JA68506-2.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-2.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-3.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-3.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-3.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-3.1
JA68506-3.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-3.1
JA68506-3.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-3.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-3.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-3.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-3.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-3.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-3.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-3.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-3.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-3.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-3.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-3.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-3.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-4.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-4.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-4.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-4.1
JA68506-4.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-4.1
JA68506-4.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-4.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-4.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-4.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-4.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-4.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-4.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-4.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-4.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-4.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-4.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-4.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-4.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-5.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-5.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-5.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-5.2
JA68506-5.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-5.2
JA68506-5.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-5.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-5.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-5.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-5.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-5.3	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-5.3	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-5.3	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-5.3	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage
JA68506-5.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-5.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-5.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-5.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-6.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-6.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-6.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-6.2
JA68506-6.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-6.2
JA68506-6.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-6.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-6.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-6.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-6.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-6.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-6.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-6.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-6.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-6.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-6.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-6.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-6.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-7.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-7.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-7.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-7.2
JA68506-7.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-7.2
JA68506-7.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-7.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-7.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-7.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-7.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-7.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-7.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-7.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-7.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-7.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-7.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-7.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-7.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-7.4	Secured Storage	Dezaree Reis	02/23/11 16:01	Retrieve from Storage
JA68506-7.4	Dezaree Reis	GCMS2B	02/23/11 16:04	Load on Instrument
JA68506-7.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-7.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-8.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-8.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-8.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-8.1
JA68506-8.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-8.1
JA68506-8.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-8.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-8.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-8.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-8.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-8.3	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-8.3	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-8.3	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-8.3	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage
JA68506-8.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-8.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-8.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-8.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-9.1	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-9.1	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-9.1	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-9.1	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-9.2	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-9.2	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-9.2	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-9.2	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-MB	2B80126.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-MB	2B80126.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	100%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-MB	2C79580.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-MB	2C79580.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	89%	64-135%
2037-26-5	Toluene-D8	106%	76-117%
460-00-4	4-Bromofluorobenzene	108%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-MB	2C79674.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-MB	2C79674.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	101%	64-135%
2037-26-5	Toluene-D8	112%	76-117%
460-00-4	4-Bromofluorobenzene	109%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-BS	2B80127.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.8	96	51-151
71-43-2	Benzene	50	45.9	92	75-122
74-97-5	Bromochloromethane	50	48.9	98	78-124
75-27-4	Bromodichloromethane	50	52.3	105	77-128
75-25-2	Bromoform	50	50.1	100	67-141
74-83-9	Bromomethane	50	42.2	84	53-152
78-93-3	2-Butanone (MEK)	50	45.7	91	64-130
75-15-0	Carbon disulfide	50	44.7	89	59-140
56-23-5	Carbon tetrachloride	50	52.4	105	75-148
108-90-7	Chlorobenzene	50	49.5	99	76-124
75-00-3	Chloroethane	50	38.9	78	54-147
67-66-3	Chloroform	50	50.4	101	77-124
74-87-3	Chloromethane	50	31.8	64	46-144
110-82-7	Cyclohexane	50	45.8	92	62-127
124-48-1	Dibromochloromethane	50	50.1	100	76-132
95-50-1	1,2-Dichlorobenzene	50	49.7	99	74-125
541-73-1	1,3-Dichlorobenzene	50	49.3	99	73-124
106-46-7	1,4-Dichlorobenzene	50	48.3	97	71-123
75-71-8	Dichlorodifluoromethane	50	29.9	60	42-152
75-34-3	1,1-Dichloroethane	50	47.5	95	72-124
107-06-2	1,2-Dichloroethane	50	55.5	111	66-150
75-35-4	1,1-Dichloroethene	50	46.6	93	61-132
156-59-2	cis-1,2-Dichloroethene	50	51.9	104	71-119
156-60-5	trans-1,2-Dichloroethene	50	41.1	82	71-123
78-87-5	1,2-Dichloropropane	50	46.2	92	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	52.8	106	75-132
100-41-4	Ethylbenzene	50	48.1	96	77-124
76-13-1	Freon 113	50	57.8	116	58-149
591-78-6	2-Hexanone	50	49.8	100	58-136
98-82-8	Isopropylbenzene	50	51.6	103	60-136
79-20-9	Methyl Acetate	50	41.2	82	57-139
108-87-2	Methylcyclohexane	50	54.8	110	73-130
1634-04-4	Methyl Tert Butyl Ether	100	97.6	98	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	46.6	93	63-135
75-09-2	Methylene chloride	50	45.2	90	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-BS	2B80127.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	48.3	97	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	46.6	93	66-125
127-18-4	Tetrachloroethene	50	48.4	97	70-136
108-88-3	Toluene	50	49.3	99	76-126
87-61-6	1,2,3-Trichlorobenzene	50	49.2	98	62-132
120-82-1	1,2,4-Trichlorobenzene	50	49.9	100	67-132
71-55-6	1,1,1-Trichloroethane	50	54.2	108	77-136
79-00-5	1,1,2-Trichloroethane	50	48.0	96	75-123
79-01-6	Trichloroethene	50	49.6	99	79-126
75-69-4	Trichlorofluoromethane	50	49.1	98	56-154
75-01-4	Vinyl chloride	50	36.0	72	56-146
	m,p-Xylene	100	97.4	97	77-125
95-47-6	o-Xylene	50	49.6	99	76-126
1330-20-7	Xylene (total)	150	147	98	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	102%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-BS	2C79581.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	43.5	87	51-151
71-43-2	Benzene	50	49.9	100	75-122
74-97-5	Bromochloromethane	50	46.0	92	78-124
75-27-4	Bromodichloromethane	50	47.1	94	77-128
75-25-2	Bromoform	50	38.2	76	67-141
74-83-9	Bromomethane	50	54.5	109	53-152
78-93-3	2-Butanone (MEK)	50	43.6	87	64-130
75-15-0	Carbon disulfide	50	52.1	104	59-140
56-23-5	Carbon tetrachloride	50	49.6	99	75-148
108-90-7	Chlorobenzene	50	49.4	99	76-124
75-00-3	Chloroethane	50	54.7	109	54-147
67-66-3	Chloroform	50	50.0	100	77-124
74-87-3	Chloromethane	50	47.5	95	46-144
110-82-7	Cyclohexane	50	53.2	106	62-127
124-48-1	Dibromochloromethane	50	42.9	86	76-132
95-50-1	1,2-Dichlorobenzene	50	49.2	98	74-125
541-73-1	1,3-Dichlorobenzene	50	51.2	102	73-124
106-46-7	1,4-Dichlorobenzene	50	49.0	98	71-123
75-71-8	Dichlorodifluoromethane	50	41.2	82	42-152
75-34-3	1,1-Dichloroethane	50	52.8	106	72-124
107-06-2	1,2-Dichloroethane	50	44.1	88	66-150
75-35-4	1,1-Dichloroethene	50	49.4	99	61-132
156-59-2	cis-1,2-Dichloroethene	50	51.4	103	71-119
156-60-5	trans-1,2-Dichloroethene	50	42.7	85	71-123
78-87-5	1,2-Dichloropropane	50	51.5	103	75-120
10061-01-5	cis-1,3-Dichloropropene	50	48.0	96	77-124
10061-02-6	trans-1,3-Dichloropropene	50	44.8	90	75-132
100-41-4	Ethylbenzene	50	48.5	97	77-124
76-13-1	Freon 113	50	49.4	99	58-149
591-78-6	2-Hexanone	50	43.4	87	58-136
98-82-8	Isopropylbenzene	50	54.1	108	60-136
79-20-9	Methyl Acetate	50	41.8	84	57-139
108-87-2	Methylcyclohexane	50	53.9	108	73-130
1634-04-4	Methyl Tert Butyl Ether	100	90.4	90	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	42.9	86	63-135
75-09-2	Methylene chloride	50	48.8	98	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-BS	2C79581.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.0	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	40.9	82	66-125
127-18-4	Tetrachloroethene	50	49.4	99	70-136
108-88-3	Toluene	50	49.9	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	43.0	86	62-132
120-82-1	1,2,4-Trichlorobenzene	50	49.3	99	67-132
71-55-6	1,1,1-Trichloroethane	50	52.6	105	77-136
79-00-5	1,1,2-Trichloroethane	50	42.8	86	75-123
79-01-6	Trichloroethene	50	49.9	100	79-126
75-69-4	Trichlorofluoromethane	50	48.7	97	56-154
75-01-4	Vinyl chloride	50	51.2	102	56-146
	m,p-Xylene	100	99.5	100	77-125
95-47-6	o-Xylene	50	50.9	102	76-126
1330-20-7	Xylene (total)	150	150	100	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	92%	64-135%
2037-26-5	Toluene-D8	107%	76-117%
460-00-4	4-Bromofluorobenzene	107%	72-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-BS	2C79675.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	54.1	108	51-151
71-43-2	Benzene	50	49.0	98	75-122
74-97-5	Bromochloromethane	50	49.9	100	78-124
75-27-4	Bromodichloromethane	50	50.4	101	77-128
75-25-2	Bromoform	50	54.5	109	67-141
74-83-9	Bromomethane	50	48.6	97	53-152
78-93-3	2-Butanone (MEK)	50	57.4	115	64-130
75-15-0	Carbon disulfide	50	48.8	98	59-140
56-23-5	Carbon tetrachloride	50	48.0	96	75-148
108-90-7	Chlorobenzene	50	50.2	100	76-124
75-00-3	Chloroethane	50	45.7	91	54-147
67-66-3	Chloroform	50	47.4	95	77-124
74-87-3	Chloromethane	50	39.2	78	46-144
110-82-7	Cyclohexane	50	49.1	98	62-127
124-48-1	Dibromochloromethane	50	51.6	103	76-132
95-50-1	1,2-Dichlorobenzene	50	52.6	105	74-125
541-73-1	1,3-Dichlorobenzene	50	51.4	103	73-124
106-46-7	1,4-Dichlorobenzene	50	49.9	100	71-123
75-71-8	Dichlorodifluoromethane	50	37.1	74	42-152
75-34-3	1,1-Dichloroethane	50	48.7	97	72-124
107-06-2	1,2-Dichloroethane	50	49.1	98	66-150
75-35-4	1,1-Dichloroethene	50	46.5	93	61-132
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	71-119
156-60-5	trans-1,2-Dichloroethene	50	39.7	79	71-123
78-87-5	1,2-Dichloropropane	50	52.4	105	75-120
10061-01-5	cis-1,3-Dichloropropene	50	52.0	104	77-124
10061-02-6	trans-1,3-Dichloropropene	50	52.2	104	75-132
100-41-4	Ethylbenzene	50	46.9	94	77-124
76-13-1	Freon 113	50	46.2	92	58-149
591-78-6	2-Hexanone	50	60.0	120	58-136
98-82-8	Isopropylbenzene	50	50.2	100	60-136
79-20-9	Methyl Acetate	50	52.0	104	57-139
108-87-2	Methylcyclohexane	50	49.3	99	73-130
1634-04-4	Methyl Tert Butyl Ether	100	102	102	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	58.3	117	63-135
75-09-2	Methylene chloride	50	48.4	97	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-BS	2C79675.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.8	102	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	51.4	103	66-125
127-18-4	Tetrachloroethene	50	49.4	99	70-136
108-88-3	Toluene	50	50.0	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	59.1	118	62-132
120-82-1	1,2,4-Trichlorobenzene	50	60.4	121	67-132
71-55-6	1,1,1-Trichloroethane	50	47.8	96	77-136
79-00-5	1,1,2-Trichloroethane	50	52.8	106	75-123
79-01-6	Trichloroethene	50	49.0	98	79-126
75-69-4	Trichlorofluoromethane	50	44.2	88	56-154
75-01-4	Vinyl chloride	50	43.9	88	56-146
	m,p-Xylene	100	98.1	98	77-125
95-47-6	o-Xylene	50	50.8	102	76-126
1330-20-7	Xylene (total)	150	149	99	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	64-135%
2037-26-5	Toluene-D8	113%	76-117%
460-00-4	4-Bromofluorobenzene	108%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68307-4MS	2B80136.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4MSD	2B80137.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4	2B80131.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	JA68307-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	76.1	152	68.5	137	11	44-157/20
71-43-2	Benzene	0.66	J	50	44.6	88	44.1	87	1	38-139/13
74-97-5	Bromochloromethane	ND		50	50.2	100	50.1	100	0	70-129/11
75-27-4	Bromodichloromethane	ND		50	52.8	106	52.0	104	2	70-135/13
75-25-2	Bromoform	ND		50	50.5	101	50.1	100	1	53-139/13
74-83-9	Bromomethane	ND		50	41.3	83	41.6	83	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.7	91	43.1	86	6	58-140/14
75-15-0	Carbon disulfide	ND		50	40.4	81	39.8	80	1	34-136/21
56-23-5	Carbon tetrachloride	ND		50	47.3	95	46.4	93	2	50-161/18
108-90-7	Chlorobenzene	ND		50	47.0	94	46.8	94	0	65-128/12
75-00-3	Chloroethane	ND		50	37.0	74	37.2	74	1	41-151/18
67-66-3	Chloroform	ND		50	48.3	97	48.0	96	1	66-132/14
74-87-3	Chloromethane	ND		50	36.3	73	36.1	72	1	35-149/22
110-82-7	Cyclohexane	ND		50	38.8	78	38.1	76	2	29-158/18
124-48-1	Dibromochloromethane	ND		50	51.0	102	50.8	102	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.1	98	48.9	98	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.4	95	47.3	95	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	47.5	95	46.9	94	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	36.6	73	35.3	71	4	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	45.0	90	45.1	90	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	57.1	114	56.1	112	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	42.0	84	42.2	84	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	44.8	90	45.5	91	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	43.5	87	43.0	86	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	45.6	91	46.3	93	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	48.1	96	49.1	98	2	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	50.2	100	51.4	103	2	68-134/13
100-41-4	Ethylbenzene	ND		50	44.7	89	44.7	89	0	37-143/13
76-13-1	Freon 113	ND		50	47.2	94	46.1	92	2	33-159/19
591-78-6	2-Hexanone	ND		50	52.2	104	52.2	104	0	53-145/17
98-82-8	Isopropylbenzene	ND		50	46.1	92	43.8	88	5	48-141/15
79-20-9	Methyl Acetate	ND		50	43.6	87	41.2	82	6	46-147/18
108-87-2	Methylcyclohexane	ND		50	44.5	89	44.0	88	1	36-156/18
1634-04-4	Methyl Tert Butyl Ether	2.0		50	51.7	99	52.7	101	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.6	101	50.4	101	0	57-141/14
75-09-2	Methylene chloride	ND		50	44.9	90	45.4	91	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68307-4MS	2B80136.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4MSD	2B80137.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4	2B80131.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	JA68307-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	47.1	94	47.1	94	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.0	96	46.6	93	3	62-126/13
127-18-4	Tetrachloroethene	ND		50	44.1	88	44.0	88	0	48-145/15
108-88-3	Toluene	ND		50	46.5	93	46.0	92	1	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.4	103	50.4	101	2	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.1	102	50.8	102	1	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.2	98	48.5	97	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.9	98	48.7	97	0	70-127/12
79-01-6	Trichloroethene	ND		50	47.4	95	45.2	90	5	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	46.3	93	44.5	89	4	35-169/23
75-01-4	Vinyl chloride	ND		50	35.9	72	36.1	72	1	34-151/20
	m,p-Xylene	0.73	J	100	91.6	91	90.5	90	1	32-146/13
95-47-6	o-Xylene	0.54	J	50	47.4	94	46.7	92	1	46-141/12
1330-20-7	Xylene (total)	1.3		150	139	92	137	90	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68307-4	Limits
1868-53-7	Dibromofluoromethane	99%	101%	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	101%	64-135%
2037-26-5	Toluene-D8	102%	102%	101%	76-117%
460-00-4	4-Bromofluorobenzene	99%	98%	99%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68481-8MS	2C79589.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8MSD	2C79590.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8	2C79584.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	JA68481-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	46.0	92	45.2	90	2	44-157/20
71-43-2	Benzene	ND		50	51.4	103	49.2	98	4	38-139/13
74-97-5	Bromochloromethane	ND		50	49.1	98	48.3	97	2	70-129/11
75-27-4	Bromodichloromethane	ND		50	49.2	98	48.4	97	2	70-135/13
75-25-2	Bromoform	ND		50	41.7	83	40.4	81	3	53-139/13
74-83-9	Bromomethane	ND		50	52.2	104	50.1	100	4	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.8	92	45.3	91	1	58-140/14
75-15-0	Carbon disulfide	ND		50	50.2	100	46.8	94	7	34-136/21
56-23-5	Carbon tetrachloride	ND		50	49.5	99	46.8	94	6	50-161/18
108-90-7	Chlorobenzene	ND		50	49.9	100	48.9	98	2	65-128/12
75-00-3	Chloroethane	ND		50	53.5	107	50.5	101	6	41-151/18
67-66-3	Chloroform	ND		50	51.3	103	49.9	100	3	66-132/14
74-87-3	Chloromethane	ND		50	51.8	104	49.5	99	5	35-149/22
110-82-7	Cyclohexane	ND		50	52.1	104	49.0	98	6	29-158/18
124-48-1	Dibromochloromethane	ND		50	46.5	93	46.2	92	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.9	100	49.6	99	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	51.3	103	50.3	101	2	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	49.2	98	2	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	48.1	96	45.4	91	6	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	54.0	108	52.7	105	2	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	46.5	93	46.4	93	0	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	49.5	99	46.6	93	6	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	47.5	95	46.5	93	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	49.1	98	47.0	94	4	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	53.3	107	52.6	105	1	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	50.2	100	49.9	100	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.4	95	46.8	94	1	68-134/13
100-41-4	Ethylbenzene	ND		50	49.5	99	47.2	94	5	37-143/13
76-13-1	Freon 113	ND		50	44.2	88	41.8	84	6	33-159/19
591-78-6	2-Hexanone	ND		50	44.4	89	44.1	88	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	52.1	104	50.5	101	3	48-141/15
79-20-9	Methyl Acetate	ND		50	44.8	90	45.2	90	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	48.5	97	45.5	91	6	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.7	97	48.9	98	0	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.6	91	44.9	90	2	57-141/14
75-09-2	Methylene chloride	ND		50	51.2	102	50.5	101	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68481-8MS	2C79589.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8MSD	2C79590.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8	2C79584.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	JA68481-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	51.8	104	50.0	100	4	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	44.2	88	44.8	90	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	50.3	101	47.7	95	5	48-145/15
108-88-3	Toluene	0.39	J	50	51.0	101	49.3	98	3	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	44.0	88	45.6	91	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	50.5	101	51.2	102	1	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	52.4	105	50.1	100	4	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	45.7	91	45.2	90	1	70-127/12
79-01-6	Trichloroethene	ND		50	50.4	101	48.3	97	4	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	48.3	97	45.3	91	6	35-169/23
75-01-4	Vinyl chloride	ND		50	52.4	105	49.0	98	7	34-151/20
	m,p-Xylene	ND		100	99.8	100	96.4	96	3	32-146/13
95-47-6	o-Xylene	ND		50	51.3	103	49.6	99	3	46-141/12
1330-20-7	Xylene (total)	ND		150	151	101	146	97	3	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68481-8	Limits
1868-53-7	Dibromofluoromethane	102%	101%	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	95%	64-135%
2037-26-5	Toluene-D8	107%	107%	107%	76-117%
460-00-4	4-Bromofluorobenzene	106%	108%	107%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68506-4MS	2C79684.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4MSD	2C79685.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	JA68506-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	9.6	J	50	66.9	115	66.5	114	1	44-157/20
71-43-2	Benzene	ND		50	49.2	98	47.4	95	4	38-139/13
74-97-5	Bromochloromethane	ND		50	52.6	105	52.3	105	1	70-129/11
75-27-4	Bromodichloromethane	ND		50	51.2	102	50.1	100	2	70-135/13
75-25-2	Bromoform	ND		50	54.7	109	55.3	111	1	53-139/13
74-83-9	Bromomethane	ND		50	48.9	98	45.7	91	7	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	59.5	119	59.7	119	0	58-140/14
75-15-0	Carbon disulfide	ND		50	46.2	92	42.2	84	9	34-136/21
56-23-5	Carbon tetrachloride	ND		50	48.2	96	44.8	90	7	50-161/18
108-90-7	Chlorobenzene	ND		50	49.6	99	48.6	97	2	65-128/12
75-00-3	Chloroethane	ND		50	46.8	94	43.4	87	8	41-151/18
67-66-3	Chloroform	ND		50	48.5	97	47.3	95	3	66-132/14
74-87-3	Chloromethane	ND		50	44.4	89	40.7	81	9	35-149/22
110-82-7	Cyclohexane	ND		50	48.7	97	44.9	90	8	29-158/18
124-48-1	Dibromochloromethane	ND		50	52.7	105	53.0	106	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	53.1	106	52.1	104	2	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	50.8	102	50.3	101	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	49.9	100	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	44.3	89	41.0	82	8	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	49.5	99	48.3	97	2	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	50.6	101	50.0	100	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	46.5	93	42.7	85	9	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.7	91	44.6	89	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	45.7	91	44.1	88	4	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	52.9	106	51.7	103	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	53.1	106	52.1	104	2	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	53.2	106	52.8	106	1	68-134/13
100-41-4	Ethylbenzene	ND		50	46.6	93	45.4	91	3	37-143/13
76-13-1	Freon 113	ND		50	46.8	94	43.6	87	7	33-159/19
591-78-6	2-Hexanone	ND		50	61.9	124	61.4	123	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	49.0	98	47.0	94	4	48-141/15
79-20-9	Methyl Acetate	ND		50	57.4	115	57.1	114	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	48.8	98	44.8	90	9	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	54.2	108	53.0	106	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	62.1	124	61.0	122	2	57-141/14
75-09-2	Methylene chloride	ND		50	50.5	101	48.7	97	4	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68506-4MS	2C79684.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4MSD	2C79685.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	JA68506-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	51.5	103	50.7	101	2	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	54.8	110	54.9	110	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	48.0	96	46.5	93	3	48-145/15
108-88-3	Toluene	ND		50	50.2	100	48.8	98	3	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	59.9	120	60.5	121	1	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	60.9	122	61.2	122	0	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.1	98	45.6	91	7	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	53.8	108	53.6	107	0	70-127/12
79-01-6	Trichloroethene	ND		50	48.8	98	46.9	94	4	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	45.0	90	41.7	83	8	35-169/23
75-01-4	Vinyl chloride	ND		50	46.7	93	41.9	84	11	34-151/20
	m,p-Xylene	ND		100	96.8	97	93.3	93	4	32-146/13
95-47-6	o-Xylene	ND		50	49.9	100	48.1	96	4	46-141/12
1330-20-7	Xylene (total)	ND		150	147	98	141	94	4	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-4	Limits
1868-53-7	Dibromofluoromethane	108%	107%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	103%	64-135%
2037-26-5	Toluene-D8	114%	113%	112%	76-117%
460-00-4	4-Bromofluorobenzene	109%	110%	108%	72-122%

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2B3558-BFB	**Injection Date:**	01/31/11
Lab File ID:	2B79401.D	**Injection Time:**	12:17
Instrument ID:	GCMS2B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16526	18.6		Pass
75	30.0 - 60.0% of mass 95	43672	49.1		Pass
95	Base peak, 100% relative abundance	88986	100.0		Pass
96	5.0 - 9.0% of mass 95	5941	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	89714	100.8		Pass
175	5.0 - 9.0% of mass 174	7137	8.02	(7.96) [a]	Pass
176	95.0 - 101.0% of mass 174	88274	99.2	(98.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5773	6.49	(6.54) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B3558-IC3558	2B79402.D	01/31/11	12:52	00:35	Initial cal 5
V2B3558-IC3558	2B79403.D	01/31/11	13:25	01:08	Initial cal 0.5
V2B3558-IC3558	2B79404.D	01/31/11	13:56	01:39	Initial cal 1
V2B3558-IC3558	2B79405.D	01/31/11	14:27	02:10	Initial cal 2
V2B3558-IC3558	2B79406.D	01/31/11	14:58	02:41	Initial cal 10
V2B3558-IC3558	2B79407.D	01/31/11	15:28	03:11	Initial cal 20
V2B3558-ICC3558	2B79408.D	01/31/11	15:59	03:42	Initial cal 50
V2B3558-IC3558	2B79409.D	01/31/11	16:45	04:28	Initial cal 100
V2B3558-IC3558	2B79410.D	01/31/11	17:16	04:59	Initial cal 200
V2B3558-ICV3558	2B79413.D	01/31/11	18:49	06:32	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2B3591-BFB	**Injection Date:**	02/23/11
Lab File ID:	2B80124.D	**Injection Time:**	09:28
Instrument ID:	GCMS2B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12228	19.7		Pass
75	30.0 - 60.0% of mass 95	31626	50.8		Pass
95	Base peak, 100% relative abundance	62216	100.0		Pass
96	5.0 - 9.0% of mass 95	4134	6.64		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	67621	108.7		Pass
175	5.0 - 9.0% of mass 174	5489	8.82	(8.12) [a]	Pass
176	95.0 - 101.0% of mass 174	65720	105.6	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	4182	6.72	(6.36) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B3591-CC3558	2B80125.D	02/23/11	10:02	00:34	Continuing cal 20
V2B3591-MB	2B80126.D	02/23/11	10:45	01:17	Method Blank
V2B3591-BS	2B80127.D	02/23/11	11:25	01:57	Blank Spike
JA68506-1	2B80129.D	02/23/11	12:40	03:12	CG
JA68506-2	2B80130.D	02/23/11	13:11	03:43	CD
JA68307-4	2B80131.D	02/23/11	13:42	04:14	(used for QC only; not part of job JA68506)
ZZZZZZ	2B80132.D	02/23/11	14:14	04:46	(unrelated sample)
ZZZZZZ	2B80133.D	02/23/11	14:45	05:17	(unrelated sample)
ZZZZZZ	2B80134.D	02/23/11	15:16	05:48	(unrelated sample)
ZZZZZZ	2B80135.D	02/23/11	15:52	06:24	(unrelated sample)
JA68307-4MS	2B80136.D	02/23/11	16:24	06:56	Matrix Spike
JA68307-4MSD	2B80137.D	02/23/11	16:55	07:27	Matrix Spike Duplicate
ZZZZZZ	2B80139.D	02/23/11	17:57	08:29	(unrelated sample)
ZZZZZZ	2B80140.D	02/23/11	18:29	09:01	(unrelated sample)
ZZZZZZ	2B80141.D	02/23/11	19:00	09:32	(unrelated sample)
ZZZZZZ	2B80142.D	02/23/11	19:31	10:03	(unrelated sample)
ZZZZZZ	2B80144.D	02/23/11	20:33	11:05	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3580-BFB	**Injection Date:**	01/20/11
Lab File ID:	2C78505.D	**Injection Time:**	12:19
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12371	16.0		Pass
75	30.0 - 60.0% of mass 95	34096	44.2		Pass
95	Base peak, 100% relative abundance	77173	100.0		Pass
96	5.0 - 9.0% of mass 95	5123	6.64		Pass
173	Less than 2.0% of mass 174	174	0.23	(0.26) [a]	Pass
174	50.0 - 120.0% of mass 95	68221	88.4		Pass
175	5.0 - 9.0% of mass 174	4956	6.42	(7.26) [a]	Pass
176	95.0 - 101.0% of mass 174	66754	86.5	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	4457	5.78	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3580-IC3580	2C78506.D	01/20/11	13:09	00:50	Initial cal 0.5
V2C3580-IC3580	2C78507.D	01/20/11	13:39	01:20	Initial cal 1
V2C3580-IC3580	2C78508.D	01/20/11	14:10	01:51	Initial cal 2
V2C3580-IC3580	2C78509.D	01/20/11	14:41	02:22	Initial cal 5
V2C3580-IC3580	2C78510.D	01/20/11	15:13	02:54	Initial cal 10
V2C3580-IC3580	2C78511.D	01/20/11	15:44	03:25	Initial cal 20
V2C3580-ICC3580	2C78512.D	01/20/11	16:14	03:55	Initial cal 50
V2C3580-IC3580	2C78514.D	01/20/11	17:15	04:56	Initial cal 100
V2C3580-IC3580	2C78515.D	01/20/11	17:46	05:27	Initial cal 200
V2C3580-ICV3580	2C78517A.D	01/20/11	19:18	06:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3633-BFB	**Injection Date:**	02/24/11
Lab File ID:	2C79577.D	**Injection Time:**	10:25
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11165	16.6		Pass
75	30.0 - 60.0% of mass 95	29424	43.6		Pass
95	Base peak, 100% relative abundance	67411	100.0		Pass
96	5.0 - 9.0% of mass 95	4432	6.57		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	61280	90.9		Pass
175	5.0 - 9.0% of mass 174	4735	7.02	(7.73) [a]	Pass
176	95.0 - 101.0% of mass 174	60125	89.2	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	4030	5.98	(6.70) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3633-CC3580	2C79578.D	02/24/11	11:04	00:39	Continuing cal 20
V2C3633-MB	2C79580.D	02/24/11	12:17	01:52	Method Blank
V2C3633-BS	2C79581.D	02/24/11	12:48	02:23	Blank Spike
ZZZZZZ	2C79583.D	02/24/11	13:53	03:28	(unrelated sample)
JA68481-8	2C79584.D	02/24/11	14:24	03:59	(used for QC only; not part of job JA68506)
ZZZZZZ	2C79585.D	02/24/11	14:55	04:30	(unrelated sample)
ZZZZZZ	2C79586.D	02/24/11	15:25	05:00	(unrelated sample)
ZZZZZZ	2C79587.D	02/24/11	15:56	05:31	(unrelated sample)
ZZZZZZ	2C79588.D	02/24/11	16:27	06:02	(unrelated sample)
JA68481-8MS	2C79589.D	02/24/11	16:57	06:32	Matrix Spike
JA68481-8MSD	2C79590.D	02/24/11	17:28	07:03	Matrix Spike Duplicate
ZZZZZZ	2C79592.D	02/24/11	18:30	08:05	(unrelated sample)
ZZZZZZ	2C79593.D	02/24/11	19:01	08:36	(unrelated sample)
JA68506-5	2C79594.D	02/24/11	19:32	09:07	FB-02172011
JA68506-8	2C79595.D	02/24/11	20:02	09:37	FB-02182011
JA68506-9	2C79596.D	02/24/11	20:33	10:08	TRIP BLANK
ZZZZZZ	2C79597.D	02/24/11	21:04	10:39	(unrelated sample)
ZZZZZZ	2C79598.D	02/24/11	21:34	11:09	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3637-BFB	**Injection Date:**	02/28/11
Lab File ID:	2C79671.D	**Injection Time:**	08:23
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	27101	15.9		Pass
75	30.0 - 60.0% of mass 95	74643	43.9		Pass
95	Base peak, 100% relative abundance	170155	100.0		Pass
96	5.0 - 9.0% of mass 95	11174	6.57		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	164928	96.9		Pass
175	5.0 - 9.0% of mass 174	12173	7.15	(7.38) [a]	Pass
176	95.0 - 101.0% of mass 174	161067	94.7	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	10376	6.10	(6.44) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3637-CC3580	2C79672.D	02/28/11	09:02	00:39	Continuing cal 20
V2C3637-MB	2C79674.D	02/28/11	10:20	01:57	Method Blank
V2C3637-BS	2C79675.D	02/28/11	10:51	02:28	Blank Spike
ZZZZZZ	2C79677.D	02/28/11	12:07	03:44	(unrelated sample)
ZZZZZZ	2C79678.D	02/28/11	12:38	04:15	(unrelated sample)
JA68506-4	2C79679.D	02/28/11	13:09	04:46	CE
JA68506-7	2C79680.D	02/28/11	13:40	05:17	CF
JA68506-6	2C79681.D	02/28/11	14:11	05:48	CC
JA68506-3	2C79682.D	02/28/11	14:42	06:19	CD-DUP
ZZZZZZ	2C79683.D	02/28/11	15:13	06:50	(unrelated sample)
JA68506-4MS	2C79684.D	02/28/11	15:44	07:21	Matrix Spike
JA68506-4MSD	2C79685.D	02/28/11	16:14	07:51	Matrix Spike Duplicate
ZZZZZZ	2C79687.D	02/28/11	17:16	08:53	(unrelated sample)
ZZZZZZ	2C79688.D	02/28/11	17:47	09:24	(unrelated sample)
ZZZZZZ	2C79689.D	02/28/11	18:18	09:55	(unrelated sample)
ZZZZZZ	2C79690.D	02/28/11	18:49	10:26	(unrelated sample)
ZZZZZZ	2C79691.D	02/28/11	19:19	10:56	(unrelated sample)
ZZZZZZ	2C79692.D	02/28/11	19:50	11:27	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2B3591-CC3558	**Injection Date:**	02/23/11
Lab File ID:	2B80125.D	**Injection Time:**	10:02
Instrument ID:	GCMS2B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	70223	8.62	180573	11.09	216789	11.99	191063	14.95	118437	17.09
Upper Limit [a]	140446	9.12	361146	11.59	433578	12.49	382126	15.45	236874	17.59
Lower Limit [b]	35112	8.12	90287	10.59	108395	11.49	95532	14.45	59219	16.59

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2B3591-MB	74874	8.62	189438	11.09	220750	11.99	192951	14.95	120540	17.10
V2B3591-BS	76146	8.62	184412	11.09	223978	11.99	199429	14.94	119180	17.10
JA68506-1	70823	8.62	184652	11.09	220753	11.99	192480	14.95	118628	17.10
JA68506-2	72038	8.62	179572	11.09	212434	11.99	189704	14.95	119957	17.10
JA68307-4	70215	8.62	187115	11.09	224122	11.99	199562	14.95	124311	17.10
ZZZZZZ	71798	8.62	185783	11.09	217610	11.99	194943	14.95	121736	17.10
ZZZZZZ	75379	8.61	186589	11.09	220960	11.99	196759	14.95	119499	17.10
ZZZZZZ	73332	8.61	189094	11.09	222186	11.99	196644	14.95	123572	17.10
ZZZZZZ	58585	8.61	184816	11.09	216686	11.99	193504	14.95	121949	17.10
JA68307-4MS	73951	8.62	184953	11.09	221833	11.99	198164	14.95	120018	17.10
JA68307-4MSD	77914	8.62	188246	11.09	226649	11.99	203575	14.95	125036	17.10
ZZZZZZ	74932	8.61	189977	11.09	225078	11.99	201210	14.95	128160	17.10
ZZZZZZ	71849	8.61	181528	11.09	214233	11.99	191333	14.95	120328	17.09
ZZZZZZ	71591	8.61	187587	11.09	215582	11.99	193054	14.95	122053	17.10
ZZZZZZ	68053	8.61	180822	11.09	214400	11.99	191294	14.95	120544	17.10
ZZZZZZ	70656	8.62	179508	11.09	211999	11.99	190689	14.95	118344	17.10

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2C3633-CC3580	**Injection Date:**	02/24/11
Lab File ID:	2C79578.D	**Injection Time:**	11:04
Instrument ID:	GCMS2C	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	54593	8.42	253281	10.85	331130	11.78	270067	14.75	136903	16.91
Upper Limit [a]	109186	8.92	506562	11.35	662260	12.28	540134	15.25	273806	17.41
Lower Limit [b]	27297	7.92	126641	10.35	165565	11.28	135034	14.25	68452	16.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C3633-MB	54499	8.43	252883	10.86	336423	11.78	277650	14.75	145044	16.91
V2C3633-BS	59002	8.42	249823	10.86	334053	11.78	277181	14.75	143561	16.91
ZZZZZZ	59195	8.43	258650	10.86	345542	11.78	285766	14.75	149271	16.91
JA68481-8	63586	8.42	257584	10.86	343730	11.78	284989	14.75	148640	16.91
ZZZZZZ	62490	8.42	252028	10.86	338066	11.78	279032	14.75	146864	16.91
ZZZZZZ	61649	8.43	257147	10.86	346924	11.78	284776	14.76	147527	16.91
ZZZZZZ	59161	8.42	254826	10.86	342790	11.78	281690	14.76	146507	16.91
ZZZZZZ	62483	8.42	253699	10.86	336043	11.78	278861	14.76	146178	16.91
JA68481-8MS	60539	8.42	257256	10.86	340025	11.78	278952	14.75	146754	16.91
JA68481-8MSD	58018	8.42	255957	10.86	343204	11.78	282527	14.76	144914	16.91
ZZZZZZ	63785	8.43	260526	10.86	345276	11.78	289277	14.75	148077	16.91
ZZZZZZ	65814	8.42	259722	10.86	347441	11.78	285818	14.75	147558	16.91
JA68506-5	62127	8.43	260684	10.86	346401	11.78	289461	14.75	149290	16.91
JA68506-8	66718	8.42	256258	10.86	342933	11.78	285353	14.75	150641	16.91
JA68506-9	64747	8.42	258452	10.86	345628	11.78	285608	14.75	149907	16.91
ZZZZZZ	67595	8.43	259355	10.86	348629	11.78	290566	14.75	153342	16.91
ZZZZZZ	65079	8.43	254604	10.86	342544	11.78	285990	14.75	150625	16.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2C3637-CC3580	**Injection Date:**	02/28/11
Lab File ID:	2C79672.D	**Injection Time:**	09:02
Instrument ID:	GCMS2C	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	92566	8.43	258059	10.85	325570	11.78	270921	14.75	144740	16.91
Upper Limit [a]	185132	8.93	516118	11.35	651140	12.28	541842	15.25	289480	17.41
Lower Limit [b]	46283	7.93	129030	10.35	162785	11.28	135461	14.25	72370	16.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C3637-MB	80430	8.43	256064	10.86	326942	11.78	274721	14.75	148062	16.91
V2C3637-BS	77223	8.42	242081	10.86	311886	11.78	264757	14.75	142370	16.91
ZZZZZZ	74829	8.43	244123	10.86	315069	11.78	267325	14.75	147795	16.91
ZZZZZZ	79291	8.43	244279	10.86	318091	11.78	270846	14.75	148959	16.91
JA68506-4	77918	8.43	244930	10.86	319287	11.78	272317	14.75	148467	16.91
JA68506-7	79582	8.43	245737	10.86	321704	11.78	273091	14.75	148527	16.91
JA68506-6	80033	8.43	244107	10.86	321964	11.78	273537	14.75	150266	16.91
JA68506-3	91655	8.43	240241	10.86	315654	11.78	271381	14.75	151632	16.91
ZZZZZZ	79320	8.43	241661	10.86	315060	11.78	270781	14.75	148531	16.91
JA68506-4MS	83021	8.43	235202	10.86	306136	11.78	267035	14.75	142903	16.91
JA68506-4MSD	80936	8.43	239797	10.86	312580	11.78	268288	14.75	142118	16.91
ZZZZZZ	78173	8.43	242274	10.86	315028	11.78	268537	14.75	149397	16.91
ZZZZZZ	83429	8.43	241531	10.86	316908	11.78	272101	14.75	150537	16.92
ZZZZZZ	83517	8.43	241931	10.86	317443	11.78	274096	14.75	151384	16.91
ZZZZZZ	88549	8.42	240995	10.86	316453	11.78	271560	14.75	148588	16.91
ZZZZZZ	88156	8.43	243161	10.86	316669	11.78	273668	14.75	150814	16.91
ZZZZZZ	88000	8.42	239836	10.86	305076	11.78	263051	14.75	151543	16.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA68506-1	2B80129.D	98.0	102.0	99.0	100.0
JA68506-2	2B80130.D	101.0	100.0	101.0	98.0
JA68506-3	2C79682.D	106.0	106.0	112.0	107.0
JA68506-4	2C79679.D	104.0	103.0	112.0	108.0
JA68506-5	2C79594.D	100.0	94.0	107.0	107.0
JA68506-6	2C79681.D	106.0	106.0	112.0	108.0
JA68506-7	2C79680.D	105.0	105.0	112.0	108.0
JA68506-8	2C79595.D	101.0	96.0	107.0	107.0
JA68506-9	2C79596.D	101.0	94.0	107.0	107.0
JA68307-4MS	2B80136.D	99.0	99.0	102.0	99.0
JA68307-4MSD	2B80137.D	101.0	101.0	102.0	98.0
JA68481-8MS	2C79589.D	102.0	94.0	107.0	106.0
JA68481-8MSD	2C79590.D	101.0	95.0	107.0	108.0
JA68506-4MS	2C79684.D	108.0	105.0	114.0	109.0
JA68506-4MSD	2C79685.D	107.0	105.0	113.0	110.0
V2B3591-BS	2B80127.D	101.0	102.0	102.0	100.0
V2B3591-MB	2B80126.D	99.0	99.0	100.0	98.0
V2C3633-BS	2C79581.D	101.0	92.0	107.0	107.0
V2C3633-MB	2C79580.D	99.0	89.0	106.0	108.0
V2C3637-BS	2C79675.D	104.0	103.0	113.0	108.0
V2C3637-MB	2C79674.D	102.0	101.0	112.0	109.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

Response Factor Report MS2B

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 15:49:20 2011
Response via : Initial Calibration

Calibration Files
1 =2B79404.D 2 =2B79405.D 100 =2B79409.D 50 =2B79408.D
20 =2B79407.D 200 =2B79410.D 5 =2B79402.D 10 =2B79406.D
0.5 =2B79403.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD										
2) tertiary butyl alcohol			1.067	0.991	1.204	0.985	0.817	0.988		1.009	12.51
3) 1,4-dioxane			0.065	0.065	0.066	0.065	0.048	0.052		0.060	13.40
4) I pentafluorobenzene	ISTD										
5) chlorodifluoromethane	0.334	0.354	0.390	0.378	0.392	0.375	0.379	0.393		0.374	5.52
6) dichlorodifluoromethane	0.412	0.487	0.599	0.570	0.585	0.550	0.529	0.595		0.541	11.88
7) chlorotrifluoroethene										0.000#	-1.00
8) chloromethane	0.431	0.462	0.524	0.486	0.480	0.509	0.476	0.495	0.439	0.478	6.41
9) vinyl chloride	0.435	0.455	0.514	0.484	0.472	0.494	0.458	0.486	0.502	0.478	5.29
10) bromomethane	0.282	0.297	0.332	0.322	0.329	0.312	0.316	0.334	0.269	0.310	7.43
11) chloroethane	0.172	0.242	0.255	0.252	0.259	0.240	0.246	0.263		0.241	12.08
12) vinyl bromide										0.000#	-1.00
13) trichlorofluoromethane	0.468	0.582	0.648	0.623	0.639	0.611	0.588	0.658		0.602	10.09
14) ethyl ether			0.194	0.186	0.192	0.195	0.158	0.174		0.183	8.00
15) acrolein			0.064	0.062	0.061	0.066	0.054	0.057		0.061	7.08
16) 1,2-dichloro-1,2,2-trifluoroet										0.000#	-1.00
17) 1,1-dichloroethene	0.258	0.316	0.325	0.323	0.334	0.319	0.289	0.334		0.312	8.31
18) acetone			0.105	0.102	0.092	0.105	0.059	0.066		0.088	23.27

----- Linear regression ----- Coefficient = 0.9999
Response Ratio = -0.00536 + 0.10623 *A

19) allyl chloride	0.174	0.206	0.202	0.205	0.207	0.191	0.201			0.198	6.09
20) acetonitrile			0.016	0.015	0.014	0.015	0.012	0.012		0.014	10.38
21) iodomethane	0.536	0.641	0.682	0.669	0.680	0.668	0.629	0.687		0.649	7.70

22)	iso-butyl alcohol									0.003#	12.00
		0.003	0.003	0.004	0.003	0.003	0.004				
23)	carbon disulfide										
	0.993	1.170	1.179	1.172	1.202	1.168	1.135	1.222	0.986	1.136	7.61
24)	methylene chloride										
	0.320	0.344	0.370	0.360	0.374	0.368	0.351	0.374	0.298	0.351	7.56
25)	methyl acetate										
		0.058	0.053	0.050	0.059	0.021	0.034			0.046	33.47
	----- Linear regression ----- Coefficient = 0.9998										
	Response Ratio = -0.00503 + 0.06043 *A										
26)	methyl tert butyl ether										
	0.975	1.059	1.134	1.131	1.156	1.091	1.091	1.144	0.908	1.077	7.81
27)	trans-1,2-dichloroethene										
	0.282	0.331	0.335	0.335	0.357	0.323	0.316	0.357		0.330	7.37
28)	di-isopropyl ether										
	0.895	0.961	1.066	1.044	1.057	1.007	1.005	1.054	0.791	0.987	9.29
29)	2-butanone										
		0.042	0.038	0.036	0.044		0.028			0.038	17.08
	----- Linear regression ----- Coefficient = 0.9993										
	Response Ratio = -0.00505 + 0.04537 *A										
30)	1,1-dichloroethane										
	0.500	0.593	0.594	0.591	0.611	0.577	0.571	0.614	0.471	0.569	8.78
31)	chloroprene										
	0.373	0.418	0.479	0.475	0.485	0.456	0.435	0.489		0.451	8.94
32)	acrylonitrile										
		0.149	0.143	0.146	0.150	0.127	0.131			0.141	6.79
33)	vinyl acetate										
		0.057	0.051	0.048	0.054		0.039			0.050	13.45
34)	ethyl tert-butyl ether										
	1.019	0.982	1.151	1.123	1.145	1.102	1.050	1.113	0.855	1.060	9.09
35)	ethyl acetate										
		0.044	0.046	0.045	0.044	0.026	0.032			0.039	21.12
	----- Linear regression ----- Coefficient = 0.9996										
	Response Ratio = -0.00111 + 0.04474 *A										
36)	2,2-dichloropropane										
	0.462	0.563	0.542	0.547	0.581	0.505	0.531	0.570	0.429	0.526	9.76
37)	cis-1,2-dichloroethene										
	0.308	0.375	0.380	0.377	0.394	0.368	0.375	0.398	0.325	0.367	8.25
38)	propionitrile										
		0.053	0.052	0.052	0.053	0.047	0.047			0.051	5.69
39)	bromochloromethane										
	0.151	0.179	0.200	0.200	0.206	0.195	0.190	0.203		0.190	9.49
40)	tetrahydrofuran										
		0.098	0.093	0.097	0.101	0.086	0.092			0.095	5.90
41)	chloroform										
	0.545	0.621	0.605	0.610	0.631	0.586	0.595	0.626	0.492	0.590	7.66
42)	t-butyl formate										
		0.334	0.319	0.325	0.326	0.288	0.325			0.319	5.13
43)	dibromofluoromethane (s)										
		0.429	0.330	0.326	0.338	0.327	0.374	0.363		0.355	10.57
44)	1,2-dichloroethane-d4 (s)										
	0.500	0.487	0.381	0.375	0.397	0.380	0.463	0.417		0.425	11.98
45)	freon 113										
		0.253	0.294	0.294	0.304	0.273	0.263	0.309		0.284	7.51
46)	methacrylonitrile										
		0.215	0.209	0.208	0.222	0.182	0.199			0.206	6.73
47)	1,1,1-trichloroethane										

SII-SSA-0014-005179

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

		0.457	0.541	0.562	0.563	0.577	0.542	0.537	0.582	0.360	0.525	13.69
48)	Cyclohexane											
		0.517	0.512	0.508	0.535	0.486	0.483	0.542			0.512	4.36
49)	tert amyl alcohol											
											0.000#	-1.00
50)	I 1,4-difluorobenzene	----------ISTD----------										
51)	tert amyl ethyl ether											
											0.000#	-1.00
52)	Di-isobutylene											
											0.000#	-1.00
53)	epichlorohydrin											
		0.026	0.025	0.027	0.025	0.022	0.023				0.025	7.11
54)	n-butyl alcohol											
		0.006	0.006	0.006	0.006	0.005	0.005				0.006#	9.23
55)	carbon tetrachloride											
		0.355	0.443	0.400	0.410	0.440	0.369	0.406	0.451		0.409	8.47
56)	1,1-dichloropropene											
		0.289	0.360	0.352	0.359	0.377	0.329	0.355	0.391		0.351	8.85
57)	hexane											
		0.215	0.241	0.235	0.251	0.221	0.227	0.245			0.234	5.59
58)	benzene											
		0.929	1.065	1.022	1.043	1.098	0.963	1.044	1.110	0.932	1.023	6.61
59)	2,2,4-trimethylpentane											
		0.818	0.826	0.858	0.872	0.920	0.778	0.838	0.908		0.852	5.55
60)	tert-amyl methyl ether											
		0.792	0.808	0.823	0.823	0.879	0.756	0.830	0.884	0.777	0.819	5.22
61)	heptane											
		0.147	0.144	0.158	0.134	0.137	0.157				0.146	6.73
62)	isopropyl acetate											
		0.356	0.414	0.486	0.461	0.501	0.463	0.454	0.465		0.450	10.14
63)	1,2-dichloroethane											
		0.308	0.364	0.373	0.379	0.400	0.355	0.372	0.398	0.268	0.358	12.02
64)	trichloroethene											
		0.228	0.277	0.278	0.276	0.287	0.266	0.262	0.290	0.217	0.265	9.63
65)	2-nitropropane											
		0.010	0.009	0.009	0.010		0.004				0.009#	32.49
	----- Linear regression ----- Coefficient = 0.9993											
	Response Ratio = -0.00086 + 0.01049 *A											
66)	2-chloroethyl vinyl ether											
		0.098	0.100	0.126	0.119	0.129	0.120	0.121	0.121		0.117	9.91
67)	methyl methacrylate											
		0.208	0.252	0.244	0.256	0.239	0.226	0.241			0.238	6.90
68)	1,2-dichloropropane											
		0.231	0.251	0.255	0.252	0.260	0.240	0.251	0.255	0.175	0.241	10.90
69)	dibromomethane											
		0.147	0.165	0.176	0.177	0.185	0.169	0.170	0.176		0.171	6.66
70)	methylcyclohexane											
		0.378	0.391	0.392	0.394	0.413	0.349	0.377	0.416		0.389	5.51
71)	bromodichloromethane											
		0.315	0.341	0.370	0.367	0.379	0.356	0.349	0.364	0.268	0.345	10.05
72)	cis-1,3-dichloropropene											
		0.326	0.365	0.415	0.410	0.417	0.410	0.375	0.400	0.314	0.381	10.28
73)	toluene-d8 (s)											
		1.236	0.886	0.893	0.923	0.845	1.003	0.996			0.969	13.54
74)	4-methyl-2-pentanone											
		0.105	0.102	0.108	0.104	0.094	0.099				0.102	4.98
75)	toluene											
		0.532	0.608	0.604	0.605	0.634	0.575	0.582	0.635	0.497	0.586	7.84

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

76)	3-methyl-1-butanol											
		0.007	0.010	0.010	0.010	0.010	0.009	0.009			0.009#	12.46
77)	trans-1,3-dichloropropene											
		0.285	0.343	0.374	0.367	0.372	0.365	0.343	0.360		0.351	8.36
78)	ethyl methacrylate											
		0.230	0.306	0.299	0.309	0.298	0.266	0.293			0.286	9.92
79)	1,1,2-trichloroethane											
		0.148	0.184	0.196	0.194	0.198	0.191	0.186	0.196		0.187	8.85
80)	2-hexanone											
			0.084	0.080	0.083	0.085	0.072	0.077			0.080	6.41
81)	I chlorobenzene-d5	----------ISTD----------										
82)	butyl ether											
											0.000#	-1.00
83)	tetrachloroethene											
		0.245	0.301	0.285	0.295	0.311	0.263	0.283	0.320	0.219	0.280	11.67
84)	1,3-dichloropropane											
		0.349	0.402	0.412	0.409	0.421	0.393	0.392	0.414		0.399	5.64
85)	butyl acetate											
			0.163	0.157	0.170	0.159	0.153	0.165			0.161	3.89
86)	3,3-dimethyl-1-butanol											
		0.020	0.025	0.025	0.026	0.026	0.024	0.023			0.024	9.41
87)	dibromochloromethane											
		0.270	0.342	0.359	0.355	0.365	0.342	0.339	0.369	0.258	0.333	12.25
88)	1,2-dibromoethane											
		0.242	0.269	0.295	0.290	0.304	0.285	0.277	0.297		0.282	7.03
89)	chlorobenzene											
		0.726	0.825	0.790	0.794	0.825	0.749	0.758	0.825	0.702	0.777	5.86
90)	1,1,1,2-tetrachloroethane											
		0.293	0.345	0.337	0.342	0.366	0.308	0.327	0.367	0.317	0.334	7.51
91)	ethylbenzene											
		1.195	1.419	1.296	1.342	1.435	1.198	1.352	1.426	1.179	1.316	7.92
92)	m,p-xylene											
		0.432	0.524	0.510	0.524	0.562	0.476	0.504	0.559	0.427	0.502	9.69
93)	o-xylene											
		0.475	0.532	0.532	0.548	0.573	0.491	0.531	0.574	0.431	0.521	9.03
94)	styrene											
		0.806	0.874	0.886	0.924	0.818	0.806	0.915			0.861	5.91
95)	bromoform											
		0.231	0.252	0.301	0.300	0.307	0.289	0.284	0.299		0.283	9.58
96)	I 1,4-dichlorobenzene-d	----------ISTD----------										
97)	isopropylbenzene											
		1.993	2.431	2.547	2.542	2.592	2.382	2.310	2.575	1.918	2.366	10.63
98)	4-bromofluorobenzene (s)											
			0.670	0.660	0.674	0.650	0.776	0.753			0.697	7.62
99)	cyclohexanone											
			0.006	0.006	0.006	0.006	0.005	0.005			0.006#	7.35
100)	bromobenzene											
		0.565	0.680	0.702	0.693	0.708	0.671	0.663	0.716	0.596	0.666	7.83
101)	1,1,2,2-tetrachloroethane											
		0.597	0.652	0.707	0.692	0.717	0.674	0.682	0.700	0.541	0.662	8.75
102)	trans-1,4-dichloro-2-butene											
			0.186	0.172	0.175	0.181	0.152	0.159			0.171	7.67
103)	1,2,3-trichloropropane											
		0.164	0.182	0.179	0.192	0.172	0.175	0.179			0.178	4.92
104)	n-propylbenzene											
		2.266	2.761	2.793	2.818	2.932	2.604	2.620	2.927	2.231	2.661	9.78
105)	2-chlorotoluene											
		0.517	0.584	0.604	0.596	0.618	0.576	0.581	0.616	0.426	0.569	10.78

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

106)	4-chlorotoluene										
	1.454	1.720	1.723	1.689	1.773	1.647	1.637	1.740	1.568	1.661	5.99
107)	1,3,5-trimethylbenzene										
	1.731	2.045	2.125	2.125	2.214	1.970	1.952	2.162	1.622	1.994	10.08
108)	tert-butylbenzene										
	1.489	1.897	1.986	1.962	1.967	1.918	1.703	1.928	1.447	1.811	11.69
109)	pentachloroethane										
	0.372	0.421	0.499	0.481	0.489	0.471	0.451	0.481		0.458	9.28
110)	1,2,4-trimethylbenzene										
	1.750	2.064	2.173	2.171	2.253	2.013	2.012	2.209	1.785	2.048	8.80
111)	sec-butylbenzene										
	2.286	2.740	2.882	2.849	2.944	2.680	2.567	2.873	2.019	2.649	11.76
112)	1,3-dichlorobenzene										
	1.181	1.375	1.341	1.324	1.390	1.275	1.301	1.398	1.246	1.315	5.48
113)	p-isopropyltoluene										
	1.982	2.304	2.463	2.444	2.532	2.282	2.217	2.466	1.835	2.281	10.40
114)	1,4-dichlorobenzene										
	1.294	1.438	1.396	1.360	1.421	1.339	1.341	1.410	1.282	1.364	4.08
115)	1,2-dichlorobenzene										
	1.213	1.359	1.415	1.392	1.440	1.328	1.325	1.423	1.305	1.356	5.29
116)	n-butylbenzene										
	0.969	1.116	1.268	1.244	1.280	1.172	1.106	1.233		1.173	9.03
117)	1,2-dibromo-3-chloropropane										
	0.124	0.163	0.158	0.161	0.152	0.138	0.147			0.149	9.44
118)	1,3,5-trichlorobenzene										
	1.065	1.273	1.348	1.363	1.393	1.158	1.225	1.366	1.220	1.268	8.73
119)	1,2,4-trichlorobenzene										
	0.965	1.105	1.215	1.227	1.252	1.041	1.078	1.203	1.042	1.125	9.05
120)	hexachlorobutadiene										
	0.565	0.668	0.665	0.694	0.732	0.573	0.637	0.705	0.594	0.648	9.20
121)	naphthalene										
	1.997	2.170	2.528	2.540	2.614	2.217	2.294	2.427	2.308	2.344	8.57
122)	1,2,3-trichlorobenzene										
	0.878	0.969	1.081	1.075	1.103	0.926	0.981	1.065	0.933	1.001	8.15
123)	hexachloroethane										
	0.452	0.565	0.554	0.538	0.527	0.458	0.523			0.517	8.64

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2B3558.M Tue Feb 01 16:16:00 2011 MS2B

SII-SSA-0014-005182

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B79413.D Vial: 13
Acq On : 31 Jan 2011 6:49 pm Operator: DEZAREER
Sample : icv3558-50 Inst : MS2B
Misc : MS7574,V2B3558,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 15:49:20 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	0.00	8.62
2	M	tertiary butyl alcohol	1.009	1.033	-2.4	104	0.00	8.75
3	M	1,4-dioxane	0.060	0.066	-10.0	100	0.00	12.66
4	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	11.09
5	M	chlorodifluoromethane	0.374	0.313	16.3	85	0.00	4.65
6	M	dichlorodifluoromethane	0.541	0.455	15.9	82	0.01	4.65
7	m	chlorotrifluoroethene		----------NA----------				
8	M	chloromethane	0.478	0.474	0.8	101	0.00	5.05
9	M	vinyl chloride	0.478	0.477	0.2	102	0.00	5.36
10	M	bromomethane	0.310	0.325	-4.8	104	0.00	6.14
11	M	chloroethane	0.241	0.256	-6.2	105	0.00	6.36
12		vinyl bromide		----------NA----------				
13	M	trichlorofluoromethane	0.602	0.609	-1.2	101	0.00	6.95
14	M	ethyl ether	0.183	0.188	-2.7	105	0.00	7.43
15	M	acrolein	0.061	0.079	-29.5#	131	0.00	7.65
16		1,2-dichloro-1,2,2-triflu		----------NA----------				
17	M	1,1-dichloroethene	0.312	0.337	-8.0	108	0.00	7.90
		----------	True	Calc.	% Drift	----------		
18	M	acetone	50.000	51.470	-2.9	105	0.00	7.92
		----------	AvgRF	CCRF	% Dev	----------		
19	M	allyl chloride	0.198	0.211	-6.6	108	0.00	8.49
20	M	acetonitrile	0.014	0.015	-7.1	107	0.00	8.38
21	M	iodomethane	0.633	0.685	-8.2	106	0.00	8.19
22	M	iso-butyl alcohol	0.003	0.003#	0.0	104	0.00	11.38
23	M	carbon disulfide	1.136	1.241	-9.2	109	0.00	8.36
24	M	methylene chloride	0.351	0.368	-4.8	105	0.00	8.68
		----------	True	Calc.	% Drift	----------		
25	M	methyl acetate	50.000	48.936	2.1	105	0.00	8.47
		----------	AvgRF	CCRF	% Dev	----------		
26	M	methyl tert butyl ether	1.077	1.125	-4.4	103	0.00	9.10
27	M	trans-1,2-dichloroethene	0.330	0.301	8.8	93	0.00	9.12
28	M	di-isopropyl ether	0.987	1.108	-12.3	110	0.00	9.78
		----------	True	Calc.	% Drift	----------		
29	M	2-butanone	50.000	49.276	1.4	108	0.00	10.48
		----------	AvgRF	CCRF	% Dev	----------		

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

30	M	1,1-dichloroethane	0.569	0.606	-6.5	106	0.00	9.73
31	M	chloroprene	0.451	0.493	-9.3	107	0.00	9.88
32	M	acrylonitrile	0.141	0.149	-5.7	108	0.00	9.01
33	M	vinyl acetate	0.050	0.060	-20.0	120	0.00	9.73
34	M	ethyl tert-butyl ether	1.060	1.157	-9.2	106	0.00	10.28
			True	Calc.	% Drift			
35	M	ethyl acetate	50.000	49.075	1.8	97	0.00	10.53
			AvgRF	CCRF	% Dev			
36	M	2,2-dichloropropane	0.526	0.542	-3.0	102	0.00	10.55
37	M	cis-1,2-dichloroethene	0.367	0.425	-15.8	116	0.00	10.52
38	M	propionitrile	0.051	0.054	-5.9	106	0.00	10.54
39	M	bromochloromethane	0.190	0.196	-3.2	101	0.00	10.84
40	M	tetrahydrofuran	0.095	0.095	0.0	106	0.00	10.90
41	M	chloroform	0.590	0.614	-4.1	104	0.00	10.90
42		t-butyl formate	0.319	0.352	-10.3	114	0.00	10.98
43	S	dibromofluoromethane (s)	0.355	0.327	7.9	104	0.00	11.10
44	S	1,2-dichloroethane-d4 (s)	0.425	0.364	14.4	100	0.00	11.53
45	M	freon 113	0.284	0.315	-10.9	111	0.00	7.90
46	M	methacrylonitrile	0.206	0.207	-0.5	102	0.00	10.76
47	M	1,1,1-trichloroethane	0.525	0.555	-5.7	102	0.00	11.20
48	M	Cyclohexane	0.512	0.544	-6.3	111	0.00	11.31
49		tert amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	11.99
51		tert amyl ethyl ether		----------NA----------				
52	M	Di-isobutylene		----------NA----------				
53	M	epichlorohydrin	0.025	0.025	0.0	104	0.00	13.15
54	M	n-butyl alcohol	0.006	0.006#	0.0	104	0.00	12.07
55	M	carbon tetrachloride	0.409	0.405	1.0	102	0.00	11.42
56	M	1,1-dichloropropene	0.351	0.359	-2.3	103	0.00	11.39
57	M	hexane	0.234	0.301	-28.6#	132	0.00	9.53
58	M	benzene	1.023	1.034	-1.1	102	0.00	11.64
59		2,2,4-trimethylpentane	0.852	0.936	-9.9	111	0.00	11.71
60	M	tert-amyl methyl ether	0.819	0.852	-4.0	107	0.00	11.70
61	M	heptane	0.146	0.174	-19.2	124	0.00	11.86
62	M	isopropyl acetate	0.450	0.462	-2.7	103	0.00	11.56
63	M	1,2-dichloroethane	0.358	0.364	-1.7	99	0.00	11.62
64	M	trichloroethene	0.265	0.273	-3.0	102	0.00	12.32
			True	Calc.	% Drift			
65	M	2-nitropropane	50.000	51.432	-2.9	108	0.00	13.35
			AvgRF	CCRF	% Dev			
66	M	2-chloroethyl vinyl ether	0.117	0.100	14.5	87	0.00	13.05
67	M	methyl methacrylate	0.238	0.252	-5.9	107	0.00	12.58
68	M	1,2-dichloropropane	0.241	0.252	-4.6	103	0.00	12.56
69	M	dibromomethane	0.171	0.172	-0.6	100	0.00	12.69
70	M	methylcyclohexane	0.389	0.444	-14.1	116	0.00	12.58
71	M	bromodichloromethane	0.345	0.364	-5.5	102	0.00	12.82
72	M	cis-1,3-dichloropropene	0.381	0.401	-5.2	101	0.00	13.26
73	S	toluene-d8 (s)	0.969	0.882	9.0	102	0.00	13.56
74	M	4-methyl-2-pentanone	0.102	0.107	-4.9	108	0.00	13.36
75	M	toluene	0.586	0.602	-2.7	103	0.00	13.63
76	M	3-methyl-1-butanol	0.009	0.010	-11.1	107	0.00	13.35
77	M	trans-1,3-dichloropropene	0.351	0.363	-3.4	102	0.00	13.77
78	M	ethyl methacrylate	0.286	0.301	-5.2	104	0.00	13.79
79	M	1,1,2-trichloroethane	0.187	0.192	-2.7	102	0.00	13.97
80	M	2-hexanone	0.080	0.085	-6.3	109	0.00	14.14

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

81	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.95
82	m	butyl ether		----------NA----------				
83	M	tetrachloroethene	0.280	0.282	-0.7	98	0.00	14.18
84	M	1,3-dichloropropane	0.399	0.410	-2.8	103	0.00	14.14
85	M	butyl acetate	0.161	0.165	-2.5	108	0.00	14.22
86		3,3-dimethyl-1-butanol	0.024	0.026	-8.3	104	0.00	14.29
87	M	dibromochloromethane	0.333	0.345	-3.6	100	0.00	14.39
88	M	1,2-dibromoethane	0.282	0.288	-2.1	102	0.00	14.53
89	M	chlorobenzene	0.777	0.790	-1.7	102	0.00	14.98
90	M	1,1,1,2-tetrachloroethane	0.334	0.349	-4.5	105	0.00	15.03
91	M	ethylbenzene	1.316	1.313	0.2	101	0.00	15.04
92	M	m,p-xylene	0.502	0.517	-3.0	102	0.00	15.14
93	M	o-xylene	0.521	0.554	-6.3	104	0.00	15.52
94	M	styrene	0.861	0.861	0.0	100	0.00	15.52
95	M	bromoform	0.283	0.295	-4.2	101	0.00	15.74
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	17.10
97	M	isopropylbenzene	2.366	2.527	-6.8	103	0.00	15.84
98	S	4-bromofluorobenzene (s)	0.697	0.646	7.3	102	0.00	16.01
99	M	cyclohexanone	0.006	0.006#	0.0	105	0.00	15.96
100	M	bromobenzene	0.666	0.679	-2.0	102	0.00	16.19
101	M	1,1,2,2-tetrachloroethane	0.662	0.689	-4.1	103	0.00	16.07
102	M	trans-1,4-dichloro-2-bute	0.171	0.183	-7.0	111	0.00	16.12
103	M	1,2,3-trichloropropane	0.178	0.177	0.6	103	0.00	16.15
104	M	n-propylbenzene	2.661	2.668	-0.3	98	0.00	16.22
105	M	2-chlorotoluene	0.569	0.603	-6.0	105	0.00	16.34
106	M	4-chlorotoluene	1.661	1.648	0.8	101	0.00	16.43
107	M	1,3,5-trimethylbenzene	1.994	2.105	-5.6	103	0.00	16.35
108	M	tert-butylbenzene	1.811	1.921	-6.1	102	0.00	16.68
109	M	pentachloroethane	0.458	0.508	-10.9	110	0.00	16.73
110	M	1,2,4-trimethylbenzene	2.048	2.118	-3.4	101	0.00	16.72
111	M	sec-butylbenzene	2.649	2.797	-5.6	102	0.00	16.89
112	M	1,3-dichlorobenzene	1.315	1.342	-2.1	105	0.00	17.04
113	M	p-isopropyltoluene	2.281	2.476	-8.5	105	0.00	17.00
114	M	1,4-dichlorobenzene	1.364	1.371	-0.5	105	0.00	17.12
115	M	1,2-dichlorobenzene	1.356	1.395	-2.9	104	0.00	17.50
116	M	n-butylbenzene	1.173	1.241	-5.8	104	0.00	17.39
117	M	1,2-dibromo-3-chloropropa	0.149	0.159	-6.7	105	0.00	18.24
118		1,3,5-trichlorobenzene	1.268	1.339	-5.6	102	0.00	18.47
119	M	1,2,4-trichlorobenzene	1.125	1.193	-6.0	101	0.00	19.11
120	M	hexachlorobutadiene	0.648	0.648	0.0	97	0.00	19.25
121	M	naphthalene	2.344	2.522	-7.6	103	0.00	19.39
122	M	1,2,3-trichlorobenzene	1.001	1.088	-8.7	105	0.00	19.63
123	M	hexachloroethane	0.517	0.555	-7.4	104	0.00	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2B79408.D M2B3558.M Tue Feb 01 16:13:53 2011 MS2B

SII-SSA-0014-005185

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B80125.D Vial: 2
Acq On : 23 Feb 2011 10:02 am Operator: DEZAREER
Sample : cc3558-20 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	0.00	8.62
2	M	tertiary butyl alcohol	1.009	1.042	-3.3	78	0.00	8.75
3	M	1,4-dioxane	0.060	0.070	-16.7	96	0.00	12.66
4	I	pentafluorobenzene	1.000	1.000	0.0	77	0.00	11.09
5	M	chlorodifluoromethane	0.374	0.344	8.0	68	0.00	4.65
6	M	dichlorodifluoromethane	0.541	0.500	7.6	66	0.00	4.65
7	m	chlorotrifluoroethene		----------NA----------				
8	M	chloromethane	0.478	0.416	13.0	67	-0.01	5.04
9	M	vinyl chloride	0.478	0.437	8.6	71	0.00	5.35
10	M	bromomethane	0.310	0.309	0.3	72	0.00	6.14
11	M	chloroethane	0.241	0.222	7.9	66	0.00	6.35
12		vinyl bromide		----------NA----------				
13	M	trichlorofluoromethane	0.602	0.688	-14.3	83	0.00	6.95
14	M	ethyl ether	0.183	0.168	8.2	67	0.00	7.42
15	M	acrolein	0.061	0.063	-3.3	78	0.00	7.65
16		1,2-dichloro-1,2,2-triflu		----------NA----------				
17	M	1,1-dichloroethene	0.312	0.314	-0.6	72	0.00	7.89
		----------	True	Calc.	% Drift	----------		
18	M	acetone	20.000	16.582	17.1	62	0.01	7.93
		----------	AvgRF	CCRF	% Dev	----------		
19	M	allyl chloride	0.198	0.183	7.6	69	0.00	8.49
20	M	acetonitrile	0.014	0.017	-21.4#	91	0.01	8.38
21	M	iodomethane	0.649	0.671	-3.4	76	-0.01	8.18
22	M	iso-butyl alcohol	0.003	0.003#	0.0	75	0.00	11.38
23	M	carbon disulfide	1.136	1.112	2.1	71	0.00	8.35
24	M	methylene chloride	0.351	0.342	2.6	70	0.00	8.67
		----------	True	Calc.	% Drift	----------		
25	M	methyl acetate	20.000	16.951	15.2	60	0.00	8.47
		----------	AvgRF	CCRF	% Dev	----------		
26	M	methyl tert butyl ether	1.077	1.091	-1.3	72	0.00	9.10
27	M	trans-1,2-dichloroethene	0.330	0.321	2.7	69	0.00	9.12
28	M	di-isopropyl ether	0.987	0.964	2.3	70	0.00	9.78
		----------	True	Calc.	% Drift	----------		
29	M	2-butanone	20.000	19.840	0.8	69	0.00	10.49
		----------	AvgRF	CCRF	% Dev	----------		

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

30	M	1,1-dichloroethane	0.569	0.562	1.2	71	0.00	9.73
31	M	chloroprene	0.451	0.518	-14.9	82	0.00	9.87
32	M	acrylonitrile	0.141	0.118	16.3	62	0.00	9.01
33	M	vinyl acetate	0.050	0.045	10.0	72	0.00	9.74
34	M	ethyl tert-butyl ether	1.060	1.115	-5.2	75	-0.01	10.27
			True	Calc.	% Drift			
35	M	ethyl acetate	20.000	17.347	13.3	61	0.00	10.53
			AvgRF	CCRF	% Dev			
36	M	2,2-dichloropropane	0.526	0.588	-11.8	78	0.00	10.55
37	M	cis-1,2-dichloroethene	0.367	0.363	1.1	71	0.00	10.52
38	M	propionitrile	0.051	0.044	13.7	65	0.00	10.54
39	M	bromochloromethane	0.190	0.195	-2.6	73	-0.01	10.83
40	M	tetrahydrofuran	0.095	0.084	11.6	66	0.00	10.90
41	M	chloroform	0.590	0.611	-3.6	74	0.00	10.89
42		t-butyl formate	0.319	0.311	2.5	74	0.00	10.97
43	S	dibromofluoromethane (s)	0.355	0.359	-1.1	82	0.00	11.10
44	S	1,2-dichloroethane-d4 (s)	0.425	0.432	-1.6	83	0.00	11.52
45	M	freon 113	0.284	0.328	-15.5	83	0.00	7.89
46	M	methacrylonitrile	0.206	0.183	11.2	67	0.00	10.77
47	M	1,1,1-trichloroethane	0.525	0.593	-13.0	79	0.00	11.20
48	M	Cyclohexane	0.512	0.468	8.6	67	0.00	11.30
49		tert amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	77	0.00	11.99
51		tert amyl ethyl ether		----------NA----------				
52	M	Di-isobutylene		----------NA----------				
53	M	epichlorohydrin	0.025	0.025	0.0	74	0.00	13.14
54	M	n-butyl alcohol	0.006	0.006#	0.0	76	0.00	12.07
55	M	carbon tetrachloride	0.409	0.462	-13.0	81	0.00	11.42
56	M	1,1-dichloropropene	0.351	0.348	0.9	71	0.00	11.38
57	M	hexane	0.234	0.282	-20.5#	87	0.00	9.53
58	M	benzene	1.023	0.977	4.5	69	0.00	11.63
59		2,2,4-trimethylpentane	0.852	0.887	-4.1	74	0.00	11.70
60	M	tert-amyl methyl ether	0.819	0.849	-3.7	74	0.00	11.70
61	M	heptane	0.146	0.157	-7.5	77	0.00	11.86
62	M	isopropyl acetate	0.450	0.455	-1.1	70	0.00	11.56
63	M	1,2-dichloroethane	0.358	0.424	-18.4	82	0.00	11.61
64	M	trichloroethene	0.265	0.269	-1.5	72	0.00	12.32
			True	Calc.	% Drift			
65	M	2-nitropropane	20.000	20.439	-2.2	71	0.00	13.34
			AvgRF	CCRF	% Dev			
66	M	2-chloroethyl vinyl ether	0.117	0.156	-33.3#	93	0.00	13.05
67	M	methyl methacrylate	0.238	0.237	0.4	71	0.00	12.58
68	M	1,2-dichloropropane	0.241	0.229	5.0	68	0.00	12.56
69	M	dibromomethane	0.171	0.177	-3.5	74	0.00	12.69
70	M	methylcyclohexane	0.389	0.432	-11.1	81	0.00	12.58
71	M	bromodichloromethane	0.345	0.373	-8.1	76	0.00	12.82
72	M	cis-1,3-dichloropropene	0.381	0.402	-5.5	75	0.00	13.26
73	S	toluene-d8 (s)	0.969	0.975	-0.6	81	0.00	13.55
74	M	4-methyl-2-pentanone	0.102	0.093	8.8	67	0.00	13.36
75	M	toluene	0.586	0.596	-1.7	72	0.00	13.62
76	M	3-methyl-1-butanol	0.009	0.011	-22.2#	81	0.00	13.35
77	M	trans-1,3-dichloropropene	0.351	0.381	-8.5	79	0.00	13.77
78	M	ethyl methacrylate	0.286	0.286	0.0	71	0.00	13.79
79	M	1,1,2-trichloroethane	0.187	0.181	3.2	70	0.00	13.97
80	M	2-hexanone	0.080	0.074	7.5	69	0.00	14.14

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

81	I	chlorobenzene-d5	1.000	1.000	0.0	80	0.00	14.95
82	m	butyl ether		----------NA----------				
83	M	tetrachloroethene	0.280	0.291	-3.9	75	0.00	14.18
84	M	1,3-dichloropropane	0.399	0.391	2.0	74	0.00	14.14
85	M	butyl acetate	0.161	0.147	8.7	69	0.00	14.22
86		3,3-dimethyl-1-butanol	0.024	0.027	-12.5	83	0.00	14.29
87	M	dibromochloromethane	0.333	0.357	-7.2	78	0.00	14.38
88	M	1,2-dibromoethane	0.282	0.282	0.0	74	0.00	14.53
89	M	chlorobenzene	0.777	0.780	-0.4	76	0.00	14.97
90	M	1,1,1,2-tetrachloroethane	0.334	0.355	-6.3	78	0.00	15.03
91	M	ethylbenzene	1.316	1.325	-0.7	74	0.00	15.04
92	M	m,p-xylene	0.502	0.511	-1.8	73	0.00	15.14
93	M	o-xylene	0.521	0.519	0.4	73	0.00	15.52
94	M	styrene	0.861	0.874	-1.5	76	0.00	15.52
95	M	bromoform	0.283	0.299	-5.7	78	0.00	15.74
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	17.09
97	M	isopropylbenzene	2.366	2.383	-0.7	74	0.00	15.84
98	S	4-bromofluorobenzene (s)	0.697	0.675	3.2	81	0.00	16.01
99	M	cyclohexanone	0.006	0.008#	-33.3#	121	0.00	15.96
100	M	bromobenzene	0.666	0.677	-1.7	77	0.00	16.19
101	M	1,1,2,2-tetrachloroethane	0.662	0.615	7.1	69	0.00	16.07
102	M	trans-1,4-dichloro-2-bute	0.171	0.118	31.0#	55	0.00	16.11
103	M	1,2,3-trichloropropane	0.178	0.172	3.4	73	0.00	16.15
104	M	n-propylbenzene	2.661	2.687	-1.0	74	0.00	16.22
105	M	2-chlorotoluene	0.569	0.569	0.0	75	0.00	16.34
106	M	4-chlorotoluene	1.661	1.667	-0.4	76	0.00	16.43
107	M	1,3,5-trimethylbenzene	1.994	2.058	-3.2	75	0.00	16.35
108	M	tert-butylbenzene	1.811	1.850	-2.2	76	0.00	16.68
109	M	pentachloroethane	0.458	0.498	-8.7	83	0.00	16.73
110	M	1,2,4-trimethylbenzene	2.048	2.146	-4.8	77	0.00	16.71
111	M	sec-butylbenzene	2.649	2.730	-3.1	75	0.00	16.88
112	M	1,3-dichlorobenzene	1.315	1.326	-0.8	77	0.00	17.04
113	M	p-isopropyltoluene	2.281	2.366	-3.7	76	0.00	16.99
114	M	1,4-dichlorobenzene	1.364	1.336	2.1	76	0.00	17.12
115	M	1,2-dichlorobenzene	1.356	1.353	0.2	76	0.00	17.49
116	M	n-butylbenzene	1.173	1.152	1.8	73	0.00	17.39
117	M	1,2-dibromo-3-chloropropa	0.149	0.155	-4.0	78	0.00	18.24
118		1,3,5-trichlorobenzene	1.268	1.311	-3.4	76	0.00	18.46
119	M	1,2,4-trichlorobenzene	1.125	1.114	1.0	72	0.00	19.11
120	M	hexachlorobutadiene	0.648	0.642	0.9	71	0.00	19.25
121	M	naphthalene	2.344	2.405	-2.6	74	0.00	19.39
122	M	1,2,3-trichlorobenzene	1.001	1.008	-0.7	74	0.00	19.63
123	M	hexachloroethane	0.517	0.501	3.1	75	0.00	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2B79407.D M2B3558.M Thu Feb 24 14:21:33 2011 MS2B

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

Response Factor Report MS2C

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

Calibration Files
1 =2c78507.D 2 =2c78508.D 100 =2c78514.D 50 =2C78512.D
20 =2c78511.D 200 =2c78515.D 5 =2c78509.D 10 =2c78510.D
0.5 =2C78506.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) tertiary butyl alcohol	1.187	1.182	1.149	1.145	0.992	1.093				1.125	6.54
3) 1,4-dioxane	0.093	0.090	0.091	0.091	0.089	0.093				0.091	1.86
4) I pentafluorobenzene ----------ISTD----------											
5) FREON 115										0.000#	-1.00
6) FREON 23										0.000#	-1.00
7) FREON 143A										0.000#	-1.00
8) FREON 152A										0.000#	-1.00
9) CHLOROTRIFLUOROETHENE										0.000#	-1.00
10) chlorodifluoromethane	0.393	0.396	0.491	0.481	0.468	0.487	0.460	0.481		0.457	8.75
11) dichlorodifluoromethane	0.477	0.611	0.606	0.577	0.596	0.577	0.585			0.576	7.88
12) FREON 114										0.000#	-1.00
13) FREON 142B										0.000#	-1.00
14) chloromethane	0.505	0.512	0.640	0.606	0.553	0.637	0.561	0.566	0.546	0.569	8.62
15) vinyl chloride	0.542	0.524	0.637	0.628	0.577	0.599	0.562	0.577		0.581	6.78
16) bromomethane	0.340	0.317	0.346	0.354	0.350	0.321	0.349	0.362	0.288	0.336	6.98
17) chloroethane	0.225	0.262	0.315	0.308	0.292	0.300	0.291	0.302		0.287	10.40
18) trichlorofluoromethane	0.589	0.595	0.732	0.719	0.686	0.714	0.684	0.696		0.677	8.09
19) ethyl ether	0.165	0.195	0.197	0.193	0.196	0.180	0.181			0.187	6.34
20) FREON 123										0.000#	-1.00
21) FREON 141B										0.000#	-1.00
22) FREON 123A										0.000#	-1.00
23) acrolein											

		0.052	0.055		0.053	0.047		0.042	0.043		0.049	10.98
24)	1,1-dichloroethene											
		0.393	0.388	0.405	0.393	0.369	0.393	0.376	0.371		0.386	3.27
25)	acetone											
				0.087	0.093	0.072	0.085		0.084		0.084	9.15
26)	allyl chloride											
				0.245	0.244	0.230	0.240	0.213	0.227		0.233	5.29
27)	acetonitrile											
				0.026	0.025	0.025	0.026	0.025	0.025		0.025	2.36
28)	iodomethane											
		0.677	0.728	0.802	0.787	0.735	0.777	0.711	0.720	0.612	0.728	8.12
29)	iso-butyl alcohol											
											0.000#	-1.00
30)	carbon disulfide											
		1.351	1.331	1.455	1.426	1.306	1.410	1.285	1.286	1.264	1.346	5.14
31)	methylene chloride											
		0.328	0.391	0.433	0.426	0.409	0.424	0.384	0.400		0.399	8.40
32)	methyl acetate											
			0.204	0.203	0.206	0.200	0.198	0.181	0.190		0.197	4.46
33)	methyl tert butyl ether											
		0.953	0.980	1.087	1.091	1.058	1.053	0.981	1.007	0.913	1.014	6.12
34)	trans-1,2-dichloroethene											
		0.410	0.427	0.402	0.398	0.390	0.386	0.385	0.399		0.400	3.49
35)	di-isopropyl ether											
		1.046	1.055	1.220	1.208	1.164	1.193	1.111	1.170	1.009	1.131	6.89
36)	2-butanone											
				0.033	0.034	0.031	0.032		0.028		0.031	7.62
37)	1,1-dichloroethane											
		0.608	0.636	0.685	0.688	0.664	0.668	0.655	0.668	0.541	0.646	7.19
38)	chloroprene											
		0.430	0.485	0.562	0.545	0.525	0.548	0.521	0.548		0.520	8.41
39)	acrylonitrile											
				0.105	0.106	0.101	0.105	0.084	0.095		0.099	8.65
40)	vinyl acetate											
				0.059	0.058	0.053	0.056		0.050		0.055	6.24
41)	ethyl tert-butyl ether											
		1.036	1.043	1.227	1.221	1.174	1.190	1.115	1.155	0.974	1.126	7.99
42)	ethyl acetate											
				0.037	0.037	0.036	0.035	0.025	0.034		0.034	14.01
43)	2,2-dichloropropane											
		0.590	0.589	0.592	0.593	0.595	0.562	0.590	0.602		0.589	1.99
44)	cis-1,2-dichloroethene											
		0.436	0.446	0.413	0.414	0.413	0.404	0.436	0.407		0.421	3.75
45)	propionitrile											
				0.039	0.039	0.039	0.038	0.035	0.037		0.038	4.05
46)	bromochloromethane											
		0.156	0.184	0.210	0.213	0.211	0.208	0.198	0.207		0.199	9.91
47)	tetrahydrofuran											
				0.091	0.094	0.092	0.088	0.080	0.090		0.089	5.61
48)	chloroform											
		0.611	0.637	0.672	0.676	0.664	0.657	0.650	0.668	0.568	0.645	5.43
49)	t-butyl formate											
			0.247	0.313	0.308	0.298	0.302	0.265	0.293		0.290	8.39
50)	dibromofluoromethane (s)											
		0.400	0.366	0.376	0.382	0.370	0.366	0.375	0.440	0.388	0.385	6.09
51)	1,2-dichloroethane-d4 (s)											
		0.421	0.385	0.381	0.391	0.380	0.367	0.380	0.443	0.420	0.396	6.39
52)	freon 113											
			0.312	0.381	0.374	0.363	0.371	0.348	0.365		0.359	6.45
53)	methacrylonitrile											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

```
                0.127 0.167 0.169 0.167 0.166 0.147 0.158          0.157     9.75
54)  1,1,1-trichloroethane
        0.563 0.568 0.640 0.633 0.605 0.615 0.585 0.604 0.463    0.586     9.10
55)  Cyclohexane
        0.579 0.618 0.668 0.660 0.629 0.643 0.603 0.618          0.627     4.68
56)  tert amyl alcohol
                                                                 0.000#   -1.00

57) I   1,4-difluorobenzene   ----------------ISTD---------------------
58)  Di-isobutylene
                                                                 0.000#   -1.00
59)  epichlorohydrin
                    0.016 0.017 0.017 0.015 0.015 0.017          0.016     6.03
60)  n-butyl alcohol
                0.004 0.005 0.005 0.005 0.005 0.005 0.005        0.005#    8.19
61)  carbon tetrachloride
        0.390 0.407 0.436 0.430 0.413 0.417 0.410 0.416          0.415     3.39
62)  1,1-dichloropropene
        0.363 0.397 0.397 0.394 0.386 0.381 0.389 0.400 0.307    0.379     7.77
63)  hexane
        0.294 0.329 0.349 0.342 0.345 0.336 0.345 0.361          0.338     5.91
64)  tert amyl ethyl ether
                                                                 0.000#   -1.00
65)  iso-octane
                                                                 0.000#   -1.00
66)  benzene
        1.157 1.142 1.115 1.135 1.122 1.053 1.128 1.132 1.121    1.123     2.58
67)  tert-amyl methyl ether
        0.766 0.766 0.818 0.834 0.815 0.764 0.808 0.806 0.761    0.793     3.60
68)  heptane
        0.156 0.186 0.194 0.194 0.195 0.185 0.192 0.210          0.189     8.13
69)  isopropyl acetate
                0.369 0.393 0.386 0.390 0.377 0.368 0.400        0.383     3.19
70)  1,2-dichloroethane
        0.306 0.343 0.342 0.351 0.351 0.324 0.352 0.349 0.307    0.336     5.65
71)  trichloroethene
        0.281 0.305 0.301 0.297 0.294 0.289 0.299 0.302 0.247    0.291     6.10
72)  2-nitropropane
                    0.010 0.010 0.026 0.009 0.015 0.012          0.014    45.18
         ----- Linear regression -----  Coefficient =  0.9706
           Response Ratio = 0.00237 + 0.00886 *A

73)  2-chloroethyl vinyl ether
                0.099 0.132 0.130 0.126 0.124 0.108 0.121        0.120    10.20
74)  methyl methacrylate
        0.115 0.120 0.147 0.148 0.146 0.142 0.142 0.147          0.138     9.57
75)  1,2-dichloropropane
        0.245 0.269 0.282 0.288 0.286 0.273 0.276 0.283 0.215    0.269     8.92
76)  dibromomethane
        0.121 0.158 0.167 0.170 0.170 0.162 0.161 0.168          0.159    10.23
77)  methylcyclohexane
        0.442 0.475 0.528 0.518 0.491 0.499 0.499 0.516          0.496     5.55
78)  bromodichloromethane
        0.328 0.352 0.378 0.382 0.372 0.372 0.359 0.369 0.299    0.357     7.62
79)  cis-1,3-dichloropropene
        0.409 0.427 0.465 0.473 0.461 0.453 0.442 0.459 0.395    0.443     6.06
80)  toluene-d8 (s)
                1.083 0.980 1.006 0.985 0.913 1.021 1.203        1.027     9.03
81)  4-methyl-2-pentanone
                0.066 0.079 0.082 0.081 0.075 0.078 0.080        0.077     6.96
```

82)	toluene											
	0.652	0.698	0.681	0.692	0.680	0.634	0.690	0.699	0.642	0.674	3.67
83)	3-methyl-1-butanol											
	0.006	0.008	0.008	0.009	0.007	0.008	0.009			0.008#	11.54
84)	trans-1,3-dichloropropene											
	0.356	0.389	0.401	0.413	0.412	0.372	0.385	0.410	0.342	0.387	6.64
85)	ethyl methacrylate											
	0.212	0.230	0.284	0.288	0.278	0.264	0.260	0.280		0.262	10.46
86)	1,1,2-trichloroethane											
	0.176	0.185	0.191	0.196	0.197	0.184	0.193	0.199	0.165	0.187	5.94
87)	2-hexanone											
	0.059	0.070	0.073	0.073	0.063	0.068	0.072			0.069	8.12
88)	I chlorobenzene-d5	----------ISTD----------										
89)	tetrachloroethene											
	0.317	0.342	0.318	0.313	0.311	0.302	0.309	0.322	0.250	0.309	8.05
90)	1,3-dichloropropane											
	0.428	0.424	0.453	0.462	0.466	0.419	0.439	0.449	0.400	0.438	4.97
91)	butyl acetate											
	0.141	0.168	0.171	0.173	0.153	0.159	0.169			0.162	7.18
92)	3,3-dimethyl-1-butanol											
	0.017	0.021	0.022	0.023	0.019	0.020	0.022			0.020	10.05
93)	dibromochloromethane											
	0.273	0.298	0.360	0.352	0.347	0.356	0.310	0.326		0.328	9.71
94)	1,2-dibromoethane											
	0.235	0.258	0.292	0.287	0.287	0.284	0.264	0.273	0.216	0.266	9.79
95)	BUTYL ETHER											
										0.000#	-1.00
96)	chlorobenzene											
	0.879	0.922	0.888	0.908	0.911	0.851	0.900	0.904	0.856	0.891	2.76
97)	1,1,1,2-tetrachloroethane											
	0.292	0.320	0.339	0.343	0.338	0.325	0.316	0.332		0.326	5.11
98)	ethylbenzene											
	1.547	1.559	1.497	1.563	1.554	1.408	1.511	1.552	1.535	1.525	3.24
99)	m,p-xylene											
	0.578	0.607	0.579	0.604	0.602	0.540	0.585	0.603	0.585	0.587	3.58
100)	o-xylene											
	0.586	0.586	0.589	0.607	0.588	0.556	0.569	0.585	0.497	0.574	5.59
101)	styrene											
	0.836	0.850	0.974	1.002	0.982	0.913	0.888	0.939	0.773	0.906	8.43
102)	bromoform											
	0.187	0.241	0.235	0.222	0.242	0.197	0.213			0.220	9.79
103)	I 1,4-dichlorobenzene-d	----------ISTD----------										
104)	isopropylbenzene											
	2.918	2.965	2.782	2.903	2.877	2.639	2.851	2.941	2.710	2.843	3.89
105)	4-bromofluorobenzene (s)											
	0.803	0.863	0.864	0.756						0.821	6.38
106)	cyclohexanone											
	0.023	0.033	0.035	0.023	0.031	0.043				0.031	24.08

----- Linear regression ----- Coefficient = 0.9904
Response Ratio = 0.04423 + 0.02231 *A

107)	bromobenzene											
	0.741	0.740	0.712	0.751	0.759	0.679	0.768	0.770	0.670	0.732	5.06
108)	1,1,2,2-tetrachloroethane											
	0.575	0.612	0.607	0.649	0.649	0.581	0.634	0.660	0.562	0.614	5.84
109)	trans-1,4-dichloro-2-butene											
	0.078	0.079	0.073	0.078	0.049	0.067				0.071	16.27

----- Linear regression ----- Coefficient = 0.9998

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

Response Ratio = -0.00170 + 0.07858 *A

110)	1,2,3-trichloropropane										
		0.144	0.145	0.155	0.159	0.135	0.152	0.158		0.150	5.88
111)	n-propylbenzene										
			3.217	3.422	3.519	2.957	3.481	3.628		3.371	7.24
112)	2-chlorotoluene										
	0.728	0.722	0.650	0.685	0.692	0.615	0.702	0.721	0.644	0.684	5.82
113)	4-chlorotoluene										
	2.158	2.216	2.005	2.111	2.155	1.909	2.153	2.191	2.111	2.112	4.59
114)	1,3,5-trimethylbenzene										
	2.338	2.397	2.343	2.440	2.449	2.226	2.383	2.428	2.298	2.367	3.09
115)	tert-butylbenzene										
			2.094	2.135	2.067	2.067	2.012	2.086		2.077	1.94
116)	pentachloroethane										
	0.394	0.417	0.491	0.487	0.463	0.493	0.432	0.457		0.454	8.13
117)	1,2,4-trimethylbenzene										
	2.398	2.431	2.389	2.450	2.522	2.262	2.440	2.510	2.401	2.423	3.15
118)	sec-butylbenzene										
	3.109	3.253	3.176	3.268	3.263	3.010	3.170	3.285	2.960	3.166	3.73
119)	1,3-dichlorobenzene										
	1.429	1.422	1.460	1.483	1.493	1.394	1.452	1.480	1.361	1.442	3.07
120)	p-isopropyltoluene										
	2.604	2.620	2.647	2.703	2.696	2.485	2.631	2.720	2.487	2.622	3.29
121)	1,4-dichlorobenzene										
	1.446	1.466	1.477	1.500	1.509	1.408	1.459	1.508	1.567	1.482	3.08
122)	1,2-dichlorobenzene										
	1.332	1.391	1.429	1.468	1.452	1.339	1.399	1.424	1.318	1.395	3.90
123)	n-butylbenzene										
	1.369	1.443	1.466	1.516	1.508	1.340	1.414	1.485	1.310	1.428	5.22
124)	1,2-dibromo-3-chloropropane										
			0.106	0.117	0.114	0.100	0.100	0.107		0.107	6.48
125)	1,3,5-trichlorobenzene										
	1.116	1.148	1.324	1.389	1.333	1.197	1.208	1.267	1.161	1.238	7.64
126)	1,2,4-trichlorobenzene										
	0.780	0.835	1.083	1.139	1.072	1.005	0.913	0.999		0.978	12.87
127)	hexachlorobutadiene										
	0.650	0.662	0.703	0.718	0.696	0.640	0.656	0.689	0.628	0.671	4.64
128)	naphthalene										
			1.775	1.859	1.739	1.643	1.409	1.556		1.663	9.80
129)	1,2,3-trichlorobenzene										
	0.690	0.716	0.912	0.951	0.891	0.845	0.767	0.841		0.826	11.37
130)	hexachloroethane										
			0.520	0.473	0.426	0.526	0.371	0.397		0.452	14.28

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2C3580.M Fri Jan 21 15:41:05 2011 ACCUTEST

SII-SSA-0014-005193

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2C78517A.D Vial: 14
Acq On : 20 Jan 2011 7:18 pm Operator: tarar1
Sample : icv3580-50 Inst : MS2C
Misc : MS7421,V2C3580,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	98	0.00	8.43
2		tertiary butyl alcohol	1.125	1.246	-10.8	104	0.00	8.57
3		1,4-dioxane	0.091	0.093	-2.2	102	0.00	12.48
4	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	10.86
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A		----------NA----------				
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.378	17.3	84	0.00	4.43
11		dichlorodifluoromethane	0.576	0.569	1.2	100	0.01	4.42
12		FREON 114		----------NA----------				
13		FREON 142B		----------NA----------				
14		chloromethane	0.569	0.590	-3.7	103	0.00	4.82
15		vinyl chloride	0.581	0.605	-4.1	102	0.00	5.13
16		bromomethane	0.336	0.347	-3.3	104	0.00	5.90
17		chloroethane	0.287	0.305	-6.3	105	0.00	6.12
18		trichlorofluoromethane	0.677	0.697	-3.0	103	0.01	6.69
19		ethyl ether	0.187	0.200	-7.0	108	0.00	7.14
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A		----------NA----------				
23		acrolein	0.049	0.051	-4.1	103	0.00	7.45
24		1,1-dichloroethene	0.386	0.398	-3.1	108	0.00	7.65
25		acetone	0.084	0.091	-8.3	105	0.00	7.71
26		allyl chloride	0.233	0.246	-5.6	107	0.00	8.25
27		acetonitrile	0.025	0.028	-12.0	116	0.01	8.25
28		iodomethane	0.728	0.798	-9.6	108	0.00	7.98
29		iso-butyl alcohol		----------NA----------				
30		carbon disulfide	1.346	1.443	-7.2	108	0.00	8.11
31		methylene chloride	0.399	0.432	-8.3	108	0.00	8.48
32		methyl acetate	0.197	0.205	-4.1	106	0.00	8.24
33		methyl tert butyl ether	1.014	1.108	-9.3	108	0.00	8.83
34		trans-1,2-dichloroethene	0.400	0.358	10.5	96	0.00	8.89
35		di-isopropyl ether	1.131	1.244	-10.0	109	0.00	9.49
36		2-butanone	0.031	0.035	-12.9	109	0.00	10.29
37		1,1-dichloroethane	0.646	0.697	-7.9	108	0.00	9.52
38		chloroprene	0.520	0.536	-3.1	105	0.00	9.63
39		acrylonitrile	0.099	0.106	-7.1	106	0.00	8.85
40		vinyl acetate	0.055	0.061	-10.9	113	0.00	9.51
41		ethyl tert-butyl ether	1.126	1.220	-8.3	106	0.00	9.99

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

42		ethyl acetate	0.034	0.038	-11.8	109	0.00	10.30
43		2,2-dichloropropane	0.589	0.597	-1.4	107	0.00	10.32
44		cis-1,2-dichloroethene	0.421	0.461	-9.5	118	0.00	10.32
45		propionitrile	0.038	0.039	-2.6	107	0.00	10.40
46		bromochloromethane	0.199	0.218	-9.5	109	0.00	10.66
47		tetrahydrofuran	0.089	0.097	-9.0	109	0.00	10.69
48		chloroform	0.645	0.695	-7.8	109	0.00	10.72
49		t-butyl formate	0.290	0.320	-10.3	111	0.00	10.74
50	S	dibromofluoromethane (s)	0.385	0.366	4.9	102	0.00	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.372	6.1	101	0.00	11.35
52		freon 113	0.359	0.373	-3.9	106	0.00	7.61
53		methacrylonitrile	0.157	0.170	-8.3	107	0.00	10.59
54		1,1,1-trichloroethane	0.586	0.633	-8.0	106	0.00	10.97
55		Cyclohexane	0.627	0.654	-4.3	105	0.00	11.04
56		tert amyl alcohol		----------NA----------				
57	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	11.79
58		Di-isobutylene		----------NA----------				
59		epichlorohydrin	0.016	0.017	-6.3	104	0.00	13.16
60		n-butyl alcohol	0.005	0.005#	0.0	104	0.00	11.91
61		carbon tetrachloride	0.415	0.425	-2.4	105	0.00	11.18
62		1,1-dichloropropene	0.379	0.403	-6.3	108	0.00	11.15
63		hexane	0.338	0.346	-2.4	107	0.00	9.21
64		tert amyl ethyl ether		----------NA----------				
65		iso-octane		----------NA----------				
66		benzene	1.123	1.142	-1.7	107	0.00	11.42
67		tert-amyl methyl ether	0.793	0.829	-4.5	105	0.00	11.44
68		heptane	0.189	0.206	-9.0	112	0.00	11.57
69		isopropyl acetate	0.383	0.433	-13.1	119	0.00	11.33
70		1,2-dichloroethane	0.336	0.355	-5.7	107	0.00	11.44
71		trichloroethene	0.291	0.300	-3.1	107	0.00	12.12
		----------	True	Calc.	% Drift	----------		
72		2-nitropropane	50.000	42.764	14.5	104	0.00	13.34
		----------	AvgRF	CCRF	% Dev	----------		
73		2-chloroethyl vinyl ether	0.120	0.106	11.7	87	0.00	12.86
74		methyl methacrylate	0.138	0.148	-7.2	106	0.00	12.36
75		1,2-dichloropropane	0.269	0.296	-10.0	109	0.00	12.37
76		dibromomethane	0.159	0.173	-8.8	108	0.00	12.53
77		methylcyclohexane	0.496	0.524	-5.6	107	0.00	12.32
78		bromodichloromethane	0.357	0.393	-10.1	109	0.00	12.65
79		cis-1,3-dichloropropene	0.443	0.486	-9.7	109	0.00	13.08
80	S	toluene-d8 (s)	1.027	0.966	5.9	102	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.085	-10.4	110	0.00	13.16
82		toluene	0.674	0.699	-3.7	107	0.00	13.41
83		3-methyl-1-butanol	0.008	0.008#	0.0	100	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.430	-11.1	110	0.00	13.60
85		ethyl methacrylate	0.262	0.301	-14.9	111	0.00	13.58
86		1,1,2-trichloroethane	0.187	0.203	-8.6	110	0.00	13.81
87		2-hexanone	0.069	0.076	-10.1	110	0.00	13.95
88	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	14.76
89		tetrachloroethene	0.309	0.316	-2.3	106	0.00	13.96
90		1,3-dichloropropane	0.438	0.478	-9.1	108	0.00	13.97
91		butyl acetate	0.162	0.174	-7.4	107	0.00	14.01
92		3,3-dimethyl-1-butanol	0.020	0.020	0.0	96	0.00	14.11
93		dibromochloromethane	0.328	0.361	-10.1	108	0.00	14.23
94		1,2-dibromoethane	0.266	0.300	-12.8	110	0.00	14.37
95		BUTYL ETHER		----------NA----------				

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

96	chlorobenzene	0.891	0.936	-5.1	108	0.00	14.79
97	1,1,1,2-tetrachloroethane	0.326	0.354	-8.6	108	0.00	14.84
98	ethylbenzene	1.525	1.545	-1.3	104	0.00	14.83
99	m,p-xylene	0.587	0.606	-3.2	105	0.00	14.92
100	o-xylene	0.574	0.614	-7.0	106	0.00	15.32
101	styrene	0.906	0.976	-7.7	102	0.00	15.33
102	bromoform	0.220	0.242	-10.0	108	0.00	15.59
103 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.92
104	isopropylbenzene	2.843	2.946	-3.6	106	0.00	15.63
105 S	4-bromofluorobenzene (s)	0.821	0.811	1.2	98	0.00	15.83
		True	Calc.	% Drift			
106	cyclohexanone	500.000	304.870	39.0#	58	0.00	15.80
		AvgRF	CCRF	% Dev			
107	bromobenzene	0.732	0.773	-5.6	108	0.00	16.02
108	1,1,2,2-tetrachloroethane	0.614	0.641	-4.4	103	0.00	15.92
		True	Calc.	% Drift			
109	trans-1,4-dichloro-2-bute	50.000	55.733	-11.5	113	0.00	15.96
		AvgRF	CCRF	% Dev			
110	1,2,3-trichloropropane	0.150	0.155	-3.3	104	0.00	15.99
111	n-propylbenzene	3.371	3.308	1.9	101	0.00	16.00
112	2-chlorotoluene	0.684	0.707	-3.4	108	0.00	16.15
113	4-chlorotoluene	2.112	2.087	1.2	103	0.00	16.24
114	1,3,5-trimethylbenzene	2.367	2.459	-3.9	105	0.00	16.14
115	tert-butylbenzene	2.077	2.110	-1.6	103	0.00	16.47
116	pentachloroethane	0.454	0.518	-14.1	111	0.00	16.56
117	1,2,4-trimethylbenzene	2.423	2.480	-2.4	106	0.00	16.51
118	sec-butylbenzene	3.166	3.219	-1.7	103	0.00	16.67
119	1,3-dichlorobenzene	1.442	1.550	-7.5	109	0.00	16.86
120	p-isopropyltoluene	2.622	2.771	-5.7	107	0.00	16.77
121	1,4-dichlorobenzene	1.482	1.546	-4.3	108	0.00	16.94
122	1,2-dichlorobenzene	1.395	1.501	-7.6	107	0.00	17.32
123	n-butylbenzene	1.428	1.499	-5.0	103	0.00	17.17
124	1,2-dibromo-3-chloropropa	0.107	0.113	-5.6	101	0.00	18.09
125	1,3,5-trichlorobenzene	1.238	1.369	-10.6	103	0.00	18.27
126	1,2,4-trichlorobenzene	0.978	1.141	-16.7	105	0.00	18.93
127	hexachlorobutadiene	0.671	0.703	-4.8	102	0.00	19.03
128	naphthalene	1.663	1.824	-9.7	102	0.00	19.22
129	1,2,3-trichlorobenzene	0.826	0.967	-17.1	106	0.00	19.47
130	hexachloroethane	0.452	0.496	-9.7	109	0.00	17.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2C78512.D M2C3580.M Fri Jan 21 15:41:05 2011 ACCUTEST

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2c...2c3633-3634\2c79578.D Vial: 2
Acq On : 24 Feb 2011 11:04 am Operator: dezareer
Sample : cc3580-20 Inst : MS2C
Misc : MS8531,V2C3633,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	0.00	8.42
2		tertiary butyl alcohol	1.125	1.198	-6.5	94	-0.01	8.55
3		1,4-dioxane	0.091	0.103	-13.2	102	0.00	12.47
4	I	pentafluorobenzene	1.000	1.000	0.0	115	-0.01	10.85
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A	0.000	0.000#	0.0	0#	-0.01	4.42
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.439	3.9	108	-0.01	4.42
11		dichlorodifluoromethane	0.576	0.556	3.5	110	0.00	4.40
12		FREON 114		----------NA----------				
13		FREON 142B	0.000	0.000#	0.0	0#	0.00	5.11
14		chloromethane	0.569	0.582	-2.3	121	0.00	4.81
15		vinyl chloride	0.581	0.592	-1.9	118	-0.02	5.11
16		bromomethane	0.336	0.356	-6.0	116	0.00	5.90
17		chloroethane	0.287	0.306	-6.6	120	0.00	6.11
18		trichlorofluoromethane	0.677	0.652	3.7	109	-0.02	6.66
19		ethyl ether	0.187	0.173	7.5	103	0.00	7.13
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A	0.000	0.000#	0.0	0#	-0.02	7.59
23		acrolein	0.049	0.036	26.5#	88	0.00	7.45
24		1,1-dichloroethene	0.386	0.396	-2.6	123	-0.01	7.63
25		acetone	0.084	0.067	20.2#	107	0.00	7.70
26		allyl chloride	0.233	0.239	-2.6	119	0.00	8.25
27		acetonitrile	0.025	0.024	4.0	107	0.00	8.23
28		iodomethane	0.728	0.720	1.1	112	-0.02	7.95
29		iso-butyl alcohol	0.000	0.000#	0.0	122	0.00	11.15
30		carbon disulfide	1.346	1.451	-7.8	127	-0.02	8.10
31		methylene chloride	0.399	0.401	-0.5	112	-0.02	8.47
32		methyl acetate	0.197	0.165	16.2	95	0.00	8.23
33		methyl tert butyl ether	1.014	0.930	8.3	101	-0.01	8.82
34		trans-1,2-dichloroethene	0.400	0.409	-2.2	120	-0.01	8.88
35		di-isopropyl ether	1.131	1.213	-7.3	119	0.00	9.48
36		2-butanone	0.031	0.026	16.1	97	0.00	10.27
37		1,1-dichloroethane	0.646	0.724	-12.1	125	-0.01	9.51
38		chloroprene	0.520	0.585	-12.5	128	0.00	9.63
39		acrylonitrile	0.099	0.084	15.2	95	0.00	8.85
40		vinyl acetate	0.055	0.044	20.0#	94	0.00	9.50
41		ethyl tert-butyl ether	1.126	1.123	0.3	110	0.00	9.98

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

42		ethyl acetate	0.034	0.030	11.8	94	0.00	10.29
43		2,2-dichloropropane	0.589	0.643	-9.2	124	0.00	10.31
44		cis-1,2-dichloroethene	0.421	0.407	3.3	113	0.00	10.31
45		propionitrile	0.038	0.033	13.2	97	0.00	10.39
46		bromochloromethane	0.199	0.190	4.5	103	0.00	10.65
47		tetrahydrofuran	0.089	0.079	11.2	98	0.00	10.69
48		chloroform	0.645	0.672	-4.2	116	-0.01	10.71
49		t-butyl formate	0.290	0.249	14.1	96	0.00	10.73
50	S	dibromofluoromethane (s)	0.385	0.376	2.3	116	-0.01	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.351	11.4	106	0.00	11.35
52		freon 113	0.359	0.362	-0.8	114	0.00	7.61
53		methacrylonitrile	0.157	0.143	8.9	98	0.00	10.59
54		1,1,1-trichloroethane	0.586	0.639	-9.0	121	0.00	10.96
55		Cyclohexane	0.627	0.680	-8.5	124	0.00	11.03
56		tert amyl alcohol	0.000	0.009#	0.0	0#	-0.03	11.33
57	I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.00	11.78
58		Di-isobutylene	0.000	0.000#	0.0	0#	-0.02	11.56
59		epichlorohydrin	0.016	0.013	18.8	84	0.00	13.16
60		n-butyl alcohol	0.005	0.004#	20.0	95	0.00	11.90
61		carbon tetrachloride	0.415	0.438	-5.5	119	0.00	11.17
62		1,1-dichloropropene	0.379	0.431	-13.7	125	0.00	11.14
63		hexane	0.338	0.396	-17.2	129	0.00	9.20
64		tert amyl ethyl ether	0.000	0.003#	0.0	0#	-0.07	12.47
65		iso-octane	0.000	0.000#	0.0	0#	0.00	11.91
66		benzene	1.123	1.221	-8.7	122	-0.01	11.41
67		tert-amyl methyl ether	0.793	0.756	4.7	104	-0.01	11.43
68		heptane	0.189	0.228	-20.6#	131	0.00	11.56
69		isopropyl acetate	0.383	0.338	11.7	97	-0.01	11.32
70		1,2-dichloroethane	0.336	0.320	4.8	102	-0.01	11.43
71		trichloroethene	0.291	0.308	-5.8	118	0.00	12.11
			True	Calc.	% Drift			
72		2-nitropropane	20.000	51.355	-156.8#	125	0.00	13.33
			AvgRF	CCRF	% Dev			
73		2-chloroethyl vinyl ether	0.120	0.098	18.3	87	0.00	12.86
74		methyl methacrylate	0.138	0.122	11.6	94	0.00	12.36
75		1,2-dichloropropane	0.269	0.291	-8.2	114	0.00	12.37
76		dibromomethane	0.159	0.144	9.4	95	0.00	12.52
77		methylcyclohexane	0.496	0.532	-7.3	122	0.00	12.31
78		bromodichloromethane	0.357	0.351	1.7	106	-0.01	12.64
79		cis-1,3-dichloropropene	0.443	0.439	0.9	107	-0.01	13.07
80	S	toluene-d8 (s)	1.027	1.101	-7.2	125	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.064	16.9	89	0.00	13.15
82		toluene	0.674	0.714	-5.9	118	0.00	13.41
83		3-methyl-1-butanol	0.008	0.006#	25.0#	81	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.350	9.6	95	0.00	13.60
85		ethyl methacrylate	0.262	0.227	13.4	92	0.00	13.57
86		1,1,2-trichloroethane	0.187	0.164	12.3	93	0.00	13.80
87		2-hexanone	0.069	0.055	20.3#	84	0.00	13.94
88	I	chlorobenzene-d5	1.000	1.000	0.0	110	0.00	14.75
89		tetrachloroethene	0.309	0.327	-5.8	116	0.00	13.95
90		1,3-dichloropropane	0.438	0.394	10.0	93	0.00	13.97
91		butyl acetate	0.162	0.136	16.0	87	0.00	14.00
92		3,3-dimethyl-1-butanol	0.020	0.016	20.0	79	0.00	14.10
93		dibromochloromethane	0.328	0.296	9.8	94	0.00	14.22
94		1,2-dibromoethane	0.266	0.237	10.9	91	0.00	14.36
95		BUTYL ETHER	0.000	0.010#	0.0	0#	0.00	14.67

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

96	chlorobenzene	0.891	0.935	-4.9	113	0.00	14.78
97	1,1,1,2-tetrachloroethane	0.326	0.333	-2.1	108	0.00	14.84
98	ethylbenzene	1.525	1.638	-7.4	116	0.00	14.82
99	m,p-xylene	0.587	0.643	-9.5	118	0.00	14.92
100	o-xylene	0.574	0.617	-7.5	115	0.00	15.31
101	styrene	0.906	0.978	-7.9	110	0.00	15.32
102	bromoform	0.220	0.171	22.3#	85	0.00	15.58
103 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	16.91
104	isopropylbenzene	2.843	3.270	-15.0	117	0.00	15.62
105 S	4-bromofluorobenzene (s)	0.821	0.883	-7.6	105	0.00	15.82
		True	Calc.	% Drift			
106	cyclohexanone	200.000	156.189	21.9#	83	0.00	15.80
		AvgRF	CCRF	% Dev			
107	bromobenzene	0.732	0.779	-6.4	105	0.00	16.01
108	1,1,2,2-tetrachloroethane	0.614	0.528	14.0	84	0.00	15.91
		True	Calc.	% Drift			
109	trans-1,4-dichloro-2-bute	20.000	14.932	25.3#	77	0.00	15.95
		AvgRF	CCRF	% Dev			
110	1,2,3-trichloropropane	0.150	0.129	14.0	83	0.00	15.99
111	n-propylbenzene	3.371	3.856	-14.4	113	0.00	16.00
112	2-chlorotoluene	0.684	0.753	-10.1	112	0.00	16.15
113	4-chlorotoluene	2.112	2.238	-6.0	107	0.00	16.24
114	1,3,5-trimethylbenzene	2.367	2.692	-13.7	113	0.00	16.13
115	tert-butylbenzene	2.077	2.391	-15.1	119	0.00	16.46
116	pentachloroethane	0.454	0.490	-7.9	109	0.00	16.56
117	1,2,4-trimethylbenzene	2.423	2.751	-13.5	112	0.00	16.51
118	sec-butylbenzene	3.166	3.691	-16.6	116	0.00	16.66
119	1,3-dichlorobenzene	1.442	1.582	-9.7	109	0.00	16.86
120	p-isopropyltoluene	2.622	3.074	-17.2	117	0.00	16.77
121	1,4-dichlorobenzene	1.482	1.566	-5.7	107	0.00	16.94
122	1,2-dichlorobenzene	1.395	1.433	-2.7	101	0.00	17.32
123	n-butylbenzene	1.428	1.645	-15.2	112	0.00	17.17
124	1,2-dibromo-3-chloropropa	0.107	0.073	31.8#	66	0.00	18.09
125	1,3,5-trichlorobenzene	1.238	1.380	-11.5	106	0.00	18.27
126	1,2,4-trichlorobenzene	0.978	1.005	-2.8	96	0.00	18.92
127	hexachlorobutadiene	0.671	0.745	-11.0	110	0.00	19.03
128	naphthalene	1.663	1.383	16.8	82	0.00	19.21
129	1,2,3-trichlorobenzene	0.826	0.725	12.2	84	0.00	19.46
130	hexachloroethane	0.452	0.495	-9.5	119	0.00	17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2c78511.D M2C3580.M Fri Feb 25 14:31:30 2011 ACCUNJ

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2c...2c3637-3638\2c79672.D Vial: 2
Acq On : 28 Feb 2011 9:02 am Operator: dezareer
Sample : cc3580-20 Inst : MS2C
Misc : MS8710,V2C3637,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	153	0.00	8.43
2		tertiary butyl alcohol	1.125	0.985	12.4	131	0.00	8.55
3		1,4-dioxane	0.091	0.088	3.3	148	0.00	12.47
4	I	pentafluorobenzene	1.000	1.000	0.0	117	-0.01	10.85
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A		----------NA----------				
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.424	7.2	106	0.00	4.43
11		dichlorodifluoromethane	0.576	0.480	16.7	97	0.00	4.41
12		FREON 114		----------NA----------				
13		FREON 142B		----------NA----------				
14		chloromethane	0.569	0.495	13.0	105	0.00	4.81
15		vinyl chloride	0.581	0.509	12.4	103	-0.01	5.12
16		bromomethane	0.336	0.322	4.2	107	0.00	5.90
17		chloroethane	0.287	0.253	11.8	101	0.00	6.11
18		trichlorofluoromethane	0.677	0.577	14.8	98	0.00	6.68
19		ethyl ether	0.187	0.193	-3.2	117	0.00	7.13
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A		----------NA----------				
23		acrolein	0.049	0.049	0.0	122	0.00	7.45
24		1,1-dichloroethene	0.386	0.352	8.8	111	-0.01	7.63
25		acetone	0.084	0.087	-3.6	141	-0.01	7.70
26		allyl chloride	0.233	0.216	7.3	110	0.00	8.25
27		acetonitrile	0.025	0.027	-8.0	124	0.00	8.23
28		iodomethane	0.728	0.688	5.5	109	0.00	7.97
29		iso-butyl alcohol		----------NA----------				
30		carbon disulfide	1.346	1.259	6.5	113	0.00	8.11
31		methylene chloride	0.399	0.390	2.3	111	-0.01	8.47
32		methyl acetate	0.197	0.214	-8.6	125	0.00	8.23
33		methyl tert butyl ether	1.014	1.030	-1.6	114	-0.01	8.82
34		trans-1,2-dichloroethene	0.400	0.366	8.5	109	-0.01	8.88
35		di-isopropyl ether	1.131	1.094	3.3	110	0.00	9.48
36		2-butanone	0.031	0.034	-9.7	130	0.00	10.28
37		1,1-dichloroethane	0.646	0.630	2.5	111	-0.01	9.51
38		chloroprene	0.520	0.487	6.3	108	0.00	9.63
39		acrylonitrile	0.099	0.112	-13.1	130	0.00	8.85
40		vinyl acetate	0.055	0.057	-3.6	125	0.00	9.50
41		ethyl tert-butyl ether	1.126	1.120	0.5	111	0.00	9.98

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

42		ethyl acetate	0.034	0.040	-17.6	127	0.00	10.29
43		2,2-dichloropropane	0.589	0.535	9.2	105	0.00	10.32
44		cis-1,2-dichloroethene	0.421	0.373	11.4	105	0.00	10.31
45		propionitrile	0.038	0.044	-15.8	134	0.00	10.39
46		bromochloromethane	0.199	0.203	-2.0	112	0.00	10.65
47		tetrahydrofuran	0.089	0.102	-14.6	129	0.00	10.69
48		chloroform	0.645	0.611	5.3	108	-0.01	10.71
49		t-butyl formate	0.290	0.292	-0.7	115	0.00	10.73
50	S	dibromofluoromethane (s)	0.385	0.392	-1.8	124	-0.01	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.400	-1.0	123	0.00	11.35
52		freon 113	0.359	0.325	9.5	105	0.00	7.60
53		methacrylonitrile	0.157	0.181	-15.3	127	0.00	10.58
54		1,1,1-trichloroethane	0.586	0.546	6.8	105	0.00	10.96
55		Cyclohexane	0.627	0.575	8.3	107	0.00	11.04
56		tert amyl alcohol		----------NA----------				
57	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	11.78
58		Di-isobutylene		----------NA----------				
59		epichlorohydrin	0.016	0.019	-18.7	123	0.00	13.16
60		n-butyl alcohol	0.005	0.007#	-40.0#	145	0.00	11.90
61		carbon tetrachloride	0.415	0.389	6.3	104	-0.01	11.17
62		1,1-dichloropropene	0.379	0.379	0.0	108	0.00	11.15
63		hexane	0.338	0.347	-2.7	111	0.00	9.20
64		tert amyl ethyl ether		----------NA----------				
65		iso-octane		----------NA----------				
66		benzene	1.123	1.120	0.3	110	-0.01	11.41
67		tert-amyl methyl ether	0.793	0.831	-4.8	112	-0.01	11.43
68		heptane	0.189	0.188	0.5	106	0.00	11.56
69		isopropyl acetate	0.383	0.426	-11.2	120	0.00	11.33
70		1,2-dichloroethane	0.336	0.344	-2.4	108	0.00	11.44
71		trichloroethene	0.291	0.285	2.1	107	0.00	12.11
		----------	True	Calc.	% Drift	----------		
72		2-nitropropane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
73		2-chloroethyl vinyl ether	0.120	0.138	-15.0	121	0.00	12.86
74		methyl methacrylate	0.138	0.163	-18.1	123	0.00	12.36
75		1,2-dichloropropane	0.269	0.285	-5.9	110	0.00	12.37
76		dibromomethane	0.159	0.169	-6.3	110	0.00	12.53
77		methylcyclohexane	0.496	0.467	5.8	105	0.00	12.31
78		bromodichloromethane	0.357	0.357	0.0	106	-0.01	12.64
79		cis-1,3-dichloropropene	0.443	0.455	-2.7	109	-0.01	13.07
80	S	toluene-d8 (s)	1.027	1.145	-11.5	128	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.091	-18.2	124	0.00	13.15
82		toluene	0.674	0.689	-2.2	112	0.00	13.41
83		3-methyl-1-butanol	0.008	0.010#	-25.0#	125	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.406	-4.9	109	0.00	13.60
85		ethyl methacrylate	0.262	0.293	-11.8	116	0.00	13.57
86		1,1,2-trichloroethane	0.187	0.199	-6.4	112	0.00	13.80
87		2-hexanone	0.069	0.082	-18.8	123	0.00	13.94
88	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.75
89		tetrachloroethene	0.309	0.306	1.0	109	0.00	13.96
90		1,3-dichloropropane	0.438	0.455	-3.9	108	0.00	13.97
91		butyl acetate	0.162	0.184	-13.6	118	0.00	14.01
92		3,3-dimethyl-1-butanol	0.020	0.025	-25.0#	123	0.00	14.10
93		dibromochloromethane	0.328	0.347	-5.8	110	0.00	14.22
94		1,2-dibromoethane	0.266	0.297	-11.7	115	0.00	14.36
95		BUTYL ETHER		----------NA----------				

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

			True	Calc.	% Drift			
96		chlorobenzene	0.891	0.903	-1.3	110	0.00	14.78
97		1,1,1,2-tetrachloroethane	0.326	0.333	-2.1	109	0.00	14.84
98		ethylbenzene	1.525	1.490	2.3	106	0.00	14.82
99		m,p-xylene	0.587	0.593	-1.0	109	0.00	14.92
100		o-xylene	0.574	0.583	-1.6	109	0.00	15.31
101		styrene	0.906	0.959	-5.8	108	0.00	15.32
102		bromoform	0.220	0.243	-10.5	121	0.00	15.58
103	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	16.91
104		isopropylbenzene	2.843	2.871	-1.0	108	0.00	15.62
105	S	4-bromofluorobenzene (s)	0.821	0.899	-9.5	113	0.00	15.82
			True	Calc.	% Drift			
106		cyclohexanone		NA				
			AvgRF	CCRF	% Dev			
107		bromobenzene	0.732	0.779	-6.4	111	0.00	16.01
108		1,1,2,2-tetrachloroethane	0.614	0.670	-9.1	112	0.00	15.92
			True	Calc.	% Drift			
109		trans-1,4-dichloro-2-bute	20.000	20.437	-2.2	114	0.00	15.95
			AvgRF	CCRF	% Dev			
110		1,2,3-trichloropropane	0.150	0.165	-10.0	113	0.00	15.99
111		n-propylbenzene	3.371	3.312	1.8	102	0.00	16.00
112		2-chlorotoluene	0.684	0.687	-0.4	108	0.00	16.15
113		4-chlorotoluene	2.112	1.998	5.4	101	0.00	16.24
114		1,3,5-trimethylbenzene	2.367	2.370	-0.1	105	0.00	16.13
115		tert-butylbenzene	2.077	2.079	-0.1	109	0.00	16.46
116		pentachloroethane	0.454	0.505	-11.2	118	0.00	16.56
117		1,2,4-trimethylbenzene	2.423	2.422	0.0	104	0.00	16.51
118		sec-butylbenzene	3.166	3.186	-0.6	106	0.00	16.66
119		1,3-dichlorobenzene	1.442	1.496	-3.7	109	0.00	16.86
120		p-isopropyltoluene	2.622	2.680	-2.2	108	0.00	16.77
121		1,4-dichlorobenzene	1.482	1.514	-2.2	109	0.00	16.94
122		1,2-dichlorobenzene	1.395	1.476	-5.8	110	0.00	17.32
123		n-butylbenzene	1.428	1.409	1.3	102	0.00	17.17
124		1,2-dibromo-3-chloropropa	0.107	0.115	-7.5	110	0.00	18.09
125		1,3,5-trichlorobenzene	1.238	1.372	-10.8	112	0.00	18.27
126		1,2,4-trichlorobenzene	0.978	1.174	-20.0#	119	0.00	18.92
127		hexachlorobutadiene	0.671	0.701	-4.5	109	0.00	19.03
128		naphthalene	1.663	2.042	-22.8#	128	0.00	19.21
129		1,2,3-trichlorobenzene	0.826	0.983	-19.0	120	0.00	19.46
130		hexachloroethane	0.452	0.470	-4.0	120	0.00	17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2c78511.D M2C3580.M Tue Mar 01 14:26:08 2011 ACCUNJ

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 13:06:02 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

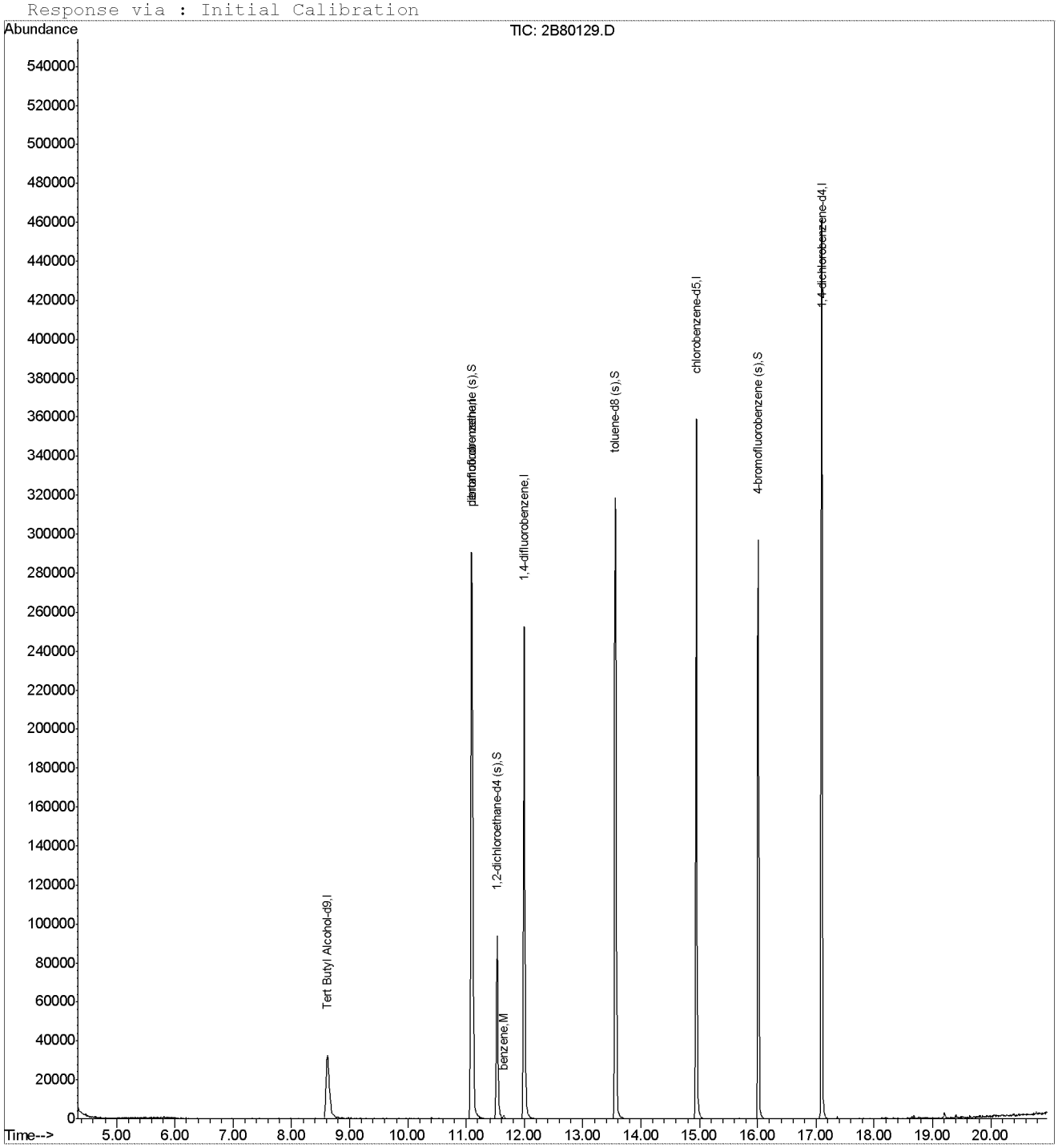
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	70823	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	184652	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	220753	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	192480	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	118628	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	64572	49.23	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.46%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	79911	50.91	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 101.82%			
73) toluene-d8 (s)	13.55	98	212205	49.62	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 99.24%			
98) 4-bromofluorobenzene (s)	16.01	95	82837	50.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.16%			
Target Compounds						Qvalue
58) benzene	11.64	78	1525	0.34	ug/L	52

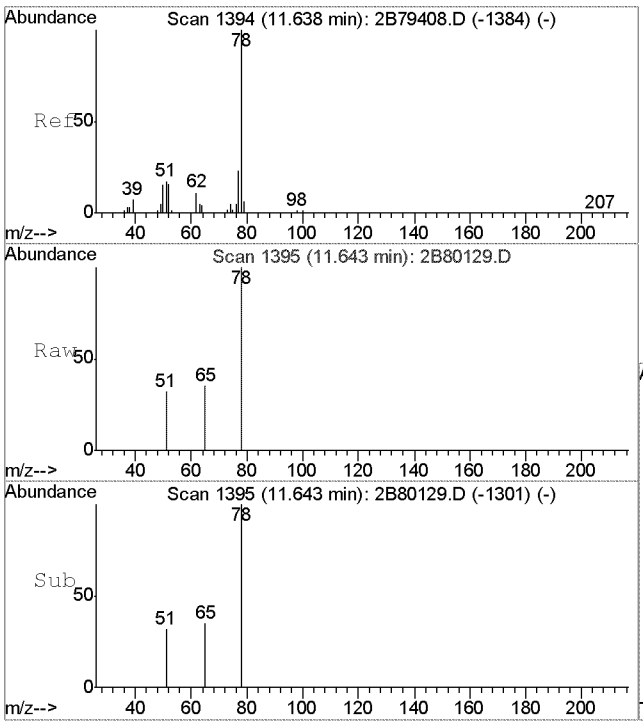
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:26 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration

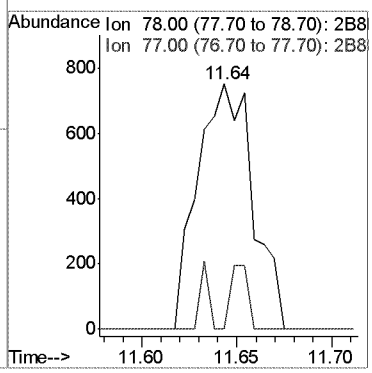




#58
benzene
Concen: 0.34 ug/L
RT: 11.64 min Scan# 1395
Delta R.T. 0.01 min
Lab File: 2B80129.D
Acq: 23 Feb 2011 12:40 pm

Tgt Ion: 78 Resp: 1525

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.618	52	55	59	rVB	797	795	0.11%	0.021%
2	4.644	59	60	67	rVB	724	704	0.10%	0.019%
3	4.691	67	69	73	rVB	671	671	0.10%	0.018%
4	4.728	73	76	79	rVB	629	542	0.08%	0.014%
5	5.121	148	151	160	rVV2	597	1225	0.18%	0.032%
6	5.325	187	190	194	rBV	593	593	0.08%	0.016%
7	5.478	214	219	220	rVB	530	586	0.08%	0.015%
8	5.493	220	222	231	rBV	546	965	0.14%	0.025%
9	5.635	247	249	252	rBV	824	861	0.12%	0.023%
10	5.813	278	283	291	rVB3	721	1139	0.16%	0.030%
11	5.897	296	299	304	rVB	566	833	0.12%	0.022%
12	5.928	304	305	315	rBV	605	980	0.14%	0.026%
13	6.191	354	355	360	rVB	748	520	0.07%	0.014%
14	6.280	369	372	377	rBB	434	633	0.09%	0.017%
15	6.311	377	378	386	rBV2	478	819	0.12%	0.022%
16	6.385	390	392	396	rVB2	402	500	0.07%	0.013%
17	6.453	402	405	411	rBB	428	627	0.09%	0.016%
18	6.510	415	416	422	rVB	441	549	0.08%	0.014%
19	6.579	422	429	435	rBB	528	877	0.13%	0.023%
20	6.626	435	438	440	rBB	692	552	0.08%	0.015%
21	6.993	503	508	511	rBB	491	825	0.12%	0.022%
22	7.050	512	519	521	rBB	585	644	0.09%	0.017%
23	7.087	524	526	536	rBB	295	741	0.11%	0.019%
24	7.417	588	589	594	rBV	469	604	0.09%	0.016%
25	7.743	648	651	656	rBV	280	492	0.07%	0.013%
26	7.942	684	689	691	rBV	531	593	0.08%	0.016%
27	8.062	707	712	718	rBV	422	816	0.12%	0.021%
28	8.115	718	722	729	rVB2	461	629	0.09%	0.017%
29	8.419	773	780	782	rBB	486	799	0.11%	0.021%
30	8.461	783	788	791	rBV	408	635	0.09%	0.017%
31	8.613	805	817	847	rBV2	32668	130021	18.63%	3.417%
32	8.781	847	849	862	rVV2	654	1621	0.23%	0.043%
33	9.116	909	913	921	rVV2	445	944	0.14%	0.025%
34	9.179	921	925	928	rVB	504	584	0.08%	0.015%
35	9.274	939	943	951	rBV	439	1030	0.15%	0.027%
36	9.436	972	974	978	rBV	495	541	0.08%	0.014%
37	9.483	981	983	989	rBB	407	534	0.08%	0.014%
38	9.588	1001	1003	1008	rVB	451	553	0.08%	0.015%

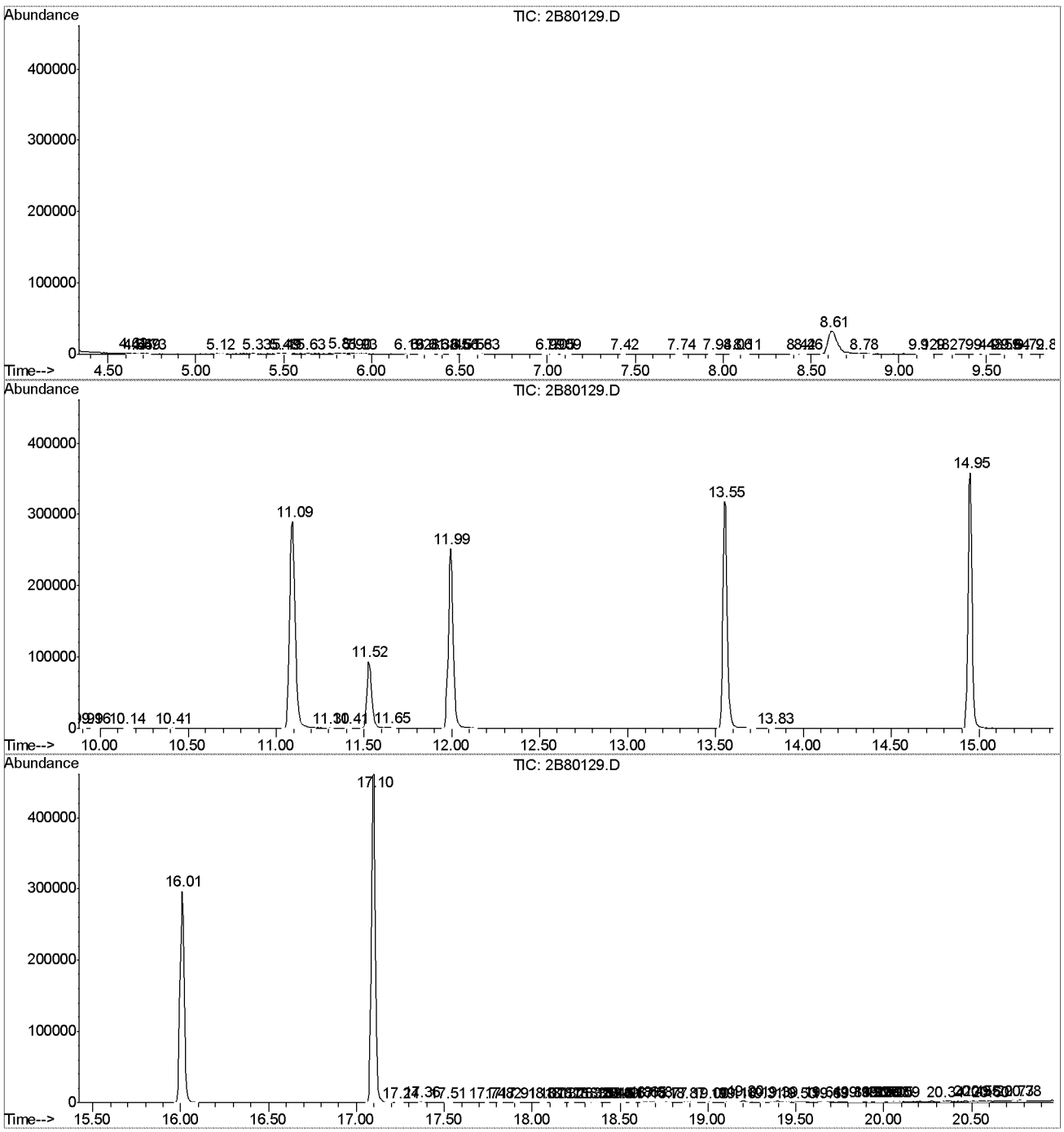
39	9.641	1008	1013	1020	rBB	351	787	0.11%	0.021%
40	9.719	1025	1028	1033	rVB	459	635	0.09%	0.017%
41	9.840	1048	1051	1058	rBB	279	670	0.10%	0.018%
42	9.908	1059	1064	1066	rBV	493	631	0.09%	0.017%
43	9.955	1071	1073	1081	rVB	526	891	0.13%	0.023%
44	10.144	1106	1109	1117	rBB	344	814	0.12%	0.021%
45	10.406	1154	1159	1162	rBV2	729	1287	0.18%	0.034%
46	11.093	1278	1290	1315	rBV2	290907	674117	96.61%	17.715%
47	11.303	1327	1330	1335	rVB2	700	915	0.13%	0.024%
48	11.413	1347	1351	1355	rBB2	436	627	0.09%	0.016%
49	11.523	1363	1372	1389	rBV	93797	192079	27.53%	5.048%
50	11.649	1389	1396	1403	rVB2	1721	3914	0.56%	0.103%
51	11.989	1452	1461	1491	rBV	252692	480009	68.79%	12.614%
52	13.552	1751	1759	1793	rBB	318691	544468	78.03%	14.308%
53	13.830	1806	1812	1814	rBB	412	515	0.07%	0.014%
54	14.946	2017	2025	2041	rBV	359386	560543	80.33%	14.730%
55	16.006	2219	2227	2245	rBB	297172	439464	62.98%	11.549%
56	17.096	2427	2435	2456	rBB	461665	697760	100.00%	18.336%
57	17.238	2459	2462	2468	rBB	462	620	0.09%	0.016%
58	17.363	2483	2486	2491	rBB	1332	1561	0.22%	0.041%
59	17.510	2512	2514	2522	rBB	273	582	0.08%	0.015%
60	17.736	2556	2557	2561	rVB	475	539	0.08%	0.014%
61	17.825	2570	2574	2576	rBB	518	551	0.08%	0.014%
62	17.909	2587	2590	2594	rBB	527	836	0.12%	0.022%
63	18.066	2616	2620	2624	rBB	506	721	0.10%	0.019%
64	18.134	2627	2633	2636	rBV	796	1036	0.15%	0.027%
65	18.166	2636	2639	2642	rBV	411	618	0.09%	0.016%
66	18.234	2647	2652	2653	rBB	488	627	0.09%	0.016%
67	18.323	2665	2669	2671	rVB	714	726	0.10%	0.019%
68	18.349	2672	2674	2676	rBB	589	527	0.08%	0.014%
69	18.375	2676	2679	2682	rBV	698	724	0.10%	0.019%
70	18.459	2692	2695	2699	rVB	546	635	0.09%	0.017%
71	18.491	2699	2701	2703	rBV	603	547	0.08%	0.014%
72	18.512	2703	2705	2709	rVV	428	522	0.07%	0.014%
73	18.569	2713	2716	2720	rBV	614	493	0.07%	0.013%
74	18.648	2725	2731	2734	rVV	1024	1614	0.23%	0.042%
75	18.685	2734	2738	2746	rVB	1563	1893	0.27%	0.050%
76	18.769	2746	2754	2759	rBV2	859	1640	0.24%	0.043%
77	18.868	2771	2773	2787	rBV2	784	1831	0.26%	0.048%
78	19.005	2795	2799	2803	rVB2	797	600	0.09%	0.016%
79	19.109	2816	2819	2824	rVB	681	767	0.11%	0.020%
80	19.157	2824	2828	2830	rBV	388	566	0.08%	0.015%
81	19.204	2830	2837	2843	rBV4	2569	3729	0.53%	0.098%
82	19.314	2854	2858	2860	rBV	526	634	0.09%	0.017%
83	19.393	2865	2873	2888	rVV3	1861	4428	0.63%	0.116%
84	19.503	2892	2894	2904	rVB2	504	876	0.13%	0.023%
85	19.639	2918	2920	2925	rVB	1183	1088	0.16%	0.029%
86	19.686	2925	2929	2930	rBV	535	592	0.08%	0.016%
87	19.807	2950	2952	2958	rBV2	807	819	0.12%	0.022%
88	19.854	2958	2961	2966	rVB	758	852	0.12%	0.022%
89	19.922	2971	2974	2975	rBV	772	566	0.08%	0.015%
90	19.969	2980	2983	2984	rVB	748	645	0.09%	0.017%
91	19.990	2984	2987	2990	rBV2	1209	1412	0.20%	0.037%
92	20.032	2993	2995	2997	rBV2	1004	695	0.10%	0.018%
93	20.053	2997	2999	3004	rVB2	1227	1026	0.15%	0.027%
94	20.090	3004	3006	3009	rBV	1081	818	0.12%	0.021%
95	20.342	3050	3054	3061	rBV3	864	1727	0.25%	0.045%

96	20.494	3082	3083	3091	rBV3	1140	1837	0.26%	0.048%
97	20.546	3092	3093	3100	rVB4	1019	1323	0.19%	0.035%
98	20.598	3100	3103	3104	rBV2	685	668	0.10%	0.018%
99	20.735	3128	3129	3134	rBV2	1339	1183	0.17%	0.031%
100	20.782	3135	3138	3144	rVB4	1506	1957	0.28%	0.051%

Sum of corrected areas: 3805354

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80129.D
Operator : DEZAREER
Acquired : 23 Feb 2011 12:40 pm using AcqMethod M2B3558
Instrument : MS2B
Sample Name: ja68506-1
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 6
Quant File :M2B3558.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 12:40 pm
Data File: C:\MSDCHEM\1\DATA\2B80129.D
Name: ja68506-1
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 13:37:14 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

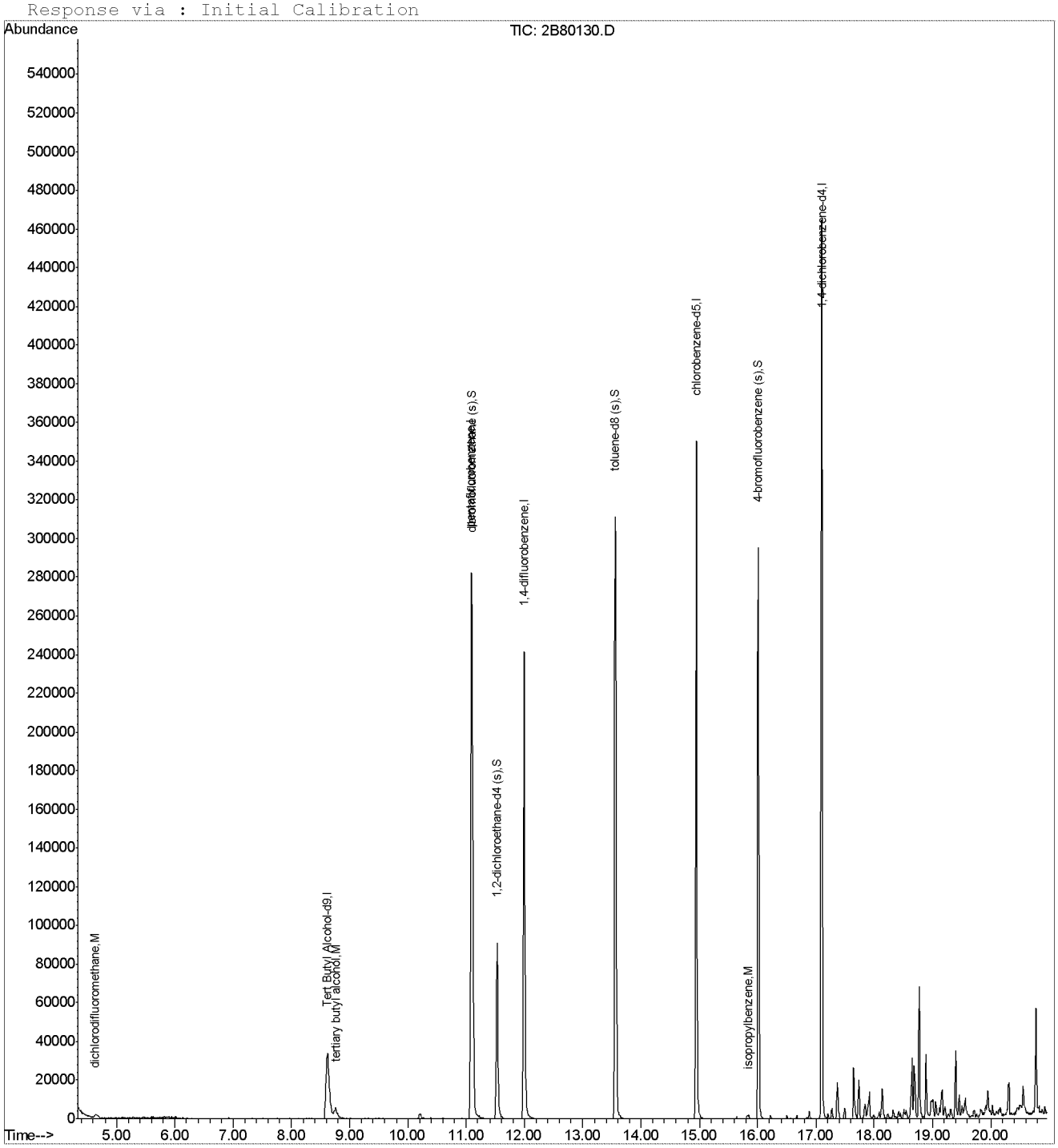
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	72038	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	179572	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	212434	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	189704	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	119957	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	64645	50.68	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.36%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	76692	50.24	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.48%			
73) toluene-d8 (s)	13.55	98	207690	50.46	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 100.92%			
98) 4-bromofluorobenzene (s)	16.01	95	81810	48.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 97.82%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.76	59	9830	67.64	ug/L	85
6) dichlorodifluoromethane	4.64	85	4306	2.22	ug/L	85
97) isopropylbenzene	15.84	105	1728	0.30	ug/L	93

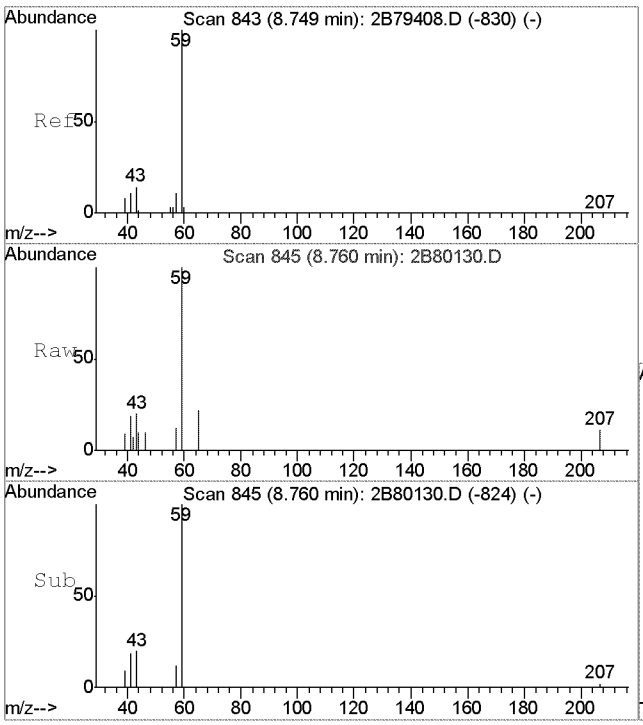
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:28 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration

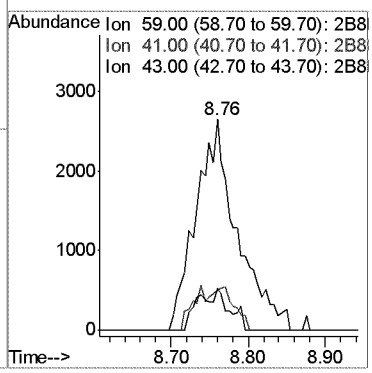


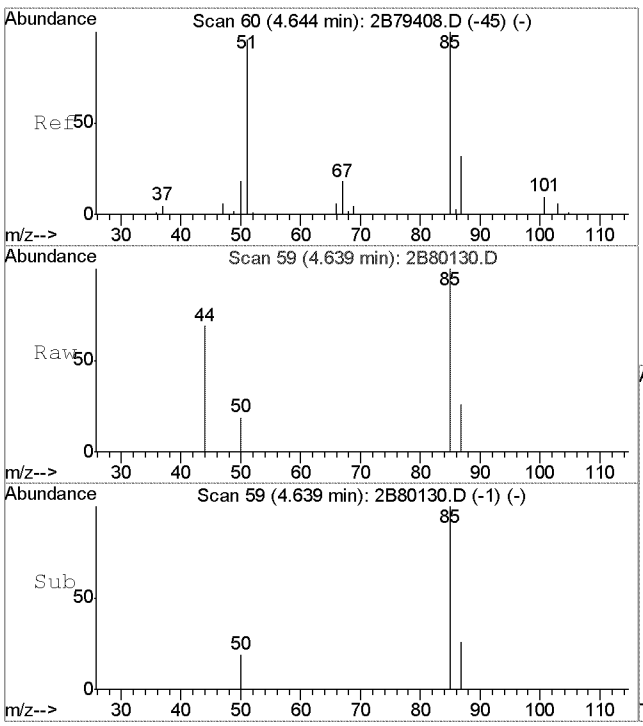


#2
tertiary butyl alcohol
Concen: 67.64 ug/L
RT: 8.76 min Scan# 845
Delta R.T. 0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion: 59 Resp: 9830

Ion	Ratio	Lower	Upper
59	100		
41	19.3	1.1	61.1
43	20.2	0.0	48.3

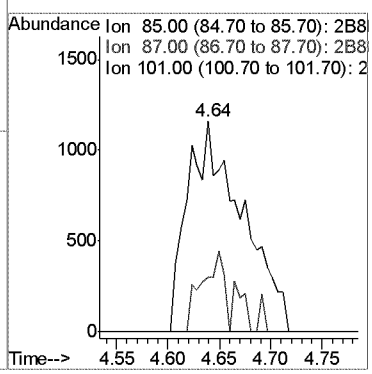


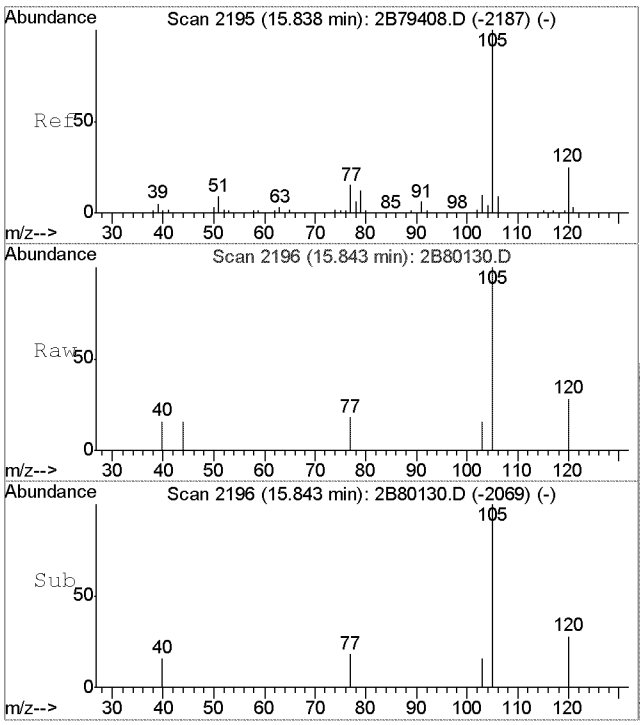


#6
dichlorodifluoromethane
Concen: 2.22 ug/L
RT: 4.64 min Scan# 59
Delta R.T. -0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion: 85 Resp: 4306

Ion	Ratio	Lower	Upper
85	100		
87	25.9	2.4	62.4
101	0.0	0.0	40.0

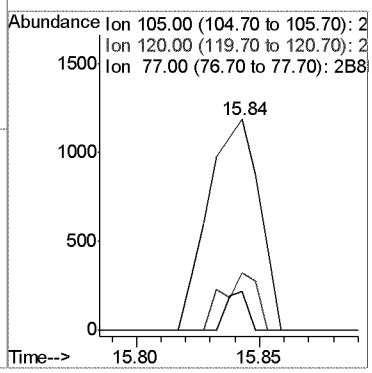




#97
isopropylbenzene
Concen: 0.30 ug/L
RT: 15.84 min Scan# 2196
Delta R.T. 0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion:105 Resp: 1728

Ion	Ratio	Lower	Upper
105	100		
120	27.6	0.0	54.8
77	18.3	0.0	44.9



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.639	52	59	75	rVB3	1954	7813	1.12%	0.167%
2	5.110	145	149	151	rVB2	483	646	0.09%	0.014%
3	5.446	212	213	231	rVB	595	1653	0.24%	0.035%
4	5.855	288	291	297	rVV3	498	1014	0.15%	0.022%
5	5.902	297	300	302	rVV	688	662	0.09%	0.014%
6	5.928	302	305	319	rVV3	847	2199	0.32%	0.047%
7	6.012	319	321	328	rVB2	819	857	0.12%	0.018%
8	6.280	369	372	384	rBB2	640	1438	0.21%	0.031%
9	6.453	403	405	413	rBB	622	800	0.11%	0.017%
10	6.552	420	424	427	rBB	455	646	0.09%	0.014%
11	6.799	466	471	477	rBB	423	680	0.10%	0.015%
12	7.758	649	654	658	rVB	468	662	0.09%	0.014%
13	7.957	689	692	696	rVB	518	688	0.10%	0.015%
14	8.314	757	760	764	rBV	682	805	0.12%	0.017%
15	8.618	806	818	836	rBV	34215	131303	18.82%	2.804%
16	8.760	838	845	865	rVV5	5650	19986	2.87%	0.427%
17	8.870	865	866	871	rVV	675	728	0.10%	0.016%
18	9.216	931	932	940	rBV	408	816	0.12%	0.017%
19	9.431	965	973	975	rBV	457	888	0.13%	0.019%
20	9.520	986	990	993	rBV	460	653	0.09%	0.014%
21	9.908	1061	1064	1071	rVB	459	745	0.11%	0.016%
22	10.201	1111	1120	1132	rBV2	2785	7110	1.02%	0.152%
23	10.390	1150	1156	1162	rVB2	851	1505	0.22%	0.032%
24	10.532	1179	1183	1186	rBV	655	706	0.10%	0.015%
25	10.642	1200	1204	1209	rBV	461	786	0.11%	0.017%
26	11.087	1279	1289	1320	rBV2	282464	664948	95.33%	14.202%
27	11.255	1320	1321	1325	rVB	688	681	0.10%	0.015%
28	11.528	1362	1373	1392	rBV	91018	189994	27.24%	4.058%
29	11.633	1392	1393	1401	rVB2	590	921	0.13%	0.020%
30	11.989	1452	1461	1499	rBB	241727	465448	66.73%	9.941%
31	12.828	1617	1621	1625	rBB	703	781	0.11%	0.017%
32	13.552	1751	1759	1788	rBB	311471	528930	75.83%	11.297%
33	14.946	2013	2025	2047	rBV	350545	550671	78.94%	11.761%
34	15.638	2152	2157	2162	rBB2	1548	1704	0.24%	0.036%
35	15.843	2186	2196	2200	rBB2	2300	4552	0.65%	0.097%
36	16.005	2219	2227	2248	rBB	295388	433187	62.10%	9.252%
37	16.215	2260	2267	2276	rBB	1767	3026	0.43%	0.065%
38	16.493	2316	2320	2326	rBB4	1850	2431	0.35%	0.052%

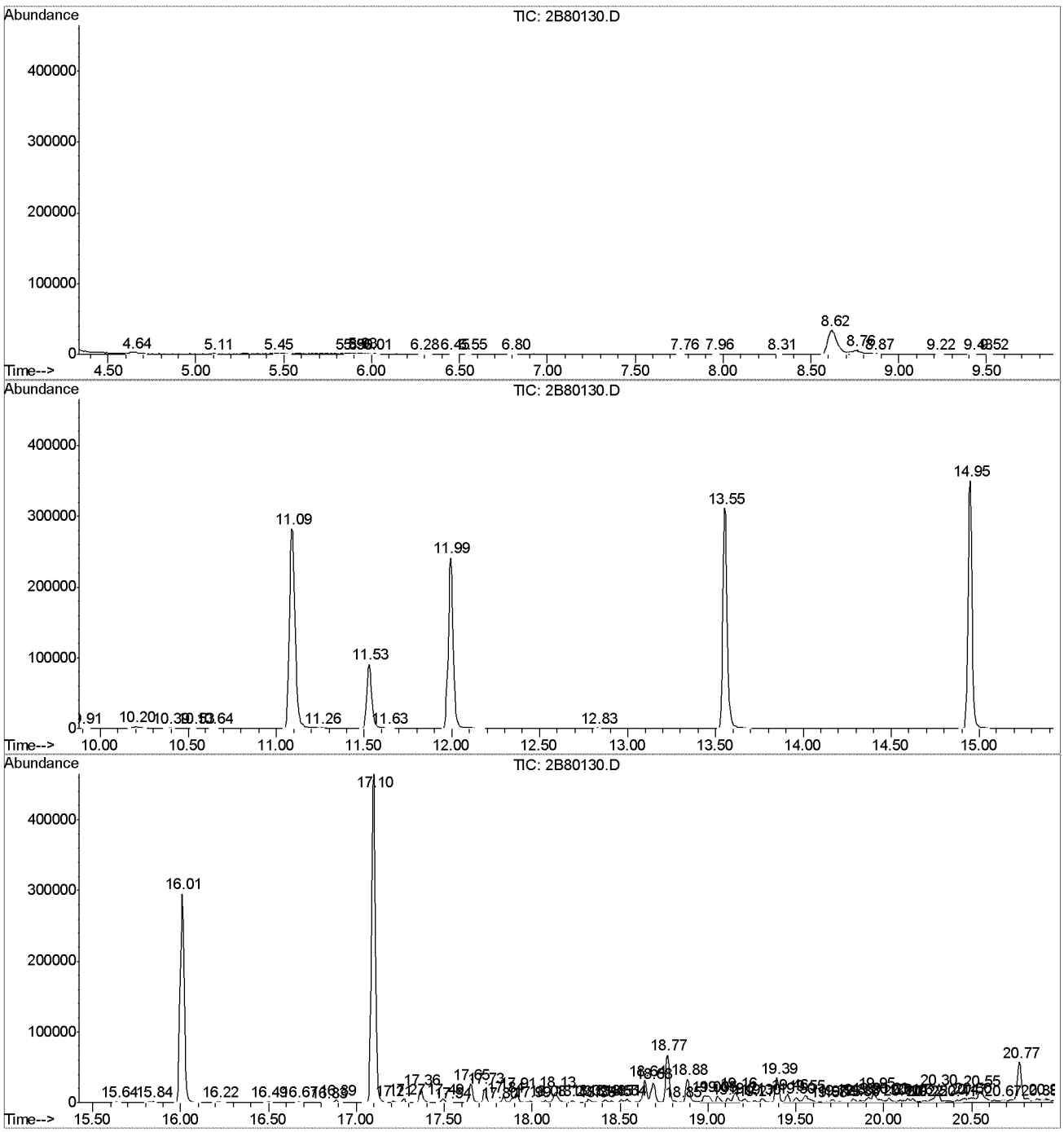
39	16.666	2350	2353	2359	rBB2	1820	1993	0.29%	0.043%
40	16.834	2379	2385	2387	rBV	705	737	0.11%	0.016%
41	16.886	2387	2395	2402	rVB3	4381	6227	0.89%	0.133%
42	17.096	2423	2435	2450	rBV	465101	697550	100.00%	14.898%
43	17.206	2454	2456	2462	rVV3	2720	3131	0.45%	0.067%
44	17.274	2462	2469	2475	rVB2	5601	7550	1.08%	0.161%
45	17.363	2479	2486	2496	rBB	19017	30003	4.30%	0.641%
46	17.494	2503	2511	2516	rBB4	5393	8030	1.15%	0.172%
47	17.536	2516	2519	2522	rBB4	620	661	0.09%	0.014%
48	17.647	2533	2540	2551	rBV2	26636	40695	5.83%	0.869%
49	17.730	2551	2556	2563	rVB2	20469	27794	3.98%	0.594%
50	17.804	2563	2570	2571	rBV	744	1172	0.17%	0.025%
51	17.835	2571	2576	2582	rBV2	7582	11269	1.62%	0.241%
52	17.909	2582	2590	2599	rVV3	13787	27792	3.98%	0.594%
53	17.993	2599	2606	2613	rVB4	2527	5290	0.76%	0.113%
54	18.076	2613	2622	2625	rBV2	3641	5455	0.78%	0.117%
55	18.134	2626	2633	2646	rVV	15228	25763	3.69%	0.550%
56	18.228	2647	2651	2659	rVB2	2722	4458	0.64%	0.095%
57	18.318	2663	2668	2674	rBV3	4264	7231	1.04%	0.154%
58	18.360	2674	2676	2680	rVB2	1058	1001	0.14%	0.021%
59	18.412	2680	2686	2691	rBV	3875	5837	0.84%	0.125%
60	18.449	2691	2693	2700	rVB2	2759	2803	0.40%	0.060%
61	18.506	2700	2704	2708	rBV4	4666	6544	0.94%	0.140%
62	18.538	2708	2710	2717	rVB6	4384	5910	0.85%	0.126%
63	18.643	2717	2730	2734	rBV	31486	49922	7.16%	1.066%
64	18.685	2734	2738	2747	rVV2	27079	41854	6.00%	0.894%
65	18.769	2747	2754	2766	rVB2	68036	107162	15.36%	2.289%
66	18.847	2766	2769	2771	rBV2	950	1020	0.15%	0.022%
67	18.884	2771	2776	2789	rBV2	33100	53812	7.71%	1.149%
68	19.004	2789	2799	2805	rVV5	9173	26391	3.78%	0.564%
69	19.052	2805	2808	2816	rVV4	8251	12516	1.79%	0.267%
70	19.115	2816	2820	2823	rVV3	5234	7853	1.13%	0.168%
71	19.162	2823	2829	2834	rVV2	14337	25235	3.62%	0.539%
72	19.209	2834	2838	2845	rVB3	5912	8349	1.20%	0.178%
73	19.267	2845	2849	2853	rBV3	2429	3476	0.50%	0.074%
74	19.303	2853	2856	2866	rVB3	4600	7991	1.15%	0.171%
75	19.392	2866	2873	2880	rBV	34684	52601	7.54%	1.123%
76	19.455	2880	2885	2889	rVV4	11147	15864	2.27%	0.339%
77	19.497	2889	2893	2899	rVV5	6026	10100	1.45%	0.216%
78	19.555	2899	2904	2918	rVB4	9947	22999	3.30%	0.491%
79	19.676	2922	2927	2930	rBV2	1115	1554	0.22%	0.033%
80	19.718	2930	2935	2939	rVB5	3392	4453	0.64%	0.095%
81	19.754	2939	2942	2948	rVB4	1847	2298	0.33%	0.049%
82	19.828	2948	2956	2961	rBV6	4312	8154	1.17%	0.174%
83	19.864	2961	2963	2966	rVV2	2214	2191	0.31%	0.047%
84	19.912	2967	2972	2975	rVV3	6354	10839	1.55%	0.231%
85	19.948	2975	2979	2989	rVV4	13228	24834	3.56%	0.530%
86	20.027	2989	2994	3002	rVV5	6276	10139	1.45%	0.217%
87	20.095	3003	3007	3012	rVV2	2701	5040	0.72%	0.108%
88	20.137	3012	3015	3018	rVV3	3898	5658	0.81%	0.121%
89	20.163	3018	3020	3025	rVB4	4498	4947	0.71%	0.106%
90	20.221	3030	3031	3033	rBV	1231	716	0.10%	0.015%
91	20.247	3033	3036	3037	rVB	1171	857	0.12%	0.018%
92	20.305	3037	3047	3055	rBV4	17169	31102	4.46%	0.664%
93	20.415	3065	3068	3071	rBV3	1955	2511	0.36%	0.054%
94	20.467	3071	3078	3080	rVV5	4132	8924	1.28%	0.191%
95	20.499	3080	3084	3089	rVV5	5393	12237	1.75%	0.261%

96	20.551	3089	3094	3105	rVB3	14382	30069	4.31%	0.642%
97	20.672	3116	3117	3122	rBV2	987	1020	0.15%	0.022%
98	20.771	3130	3136	3153	rVB	54065	91709	13.15%	1.959%
99	20.876	3153	3156	3161	rVB4	2118	3450	0.49%	0.074%
100	20.923	3161	3165	3169	rBV5	3545	4364	0.63%	0.093%

Sum of corrected areas: 4682170

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80130.D
Operator : DEZAREER
Acquired : 23 Feb 2011 1:11 pm using AcqMethod M2B3558
Instrument : MS2B
Sample Name: ja68506-2
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 7
Quant File :M2B3558.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

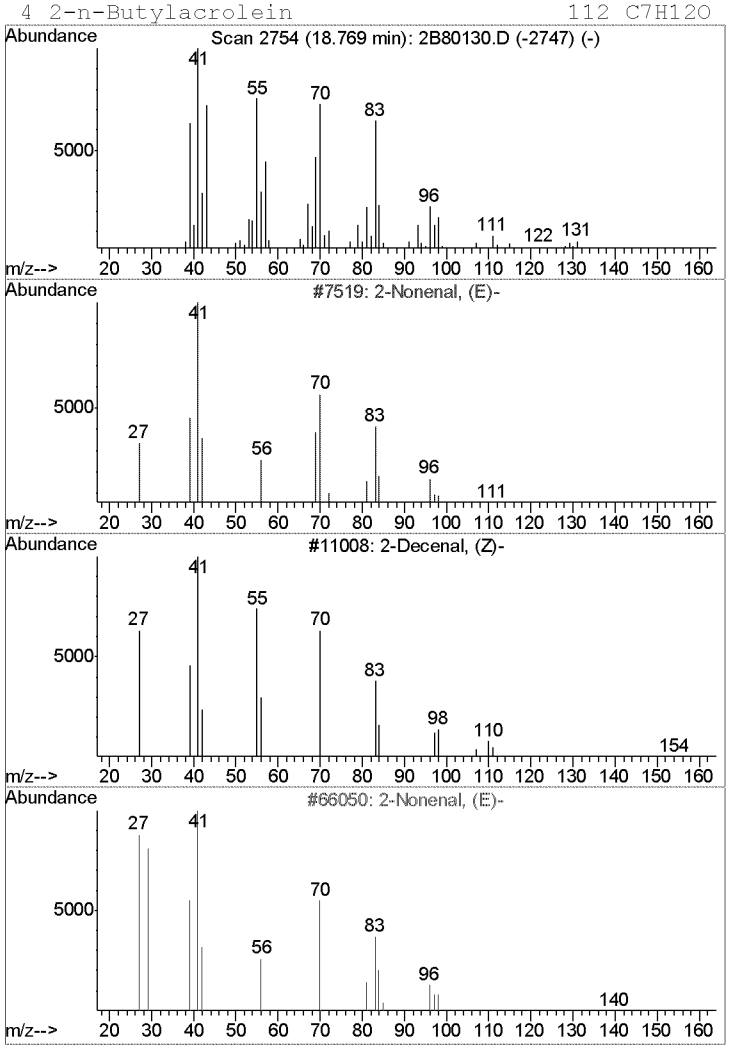
Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library : C:\DATABASE\NBS75K.L

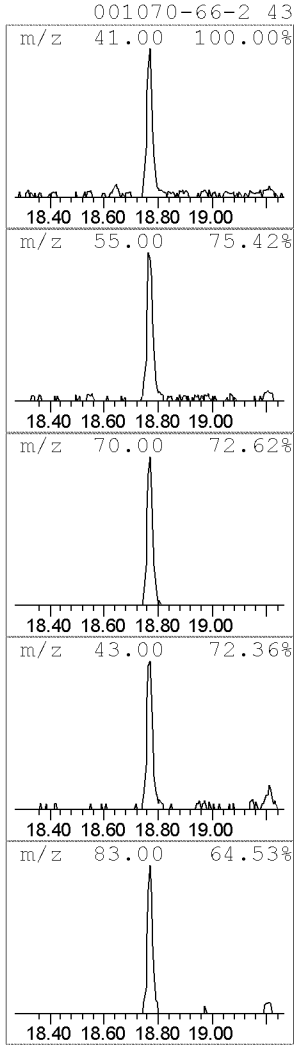
****

Peak Number 1 2-Nonenal, (E)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.77	7.68 ug/L	107162	1,4-dichlorobenzene-d4	17.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Nonenal, (E)-	140	C9H16O	018829-56-6	72
2	2-Decenal, (Z)-	154	C10H18O	002497-25-8	52
3	2-Nonenal, (E)-	140	C9H16O	018829-56-6	47
4	2-n-Butylacrolein	112	C7H12O	001070-66-2	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

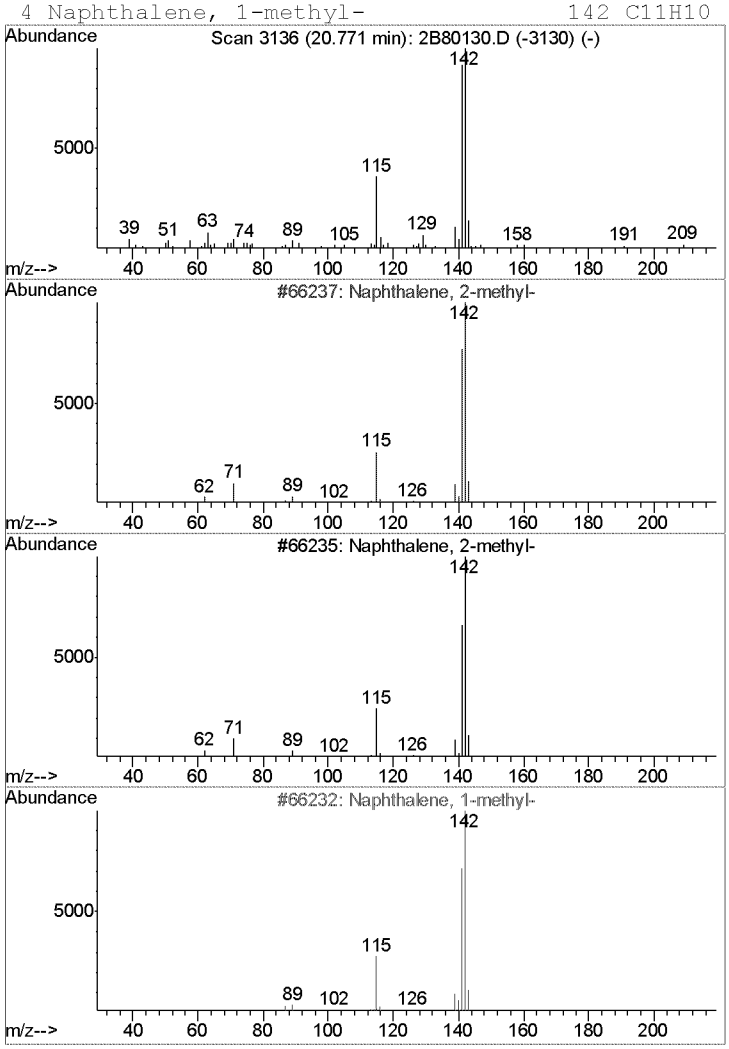
Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library : C:\DATABASE\NBS75K.L

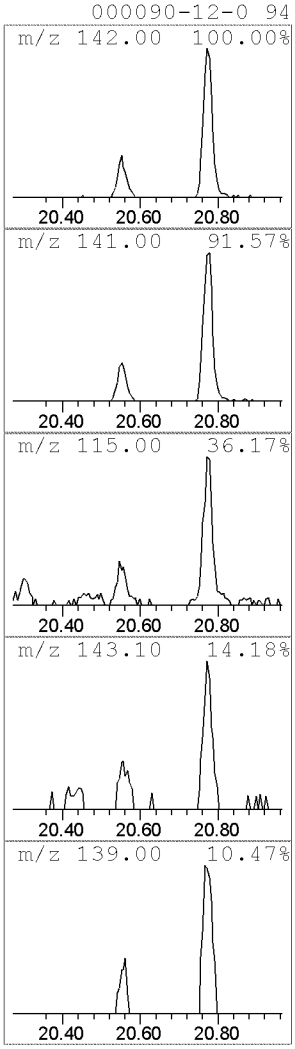
****

Peak Number 2 Naphthalene, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.77	6.57 ug/L	91709	1,4-dichlorobenzene-d4	17.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	95
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94





Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 1:11 pm
Data File: C:\MSDCHEM\1\DATA\2B80130.D
Name: ja68506-2
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Nonenal, (E)-	18.77	7.7	ug/L	107162	5	17.10	697550	50.0
Naphthalene, 2-me...	20.77	6.6	ug/L	91709	5	17.10	697550	50.0

6.1.4 6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 01 14:33:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

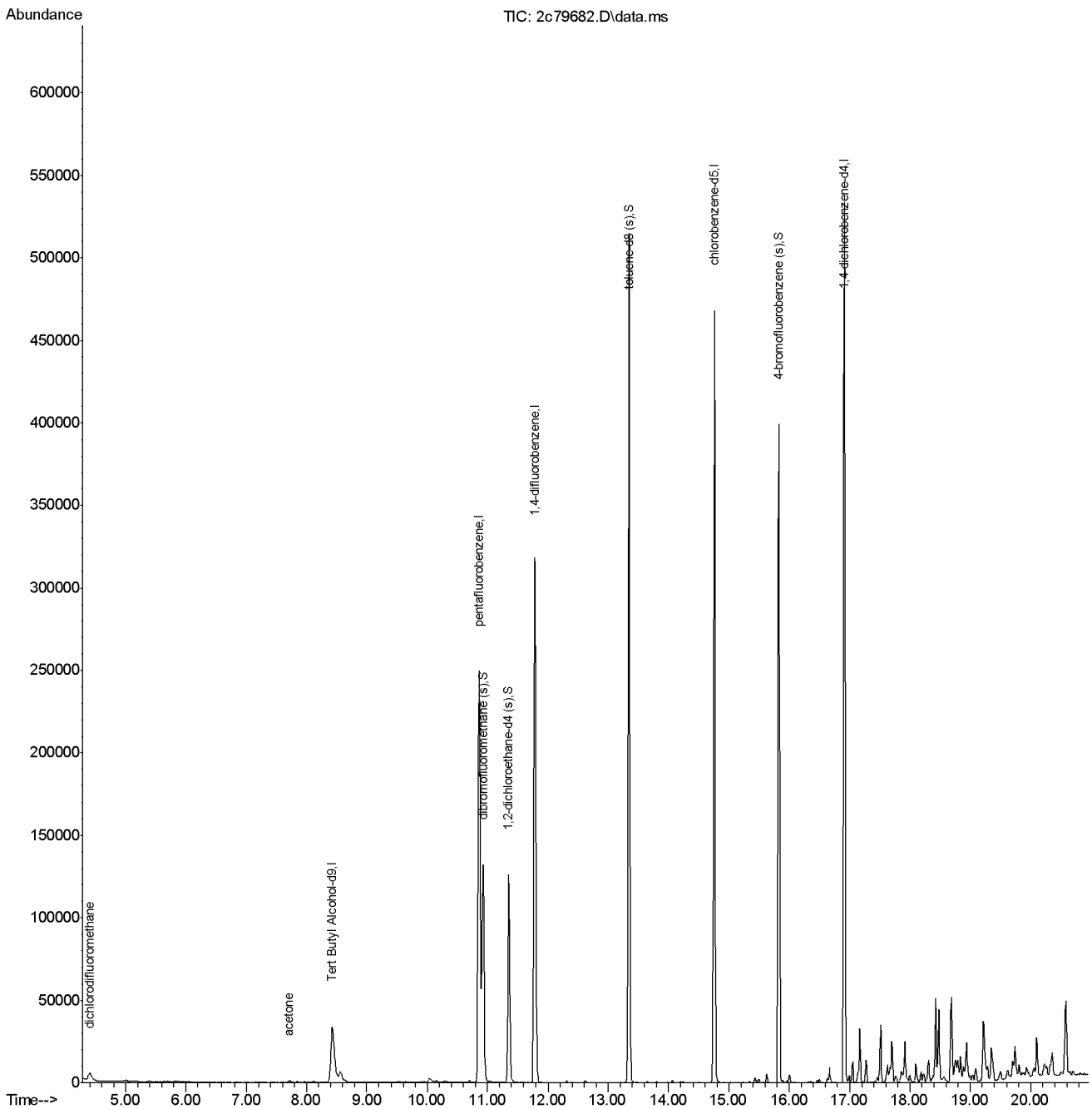
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	91655	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	240241	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	315654	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	271381	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	151632	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	98046	53.04	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.08%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	101305	53.18	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 106.36%			
80) toluene-d8 (s)	13.339	98	364073	56.13	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.26%			
105) 4-bromofluorobenzene (s)	15.824	95	133599	53.63	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.26%			
Target Compounds						Qvalue
11) dichlorodifluoromethane	4.400	85	11340	4.10	ug/L	96
25) acetone	7.708	43	2252	5.58	ug/L	89

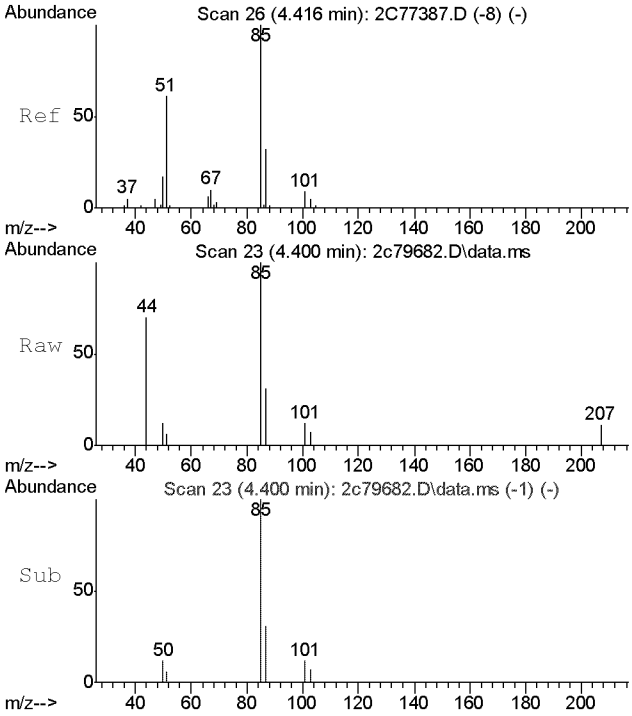
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 01 14:33:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

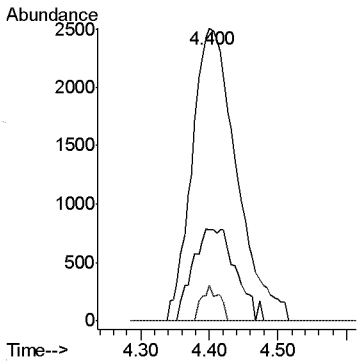


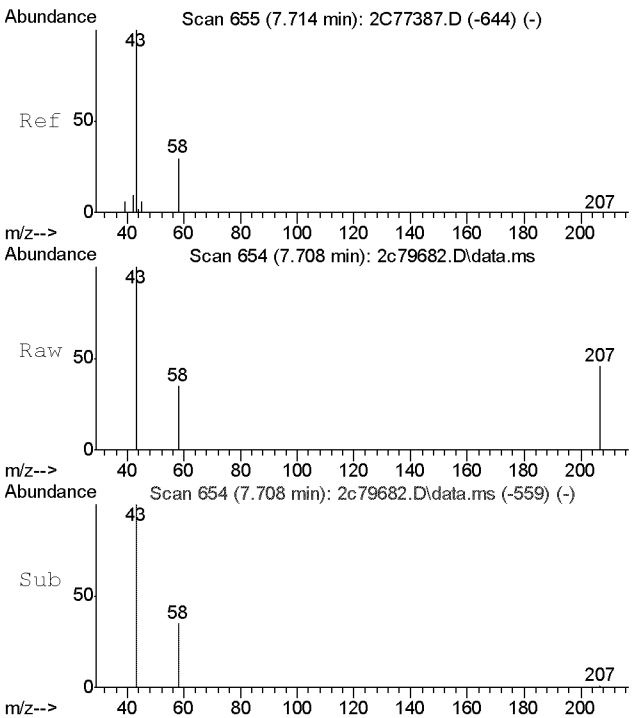


#11
dichlorodifluoromethane
Concen: 4.10 ug/L
RT: 4.400 min Scan# 23
Delta R.T. -0.005 min
Lab File: 2c79682.D
Acq: 28 Feb 2011 2:42 pm

Tgt Ion: 85 Resp: 11340

Ion	Ratio	Lower	Upper
85	100		
87	31.1	2.5	62.5
101	12.1	0.0	39.2

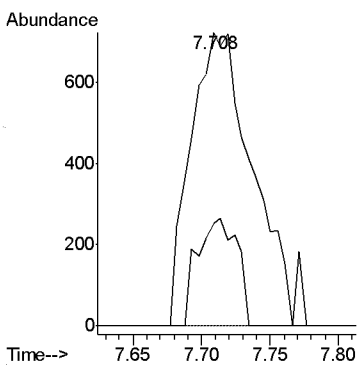




#25
acetone
Concen: 5.58 ug/L
RT: 7.708 min Scan# 654
Delta R.T. 0.000 min
Lab File: 2c79682.D
Acq: 28 Feb 2011 2:42 pm

Tgt Ion: 43 Resp: 2252

Ion	Ratio	Lower	Upper
43	100		
58	34.7	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79682.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.400	13	23	45	rVB3	5080	23073	2.53%	0.351%
2	5.003	129	138	145	rVV2	755	2253	0.25%	0.034%
3	5.076	149	152	159	rVV2	508	905	0.10%	0.014%
4	5.165	166	169	178	rVB2	531	1055	0.12%	0.016%
5	5.386	207	211	219	rVV2	594	1462	0.16%	0.022%
6	5.679	263	267	278	rBV2	481	1015	0.11%	0.015%
7	5.999	326	328	335	rVV2	566	877	0.10%	0.013%
8	6.046	335	337	354	rVB2	635	1157	0.13%	0.018%
9	6.838	483	488	496	rVB2	416	940	0.10%	0.014%
10	7.719	648	656	668	rBV3	1215	3871	0.42%	0.059%
11	7.839	672	679	681	rBV2	854	1100	0.12%	0.017%
12	8.117	720	732	736	rVB3	555	1651	0.18%	0.025%
13	8.426	776	791	809	rBV2	33904	147456	16.14%	2.245%
14	8.558	809	816	835	rVB2	5680	22245	2.44%	0.339%
15	9.538	995	1003	1005	rVB2	451	936	0.10%	0.014%
16	10.026	1088	1096	1114	rBV3	2317	9049	0.99%	0.138%
17	10.151	1114	1120	1131	rVB5	1151	3071	0.34%	0.047%
18	10.293	1140	1147	1160	rVB2	963	3010	0.33%	0.046%
19	10.697	1217	1224	1229	rVV	1008	1631	0.18%	0.025%
20	10.859	1243	1255	1261	rVV	249431	594142	65.05%	9.044%
21	10.917	1261	1266	1283	rVV	132265	315796	34.57%	4.807%
22	11.043	1283	1290	1295	rVB3	942	2106	0.23%	0.032%
23	11.347	1338	1348	1366	rBV	125979	280456	30.70%	4.269%
24	11.682	1406	1412	1417	rBV3	511	1095	0.12%	0.017%
25	11.777	1421	1430	1454	rVB	318507	668949	73.24%	10.182%
26	12.317	1525	1533	1538	rVV3	1777	3119	0.34%	0.047%
27	12.364	1538	1542	1547	rVV	366	837	0.09%	0.013%
28	12.610	1580	1589	1594	rVB3	1151	2020	0.22%	0.031%
29	13.339	1718	1728	1743	rVV	515005	913392	100.00%	13.903%
30	13.649	1780	1787	1793	rBV2	837	1229	0.13%	0.019%
31	13.801	1811	1816	1820	rBV	738	879	0.10%	0.013%
32	13.911	1831	1837	1845	rBV	341	891	0.10%	0.014%
33	14.063	1859	1866	1873	rBV3	1494	2002	0.22%	0.030%
34	14.199	1883	1892	1895	rBV2	926	1779	0.19%	0.027%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	14.236	1895	1899	1906	rVB2	1105	1530	0.17%	0.023%
36	14.755	1989	1998	2009	rBV	468363	763646	83.61%	11.624%
37	14.833	2009	2013	2018	rVB3	1186	1867	0.20%	0.028%
38	15.342	2100	2110	2114	rBV2	1052	1832	0.20%	0.028%
39	15.431	2121	2127	2132	rBV2	2967	4690	0.51%	0.071%
40	15.494	2132	2139	2147	rVB3	1839	3100	0.34%	0.047%
41	15.625	2157	2164	2175	rVV2	5735	9755	1.07%	0.148%
42	15.824	2192	2202	2212	rVV	399135	636856	69.72%	9.694%
43	15.893	2212	2215	2223	rVV4	1707	2494	0.27%	0.038%
44	15.961	2223	2228	2231	rVV2	1640	2439	0.27%	0.037%
45	16.003	2231	2236	2245	rVB	5195	8833	0.97%	0.134%
46	16.066	2245	2248	2252	rBV2	493	881	0.10%	0.013%
47	16.354	2300	2303	2308	rVV	761	1009	0.11%	0.015%
48	16.459	2318	2323	2327	rVV3	1556	1872	0.20%	0.028%
49	16.501	2327	2331	2336	rVV	1929	2475	0.27%	0.038%
50	16.627	2346	2355	2358	rBV3	2379	3899	0.43%	0.059%
51	16.663	2358	2362	2368	rVV	9227	13629	1.49%	0.207%
52	16.910	2400	2409	2419	rBV	534025	848258	92.87%	12.912%
53	16.994	2419	2425	2429	rVV2	3959	6373	0.70%	0.097%
54	17.046	2429	2435	2445	rVB	12539	19722	2.16%	0.300%
55	17.167	2445	2458	2465	rBV2	32639	59424	6.51%	0.905%
56	17.271	2472	2478	2487	rBV2	13591	21862	2.39%	0.333%
57	17.408	2497	2504	2507	rBV4	585	968	0.11%	0.015%
58	17.455	2507	2513	2517	rBV2	2747	4347	0.48%	0.066%
59	17.507	2517	2523	2532	rVB	35017	55683	6.10%	0.848%
60	17.628	2532	2546	2550	rBV3	10775	23654	2.59%	0.360%
61	17.696	2550	2559	2566	rVB2	23651	50441	5.52%	0.768%
62	17.764	2566	2572	2581	rVB8	3488	8281	0.91%	0.126%
63	17.859	2581	2590	2593	rBV	6256	12327	1.35%	0.188%
64	17.911	2595	2600	2612	rVB2	23909	44269	4.85%	0.674%
65	18.000	2612	2617	2624	rVB2	4404	6906	0.76%	0.105%
66	18.095	2629	2635	2644	rVB3	10954	19050	2.09%	0.290%
67	18.184	2644	2652	2656	rBV	5860	9829	1.08%	0.150%
68	18.226	2656	2660	2667	rVB	4751	7036	0.77%	0.107%
69	18.304	2667	2675	2682	rBV3	13279	25434	2.78%	0.387%
70	18.425	2682	2698	2703	rBV	50093	90953	9.96%	1.384%
71	18.477	2703	2708	2716	rVB	43341	76118	8.33%	1.159%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	18.567	2716	2725	2736	rVB	3439	11047	1.21%	0.168%
73	18.682	2738	2747	2755	rBV	51352	96440	10.56%	1.468%
74	18.750	2755	2760	2764	rVV2	10822	21826	2.39%	0.332%
75	18.792	2764	2768	2772	rVV2	10398	17386	1.90%	0.265%
76	18.834	2772	2776	2781	rVV2	12510	19374	2.12%	0.295%
77	18.886	2781	2786	2790	rVV5	6483	11126	1.22%	0.169%
78	18.939	2790	2796	2803	rVB	21298	42599	4.66%	0.648%
79	18.986	2804	2805	2810	rVB4	2503	2753	0.30%	0.042%
80	19.033	2810	2814	2819	rBV5	2969	4035	0.44%	0.061%
81	19.086	2819	2824	2835	rVB3	7710	15402	1.69%	0.234%
82	19.217	2835	2849	2858	rBV2	36327	93883	10.28%	1.429%
83	19.280	2858	2861	2868	rVB3	8269	14167	1.55%	0.216%
84	19.348	2868	2874	2888	rVB4	20075	49055	5.37%	0.747%
85	19.495	2888	2902	2911	rBV5	5857	14611	1.60%	0.222%
86	19.620	2916	2926	2935	rBV8	5748	16047	1.76%	0.244%
87	19.704	2935	2942	2945	rBV	9368	17040	1.87%	0.259%
88	19.741	2945	2949	2957	rVV4	17003	30511	3.34%	0.464%
89	19.809	2959	2962	2967	rVB2	6611	8428	0.92%	0.128%
90	19.856	2967	2971	2980	rBV7	1960	5509	0.60%	0.084%
91	19.930	2980	2985	2990	rBV4	4152	7256	0.79%	0.110%
92	20.056	3000	3009	3012	rBV6	5053	10615	1.16%	0.162%
93	20.097	3012	3017	3027	rVV2	23614	41483	4.54%	0.631%
94	20.160	3027	3029	3033	rVV4	1032	936	0.10%	0.014%
95	20.234	3033	3043	3055	rVV7	7199	24238	2.65%	0.369%
96	20.354	3055	3066	3088	rVB5	13672	34793	3.81%	0.530%
97	20.501	3092	3094	3098	rBV4	1698	2212	0.24%	0.034%
98	20.580	3100	3109	3119	rVV3	43369	83544	9.15%	1.272%
99	20.706	3127	3133	3147	rBV6	2305	4728	0.52%	0.072%
100	20.821	3153	3155	3164	rVB5	1158	1404	0.15%	0.021%

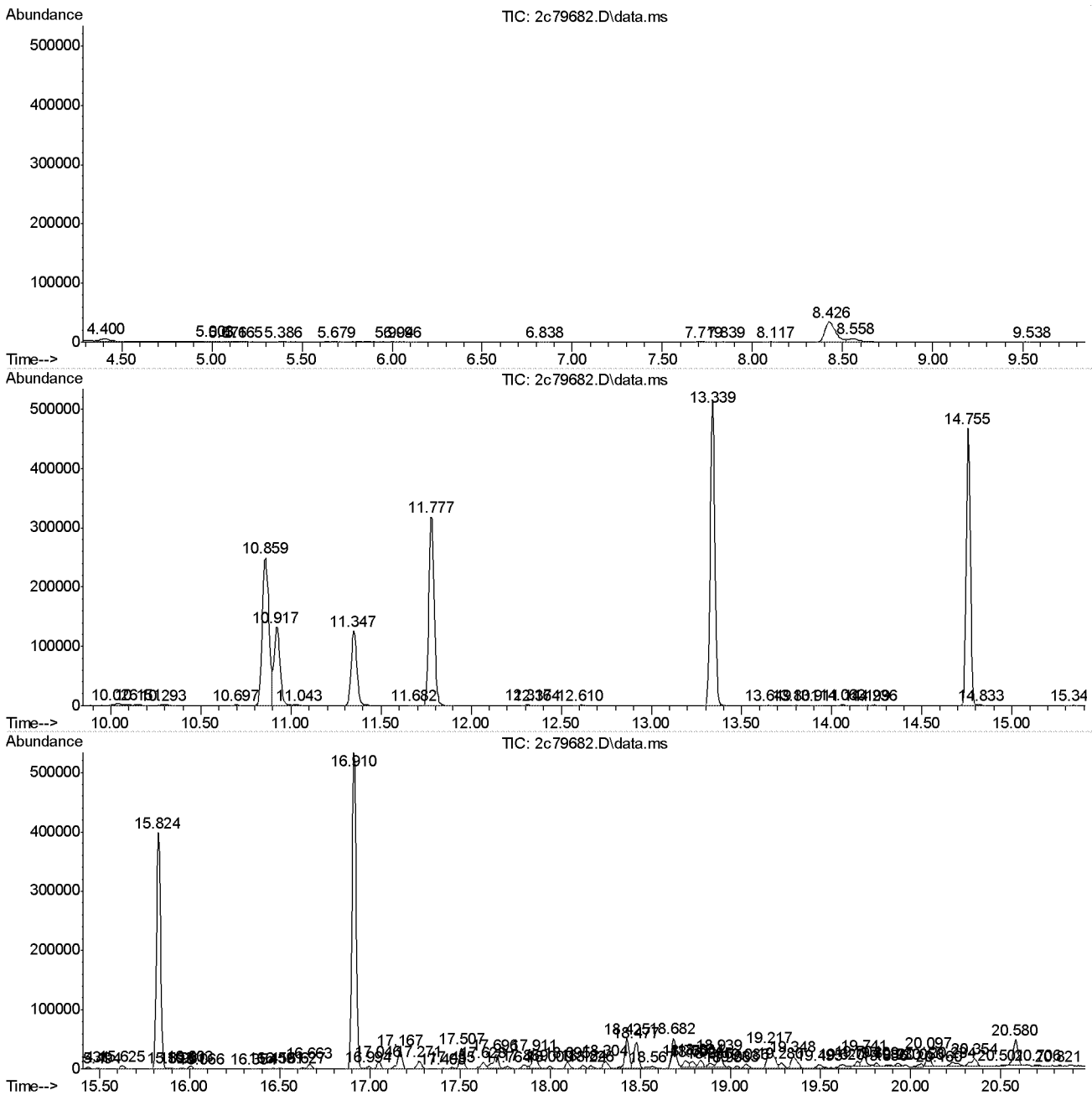
Sum of corrected areas: 6569639

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

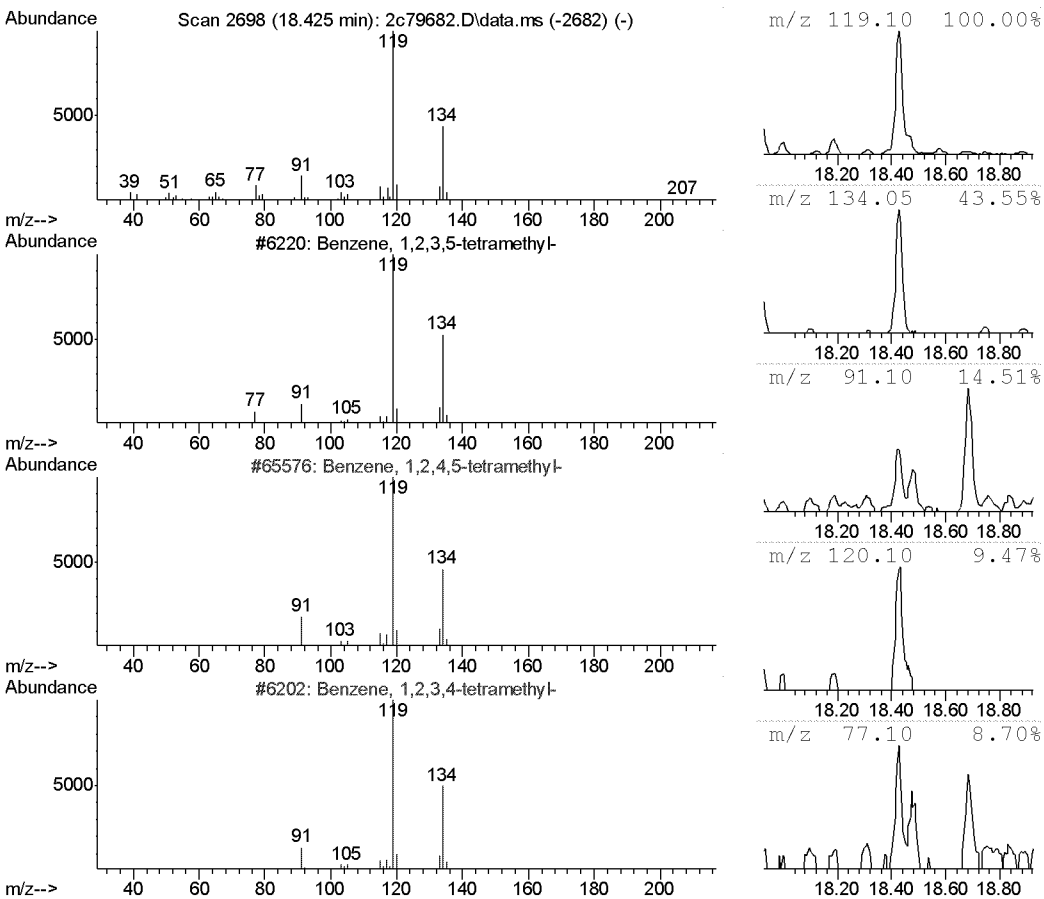
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 1 C4 alkyl benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.425	5.36 ug/L	90953	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

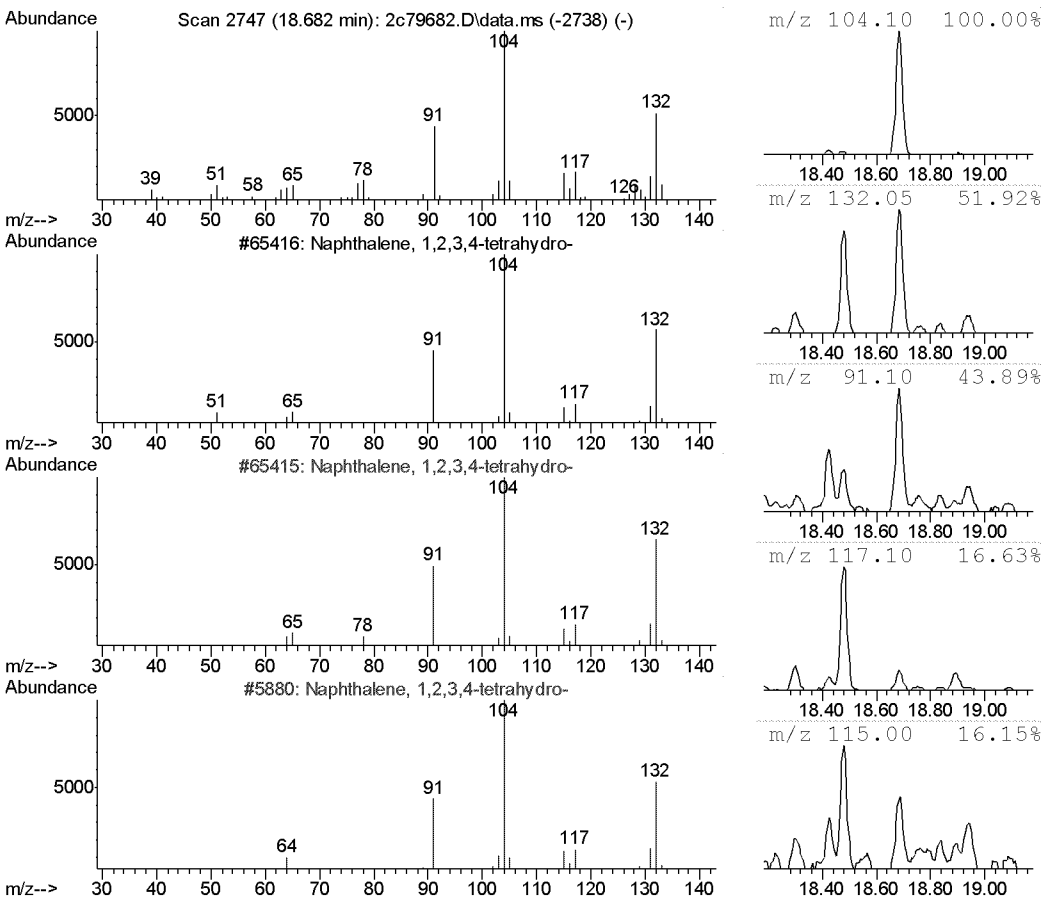
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 2 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.682	5.68 ug/L	96440	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
3	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	94
4	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	93
5	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	64



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

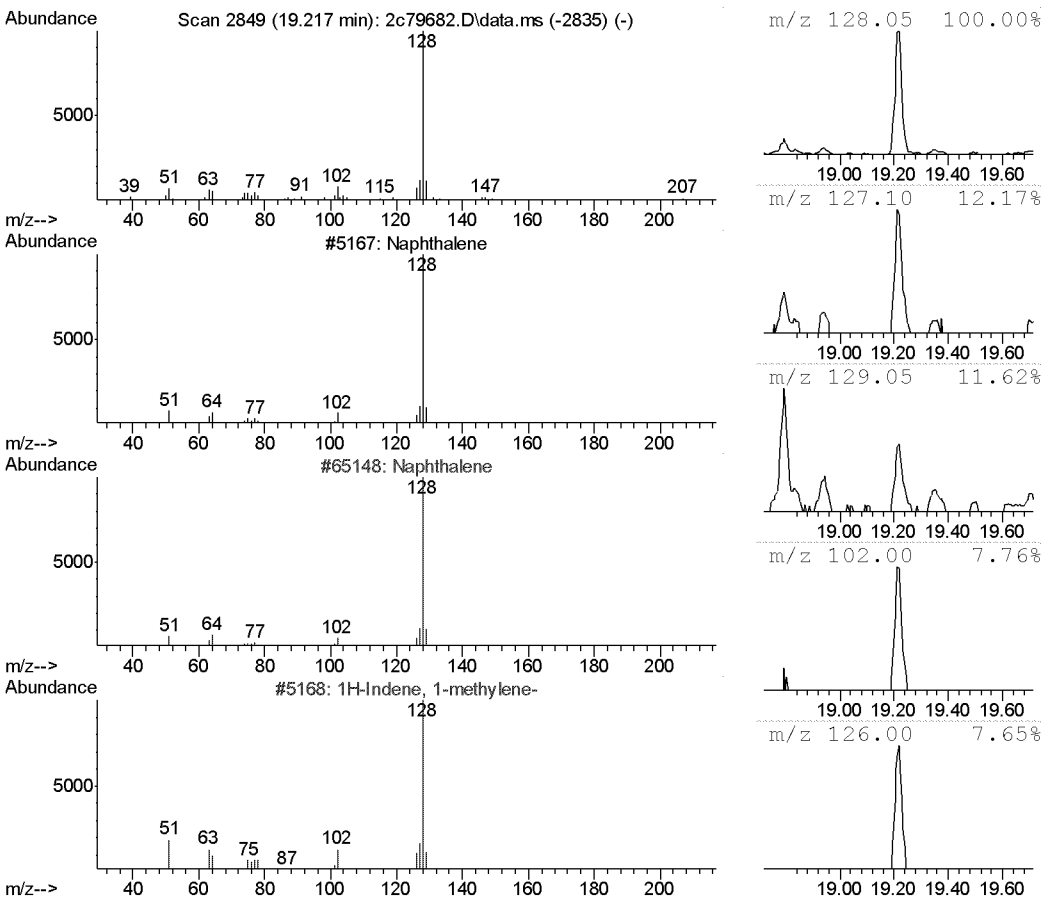
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 3 Naphthalene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.217	5.53 ug/L	93883	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	94
2	Naphthalene	128	C10H8	000091-20-3	93
3	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	93
4	Naphthalene	128	C10H8	000091-20-3	90
5	Naphthalene	128	C10H8	000091-20-3	90



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
C4 alkyl benzene	18.425	5.4	ug/L	90953	5	16.910	848258	50.0
Naphthalene, 1,...	18.682	5.7	ug/L	96440	5	16.910	848258	50.0
Naphthalene	19.217	5.5	ug/L	93883	5	16.910	848258	50.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 14:30:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

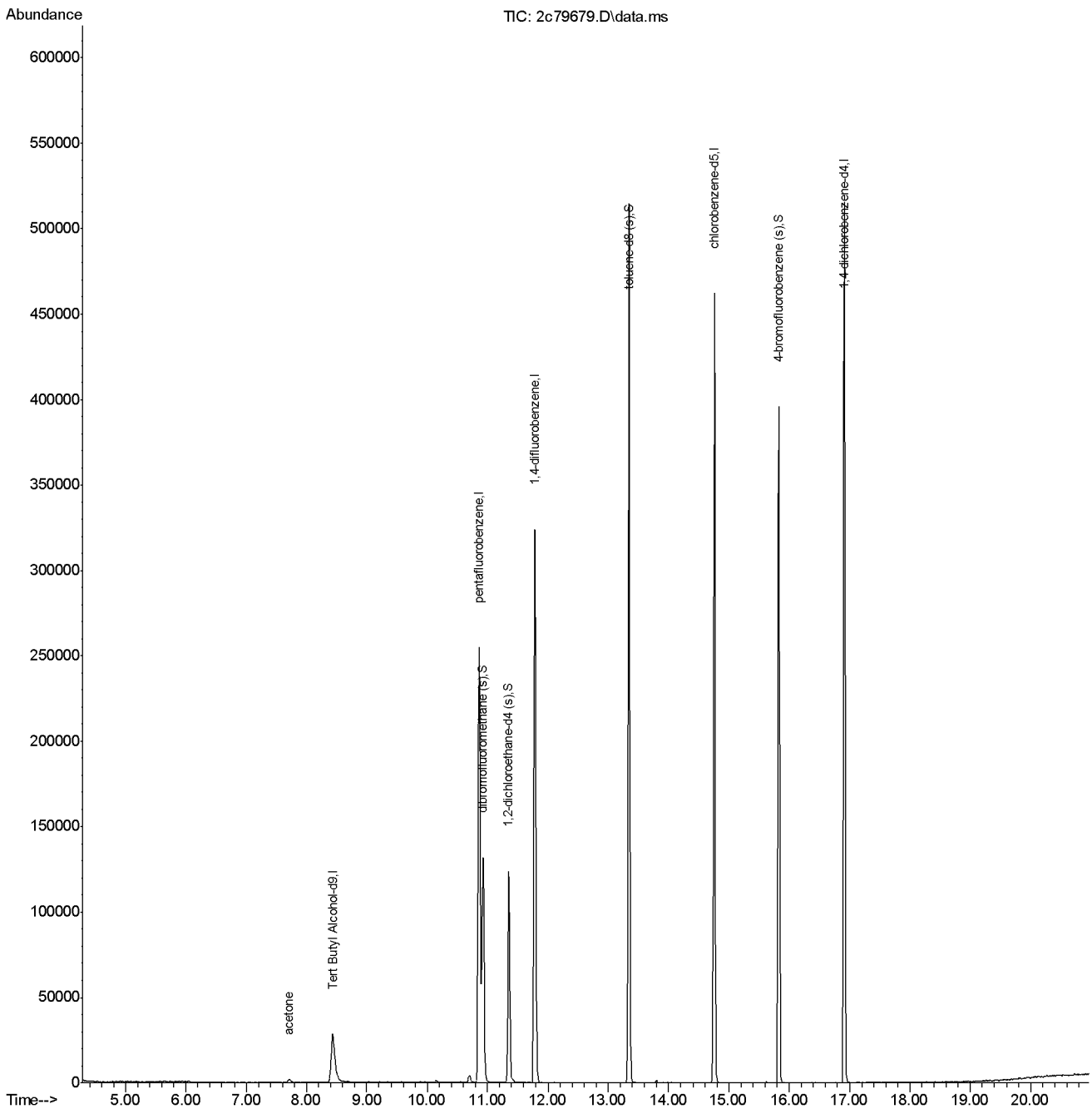
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	77918	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	244930	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	319287	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	272317	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148467	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	98366	52.19	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.38%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	100158	51.57	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 103.14%			
80) toluene-d8 (s)	13.339	98	367771	56.06	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.12%			
105) 4-bromofluorobenzene (s)	15.824	95	131303	53.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.66%			
Target Compounds						Qvalue
25) acetone	7.708	43	3947	9.59	ug/L	98

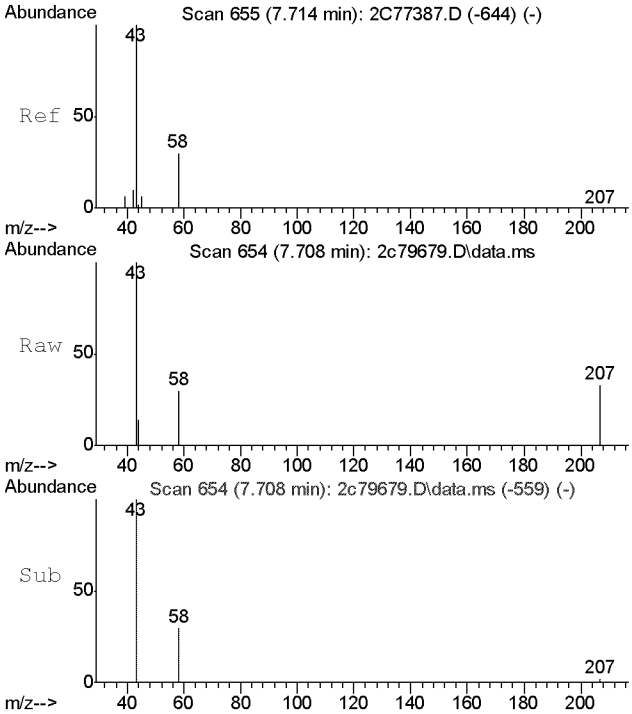
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 14:30:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

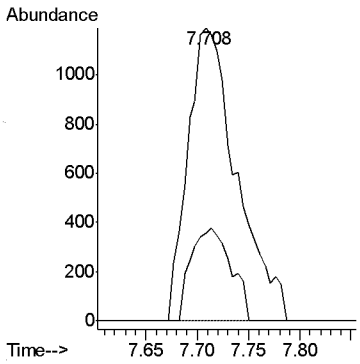




#25
acetone
Concen: 9.59 ug/L
RT: 7.708 min Scan# 654
Delta R.T. 0.000 min
Lab File: 2c79679.D
Acq: 28 Feb 2011 1:09 pm

Tgt Ion: 43 Resp: 3947

Ion	Ratio	Lower	Upper
43	100		
58	30.0	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79679.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.374	16	18	26	rBV2	384	731	0.08%	0.014%
2	4.505	41	43	58	rVB2	445	1433	0.16%	0.027%
3	4.693	76	79	87	rBV2	329	708	0.08%	0.014%
4	4.783	90	96	99	rBV2	557	786	0.09%	0.015%
5	4.845	104	108	112	rVB2	504	654	0.07%	0.013%
6	4.893	112	117	124	rBV2	412	988	0.11%	0.019%
7	4.940	124	126	132	rVV	458	533	0.06%	0.010%
8	5.024	140	142	147	rVB2	460	491	0.05%	0.009%
9	5.181	169	172	181	rVB2	467	827	0.09%	0.016%
10	5.417	216	217	224	rVB2	343	572	0.06%	0.011%
11	5.564	242	245	250	rBV2	481	681	0.07%	0.013%
12	5.810	291	292	297	rBV2	481	466	0.05%	0.009%
13	5.857	297	301	303	rBV2	453	516	0.06%	0.010%
14	5.915	311	312	321	rVV3	338	637	0.07%	0.012%
15	6.030	333	334	351	rVB2	600	1315	0.14%	0.025%
16	6.518	422	427	436	rBV	256	446	0.05%	0.009%
17	6.633	447	449	455	rVB2	386	482	0.05%	0.009%
18	6.722	462	466	475	rBV	285	700	0.08%	0.013%
19	6.922	498	504	518	rVB2	277	1307	0.14%	0.025%
20	7.210	557	559	564	rVV	312	475	0.05%	0.009%
21	7.477	607	610	615	rVB2	359	558	0.06%	0.011%
22	7.624	633	638	641	rBV2	446	619	0.07%	0.012%
23	7.713	645	655	670	rVB3	1980	6770	0.74%	0.129%
24	7.939	691	698	699	rBV2	318	473	0.05%	0.009%
25	8.018	704	713	715	rVV2	279	608	0.07%	0.012%
26	8.180	739	744	749	rBV	325	602	0.07%	0.012%
27	8.432	777	792	825	rBV2	28103	128718	14.00%	2.461%
28	8.615	825	827	830	rVV	735	810	0.09%	0.015%
29	8.636	830	831	837	rVV	511	808	0.09%	0.015%
30	8.678	837	839	849	rVB3	629	1269	0.14%	0.024%
31	9.082	911	916	920	rBV2	410	613	0.07%	0.012%
32	9.302	954	958	961	rBV	289	467	0.05%	0.009%
33	9.344	961	966	968	rVV	504	477	0.05%	0.009%
34	9.412	978	979	987	rVV2	346	633	0.07%	0.012%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.569	1007	1009	1014	rVB	517	480	0.05%	0.009%
36	9.832	1052	1059	1062	rVB2	268	524	0.06%	0.010%
37	10.041	1097	1099	1108	rVB	349	663	0.07%	0.013%
38	10.146	1113	1119	1131	rVV2	1005	2554	0.28%	0.049%
39	10.314	1149	1151	1159	rBV2	337	586	0.06%	0.011%
40	10.429	1169	1173	1180	rBV2	320	680	0.07%	0.013%
41	10.597	1204	1205	1211	rBV2	348	478	0.05%	0.009%
42	10.697	1215	1224	1234	rVV2	3890	9242	1.01%	0.177%
43	10.859	1243	1255	1261	rBV	254519	600677	65.33%	11.484%
44	10.922	1261	1267	1288	rVB	131670	319220	34.72%	6.103%
45	11.347	1337	1348	1369	rBV	123276	281208	30.59%	5.376%
46	11.504	1375	1378	1386	rBV	210	498	0.05%	0.010%
47	11.672	1406	1410	1415	rBV	376	596	0.06%	0.011%
48	11.782	1421	1431	1449	rBV	324081	671200	73.00%	12.832%
49	11.882	1449	1450	1459	rVB2	455	836	0.09%	0.016%
50	12.107	1488	1493	1500	rBV2	619	1021	0.11%	0.020%
51	12.217	1509	1514	1519	rBB	219	497	0.05%	0.010%
52	12.369	1532	1543	1546	rBV	268	857	0.09%	0.016%
53	12.694	1599	1605	1609	rBV	230	591	0.06%	0.011%
54	12.783	1620	1622	1628	rBV	376	628	0.07%	0.012%
55	13.040	1669	1671	1677	rBV	380	558	0.06%	0.011%
56	13.140	1685	1690	1692	rBV	354	474	0.05%	0.009%
57	13.192	1699	1700	1706	rBV	336	443	0.05%	0.008%
58	13.339	1717	1728	1748	rVV	514464	919419	100.00%	17.578%
59	13.449	1748	1749	1759	rVB	513	738	0.08%	0.014%
60	13.664	1788	1790	1795	rVB	418	448	0.05%	0.009%
61	13.732	1795	1803	1807	rBV	194	641	0.07%	0.012%
62	13.795	1807	1815	1822	rVV2	1573	2754	0.30%	0.053%
63	13.905	1830	1836	1842	rVB2	404	551	0.06%	0.011%
64	14.267	1903	1905	1912	rVB	246	515	0.06%	0.010%
65	14.681	1979	1984	1988	rBV	363	608	0.07%	0.012%
66	14.755	1988	1998	2016	rVB	462420	764985	83.20%	14.625%
67	14.886	2019	2023	2028	rBV	220	546	0.06%	0.010%
68	15.295	2097	2101	2108	rBV	375	714	0.08%	0.014%
69	15.358	2108	2113	2118	rVB	389	670	0.07%	0.013%
70	15.415	2118	2124	2128	rBV	409	715	0.08%	0.014%
71	15.620	2159	2163	2171	rBV	874	1154	0.13%	0.022%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.824	2194	2202	2218	rBV	395938	629909	68.51%	12.043%
73	15.966	2226	2229	2233	rVB	383	460	0.05%	0.009%
74	16.564	2339	2343	2347	rVB	432	600	0.07%	0.011%
75	16.611	2347	2352	2353	rBV	472	552	0.06%	0.011%
76	16.910	2400	2409	2429	rVB	515650	831906	90.48%	15.905%
77	17.146	2451	2454	2460	rVV	378	516	0.06%	0.010%
78	17.198	2460	2464	2470	rVB2	408	521	0.06%	0.010%
79	17.513	2520	2524	2526	rVB2	603	835	0.09%	0.016%
80	17.555	2526	2532	2538	rBV2	745	1874	0.20%	0.036%
81	17.916	2595	2601	2606	rVB2	311	501	0.05%	0.010%
82	18.278	2667	2670	2684	rVB2	406	987	0.11%	0.019%
83	18.362	2684	2686	2692	rBV2	360	497	0.05%	0.010%
84	18.839	2774	2777	2785	rBV	417	494	0.05%	0.009%
85	19.154	2832	2837	2839	rBV2	408	482	0.05%	0.009%
86	19.222	2843	2850	2855	rVB3	714	1183	0.13%	0.023%
87	19.285	2855	2862	2864	rBV3	604	1088	0.12%	0.021%
88	19.332	2868	2871	2878	rVV2	322	524	0.06%	0.010%
89	19.426	2883	2889	2891	rBV2	792	1358	0.15%	0.026%
90	19.447	2891	2893	2898	rVB	532	635	0.07%	0.012%
91	19.505	2900	2904	2909	rBV4	462	1098	0.12%	0.021%
92	19.578	2914	2918	2921	rBV2	434	646	0.07%	0.012%
93	19.683	2937	2938	2941	rVB2	551	450	0.05%	0.009%
94	19.709	2941	2943	2947	rBV3	905	623	0.07%	0.012%
95	19.762	2951	2953	2959	rVB4	803	1057	0.11%	0.020%
96	19.804	2959	2961	2963	rBV2	1115	907	0.10%	0.017%
97	19.851	2969	2970	2973	rBV3	636	520	0.06%	0.010%
98	19.935	2979	2986	2989	rBV4	811	1682	0.18%	0.032%
99	19.961	2990	2991	2997	rVB3	663	1050	0.11%	0.020%
100	20.045	3006	3007	3010	rBV2	552	474	0.05%	0.009%

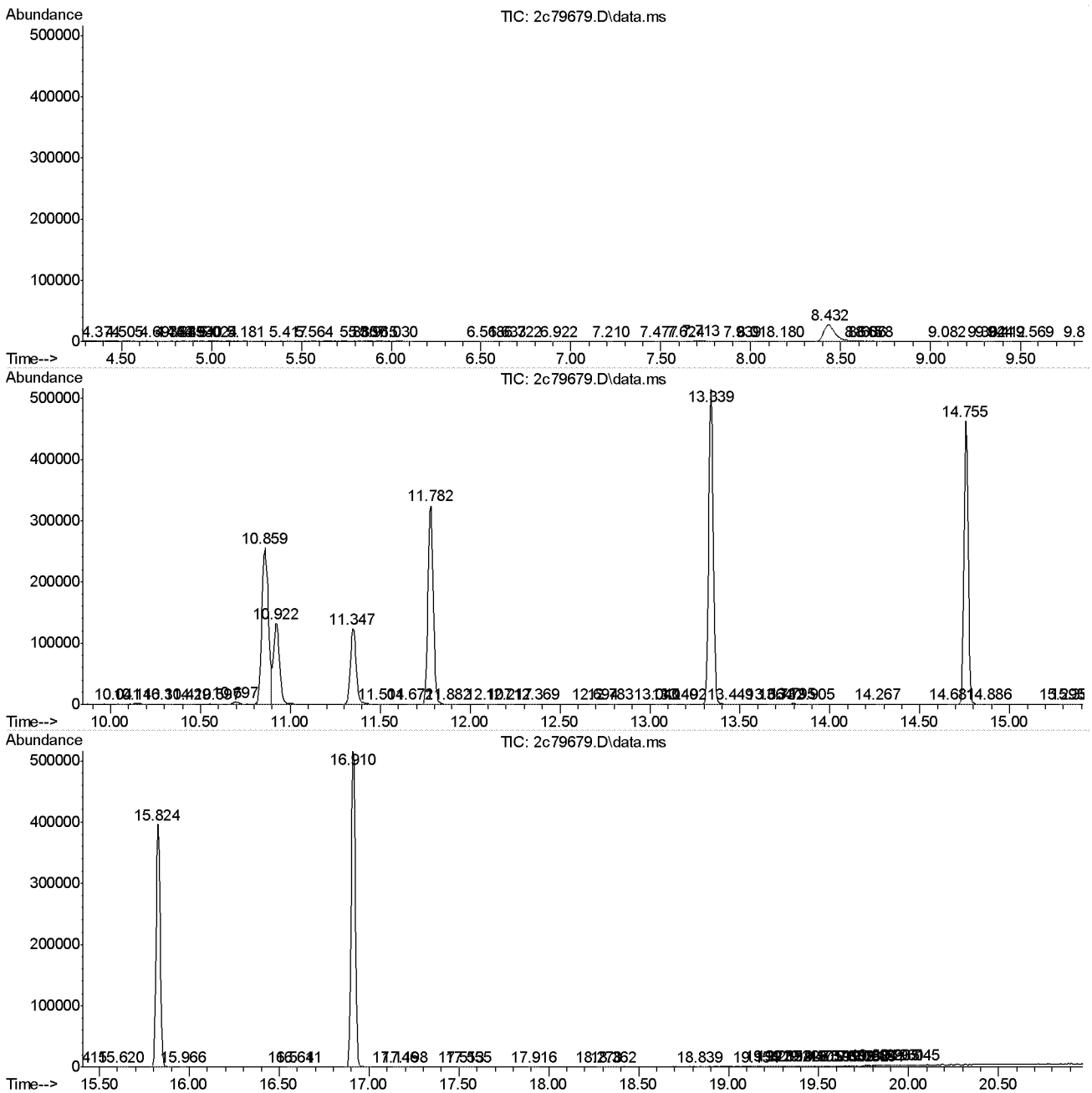
Sum of corrected areas: 5230571

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 07:29:31 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

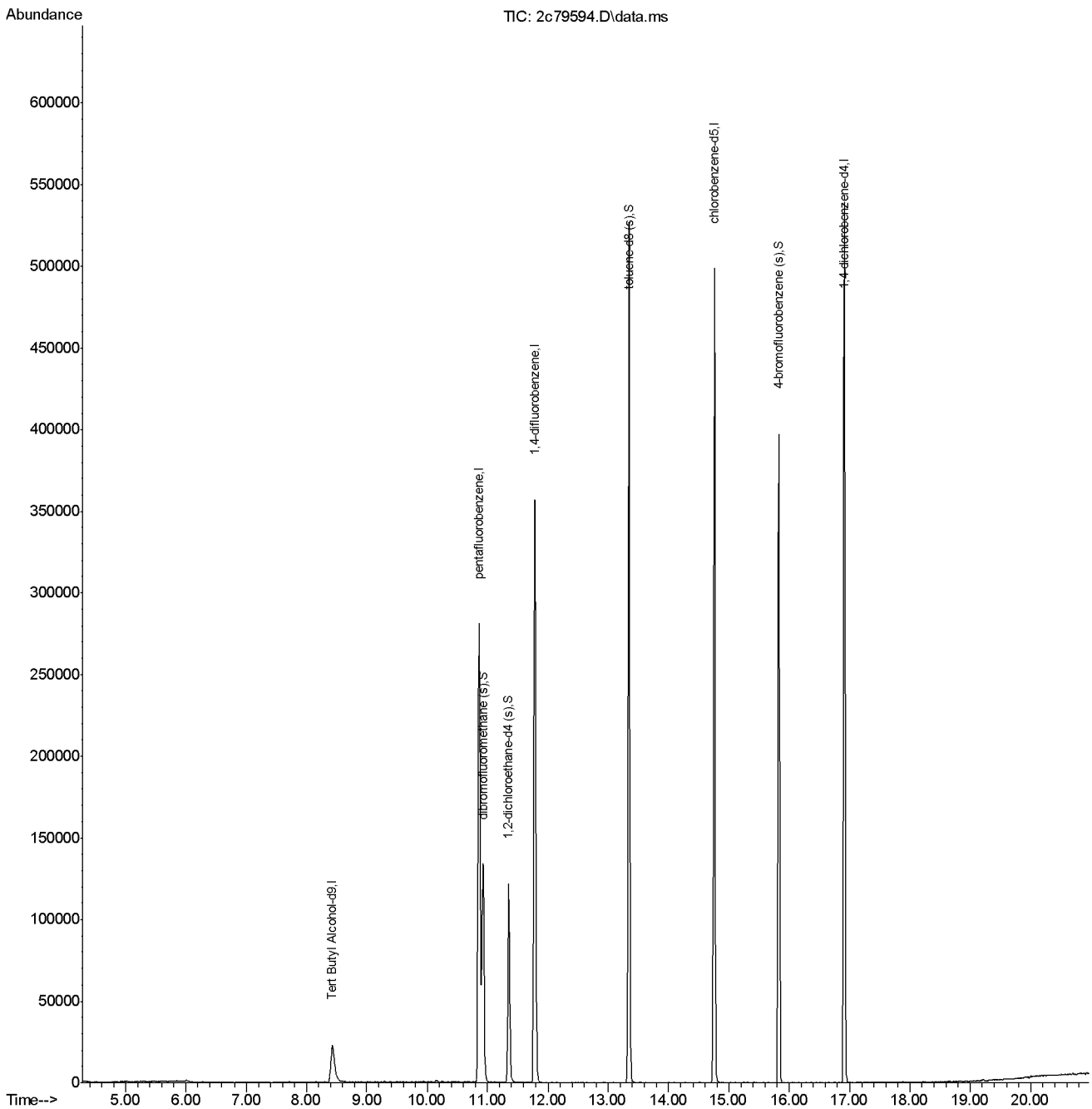
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	62127	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	260684	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	346401	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	289461	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	149290	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	99853	49.78	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.56%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	97248	47.05	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.10%			
80) toluene-d8 (s)	13.339	98	381423	53.59	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 107.18%			
105) 4-bromofluorobenzene (s)	15.824	95	131118	53.46	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.92%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 07:29:31 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



M2C3580.M Mon Feb 28 07:34:03 2011 ACCUNJ Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79594.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.484	37	39	45	rVB3	487	901	0.09%	0.017%
2	4.520	45	46	55	rBV3	514	978	0.10%	0.018%
3	4.767	91	93	96	rBV3	539	429	0.04%	0.008%
4	4.856	108	110	118	rBV2	494	1011	0.10%	0.019%
5	4.914	118	121	124	rVB	523	582	0.06%	0.011%
6	5.097	154	156	157	rBV	558	380	0.04%	0.007%
7	5.307	191	196	203	rBV3	497	1111	0.11%	0.020%
8	5.511	234	235	240	rVB2	395	479	0.05%	0.009%
9	5.800	287	290	297	rBV4	540	998	0.10%	0.018%
10	6.088	342	345	351	rVB2	504	857	0.09%	0.016%
11	6.277	379	381	389	rBV	388	636	0.07%	0.012%
12	6.644	443	451	454	rBV2	243	530	0.05%	0.010%
13	6.806	481	482	486	rBV	335	419	0.04%	0.008%
14	6.843	486	489	493	rVB3	402	583	0.06%	0.011%
15	6.890	493	498	500	rBV	328	493	0.05%	0.009%
16	7.242	562	565	568	rVB	412	508	0.05%	0.009%
17	7.289	572	574	583	rVV2	428	1017	0.11%	0.019%
18	7.378	584	591	596	rVB	444	1063	0.11%	0.019%
19	7.493	610	613	617	rVB2	283	383	0.04%	0.007%
20	7.540	617	622	624	rBV	258	408	0.04%	0.007%
21	7.614	633	636	642	rBV2	338	532	0.05%	0.010%
22	7.713	652	655	658	rVB2	652	813	0.08%	0.015%
23	7.886	684	688	691	rVB2	394	599	0.06%	0.011%
24	8.159	739	740	747	rVB2	343	435	0.04%	0.008%
25	8.426	777	791	844	rBV2	22806	103585	10.70%	1.899%
26	8.762	853	855	862	rVB2	672	957	0.10%	0.018%
27	8.804	862	863	869	rBV2	574	789	0.08%	0.014%
28	8.851	869	872	875	rVB2	695	624	0.06%	0.011%
29	8.904	876	882	890	rVV2	347	746	0.08%	0.014%
30	9.134	924	926	932	rBV	476	703	0.07%	0.013%
31	9.234	941	945	953	rVB2	405	770	0.08%	0.014%
32	9.307	953	959	963	rBV	466	1006	0.10%	0.018%
33	9.800	1047	1053	1055	rBV2	597	995	0.10%	0.018%
34	10.146	1115	1119	1126	rVB2	1056	2168	0.22%	0.040%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	10.335	1151	1155	1159	rBV2	516	971	0.10%	0.018%
36	10.408	1164	1169	1171	rVV2	417	467	0.05%	0.009%
37	10.629	1209	1211	1217	rVB2	524	667	0.07%	0.012%
38	10.691	1222	1223	1233	rVB2	465	597	0.06%	0.011%
39	10.859	1244	1255	1261	rBV	280704	665999	68.82%	12.208%
40	10.917	1261	1266	1289	rVB	133726	321814	33.26%	5.899%
41	11.158	1309	1312	1317	rVB2	392	382	0.04%	0.007%
42	11.195	1317	1319	1323	rBV	331	392	0.04%	0.007%
43	11.347	1337	1348	1372	rVB	121409	271676	28.07%	4.980%
44	11.509	1373	1379	1381	rBV2	362	520	0.05%	0.010%
45	11.640	1400	1404	1406	rBV	397	538	0.06%	0.010%
46	11.656	1406	1407	1412	rVB	381	465	0.05%	0.009%
47	11.782	1419	1431	1460	rVV	356898	754525	77.97%	13.830%
48	11.960	1464	1465	1470	rVB	387	447	0.05%	0.008%
49	12.081	1481	1488	1493	rBV	246	443	0.05%	0.008%
50	12.233	1516	1517	1527	rVB	392	781	0.08%	0.014%
51	12.333	1531	1536	1537	rVB	397	445	0.05%	0.008%
52	12.348	1537	1539	1543	rBB	403	493	0.05%	0.009%
53	12.443	1555	1557	1562	rBV	372	495	0.05%	0.009%
54	12.500	1562	1568	1575	rVV2	272	599	0.06%	0.011%
55	12.637	1593	1594	1599	rVB	362	505	0.05%	0.009%
56	12.710	1607	1608	1615	rVB	405	572	0.06%	0.010%
57	12.768	1615	1619	1621	rBV	379	502	0.05%	0.009%
58	12.825	1628	1630	1635	rBV	407	491	0.05%	0.009%
59	13.030	1667	1669	1672	rVB	407	394	0.04%	0.007%
60	13.061	1672	1675	1678	rBV	437	582	0.06%	0.011%
61	13.129	1687	1688	1694	rBV	378	587	0.06%	0.011%
62	13.339	1717	1728	1752	rVB	527033	967704	100.00%	17.738%
63	13.727	1797	1802	1804	rVB	347	493	0.05%	0.009%
64	13.869	1824	1829	1834	rVB	413	819	0.08%	0.015%
65	13.911	1834	1837	1841	rBV	349	606	0.06%	0.011%
66	14.052	1862	1864	1869	rVB	416	488	0.05%	0.009%
67	14.084	1869	1870	1877	rBV	444	792	0.08%	0.015%
68	14.236	1898	1899	1904	rVB	363	461	0.05%	0.008%
69	14.278	1904	1907	1911	rBV	423	646	0.07%	0.012%
70	14.755	1988	1998	2018	rBV	498678	831162	85.89%	15.235%
71	14.917	2023	2029	2032	rVB	275	450	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.237	2088	2090	2097	rVB	233	396	0.04%	0.007%
73	15.326	2101	2107	2108	rBV2	263	420	0.04%	0.008%
74	15.672	2171	2173	2178	rVB	379	606	0.06%	0.011%
75	15.824	2194	2202	2217	rVB	397351	623440	64.42%	11.428%
76	16.281	2287	2289	2295	rBV2	271	400	0.04%	0.007%
77	16.459	2319	2323	2329	rVB	393	650	0.07%	0.012%
78	16.553	2336	2341	2344	rBB2	370	385	0.04%	0.007%
79	16.642	2355	2358	2365	rBV	315	522	0.05%	0.010%
80	16.731	2371	2375	2378	rBV2	354	442	0.05%	0.008%
81	16.805	2387	2389	2396	rVB2	395	563	0.06%	0.010%
82	16.910	2396	2409	2424	rBV	539452	857267	88.59%	15.714%
83	17.036	2432	2433	2438	rVB	386	469	0.05%	0.009%
84	17.104	2444	2446	2451	rBV2	379	445	0.05%	0.008%
85	17.245	2468	2473	2476	rBV2	426	708	0.07%	0.013%
86	17.303	2481	2484	2489	rVB2	343	619	0.06%	0.011%
87	17.507	2520	2523	2527	rVB3	338	447	0.05%	0.008%
88	17.722	2560	2564	2568	rBV3	300	433	0.04%	0.008%
89	17.885	2593	2595	2600	rVB3	430	432	0.04%	0.008%
90	17.937	2600	2605	2607	rBV2	267	403	0.04%	0.007%
91	18.053	2624	2627	2644	rBV2	396	1302	0.13%	0.024%
92	18.902	2788	2789	2797	rBV2	547	727	0.08%	0.013%
93	18.975	2802	2803	2811	rBV2	602	1193	0.12%	0.022%
94	19.117	2828	2830	2841	rBV4	400	821	0.08%	0.015%
95	19.185	2841	2843	2845	rBV3	477	445	0.05%	0.008%
96	19.631	2909	2928	2931	rBV7	1106	3593	0.37%	0.066%

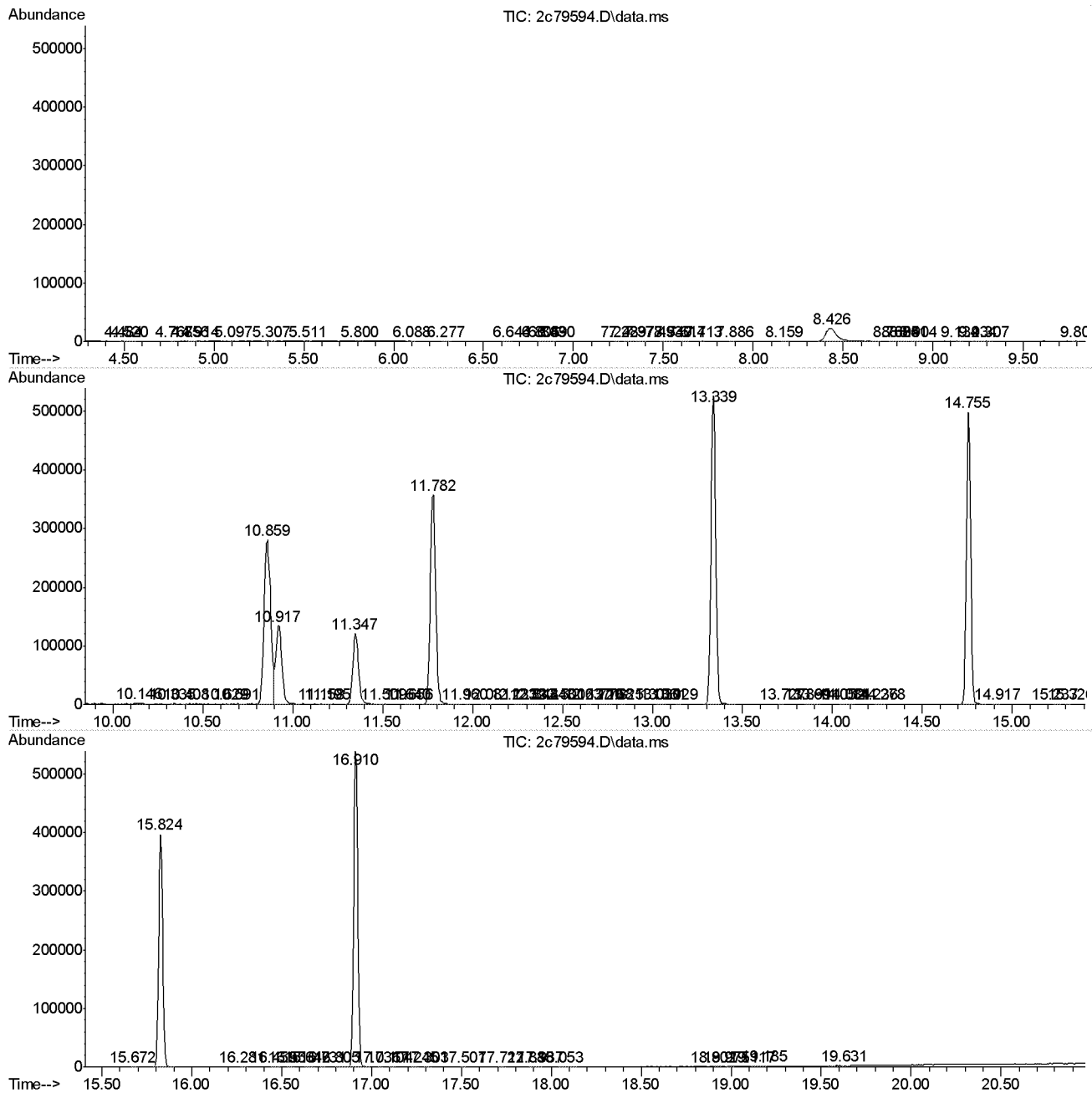
Sum of corrected areas: 5455586

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 01 14:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

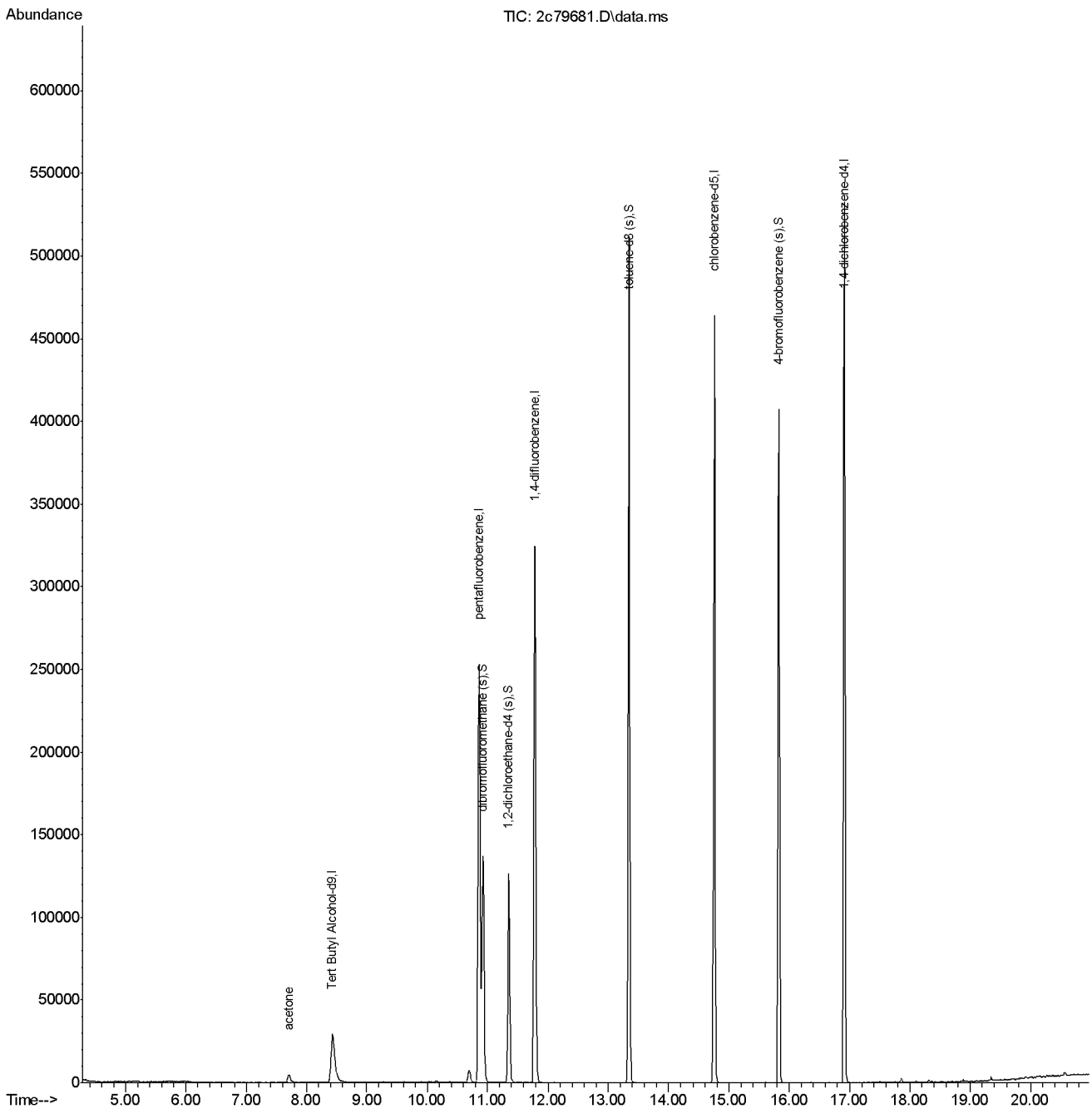
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.427	65	80033	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	244107	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	321964	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	273537	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	150266	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99905	53.19	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.38%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	102397	52.90	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 105.80%			
80) toluene-d8 (s)	13.339	98	370025	55.93	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 111.86%			
105) 4-bromofluorobenzene (s)	15.824	95	133830	54.21	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 108.42%			
Target Compounds						Qvalue
25) acetone	7.703	43	10240	24.97	ug/L	91

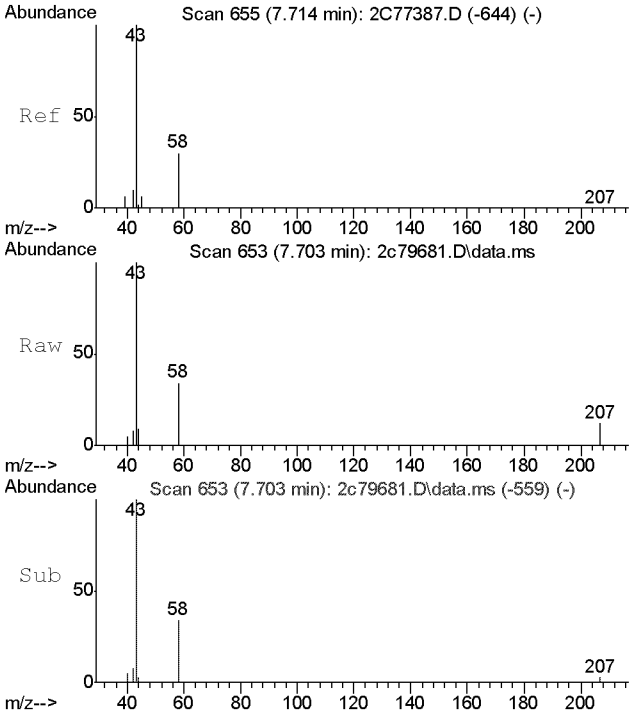
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 01 14:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

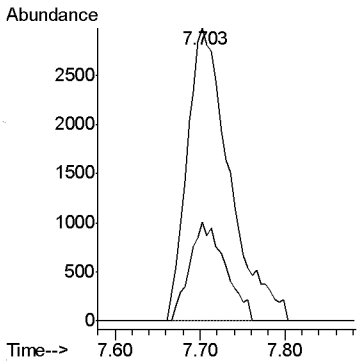




#25
acetone
Concen: 24.97 ug/L
RT: 7.703 min Scan# 653
Delta R.T. -0.005 min
Lab File: 2c79681.D
Acq: 28 Feb 2011 2:11 pm

Tgt Ion: 43 Resp: 10240

Ion	Ratio	Lower	Upper
43	100		
58	33.8	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79681.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.306	3	5	8	rBV2	645	550	0.06%	0.010%
2	4.342	8	12	30	rVB2	1350	3941	0.42%	0.074%
3	4.447	30	32	46	rVB2	453	862	0.09%	0.016%
4	4.699	76	80	91	rVB3	586	1329	0.14%	0.025%
5	4.861	110	111	119	rBV2	500	882	0.09%	0.017%
6	4.914	119	121	130	rVV2	421	812	0.09%	0.015%
7	5.134	160	163	170	rVB2	394	684	0.07%	0.013%
8	5.291	190	193	199	rVB2	410	476	0.05%	0.009%
9	5.359	203	206	209	rVB3	546	541	0.06%	0.010%
10	5.391	209	212	214	rBV	446	483	0.05%	0.009%
11	5.412	214	216	223	rVV2	441	508	0.05%	0.010%
12	5.585	247	249	254	rBV	476	491	0.05%	0.009%
13	5.732	274	277	281	rVB2	642	719	0.08%	0.013%
14	5.821	288	294	296	rVV2	398	547	0.06%	0.010%
15	5.968	319	322	330	rVB3	581	1256	0.13%	0.024%
16	6.025	330	333	337	rBV2	666	795	0.09%	0.015%
17	6.429	408	410	418	rVB2	402	861	0.09%	0.016%
18	6.497	418	423	427	rBV2	277	691	0.07%	0.013%
19	6.880	493	496	505	rVB2	406	788	0.08%	0.015%
20	7.011	517	521	525	rVB2	262	470	0.05%	0.009%
21	7.074	530	533	540	rVB2	272	528	0.06%	0.010%
22	7.703	643	653	673	rBV	4689	15874	1.71%	0.298%
23	8.023	712	714	720	rBV	475	568	0.06%	0.011%
24	8.427	776	791	831	rBV	29093	134264	14.42%	2.518%
25	8.689	839	841	844	rBV	431	490	0.05%	0.009%
26	8.851	870	872	878	rVB3	396	544	0.06%	0.010%
27	9.108	913	921	923	rBV2	272	538	0.06%	0.010%
28	9.129	923	925	932	rVV	330	477	0.05%	0.009%
29	9.349	964	967	973	rBV2	338	715	0.08%	0.013%
30	9.480	988	992	994	rBV	379	477	0.05%	0.009%
31	9.507	994	997	1004	rVV2	362	569	0.06%	0.011%
32	9.564	1004	1008	1011	rVV2	378	495	0.05%	0.009%
33	9.617	1014	1018	1022	rVV2	472	711	0.08%	0.013%
34	9.669	1026	1028	1037	rVV	337	790	0.08%	0.015%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.732	1039	1040	1045	rVV2	275	462	0.05%	0.009%
36	9.795	1050	1052	1057	rVV2	335	546	0.06%	0.010%
37	9.895	1069	1071	1076	rVV	450	483	0.05%	0.009%
38	10.041	1090	1099	1101	rVV3	546	1303	0.14%	0.024%
39	10.068	1102	1104	1109	rVV	421	535	0.06%	0.010%
40	10.157	1111	1121	1136	rBV3	949	3353	0.36%	0.063%
41	10.692	1214	1223	1237	rVB	7368	18758	2.01%	0.352%
42	10.859	1242	1255	1261	rVV	252623	603683	64.85%	11.322%
43	10.917	1261	1266	1291	rVB	136811	323551	34.76%	6.068%
44	11.080	1291	1297	1299	rVB	404	684	0.07%	0.013%
45	11.121	1299	1305	1307	rBV2	416	717	0.08%	0.013%
46	11.347	1337	1348	1370	rVB	126358	283555	30.46%	5.318%
47	11.588	1392	1394	1407	rBV2	322	986	0.11%	0.018%
48	11.782	1421	1431	1446	rBV	324211	677555	72.78%	12.707%
49	12.102	1483	1492	1497	rBV2	634	1297	0.14%	0.024%
50	12.191	1506	1509	1513	rBB	349	460	0.05%	0.009%
51	12.369	1542	1543	1552	rVB	237	580	0.06%	0.011%
52	12.658	1594	1598	1603	rBB	233	464	0.05%	0.009%
53	12.904	1641	1645	1650	rBV	242	467	0.05%	0.009%
54	13.051	1669	1673	1679	rVB	226	511	0.05%	0.010%
55	13.339	1716	1728	1743	rBV	511635	930925	100.00%	17.459%
56	13.539	1762	1766	1772	rBV	388	636	0.07%	0.012%
57	13.864	1821	1828	1835	rBB	328	783	0.08%	0.015%
58	13.963	1845	1847	1853	rBV	260	511	0.05%	0.010%
59	14.446	1936	1939	1944	rBV	352	518	0.06%	0.010%
60	14.755	1987	1998	2017	rBV	463960	770418	82.76%	14.449%
61	15.342	2109	2110	2117	rVB	404	544	0.06%	0.010%
62	15.667	2168	2172	2175	rBB	370	548	0.06%	0.010%
63	15.699	2175	2178	2182	rBV	259	466	0.05%	0.009%
64	15.824	2192	2202	2219	rBV	407057	639616	68.71%	11.996%
65	15.935	2221	2223	2229	rVB	318	504	0.05%	0.009%
66	16.003	2229	2236	2241	rBV	354	739	0.08%	0.014%
67	16.359	2299	2304	2305	rVB	387	454	0.05%	0.009%
68	16.910	2397	2409	2425	rBV	532735	840653	90.30%	15.766%
69	17.235	2465	2471	2473	rBV2	419	455	0.05%	0.009%
70	17.308	2481	2485	2493	rVB2	412	974	0.10%	0.018%
71	17.361	2493	2495	2503	rBV2	330	849	0.09%	0.016%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	17.502	2515	2522	2530	rBV3	646	1197	0.13%	0.022%
73	17.597	2539	2540	2551	rVB	257	533	0.06%	0.010%
74	17.754	2566	2570	2573	rVV3	496	606	0.07%	0.011%
75	17.859	2582	2590	2596	rBV	2398	3748	0.40%	0.070%
76	18.095	2629	2635	2645	rVB	892	1523	0.16%	0.029%
77	18.215	2654	2658	2665	rBV2	292	540	0.06%	0.010%
78	18.315	2671	2677	2682	rBV3	1343	2343	0.25%	0.044%
79	18.362	2682	2686	2691	rVV2	590	805	0.09%	0.015%
80	18.415	2692	2696	2701	rVB2	458	573	0.06%	0.011%
81	18.525	2715	2717	2736	rVB2	358	701	0.08%	0.013%
82	18.687	2746	2748	2758	rVB2	460	735	0.08%	0.014%
83	18.755	2758	2761	2766	rBV2	396	518	0.06%	0.010%
84	18.834	2772	2776	2781	rBV2	673	940	0.10%	0.018%
85	18.886	2782	2786	2792	rVV	1164	1684	0.18%	0.032%
86	18.934	2792	2795	2800	rVV3	548	703	0.08%	0.013%
87	19.101	2820	2827	2832	rBV2	1135	2231	0.24%	0.042%
88	19.190	2841	2844	2847	rVB2	554	485	0.05%	0.009%
89	19.274	2858	2860	2863	rBV2	468	467	0.05%	0.009%
90	19.343	2869	2873	2879	rBV2	2099	2537	0.27%	0.048%
91	19.537	2905	2910	2913	rBV3	482	703	0.08%	0.013%
92	19.594	2913	2921	2925	rBV4	665	1379	0.15%	0.026%
93	19.631	2925	2928	2934	rVB4	769	1008	0.11%	0.019%
94	19.689	2934	2939	2944	rBV4	928	2034	0.22%	0.038%
95	19.725	2944	2946	2948	rBV2	582	498	0.05%	0.009%
96	19.825	2962	2965	2969	rVV3	921	920	0.10%	0.017%
97	19.856	2969	2971	2979	rVB3	845	1073	0.12%	0.020%
98	19.914	2979	2982	2998	rBV4	1271	4197	0.45%	0.079%
99	20.260	3044	3048	3056	rBV5	1271	3146	0.34%	0.059%
100	20.575	3101	3108	3147	rBV9	2053	9943	1.07%	0.186%

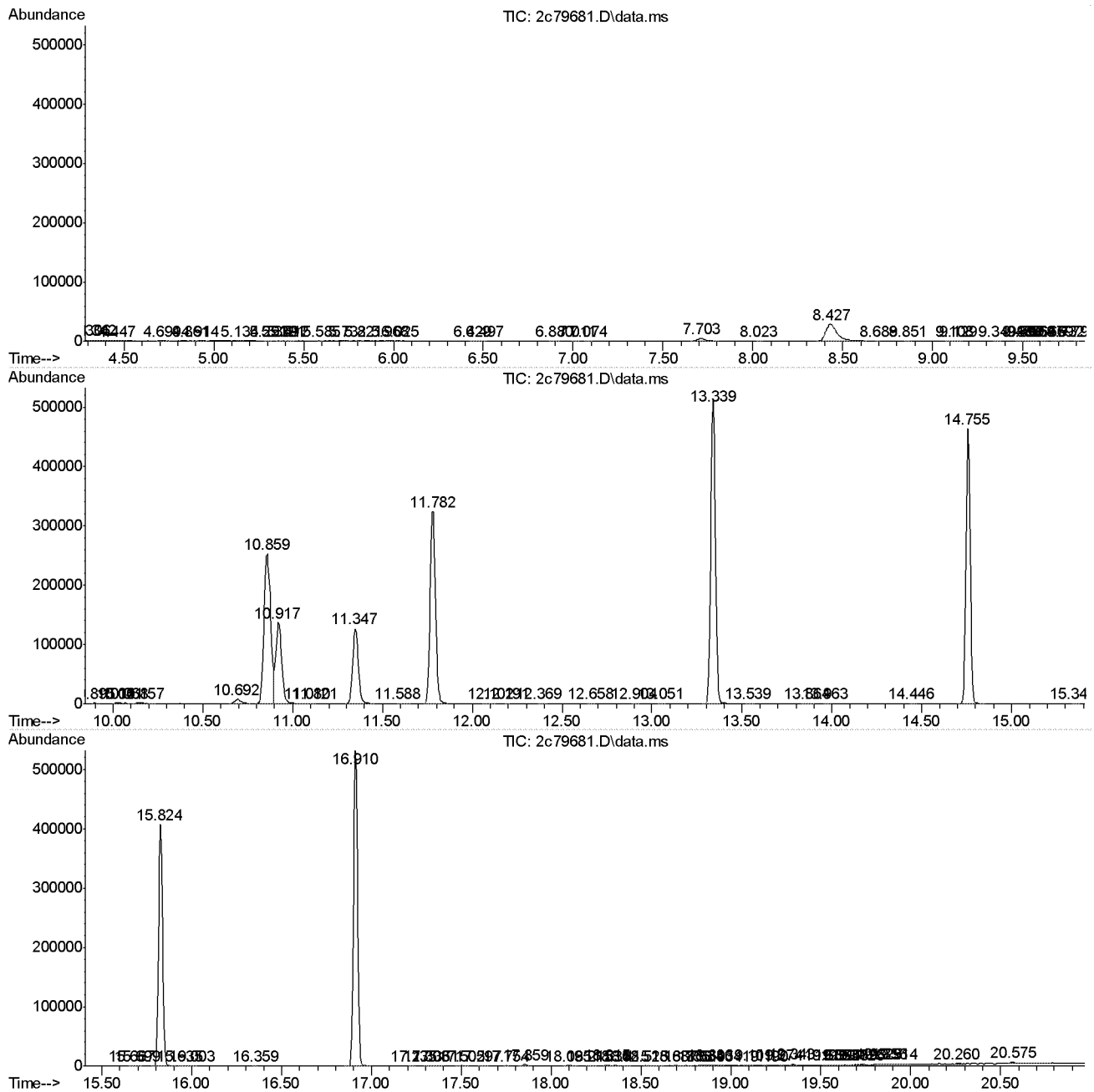
Sum of corrected areas: 5332039

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 14:31:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

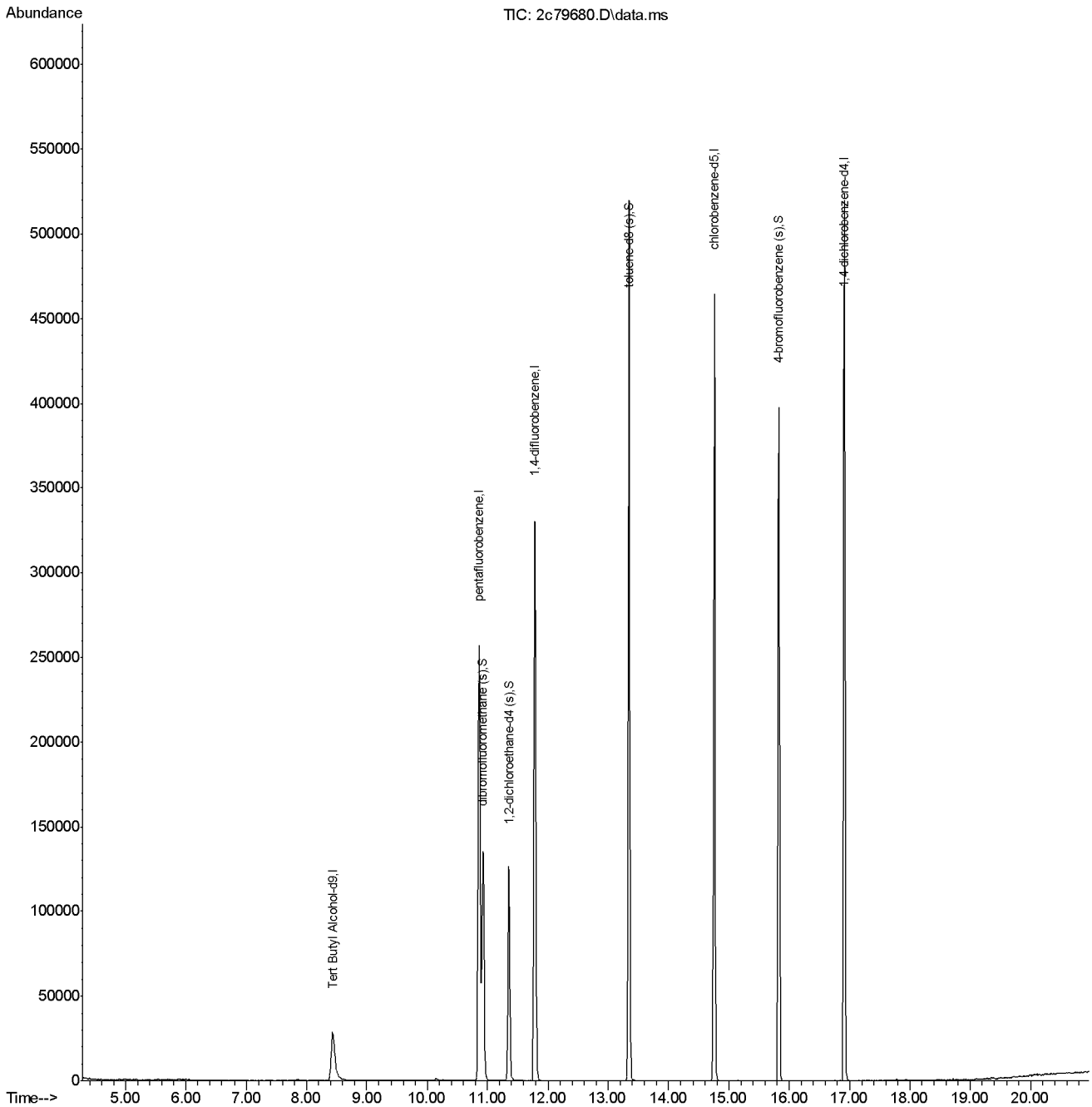
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	79582	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	245737	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	321704	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	273091	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148527	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99408	52.57	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.14%			
51) 1,2-dichloroethane-d4 (s)	11.352	65	102487	52.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 105.20%			
80) toluene-d8 (s)	13.339	98	371014	56.13	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.26%			
105) 4-bromofluorobenzene (s)	15.824	95	132180	54.17	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 108.34%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 14:31:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79680.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.536	47	49	54	rVV2	473	483	0.05%	0.009%
2	4.578	56	57	65	rVV	485	759	0.08%	0.014%
3	4.856	106	110	113	rBV2	380	588	0.06%	0.011%
4	4.893	113	117	127	rVB2	512	1056	0.11%	0.020%
5	4.971	127	132	134	rBV2	422	645	0.07%	0.012%
6	4.992	134	136	142	rBV2	295	420	0.05%	0.008%
7	5.186	172	173	179	rVB2	568	417	0.04%	0.008%
8	5.260	182	187	189	rBV2	294	415	0.04%	0.008%
9	5.359	204	206	208	rBV2	490	425	0.05%	0.008%
10	5.527	235	238	247	rBV2	397	703	0.08%	0.013%
11	5.815	291	293	297	rVB3	445	450	0.05%	0.009%
12	5.905	297	310	314	rBV3	433	1578	0.17%	0.030%
13	6.041	333	336	344	rVB2	573	836	0.09%	0.016%
14	6.099	344	347	359	rVB	316	480	0.05%	0.009%
15	6.833	486	487	493	rVV2	336	446	0.05%	0.008%
16	6.974	513	514	521	rVV2	323	567	0.06%	0.011%
17	7.027	521	524	530	rVV2	286	541	0.06%	0.010%
18	7.069	530	532	537	rVV	354	497	0.05%	0.009%
19	7.100	537	538	543	rVB2	342	454	0.05%	0.009%
20	7.142	543	546	551	rBV	303	486	0.05%	0.009%
21	7.346	578	585	588	rBV	372	465	0.05%	0.009%
22	7.530	619	620	627	rVB2	313	555	0.06%	0.011%
23	7.577	627	629	634	rBV2	302	473	0.05%	0.009%
24	7.656	641	644	649	rVB	339	592	0.06%	0.011%
25	7.692	649	651	656	rBV2	277	421	0.05%	0.008%
26	7.734	656	659	664	rVV	342	495	0.05%	0.009%
27	7.845	676	680	688	rVV4	953	1812	0.19%	0.034%
28	8.059	719	721	733	rBV2	400	1010	0.11%	0.019%
29	8.133	733	735	739	rVB2	416	445	0.05%	0.008%
30	8.264	758	760	767	rVB2	438	738	0.08%	0.014%
31	8.426	777	791	831	rVV2	28532	133245	14.30%	2.535%
32	8.877	871	877	880	rBV	304	686	0.07%	0.013%
33	9.129	921	925	930	rVB	308	541	0.06%	0.010%
34	9.339	962	965	970	rVB2	301	461	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.444	978	985	988	rVB	303	449	0.05%	0.009%
36	9.517	998	999	1007	rVV2	292	565	0.06%	0.011%
37	9.695	1026	1033	1036	rVB2	325	622	0.07%	0.012%
38	9.732	1036	1040	1044	rBV	312	546	0.06%	0.010%
39	10.146	1113	1119	1130	rVB3	948	2590	0.28%	0.049%
40	10.262	1138	1141	1144	rBV	438	543	0.06%	0.010%
41	10.366	1160	1161	1169	rVB2	306	556	0.06%	0.011%
42	10.424	1169	1172	1183	rBV2	428	922	0.10%	0.018%
43	10.560	1194	1198	1207	rBV2	342	1019	0.11%	0.019%
44	10.859	1244	1255	1261	rVV	256523	606891	65.13%	11.546%
45	10.917	1261	1266	1287	rVV	135462	323491	34.72%	6.154%
46	11.053	1287	1292	1294	rVB	317	469	0.05%	0.009%
47	11.263	1330	1332	1338	rBV2	429	628	0.07%	0.012%
48	11.347	1338	1348	1369	rVB	126691	283255	30.40%	5.389%
49	11.562	1388	1389	1397	rVB2	261	473	0.05%	0.009%
50	11.782	1421	1431	1446	rBV	330472	680264	73.01%	12.942%
51	11.866	1446	1447	1454	rVB	691	936	0.10%	0.018%
52	12.044	1472	1481	1482	rBB	201	483	0.05%	0.009%
53	12.264	1521	1523	1530	rBB	210	465	0.05%	0.009%
54	12.768	1614	1619	1623	rBB	339	494	0.05%	0.009%
55	12.993	1657	1662	1664	rBV	320	439	0.05%	0.008%
56	13.182	1695	1698	1704	rBB	231	465	0.05%	0.009%
57	13.240	1704	1709	1713	rBV	223	535	0.06%	0.010%
58	13.339	1718	1728	1759	rVB	520079	931774	100.00%	17.727%
59	13.743	1801	1805	1810	rBB	242	475	0.05%	0.009%
60	13.827	1819	1821	1827	rBB	215	423	0.05%	0.008%
61	14.052	1862	1864	1874	rVB	421	879	0.09%	0.017%
62	14.126	1874	1878	1882	rBB	399	452	0.05%	0.009%
63	14.251	1901	1902	1908	rBV	217	416	0.04%	0.008%
64	14.351	1915	1921	1924	rBV	364	635	0.07%	0.012%
65	14.613	1970	1971	1978	rVB	227	434	0.05%	0.008%
66	14.655	1978	1979	1986	rBB	363	448	0.05%	0.009%
67	14.755	1986	1998	2020	rBV	464676	767483	82.37%	14.602%
68	15.027	2044	2050	2055	rBV	405	721	0.08%	0.014%
69	15.358	2108	2113	2119	rBV	362	743	0.08%	0.014%
70	15.824	2193	2202	2216	rBV	397420	632130	67.84%	12.026%
71	16.731	2371	2375	2377	rVB	393	424	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	16.910	2399	2409	2425	rVV	519989	830295	89.11%	15.797%
73	17.193	2461	2463	2470	rBV2	295	505	0.05%	0.010%
74	17.324	2483	2488	2494	rVB2	328	772	0.08%	0.015%
75	17.403	2500	2503	2508	rBV2	397	555	0.06%	0.011%
76	17.476	2516	2517	2522	rBV2	392	493	0.05%	0.009%
77	17.513	2522	2524	2531	rVB2	332	648	0.07%	0.012%
78	17.555	2531	2532	2540	rBV2	400	701	0.08%	0.013%
79	17.780	2568	2575	2586	rVV3	504	1068	0.11%	0.020%
80	17.943	2600	2606	2615	rVB2	892	1458	0.16%	0.028%
81	18.719	2748	2754	2758	rVV2	937	1063	0.11%	0.020%
82	19.075	2818	2822	2825	rBV	460	514	0.06%	0.010%
83	19.101	2825	2827	2830	rVV	674	543	0.06%	0.010%
84	19.138	2830	2834	2836	rVB2	470	521	0.06%	0.010%
85	19.222	2844	2850	2854	rBV	702	785	0.08%	0.015%
86	19.295	2862	2864	2868	rVB3	689	607	0.07%	0.012%
87	19.348	2868	2874	2891	rBV5	964	4447	0.48%	0.085%
88	19.463	2892	2896	2897	rBV2	575	605	0.06%	0.012%
89	19.505	2901	2904	2913	rVV3	777	1279	0.14%	0.024%
90	19.578	2913	2918	2919	rVB3	607	736	0.08%	0.014%
91	19.699	2934	2941	2944	rBV3	642	1192	0.13%	0.023%
92	19.720	2944	2945	2952	rVB3	857	1044	0.11%	0.020%
93	19.778	2953	2956	2958	rVV2	490	551	0.06%	0.010%
94	19.820	2961	2964	2969	rVB5	608	917	0.10%	0.017%
95	19.877	2974	2975	2983	rVV5	768	581	0.06%	0.011%
96	19.945	2983	2988	2993	rBV5	611	1273	0.14%	0.024%
97	19.982	2993	2995	3002	rBV4	938	1309	0.14%	0.025%
98	20.024	3002	3003	3005	rBV2	592	451	0.05%	0.009%
99	20.134	3022	3024	3031	rBV5	696	1034	0.11%	0.020%
100	20.344	3059	3064	3068	rBV4	1106	1516	0.16%	0.029%

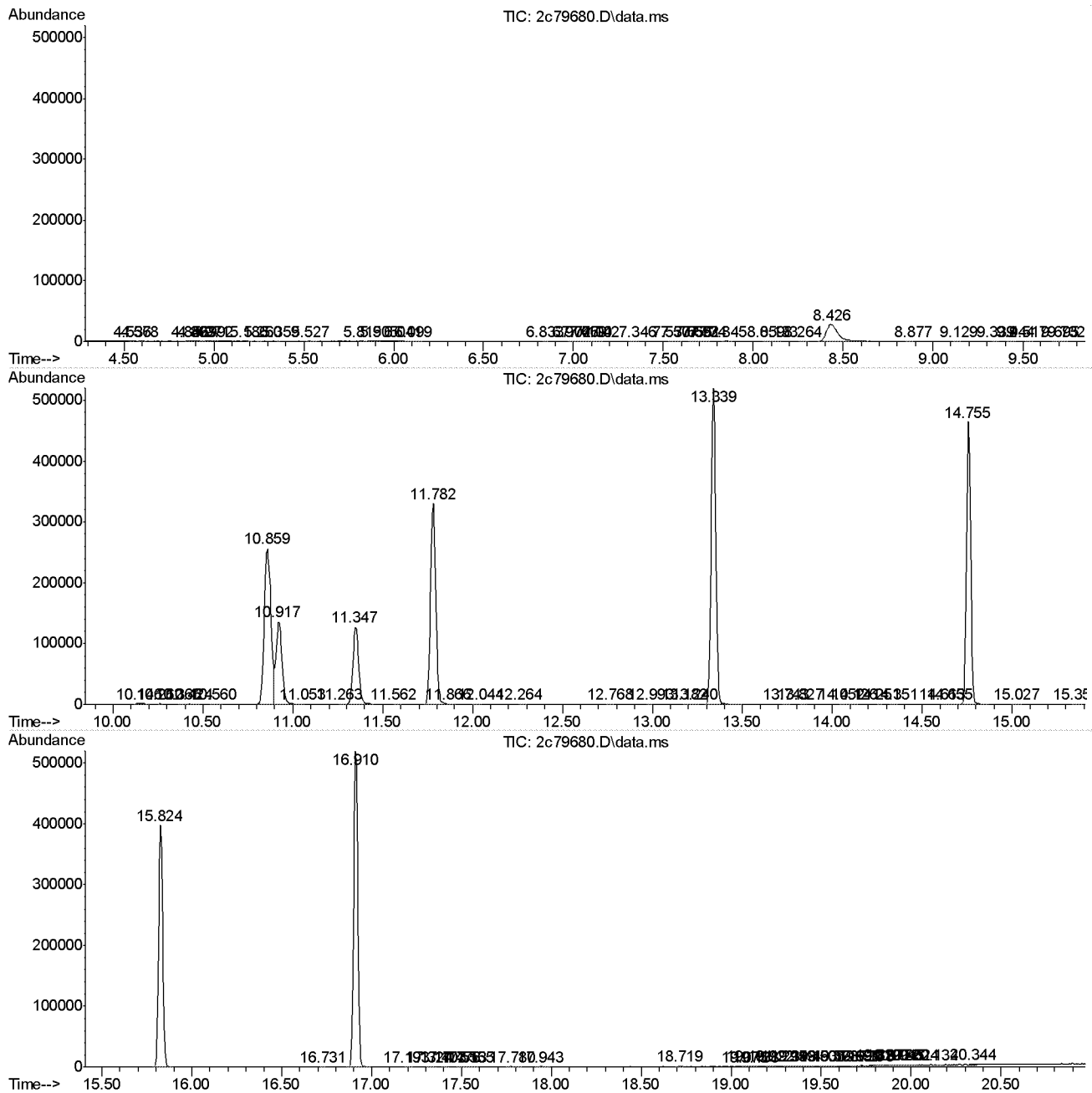
Sum of corrected areas: 5256185

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 07:30:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

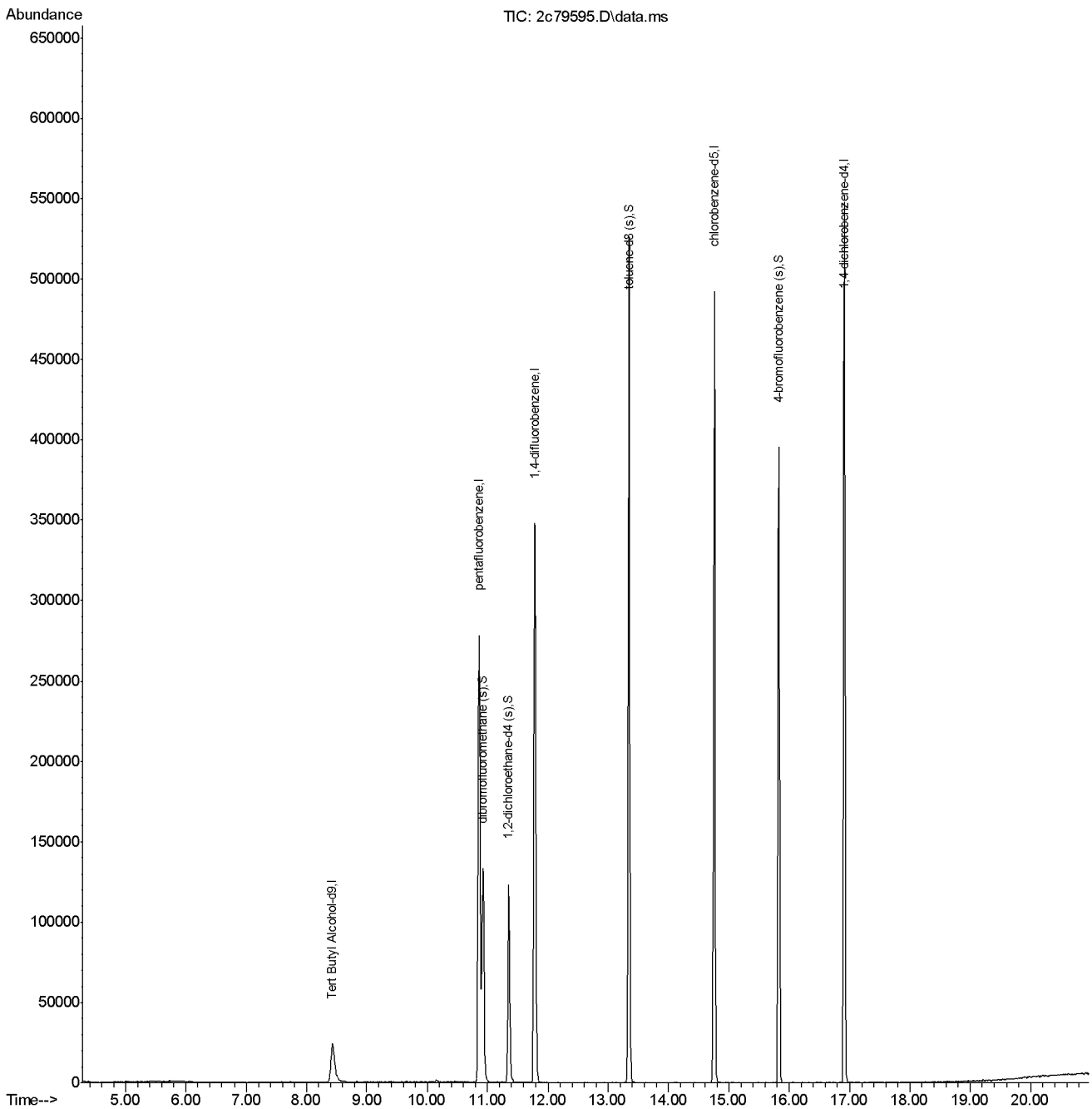
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.421	65	66718	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	256258	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	342933	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	285353	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	150641	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99243	50.33	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.66%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	97555	48.01	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.02%			
80) toluene-d8 (s)	13.339	98	377222	53.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 107.06%			
105) 4-bromofluorobenzene (s)	15.825	95	132432	53.51	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.02%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 07:30:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79595.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.594	56	60	62	rBV2	458	577	0.06%	0.011%
2	4.610	62	63	70	rVV	353	547	0.06%	0.010%
3	4.762	87	92	97	rBV3	264	465	0.05%	0.009%
4	4.819	97	103	105	rBV2	489	761	0.08%	0.014%
5	4.840	105	107	113	rVB3	403	572	0.06%	0.011%
6	4.945	118	127	134	rBV4	515	1548	0.16%	0.029%
7	5.092	153	155	159	rVB2	474	482	0.05%	0.009%
8	5.124	159	161	165	rVB2	607	691	0.07%	0.013%
9	5.160	165	168	171	rBV2	615	831	0.09%	0.015%
10	5.186	171	173	182	rBV2	478	660	0.07%	0.012%
11	5.627	254	257	263	rBV3	582	1084	0.11%	0.020%
12	5.726	274	276	288	rBV3	579	977	0.10%	0.018%
13	6.036	333	335	342	rVB2	692	1186	0.12%	0.022%
14	6.523	421	428	434	rVB2	415	886	0.09%	0.016%
15	6.581	434	439	442	rBV2	325	450	0.05%	0.008%
16	6.654	449	453	456	rBV2	320	403	0.04%	0.007%
17	6.717	463	465	471	rBV	319	401	0.04%	0.007%
18	7.027	522	524	528	rBV2	515	682	0.07%	0.013%
19	7.289	566	574	578	rBV	275	724	0.08%	0.013%
20	7.462	605	607	617	rVB2	431	880	0.09%	0.016%
21	7.535	619	621	627	rVB	405	683	0.07%	0.013%
22	7.583	627	630	635	rBV	572	790	0.08%	0.015%
23	7.651	639	643	647	rVV2	339	467	0.05%	0.009%
24	7.740	653	660	669	rVB3	449	865	0.09%	0.016%
25	8.421	777	790	840	rBV3	24290	113470	11.85%	2.095%
26	8.836	864	869	871	rBV	428	569	0.06%	0.011%
27	9.056	901	911	916	rBV2	422	1291	0.13%	0.024%
28	9.098	916	919	932	rVB2	483	1013	0.11%	0.019%
29	9.176	932	934	938	rBV2	413	451	0.05%	0.008%
30	9.239	944	946	953	rVB	405	656	0.07%	0.012%
31	9.360	965	969	974	rBV2	357	666	0.07%	0.012%
32	9.638	1019	1022	1024	rBV	529	583	0.06%	0.011%
33	9.716	1030	1037	1040	rBV2	500	672	0.07%	0.012%
34	9.816	1053	1056	1066	rBV2	522	1107	0.12%	0.020%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.973	1085	1086	1094	rBV2	434	686	0.07%	0.013%
36	10.146	1115	1119	1127	rVB4	1100	2821	0.29%	0.052%
37	10.215	1127	1132	1137	rBV2	470	942	0.10%	0.017%
38	10.277	1142	1144	1154	rBV2	572	1184	0.12%	0.022%
39	10.340	1154	1156	1168	rVV2	544	1241	0.13%	0.023%
40	10.409	1168	1169	1180	rVV2	508	1047	0.11%	0.019%
41	10.498	1180	1186	1189	rVB2	378	582	0.06%	0.011%
42	10.592	1194	1204	1206	rVV2	434	861	0.09%	0.016%
43	10.618	1206	1209	1213	rVB	379	390	0.04%	0.007%
44	10.671	1218	1219	1229	rVB2	463	942	0.10%	0.017%
45	10.859	1243	1255	1261	rBV	277952	654070	68.32%	12.075%
46	10.917	1262	1266	1292	rVB2	133160	301947	31.54%	5.575%
47	11.242	1325	1328	1334	rVB2	438	678	0.07%	0.013%
48	11.347	1337	1348	1379	rBV	123269	274274	28.65%	5.064%
49	11.525	1379	1382	1388	rVB3	318	464	0.05%	0.009%
50	11.777	1419	1430	1450	rVB	347856	739839	77.27%	13.659%
51	11.971	1462	1467	1476	rBV2	292	625	0.07%	0.012%
52	12.170	1503	1505	1509	rBV	395	518	0.05%	0.010%
53	12.254	1516	1521	1523	rBB	375	433	0.05%	0.008%
54	12.270	1523	1524	1528	rBV	431	418	0.04%	0.008%
55	12.621	1585	1591	1595	rBV2	229	410	0.04%	0.008%
56	12.757	1613	1617	1619	rBB	370	382	0.04%	0.007%
57	13.041	1668	1671	1673	rBV	393	469	0.05%	0.009%
58	13.339	1717	1728	1751	rVB	526547	957411	100.00%	17.676%
59	13.512	1758	1761	1765	rVB	384	443	0.05%	0.008%
60	13.612	1776	1780	1785	rBV2	420	857	0.09%	0.016%
61	13.680	1790	1793	1799	rVB	391	601	0.06%	0.011%
62	13.717	1799	1800	1805	rBV	386	547	0.06%	0.010%
63	13.806	1814	1817	1819	rBV	403	416	0.04%	0.008%
64	14.084	1868	1870	1876	rVB	421	661	0.07%	0.012%
65	14.121	1876	1877	1884	rBV2	419	838	0.09%	0.015%
66	14.304	1908	1912	1914	rBV	409	543	0.06%	0.010%
67	14.755	1989	1998	2020	rBV	492503	823598	86.02%	15.205%
68	14.876	2020	2021	2026	rVB	419	509	0.05%	0.009%
69	14.923	2026	2030	2033	rBV	429	542	0.06%	0.010%
70	15.033	2047	2051	2060	rBV	235	583	0.06%	0.011%
71	15.631	2159	2165	2167	rVB	395	643	0.07%	0.012%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.825	2194	2202	2219	rVB	395471	625348	65.32%	11.545%
73	16.165	2261	2267	2270	rVB	381	726	0.08%	0.013%
74	16.207	2270	2275	2276	rBV	413	465	0.05%	0.009%
75	16.317	2293	2296	2302	rBV2	351	426	0.04%	0.008%
76	16.459	2319	2323	2328	rBV2	224	407	0.04%	0.008%
77	16.527	2333	2336	2339	rVB	365	388	0.04%	0.007%
78	16.669	2358	2363	2367	rVB2	248	461	0.05%	0.009%
79	16.737	2372	2376	2380	rVV	362	407	0.04%	0.008%
80	16.910	2400	2409	2424	rVB	547875	864066	90.25%	15.952%
81	16.999	2424	2426	2440	rVB3	548	1597	0.17%	0.029%
82	17.104	2440	2446	2448	rBV2	391	679	0.07%	0.013%
83	17.167	2453	2458	2462	rVB	434	603	0.06%	0.011%
84	17.203	2462	2465	2469	rVB2	428	529	0.06%	0.010%
85	17.230	2469	2470	2473	rBV2	429	391	0.04%	0.007%
86	17.256	2473	2475	2479	rVB2	393	426	0.04%	0.008%
87	17.298	2479	2483	2484	rBV2	472	415	0.04%	0.008%
88	17.434	2504	2509	2513	rVB2	259	465	0.05%	0.009%
89	17.591	2536	2539	2542	rBV	566	627	0.07%	0.012%
90	17.707	2554	2561	2566	rVB2	304	651	0.07%	0.012%
91	17.827	2582	2584	2588	rBV	432	561	0.06%	0.010%
92	18.152	2641	2646	2650	rVB2	295	475	0.05%	0.009%
93	18.189	2651	2653	2663	rBV2	271	458	0.05%	0.008%
94	18.299	2673	2674	2683	rVB3	297	575	0.06%	0.011%
95	18.404	2690	2694	2700	rBV3	313	551	0.06%	0.010%
96	18.509	2709	2714	2719	rBV3	398	743	0.08%	0.014%
97	18.551	2720	2722	2729	rVB3	515	688	0.07%	0.013%
98	18.970	2800	2802	2821	rBV3	718	1939	0.20%	0.036%

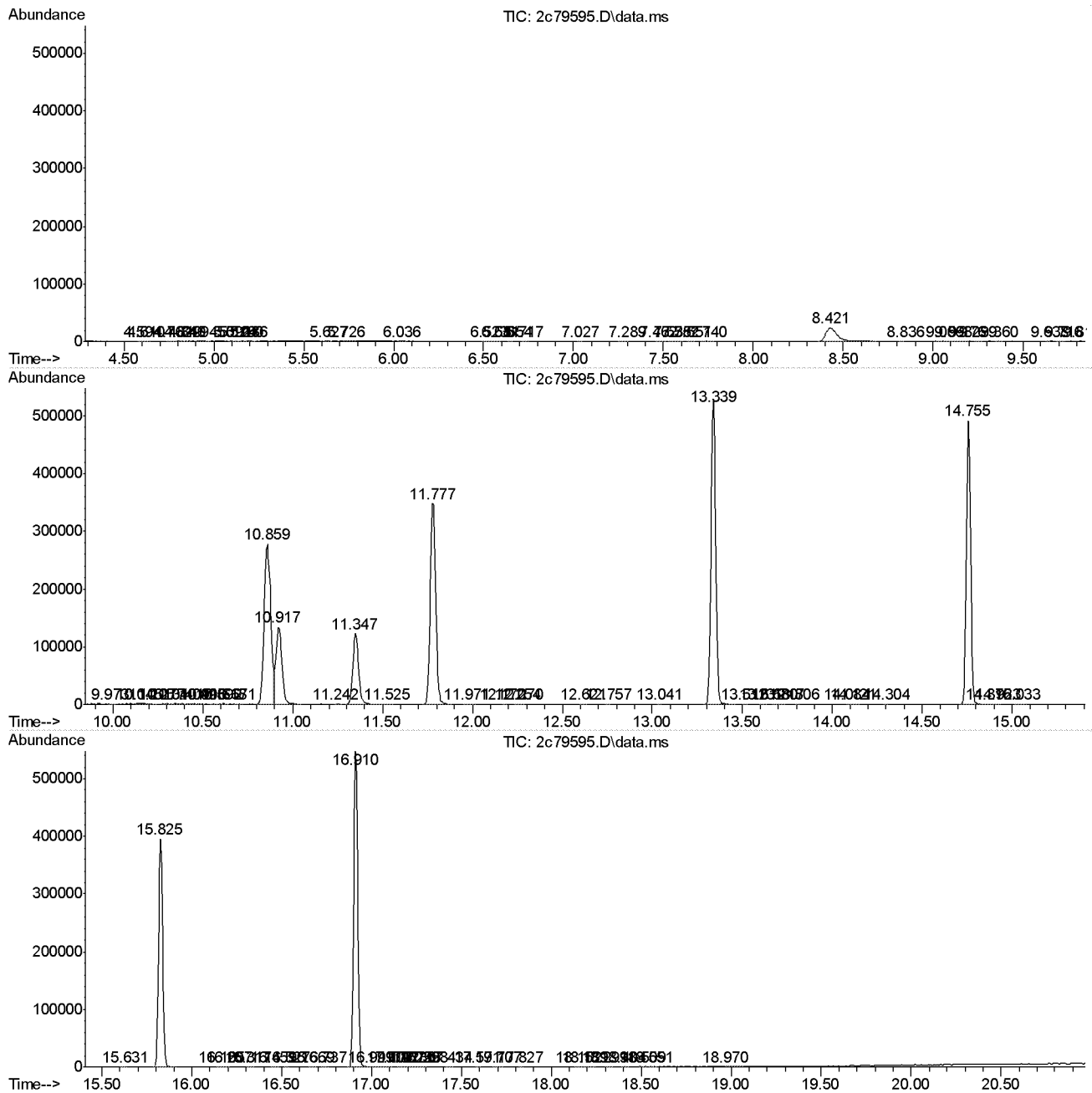
Sum of corrected areas: 5416572

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 07:31:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

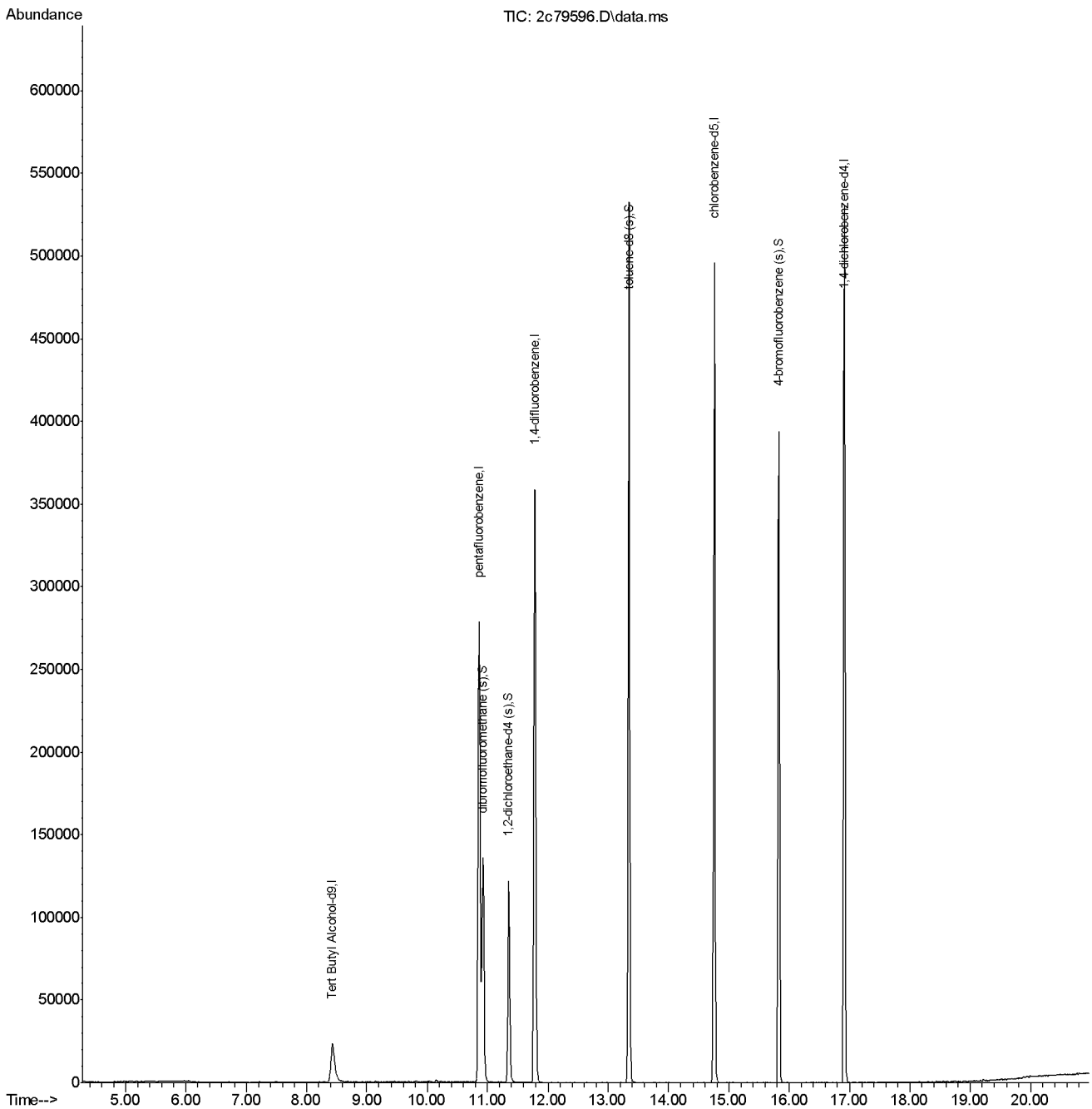
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.421	65	64747	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	258452	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	345628	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	285608	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.915	152	149907	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	100175	50.37	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.74%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	96702	47.19	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.38%			
80) toluene-d8 (s)	13.339	98	379381	53.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 106.84%			
105) 4-bromofluorobenzene (s)	15.824	95	131600	53.43	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.86%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 07:31:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



M2C3580.M Mon Feb 28 07:34:09 2011 ACCUNJ Page: 2

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79596.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.547	39	51	60	rVB3	378	1201	0.12%	0.022%
2	4.615	63	64	80	rBV3	464	1612	0.17%	0.030%
3	4.741	87	88	96	rVB	406	758	0.08%	0.014%
4	4.814	98	102	103	rVV	394	452	0.05%	0.008%
5	4.877	110	114	116	rBV2	521	554	0.06%	0.010%
6	5.543	240	241	247	rVB3	407	430	0.04%	0.008%
7	6.235	370	373	378	rBV3	319	439	0.05%	0.008%
8	6.324	389	390	399	rBV3	322	621	0.06%	0.011%
9	6.712	460	464	471	rBV	353	514	0.05%	0.009%
10	7.090	531	536	540	rBV2	519	903	0.09%	0.017%
11	7.226	560	562	578	rVB2	442	1327	0.14%	0.025%
12	7.483	608	611	617	rVB2	453	727	0.08%	0.013%
13	7.645	639	642	645	rBV2	346	441	0.05%	0.008%
14	7.698	645	652	654	rVB3	493	937	0.10%	0.017%
15	7.734	654	659	663	rBV2	487	835	0.09%	0.015%
16	8.101	728	729	735	rVB	436	469	0.05%	0.009%
17	8.426	777	791	833	rVB2	23324	107245	11.12%	1.980%
18	8.731	847	849	855	rVB2	347	395	0.04%	0.007%
19	8.925	883	886	891	rVB	409	659	0.07%	0.012%
20	8.972	891	895	898	rBV2	427	562	0.06%	0.010%
21	9.035	905	907	923	rVB2	515	939	0.10%	0.017%
22	9.140	923	927	935	rVB3	484	1286	0.13%	0.024%
23	9.187	935	936	943	rBV2	379	663	0.07%	0.012%
24	9.386	970	974	979	rBV2	414	539	0.06%	0.010%
25	9.722	1036	1038	1045	rVB2	353	397	0.04%	0.007%
26	9.805	1051	1054	1062	rVB3	646	1380	0.14%	0.025%
27	9.957	1082	1083	1091	rVB3	676	1000	0.10%	0.018%
28	10.010	1091	1093	1104	rBV2	504	1553	0.16%	0.029%
29	10.162	1113	1122	1128	rBV4	1123	2700	0.28%	0.050%
30	10.225	1132	1134	1140	rVB2	301	487	0.05%	0.009%
31	10.440	1172	1175	1179	rVB	660	795	0.08%	0.015%
32	10.597	1203	1205	1212	rVB	641	1020	0.11%	0.019%
33	10.655	1212	1216	1219	rVB3	493	717	0.07%	0.013%
34	10.676	1219	1220	1224	rBV2	465	596	0.06%	0.011%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	10.859	1243	1255	1261	rBV	278360	659283	68.35%	12.172%
36	10.917	1262	1266	1288	rVB	135506	301425	31.25%	5.565%
37	11.074	1294	1296	1304	rVB2	325	404	0.04%	0.007%
38	11.190	1317	1318	1322	rBV2	412	425	0.04%	0.008%
39	11.347	1335	1348	1382	rVB	121704	273968	28.40%	5.058%
40	11.551	1382	1387	1389	rVB2	449	641	0.07%	0.012%
41	11.782	1421	1431	1451	rVV	358319	750361	77.79%	13.854%
42	11.897	1451	1453	1460	rVB2	406	590	0.06%	0.011%
43	12.757	1614	1617	1621	rBV	409	608	0.06%	0.011%
44	12.867	1635	1638	1642	rVB	419	558	0.06%	0.010%
45	12.904	1642	1645	1647	rBV	362	381	0.04%	0.007%
46	12.936	1647	1651	1658	rVB	425	935	0.10%	0.017%
47	12.977	1658	1659	1664	rBV2	373	532	0.06%	0.010%
48	13.056	1671	1674	1677	rBV	406	467	0.05%	0.009%
49	13.234	1704	1708	1710	rBV	421	494	0.05%	0.009%
50	13.339	1717	1728	1751	rBV	532716	964618	100.00%	17.810%
51	13.559	1767	1770	1776	rVB	279	405	0.04%	0.007%
52	13.774	1808	1811	1815	rVB	256	399	0.04%	0.007%
53	14.314	1913	1914	1920	rBB	380	430	0.04%	0.008%
54	14.755	1989	1998	2013	rVB	495915	822540	85.27%	15.186%
55	15.048	2052	2054	2062	rVB	434	989	0.10%	0.018%
56	15.111	2062	2066	2068	rBV	422	519	0.05%	0.010%
57	15.824	2192	2202	2216	rBV	394011	623189	64.60%	11.506%
58	15.966	2223	2229	2234	rBV	235	576	0.06%	0.011%
59	16.553	2337	2341	2345	rBV2	425	791	0.08%	0.015%
60	16.600	2345	2350	2352	rVV2	356	589	0.06%	0.011%
61	16.616	2352	2353	2363	rVV2	473	704	0.07%	0.013%
62	16.726	2370	2374	2377	rVB2	388	435	0.05%	0.008%
63	16.773	2382	2383	2388	rBV	421	431	0.04%	0.008%
64	16.910	2401	2409	2429	rBV	530097	862290	89.39%	15.920%
65	17.046	2433	2435	2439	rBV3	379	460	0.05%	0.008%
66	17.146	2453	2454	2463	rBV3	491	916	0.09%	0.017%
67	17.219	2464	2468	2470	rVB	380	437	0.05%	0.008%
68	17.261	2471	2476	2479	rVB2	423	668	0.07%	0.012%
69	17.340	2488	2491	2500	rVB	408	568	0.06%	0.010%
70	17.445	2508	2511	2514	rBV2	322	424	0.04%	0.008%
71	17.597	2534	2540	2551	rVB2	372	869	0.09%	0.016%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	17.733	2563	2566	2574	rBV3	317	643	0.07%	0.012%
73	17.869	2589	2592	2602	rBV3	240	557	0.06%	0.010%
74	18.299	2671	2674	2679	rVB2	368	527	0.05%	0.010%
75	18.373	2686	2688	2698	rBV2	398	750	0.08%	0.014%
76	18.441	2698	2701	2705	rVV2	289	422	0.04%	0.008%
77	18.540	2719	2720	2736	rBV	442	1326	0.14%	0.024%
78	18.724	2752	2755	2762	rBV3	428	816	0.08%	0.015%
79	18.844	2774	2778	2781	rVB2	423	510	0.05%	0.009%
80	19.211	2845	2848	2855	rBV3	765	1248	0.13%	0.023%

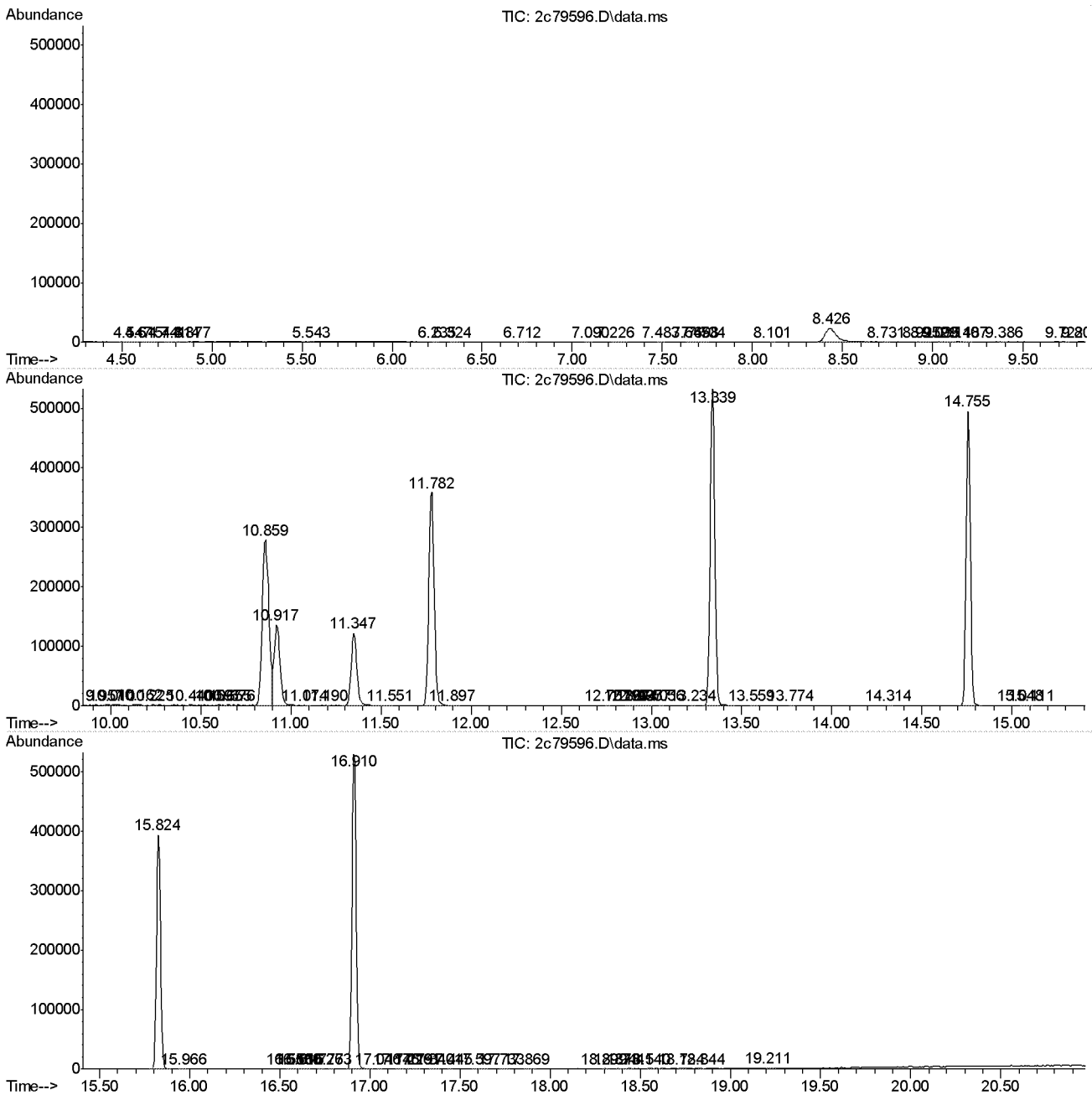
Sum of corrected areas: 5416271

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 11:11:06 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

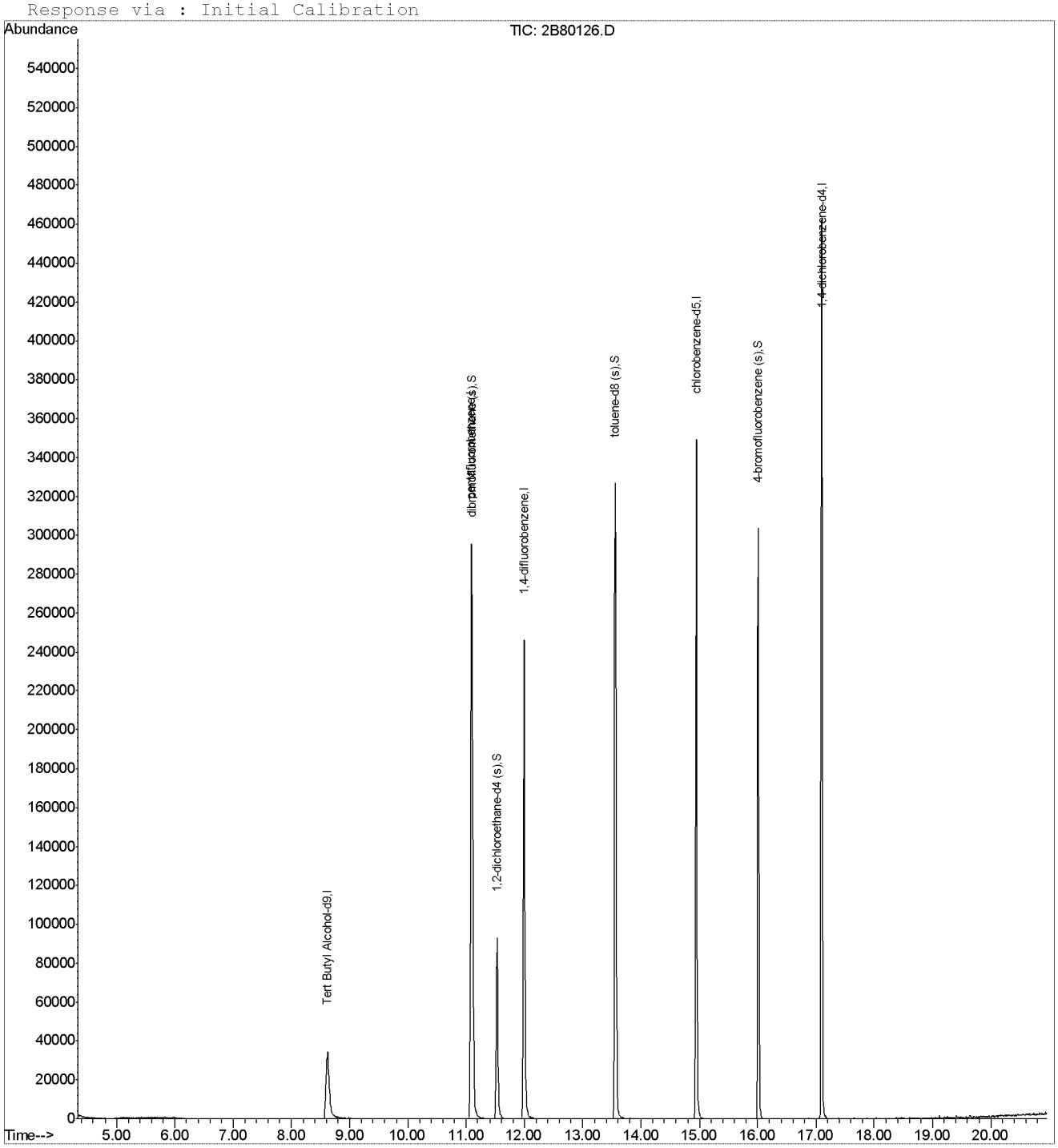
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	74874	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	189438	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	220750	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	192951	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	120540	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	66670	49.54	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.08%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	79788	49.54	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.08%			
73) toluene-d8 (s)	13.55	98	214554	50.17	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 100.34%			
98) 4-bromofluorobenzene (s)	16.01	95	82690	49.19	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 98.38%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:24 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration



ACCUTEST LABORATORIES JA68506

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.376	7	9	17	rVB	1051	1608	0.23%	0.042%
2	4.481	27	29	33	rVB	562	557	0.08%	0.015%
3	4.518	33	36	43	rVV	560	653	0.09%	0.017%
4	4.565	43	45	49	rVB	436	449	0.06%	0.012%
5	4.791	85	88	98	rVB	650	1409	0.20%	0.037%
6	4.859	99	101	106	rBV	481	582	0.08%	0.015%
7	4.911	109	111	114	rVB	492	436	0.06%	0.011%
8	4.979	118	124	129	rBV	620	1435	0.20%	0.037%
9	5.215	168	169	174	rVB	497	382	0.05%	0.010%
10	5.273	179	180	185	rVB2	328	391	0.06%	0.010%
11	5.346	189	194	196	rBV2	564	548	0.08%	0.014%
12	5.504	220	224	229	rVV	317	440	0.06%	0.011%
13	5.630	244	248	250	rVB	456	473	0.07%	0.012%
14	5.656	250	253	255	rBV	522	442	0.06%	0.012%
15	5.703	259	262	266	rVB	487	551	0.08%	0.014%
16	5.834	283	287	291	rVB2	338	498	0.07%	0.013%
17	5.960	309	311	313	rVV	615	424	0.06%	0.011%
18	5.976	313	314	318	rVV2	521	635	0.09%	0.017%
19	6.007	318	320	326	rVV	573	678	0.10%	0.018%
20	6.232	360	363	366	rVB	423	436	0.06%	0.011%
21	6.280	366	372	376	rBB	418	836	0.12%	0.022%
22	6.589	430	431	438	rBB	429	411	0.06%	0.011%
23	6.725	456	457	465	rBB	233	391	0.06%	0.010%
24	6.793	465	470	474	rBB	427	574	0.08%	0.015%
25	7.444	589	594	599	rBB	476	471	0.07%	0.012%
26	8.618	806	818	853	rBV2	34924	135311	19.25%	3.534%
27	8.807	853	854	858	rVV	902	1019	0.14%	0.027%
28	8.854	860	863	866	rVV2	822	967	0.14%	0.025%
29	8.901	870	872	875	rVB	723	613	0.09%	0.016%
30	8.933	875	878	881	rBV	568	650	0.09%	0.017%
31	8.980	881	887	891	rBV	577	542	0.08%	0.014%
32	10.390	1151	1156	1163	rBB	646	1231	0.18%	0.032%
33	11.088	1279	1289	1321	rBV2	295640	692067	98.44%	18.074%
34	11.282	1321	1326	1333	rVB	738	1403	0.20%	0.037%
35	11.523	1364	1372	1388	rBV	93125	197003	28.02%	5.145%
36	11.617	1388	1390	1399	rVB	1158	1754	0.25%	0.046%
37	11.989	1452	1461	1482	rBV	246076	478782	68.10%	12.504%
38	13.552	1751	1759	1783	rBV	326987	548697	78.05%	14.330%

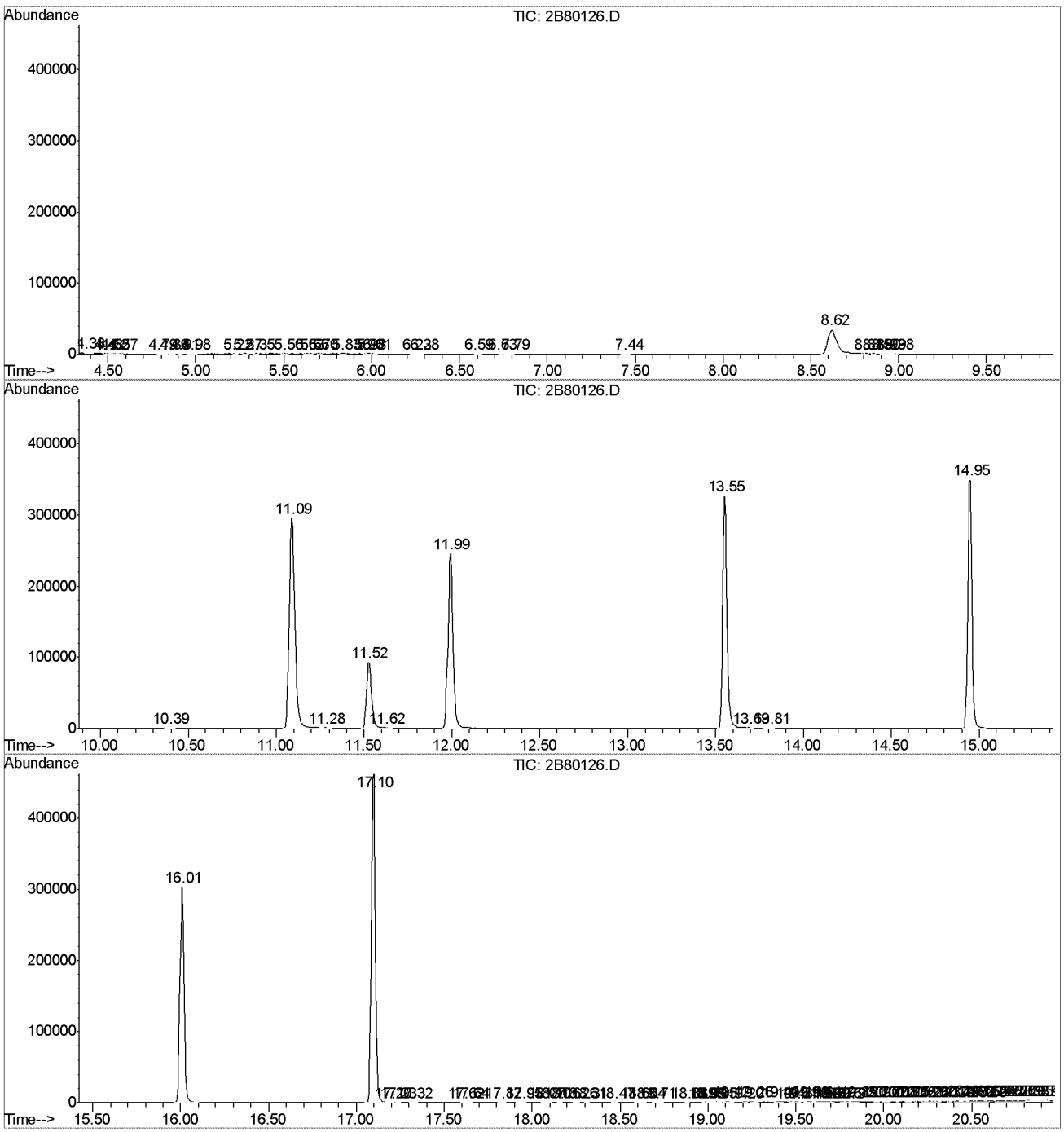
39	13.693	1783	1786	1791	rVB2	809	1155	0.16%	0.030%
40	13.809	1801	1808	1814	rBB	607	1086	0.15%	0.028%
41	14.946	2017	2025	2043	rBV	349646	560202	79.68%	14.630%
42	16.006	2219	2227	2246	rBB	303716	438224	62.33%	11.445%
43	17.096	2426	2435	2453	rBB	462599	703042	100.00%	18.360%
44	17.201	2453	2455	2458	rBV	575	464	0.07%	0.012%
45	17.227	2459	2460	2465	rVB	459	388	0.06%	0.010%
46	17.322	2474	2478	2483	rBB	225	377	0.05%	0.010%
47	17.615	2530	2534	2537	rBB	525	418	0.06%	0.011%
48	17.641	2537	2539	2542	rBV	587	646	0.09%	0.017%
49	17.825	2570	2574	2580	rBB	454	628	0.09%	0.016%
50	17.945	2589	2597	2601	rBB	441	799	0.11%	0.021%
51	18.071	2617	2621	2623	rVB	448	421	0.06%	0.011%
52	18.103	2623	2627	2629	rBB	487	535	0.08%	0.014%
53	18.160	2635	2638	2640	rBV	475	453	0.06%	0.012%
54	18.260	2651	2657	2659	rBV	456	836	0.12%	0.022%
55	18.312	2664	2667	2670	rBV	649	601	0.09%	0.016%
56	18.470	2693	2697	2701	rVB	808	945	0.13%	0.025%
57	18.596	2718	2721	2725	rVB	708	856	0.12%	0.022%
58	18.643	2725	2730	2732	rBV	570	886	0.13%	0.023%
59	18.706	2737	2742	2750	rBV	467	1076	0.15%	0.028%
60	18.884	2773	2776	2779	rBV	334	462	0.07%	0.012%
61	18.984	2791	2795	2796	rVV2	414	469	0.07%	0.012%
62	18.994	2796	2797	2805	rVV	331	479	0.07%	0.013%
63	19.052	2805	2808	2813	rVB2	483	573	0.08%	0.015%
64	19.120	2814	2821	2827	rBV3	1295	1964	0.28%	0.051%
65	19.204	2836	2837	2841	rBV2	626	654	0.09%	0.017%
66	19.256	2844	2847	2853	rVB2	925	1269	0.18%	0.033%
67	19.403	2870	2875	2880	rVV2	1048	1391	0.20%	0.036%
68	19.482	2886	2890	2892	rBV	547	489	0.07%	0.013%
69	19.508	2893	2895	2899	rVB	524	387	0.06%	0.010%
70	19.576	2902	2908	2912	rBV	833	1038	0.15%	0.027%
71	19.639	2912	2920	2927	rBV3	1271	2808	0.40%	0.073%
72	19.691	2927	2930	2932	rVB	502	496	0.07%	0.013%
73	19.707	2932	2933	2936	rBV	683	557	0.08%	0.015%
74	19.760	2941	2943	2946	rVB	557	539	0.08%	0.014%
75	19.786	2946	2948	2952	rBV	532	439	0.06%	0.011%
76	19.849	2952	2960	2962	rBV2	802	1596	0.23%	0.042%
77	19.969	2978	2983	2985	rBV2	930	1146	0.16%	0.030%
78	20.001	2988	2989	2992	rBV	703	714	0.10%	0.019%
79	20.022	2992	2993	2996	rBV	626	511	0.07%	0.013%
80	20.079	3002	3004	3006	rBV	828	807	0.11%	0.021%
81	20.148	3012	3017	3019	rBV	579	781	0.11%	0.020%
82	20.179	3022	3023	3025	rBV	905	488	0.07%	0.013%
83	20.226	3030	3032	3037	rVB3	726	870	0.12%	0.023%
84	20.258	3037	3038	3044	rVB2	938	1359	0.19%	0.035%
85	20.300	3044	3046	3051	rBV	916	1059	0.15%	0.028%
86	20.368	3057	3059	3063	rBV	727	934	0.13%	0.024%
87	20.425	3065	3070	3074	rVB2	856	1153	0.16%	0.030%
88	20.457	3074	3076	3082	rBV3	1076	1246	0.18%	0.033%
89	20.520	3082	3088	3090	rVV2	477	675	0.10%	0.018%
90	20.546	3090	3093	3100	rVB3	750	1424	0.20%	0.037%
91	20.588	3100	3101	3103	rBV2	686	410	0.06%	0.011%
92	20.635	3109	3110	3113	rBV2	994	687	0.10%	0.018%
93	20.677	3113	3118	3121	rVB2	1128	1355	0.19%	0.035%
94	20.729	3121	3128	3130	rBV2	1179	1551	0.22%	0.041%
95	20.750	3130	3132	3135	rVB3	897	849	0.12%	0.022%

96	20.792	3135	3140	3143	rBV3	1075	1863	0.26%	0.049%
97	20.824	3143	3146	3149	rVB2	1279	1057	0.15%	0.028%
98	20.850	3149	3151	3154	rBV2	819	868	0.12%	0.023%
99	20.871	3154	3155	3162	rBV4	854	1064	0.15%	0.028%
100	20.929	3163	3166	3169	rVB	1083	850	0.12%	0.022%

Sum of corrected areas: 3829118

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80126.D
Operator : DEZAREER
Acquired : 23 Feb 2011 10:45 am using AcqMethod M2B3558
Instrument : MS2B
Sample Name: mb
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 3
Quant File :M2B3558.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 10:45 am
Data File: C:\MSDCHEM\1\DATA\2B80126.D
Name: mb
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 25 14:32:36 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

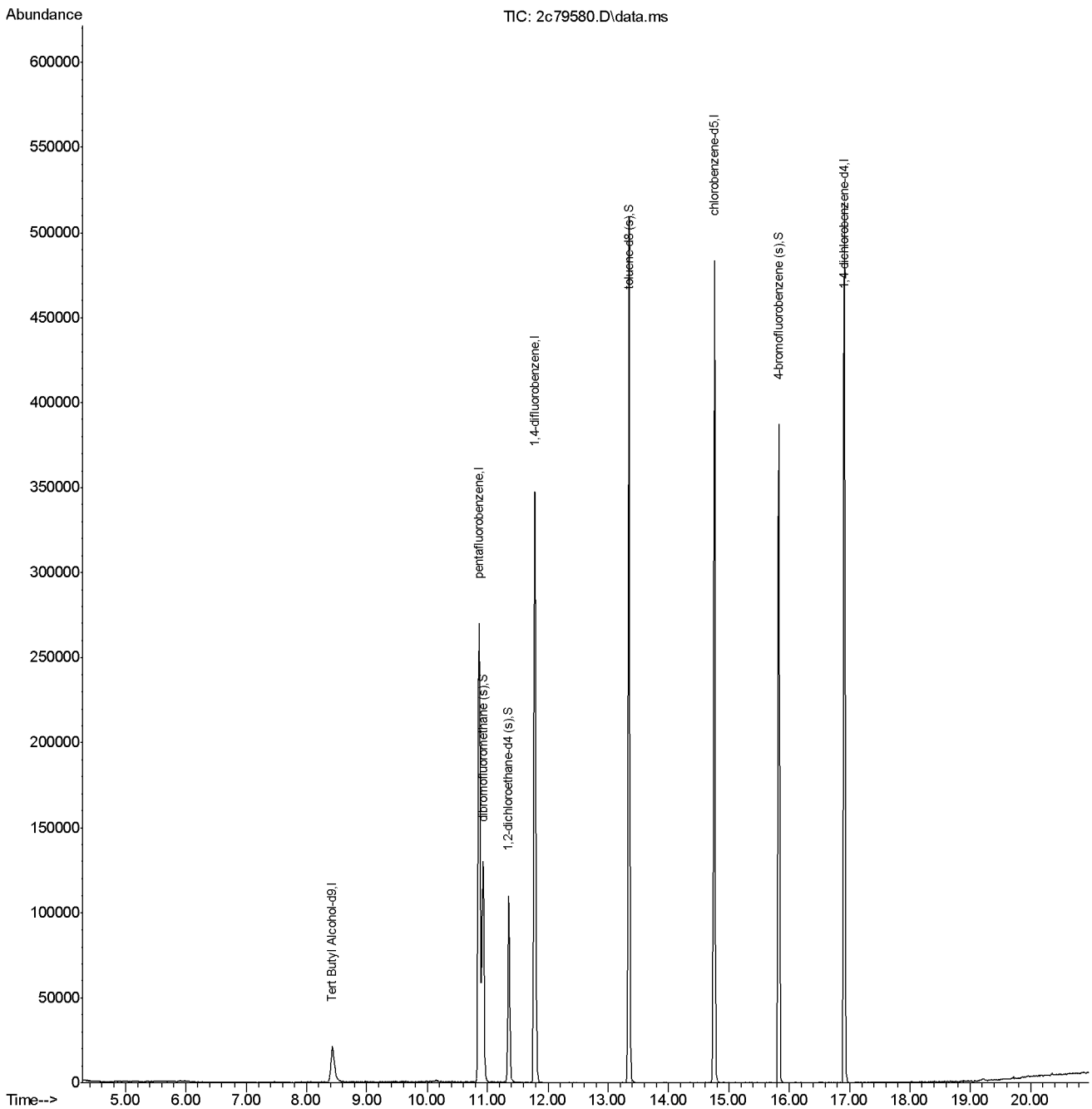
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	54499	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	252883	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	336423	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	277650	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	145044	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	96291	49.48	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.96%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	88967	44.37	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 88.74%			
80) toluene-d8 (s)	13.339	98	367772	53.20	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 106.40%			
105) 4-bromofluorobenzene (s)	15.824	95	128497	53.92	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.84%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 25 14:32:36 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79580.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.762	89	92	98	rBV3	380	619	0.07%	0.012%
2	4.798	98	99	103	rBV2	345	441	0.05%	0.008%
3	4.956	127	129	141	rBV3	450	734	0.08%	0.014%
4	5.165	167	169	179	rVB3	503	1181	0.13%	0.023%
5	5.228	179	181	193	rVB2	457	991	0.11%	0.019%
6	5.344	201	203	212	rVB3	580	938	0.10%	0.018%
7	5.459	223	225	235	rBV3	455	1342	0.14%	0.026%
8	5.527	235	238	245	rVV3	480	946	0.10%	0.018%
9	5.627	245	257	269	rVB4	461	2382	0.26%	0.045%
10	6.382	399	401	408	rVB2	310	548	0.06%	0.010%
11	6.434	408	411	418	rBV2	359	612	0.07%	0.012%
12	6.895	498	499	505	rVB2	404	495	0.05%	0.009%
13	7.226	561	562	568	rBV	422	422	0.05%	0.008%
14	7.278	570	572	581	rBV2	409	866	0.09%	0.017%
15	7.383	589	592	595	rVB	352	418	0.04%	0.008%
16	7.441	600	603	606	rBV2	440	475	0.05%	0.009%
17	7.614	630	636	637	rVB	447	595	0.06%	0.011%
18	7.666	641	646	647	rVB	413	461	0.05%	0.009%
19	7.761	663	664	670	rVB2	405	552	0.06%	0.011%
20	7.829	670	677	682	rBV	478	1154	0.12%	0.022%
21	7.865	682	684	688	rVV2	373	518	0.06%	0.010%
22	7.902	688	691	694	rVB2	536	488	0.05%	0.009%
23	7.981	705	706	712	rBV2	457	530	0.06%	0.010%
24	8.180	741	744	751	rBV2	345	605	0.06%	0.012%
25	8.295	763	766	770	rVB2	456	552	0.06%	0.011%
26	8.426	776	791	822	rBV3	21094	91734	9.84%	1.750%
27	8.662	835	836	842	rVB2	440	508	0.05%	0.010%
28	8.704	842	844	848	rBV2	428	560	0.06%	0.011%
29	8.856	870	873	878	rBV2	398	636	0.07%	0.012%
30	8.982	889	897	899	rBV2	506	988	0.11%	0.019%
31	9.255	947	949	956	rVB	344	445	0.05%	0.008%
32	9.454	984	987	989	rBV	436	425	0.05%	0.008%
33	9.580	1009	1011	1015	rBV2	305	429	0.05%	0.008%
34	9.648	1021	1024	1030	rVB	416	809	0.09%	0.015%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.721	1036	1038	1051	rBV	561	1057	0.11%	0.020%
36	9.805	1052	1054	1060	rVB	427	567	0.06%	0.011%
37	9.847	1060	1062	1067	rBV	467	604	0.06%	0.012%
38	10.020	1085	1095	1103	rVB2	510	1875	0.20%	0.036%
39	10.078	1103	1106	1108	rBV2	683	584	0.06%	0.011%
40	10.151	1115	1120	1129	rVB4	1022	2957	0.32%	0.056%
41	10.408	1166	1169	1177	rBV2	452	805	0.09%	0.015%
42	10.503	1182	1187	1190	rBB2	438	592	0.06%	0.011%
43	10.560	1194	1198	1205	rVB2	452	694	0.07%	0.013%
44	10.859	1242	1255	1261	rBV	269902	644418	69.11%	12.296%
45	10.917	1262	1266	1288	rVB	129902	290370	31.14%	5.540%
46	11.347	1335	1348	1370	rBV	109775	248344	26.63%	4.738%
47	11.583	1390	1393	1398	rBV	447	638	0.07%	0.012%
48	11.703	1414	1416	1419	rBV	393	433	0.05%	0.008%
49	11.782	1419	1431	1450	rVB	347381	726488	77.91%	13.862%
50	11.960	1462	1465	1469	rBV	354	461	0.05%	0.009%
51	12.002	1469	1473	1479	rVB	342	696	0.07%	0.013%
52	12.055	1479	1483	1488	rBB	362	510	0.05%	0.010%
53	12.102	1488	1492	1494	rBV	376	406	0.04%	0.008%
54	12.228	1514	1516	1521	rVB	375	549	0.06%	0.010%
55	12.259	1521	1522	1527	rBV	366	440	0.05%	0.008%
56	12.474	1558	1563	1566	rVB	379	569	0.06%	0.011%
57	12.642	1592	1595	1597	rVB	392	388	0.04%	0.007%
58	12.804	1625	1626	1632	rVB	327	388	0.04%	0.007%
59	13.166	1694	1695	1700	rBV	359	496	0.05%	0.009%
60	13.245	1706	1710	1712	rVB	372	523	0.06%	0.010%
61	13.261	1712	1713	1717	rBV	442	467	0.05%	0.009%
62	13.339	1717	1728	1746	rVV	509365	932462	100.00%	17.792%
63	13.449	1747	1749	1755	rVB	665	826	0.09%	0.016%
64	13.575	1766	1773	1775	rBV	405	723	0.08%	0.014%
65	13.811	1815	1818	1822	rBV	369	543	0.06%	0.010%
66	13.968	1843	1848	1851	rVB	404	658	0.07%	0.013%
67	14.026	1856	1859	1863	rBV	349	457	0.05%	0.009%
68	14.346	1917	1920	1923	rVB	398	418	0.04%	0.008%
69	14.613	1968	1971	1975	rVB	403	504	0.05%	0.010%
70	14.650	1975	1978	1983	rBV2	385	725	0.08%	0.014%
71	14.755	1988	1998	2018	rVV	483639	799193	85.71%	15.249%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	14.928	2022	2031	2034	rVV2	517	805	0.09%	0.015%
73	15.274	2095	2097	2103	rVB2	384	614	0.07%	0.012%
74	15.332	2103	2108	2109	rBV	364	507	0.05%	0.010%
75	15.379	2113	2117	2121	rBV	419	832	0.09%	0.016%
76	15.824	2192	2202	2222	rVB	387497	611011	65.53%	11.658%
77	15.940	2222	2224	2228	rBV2	432	598	0.06%	0.011%
78	16.516	2327	2334	2344	rVB2	465	1292	0.14%	0.025%
79	16.674	2358	2364	2365	rBV	251	392	0.04%	0.007%
80	16.836	2393	2395	2401	rVB2	376	507	0.05%	0.010%
81	16.910	2401	2409	2426	rBV	517998	828337	88.83%	15.805%
82	17.088	2439	2443	2450	rBV2	441	986	0.11%	0.019%
83	17.182	2458	2461	2466	rVB2	446	698	0.07%	0.013%
84	17.240	2469	2472	2479	rVB3	390	823	0.09%	0.016%
85	17.303	2479	2484	2486	rBV	470	628	0.07%	0.012%
86	17.371	2490	2497	2503	rBV2	486	1306	0.14%	0.025%
87	17.722	2561	2564	2570	rBV2	340	515	0.06%	0.010%
88	17.785	2571	2576	2583	rVB2	341	672	0.07%	0.013%
89	17.885	2593	2595	2604	rBV3	310	697	0.07%	0.013%
90	17.943	2604	2606	2613	rVV2	301	522	0.06%	0.010%
91	18.011	2613	2619	2623	rVV	365	525	0.06%	0.010%
92	18.409	2693	2695	2707	rVB2	278	604	0.06%	0.012%
93	18.608	2731	2733	2739	rBV2	424	699	0.07%	0.013%
94	18.760	2760	2762	2765	rVB2	408	436	0.05%	0.008%
95	18.829	2772	2775	2777	rBV2	529	387	0.04%	0.007%
96	18.850	2777	2779	2785	rVB2	547	782	0.08%	0.015%
97	18.892	2785	2787	2789	rBV	693	480	0.05%	0.009%
98	18.960	2798	2800	2807	rBV3	551	786	0.08%	0.015%
99	19.138	2816	2834	2835	rBV2	704	2809	0.30%	0.054%
100	19.217	2843	2849	2861	rVB2	1602	3512	0.38%	0.067%

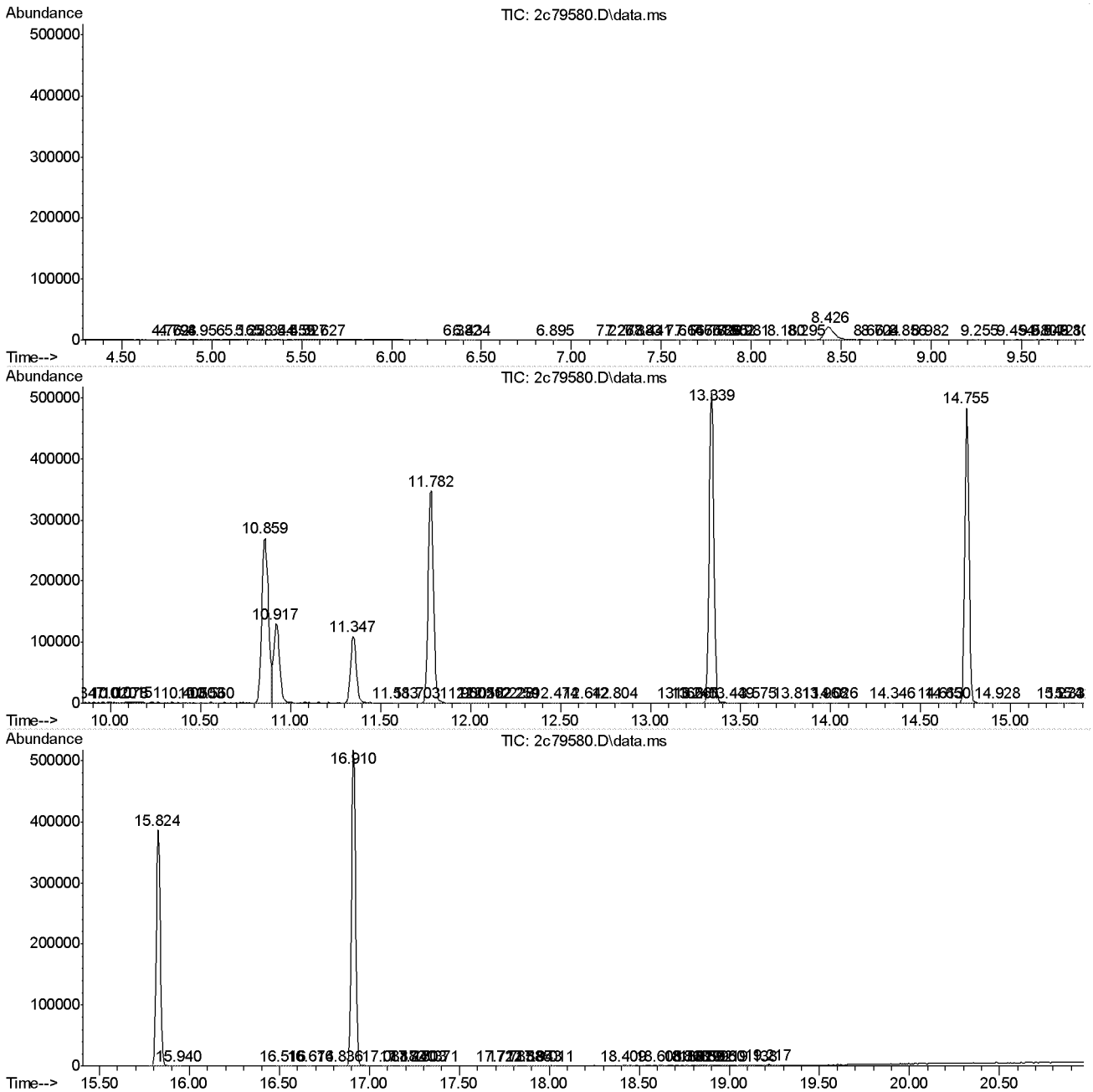
Sum of corrected areas: 5240989

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 01 14:26:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	80430	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	256064	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	326942	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	274721	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148062	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	100369	50.94	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.88%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	102746	50.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 101.20%			
80) toluene-d8 (s)	13.339	98	377669	56.22	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.44%			
105) 4-bromofluorobenzene (s)	15.824	95	132568	54.50	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 109.00%			
Target Compounds						Qvalue

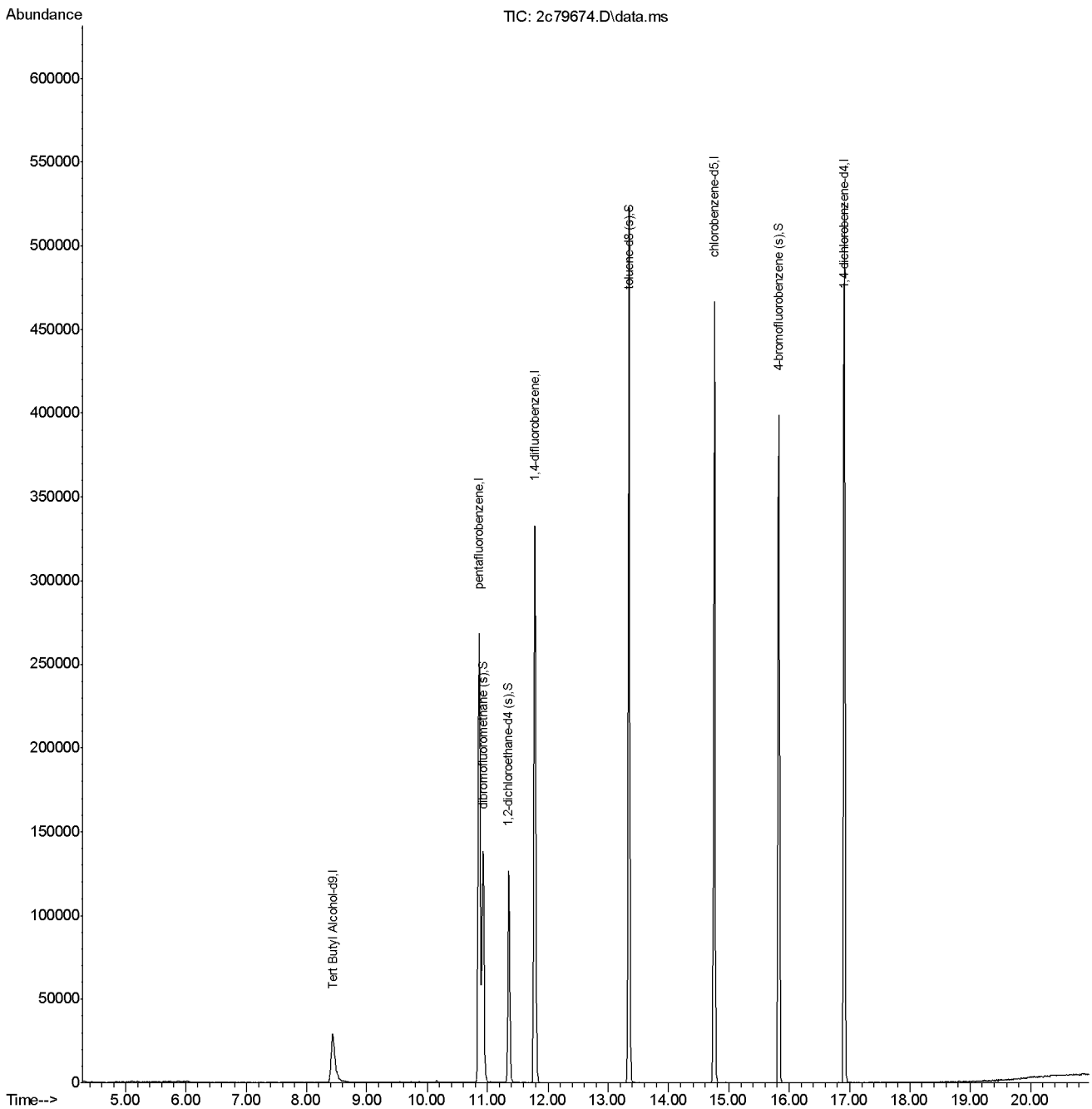
(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.2.5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 01 14:26:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79674.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.589	54	59	61	rBV2	440	513	0.05%	0.010%
2	4.615	61	64	72	rVB2	288	649	0.07%	0.012%
3	4.798	95	99	100	rBV2	291	391	0.04%	0.007%
4	4.835	104	106	112	rVB2	438	612	0.06%	0.012%
5	4.956	125	129	136	rBV2	479	1109	0.12%	0.021%
6	5.013	136	140	144	rBV2	336	573	0.06%	0.011%
7	5.055	144	148	150	rBV	359	479	0.05%	0.009%
8	5.102	154	157	169	rVB2	439	835	0.09%	0.016%
9	5.275	186	190	193	rVB2	533	577	0.06%	0.011%
10	5.359	198	206	208	rVV2	414	695	0.07%	0.013%
11	5.391	208	212	218	rVV	339	541	0.06%	0.010%
12	5.511	230	235	238	rVV2	543	535	0.06%	0.010%
13	5.553	241	243	247	rVB	465	569	0.06%	0.011%
14	5.632	251	258	260	rVB3	366	626	0.07%	0.012%
15	5.716	268	274	276	rVV2	491	627	0.07%	0.012%
16	5.810	290	292	297	rVB	369	500	0.05%	0.009%
17	5.852	297	300	302	rBV2	450	415	0.04%	0.008%
18	5.884	305	306	314	rVB2	442	621	0.07%	0.012%
19	6.387	398	402	408	rVB2	360	813	0.09%	0.015%
20	6.439	408	412	416	rBV	352	656	0.07%	0.012%
21	6.492	416	422	424	rBV2	284	449	0.05%	0.008%
22	6.738	464	469	475	rBV	421	658	0.07%	0.012%
23	6.922	499	504	512	rBV2	256	729	0.08%	0.014%
24	7.268	564	570	572	rVB2	308	416	0.04%	0.008%
25	7.598	628	633	637	rBV2	350	461	0.05%	0.009%
26	7.645	639	642	651	rVV	234	552	0.06%	0.010%
27	8.432	776	792	842	rVV2	28971	138160	14.62%	2.603%
28	8.699	842	843	850	rVB3	388	630	0.07%	0.012%
29	8.825	862	867	871	rVB	352	420	0.04%	0.008%
30	8.909	879	883	887	rBV	250	469	0.05%	0.009%
31	9.066	906	913	916	rBV2	229	428	0.05%	0.008%
32	9.150	927	929	937	rVB2	415	623	0.07%	0.012%
33	9.229	940	944	948	rVV2	225	396	0.04%	0.007%
34	9.323	959	962	968	rVB	319	503	0.05%	0.009%

M2C3580.M Tue Mar 01 14:27:12 2011 ACCUNJ

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.407	974	978	986	rBV	248	576	0.06%	0.011%
36	9.543	997	1004	1007	rBV2	521	864	0.09%	0.016%
37	9.590	1011	1013	1024	rVB2	250	552	0.06%	0.010%
38	9.957	1076	1083	1086	rBV2	269	408	0.04%	0.008%
39	10.162	1111	1122	1128	rBV4	982	2741	0.29%	0.052%
40	10.702	1221	1225	1234	rBV2	266	616	0.07%	0.012%
41	10.859	1239	1255	1261	rBV	268011	626726	66.32%	11.807%
42	10.917	1261	1266	1287	rVV2	137731	326913	34.59%	6.159%
43	11.038	1287	1289	1294	rVB2	498	483	0.05%	0.009%
44	11.116	1297	1304	1309	rBV	385	988	0.10%	0.019%
45	11.179	1314	1316	1319	rBV	322	418	0.04%	0.008%
46	11.347	1337	1348	1367	rVV	126446	284878	30.15%	5.367%
47	11.509	1375	1379	1388	rVV2	369	935	0.10%	0.018%
48	11.588	1392	1394	1407	rVV	368	1197	0.13%	0.023%
49	11.682	1407	1412	1413	rVV2	500	575	0.06%	0.011%
50	11.782	1417	1431	1450	rVV	333028	689842	73.00%	12.996%
51	11.987	1464	1470	1473	rBV	210	504	0.05%	0.009%
52	12.028	1473	1478	1482	rVB	191	452	0.05%	0.009%
53	12.306	1524	1531	1532	rVB	206	406	0.04%	0.008%
54	12.348	1532	1539	1542	rBV	321	597	0.06%	0.011%
55	12.432	1552	1555	1562	rBB	382	588	0.06%	0.011%
56	12.511	1569	1570	1578	rVB	234	503	0.05%	0.009%
57	12.616	1586	1590	1597	rBB	389	636	0.07%	0.012%
58	12.684	1600	1603	1607	rBV	315	435	0.05%	0.008%
59	12.825	1627	1630	1635	rBB	373	427	0.05%	0.008%
60	12.867	1635	1638	1643	rBV	230	489	0.05%	0.009%
61	13.051	1671	1673	1678	rBB	323	426	0.05%	0.008%
62	13.109	1678	1684	1685	rBB	330	400	0.04%	0.008%
63	13.166	1689	1695	1696	rBV	338	480	0.05%	0.009%
64	13.339	1717	1728	1754	rVV	522897	944976	100.00%	17.803%
65	13.512	1758	1761	1766	rVV	454	750	0.08%	0.014%
66	13.722	1798	1801	1809	rBB	334	628	0.07%	0.012%
67	13.921	1837	1839	1847	rBB	247	521	0.06%	0.010%
68	13.979	1847	1850	1853	rBV	343	437	0.05%	0.008%
69	14.173	1880	1887	1893	rBV	347	813	0.09%	0.015%
70	14.314	1911	1914	1919	rBV	366	524	0.06%	0.010%
71	14.372	1919	1925	1932	rVB	385	935	0.10%	0.018%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	14.561	1954	1961	1963	rBV	224	553	0.06%	0.010%
73	14.755	1988	1998	2012	rBV	466597	769030	81.38%	14.488%
74	15.510	2141	2142	2153	rVB	262	720	0.08%	0.014%
75	15.615	2153	2162	2167	rBV	418	927	0.10%	0.017%
76	15.824	2193	2202	2215	rVB	398934	633690	67.06%	11.938%
77	16.910	2400	2409	2421	rBV	526248	826877	87.50%	15.578%
78	17.036	2428	2433	2436	rVB	368	444	0.05%	0.008%
79	17.083	2436	2442	2443	rVV2	348	455	0.05%	0.009%
80	17.334	2485	2490	2493	rBV2	398	562	0.06%	0.011%
81	17.361	2494	2495	2501	rVB2	372	529	0.06%	0.010%
82	17.476	2514	2517	2522	rVB2	371	545	0.06%	0.010%
83	18.414	2692	2696	2702	rBV2	301	490	0.05%	0.009%
84	18.504	2707	2713	2716	rBV2	436	588	0.06%	0.011%
85	18.813	2771	2772	2777	rVB2	384	445	0.05%	0.008%
86	18.881	2784	2785	2792	rBV2	340	559	0.06%	0.011%
87	19.211	2846	2848	2854	rVB3	482	798	0.08%	0.015%
88	19.316	2864	2868	2871	rBV4	552	666	0.07%	0.013%
89	19.369	2877	2878	2882	rBV2	558	428	0.05%	0.008%
90	19.432	2887	2890	2894	rVB3	637	623	0.07%	0.012%
91	19.463	2894	2896	2900	rBV4	628	657	0.07%	0.012%
92	19.500	2900	2903	2904	rVB2	637	436	0.05%	0.008%
93	19.573	2914	2917	2922	rBV2	411	551	0.06%	0.010%
94	19.720	2943	2945	2949	rBV2	649	677	0.07%	0.013%
95	19.757	2949	2952	2955	rBV2	697	774	0.08%	0.015%
96	20.061	3004	3010	3014	rBV5	671	1390	0.15%	0.026%
97	20.166	3026	3030	3037	rBV6	691	1565	0.17%	0.029%
98	20.276	3048	3051	3060	rVB5	1050	1723	0.18%	0.032%
99	20.449	3060	3084	3092	rBV8	1092	8485	0.90%	0.160%
100	20.868	3160	3164	3165	rBV4	747	915	0.10%	0.017%

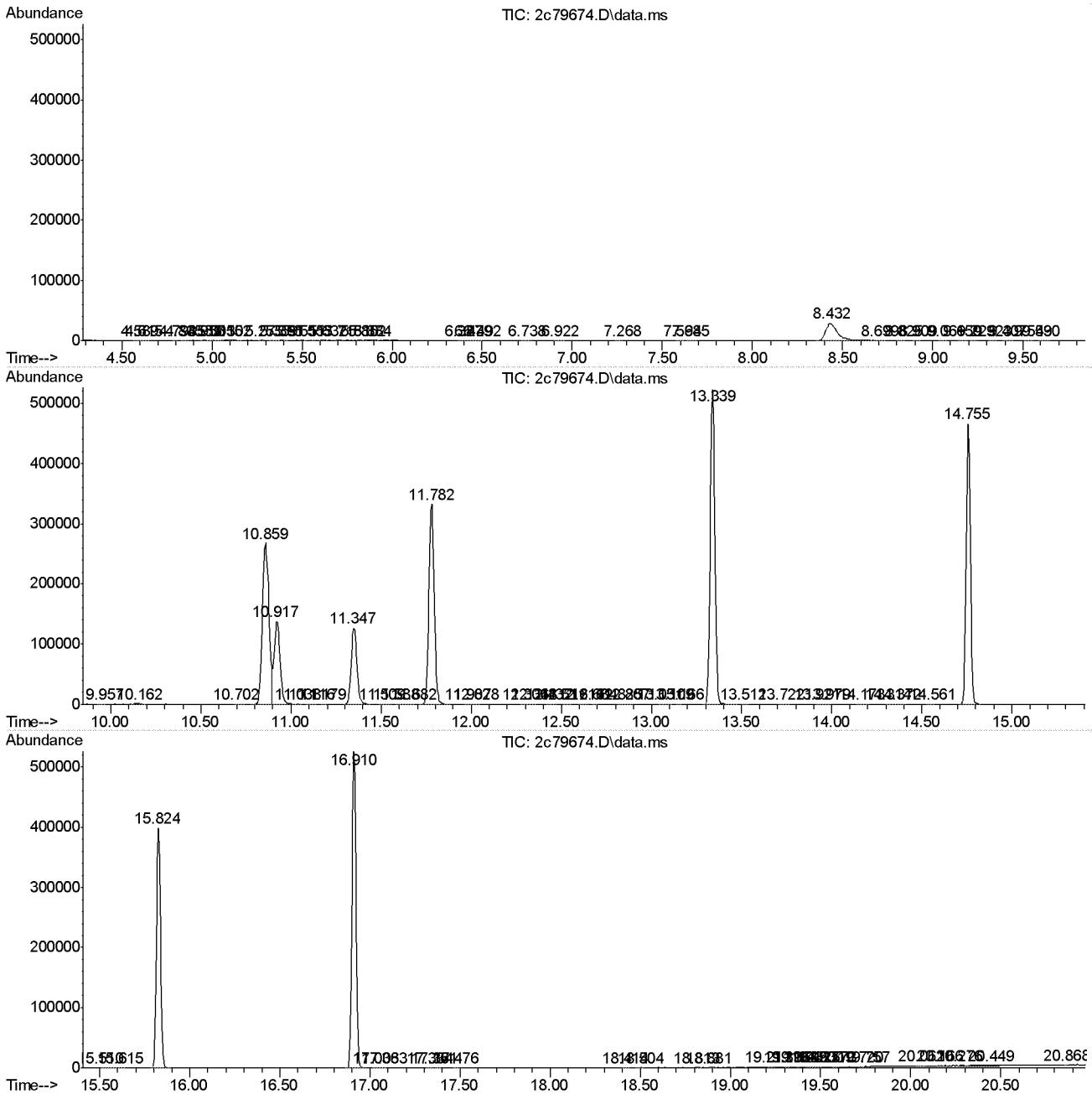
Sum of corrected areas: 5307971

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MB1	P54982.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MB1	P54982.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	98%	25-112%
321-60-8	2-Fluorobiphenyl	91%	31-106%
1718-51-0	Terphenyl-d14	77%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.03	4.9	ug/l	J
	Internal standard added for SIM test	7.78	4.3	ug/l	J
	Internal standard added for SIM test	10.14	5.4	ug/l	J
	Internal standard added for SIM test	13.22	6	ug/l	J
	Internal standard added for SIM test	16.24	5	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-MB1	4M23774.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	93%	32-135%
321-60-8	2-Fluorobiphenyl	94%	31-121%
1718-51-0	Terphenyl-d14	105%	10-130%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-BS1	P54983.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	42.5	85	46-113
1912-24-9	Atrazine	50	43.9	88	55-127
100-52-7	Benzaldehyde	50	56.8	114	31-130
101-55-3	4-Bromophenyl phenyl ether	50	39.7	79	55-121
85-68-7	Butyl benzyl phthalate	50	39.5	79	55-132
92-52-4	1,1'-Biphenyl	50	38.6	77	43-107
91-58-7	2-Chloronaphthalene	50	35.2	70	39-108
106-47-8	4-Chloroaniline	50	32.3	65	34-103
86-74-8	Carbazole	50	38.9	78	63-122
105-60-2	Caprolactam	50	4.8	10	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	39.1	78	43-119
111-44-4	bis(2-Chloroethyl)ether	50	33.9	68	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	34.5	69	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	37.2	74	50-117
121-14-2	2,4-Dinitrotoluene	50	40.3	81	56-124
606-20-2	2,6-Dinitrotoluene	50	49.6	99	55-128
91-94-1	3,3'-Dichlorobenzidine	50	36.7	73	42-116
132-64-9	Dibenzofuran	50	38.2	76	53-109
84-74-2	Di-n-butyl phthalate	50	42.1	84	58-130
117-84-0	Di-n-octyl phthalate	50	41.6	83	55-133
84-66-2	Diethyl phthalate	50	40.8	82	52-123
131-11-3	Dimethyl phthalate	50	32.1	64	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	40.0	80	57-134
87-68-3	Hexachlorobutadiene	50	33.3	67	11-100
77-47-4	Hexachlorocyclopentadiene	100	85.4	85	5-120
67-72-1	Hexachloroethane	50	27.1	54	13-88
78-59-1	Isophorone	50	40.3	81	43-120
91-57-6	2-Methylnaphthalene	50	33.1	66	33-103
88-74-4	2-Nitroaniline	50	48.0	96	48-132
99-09-2	3-Nitroaniline	50	38.0	76	48-115
100-01-6	4-Nitroaniline	50	35.2	70	51-125
98-95-3	Nitrobenzene	50	31.6	63	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	43.0	86	41-121
86-30-6	N-Nitrosodiphenylamine	50	35.2	70	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	37.8	76	18-130

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-BS1	P54983.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	100%	25-112%
321-60-8	2-Fluorobiphenyl	93%	31-106%
1718-51-0	Terphenyl-d14	80%	14-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-BS12	4M23775.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.866	87	53-125
208-96-8	Acenaphthylene	1	0.906	91	51-111
120-12-7	Anthracene	1	0.992	99	62-134
56-55-3	Benzo(a)anthracene	1	0.901	90	46-142
50-32-8	Benzo(a)pyrene	1	0.855	86	49-132
205-99-2	Benzo(b)fluoranthene	1	0.679	68	36-167
191-24-2	Benzo(g,h,i)perylene	1	0.885	89	43-149
207-08-9	Benzo(k)fluoranthene	1	0.999	100	27-173
218-01-9	Chrysene	1	1.06	106	59-137
53-70-3	Dibenzo(a,h)anthracene	1	0.802	80	47-149
206-44-0	Fluoranthene	1	0.852	85	57-126
86-73-7	Fluorene	1	0.848	85	58-126
118-74-1	Hexachlorobenzene	1	0.913	91	36-140
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.829	83	51-151
91-20-3	Naphthalene	1	0.765	77	40-130
85-01-8	Phenanthrene	1	0.862	86	52-130
129-00-0	Pyrene	1	0.916	92	60-134

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	88%	32-135%
321-60-8	2-Fluorobiphenyl	89%	31-121%
1718-51-0	Terphenyl-d14	97%	10-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
OP48193-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
JA68506-1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	JA68506-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		100	48.0	48	81.1	81	51* [a]	25-127/35
1912-24-9	Atrazine	ND		100	53.7	54	80.4	80	40* [a]	40-133/27
100-52-7	Benzaldehyde	ND		100	55.8	56	98.8	99	56* [a]	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		100	44.9	45* [b]	71.4	71	46* [a]	47-123/28
85-68-7	Butyl benzyl phthalate	ND		100	43.7	44* [b]	71.6	72	48* [a]	47-137/27
92-52-4	1,1'-Biphenyl	ND		100	45.0	45	75.4	75	50* [a]	36-113/32
91-58-7	2-Chloronaphthalene	ND		100	41.6	42	69.1	69	50* [a]	35-110/32
106-47-8	4-Chloroaniline	ND		100	40.3	40	59.6	60	39* [a]	22-98/36
86-74-8	Carbazole	ND		100	46.8	47* [b]	72.9	73	44* [a]	54-127/26
105-60-2	Caprolactam	ND		100	15.6	16	26.5	27	52* [a]	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		100	43.7	44	74.3	74	52* [a]	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		100	36.3	36	63.2	63	54* [a]	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	37.8	38	64.7	65	52* [a]	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	45.3	45	71.9	72	45* [a]	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		100	47.8	48	79.6	80	50* [a]	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		100	61.4	61	98.9	99	47* [a]	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		100	44.7	45	67.6	68	41* [a]	17-119/36
132-64-9	Dibenzofuran	ND		100	44.9	45	73.9	74	49* [a]	44-114/30
84-74-2	Di-n-butyl phthalate	ND		100	47.0	47* [b]	75.5	76	47* [a]	49-134/26
117-84-0	Di-n-octyl phthalate	ND		100	48.2	48	77.8	78	47* [a]	46-140/25
84-66-2	Diethyl phthalate	ND		100	46.1	46	74.9	75	48* [a]	46-123/27
131-11-3	Dimethyl phthalate	ND		100	31.8	32* [b]	52.7	53	49* [a]	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	48.2	48* [b]	76.3	76	45* [a]	49-141/27
87-68-3	Hexachlorobutadiene	ND		100	40.1	40	71.2	71	56* [a]	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		200	88.4	44	167	84	62* [a]	4-124/39
67-72-1	Hexachloroethane	ND		100	30.5	31	56.6	57	60* [a]	16-86/39
78-59-1	Isophorone	ND		100	47.3	47	77.7	78	49* [a]	33-117/36
91-57-6	2-Methylnaphthalene	ND		100	38.9	39	64.1	64	49* [a]	22-117/37
88-74-4	2-Nitroaniline	ND		100	58.8	59	95.1	95	47* [a]	37-135/29
99-09-2	3-Nitroaniline	ND		100	48.0	48	72.4	72	41* [a]	34-115/28
100-01-6	4-Nitroaniline	ND		100	45.3	45	72.2	72	46* [a]	36-128/30
98-95-3	Nitrobenzene	ND		100	35.7	36	61.9	62	54* [a]	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		100	50.8	51	81.8	82	47* [a]	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		100	42.9	43	65.8	66	42* [a]	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	43.7	44	73.2	73	50* [a]	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
OP48193-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
JA68506-1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-1	Limits
4165-60-0	Nitrobenzene-d5	55%	96%	77%	25-112%
321-60-8	2-Fluorobiphenyl	53%	88%	69%	31-106%
1718-51-0	Terphenyl-d14	31%	52%	45%	14-122%

(a) Analytical precision exceeds standard laboratory control limits.
(b) Outside of in house control limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193A	EP2378
OP48193A-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193A	EP2378
JA68506-1	4M23778.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	JA68506-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		100	43.7	44* [a]	73.9	74	51* [b]	51-125/22
208-96-8	Acenaphthylene	0.442		100	42.1	42* [a]	68.5	68	48* [b]	46-113/22
120-12-7	Anthracene	ND		100	44.6	45* [a]	71.8	72	47* [b]	59-131/23
56-55-3	Benzo(a)anthracene	ND		100	44.2	44* [a]	70.3	70	46* [b]	53-127/23
50-32-8	Benzo(a)pyrene	ND		100	45.9	46* [a]	72.1	72	44* [b]	49-135/23
205-99-2	Benzo(b)fluoranthene	ND		100	46.6	47	69.5	70	39* [b]	42-140/30
191-24-2	Benzo(g,h,i)perylene	ND		100	48.1	48	75.7	76	45* [b]	37-146/25
207-08-9	Benzo(k)fluoranthene	ND		100	51.8	52	89.3	89	53* [b]	41-141/34
218-01-9	Chrysene	ND		100	43.6	44* [a]	69.8	70	46* [b]	54-129/21
53-70-3	Dibenzo(a,h)anthracene	ND		100	49.7	50	78.8	79	45* [b]	38-146/25
206-44-0	Fluoranthene	ND		100	46.5	47* [a]	73.5	74	45* [b]	56-129/22
86-73-7	Fluorene	ND		100	47.8	48* [a]	75.4	75	45* [b]	58-126/25
118-74-1	Hexachlorobenzene	ND		100	44.1	44* [a]	68.5	69	43* [b]	52-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	48.0	48	76.4	76	46* [b]	36-150/25
91-20-3	Naphthalene	ND		100	37.8	38	66.4	66	55* [b]	38-121/25
85-01-8	Phenanthrene	ND		100	45.0	45* [a]	72.4	72	47* [b]	57-127/23
129-00-0	Pyrene	ND		100	43.5	44* [a]	69.4	69	46* [b]	51-128/23

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-1	Limits
4165-60-0	Nitrobenzene-d5	55%	96%	75%	32-135%
321-60-8	2-Fluorobiphenyl	53%	88%	76%	31-121%
1718-51-0	Terphenyl-d14	31%	52%	69%	10-130%

(a) Outside of in house control limits.
(b) Analytical precision exceeds standard laboratory control limits.

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1016-DFTPP	**Injection Date:**	01/21/11
Lab File ID:	4M23284.D	**Injection Time:**	09:44
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33290	33.3		Pass
68	Less than 2.0% of mass 69	510	0.51	(1.63) [a]	Pass
69	Mass 69 relative abundance	31340	31.4		Pass
70	Less than 2.0% of mass 69	102	0.10	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47020	47.1		Pass
197	Less than 1.0% of mass 198	366	0.37		Pass
198	Base peak, 100% relative abundance	99900	100.0		Pass
199	5.0 - 9.0% of mass 198	6849	6.86		Pass
275	10.0 - 30.0% of mass 198	19792	19.8		Pass
365	1.0 - 100.0% of mass 198	2508	2.51		Pass
441	Present, but less than mass 443	11432	11.4	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	77293	77.4		Pass
443	17.0 - 23.0% of mass 442	15327	15.3	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1016-IC1016	4M23287.D	01/21/11	13:00	03:16	Initial cal 5
E4M1016-ICC1016	4M23288.D	01/21/11	13:27	03:43	Initial cal 1
E4M1016-IC1016	4M23289.D	01/21/11	13:51	04:07	Initial cal .01
E4M1016-IC1016	4M23290.D	01/21/11	14:15	04:31	Initial cal .02
E4M1016-IC1016	4M23291.D	01/21/11	14:39	04:55	Initial cal .05
E4M1016-IC1016	4M23293.D	01/21/11	15:58	06:14	Initial cal .2
E4M1016-IC1016	4M23294.D	01/21/11	16:22	06:38	Initial cal .5
E4M1016-IC1016	4M23295.D	01/21/11	16:46	07:02	Initial cal 2.5
E4M1016-IC1016	4M23292.D	01/21/11	17:10	07:26	Initial cal .1
E4M1016-ICV1016	4M23296.D	01/21/11	17:34	07:50	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1040-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	4M23772.D	**Injection Time:**	07:10
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	16653	41.6		Pass
68	Less than 2.0% of mass 69	186	0.46	(1.15) [a]	Pass
69	Mass 69 relative abundance	16237	40.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	20038	50.0		Pass
197	Less than 1.0% of mass 198	98	0.24		Pass
198	Base peak, 100% relative abundance	40075	100.0		Pass
199	5.0 - 9.0% of mass 198	2730	6.81		Pass
275	10.0 - 30.0% of mass 198	8167	20.4		Pass
365	1.0 - 100.0% of mass 198	964	2.41		Pass
441	Present, but less than mass 443	4869	12.1	(75.7) [b]	Pass
442	40.0 - 100.0% of mass 198	32632	81.4		Pass
443	17.0 - 23.0% of mass 442	6431	16.0	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1040-CC1016	4M23773.D	02/22/11	07:56	00:46	Continuing cal .5
OP48193A-MB1	4M23774.D	02/22/11	08:27	01:17	Method Blank
OP48193A-BS12	4M23775.D	02/22/11	08:54	01:44	Blank Spike
ZZZZZZ	4M23776.D	02/22/11	09:18	02:08	(unrelated sample)
JA68506-1	4M23778.D	02/22/11	10:05	02:55	CG
JA68506-2	4M23779.D	02/22/11	10:29	03:19	CD
JA68506-3	4M23780.D	02/22/11	10:53	03:43	CD-DUP
JA68506-4	4M23781.D	02/22/11	11:17	04:07	CE
JA68506-5	4M23782.D	02/22/11	11:40	04:30	FB-02172011
JA68506-6	4M23783.D	02/22/11	12:04	04:54	CC
JA68506-8	4M23785.D	02/22/11	12:52	05:42	FB-02182011
ZZZZZZ	4M23786.D	02/22/11	13:16	06:06	(unrelated sample)
ZZZZZZ	4M23787.D	02/22/11	13:41	06:31	(unrelated sample)
ZZZZZZ	4M23788.D	02/22/11	14:05	06:55	(unrelated sample)
ZZZZZZ	4M23789.D	02/22/11	14:29	07:19	(unrelated sample)
ZZZZZZ	4M23790.D	02/22/11	14:54	07:44	(unrelated sample)
ZZZZZZ	4M23791.D	02/22/11	15:18	08:08	(unrelated sample)
ZZZZZZ	4M23792.D	02/22/11	15:42	08:32	(unrelated sample)
ZZZZZZ	4M23793.D	02/22/11	16:06	08:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1040-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	4M23772.D	**Injection Time:**	07:10
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M23794.D	02/22/11	16:30	09:20	(unrelated sample)
ZZZZZZ	4M23795.D	02/22/11	16:54	09:44	(unrelated sample)
JA68506-7	4M23796.D	02/22/11	17:18	10:08	CF
ZZZZZZ	4M23797.D	02/22/11	17:42	10:32	(unrelated sample)
ZZZZZZ	4M23798.D	02/22/11	18:06	10:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2339-DFTPP	**Injection Date:**	12/29/10
Lab File ID:	P54216.D	**Injection Time:**	14:06
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	62252	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	81862	40.0		Pass
70	Less than 2.0% of mass 69	554	0.27	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	102292	50.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	204529	100.0		Pass
199	5.0 - 9.0% of mass 198	14305	6.99		Pass
275	10.0 - 30.0% of mass 198	49843	24.4		Pass
365	1.0 - 100.0% of mass 198	5966	2.92		Pass
441	Present, but less than mass 443	26016	12.7	(78.0) [b]	Pass
442	40.0 - 100.0% of mass 198	165461	80.9		Pass
443	17.0 - 23.0% of mass 442	33333	16.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2339-ICC2339	P54217.D	12/29/10	14:20	00:14	Initial cal 50
EP2339-IC2339	P54218.D	12/29/10	14:48	00:42	Initial cal 1
EP2339-IC2339	P54219.D	12/29/10	15:17	01:11	Initial cal 2
EP2339-IC2339	P54220.D	12/29/10	15:45	01:39	Initial cal 5
EP2339-IC2339	P54221.D	12/29/10	16:13	02:07	Initial cal 10
EP2339-IC2339	P54222.D	12/29/10	16:42	02:36	Initial cal 25
EP2339-IC2339	P54223.D	12/29/10	17:10	03:04	Initial cal 80
EP2339-IC2339	P54224.D	12/29/10	17:39	03:33	Initial cal 100
EP2339-ICV2338	P54225.D	12/29/10	18:07	04:01	Initial cal verification 50
EP2339-ICV2339	P54225A.D	12/29/10	18:07	04:01	Initial cal verification 50
EP2339-ICV2338	P54226.D	12/29/10	18:36	04:30	Initial cal verification 50
EP2339-ICV2339	P54226A.D	12/29/10	18:36	04:30	Initial cal verification 50
EP2339-ICV2338	P54227.D	12/29/10	19:04	04:58	Initial cal verification 50
EP2339-ICV2338	P54228.D	12/29/10	19:33	05:27	Initial cal verification 50
EP2339-ICV2338	P54229.D	12/29/10	20:01	05:55	Initial cal verification 50
EP2339-ICV2339	P54229A.D	12/29/10	20:01	05:55	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2364-DFTPP	**Injection Date:**	02/01/11
Lab File ID:	P54689.D	**Injection Time:**	09:48
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	58014	40.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	72347	50.7		Pass
70	Less than 2.0% of mass 69	359	0.25	(0.50) [a]	Pass
127	40.0 - 60.0% of mass 198	78237	54.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	142709	100.0		Pass
199	5.0 - 9.0% of mass 198	10109	7.08		Pass
275	10.0 - 30.0% of mass 198	34096	23.9		Pass
365	1.0 - 100.0% of mass 198	3944	2.76		Pass
441	Present, but less than mass 443	16406	11.5	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	99317	69.6		Pass
443	17.0 - 23.0% of mass 442	19400	13.6	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2364-ICC2364	P54690.D	02/01/11	10:18	00:30	Initial cal 50
EP2364-IC2364	P54691.D	02/01/11	10:48	01:00	Initial cal 1
EP2364-IC2364	P54692.D	02/01/11	11:16	01:28	Initial cal 2
EP2364-IC2364	P54693.D	02/01/11	11:45	01:57	Initial cal 5
EP2364-IC2364	P54694.D	02/01/11	12:14	02:26	Initial cal 10
EP2364-IC2364	P54695.D	02/01/11	12:43	02:55	Initial cal 25
EP2364-IC2364	P54696.D	02/01/11	13:11	03:23	Initial cal 80
EP2364-IC2364	P54697.D	02/01/11	13:40	03:52	Initial cal 100
EP2364-ICV2364	P54698.D	02/01/11	15:17	05:29	Initial cal verification 50
EP2364-ICV2364	P54700.D	02/01/11	15:46	05:58	Initial cal verification 50
EP2364-ICV2364	P54701.D	02/01/11	16:15	06:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2378-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	P54978.D	**Injection Time:**	07:27
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	64125	37.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	77200	45.1		Pass
70	Less than 2.0% of mass 69	423	0.25	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	87504	51.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	171157	100.0		Pass
199	5.0 - 9.0% of mass 198	12081	7.06		Pass
275	10.0 - 30.0% of mass 198	43090	25.2		Pass
365	1.0 - 100.0% of mass 198	6367	3.72		Pass
441	Present, but less than mass 443	20768	12.1	(81.6) [b]	Pass
442	40.0 - 100.0% of mass 198	131104	76.6		Pass
443	17.0 - 23.0% of mass 442	25442	14.9	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2378-CC2364	P54979.D	02/22/11	07:40	00:13	Continuing cal 50
EP2378-CC2339	P54980.D	02/22/11	08:08	00:41	Continuing cal 25
OP48193-MB1	P54982.D	02/22/11	09:07	01:40	Method Blank
OP48193-BS1	P54983.D	02/22/11	09:35	02:08	Blank Spike
JA68506-5	P54984.D	02/22/11	10:04	02:37	FB-02172011
JA68506-8	P54985.D	02/22/11	10:32	03:05	FB-02182011
ZZZZZZ	P54986.D	02/22/11	11:00	03:33	(unrelated sample)
ZZZZZZ	P54987.D	02/22/11	11:29	04:02	(unrelated sample)
ZZZZZZ	P54988.D	02/22/11	11:58	04:31	(unrelated sample)
JA68506-1	P54989.D	02/22/11	12:26	04:59	CG
OP48193-MS	P54990.D	02/22/11	12:55	05:28	Matrix Spike
OP48193A-MS	P54990.D	02/22/11	12:55	05:28	Matrix Spike
OP48193-MSD	P54991.D	02/22/11	13:24	05:57	Matrix Spike Duplicate
OP48193A-MSD	P54991.D	02/22/11	13:24	05:57	Matrix Spike Duplicate
JA68506-2	P54992.D	02/22/11	13:52	06:25	CD
JA68506-3	P54993.D	02/22/11	14:21	06:54	CD-DUP
JA68506-4	P54994.D	02/22/11	14:50	07:23	CE
JA68506-6	P54995.D	02/22/11	15:19	07:52	CC
JA68506-7	P54996.D	02/22/11	15:47	08:20	CF

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2378-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	P54978.D	**Injection Time:**	07:27
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P54997.D	02/22/11	16:16	08:49	(unrelated sample)
ZZZZZZ	P54998.D	02/22/11	16:45	09:18	(unrelated sample)
ZZZZZZ	P54999.D	02/22/11	17:13	09:46	(unrelated sample)
ZZZZZZ	P55000.D	02/22/11	17:42	10:15	(unrelated sample)
ZZZZZZ	P55001.D	02/22/11	18:11	10:44	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1040-CC1016	**Injection Date:**	02/22/11
Lab File ID:	4M23773.D	**Injection Time:**	07:56
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	24227	6.76	18462	9.06	30952	12.36	30706	15.45
Upper Limit [a]	48454	7.26	36924	9.56	61904	12.86	61412	15.95
Lower Limit [b]	12114	6.26	9231	8.56	15476	11.86	15353	14.95

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP48193A-MB1	19201	6.76	12967	9.04	22653	12.36	23394	15.45
OP48193A-BS12	20390	6.76	14627	9.04	24918	12.36	25845	15.45
ZZZZZZ	12185	6.76	15323	9.06	19973	12.38	22361	15.45
JA68506-1	19324	6.77	12584	9.06	22191	12.37	25321	15.46
JA68506-2	17238	6.76	13210	9.04	22959	12.36	25739	15.45
JA68506-3	17113	6.77	13034	9.06	22864	12.37	25099	15.45
JA68506-4	16866	6.76	13018	9.05	22030	12.37	26242	15.46
JA68506-5	16782	6.76	12101	9.04	19877	12.36	22306	15.45
JA68506-6	16649	6.77	13067	9.06	22964	12.37	27759	15.46
JA68506-8	12931	6.77	9689	9.05	17530	12.37	19408	15.46
ZZZZZZ	10901*	6.77	8722*	9.05	15213*	12.37	17359	15.46
ZZZZZZ	15031	6.76	11877	9.04	20892	12.36	23183	15.45
ZZZZZZ	11965*	6.77	10215	9.05	19369	12.37	23178	15.46
ZZZZZZ	16809	6.77	13357	9.05	22457	12.37	25446	15.46
ZZZZZZ	16098	6.77	13769	9.06	24121	12.37	26793	15.46
ZZZZZZ	16145	6.76	12120	9.04	19867	12.36	21528	15.45
ZZZZZZ	17367	6.76	13554	9.04	23376	12.36	25424	15.45
ZZZZZZ	16779	6.77	13930	9.06	23465	12.36	25588	15.46
ZZZZZZ	18175	6.77	14631	9.06	25339	12.37	26709	15.46
ZZZZZZ	14687	6.77	12164	9.05	21786	12.37	30835	15.46
JA68506-7	13339	6.76	10388	9.04	18708	12.36	22359	15.45
ZZZZZZ	6467*	6.77	5337*	9.06	9389*	12.37	10979*	15.46
ZZZZZZ	11474*	6.77	8904*	9.06	16118	12.36	18897	15.46

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	EP2378-CC2364	**Injection Date:**	02/22/11
Lab File ID:	P54979.D	**Injection Time:**	07:40
Instrument ID:	GCMSP	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	117374	4.78	428789	6.58	283001	9.33	458815	11.65	485209	14.85	458101	16.33
Upper Limit [a]	234748	5.28	857578	7.08	566002	9.83	917630	12.15	970418	15.35	916202	16.83
Lower Limit [b]	58687	4.28	214395	6.08	141501	8.83	229408	11.15	242605	14.35	229051	15.83
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP48193-MB1	156843	4.78	544048	6.57	344454	9.33	607637	11.64	671707	14.85	561533	16.33
OP48193-BS1	126203	4.78	473344	6.58	280151	9.33	482579	11.64	508352	14.85	471782	16.33
JA68506-5	161372	4.78	575979	6.57	355651	9.33	609508	11.64	672762	14.85	576551	16.33
JA68506-8	160648	4.78	557580	6.57	360586	9.33	622742	11.64	684669	14.85	571229	16.33
ZZZZZZ	164254	4.78	571365	6.57	365699	9.33	637879	11.64	699223	14.85	583588	16.33
ZZZZZZ	148943	4.79	501037	6.58	245035	9.33	362814	11.65	384091	14.86	401197	16.33
ZZZZZZ	149448	4.78	531183	6.57	311925	9.33	507352	11.64	579736	14.85	467944	16.33
JA68506-1	152671	4.78	540381	6.57	330608	9.33	579415	11.64	652840	14.85	548258	16.33
OP48193-MS	140501	4.78	528241	6.58	320807	9.33	571409	11.64	594908	14.85	543368	16.33
OP48193A-MS	140501	4.78	528241	6.58	320807	9.33	571409	11.64	594908	14.85	543368	16.33
OP48193-MSD	126847	4.78	462750	6.58	274710	9.33	493814	11.65	502849	14.85	462760	16.33
OP48193A-MSD	126847	4.78	462750	6.58	274710	9.33	493814	11.65	502849	14.85	462760	16.33
JA68506-2	144025	4.78	504955	6.57	290881	9.33	461733	11.65	569067	14.85	503336	16.33
JA68506-3	150848	4.78	530356	6.57	305333	9.33	471038	11.64	594393	14.85	538009	16.33
JA68506-4	155533	4.78	554125	6.57	346833	9.33	584336	11.64	643221	14.85	549267	16.33
JA68506-6	170412	4.78	597617	6.57	377525	9.33	634571	11.64	709052	14.85	600666	16.33
JA68506-7	158740	4.78	558030	6.57	333733	9.33	543598	11.64	636496	14.85	548275	16.33
ZZZZZZ	158674	4.78	565373	6.57	357348	9.33	616432	11.64	666724	14.85	562397	16.33
ZZZZZZ	178532	4.78	624445	6.57	395592	9.33	686640	11.64	758127	14.85	635413	16.33
ZZZZZZ	179325	4.78	627166	6.57	399642	9.33	680081	11.64	739932	14.85	625464	16.33
ZZZZZZ	145060	4.78	482778	6.57	282143	9.33	482698	11.64	622362	14.85	553046	16.33
ZZZZZZ	161481	4.78	535959	6.57	327862	9.33	565631	11.64	691890	14.85	601597	16.33

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA68506-1	P54989.D	77.0	69.0	45.0
JA68506-2	P54992.D	76.0	72.0	36.0
JA68506-3	P54993.D	83.0	79.0	38.0
JA68506-4	P54994.D	83.0	80.0	75.0
JA68506-5	P54984.D	85.0	82.0	64.0
JA68506-6	P54995.D	87.0	82.0	64.0
JA68506-7	P54996.D	84.0	82.0	66.0
JA68506-8	P54985.D	93.0	86.0	65.0
OP48193-BS1	P54983.D	100.0	93.0	80.0
OP48193-MB1	P54982.D	98.0	91.0	77.0
OP48193-MS	P54990.D	55.0	53.0	31.0
OP48193-MSD	P54991.D	96.0	88.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA68506-1	4M23778.D	75.0	76.0	69.0
JA68506-2	4M23779.D	86.0	88.0	58.0
JA68506-3	4M23780.D	102.0	98.0	60.0
JA68506-4	4M23781.D	103.0	100.0	105.0
JA68506-5	4M23782.D	105.0	106.0	105.0
JA68506-6	4M23783.D	106.0	108.0	99.0
JA68506-7	4M23796.D	97.0	107.0	98.0
JA68506-8	4M23785.D	106.0	114.0	99.0
OP48193A-BS12	4M23775.D	88.0	89.0	97.0
OP48193A-MB1	4M23774.D	93.0	94.0	105.0
OP48193A-MS	P54990.D	55.0	53.0	31.0
OP48193A-MSD	P54991.D	96.0	88.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-135%
S2 = 2-Fluorobiphenyl	31-121%
S3 = Terphenyl-d14	10-130%

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Initial Calibration

Calibration Files
0.05=4m23291.D .2 =4m23293.D 2.5 =4m23295.D .02 =4m23290.D
.1 =4m23292.D 1 =4m23288.D .01 =4m23289.D .5 =4m23294.D
5 =4m23287.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.614	0.610	0.578	0.604	0.604	0.590		0.575	0.558	0.592	3.34
3) Phenol-d5	0.771	0.763	0.694	0.761	0.795	0.746		0.740	0.615	0.736	7.71
4) Phenol	0.761	0.825	0.795	0.721	0.793	0.840		0.759	0.929	0.803	7.92
5) bis(2-Chloroethyl)ether	0.822	0.802	0.779	0.912	0.783	0.757	1.004	0.744	0.758	0.818	10.56
6) Nitrobenzene-d5	0.590	0.611	0.600	0.551	0.589	0.596		0.590	0.570	0.587	3.17
7) Naphthalene	1.926	1.856	1.675	1.901	1.851	1.691		1.687	1.661	1.781	6.32
8) Hexachlorobutadiene	0.316	0.283		0.328	0.287			0.298	0.277	0.298	6.71
9) 2-Methylnaphthalene	1.520	1.346	1.397	1.509	1.343	1.372	1.868	1.322	1.352	1.448	11.97
10) 1-Methylnaphthalene	1.450	1.431	1.269	1.475	1.365	1.351		1.296	1.255	1.362	6.19
11) 2-Fluorobiphenyl	1.430	1.397	1.287	1.374	1.383	1.280		1.298	1.313	1.345	4.26
12) I Fluorene-d10	ISTD										
13) Acenaphthylene	2.355	2.183	2.225	2.585	2.243	2.203		1.993	2.333	2.265	7.49
14) Acenaphthene	1.777	1.681	1.594	2.043	1.698	1.624		1.517	1.598	1.691	9.60
15) Fluorene	1.377	1.277	1.184	1.569	1.326	1.191		1.139	1.190	1.282	11.03
16) 2,6-Dinitrotoluene	0.388	0.582		0.384	0.568			0.418	0.682	0.504	24.67
----- Linear regression ----- Coefficient = 0.9953											
Response Ratio = -0.02627 + 0.68713 *A											
17) 2,4,6-Tribromophenol	0.135	0.172		0.129	0.168			0.146	0.181	0.155	13.83
18) Hexachlorobenzene	0.536	0.461	0.413	0.587	0.499	0.416		0.423	0.420	0.469	13.91
19) Pentachlorophenol	0.155	0.140	0.220	0.282	0.155	0.214		0.151	0.262	0.197	27.88
----- Linear regression ----- Coefficient = 0.9936											
Response Ratio = -0.03525 + 0.25937 *A											
20) Phenanthrene											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

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      2.032 1.826 1.725 2.438 1.942 1.701       1.654 1.757        1.884   13.66
21)  Anthracene
      1.687 1.389 1.590 1.987 1.356 1.562       1.277 1.673        1.565   14.55
22)  2,4-Dinitrotoluene
            0.342 0.679       0.301 0.596       0.391 0.735        0.507   36.65
            ----- Linear regression -----  Coefficient =  0.9983
              Response Ratio = -0.03017 + 0.75147 *A


23) I   Fluoranthene-d10      ----------------ISTD---------------------
24)  Fluoranthene
      1.482 1.176 1.099       1.282 1.141       1.073 1.118        1.196   11.99
25)  Pyrene
      1.137 1.026 1.115 1.371 1.030 1.092       0.974 1.137        1.110   10.88
26)  Terphenyl-d14
      0.432 0.441 0.377 0.536 0.405 0.419       0.420 0.416        0.431   10.79
27)  Benzo[a]anthracene
      0.629 0.531 0.797       0.540 0.709       0.542 0.813        0.652   18.81
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.01678 + 0.82341 *A

28)  Chrysene
      0.888 0.774 0.772       0.742 0.884       0.710 0.881        0.807    9.32
29)  bis(2-Ethylhexyl)phthalate
      0.327 0.247 0.348       0.357 0.290       0.220 0.497        0.327   27.83
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = 0.00237 + 0.20009 *A + 0.23586 *A^2


30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
      0.319 0.258 0.327       0.280 0.306       0.271 0.329        0.298    9.62
32)  Benzo[k]fluoranthene
      0.302 0.207 0.255       0.271 0.281       0.231 0.286        0.262   12.66
33)  Benzo[a]pyrene
            1.506 1.258       1.889 1.394       1.293 1.289        1.438   16.62
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.01149 + 1.27359 *A

34)  Indeno[1,2,3-cd]pyrene
      1.027 0.746 1.097       0.762 1.036       0.778 1.252        0.957   20.56
            ----- Linear regression -----  Coefficient =  0.9961
              Response Ratio = -0.03593 + 1.25236 *A

35)  Dibenz[a,h]anthracene
      0.736 0.555 0.856       0.602 0.796       0.573 0.973        0.727   21.78
            ----- Linear regression -----  Coefficient =  0.9962
              Response Ratio = -0.02925 + 0.97470 *A

36)  Benzo[g,h,i]perylene
      1.308 0.968 1.096       1.019 1.091       0.962 1.160        1.086   11.20
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M1016SIM.M        Mon Jan 24 15:30:58 2011   RPT1
```

7.1.1

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICV1016
Lab FileID: 4M23296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1016\4m23296.D Vial: 11
Acq On : 21 Jan 2011 5:34 pm Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1016,acid Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 08:13:52 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	68	0.00	6.77
4	t	Phenol	0.803	0.921	-14.7	75	0.00	3.57
12	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	9.07
19	t	Pentachlorophenol	5.000	5.009	-0.2	73	0.00	10.40
23	I	Fluoranthene-d10	1.000	1.000	0.0	64	0.00	12.38
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 08:29:16 2011 RPT1

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1017\4m23300.D Vial: 3
Acq On : 24 Jan 2011 10:50 am Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1017 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.02	6.79
5	t	bis(2-Chloroethyl)ether	0.818	0.702	14.2	75	0.00	3.62
7	t	Naphthalene	1.781	1.785	-0.2	86	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.321	-7.7	91	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.236	14.6	73	0.00	6.67
12	I	Fluorene-d10	1.000	1.000	0.0	70	0.00	9.07
13	t	Acenaphthylene	2.265	2.256	0.4	71	0.00	8.03
14	t	Acenaphthene	1.691	1.774	-4.9	76	0.00	8.33
15	t	Fluorene	1.282	1.315	-2.6	77	0.01	9.12
18	t	Hexachlorobenzene	0.469	0.447	4.7	75	0.02	10.11
20	t	Phenanthrene	1.884	1.826	3.1	75	0.02	10.57
21	t	Anthracene	1.565	1.469	6.1	65	0.00	10.63
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	61	0.01	12.39
24	t	Fluoranthene	1.196	1.223	-2.3	65	0.01	12.41
25	t	Pyrene	1.110	1.137	-2.4	63	0.00	12.70
		----------	True	Calc.	% Drift		----------	
27	t	Benzo[a]anthracene	1.000	0.943	5.7	61	0.02	14.16
		----------	AvgRF	CCRF	% Dev		----------	
28	t	Chrysene	0.807	0.947	-17.3	65	0.00	14.19
		----------	True	Calc.	% Drift		----------	
29		bis(2-Ethylhexyl)phthalat	1.000	1.148	-14.8	66	0.00	14.43
		----------	AvgRF	CCRF	% Dev		----------	
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	61	0.01	15.48
31	t	Benzo[b]fluoranthene	0.298	0.280	6.0	56	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.256	2.3	56	0.01	15.24

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	1.000	0.934	6.6	54	0.00	15.49
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	56	0.01	16.38
35	t	Dibenz[a,h]anthracene	1.000	0.893	10.7	58	0.01	16.41

			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.066	1.8	59	0.01	16.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 15:33:12 2011 RPT1

7.7.3

7

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1040-CC1016
Lab FileID: 4M23773.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1040\4m23773.D Vial: 2
Acq On : 22 Feb 2011 7:56 am Operator: ninap
Sample : cc1016-.5 Inst : MS4M
Misc : op48186a,e4m1040 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Feb 21 12:22:38 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	103	-0.02	6.76
2	S	2-Fluorophenol	0.592	0.568	4.1	101	0.00	2.47
3	S	Phenol-d5	0.736	0.711	3.4	99	0.00	3.55
4	t	Phenol	0.803	0.762	5.1	103	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.719	12.1	99	-0.02	3.60
6	S	Nitrobenzene-d5	0.587	0.548	6.6	95	-0.01	4.60
7	t	Naphthalene	1.781	1.637	8.1	100	-0.01	5.61
8	t	Hexachlorobutadiene	0.298	0.303	-1.7	105	-0.01	5.94
9	t	2-Methylnaphthalene	----------	----------	NA	----------		
10	t	1-Methylnaphthalene	1.362	1.289	5.4	102	-0.02	6.81
11	S	2-Fluorobiphenyl	1.345	1.373	-2.1	109	-0.02	7.30
12	I	Fluorene-d10	1.000	1.000	0.0	100	-0.02	9.06
13	t	Acenaphthylene	2.265	2.370	-4.6	119	-0.02	8.02
14	t	Acenaphthene	1.691	1.607	5.0	106	-0.02	8.31
15	t	Fluorene	1.282	1.189	7.3	104	-0.02	9.09
		----------	True	Calc.	% Drift	----------		
16	t	2,6-Dinitrotoluene	0.500	0.547	-9.4	129	-0.02	8.13
		----------	AvgRF	CCRF	% Dev	----------		
17	S	2,4,6-Tribromophenol	0.155	0.188	-21.3#	129	-0.02	9.50
18	t	Hexachlorobenzene	0.469	0.462	1.5	109	-0.02	10.08
		----------	True	Calc.	% Drift	----------		
19	t	Pentachlorophenol	2.500	2.968	-18.7	167	-0.02	10.39
		----------	AvgRF	CCRF	% Dev	----------		
20	t	Phenanthrene	1.884	1.702	9.7	103	-0.02	10.54
21	t	Anthracene	1.565	1.596	-2.0	125	-0.01	10.62
		----------	True	Calc.	% Drift	----------		
22	t	2,4-Dinitrotoluene	0.500	0.475	5.0	121	0.00	8.71
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	107	-0.02	12.36
24	t	Fluoranthene	1.196	1.091	8.8	109	-0.02	12.38
25	t	Pyrene	1.110	1.066	4.0	117	-0.02	12.67
26	S	Terphenyl-d14	0.431	0.403	6.5	103	-0.02	13.01
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1040-CC1016
Lab FileID: 4M23773.D

			AvgRF	CCRF	% Dev		% Drift	
27	t	Benzo[a]anthracene	0.500	0.591	-18.2	166	-0.02	14.13
			AvgRF	CCRF	% Dev			
28	t	Chrysene	0.807	0.802	0.6	121	-0.04	14.18
			True	Calc.	% Drift			
29		bis(2-Ethylhexyl)phthalat		NA				
			AvgRF	CCRF	% Dev			
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	120	0.00	15.45
31	t	Benzo[b]fluoranthene	0.298	0.301	-1.0	133	0.00	15.21
32	t	Benzo[k]fluoranthene	0.262	0.215	17.9	112	-0.02	15.21
			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	0.500	0.512	-2.4	129	-0.01	15.47
34	t	Indeno[1,2,3-cd]pyrene	0.500	0.508	-1.6	152	-0.02	16.35
35	t	Dibenz[a,h]anthracene	0.500	0.495	1.0	153	-0.02	16.38
			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.062	2.2	132	-0.02	16.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23294.D M4M1016SIM.M Tue Feb 22 09:50:16 2011 RPT1

7.7.4

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICC2339
Lab FileID: P54217.D

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Initial Calibration

Calibration Files
100 =P54224.D 80 =P54223.D 50 =P54217.D 25 =P54222.D
10 =P54221.D 5 =P54220.D 2 =P54219.D 1 =P54218.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
102) 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	0.630	0.821	0.855	0.997	0.858	0.890	0.988	0.863		14.23
104) Phenanthrene-d10a	ISTD									
105) Atrazine	0.120	0.125	0.134	0.139	0.140	0.127	0.123	0.156	0.133	8.97
106) Acenaphthene-d10a	ISTD									
107) 1,2,4,5-Tetr	0.527	0.539	0.570	0.615	0.671	0.638	0.695	0.786	0.630	13.80
108) Chrysene-d12a	ISTD									
109) Benzidine	0.362	0.392	0.638	0.627	0.708	0.602	0.488	0.583	0.550	22.45

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP2339.M Thu Dec 30 12:19:21 2010 MSP

7.7.5

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54225A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54225A.D Vial: 10
Acq On : 29 Dec 2010 6:07 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.29- 5.29
103	Benzaldehyde		----------NA----------				
104	Phenanthrene-d10a	1.000	1.000	0.0	89	0.00	11.15-12.15
105	Atrazine		----------NA----------				
106	Acenaphthene-d10a	1.000	1.000	0.0	79	0.00	8.84- 9.84
107	1,2,4,5-Tetrachloroben	0.630	0.687	-9.0	96	0.00	7.50- 8.50
108	Chrysene-d12a	1.000	1.000	0.0	76	0.00	14.35-15.35
109	Benzidine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54217.D MP2339.M Thu Dec 30 12:47:20 2010 MSP

7.7.6

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54226A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54226A.D Vial: 11
Acq On : 29 Dec 2010 6:36 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	4.29- 5.29
103	Benzaldehyde	0.863	1.016	-17.7	128	0.00	3.76- 4.76
104	Phenanthrene-d10a	1.000	1.000	0.0	87	0.00	11.15-12.15
105	Atrazine	0.133	0.147	-10.5	95	0.00	10.85-11.85
106	Acenaphthene-d10a	1.000	1.000	0.0	98	0.00	8.84- 9.84
107	1,2,4,5-Tetrachlorobenzen		----------NA----------				
108	Chrysene-d12a	1.000	1.000	0.0	106	0.00	14.35-15.35
109	Benzidine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54217.D MP2339.M Thu Dec 30 12:48:58 2010 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54229A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54229A.D Vial: 14
Acq On : 29 Dec 2010 8:01 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,benzidine Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2338.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 12:52:11 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	146	0.00	4.29- 5.29
103	Benzaldehyde		----------NA----------				
104	Phenanthrene-d10a	1.000	1.000	0.0	143	0.00	11.15-12.15
105	Atrazine		----------NA----------				
106	Acenaphthene-d10a	1.000	1.000	0.0	135	0.00	8.84- 9.84
107	1,2,4,5-Tetrachlorobenzen		----------NA----------				
108	Chrysene-d12a	1.000	1.000	0.0	121	0.00	14.35-15.35
109	Benzidine	0.550	1.001	-82.0#	190	0.04	12.93-13.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54208.D MP2338.M Thu Dec 30 13:01:43 2010 MSP

7.7.8

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Calibration Files
100 =P54697.D 80 =P54696.D 50 =P54690.D 25 =P54695.D
10 =P54694.D 5 =P54693.D 2 =P54692.D 1 =P54691.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.970	0.991	1.052	1.005	0.940	0.893	0.907	1.019	0.972	5.71
3) Pyridine	1.923	2.001	2.202	2.186	2.168	2.115	2.210	2.556	2.170	8.61
4) N-Nitrosodim	1.424	1.475	1.585	1.535	1.425	1.354	1.403	1.570	1.471	5.71
5) 2-Fluorophen	1.686	1.734	1.810	1.768	1.676	1.585	1.545	1.721	1.691	5.28
6) Indene	1.932	1.972	2.040	2.076	2.023	2.001	2.179	2.399	2.078	7.19
7) Cumene	3.446	3.603	3.789	3.916	3.834	3.730	3.780	4.319	3.802	6.69
8) Phenol-d5	2.107	2.176	2.262	2.218	2.144	2.022	2.015	2.060	2.126	4.27
9) Phenol	2.070	2.158	2.353	2.444	2.434	2.325	2.386	2.428	2.325	5.95
10) Aniline	1.940	1.962	2.460	2.594	2.557	2.541	2.697		2.393	12.96
11) bis(2-Chloro	1.436	1.495	1.568	1.594	1.640	1.634	1.818	2.089	1.659	12.48
12) 2-Chlorophen	1.305	1.354	1.441	1.513	1.575	1.567	1.649	1.712	1.514	9.27
13) Decane	1.723	1.797	1.982	2.087	2.185	2.228	2.434		2.062	12.09
14) 1,3-Dichloro	1.570	1.617	1.690	1.706	1.791	1.783	1.927	2.220	1.788	11.56
15) 1,4-Dichloro	1.430	1.475	1.547	1.567	1.544	1.572	1.654	2.016	1.601	11.28
16) Benzyl alcoh	1.056	1.075	1.065	1.052	0.975	0.879	0.853	0.814	0.971	11.03
17) 1,2-Dichloro	1.286	1.334	1.431	1.531	1.571	1.586	1.708	1.945	1.549	13.67
18) Acetophenone	1.960	2.025	2.128	2.086	2.025	2.025	1.988	2.175	2.052	3.52
19) 2-Methylphen	1.144	1.182	1.259	1.289	1.265	1.244	1.314	1.344	1.255	5.26
20) 2,2'-oxybis(	0.430	0.444	0.471	0.480	0.502	0.500	0.551	0.661	0.505	14.54
21) 3&4-Methylph	1.273	1.315	1.360	1.385	1.333	1.295	1.341	1.390	1.336	3.10
22) n-Nitroso-di	1.023	1.050	1.121	1.135	1.124	1.091	1.161	1.307	1.127	7.62
23) Hexachloroet	0.521	0.548	0.571	0.585	0.595	0.586	0.650	0.748	0.601	11.71
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.490	0.496	0.501	0.509	0.498	0.484	0.491	0.563	0.504	4.95
26) Nitrobenzene	0.189	0.193	0.203	0.209	0.214	0.205	0.227	0.257	0.212	10.17
27) Quinoline	0.710	0.726	0.736	0.741	0.721	0.699	0.722	0.848	0.738	6.30
28) Isophorone	0.911	0.929	0.948	0.951	0.922	0.875	0.940	1.056	0.942	5.55
29) 2-Nitropheno	0.231	0.236	0.243	0.245	0.227	0.224	0.214	0.261	0.235	6.22
30) 2,4-Dimethyl	0.378	0.386	0.408	0.419	0.396	0.399	0.430	0.490	0.413	8.55
31) Benzoic Acid	0.325	0.322	0.251	0.263	0.187	0.114			0.244	33.42
----- Linear regression ----- Coefficient = 0.9912										
Response Ratio = -0.04716 + 0.33766 *A										
32) bis(2-Chloro	0.496	0.508	0.513	0.521	0.525	0.515	0.546	0.604	0.528	6.39
33) 2,4-Dichloro	0.311	0.320	0.336	0.342	0.348	0.331	0.349	0.381	0.340	6.24
34) 2,6-Dichloro	0.292	0.296	0.310	0.323	0.317	0.311	0.321	0.346	0.314	5.37
35) 1,3,5-Trichl	0.342	0.354	0.377	0.409	0.417	0.425	0.456	0.516	0.412	13.76
36) 1,2,4-Trichl	0.347	0.360	0.375	0.399	0.404	0.408	0.452	0.493	0.405	11.87
37) 1,2,3-Trichl	0.330	0.339	0.346	0.373	0.365	0.362	0.399	0.466	0.372	11.68
38) Naphthalene	1.006	1.023	1.053	1.087	1.071	1.065	1.160	1.308	1.097	8.87
39) 4-Chloroanil	0.466	0.473	0.500	0.521	0.490	0.463	0.496	0.552	0.495	6.07
40) 2,3-Dichloro	0.351	0.362	0.368	0.390	0.395	0.393	0.447	0.484	0.399	11.37
41) Caprolactam	0.248	0.250	0.242	0.236	0.222	0.210	0.209	0.263	0.235	8.35
42) Hexachlorobu	0.183	0.192	0.199	0.211	0.214	0.220	0.231	0.263	0.214	11.76

7.7.9

7

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

43)	4-Chloro-3-m	0.391	0.400	0.408	0.407	0.389	0.349	0.376	0.378	0.387	5.07
44)	2-Methylnaph	0.784	0.806	0.835	0.886	0.892	0.866	0.914	1.022	0.876	8.45
45)	1-Methylnaph	0.745	0.764	0.785	0.830	0.834	0.846	0.917	1.029	0.844	10.95
46)	Dimethylnaph	0.651	0.669	0.680	0.721	0.714	0.721	0.744	0.845	0.718	8.34
47)	I Acenaphthene-d10	----------ISTD----------									
48)	Hexachlorocy	0.321	0.332	0.341	0.337	0.311	0.276	0.251	0.249	0.302	12.56
49)	2,4,6-Trichl	0.371	0.388	0.407	0.415	0.416	0.394	0.410	0.454	0.407	6.01
50)	2,4,5-Trichl	0.386	0.401	0.406	0.426	0.425	0.399	0.411	0.501	0.419	8.48
51)	2-Fluorobiph	1.186	1.236	1.289	1.360	1.433	1.483	1.627		1.374	11.18
52)	2-Chloronaph	1.073	1.115	1.147	1.212	1.285	1.315	1.494		1.234	11.70
53)	Biphenyl	1.397	1.434	1.489	1.539	1.633	1.643	1.845	2.105	1.636	14.48
54)	2-Nitroanili	0.454	0.470	0.481	0.483	0.479	0.449	0.458	0.479	0.469	2.88
55)	Dimethylphth	1.476	1.520	1.569	1.588	1.615	1.538	1.731	1.949	1.623	9.36
56)	Acenaphthyle	1.752	1.827	1.930	2.000	2.067	2.030	2.210	2.461	2.034	10.97
57)	2,6-Dinitrot	0.191	0.195	0.203	0.206	0.211	0.203	0.216	0.256	0.210	9.66
58)	3-Nitroanili	0.368	0.378	0.384	0.377	0.353	0.319	0.299	0.351	0.353	8.56
59)	Acenaphthene	1.073	1.103	1.137	1.157	1.147	1.116	1.236	1.402	1.171	8.95
60)	2,4-Dinitrop	0.182	0.184	0.168	0.136	0.098	0.065	0.042		0.125	46.03
	----- Linear regression ----- Coefficient = 0.9976										
	Response Ratio = -0.03895 + 0.18933 *A										
61)	4-Nitropheno	0.220	0.228	0.227	0.217	0.190	0.129	0.121		0.190	24.34
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.00683 + 0.22686 *A										
62)	Dibenzofuran	1.602	1.655	1.732	1.784	1.827	1.785	1.946	2.275	1.826	11.48
63)	2,4-Dinitrot	0.421	0.438	0.448	0.443	0.438	0.396	0.376	0.375	0.417	7.24
64)	2,3,4,6-Tetr	0.363	0.369	0.374	0.371	0.358	0.316	0.307	0.328	0.348	7.74
65)	Diethylphtha	1.469	1.518	1.570	1.578	1.572	1.515	1.587	1.797	1.576	6.23
66)	Fluorene	1.217	1.260	1.322	1.403	1.476	1.426	1.567	1.747	1.427	12.07
67)	4-Chlorophen	0.556	0.575	0.619	0.663	0.719	0.727	0.815		0.668	13.83
68)	4-Nitroanili	0.357	0.362	0.365	0.361	0.352	0.323	0.321	0.358	0.350	5.02
69)	I Phenanthrene-d10	----------ISTD----------									
70)	4,6-Dinitro-	0.169	0.170	0.170	0.162	0.138	0.106	0.082	0.086	0.136	28.42
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00543 + 0.17221 *A										
71)	n-Nitrosodip	0.570	0.591	0.610	0.638	0.662	0.649	0.676	0.763	0.645	9.31
72)	1,2-Diphenyl	0.894	0.923	0.973	0.992	1.033	1.010	1.098	1.193	1.014	9.43
73)	2,4,6-Tribro	0.106	0.112	0.113	0.117	0.111	0.105	0.105	0.111	0.110	3.98
74)	4-Bromopheny	0.252	0.261	0.269	0.277	0.272	0.251	0.280	0.293	0.269	5.36
75)	Hexachlorobe	0.254	0.267	0.279	0.294	0.300	0.303	0.321	0.364	0.298	11.46
76)	Pentachlorop	0.160	0.167	0.174	0.172	0.155	0.131	0.112	0.107	0.147	18.20
	----- Linear regression ----- Coefficient = 0.9982										
	Response Ratio = 0.00007 + 0.16436 *A										
77)	Phenanthrene	1.004	1.032	1.068	1.080	1.083	1.077	1.177	1.331	1.106	9.36
78)	Anthracene	1.026	1.060	1.114	1.152	1.171	1.137	1.228	1.328	1.152	8.23
79)	Carbazole	1.068	1.107	1.164	1.186	1.189	1.123	1.183	1.289	1.164	5.73
80)	Di-n-butylph	1.565	1.606	1.690	1.677	1.633	1.463	1.475	1.596	1.588	5.31
81)	Fluoranthene	1.365	1.419	1.475	1.528	1.522	1.421	1.499	1.616	1.481	5.32
82)	Octadecane	0.608	0.630	0.674	0.689	0.681	0.636	0.655	0.694	0.658	4.74
83)	I Chrysene-d12	----------ISTD----------									
84)	Pyrene	1.359	1.402	1.375	1.387	1.504	1.455	1.598	1.775	1.482	9.62
85)	Butyl steara	0.469	0.482	0.484	0.452	0.486	0.452	0.604		0.490	10.64
86)	Terphenyl-d1	0.925	0.937	0.923	0.916	0.944	0.902	0.960	1.054	0.945	5.04
87)	Butylbenzylp	0.786	0.789	0.784	0.733	0.706	0.622	0.642	0.698	0.720	9.04

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

88)	Benzo[a]anth	1.177	1.195	1.222	1.230	1.274	1.239	1.376	1.585	1.287	10.49
89)	3,3'-Dichlor	0.540	0.548	0.527	0.502	0.485	0.429	0.429	0.544	0.500	9.83
90)	Chrysene	1.075	1.079	1.058	1.053	1.067	1.038	1.169	1.304	1.106	8.10
91)	bis(2-Ethylh	0.815	0.828	0.822	0.775	0.752	0.674	0.712	0.804	0.773	7.27
92)	I Perylene-d12	----------ISTD----------									
93)	Di-n-octylph	1.773	1.816	1.845	1.725	1.576	1.375	1.339	1.360	1.601	13.55
94)	Benzo[b]fluo	1.410	1.547	1.471	1.468	1.576	1.331	1.355	1.472	1.454	5.89
95)	Benzo[k]fluo	0.977	0.916	1.061	1.193	1.208	1.341	1.477	1.701	1.234	21.40

----- Linear regression ----- Coefficient = 0.9942
Response Ratio = 0.06376 + 0.94090 *A

96)	Benzo[a]pyre	1.232	1.267	1.311	1.331	1.280	1.203	1.287	1.379	1.286	4.31
97)	Indeno[1,2,3	1.378	1.421	1.435	1.474	1.484	1.382	1.434	1.574	1.448	4.38
98)	Dibenz(a,h)a	1.154	1.195	1.169	1.171	1.078	0.996	0.985	1.136	1.111	7.36
99)	Dibenz[a,h]a	1.090	1.130	1.160	1.192	1.212	1.080	1.173	1.262	1.162	5.30
100)	7,12-Dimethy	0.569	0.579	0.604	0.623	0.590	0.559	0.588	0.608	0.590	3.58
101)	Benzo[g,h,i]	1.210	1.252	1.254	1.276	1.264	1.187	1.228	1.285	1.244	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP2364.M Fri Feb 04 06:58:04 2011 MSP

7.7.9

SII-SSA-0014-005333

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54698.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54698.D Vial: 10
Acq On : 1 Feb 2011 3:17 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	127	0.00	4.35- 5.35
3	t	Pyridine	2.170	1.746	19.5	100	0.00	1.88- 2.88
4	t	N-Nitrosodimethylamine	1.471	1.185	19.4	95	0.00	1.86- 2.86
11	t	bis(2-Chloroethyl)ethe	1.659	1.725	-4.0	139	0.00	4.05- 5.05
14	t	1,3-Dichlorobenzene	1.788	1.794	-0.3	134	0.00	4.31- 5.31
15	t	1,4-Dichlorobenzene	1.601	1.530	4.4	125	0.00	4.37- 5.37
16	t	Benzyl alcohol	0.971	0.984	-1.3	117	0.00	4.56- 5.56
17	t	1,2-Dichlorobenzene	1.549	1.497	3.4	132	0.00	4.62- 5.62
20	t	2,2'-oxybis(1-Chloropr	0.505	0.527	-4.4	142	0.00	4.76- 5.76
22	t	n-Nitroso-di-n-propyla	1.127	1.259	-11.7	142	-0.01	4.95- 5.95
23	t	Hexachloroethane	0.601	0.591	1.7	131	0.00	5.04- 6.04
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	6.15- 7.15
26	t	Nitrobenzene	0.212	0.213	-0.5	129	0.00	5.16- 6.16
28	t	Isophorone	0.942	0.946	-0.4	123	0.00	5.48- 6.48
32	t	bis(2-Chloroethoxy)met	0.528	0.574	-8.7	138	0.00	5.83- 6.83
36	t	1,2,4-Trichlorobenzene	0.405	0.402	0.7	132	0.00	6.09- 7.09
38	t	Naphthalene	1.097	1.059	3.5	124	0.00	6.18- 7.18
42	t	Hexachlorobutadiene	0.214	0.231	-7.9	143	0.00	6.47- 7.47
44	t	2-Methylnaphthalene	0.876	0.783	10.6	116	0.00	7.24- 8.24
47	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00	8.91- 9.91
48	t	Hexachlorocyclopentadi	0.302	0.440	-45.7#	144	0.00	7.61- 8.61
52	t	2-Chloronaphthalene	1.234	1.382	-12.0	134	0.00	8.00- 9.00
54	t	2-Nitroaniline	0.469	0.515	-9.8	119	0.00	8.23- 9.23
55	t	Dimethylphthalate	1.623	1.577	2.8	111	0.00	8.59- 9.59
56	t	Acenaphthylene	2.034	1.892	7.0	109	0.00	8.66- 9.66
57	t	2,6-Dinitrotoluene	0.210	0.197	6.2	108	0.00	8.68- 9.68
58	t	3-Nitroaniline	0.353	0.329	6.8	95	0.00	8.90- 9.90
59	t	Acenaphthene	1.171	1.166	0.4	114	0.00	8.96- 9.96
62	t	Dibenzofuran	1.826	1.795	1.7	115	0.00	9.22-10.22
63	t	2,4-Dinitrotoluene	0.417	0.407	2.4	101	0.00	9.30-10.30
65	t	Diethylphthalate	1.576	1.551	1.6	110	0.00	9.73-10.73
66	t	Fluorene	1.427	1.395	2.2	117	0.00	9.77-10.77
67	t	4-Chlorophenyl-phenyle	0.668	0.595	10.9	107	0.00	9.79-10.79
68	t	4-Nitroaniline	0.350	0.337	3.7	102	0.00	9.89-10.89
69	I	Phenanthrene-d10	1.000	1.000	0.0	121	0.00	11.22-12.22
71	t	n-Nitrosodiphenylamine	0.645	0.552	14.4	110	0.00	9.99-10.99
72	t	1,2-Diphenylhydrazine	1.014	0.908	10.5	113	0.00	10.04-11.04

7.7.10

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Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54698.D

74	t	4-Bromophenyl-phenylet	0.269	0.242	10.0	109	0.00	10.56-11.56
75	t	Hexachlorobenzene	0.298	0.246	17.4	107	0.00	10.78-11.78
77	t	Phenanthrene	1.106	1.037	6.2	118	0.00	11.25-12.25
78	t	Anthracene	1.152	1.020	11.5	111	0.00	11.31-12.31
79	t	Carbazole	1.164	1.038	10.8	108	0.00	11.56-12.56
80	t	Di-n-butylphthalate	1.588	1.421	10.5	102	0.00	12.13-13.13
81	t	Fluoranthene	1.481	1.269	14.3	104	0.00	12.81-13.81
83	I	Chrysene-d12	1.000	1.000	0.0	101	0.00	14.41-15.41
84	t	Pyrene	1.482	1.511	-2.0	111	0.00	13.07-14.07
87	t	Butylbenzylphthalate	0.720	0.780	-8.3	100	0.00	13.85-14.85
88	t	Benzo[a]anthracene	1.287	1.257	2.3	104	0.00	14.39-15.39
89	t	3,3'-Dichlorobenzidine	0.500	0.426	14.8	81	0.00	14.38-15.38
90	t	Chrysene	1.106	1.082	2.2	103	0.00	14.43-15.43
91	t	bis(2-Ethylhexyl)phtha	0.773	0.783	-1.3	96	0.00	14.48-15.48
92	I	Perylene-d12	1.000	1.000	0.0	95	0.00	15.90-16.90
93	t	Di-n-octylphthalate	1.601	1.814	-13.3	93	0.00	15.06-16.06
94	t	Benzo[b]fluoranthene	1.454	1.566	-7.7	101	0.00	15.49-16.49
			True	Calc.	% Drift			
95	t	Benzo[k]fluoranthene	50.000	57.569	-15.1	101	0.00	15.51-16.51
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.286	1.331	-3.5	96	0.00	15.84-16.84
97	t	Indeno[1,2,3-cd]pyrene	1.448	1.512	-4.4	100	0.00	17.29-18.29
99	t	Dibenz[a,h]anthracene	1.162	1.237	-6.5	101	0.00	17.30-18.30
101	t	Benzo[g,h,i]perylene	1.244	1.304	-4.8	99	0.00	17.69-18.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 01 16:23:44 2011 MSP

7.7.10

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54700.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54700.D Vial: 12
Acq On : 1 Feb 2011 3:46 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,acid Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	138	0.00	4.35- 5.35
9	t	Phenol	2.325	2.130	8.4	125	0.00	3.96- 4.96
12	t	2-Chlorophenol	1.514	1.493	1.4	143	0.00	4.13- 5.13
19	t	2-Methylphenol	1.255	1.318	-5.0	145	0.00	4.74- 5.74
21	t	3&4-Methylphenol	1.336	1.308	2.1	133	0.00	4.93- 5.93
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	6.15- 7.15
29	t	2-Nitrophenol	0.235	0.259	-10.2	131	0.00	5.62- 6.62
30	t	2,4-Dimethylphenol	0.413	0.420	-1.7	126	0.00	5.70- 6.70
			True	Calc.	% Drift			
31		Benzoic Acid	50.000	44.946	10.1	130	0.00	5.89- 6.89
			AvgRF	CCRF	% Dev			
33	t	2,4-Dichlorophenol	0.340	0.315	7.4	115	0.00	5.97- 6.97
34		2,6-Dichlorophenol	0.314	0.319	-1.6	126	-0.01	6.31- 7.31
43	t	4-Chloro-3-methylpheno	0.387	0.384	0.8	116	-0.01	7.08- 8.08
47	I	Acenaphthene-d10	1.000	1.000	0.0	133	0.00	8.91- 9.91
49	t	2,4,6-Trichlorophenol	0.407	0.398	2.2	130	0.00	7.74- 8.74
50	t	2,4,5-Trichlorophenol	0.419	0.377	10.0	124	-0.01	7.80- 8.80
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	89.330	10.7	110	0.00	9.05-10.05
61	t	4-Nitrophenol	50.000	42.707	14.6	110	0.00	9.22-10.22
			AvgRF	CCRF	% Dev			
64		2,3,4,6-Tetrachlorophe	0.348	0.291	16.4	103	0.00	9.50-10.50
69	I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00	11.22-12.22
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylph	50.000	48.623	2.8	115	0.00	9.95-10.95
			AvgRF	CCRF	% Dev			
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	106.888	-6.9	122	0.00	11.06-12.06
			AvgRF	CCRF	% Dev			
83	I	Chrysene-d12	1.000	1.000	0.0	131	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	112	0.00	15.90-16.90

7.7.11

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54700.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 01 16:18:26 2011 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54701.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54701.D Vial: 13
Acq On : 1 Feb 2011 4:15 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,3rd source Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	161	0.00	4.35- 5.35
10	t	Aniline	2.393	2.411	-0.8	158	0.00	3.99- 4.99
24	I	Naphthalene-d8	1.000	1.000	0.0	163	0.00	6.15- 7.15
39	t	4-Chloroaniline	0.495	0.435	12.1	142	0.00	6.31- 7.31
47	I	Acenaphthene-d10	1.000	1.000	0.0	141	0.00	8.91- 9.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	162	0.00	11.22-12.22
83	I	Chrysene-d12	1.000	1.000	0.0	180	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	160	0.00	15.90-16.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Wed Feb 02 12:55:57 2011 MSP

7.7.12
7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2365-ICV2364
Lab FileID: P54723.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2365\P54723.D Vial: 21
Acq On : 2 Feb 2011 1:39 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47915,ep2365,1000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	0.00	4.35- 5.35
2	t	1,4-Dioxane	0.972	1.090	-12.1	124	0.00	1.65- 2.65
6	t	Indene	2.078	2.932	-41.1#	172	0.00	4.72- 5.72
7	t	Cumene	3.802	4.566	-20.1#	144	0.00	3.45- 4.45
13	t	Decane	2.062	2.353	-14.1	142	0.00	4.16- 5.16
18	t	Acetophenone	2.052	2.236	-9.0	126	0.00	4.92- 5.92
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.15- 7.15
27	t	Quinoline	0.738	0.814	-10.3	143	-0.02	6.69- 7.69
40	t	2,3-Dichloroaniline	0.399	0.345	13.5	122	0.00	7.74- 8.74
41	t	Caprolactam	0.235	0.200	14.9	107	-0.03	6.76- 7.76
45	t	1-Methylnaphthalene	0.844	0.775	8.2	128	0.00	7.41- 8.41
46	t	Dimethylnaphthalene	0.718	0.656	8.6	125	0.00	8.24- 9.24
47	I	Acenaphthene-d10	1.000	1.000	0.0	121	0.00	8.91- 9.91
53	t	Biphenyl	1.636	1.607	1.8	130	0.00	8.00- 9.00
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	11.22-12.22
			True	Calc.	% Drift			
82	t	Octadecane	0.658	0.818	-24.3#	124	0.00	11.14-12.14
83	I	Chrysene-d12	1.000	1.000	0.0	126	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	102	0.00	15.90-16.90
100	t	7,12-Dimethylbenz(a)an	0.590	0.702	-19.0	119	0.00	15.50-16.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Wed Feb 02 14:19:37 2011 MSP

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2378\P54979.D Vial: 2
Acq On : 22 Feb 2011 7:40 am Operator: ninap
Sample : cc2364-50 Inst : MSP
Misc : op48151,ep2378 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	63	-0.07	4.28- 5.28
2	t	1,4-Dioxane	0.972	0.886	8.8	53	-0.05	1.59- 2.59
3	t	Pyridine	2.170	1.956	9.9	56	-0.05	1.83- 2.83
4	t	N-Nitrosodimethylamine	1.471	1.397	5.0	56	-0.05	1.81- 2.81
5	S	2-Fluorophenol	1.691	1.634	3.4	57	-0.05	2.88- 3.88
6	t	Indene	2.078	1.997	3.9	62	-0.07	4.66- 5.66
7	t	Cumene	3.802	3.872	-1.8	65	-0.06	3.39- 4.39
8	S	Phenol-d5	2.126	2.101	1.2	59	-0.06	3.89- 4.89
9	t	Phenol	2.325	2.249	3.3	60	-0.06	3.91- 4.91
10	t	Aniline	2.393	2.036	14.9	52	-0.07	3.92- 4.92
11	t	bis(2-Chloroethyl)ethe	1.659	1.431	13.7	58	-0.07	3.98- 4.98
12	t	2-Chlorophenol	1.514	1.424	5.9	62	-0.06	4.07- 5.07
13	t	Decane	2.062	2.187	-6.1	70	-0.06	4.10- 5.10
14	t	1,3-Dichlorobenzene	1.788	1.678	6.2	63	-0.07	4.24- 5.24
15	t	1,4-Dichlorobenzene	1.601	1.551	3.1	63	-0.07	4.30- 5.30
16	t	Benzyl alcohol	0.971	1.041	-7.2	62	-0.07	4.49- 5.49
17	t	1,2-Dichlorobenzene	1.549	1.469	5.2	65	-0.08	4.55- 5.55
18	t	Acetophenone	2.052	2.185	-6.5	65	-0.07	4.85- 5.85
19	t	2-Methylphenol	1.255	1.200	4.4	60	-0.06	4.68- 5.68
20	t	2,2'-oxybis(1-Chloropr	0.505	0.465	7.9	62	-0.07	4.70- 5.70
21	t	3&4-Methylphenol	1.336	1.321	1.1	61	-0.06	4.88- 5.88
22	t	n-Nitroso-di-n-propyla	1.127	1.238	-9.8	70	-0.08	4.89- 5.89
23	t	Hexachloroethane	0.601	0.621	-3.3	69	-0.07	4.97- 5.97
24	I	Naphthalene-d8	1.000	1.000	0.0	63	-0.08	6.08- 7.08
25	S	Nitrobenzene-d5	0.504	0.550	-9.1	70	-0.07	5.07- 6.07
26	t	Nitrobenzene	0.212	0.191	9.9	60	-0.08	5.09- 6.09
27	t	Quinoline	0.738	0.743	-0.7	64	-0.08	6.63- 7.63
28	t	Isophorone	0.942	1.008	-7.0	68	-0.07	5.42- 6.42
29	t	2-Nitrophenol	0.235	0.245	-4.3	64	-0.08	5.55- 6.55
30	t	2,4-Dimethylphenol	0.413	0.425	-2.9	66	-0.07	5.63- 6.63
			True	Calc.	% Drift			
31		Benzoic Acid	50.000	55.234	-10.5	85	-0.04	5.85- 6.85
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)met	0.528	0.500	5.3	62	-0.07	5.76- 6.76
33	t	2,4-Dichlorophenol	0.340	0.342	-0.6	65	-0.07	5.91- 6.91
34		2,6-Dichlorophenol	0.314	0.329	-4.8	67	-0.08	6.25- 7.25
35	t	1,3,5-Trichlorobenzene	0.412	0.399	3.2	67	-0.08	5.56- 6.56
36	t	1,2,4-Trichlorobenzene	0.405	0.398	1.7	67	-0.08	6.02- 7.02
37	t	1,2,3-Trichlorobenzene	0.372	0.378	-1.6	69	-0.08	6.38- 7.38

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

38	t	Naphthalene	1.097	1.088	0.8	66	-0.08	6.10- 7.10
39	t	4-Chloroaniline	0.495	0.491	0.8	62	-0.07	6.24- 7.24
40	t	2,3-Dichloroaniline	0.399	0.405	-1.5	70	-0.08	7.67- 8.67
41	t	Caprolactam	0.235	0.265	-12.8	69	-0.07	6.72- 7.72
42	t	Hexachlorobutadiene	0.214	0.248	-15.9	79	-0.08	6.39- 7.39
43	t	4-Chloro-3-methylpheno	0.387	0.451	-16.5	70	-0.06	7.03- 8.03
44	t	2-Methylnaphthalene	0.876	0.867	1.0	66	-0.08	7.17- 8.17
45	t	1-Methylnaphthalene	0.844	0.815	3.4	66	-0.08	7.33- 8.33
46	t	Dimethylnaphthalene	0.718	0.758	-5.6	71	-0.08	8.16- 9.16
47	I	Acenaphthene-d10	1.000	1.000	0.0	70	-0.08	8.83- 9.83
48	t	Hexachlorocyclopentadi	0.302	0.325	-7.6	67	-0.08	7.53- 8.53
49	t	2,4,6-Trichlorophenol	0.407	0.411	-1.0	71	-0.08	7.67- 8.67
50	t	2,4,5-Trichlorophenol	0.419	0.408	2.6	71	-0.06	7.75- 8.75
51	S	2-Fluorobiphenyl	1.374	1.268	7.7	69	-0.08	7.79- 8.79
52	t	2-Chloronaphthalene	1.234	1.166	5.5	71	-0.07	7.93- 8.93
53	t	Biphenyl	1.636	1.514	7.5	71	-0.08	7.92- 8.92
54	t	2-Nitroaniline	0.469	0.555	-18.3	81	-0.07	8.16- 9.16
55	t	Dimethylphthalate	1.623	1.607	1.0	72	-0.08	8.51- 9.51
56	t	Acenaphthylene	2.034	1.873	7.9	68	-0.08	8.59- 9.59
57	t	2,6-Dinitrotoluene	0.210	0.252	-20.0#	87	-0.08	8.61- 9.61
58	t	3-Nitroaniline	0.353	0.355	-0.6	65	-0.08	8.82- 9.82
59	t	Acenaphthene	1.171	1.131	3.4	70	-0.08	8.88- 9.88
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	93.248	6.8	68	-0.06	8.99- 9.99
61	t	4-Nitrophenol	50.000	59.922	-19.8	82	-0.05	9.17-10.17
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.826	1.732	5.1	70	-0.07	9.14-10.14
63	t	2,4-Dinitrotoluene	0.417	0.428	-2.6	67	-0.07	9.23-10.23
64		2,3,4,6-Tetrachlorophe	0.348	0.392	-12.6	74	-0.07	9.43-10.43
65	t	Diethylphthalate	1.576	1.657	-5.1	74	-0.08	9.65-10.65
66	t	Fluorene	1.427	1.323	7.3	70	-0.08	9.69-10.69
67	t	4-Chlorophenyl-phenyle	0.668	0.630	5.7	71	-0.08	9.71-10.71
68	t	4-Nitroaniline	0.350	0.326	6.9	63	-0.08	9.82-10.82
69	I	Phenanthrene-d10	1.000	1.000	0.0	70	-0.08	11.15-12.15
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylph	50.000	49.855	0.3	69	-0.06	9.89-10.89
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.645	0.607	5.9	70	-0.08	9.92-10.92
72	t	1,2-Diphenylhydrazine	1.014	1.044	-3.0	75	-0.08	9.96-10.96
73	S	2,4,6-Tribromophenol	0.110	0.139	-26.4#	86	-0.08	10.11-11.11
74	t	4-Bromophenyl-phenylet	0.269	0.294	-9.3	77	-0.08	10.48-11.48
75	t	Hexachlorobenzene	0.298	0.310	-4.0	78	-0.07	10.70-11.70
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	118.284	-18.3	78	-0.07	10.99-11.99
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.106	1.066	3.6	70	-0.08	11.18-12.18
78	t	Anthracene	1.152	1.115	3.2	70	-0.08	11.24-12.24
79	t	Carbazole	1.164	1.137	2.3	68	-0.06	11.50-12.50
80	t	Di-n-butylphthalate	1.588	1.712	-7.8	71	-0.06	12.07-13.07
81	t	Fluoranthene	1.481	1.530	-3.3	73	-0.06	12.74-13.74
82	t	Octadecane	0.658	0.700	-6.4	73	-0.07	11.07-12.07

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

83	I	Chrysene-d12	1.000	1.000	0.0	78	-0.06	14.35-15.35
84	t	Pyrene	1.482	1.371	7.5	77	-0.06	13.01-14.01
85		Butyl stearate	0.490	0.434	11.4	70	-0.06	13.82-14.82
86	S	Terphenyl-d14	0.945	0.919	2.8	77	-0.06	13.21-14.21
87	t	Butylbenzylphthalate	0.720	0.766	-6.4	76	-0.06	13.79-14.79
88	t	Benzo[a]anthracene	1.287	1.196	7.1	76	-0.06	14.33-15.33
89	t	3,3'-Dichlorobenzidine	0.500	0.539	-7.8	79	-0.06	14.32-15.32
90	t	Chrysene	1.106	1.034	6.5	76	-0.06	14.38-15.38
91	t	bis(2-Ethylhexyl)phtha	0.773	0.817	-5.7	77	-0.06	14.42-15.42
92	I	Perylene-d12	1.000	1.000	0.0	80	-0.07	15.83-16.83
93	t	Di-n-octylphthalate	1.601	1.709	-6.7	74	-0.06	15.00-16.00
94	t	Benzo[b]fluoranthene	1.454	1.470	-1.1	80	-0.06	15.42-16.42
			True	Calc.	% Drift			
95	t	Benzo[k]fluoranthene	50.000	54.994	-10.0	81	-0.06	15.45-16.45
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.286	1.210	5.9	73	-0.07	15.77-16.77
97	t	Indeno[1,2,3-cd]pyrene	1.448	1.463	-1.0	81	-0.10	17.19-18.19
98	t	Dibenz(a,h)acridine	1.111	1.140	-2.6	78	-0.09	16.86-17.86
99	t	Dibenz[a,h]anthracene	1.162	1.219	-4.9	84	-0.10	17.20-18.20
100	t	7,12-Dimethylbenz(a)an	0.590	0.616	-4.4	81	-0.07	15.43-16.43
101	t	Benzo[g,h,i]perylene	1.244	1.277	-2.7	81	-0.10	17.58-18.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 22 08:07:51 2011 MSP

7.7.14

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2339
Lab FileID: P54980.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2378\P54980.D Vial: 3
Acq On : 22 Feb 2011 8:08 am Operator: ninap
Sample : cc2339-25 Inst : MSP
Misc : op48151,ep2378, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	47	-0.07	4.28- 5.28
103	Benzaldehyde	0.863	0.925	-7.2	51	-0.06	3.76- 4.76
104	Phenanthrene-d10a	1.000	1.000	0.0	54	-0.08	11.14-12.14
105	Atrazine	0.133	0.136	-2.3	53	0.04	10.83-11.83
106	Acenaphthene-d10a	1.000	1.000	0.0	51	-0.09	8.83- 9.83
107	1,2,4,5-Tetrachloroben	0.630	0.603	4.3	50	0.05	7.49- 8.49
108	Chrysene-d12a	1.000	1.000	0.0	57	-0.06	14.35-15.35
109	Benzidine	0.550	0.579	-5.3	53	0.03	12.92-13.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54695.D MP2364.M Tue Feb 22 09:55:25 2011 MSP

7.7.15
7

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 22 12:49:12 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	152671	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	540381	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	330608	40.00	ppb	-0.08
69) Phenanthrene-d10	11.64	188	579415	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	652840	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	548258	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	152671	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	579415	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	330608	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	652840	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	261321	38.38	ppb	-0.07
Spiked Amount 50.000			Recovery =	76.76%		
51) 2-Fluorobiphenyl	8.29	172	389860	34.34	ppb	-0.08
Spiked Amount 50.000			Recovery =	68.68%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	347883	22.55	ppb	-0.06
Spiked Amount 50.000			Recovery =	45.10%		

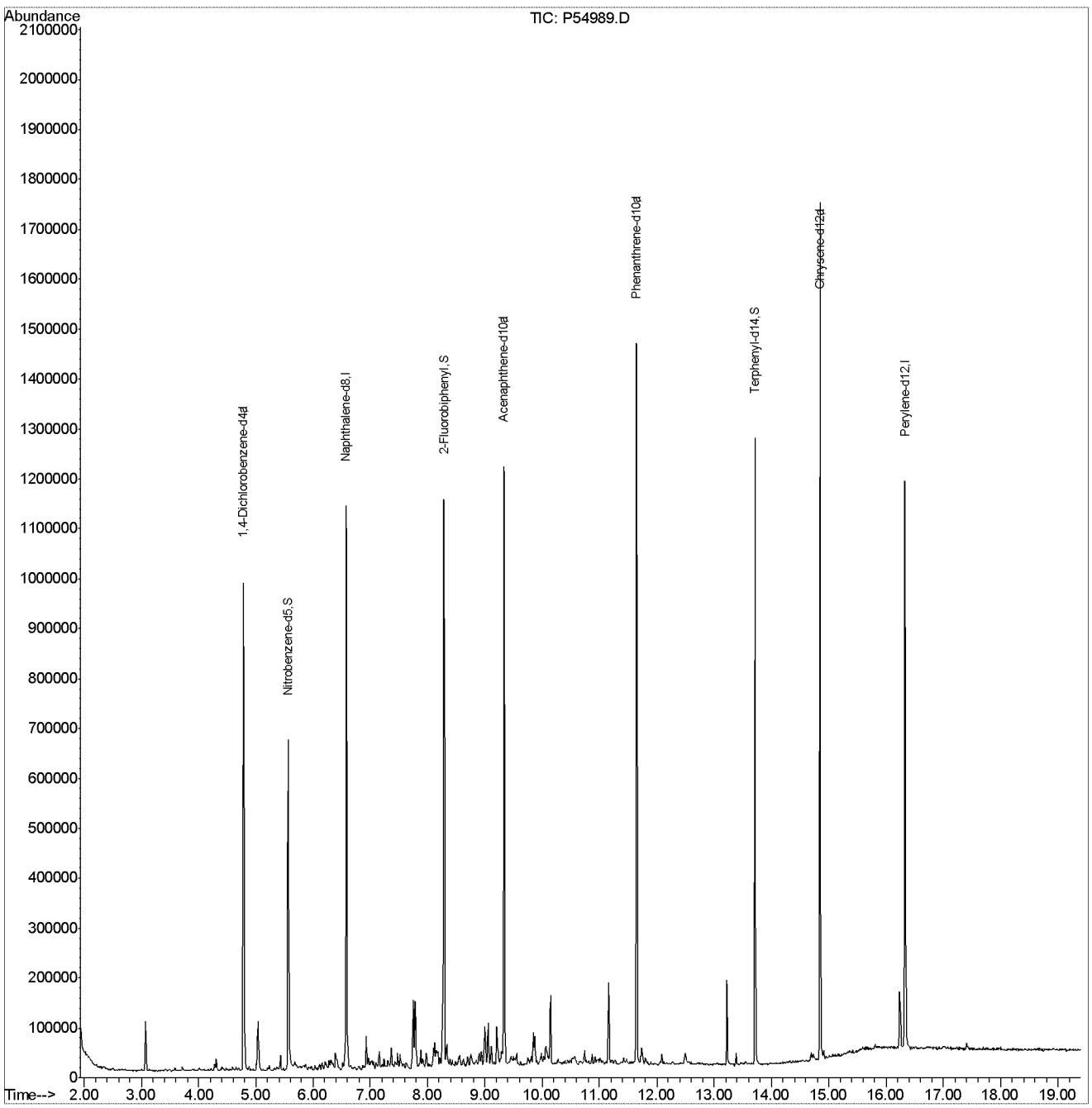
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 22 12:49:12 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.507	101	108	112	rVB10	5720	12481	0.73%	0.075%
2	3.067	209	213	221	rBV	99568	119424	6.98%	0.718%
3	3.580	305	309	314	rVB8	7208	11660	0.68%	0.070%
4	3.719	328	335	340	rVB2	8496	12302	0.72%	0.074%
5	4.275	435	439	442	rBV4	13145	17197	1.01%	0.103%
6	4.307	442	445	457	rVB	23375	30189	1.77%	0.182%
7	4.398	457	462	474	rBV	6927	17323	1.01%	0.104%
8	4.782	524	534	548	rBV	977494	1173315	68.60%	7.057%
9	4.873	548	551	558	rVB9	8416	13096	0.77%	0.079%
10	5.033	572	581	594	rVB2	98468	161599	9.45%	0.972%
11	5.231	614	618	623	rVB5	10421	13940	0.82%	0.084%
12	5.365	639	643	649	rVV8	6707	15075	0.88%	0.091%
13	5.429	649	655	659	rVV	30494	41239	2.41%	0.248%
14	5.562	671	680	695	rBV	661717	851581	49.79%	5.122%
15	5.680	698	702	713	rVB9	12384	25264	1.48%	0.152%
16	5.872	734	738	743	rVB7	9966	13682	0.80%	0.082%
17	6.032	762	768	776	rBV7	10191	16147	0.94%	0.097%
18	6.107	776	782	787	rBV9	11162	16039	0.94%	0.096%
19	6.161	787	792	796	rBV6	13533	19481	1.14%	0.117%
20	6.209	796	801	811	rBV9	13846	30440	1.78%	0.183%
21	6.278	811	814	816	rBV3	14812	15746	0.92%	0.095%
22	6.305	817	819	831	rVV9	19343	48424	2.83%	0.291%
23	6.390	831	835	851	rVB7	32192	76054	4.45%	0.457%
24	6.508	853	857	860	rBV3	14502	18463	1.08%	0.111%
25	6.572	860	869	881	rVB	1126124	1399003	81.80%	8.414%
26	6.722	893	897	904	rVB10	4986	12126	0.71%	0.073%
27	6.791	904	910	919	rBV10	8067	15410	0.90%	0.093%
28	6.925	930	935	940	rBV5	62945	85046	4.97%	0.512%
29	6.967	940	943	946	rVB3	16543	16015	0.94%	0.096%
30	7.021	947	953	956	rVV7	11933	22653	1.32%	0.136%
31	7.047	956	958	963	rVB5	13964	15661	0.92%	0.094%
32	7.096	963	967	971	rBV7	13573	18696	1.09%	0.112%
33	7.149	973	977	984	rVB7	31173	45152	2.64%	0.272%
34	7.240	990	994	1002	rBV6	16851	22812	1.33%	0.137%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.304	1002	1006	1010	rVV4	12668	17049	1.00%	0.103%
36	7.363	1012	1017	1021	rBV3	36788	39112	2.29%	0.235%
37	7.432	1026	1030	1034	rBV7	10913	17572	1.03%	0.106%
38	7.469	1034	1037	1042	rVV3	28087	35043	2.05%	0.211%
39	7.518	1042	1046	1054	rVV6	27871	48637	2.84%	0.293%
40	7.582	1054	1058	1061	rVB6	9362	13097	0.77%	0.079%
41	7.624	1062	1066	1074	rVB10	11958	21137	1.24%	0.127%
42	7.742	1080	1088	1092	rBV4	136926	213200	12.47%	1.282%
43	7.779	1092	1095	1105	rVB2	130940	178959	10.46%	1.076%
44	7.875	1107	1113	1116	rBV3	31633	36085	2.11%	0.217%
45	7.913	1117	1120	1126	rVB3	16193	21900	1.28%	0.132%
46	7.972	1126	1131	1136	rBV4	27921	42335	2.48%	0.255%
47	8.100	1148	1155	1157	rBV2	38368	55467	3.24%	0.334%
48	8.121	1157	1159	1162	rVV	47920	54935	3.21%	0.330%
49	8.148	1162	1164	1173	rVB5	29307	69045	4.04%	0.415%
50	8.217	1174	1177	1180	rVV3	17720	21530	1.26%	0.129%
51	8.281	1180	1189	1195	rVV	1136041	1504781	87.99%	9.050%
52	8.330	1195	1198	1206	rVV3	43888	60564	3.54%	0.364%
53	8.388	1206	1209	1212	rVB3	13137	12943	0.76%	0.078%
54	8.426	1212	1216	1223	rVB10	13372	20242	1.18%	0.122%
55	8.485	1223	1227	1232	rBV7	9803	14066	0.82%	0.085%
56	8.554	1232	1240	1246	rBV7	20523	43931	2.57%	0.264%
57	8.618	1247	1252	1258	rVB9	15193	24327	1.42%	0.146%
58	8.693	1262	1266	1272	rVB7	16981	23760	1.39%	0.143%
59	8.752	1272	1277	1287	rBV5	23227	44330	2.59%	0.267%
60	8.891	1299	1303	1308	rBV8	21701	32568	1.90%	0.196%
61	8.933	1308	1311	1316	rVB3	27481	35341	2.07%	0.213%
62	8.992	1316	1322	1329	rBV2	77211	123611	7.23%	0.743%
63	9.051	1329	1333	1339	rVV	82675	97884	5.72%	0.589%
64	9.110	1339	1344	1350	rVV	36362	45523	2.66%	0.274%
65	9.206	1357	1362	1370	rBV2	74519	126501	7.40%	0.761%
66	9.286	1371	1377	1380	rVV8	24448	45572	2.66%	0.274%
67	9.329	1380	1385	1397	rVB	1197878	1509344	88.25%	9.078%
68	9.451	1403	1408	1411	rBV7	11470	15786	0.92%	0.095%
69	9.548	1422	1426	1430	rVB4	19510	23645	1.38%	0.142%
70	9.751	1459	1464	1468	rBV8	13383	22002	1.29%	0.132%
71	9.804	1469	1474	1477	rVV5	15515	20093	1.17%	0.121%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	9.841	1477	1481	1484	rVV3	60967	85100	4.98%	0.512%
73	9.868	1484	1486	1491	rVB3	53154	57608	3.37%	0.346%
74	9.980	1498	1507	1512	rBV3	19704	44384	2.60%	0.267%
75	10.023	1512	1515	1518	rBV4	10163	12331	0.72%	0.074%
76	10.060	1518	1522	1528	rVV4	28045	47288	2.76%	0.284%
77	10.141	1533	1537	1547	rVB	138524	177422	10.37%	1.067%
78	10.274	1558	1562	1575	rVB	11567	24502	1.43%	0.147%
79	10.525	1606	1609	1611	rBV4	10544	12564	0.73%	0.076%
80	10.734	1643	1648	1651	rBV3	24342	26581	1.55%	0.160%
81	10.862	1668	1672	1677	rVB7	17430	22346	1.31%	0.134%
82	10.915	1678	1682	1686	rBV7	10634	12499	0.73%	0.075%
83	11.150	1721	1726	1733	rBV	163389	191909	11.22%	1.154%
84	11.262	1744	1747	1759	rVB	8907	16170	0.95%	0.097%
85	11.417	1772	1776	1782	rVB8	9093	13958	0.82%	0.084%
86	11.471	1783	1786	1792	rVB7	10757	16385	0.96%	0.099%
87	11.642	1811	1818	1829	rVB2	1440751	1641262	95.97%	9.871%
88	11.738	1829	1836	1843	rVB5	32386	59123	3.46%	0.356%
89	11.797	1843	1847	1854	rBV7	13519	22650	1.32%	0.136%
90	12.053	1890	1895	1897	rBV6	7425	12035	0.70%	0.072%
91	12.080	1897	1900	1906	rVB2	20010	24977	1.46%	0.150%
92	12.491	1971	1977	1985	rBV2	20938	50414	2.95%	0.303%
93	13.218	2108	2113	2124	rBV	171693	197380	11.54%	1.187%
94	13.378	2139	2143	2153	rVB9	22878	27603	1.61%	0.166%
95	13.709	2200	2205	2219	rBV	1254499	1250126	73.10%	7.519%
96	14.692	2386	2389	2393	rBV5	16416	22885	1.34%	0.138%
97	14.847	2411	2418	2427	rBV	1717754	1710258	100.00%	10.286%
98	14.911	2428	2430	2434	rVB2	14172	12946	0.76%	0.078%
99	16.236	2673	2678	2688	rBV	113178	169954	9.94%	1.022%
100	16.327	2688	2695	2713	rVB	1138503	1509282	88.25%	9.078%

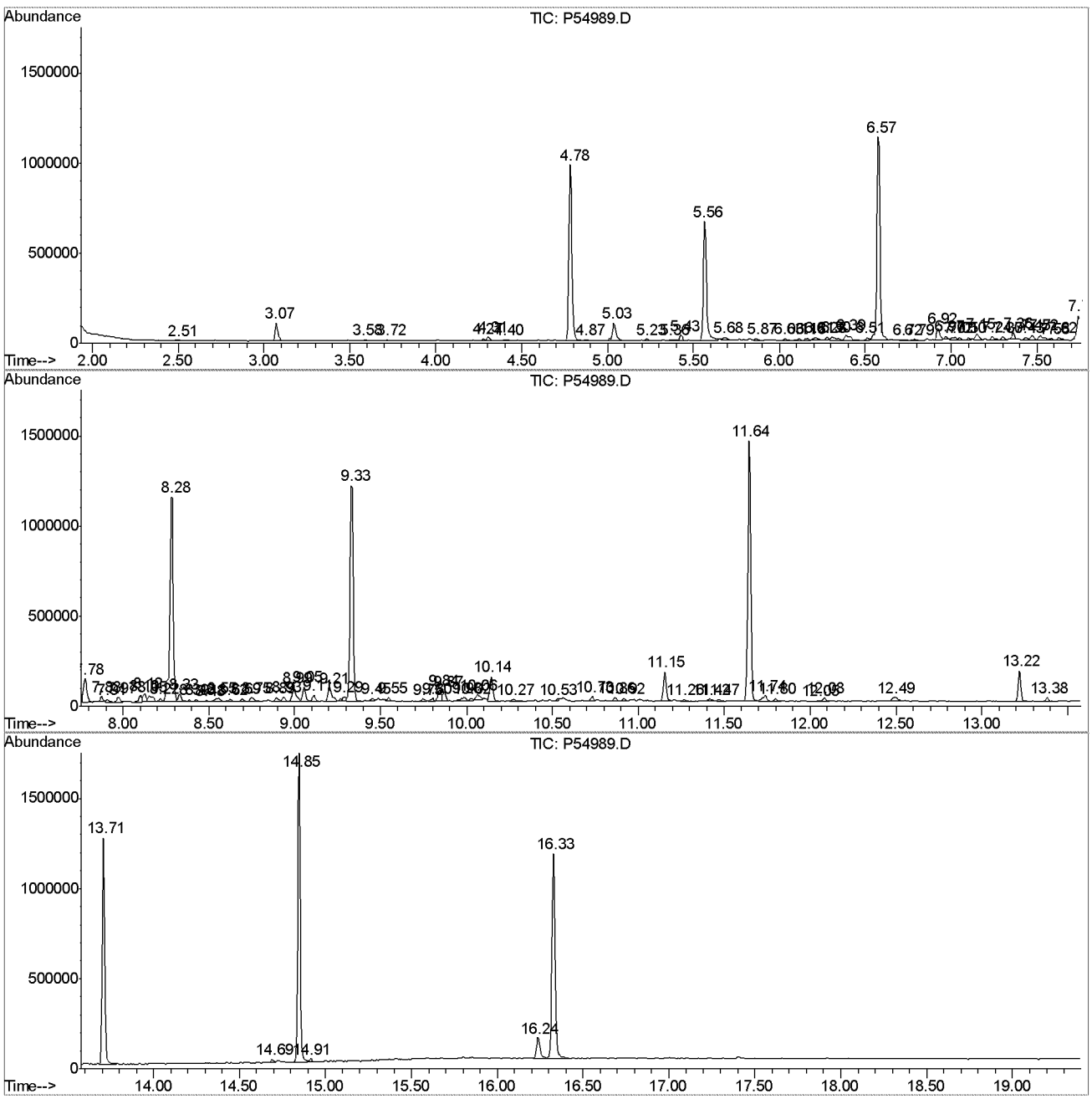
Sum of corrected areas: 16626594

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

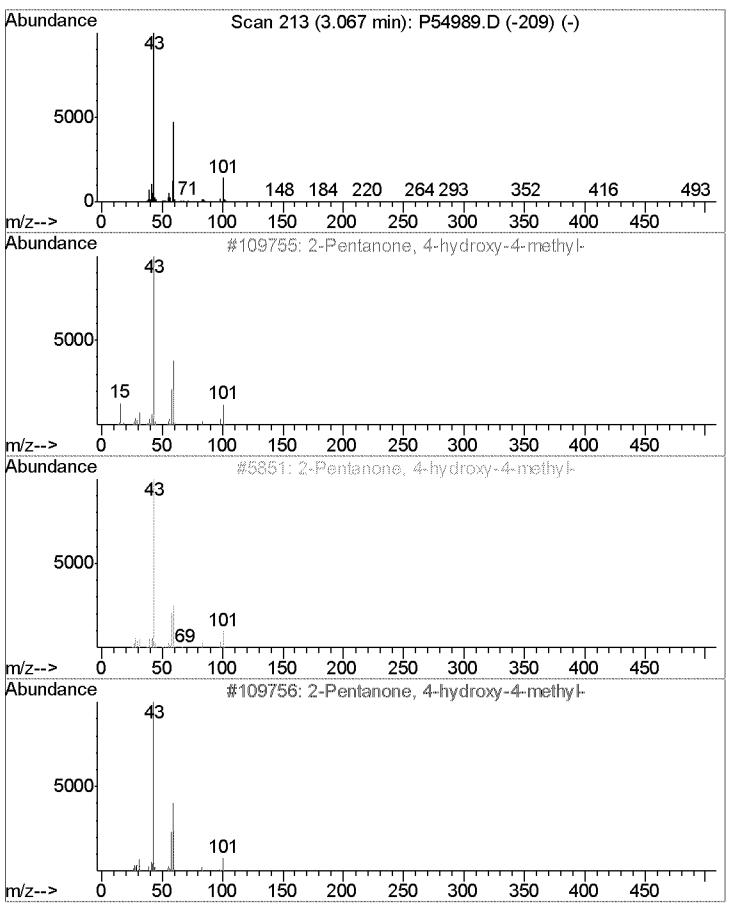
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

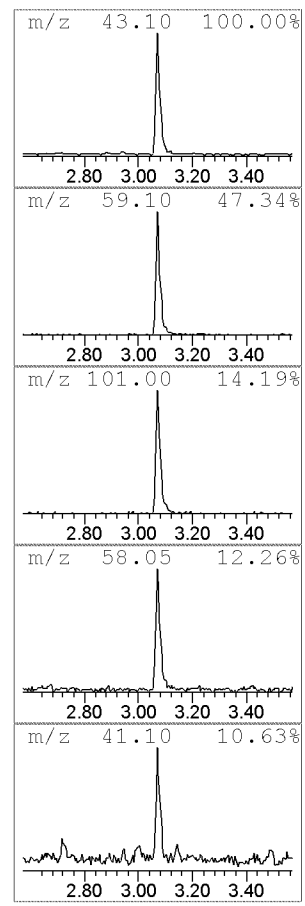
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.07 ppb	119424	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	25
5	1-Propanamine	59	C3H9N	000107-10-8	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

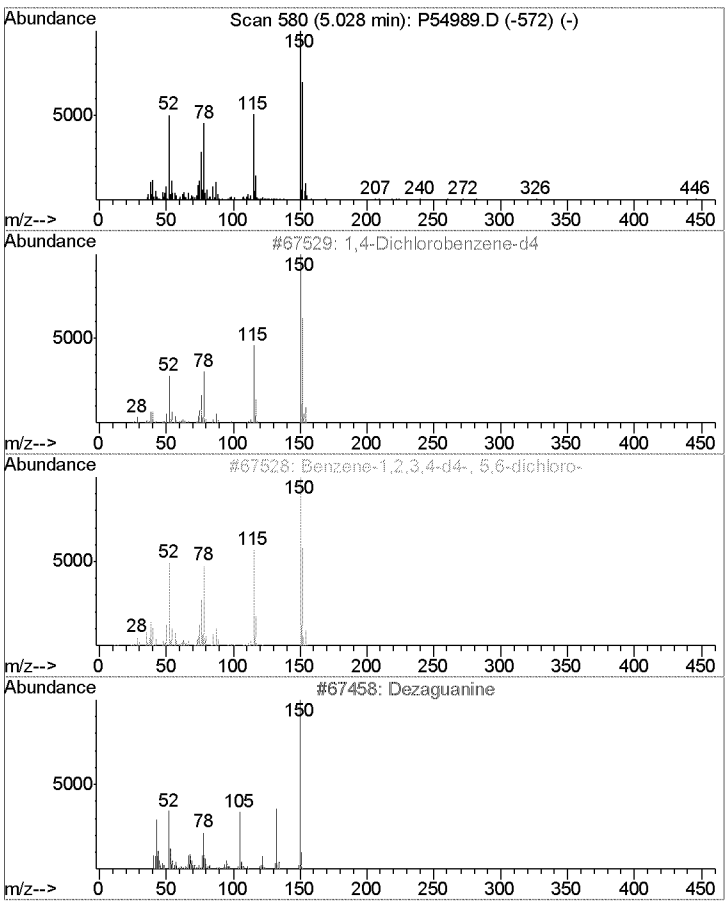
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

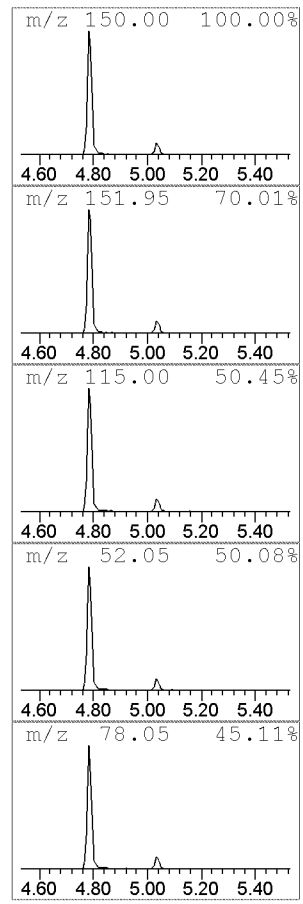
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.87 ppb	142985	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	94
2	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
3	Dezaguanine	150	C6H6N4O	041729-52-6	28
4	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
5	Cyclobuta[1,2-A:3,4-A']diindene,...	300	C18H14Cl2	110848-73-2	12





8.1.2 8

Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

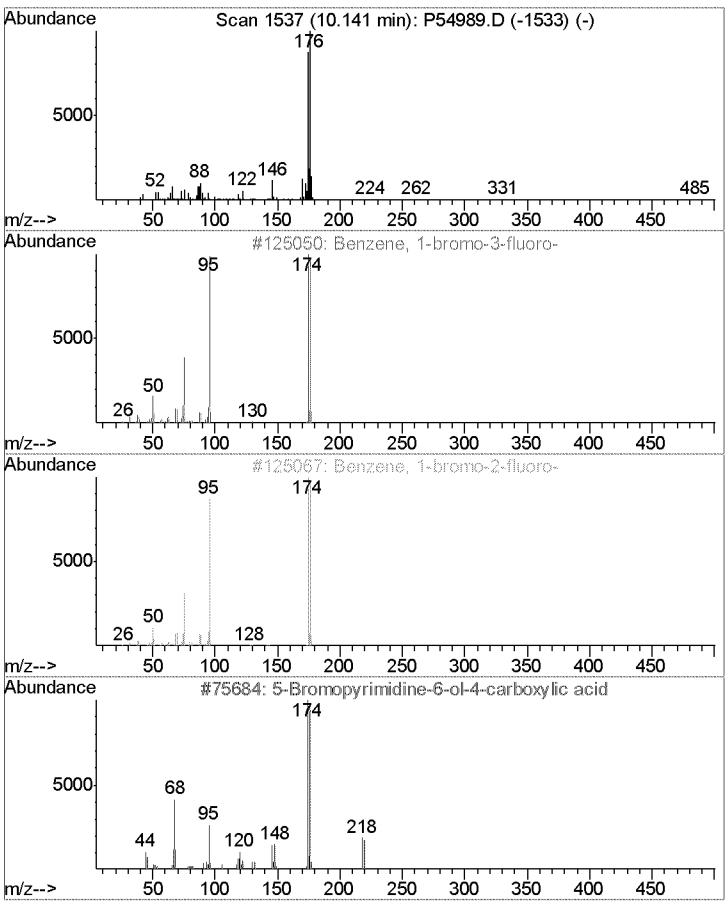
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

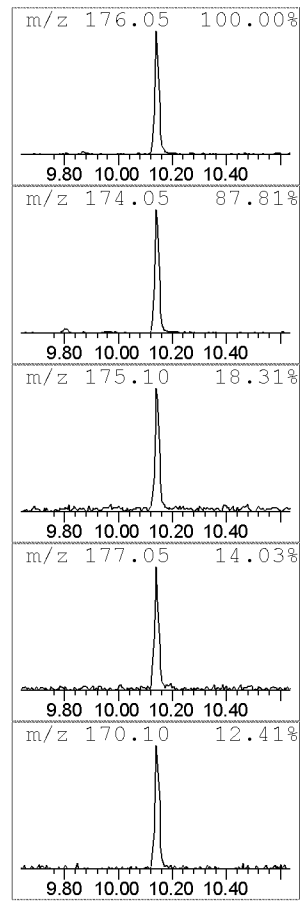
****

Peak Number 3 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.70 ppb	177422	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	64
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	50
3	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	39
4	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	35
5	Phenol, 4-[(5,6,7,8-tetrahydro-1...	283	C17H17NO3	034168-00-8	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

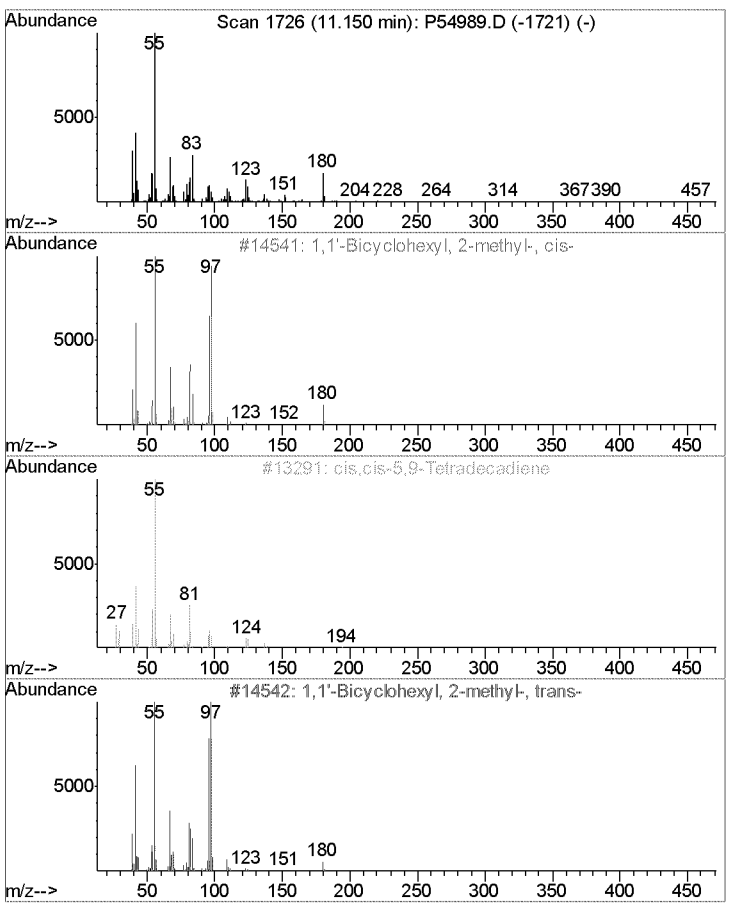
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

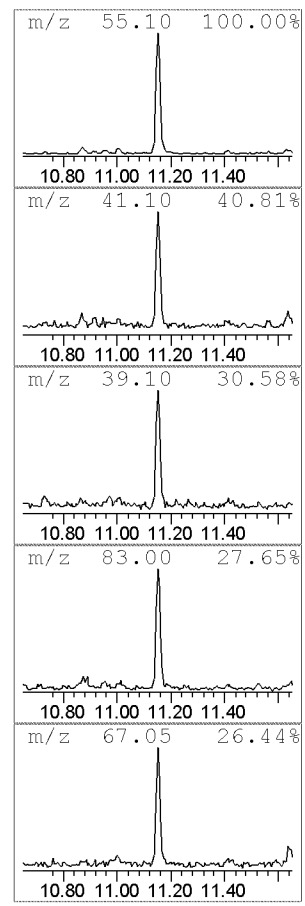
****

Peak Number 4 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.15	4.68 ppb	191909	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Bicyclohexyl, 2-methyl-, cis-	180	C13H24	050991-08-7	46
2	cis,cis-5,9-Tetradecadiene	194	C14H26	051255-62-0	43
3	1,1'-Bicyclohexyl, 2-methyl-, tr...	180	C13H24	050991-09-8	43
4	Cyclohexanemethanol	114	C7H14O	000100-49-2	38
5	1-Cyclohexylheptene	180	C13H24	114614-83-4	38





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

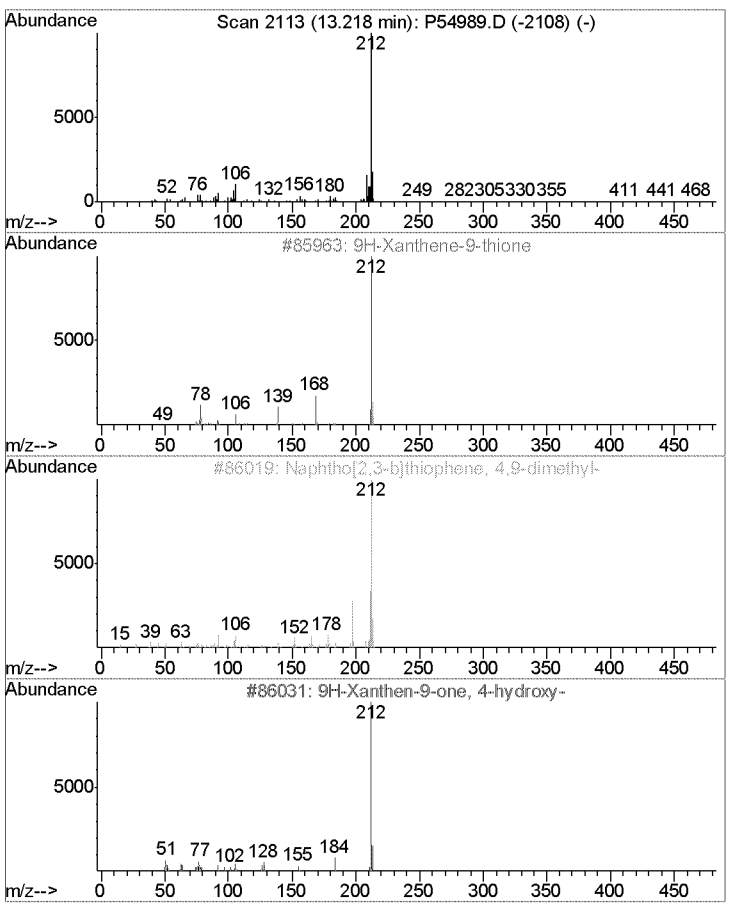
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

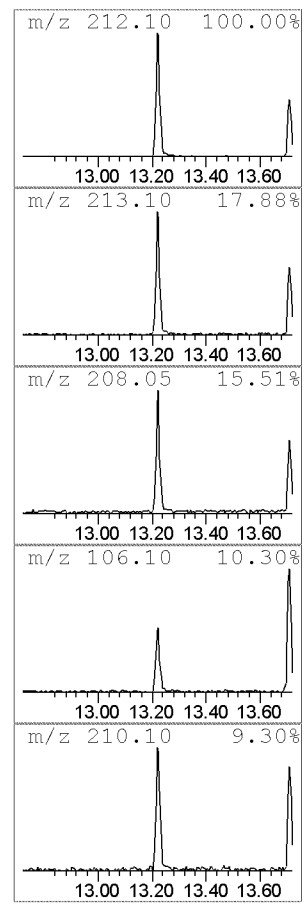
****

Peak Number 5 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.81 ppb	197380	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	53
4	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	47
5	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	45





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

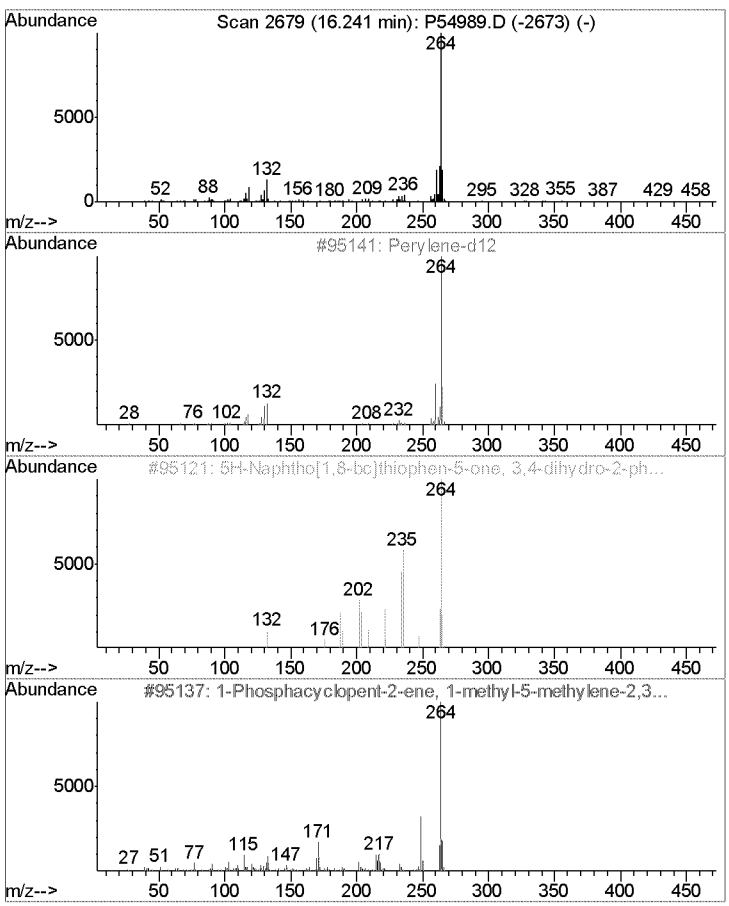
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

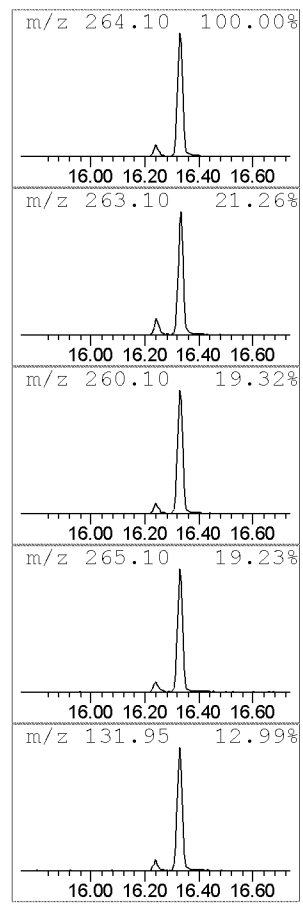
****

Peak Number 6 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.50 ppb	169954	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	93
2	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	53
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	53
5	Naphtho[2,1-b]furan-2,8-dione, d...	264	C16H24O3	029065-00-7	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.1	ppb	119424	1	4.78	1173320	40.0
Internal standard...	5.03	4.9	ppb	142985	2	4.78	1173320	40.0
Internal standard...	10.14	4.7	ppb	177422	5	9.33	1509340	40.0
unknown	11.15	4.7	ppb	191909	6	11.64	1641260	40.0
Internal standard...	13.22	4.8	ppb	197380	7	11.64	1641260	40.0
Internal standard...	16.24	4.5	ppb	169954	10	16.33	1509280	40.0

8.1.2
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:18:25 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

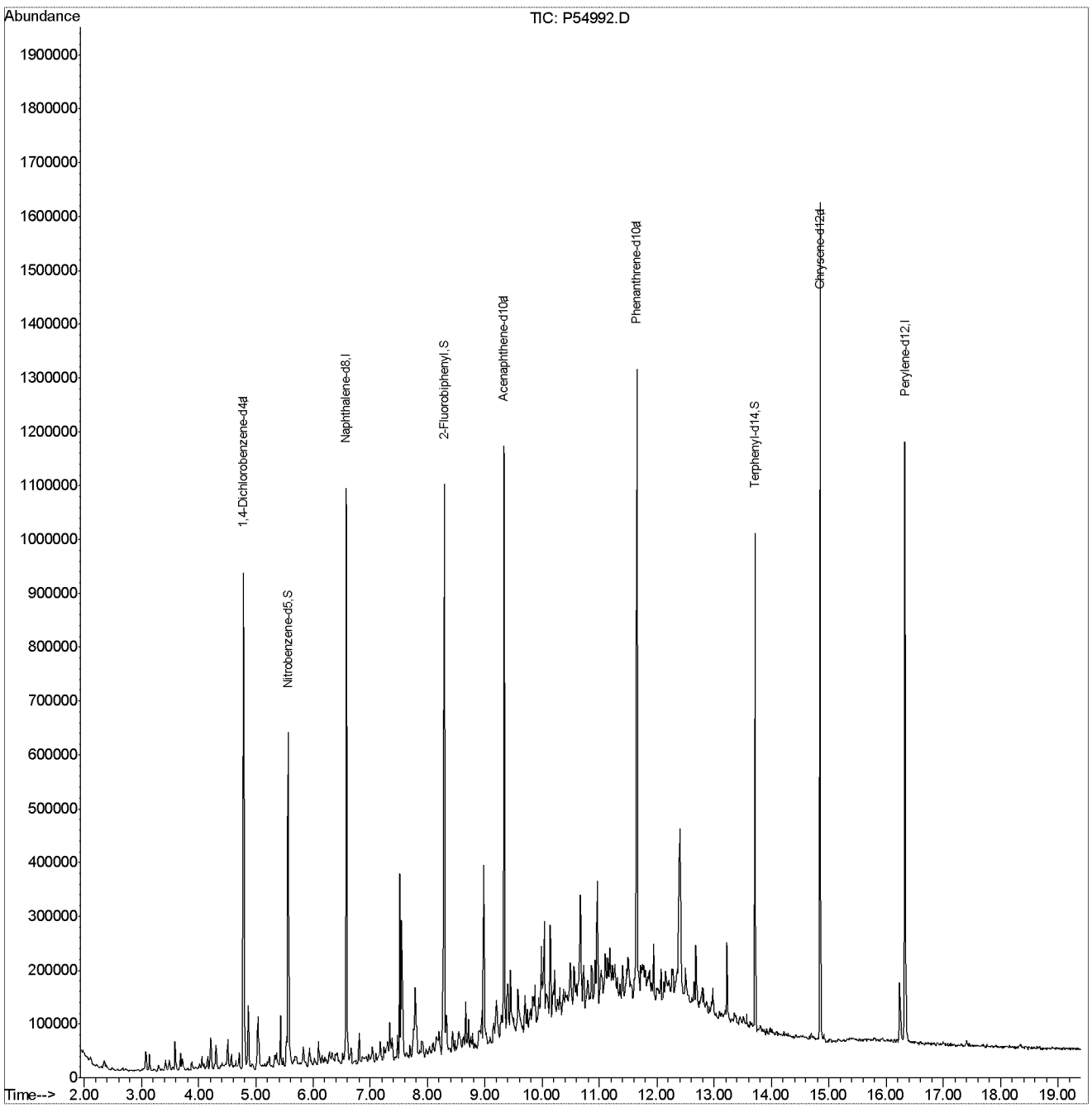
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	144025	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	504955	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	290881	40.00	ppb	-0.08
69) Phenanthrene-d10	11.65	188	461733	40.00	ppb	-0.07
83) Chrysene-d12	14.85	240	569067	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	503336	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	144025	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.65	188	461733	40.00	ppb	-0.07
106) Acenaphthene-d10a	9.33	164	290881	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	569067	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	241442	37.95	ppb	-0.07
Spiked Amount 50.000			Recovery =	75.90%		
51) 2-Fluorobiphenyl	8.29	172	360116	36.05	ppb	-0.08
Spiked Amount 50.000			Recovery =	72.10%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	241505	17.96	ppb	-0.06
Spiked Amount 50.000			Recovery =	35.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:18:25 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.073	204	214	221	rVV3	34797	58778	3.91%	0.280%
2	3.137	223	226	234	rVB	31588	40291	2.68%	0.192%
3	3.420	274	279	285	rBV3	19921	27841	1.85%	0.133%
4	3.484	285	291	298	rVV5	20342	29744	1.98%	0.142%
5	3.586	306	310	322	rVB2	53036	74189	4.93%	0.354%
6	3.682	322	328	331	rBV	31349	38842	2.58%	0.185%
7	3.714	331	334	344	rVB2	21051	32285	2.15%	0.154%
8	3.879	358	365	372	rBV2	16937	27565	1.83%	0.131%
9	4.152	409	416	421	rBV2	24256	35630	2.37%	0.170%
10	4.205	421	426	435	rVB2	57929	87371	5.81%	0.417%
11	4.302	435	444	452	rBV5	44230	87015	5.78%	0.415%
12	4.505	477	482	488	rVV3	52341	70997	4.72%	0.339%
13	4.569	488	494	501	rVB2	24603	34843	2.32%	0.166%
14	4.702	513	519	526	rVB2	30262	44063	2.93%	0.210%
15	4.782	526	534	543	rBV	921893	1116635	74.22%	5.326%
16	4.862	544	549	559	rVV	113233	140613	9.35%	0.671%
17	4.932	559	562	572	rVB8	12206	27857	1.85%	0.133%
18	5.033	572	581	594	rBV2	99102	201421	13.39%	0.961%
19	5.231	615	618	624	rVB5	19853	26545	1.76%	0.127%
20	5.327	632	636	638	rBV2	24647	28438	1.89%	0.136%
21	5.354	638	641	650	rVV4	29187	56271	3.74%	0.268%
22	5.429	650	655	660	rVV2	96119	118830	7.90%	0.567%
23	5.562	669	680	694	rBV	620994	871932	57.95%	4.159%
24	5.685	700	703	713	rVB8	15135	34748	2.31%	0.166%
25	5.824	725	729	743	rVB5	36112	70542	4.69%	0.336%
26	5.936	743	750	761	rBV7	35308	74016	4.92%	0.353%
27	6.091	775	779	787	rBV3	43948	72073	4.79%	0.344%
28	6.284	810	815	819	rBV5	19987	30914	2.05%	0.147%
29	6.321	819	822	831	rVB10	18384	36593	2.43%	0.175%
30	6.572	861	869	880	rVV	1068900	1337654	88.91%	6.381%
31	6.657	880	885	891	rVB7	29671	45464	3.02%	0.217%
32	6.796	906	911	918	rBV3	57626	85320	5.67%	0.407%
33	7.031	950	955	962	rVB7	28805	54762	3.64%	0.261%
34	7.170	971	981	988	rVB10	37228	76856	5.11%	0.367%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.240	989	994	997	rBV4	23912	33798	2.25%	0.161%
36	7.299	998	1005	1008	rVV6	36286	89622	5.96%	0.428%
37	7.336	1008	1012	1016	rVV3	71606	109445	7.27%	0.522%
38	7.373	1016	1019	1026	rVB	43481	57947	3.85%	0.276%
39	7.469	1027	1037	1040	rBV	47782	67107	4.46%	0.320%
40	7.512	1040	1045	1048	rBV	343152	408777	27.17%	1.950%
41	7.544	1048	1051	1062	rVB	251306	323428	21.50%	1.543%
42	7.779	1083	1095	1107	rBV5	130451	336221	22.35%	1.604%
43	7.897	1114	1117	1126	rVB6	30656	59919	3.98%	0.286%
44	7.966	1126	1130	1137	rBV9	15644	33203	2.21%	0.158%
45	8.153	1161	1165	1169	rBV6	19231	34664	2.30%	0.165%
46	8.196	1170	1173	1181	rVB6	43753	72552	4.82%	0.346%
47	8.287	1181	1190	1194	rBV	1060324	1390175	92.40%	6.631%
48	8.324	1195	1197	1202	rVB2	65684	74058	4.92%	0.353%
49	8.431	1211	1217	1222	rBV7	39499	72441	4.81%	0.346%
50	8.538	1232	1237	1247	rVB7	30571	78584	5.22%	0.375%
51	8.655	1256	1259	1265	rVV	81743	94507	6.28%	0.451%
52	8.709	1265	1269	1273	rVV2	52547	63491	4.22%	0.303%
53	8.746	1273	1276	1280	rVV4	22998	26891	1.79%	0.128%
54	8.784	1280	1283	1286	rVB3	29191	31473	2.09%	0.150%
55	8.896	1298	1304	1309	rBV10	34155	95641	6.36%	0.456%
56	8.939	1309	1312	1315	rVV3	57535	61648	4.10%	0.294%
57	8.976	1315	1319	1325	rVV2	322025	395475	26.29%	1.886%
58	9.152	1347	1352	1355	rBV5	36292	58509	3.89%	0.279%
59	9.195	1355	1360	1370	rVB5	74289	187476	12.46%	0.894%
60	9.286	1370	1377	1380	rBV6	43048	86055	5.72%	0.410%
61	9.329	1380	1385	1391	rVV	1086860	1339718	89.05%	6.391%
62	9.398	1391	1398	1402	rVV4	82848	156879	10.43%	0.748%
63	9.446	1402	1407	1414	rVV3	103733	160382	10.66%	0.765%
64	9.574	1427	1431	1444	rVB3	74302	154391	10.26%	0.736%
65	9.697	1449	1454	1458	rBV4	64682	86140	5.73%	0.411%
66	9.735	1458	1461	1465	rVB4	34853	45051	2.99%	0.215%
67	9.831	1475	1479	1483	rBV7	43812	80938	5.38%	0.386%
68	9.868	1483	1486	1491	rVB4	68887	89782	5.97%	0.428%
69	9.938	1496	1499	1502	rBV5	41873	47710	3.17%	0.228%
70	9.980	1502	1507	1511	rBV3	118465	174807	11.62%	0.834%
71	10.028	1512	1516	1520	rVB2	164575	211910	14.08%	1.011%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.135	1532	1536	1541	rVB2	173139	236775	15.74%	1.129%
73	10.189	1542	1546	1547	rBV4	45493	57881	3.85%	0.276%
74	10.210	1548	1550	1556	rVB4	78458	91233	6.06%	0.435%
75	10.301	1564	1567	1573	rVB7	52494	74930	4.98%	0.357%
76	10.365	1575	1579	1582	rBV5	42504	61023	4.06%	0.291%
77	10.488	1599	1602	1610	rVB6	79273	136527	9.07%	0.651%
78	10.552	1610	1614	1619	rBV6	71868	120192	7.99%	0.573%
79	10.664	1630	1635	1640	rVB3	199475	277935	18.47%	1.326%
80	10.718	1641	1645	1650	rVB4	79120	105437	7.01%	0.503%
81	10.787	1655	1658	1664	rVB6	38390	59531	3.96%	0.284%
82	10.856	1668	1671	1677	rVB7	61923	99847	6.64%	0.476%
83	10.921	1679	1683	1686	rBV4	66820	99905	6.64%	0.477%
84	10.958	1686	1690	1695	rVB2	228529	279230	18.56%	1.332%
85	11.022	1698	1702	1710	rBV9	45737	90951	6.05%	0.434%
86	11.097	1712	1716	1722	rBV7	59325	96617	6.42%	0.461%
87	11.177	1729	1731	1735	rVB4	60627	59334	3.94%	0.283%
88	11.396	1768	1772	1778	rBV9	62295	85658	5.69%	0.409%
89	11.647	1812	1819	1829	rVB	1155803	1472159	97.85%	7.022%
90	11.717	1829	1832	1834	rBV2	48290	54682	3.63%	0.261%
91	11.936	1870	1873	1881	rVB2	103040	117702	7.82%	0.561%
92	12.064	1895	1897	1902	rVB3	57489	67818	4.51%	0.323%
93	12.400	1953	1960	1972	rVB3	307100	685595	45.57%	3.270%
94	12.497	1975	1978	1995	rVB10	64440	137141	9.12%	0.654%
95	12.678	2009	2012	2021	rVB2	116846	162332	10.79%	0.774%
96	13.218	2110	2113	2125	rVB	150541	195612	13.00%	0.933%
97	13.709	2201	2205	2213	rVB	924412	873249	58.04%	4.165%
98	14.847	2412	2418	2427	rVB	1556047	1504521	100.00%	7.177%
99	16.236	2673	2678	2688	rBV	110961	164654	10.94%	0.785%
100	16.327	2688	2695	2719	rVB	1118317	1407797	93.57%	6.715%

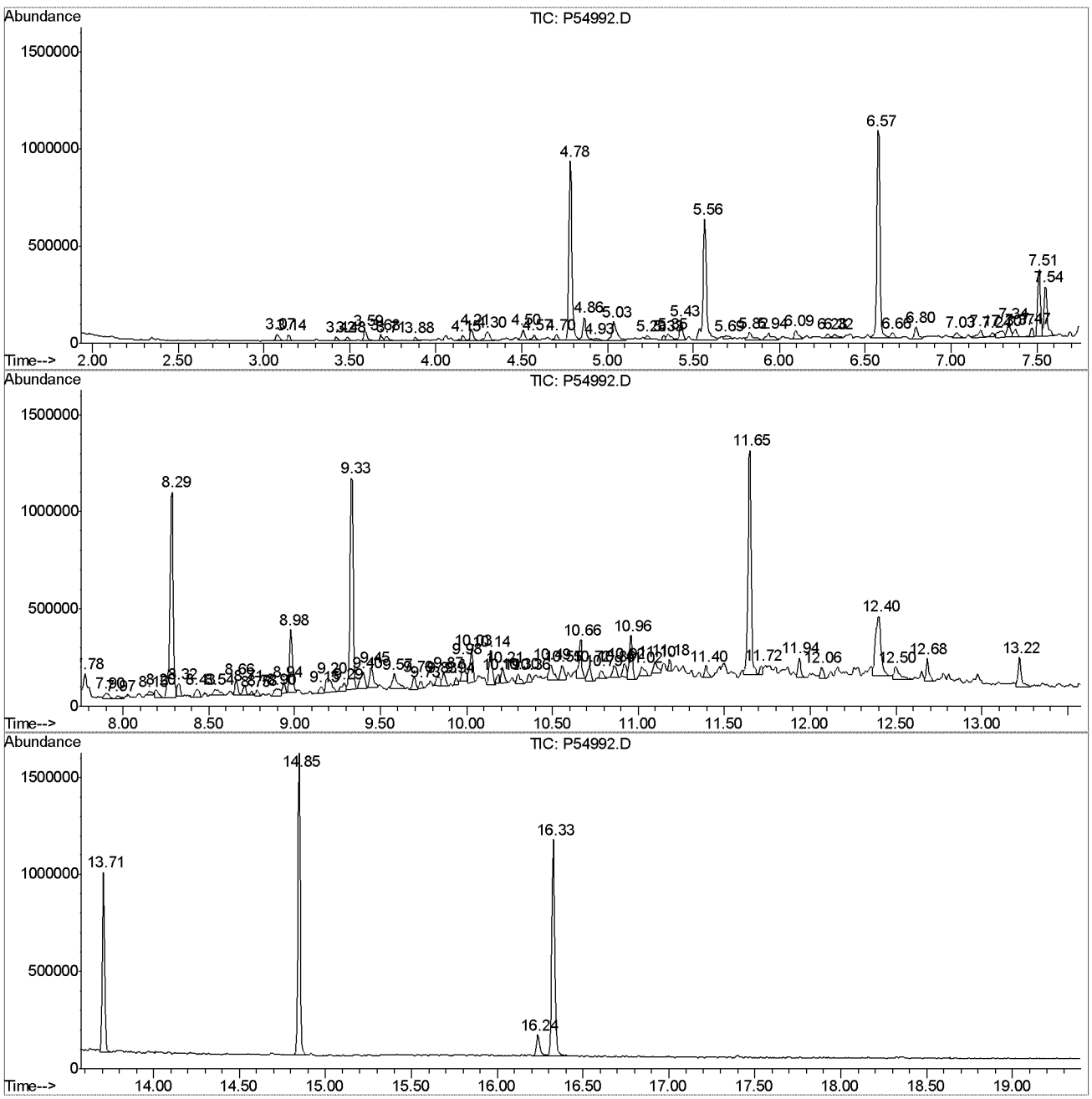
Sum of corrected areas: 20964021

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

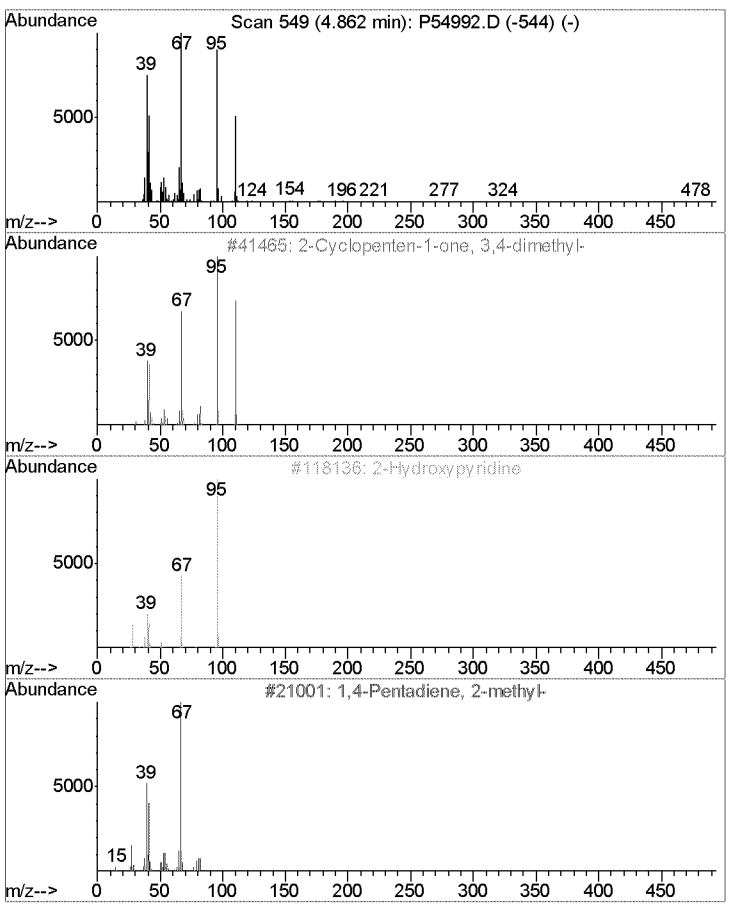
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

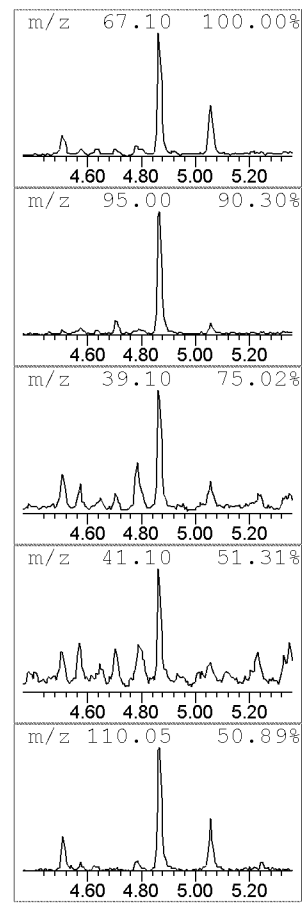
****

Peak Number 1 cycloalkane/alkene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	5.04 ppb	140613	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4-dimethyl-	110	C7H10O	030434-64-1	91
2	2-Hydroxypyridine	95	C5H5NO	000142-08-5	80
3	1,4-Pentadiene, 2-methyl-	82	C6H10	000763-30-4	76
4	1,5-Hexadiene	82	C6H10	000592-42-7	62
5	1,4-Hexadiene, 2,3-dimethyl-	110	C8H14	018669-52-8	59





Library Search Compound Report

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Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

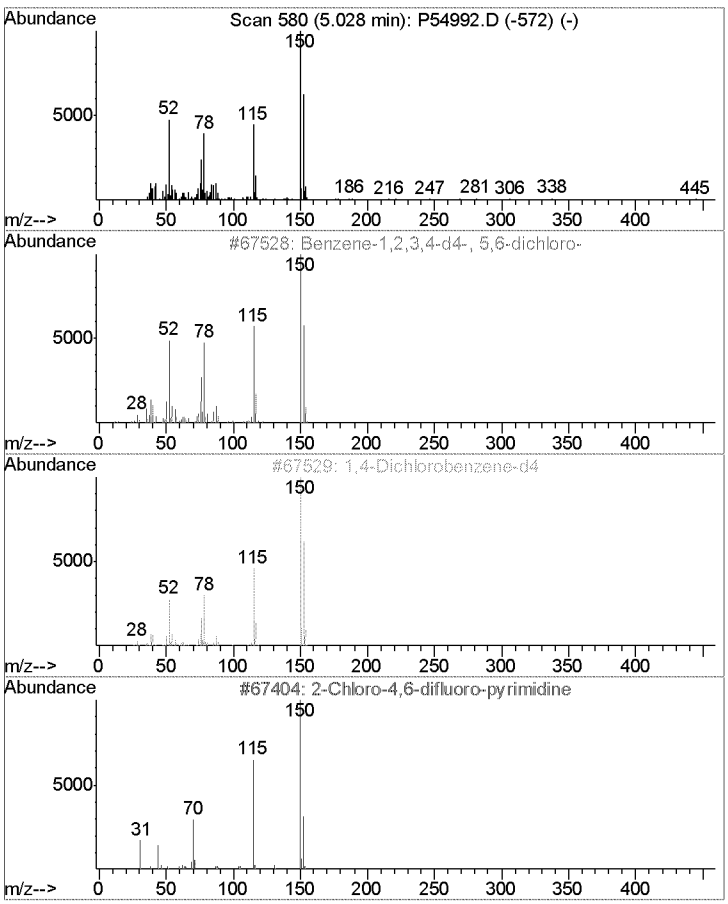
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

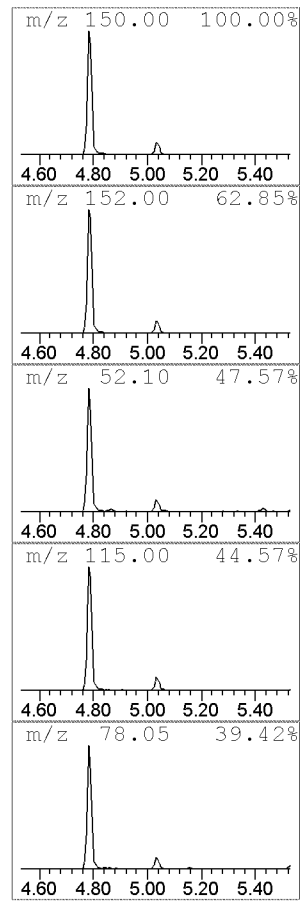
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.96 ppb	138385	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	91
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
4	4H-1-Benzopyran-4-one, 2,3-dihyd...	254	C16H14O3	005128-69-8	12
5	4-Nitrophenylglyoxylic acid	195	C8H5NO5	014922-36-2	11





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

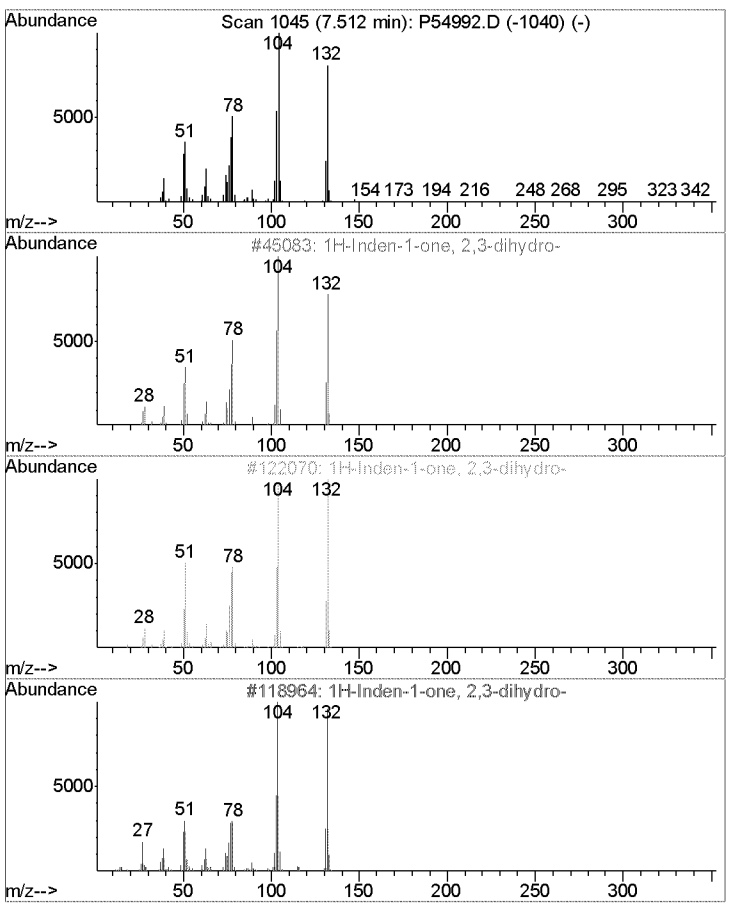
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

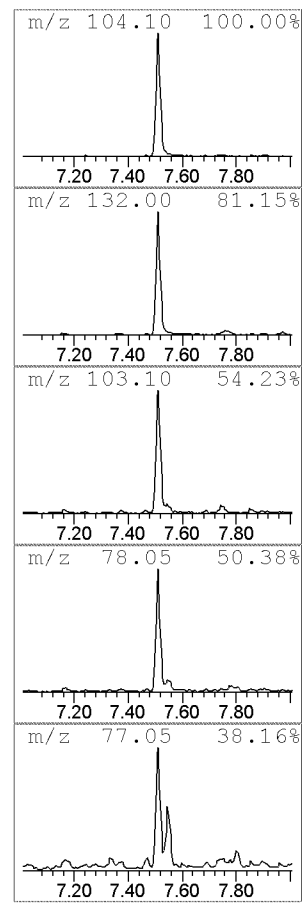
****

Peak Number 3 1H-Inden-1-one, -dihydro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.51	12.22 ppb	408777	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	98
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
4	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	94
5	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	64





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

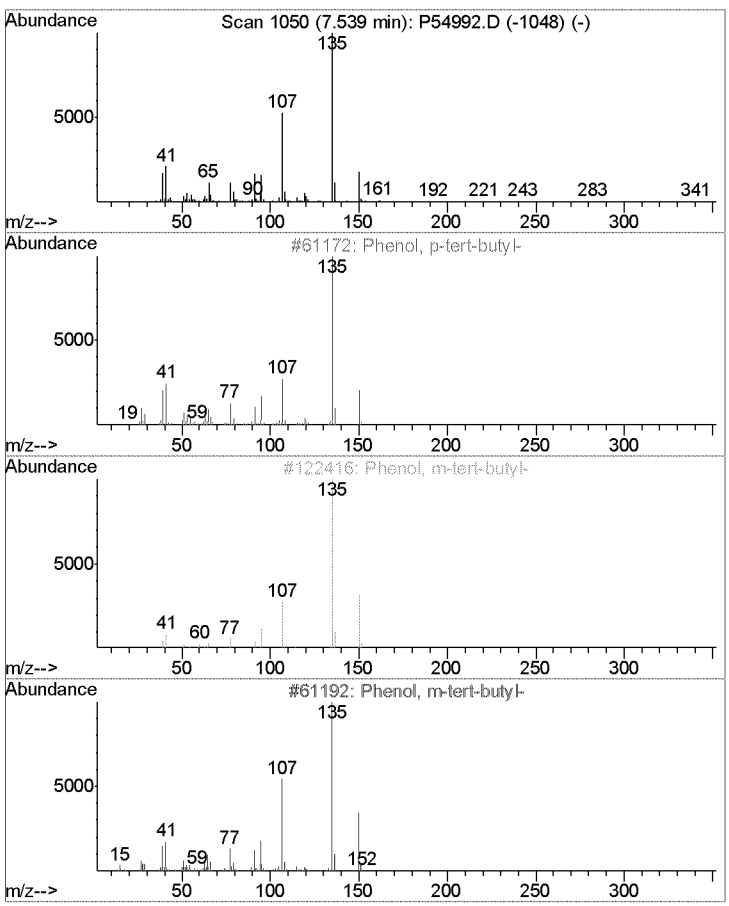
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

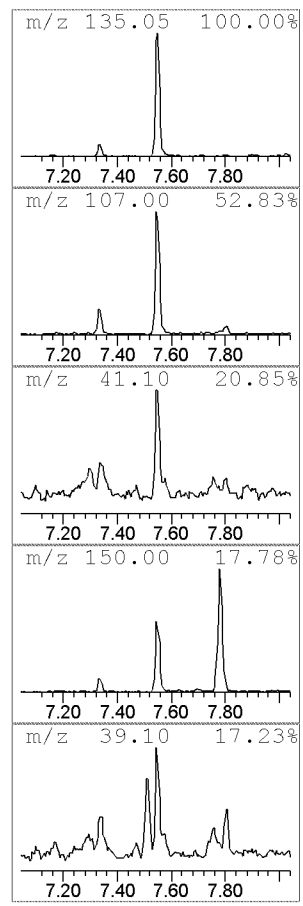
****

Peak Number 4 Phenol, -tert-butyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.54	9.67 ppb	323428	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	93
2	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
3	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	76
4	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	64
5	Ethanone, 1-(3-methoxyphenyl)-	150	C9H10O2	000586-37-8	64





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

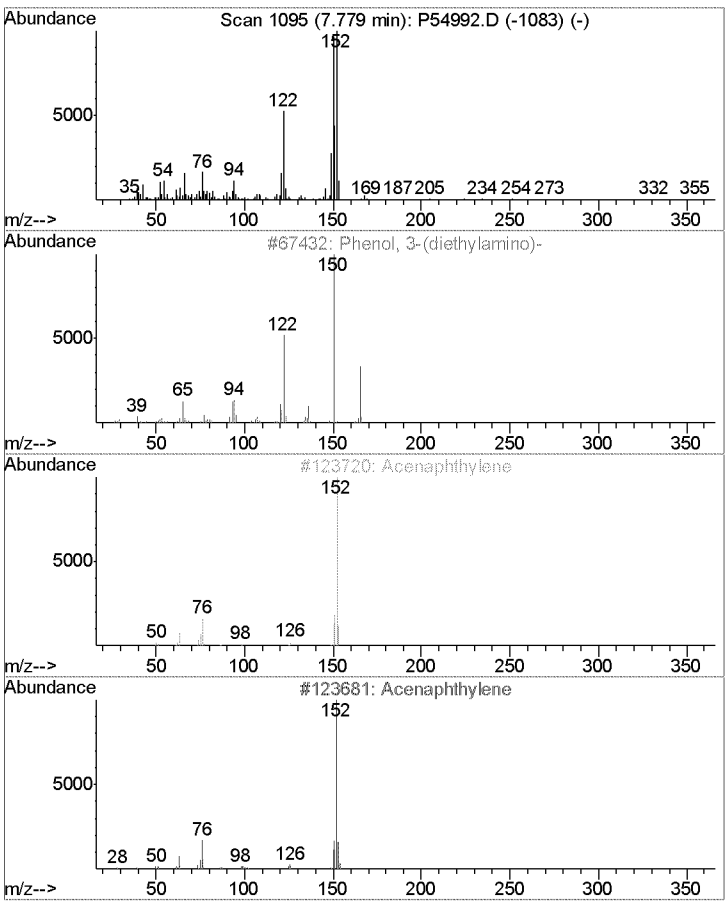
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

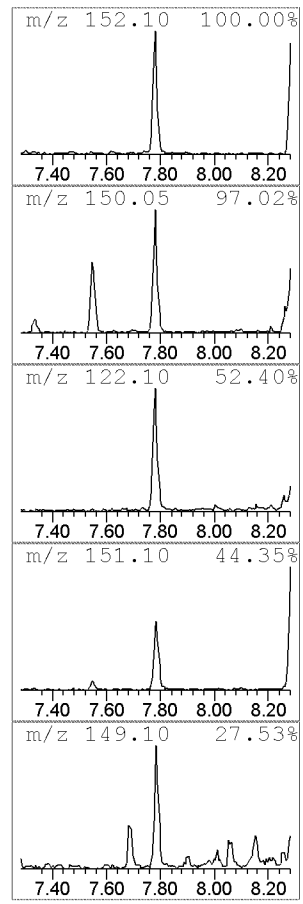
****

Peak Number 5 Internal standard added for... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.78	4.70 ppb	157020	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 3-(diethylamino)-	165	C10H15NO	000091-68-9	25
2	Acenaphthylene	152	C12H8	000208-96-8	22
3	Acenaphthylene	152	C12H8	000208-96-8	22
4	1,4-Benzenediol, 2,3,5-trimethyl-	152	C9H12O2	000700-13-0	22
5	2,6-Dimethoxytoluene	152	C9H12O2	005673-07-4	16





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

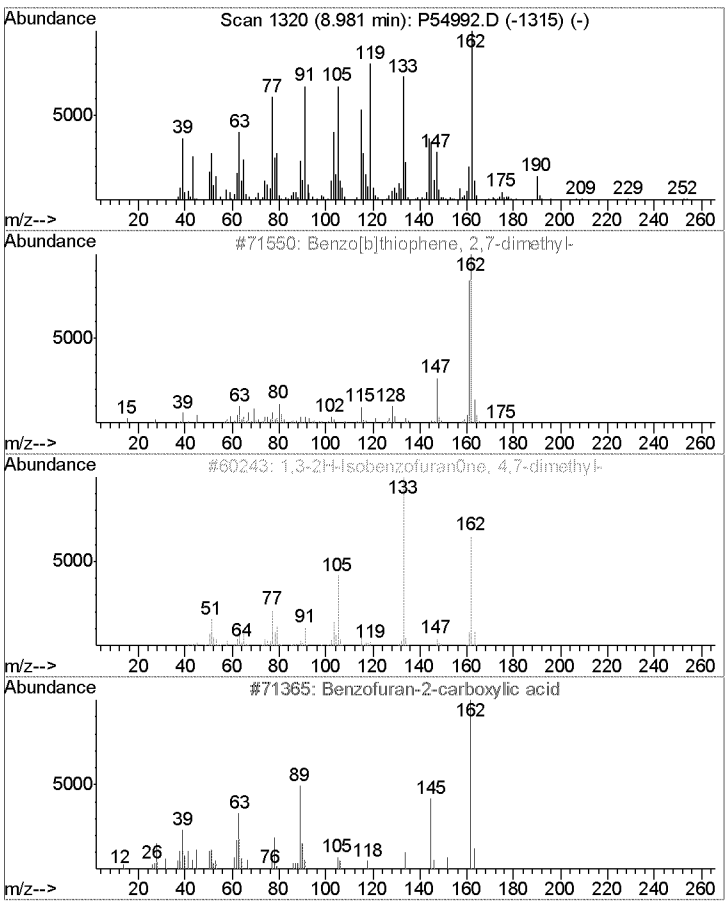
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

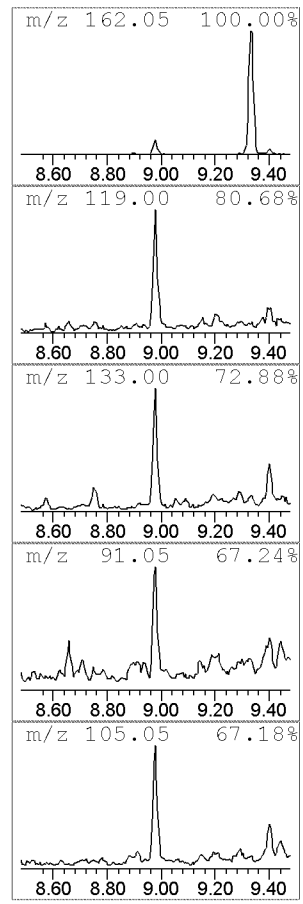
****

Peak Number 6 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.98	10.23 ppb	342605	Acenaphthene-d10	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]thiophene, 2,7-dimethyl-	162	C10H10S	016587-40-9	55
2	1,3-2H-Isobenzofuran0ne, 4,7-dim...	162	C10H10O2	1000129-71-5	55
3	Benzofuran-2-carboxylic acid	162	C9H6O3	000496-41-3	55
4	Indoxazene, 3-ethyl-	147	C9H9NO	1000131-51-1	49
5	1,4-Benzenedicarboxaldehyde, 2,5...	162	C10H10O2	007044-92-0	35





Library Search Compound Report

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Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

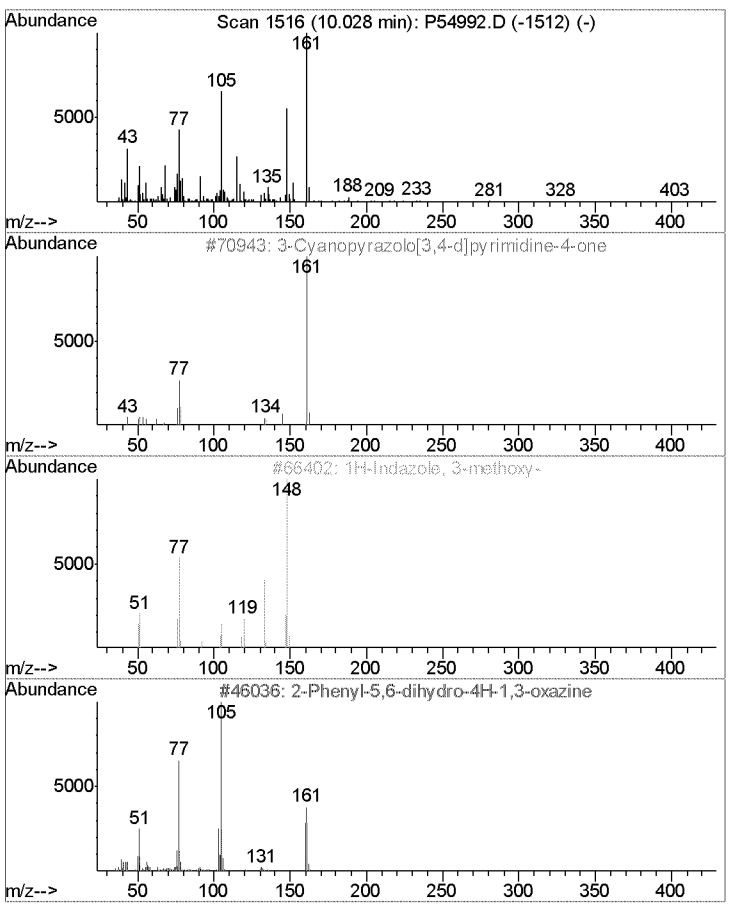
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

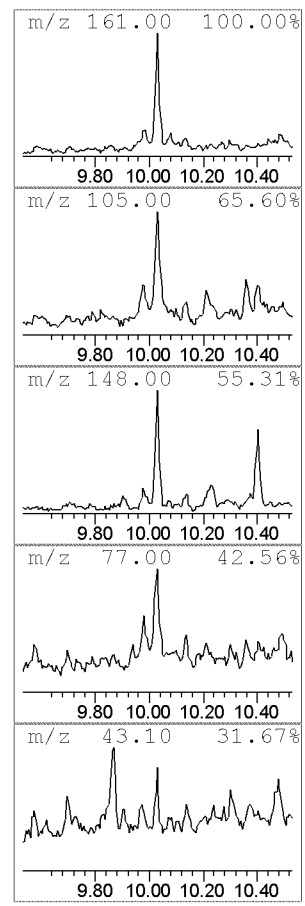
****

Peak Number 7 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.03	4.69 ppb	157055	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyanopyrazolo[3,4-d]pyrimidine...	161	C6H3N5O	1000212-40-6	35
2	1H-Indazole, 3-methoxy-	148	C8H8N2O	001848-41-5	27
3	2-Phenyl-5,6-dihydro-4H-1,3-oxazine	161	C10H11NO	1000223-47-5	22
4	4-Dimethylaminobenzoin	255	C16H17NO2	006317-85-7	22
5	Thiazole, 5-phenyl-	161	C9H7NS	001826-13-7	22





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Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

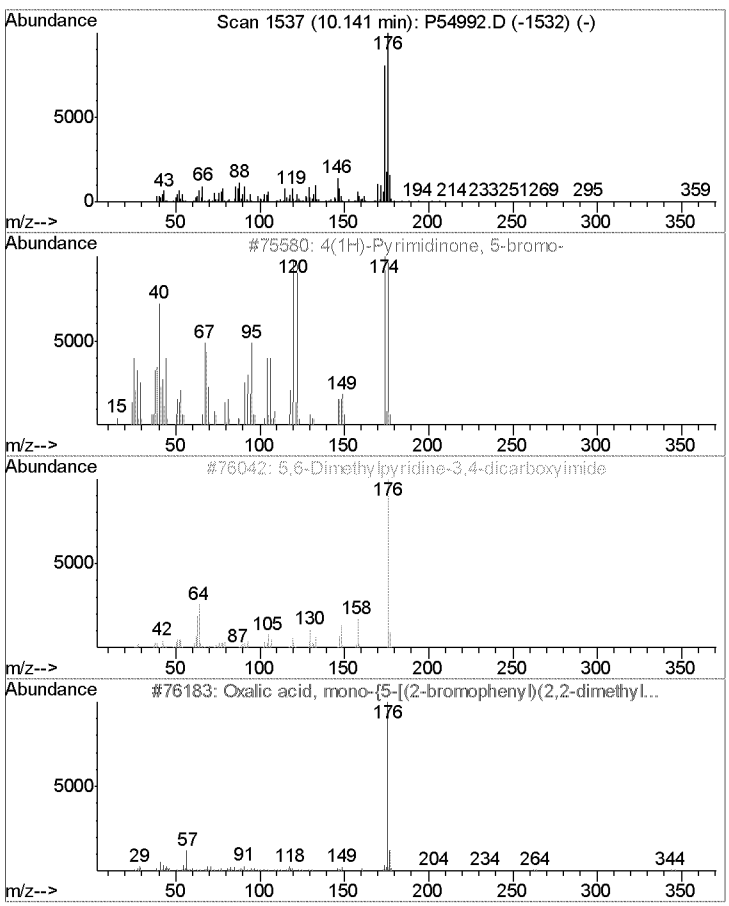
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

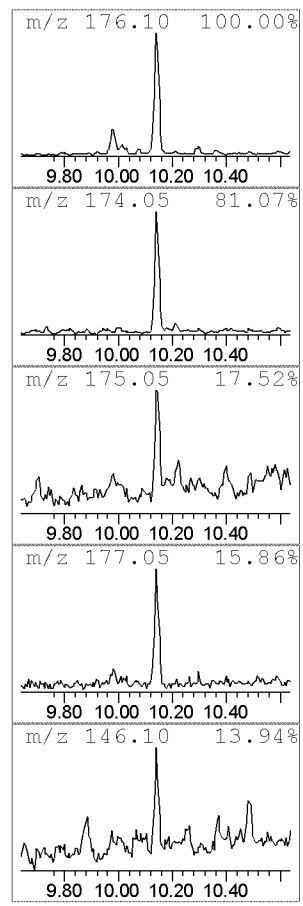
****

Peak Number 8 Internal standard added for... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.67 ppb	190027	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4(1H)-Pyrimidinone, 5-bromo-	174	C4H3BrN2O	019808-30-1	50
2	5,6-Dimethylpyridine-3,4-dicarbo...	176	C9H8N2O2	1000222-05-7	27
3	Oxalic acid, mono-{5-[(2-bromoph...	535	C24H26BrNO8	1000188-38-2	27
4	7-Methoxy-1-tetralone	176	C11H12O2	006836-19-7	27
5	4-Hydrazino-1-oxo-1,2-dihydropht...	176	C8H8N4O	014161-35-4	27





Library Search Compound Report

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Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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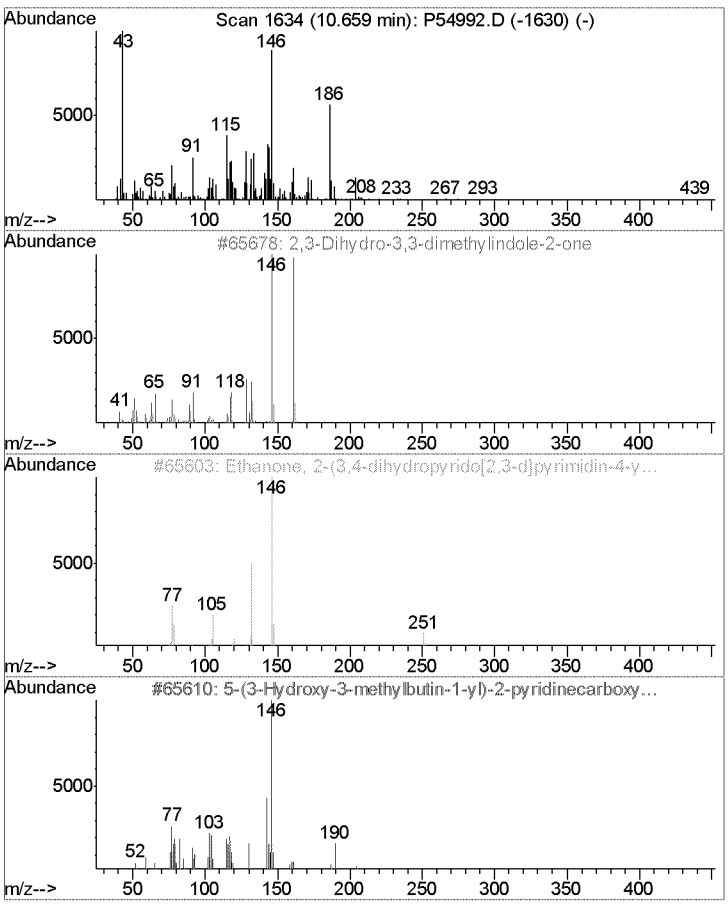
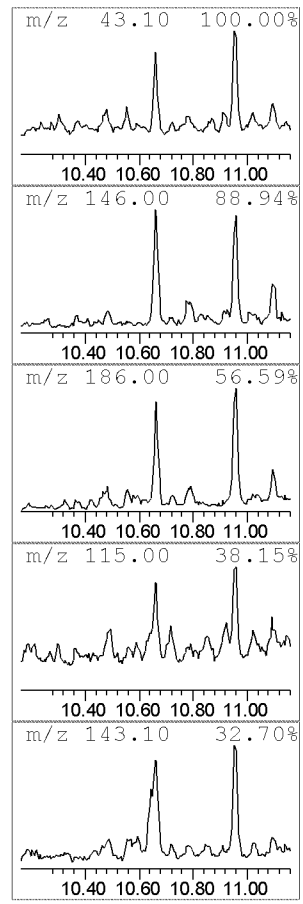
Peak Number 9 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.66	4.00 ppb	147309	Phenanthrene-d10	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-3,3-dimethylindole-2...	161	C10H11NO	1000128-67-0	38
2	Ethanone, 2-(3,4-dihydropyrido[2...	251	C15H13N3O	028732-76-5	30
3	5-(3-Hydroxy-3-methylbutin-1-yl)...	205	C11H11NO3	017880-58-9	27
4	1H-Isoindole, 3-methoxy-1-methyl-	161	C10H11NO	083889-38-7	25
5	4(1H)-Quinazolinone	146	C8H6N2O	000491-36-1	22





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Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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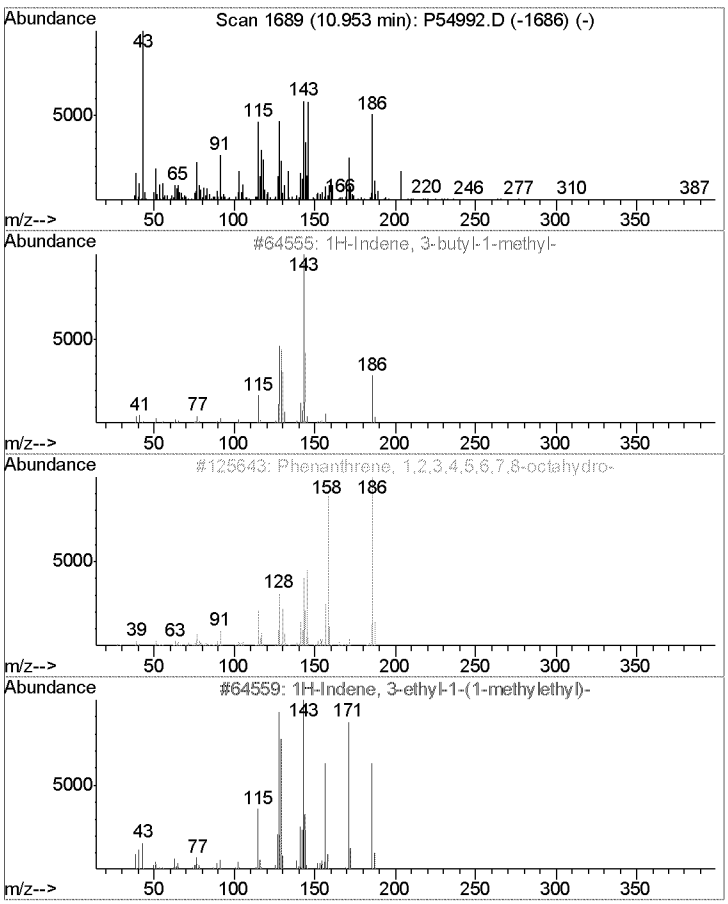
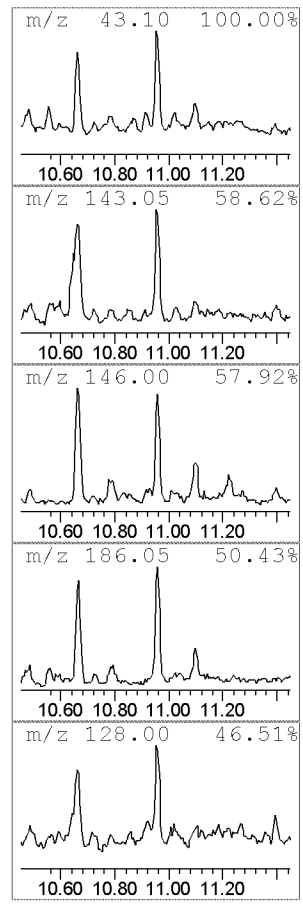
Peak Number 10 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.95	6.34 ppb	233210	Phenanthrene-d10	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 3-butyl-1-methyl-	186	C14H18	111400-84-1	50
2	Phenanthrene, 1,2,3,4,5,6,7,8-oc...	186	C14H18	005325-97-3	38
3	1H-Indene, 3-ethyl-1-(1-methylet...	186	C14H18	111400-85-2	27
4	Propanamide, N-[3-(acetylmethyla...	186	C9H18N2O2	067139-07-5	22
5	Detomidine	186	C12H14N2	076631-46-4	22





Library Search Compound Report

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Acq On : 22 Feb 2011 1:52 pm
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Sample : ja68506-2
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ALS Vial : 15 Sample Multiplier: 1

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Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

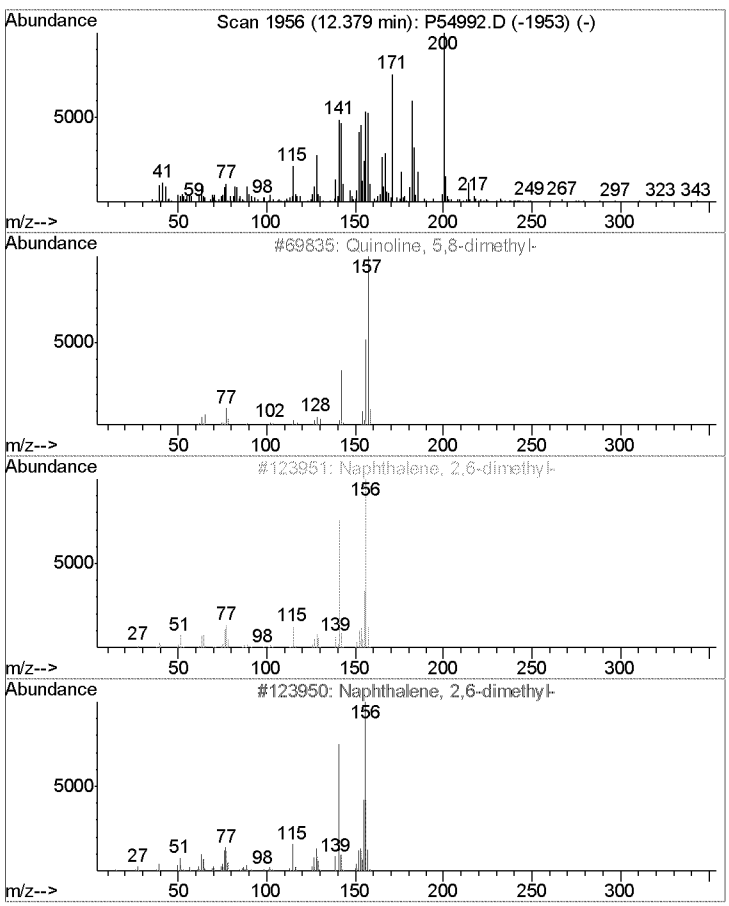
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

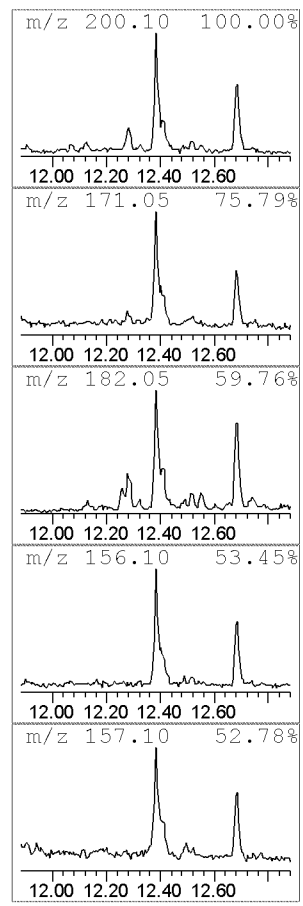
****

Peak Number 11 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	6.92 ppb	254597	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Quinoline, 5,8-dimethyl-	157	C11H11N	002623-50-9	11
2	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
3	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
4	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
5	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	11





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

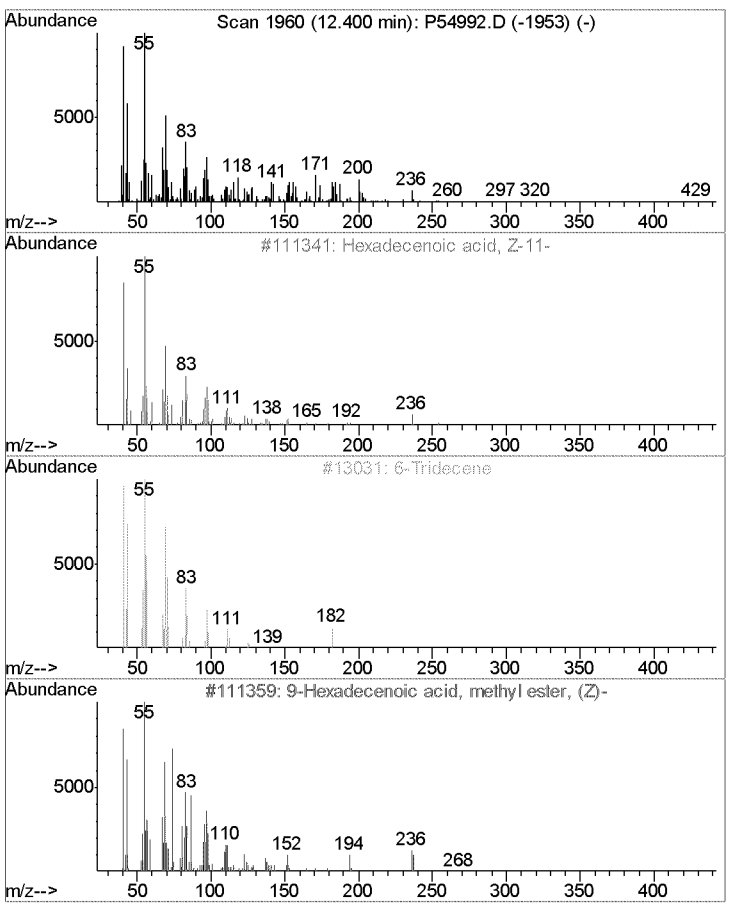
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

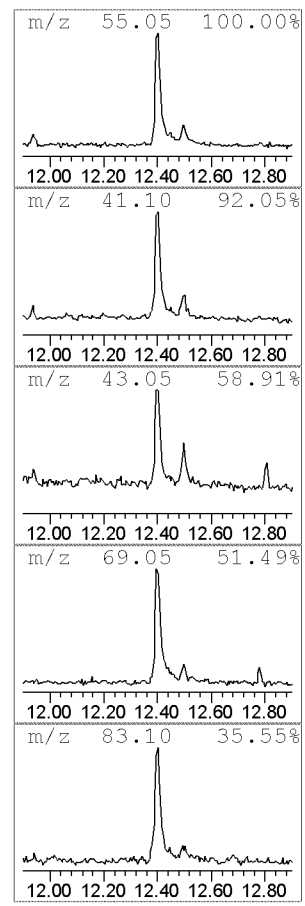
****

Peak Number 12 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	10.11 ppb	372207	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	50
2	6-Tridecene	182	C13H26	024949-38-0	49
3	9-Hexadecenoic acid, methyl este...	268	C17H32O2	001120-25-8	45
4	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	42
5	2-Tridecene, (Z)-	182	C13H26	041446-59-7	42





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

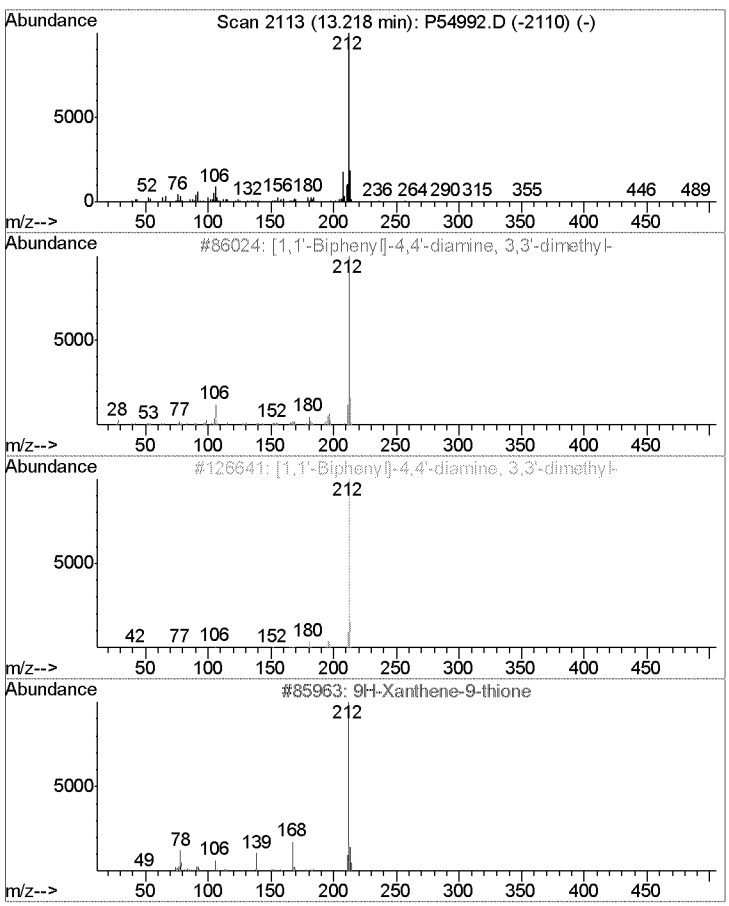
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

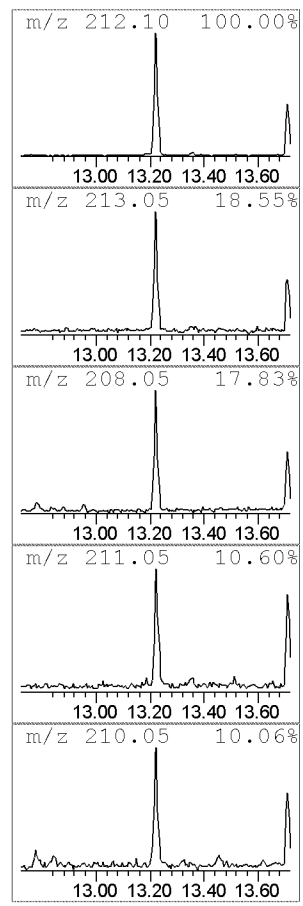
****

Peak Number 13 Internal standard added for... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.31 ppb	195612	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
5	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

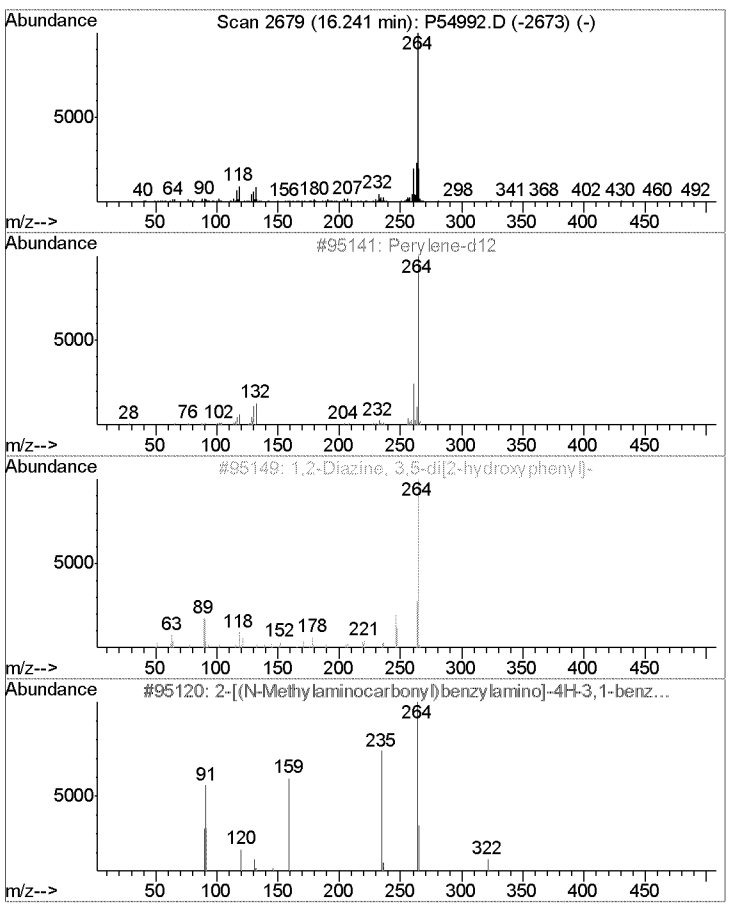
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

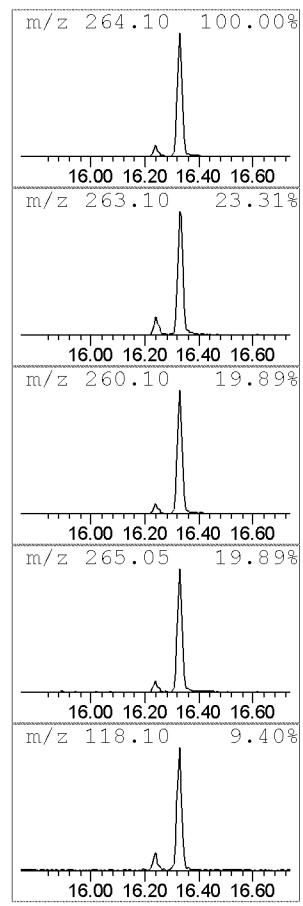
****

Peak Number 14 Internal standard added for... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.68 ppb	164654	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	96
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	58
3	2-[(N-Methylaminocarbonyl)benzyl...	322	C18H18N4O2	1000148-36-9	50
4	1H-Pyrazole-4,5-dione, 1-phenyl-...	264	C15H12N4O	016335-50-5	47
5	2-Nitro-4-methoxytrifluoroacetan...	264	C9H7F3N2O4	1000214-43-5	41





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
cycloalkane/alkene	4.86	5.0	ppb	140613	2	4.78	1116640	40.0
Internal standard...	5.03	5.0	ppb	138385	2	4.78	1116640	40.0
1H-Inden-1-one, -...	7.51	12.2	ppb	408777	3	6.57	1337650	40.0
Phenol, -tert-butyl-	7.54	9.7	ppb	323428	3	6.57	1337650	40.0
Internal standard...	7.78	4.7	ppb	157020	3	6.57	1337650	40.0
unknown	8.98	10.2	ppb	342605	4	9.33	1339720	40.0
unknown	10.03	4.7	ppb	157055	5	9.33	1339720	40.0
Internal standard...	10.14	5.7	ppb	190027	5	9.33	1339720	40.0
unknown	10.66	4.0	ppb	147309	6	11.65	1472160	40.0
unknown	10.95	6.3	ppb	233210	6	11.65	1472160	40.0
unknown	12.38	6.9	ppb	254597	7	11.65	1472160	40.0
unknown	12.40	10.1	ppb	372207	7	11.65	1472160	40.0
Internal standard...	13.22	5.3	ppb	195612	7	11.65	1472160	40.0
Internal standard...	16.24	4.7	ppb	164654	10	16.33	1407800	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:17:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

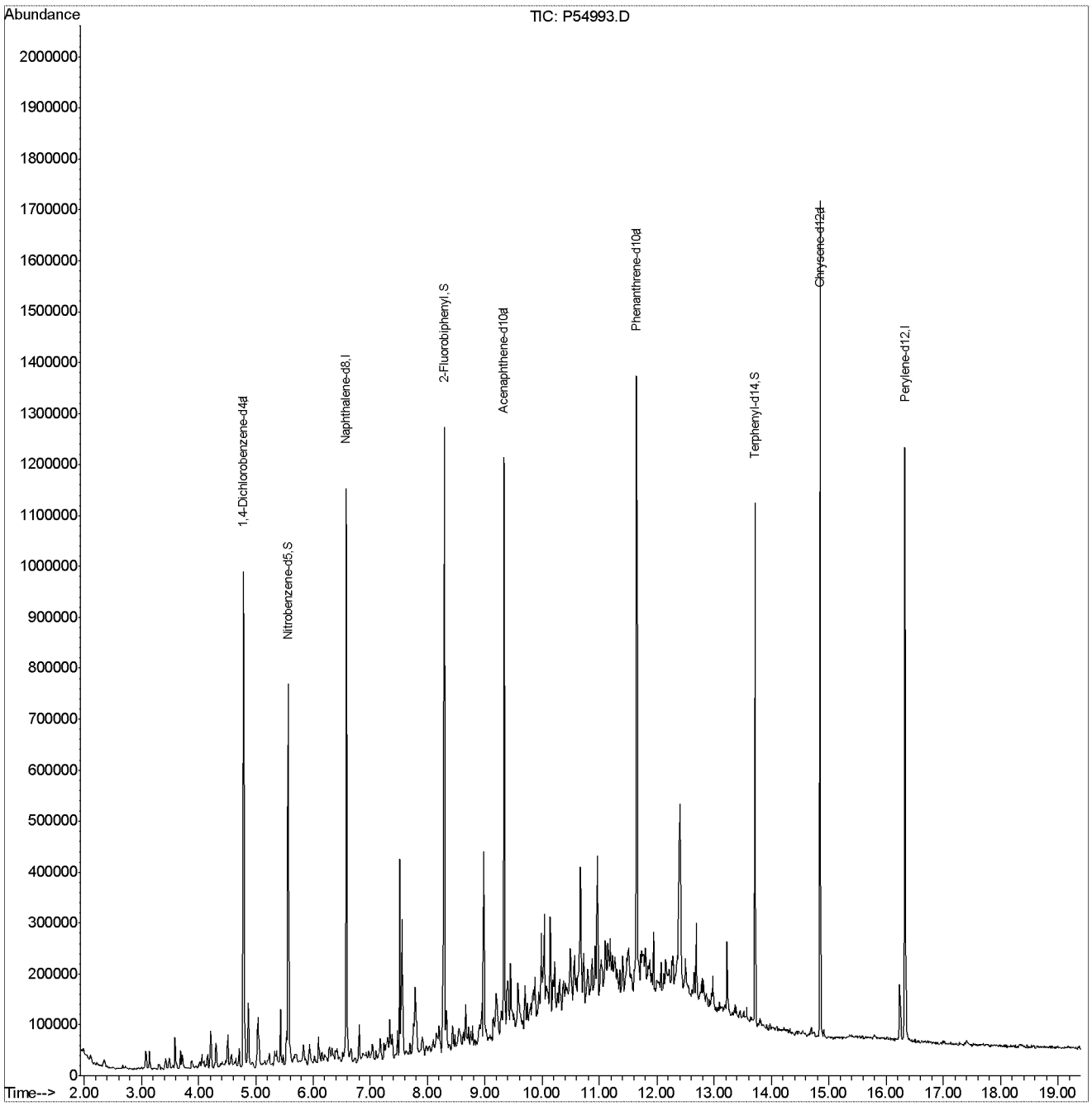
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	150848	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	530356	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	305333	40.00	ppb	-0.08
69) Phenanthrene-d10	11.64	188	471038	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	594393	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	538009	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	4.78	152	150848	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	471038	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	305333	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	594393	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	278793	41.72	ppb	-0.08
Spiked Amount 50.000			Recovery =	83.44%		
51) 2-Fluorobiphenyl	8.29	172	415995	39.68	ppb	-0.08
Spiked Amount 50.000			Recovery =	79.36%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	268234	19.10	ppb	-0.06
Spiked Amount 50.000			Recovery =	38.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:17:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.106	30	33	44	rVB8	17664	38247	2.24%	0.165%
2	3.073	208	214	223	rVV3	36475	65700	3.84%	0.284%
3	3.142	223	227	236	rVV2	35806	51315	3.00%	0.222%
4	3.585	306	310	321	rVB	60395	82326	4.81%	0.355%
5	3.676	322	327	331	rVV	34845	42073	2.46%	0.182%
6	3.714	331	334	343	rVB2	25683	36101	2.11%	0.156%
7	4.056	394	398	402	rVV3	26331	35153	2.05%	0.152%
8	4.152	409	416	421	rVB3	26290	39447	2.31%	0.170%
9	4.205	421	426	435	rBV	71741	103540	6.05%	0.447%
10	4.301	435	444	454	rBV5	48354	97043	5.67%	0.419%
11	4.504	477	482	488	rVB3	58823	76286	4.46%	0.329%
12	4.649	501	509	513	rVV5	18153	37634	2.20%	0.162%
13	4.702	513	519	526	rVB2	36756	51543	3.01%	0.223%
14	4.782	527	534	543	rBV	971503	1180777	69.01%	5.097%
15	4.862	543	549	557	rVB	123121	159241	9.31%	0.687%
16	5.033	572	581	592	rBV2	98635	200607	11.72%	0.866%
17	5.231	607	618	624	rVB9	22921	49611	2.90%	0.214%
18	5.354	638	641	648	rVB5	26366	44028	2.57%	0.190%
19	5.429	650	655	660	rVB	105549	124313	7.26%	0.537%
20	5.562	669	680	694	rBV	748484	1019381	59.57%	4.401%
21	5.685	701	703	713	rVB4	16288	37245	2.18%	0.161%
22	5.824	725	729	734	rVB4	31557	38484	2.25%	0.166%
23	5.936	742	750	761	rBV7	40845	81518	4.76%	0.352%
24	6.091	775	779	788	rBV4	52534	88582	5.18%	0.382%
25	6.203	796	800	809	rVB4	12660	34075	1.99%	0.147%
26	6.283	810	815	818	rBV4	28096	36965	2.16%	0.160%
27	6.321	819	822	831	rVB8	23915	44941	2.63%	0.194%
28	6.572	860	869	880	rVV	1124836	1387772	81.10%	5.991%
29	6.657	880	885	892	rVB7	25795	44038	2.57%	0.190%
30	6.796	905	911	918	rBV2	75544	109014	6.37%	0.471%
31	7.031	949	955	962	rVB9	30975	58040	3.39%	0.251%
32	7.170	971	981	988	rVB10	41168	88141	5.15%	0.380%
33	7.240	988	994	997	rBV5	33350	49909	2.92%	0.215%
34	7.298	998	1005	1008	rVV8	39333	95734	5.59%	0.413%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.336	1008	1012	1017	rVV3	74488	123556	7.22%	0.533%
36	7.373	1017	1019	1027	rVB	49118	54126	3.16%	0.234%
37	7.469	1027	1037	1040	rBV2	55749	81109	4.74%	0.350%
38	7.512	1040	1045	1048	rVV	385381	447084	26.13%	1.930%
39	7.549	1048	1052	1061	rVB	265565	339472	19.84%	1.465%
40	7.747	1083	1089	1092	rVV5	58840	108215	6.32%	0.467%
41	7.779	1092	1095	1108	rVB3	127682	228799	13.37%	0.988%
42	7.902	1114	1118	1126	rVB8	38253	79818	4.66%	0.345%
43	7.971	1126	1131	1136	rBV8	20771	43864	2.56%	0.189%
44	8.148	1161	1164	1169	rBV4	24311	39332	2.30%	0.170%
45	8.190	1169	1172	1181	rVB6	54382	106023	6.20%	0.458%
46	8.287	1181	1190	1194	rBV	1229337	1605734	93.84%	6.932%
47	8.324	1195	1197	1202	rVB2	77061	87106	5.09%	0.376%
48	8.431	1211	1217	1222	rBV7	49414	89532	5.23%	0.386%
49	8.548	1232	1239	1248	rVB7	33283	94005	5.49%	0.406%
50	8.618	1248	1252	1255	rBV5	25544	33540	1.96%	0.145%
51	8.655	1255	1259	1265	rBV2	72948	81481	4.76%	0.352%
52	8.709	1266	1269	1273	rVV5	37832	49586	2.90%	0.214%
53	8.746	1273	1276	1280	rVV3	28533	34997	2.05%	0.151%
54	8.783	1280	1283	1286	rVB2	38416	36837	2.15%	0.159%
55	8.890	1298	1303	1308	rBV9	38116	87388	5.11%	0.377%
56	8.938	1308	1312	1315	rVB3	67915	75028	4.38%	0.324%
57	8.976	1315	1319	1325	rBV	362611	441117	25.78%	1.904%
58	9.147	1347	1351	1354	rBV4	44313	69193	4.04%	0.299%
59	9.189	1355	1359	1369	rVB5	84474	222109	12.98%	0.959%
60	9.286	1371	1377	1380	rBV7	42127	82168	4.80%	0.355%
61	9.328	1380	1385	1391	rVV	1122658	1403026	81.99%	6.057%
62	9.398	1391	1398	1402	rVV5	87173	184793	10.80%	0.798%
63	9.446	1402	1407	1414	rVV3	113437	178933	10.46%	0.772%
64	9.574	1426	1431	1444	rVB3	83867	192129	11.23%	0.829%
65	9.697	1449	1454	1458	rBV4	87007	121263	7.09%	0.523%
66	9.734	1458	1461	1465	rVB5	38924	51344	3.00%	0.222%
67	9.836	1475	1480	1483	rBV6	46637	83754	4.89%	0.362%
68	9.868	1484	1486	1491	rVB4	78628	89812	5.25%	0.388%
69	9.937	1496	1499	1502	rBV5	44224	54835	3.20%	0.237%
70	9.980	1502	1507	1511	rBV5	141278	201647	11.78%	0.870%
71	10.028	1512	1516	1520	rVB2	169978	212397	12.41%	0.917%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.135	1532	1536	1541	rVB2	186137	244862	14.31%	1.057%
73	10.183	1542	1545	1548	rBV5	59118	86587	5.06%	0.374%
74	10.210	1548	1550	1556	rVB5	91085	116410	6.80%	0.503%
75	10.301	1564	1567	1574	rVB5	62546	98855	5.78%	0.427%
76	10.365	1575	1579	1583	rBV6	57334	96507	5.64%	0.417%
77	10.488	1599	1602	1610	rVB7	103120	184189	10.76%	0.795%
78	10.557	1610	1615	1619	rBV6	89364	154971	9.06%	0.669%
79	10.664	1631	1635	1640	rVB	246930	296411	17.32%	1.280%
80	10.717	1641	1645	1650	rVB4	97654	131080	7.66%	0.566%
81	10.862	1668	1672	1677	rVB6	62549	97189	5.68%	0.420%
82	10.920	1679	1683	1686	rBV3	79803	108429	6.34%	0.468%
83	10.958	1686	1690	1695	rVB	274426	328676	19.21%	1.419%
84	11.022	1697	1702	1710	rBV	63380	149146	8.72%	0.644%
85	11.097	1711	1716	1722	rBV6	91038	180206	10.53%	0.778%
86	11.145	1723	1725	1729	rVV4	61425	75565	4.42%	0.326%
87	11.182	1729	1732	1735	rVB2	62619	66373	3.88%	0.287%
88	11.396	1768	1772	1777	rBV6	71790	98599	5.76%	0.426%
89	11.642	1807	1818	1829	rBV2	1210277	1711124	100.00%	7.387%
90	11.935	1870	1873	1881	rVB2	117208	141941	8.30%	0.613%
91	12.069	1895	1898	1902	rVB3	57212	63759	3.73%	0.275%
92	12.400	1953	1960	1971	rVB4	360950	805834	47.09%	3.479%
93	12.646	2003	2006	2009	rVV2	43189	43673	2.55%	0.189%
94	12.683	2009	2013	2021	rVB	148215	179415	10.49%	0.775%
95	12.972	2065	2067	2075	rVB2	66465	87384	5.11%	0.377%
96	13.218	2110	2113	2126	rVB	146835	193916	11.33%	0.837%
97	13.709	2200	2205	2213	rVB	1026343	993039	58.03%	4.287%
98	14.847	2413	2418	2427	rBV	1641327	1576521	92.13%	6.806%
99	16.236	2674	2678	2687	rVB	107712	153890	8.99%	0.664%
100	16.327	2688	2695	2710	rVB	1165313	1456501	85.12%	6.287%

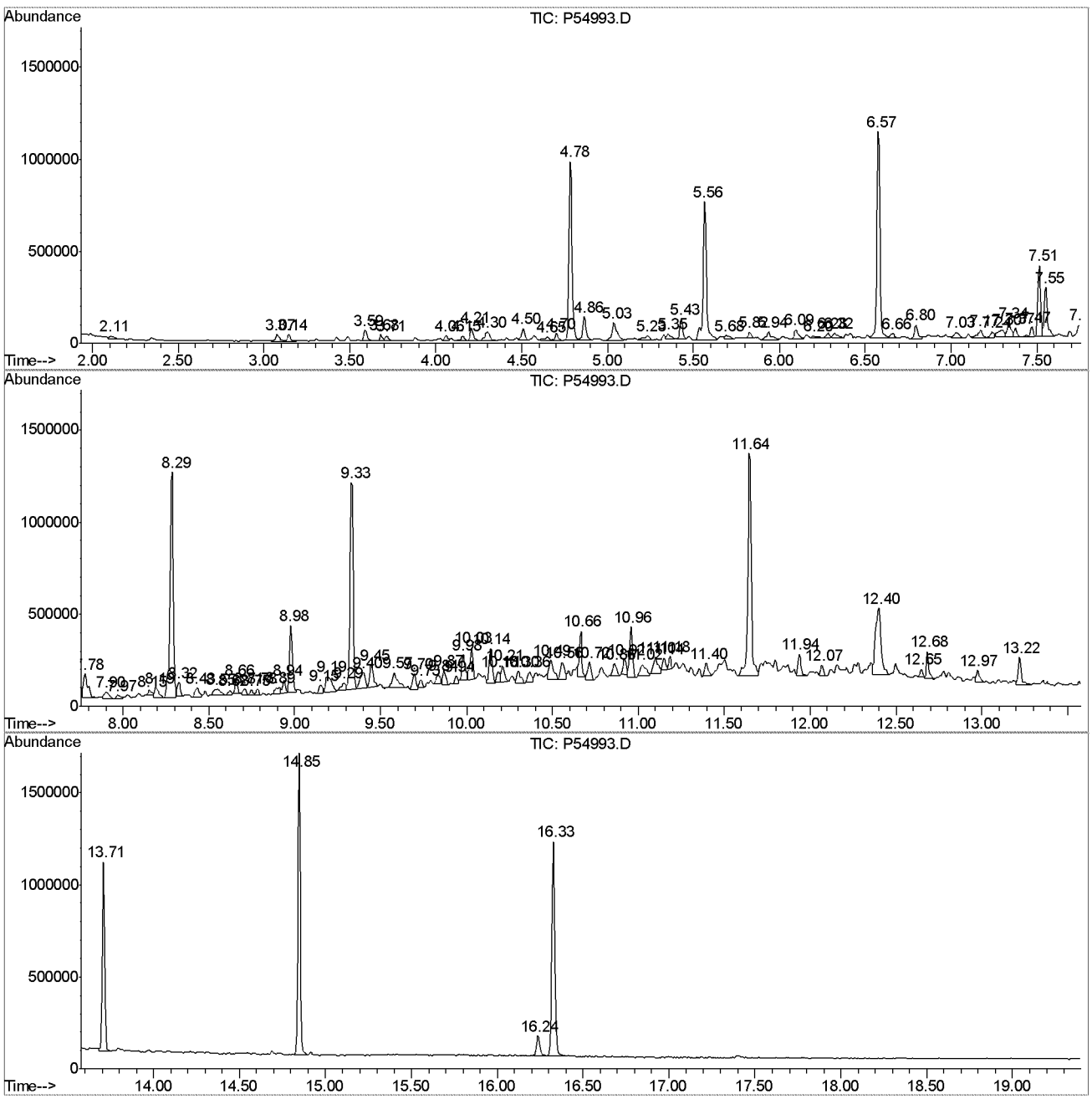
Sum of corrected areas: 23165028

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

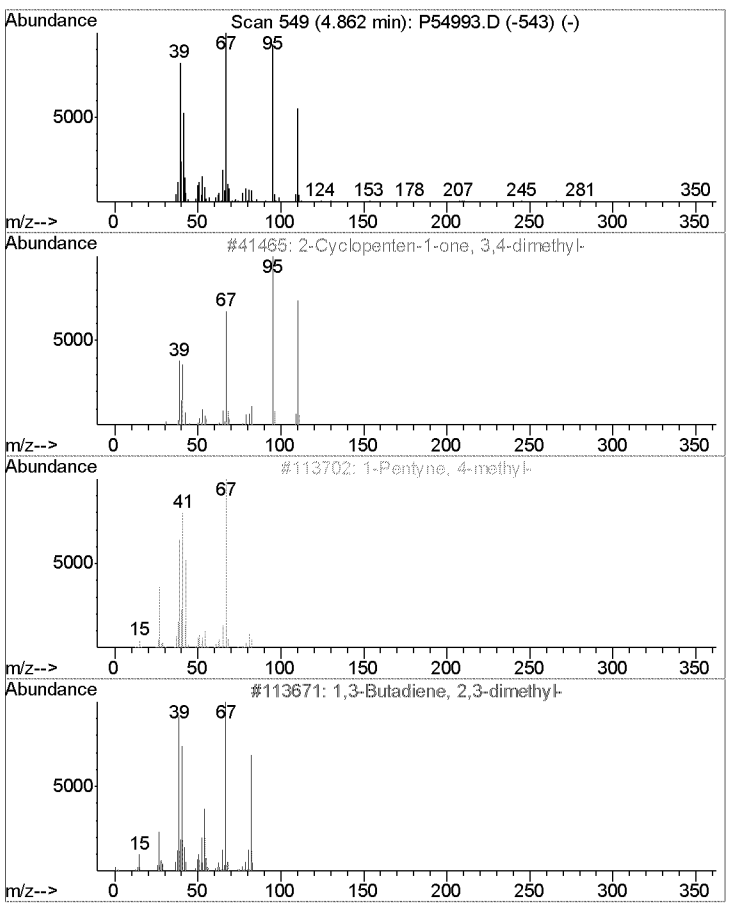
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

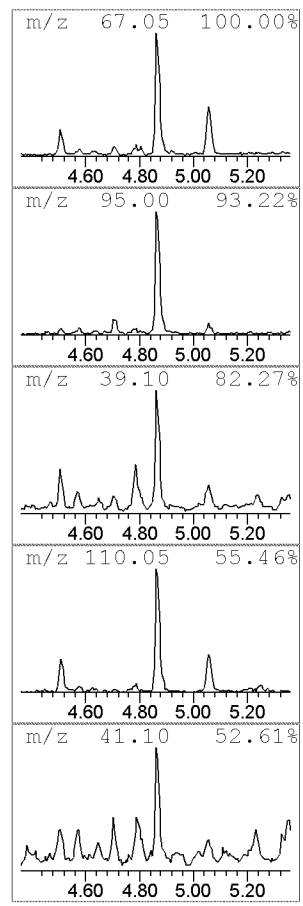
****

Peak Number 1 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	5.39 ppb	159241	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4-dimethyl-	110	C7H10O	030434-64-1	91
2	1-Pentyne, 4-methyl-	82	C6H10	007154-75-8	68
3	1,3-Butadiene, 2,3-dimethyl-	82	C6H10	000513-81-5	59
4	Spiropentane	68	C5H8	000157-40-4	58
5	Cyclopropane, (1-methylethenyl)-	82	C6H10	004663-22-3	53





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
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Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

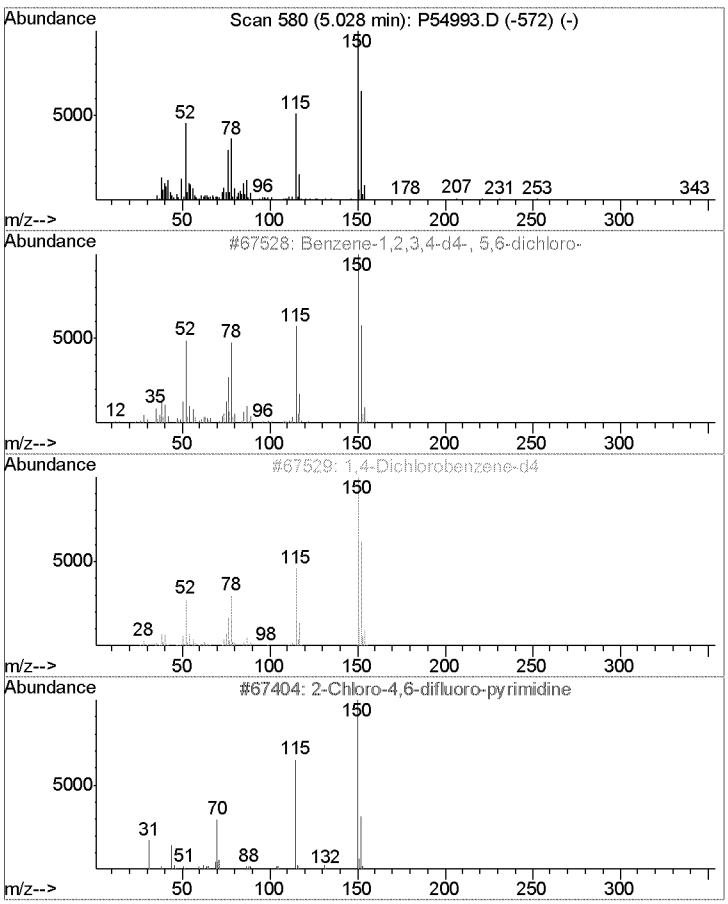
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

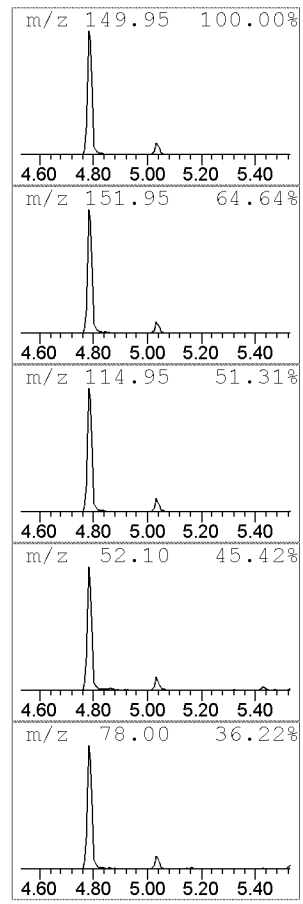
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.68 ppb	138172	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	12
4	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	10
5	3-Methyl-4,4'-bi(1,2,4-triazole)	150	C5H6N6	1000146-57-2	10





Library Search Compound Report

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Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

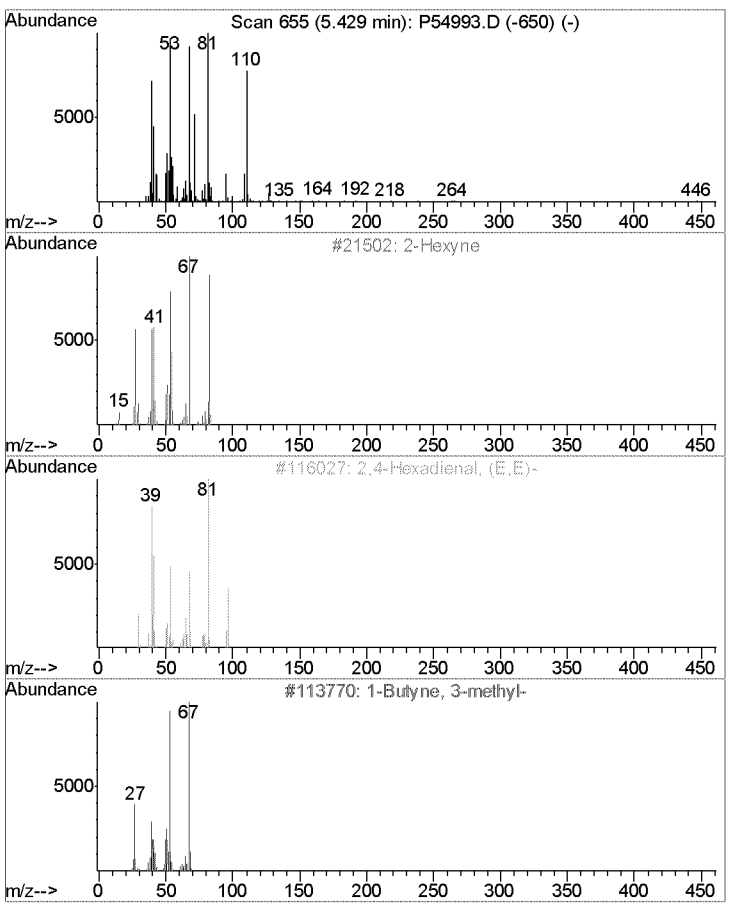
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

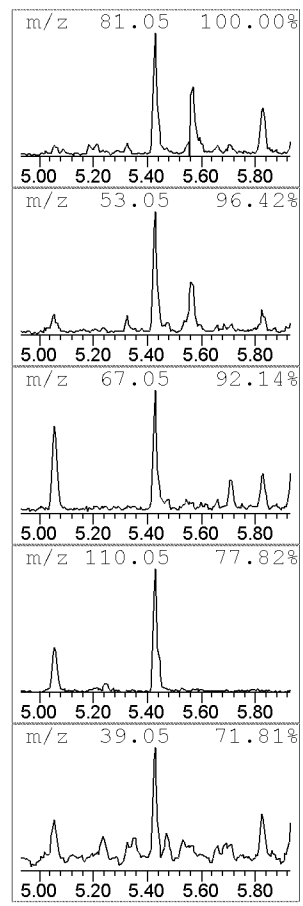
****

Peak Number 3 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.43	4.21 ppb	124313	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Hexyne	82	C6H10	000764-35-2	64
2	2,4-Hexadienal, (E,E)-	96	C6H8O	000142-83-6	59
3	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	49
4	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	49
5	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	47





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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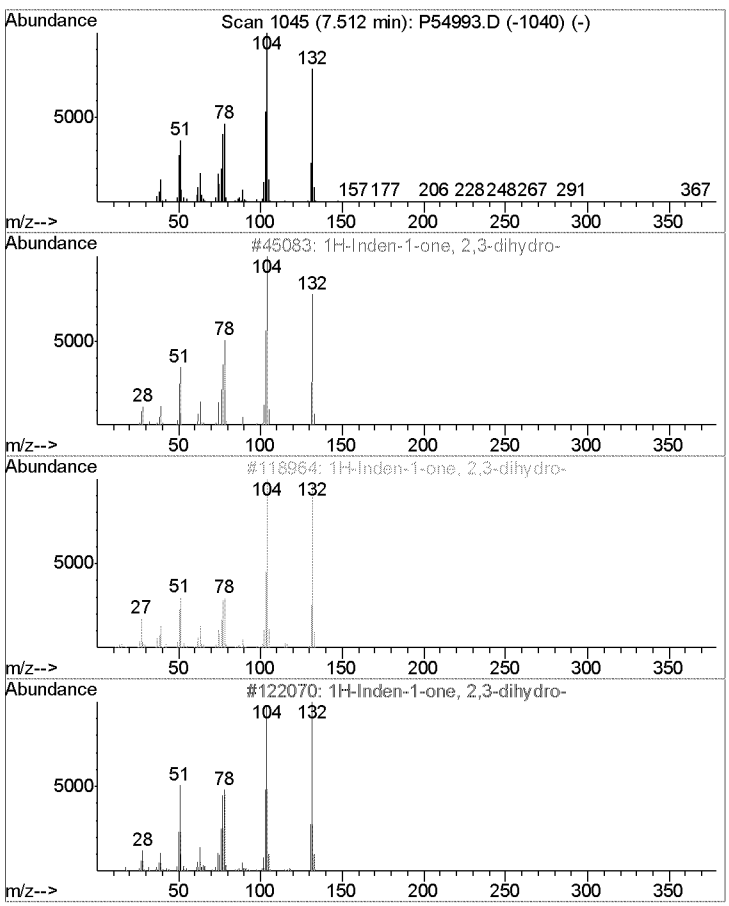
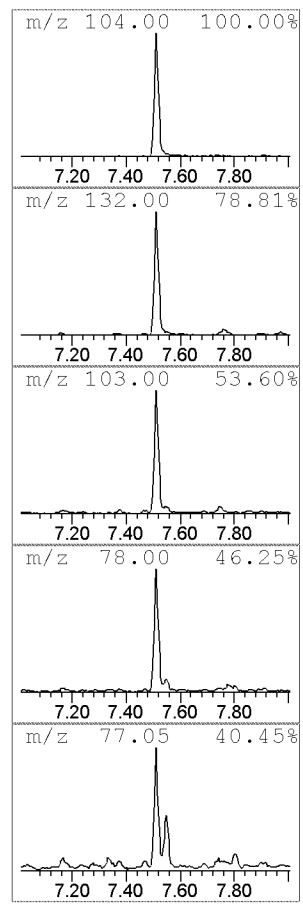
Peak Number 4 1H-Inden-1-one, -dihydro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.51	12.89 ppb	447084	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	98
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
4	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
5	Styrene	104	C8H8	000100-42-5	64





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

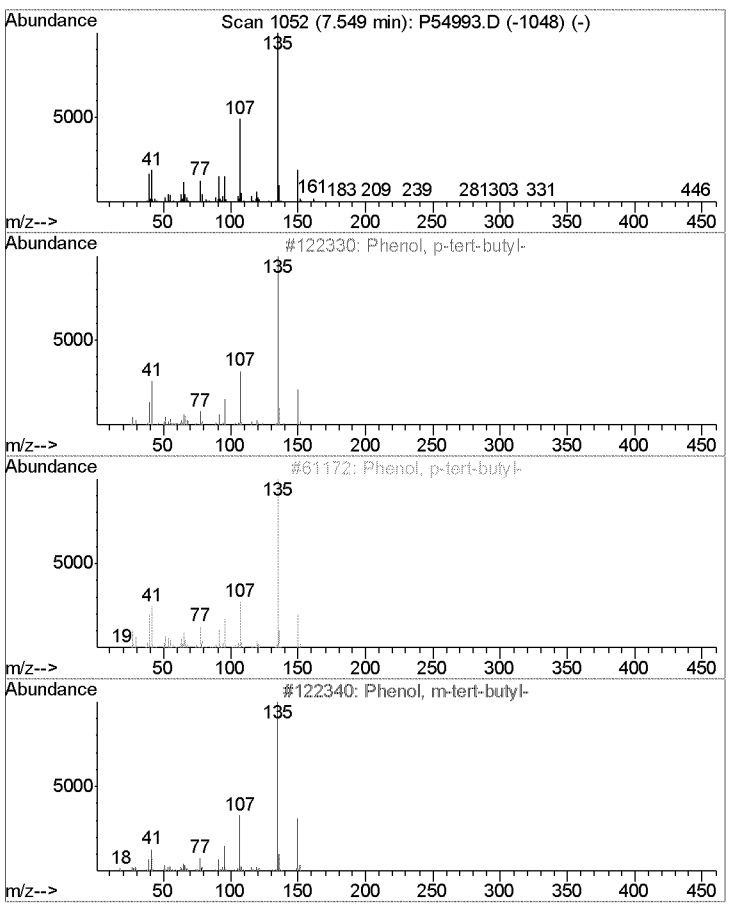
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

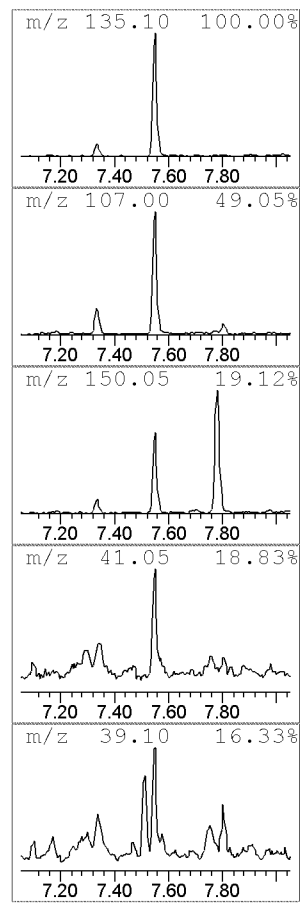
****

Peak Number 5 Phenol, -tert-butyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.55	9.78 ppb	339472	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	87
2	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	87
3	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
4	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
5	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	83





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

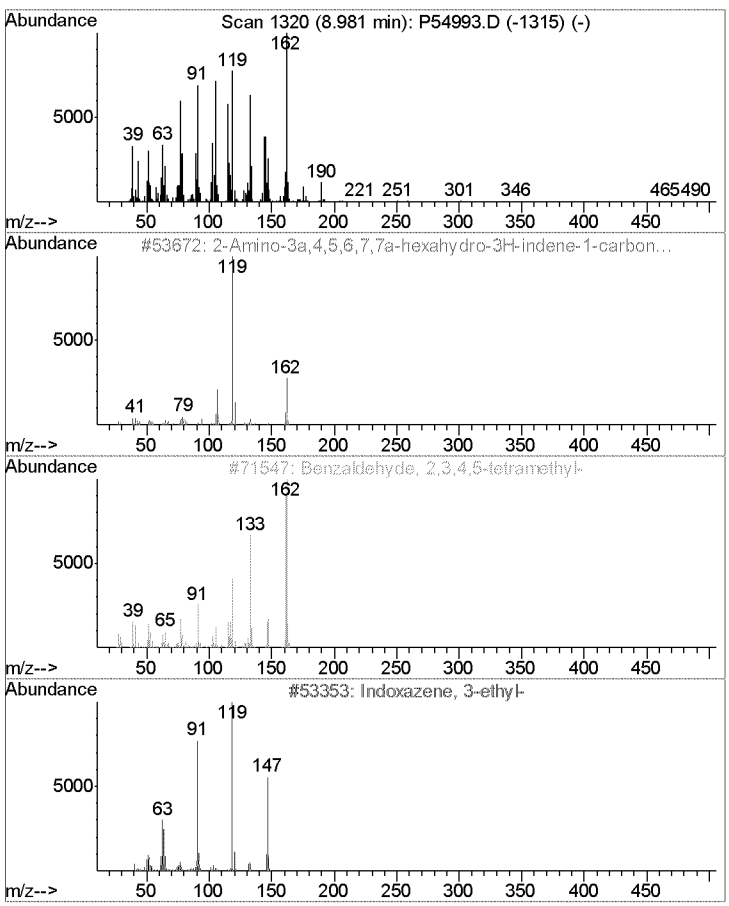
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

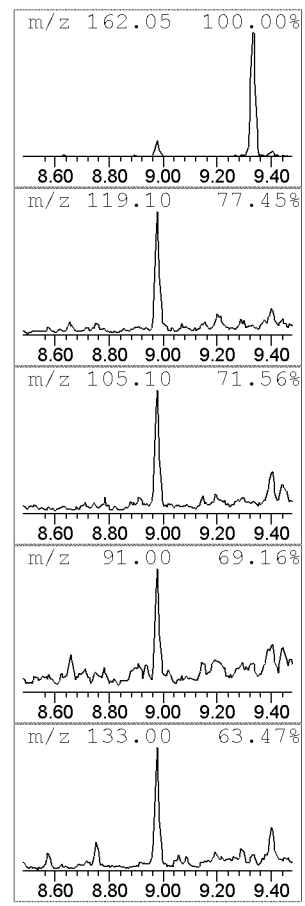
****

Peak Number 6 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.98	12.58 ppb	441117	Acenaphthene-d10	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Amino-3a,4,5,6,7,7a-hexahydro-...	162	C10H14N2	1000185-29-8	42
2	Benzaldehyde, 2,3,4,5-tetramethyl-	162	C11H14O	029344-95-4	38
3	Indoxazene, 3-ethyl-	147	C9H9NO	1000131-51-1	38
4	Anisole, p-(1-ethylvinyl)-	162	C11H14O	021758-19-0	30
5	Benzene, 1-(2-methoxy-1-propenyl...	162	C11H14O	053291-92-2	30





Library Search Compound Report

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Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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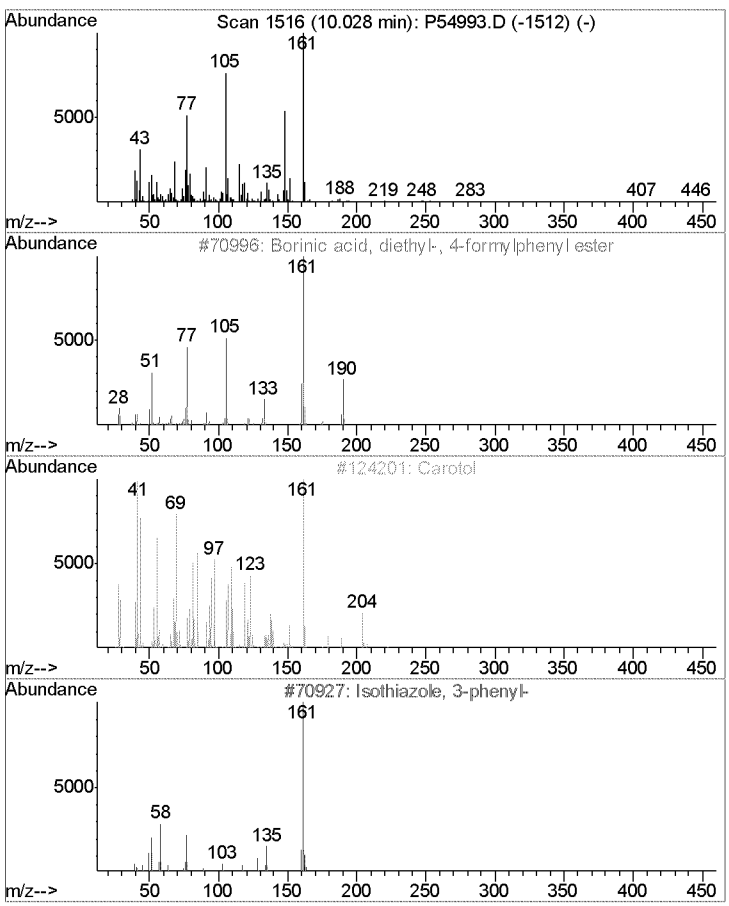
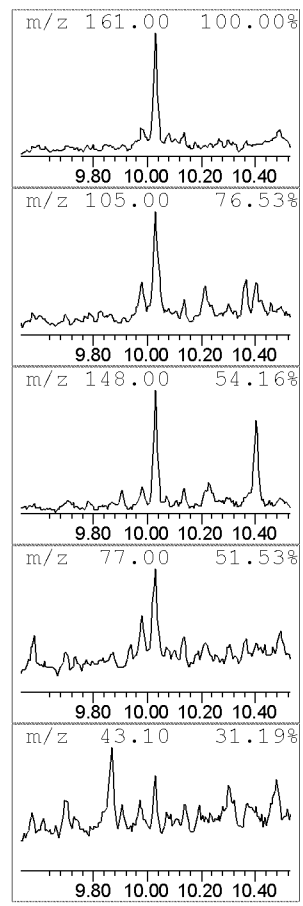
Peak Number 7 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.03	4.33 ppb	151705	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Borinic acid, diethyl-, 4-formyl...	190	C11H15BO2	061142-75-4	43
2	Carotol	222	C15H26O	000465-28-1	38
3	Isothiazole, 3-phenyl-	161	C9H7NS	010514-34-8	35
4	2-(3-Thienyl)pyridine	161	C9H7NS	021298-55-5	35
5	3-Cyanopyrazolo[3,4-d]pyrimidine...	161	C6H3N5O	1000212-40-6	35





Library Search Compound Report

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Acq On : 22 Feb 2011 2:21 pm
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Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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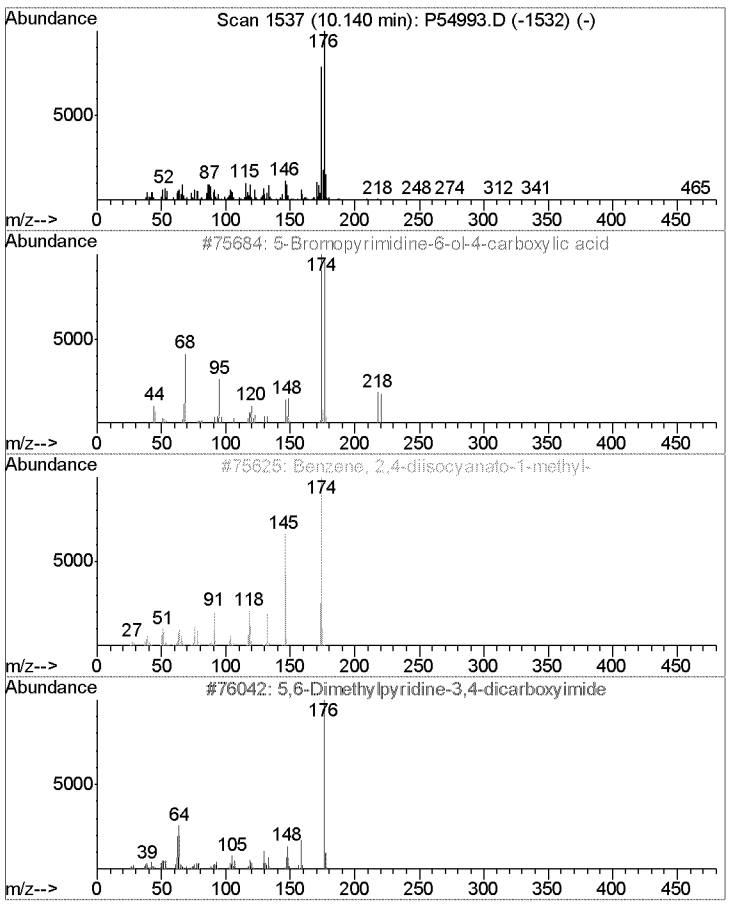
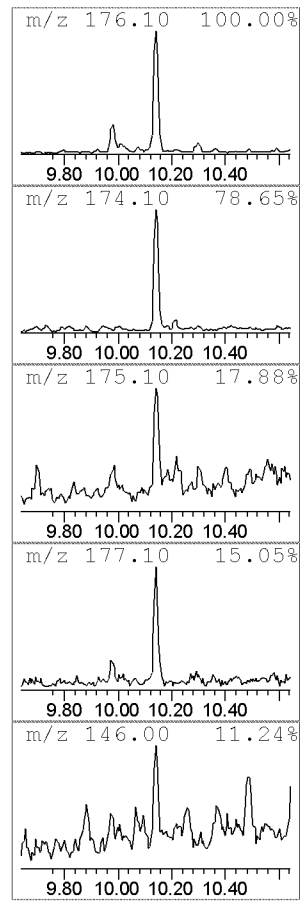
Peak Number 8 Internal standard added for... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.80 ppb	203342	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	40
2	Benzene, 2,4-diisocyanato-1-methyl-	174	C9H6N2O2	000584-84-9	38
3	5,6-Dimethylpyridine-3,4-dicarbo...	176	C9H8N2O2	1000222-05-7	35
4	2-Cyanomethyl-1,3-benzothiazole	174	C9H6N2S	056278-50-3	35
5	5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	35





Library Search Compound Report

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Sample : ja68506-3
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TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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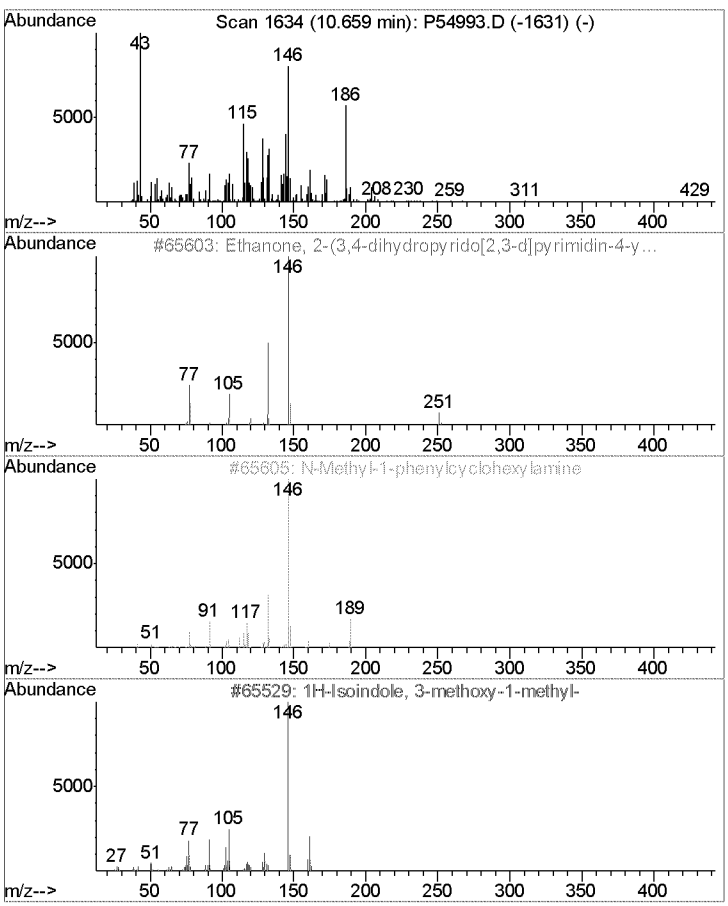
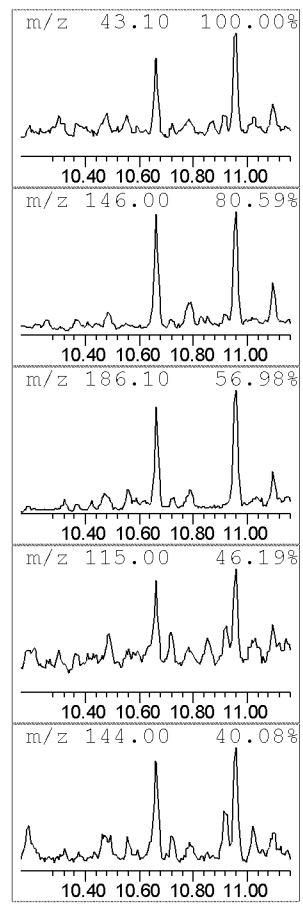
Peak Number 9 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.66	6.93 ppb	296411	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanone, 2-(3,4-dihydropyrido[2...	251	C15H13N3O	028732-76-5	22
2	N-Methyl-1-phenylcyclohexylamine	189	C13H19N	002201-16-3	22
3	1H-Isoindole, 3-methoxy-1-methyl-	161	C10H11NO	083889-38-7	18
4	Phenanthrene, 1,2,3,4,5,6,7,8-oc...	186	C14H18	005325-97-3	18
5	Naphth[1,2-b]oxirene, 1a,2,3,7b-...	146	C10H10O	002461-34-9	18





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TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

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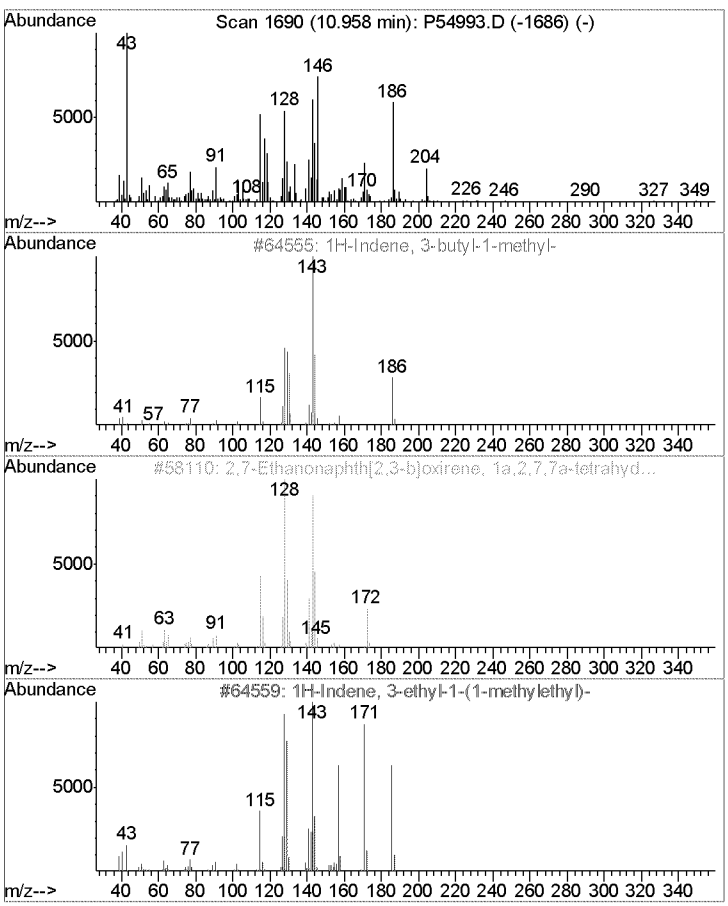
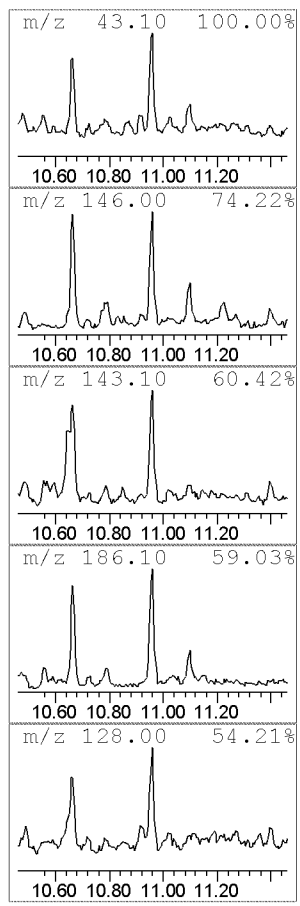
Peak Number 10 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.96	7.68 ppb	328676	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 3-butyl-1-methyl-	186	C14H18	111400-84-1	38
2	2,7-Ethanonaphth[2,3-b]oxirene, ...	172	C12H12O	054515-76-3	27
3	1H-Indene, 3-ethyl-1-(1-methylet...	186	C14H18	111400-85-2	25
4	Benzene, (1,2,3-trimethyl-2-cycl...	158	C12H14	006393-13-1	18
5	(1-Methylpenta-1,3-dienyl)benzene	158	C12H14	116669-49-9	14





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

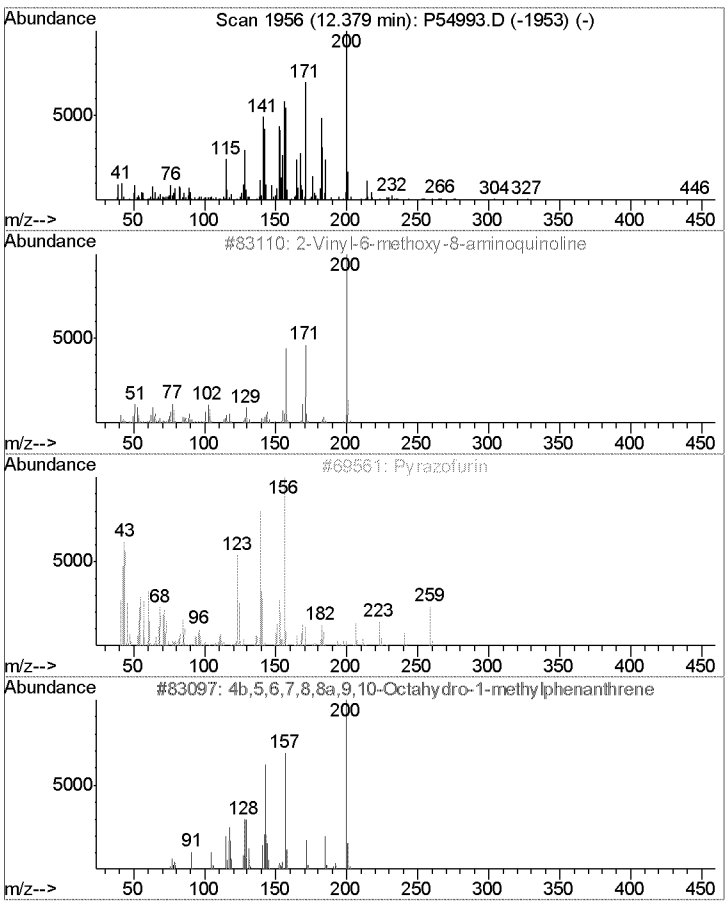
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

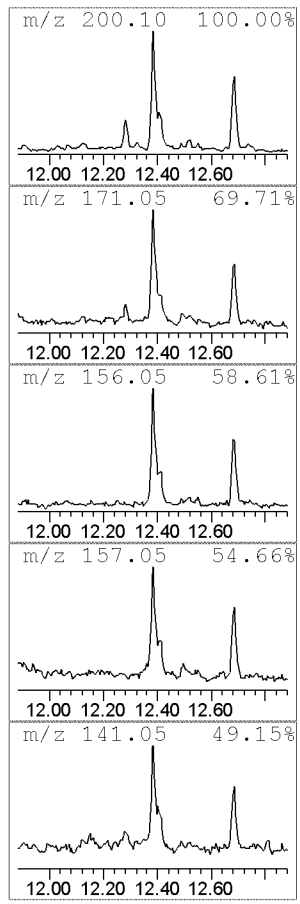
****

Peak Number 11 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	6.72 ppb	287599	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	30
2	Pyrazofurin	259	C9H13N3O6	030868-30-5	18
3	4b,5,6,7,8,8a,9,10-Octahydro-1-m...	200	C15H20	1000080-19-3	14
4	Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	11
5	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	11





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

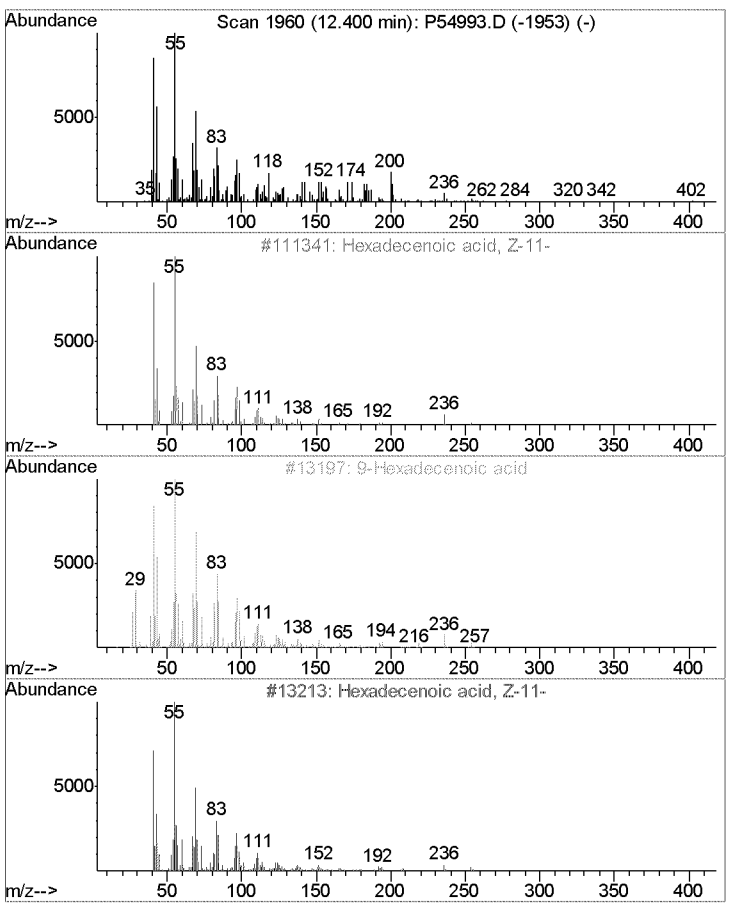
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

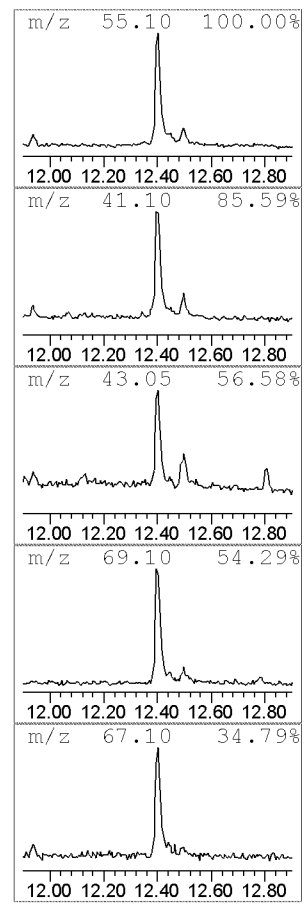
****

Peak Number 12 unknown acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	9.57 ppb	409243	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	93
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	91
3	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	91
4	2-Tridecene, (E)-	182	C13H26	041446-58-6	42
5	4-Tridecene, (Z)-	182	C13H26	041446-54-2	38





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

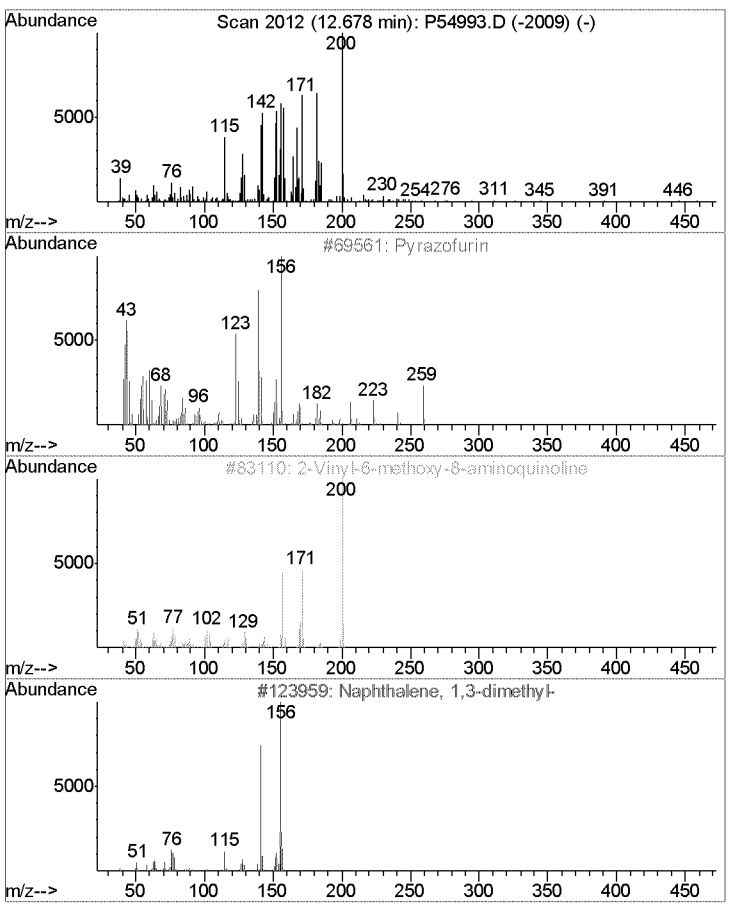
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

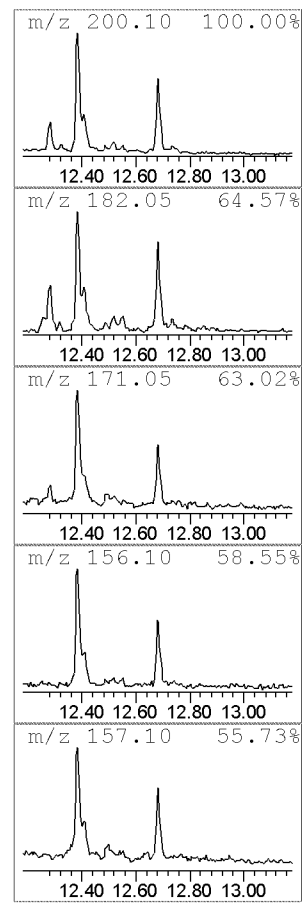
****

Peak Number 13 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.68	4.19 ppb	179415	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrazofurin	259	C9H13N3O6	030868-30-5	92
2	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	22
3	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	11
4	4,6(1H,5H)-Pyrimidinedione, 1,3-...	200	C8H12N2O2S	005217-47-0	11
5	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	11





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

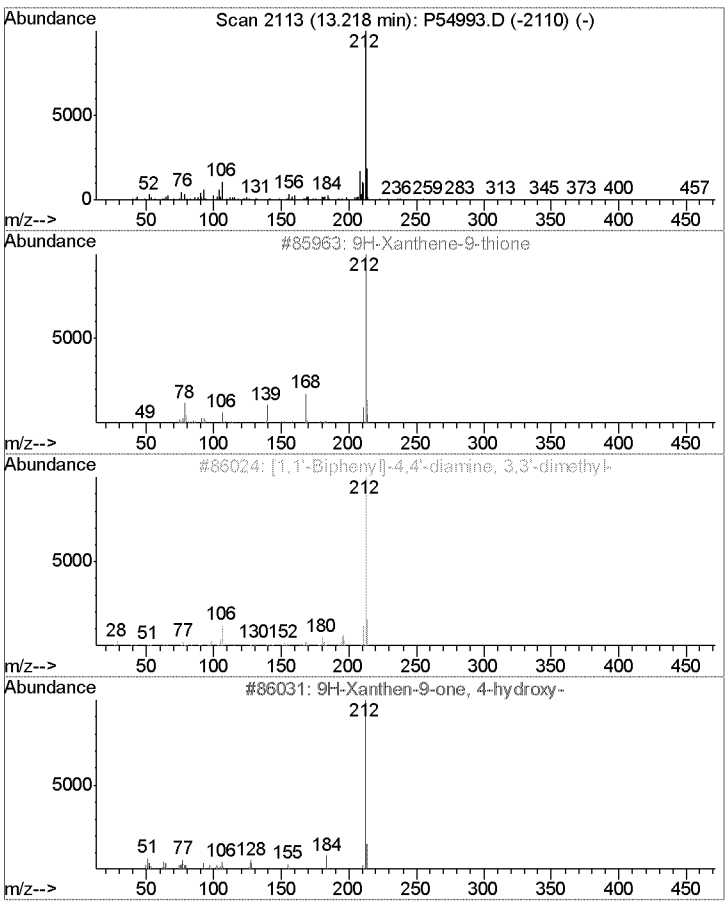
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

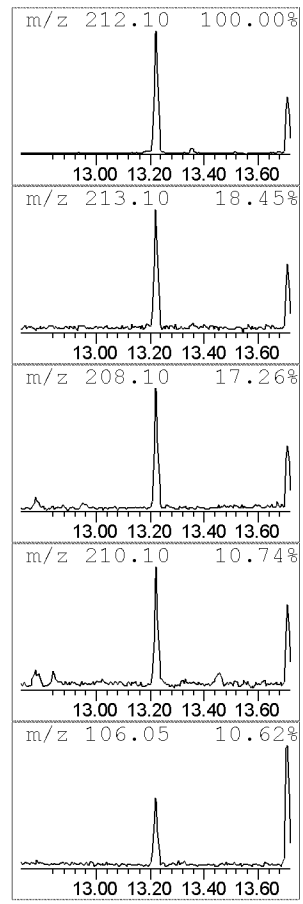
****

Peak Number 14 Internal standard added for... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.53 ppb	193916	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	52
4	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	50
5	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	50





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

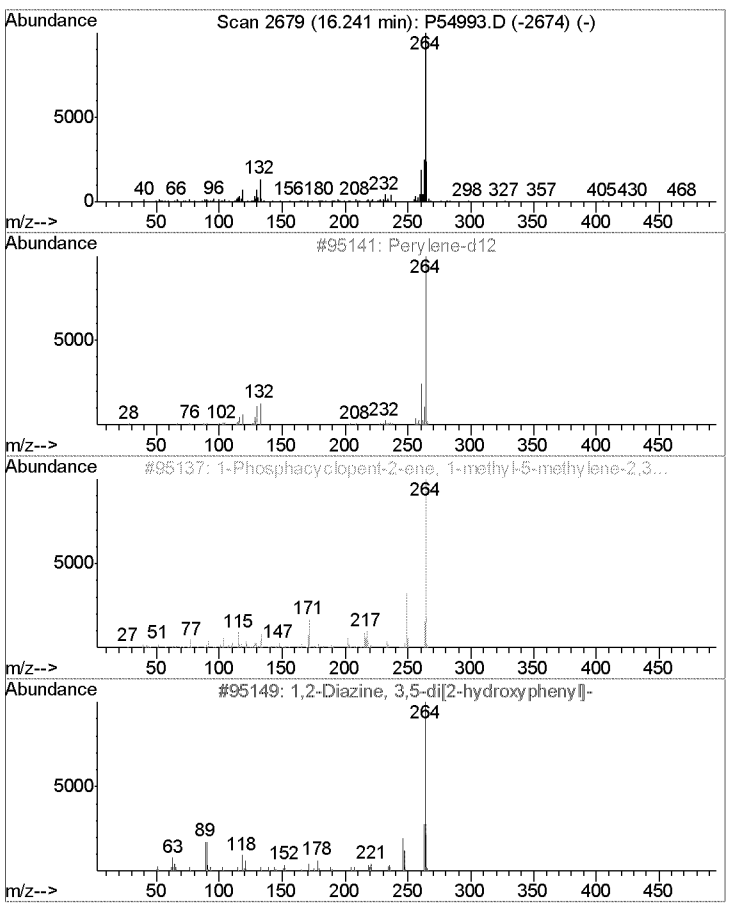
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

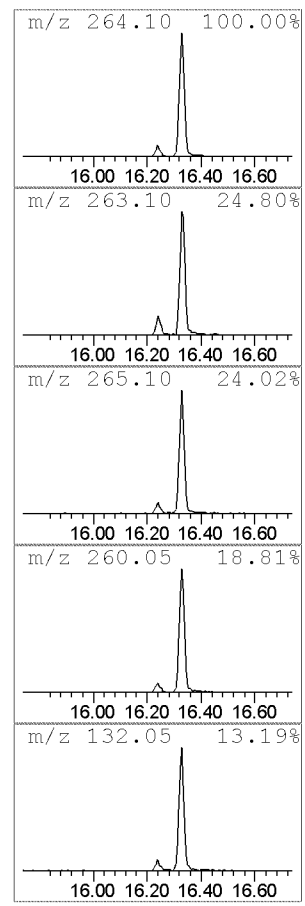
****

Peak Number 15 Internal standard added for... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.23 ppb	153890	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	95
2	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	72
3	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	64
4	2-[(N-Methylaminocarbonyl)benzyl...	322	C18H18N4O2	1000148-36-9	53
5	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	4.86	5.4	ppb	159241	2	4.78	1180780	40.0
Internal standard...	5.03	4.7	ppb	138172	2	4.78	1180780	40.0
unknown	5.43	4.2	ppb	124313	2	4.78	1180780	40.0
1H-Inden-1-one, -...	7.51	12.9	ppb	447084	3	6.57	1387770	40.0
Phenol, -tert-butyl-	7.55	9.8	ppb	339472	3	6.57	1387770	40.0
unknown	8.98	12.6	ppb	441117	4	9.33	1403030	40.0
unknown	10.03	4.3	ppb	151705	5	9.33	1403030	40.0
Internal standard...	10.14	5.8	ppb	203342	5	9.33	1403030	40.0
unknown	10.66	6.9	ppb	296411	6	11.64	1711120	40.0
unknown	10.96	7.7	ppb	328676	6	11.64	1711120	40.0
unknown	12.38	6.7	ppb	287599	7	11.64	1711120	40.0
unknown acid	12.40	9.6	ppb	409243	7	11.64	1711120	40.0
unknown	12.68	4.2	ppb	179415	7	11.64	1711120	40.0
Internal standard...	13.22	4.5	ppb	193916	7	11.64	1711120	40.0
Internal standard...	16.24	4.2	ppb	153890	10	16.33	1456500	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	155533	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	554125	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	346833	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	584336	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	643221	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	549267	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	155533	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	584336	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	346833	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	643221	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	289308	41.44	ppb	-0.07
Spiked Amount 50.000			Recovery =	82.88%		
51) 2-Fluorobiphenyl	8.28	172	478893	40.21	ppb	-0.09
Spiked Amount 50.000			Recovery =	80.42%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	566776	37.29	ppb	-0.06
Spiked Amount 50.000			Recovery =	74.58%		

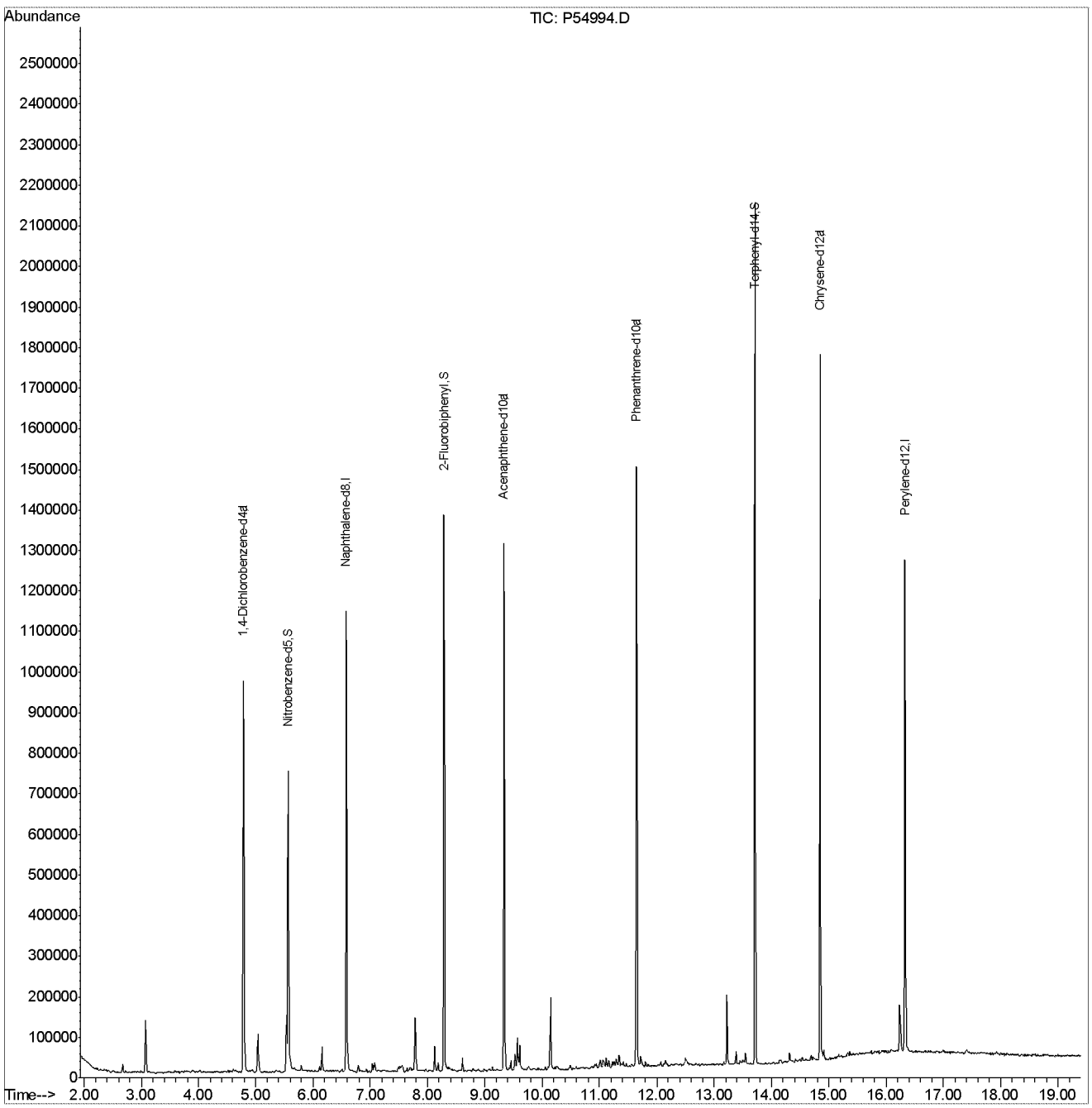
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.384	82	85	100	rVB	7252	18643	0.92%	0.112%
2	2.501	100	107	114	rVB	4482	10529	0.52%	0.063%
3	2.667	134	138	144	rVV2	20694	27565	1.36%	0.165%
4	2.726	144	149	156	rVB2	5349	11297	0.56%	0.068%
5	3.068	205	213	222	rBV	130265	158651	7.81%	0.951%
6	3.137	222	226	231	rBV8	3761	6787	0.33%	0.041%
7	3.591	303	311	315	rBV10	4721	9922	0.49%	0.059%
8	3.794	345	349	361	rVB10	4254	10354	0.51%	0.062%
9	3.896	361	368	377	rVB10	5921	13851	0.68%	0.083%
10	4.024	383	392	397	rBV10	5224	11726	0.58%	0.070%
11	4.435	465	469	477	rBV9	3335	8869	0.44%	0.053%
12	4.601	497	500	504	rBV5	7582	11184	0.55%	0.067%
13	4.638	504	507	516	rVB7	6365	10786	0.53%	0.065%
14	4.782	526	534	549	rBV	964731	1164577	57.31%	6.978%
15	4.937	559	563	571	rVB7	7427	12756	0.63%	0.076%
16	5.033	576	581	591	rVB	93359	120255	5.92%	0.721%
17	5.349	634	640	641	rBV6	5977	8676	0.43%	0.052%
18	5.402	646	650	659	rVB9	4399	8701	0.43%	0.052%
19	5.530	665	674	677	rBV	141713	177662	8.74%	1.064%
20	5.562	677	680	697	rVB	738837	907967	44.68%	5.440%
21	5.792	719	723	729	rVB4	14442	17917	0.88%	0.107%
22	6.113	779	783	786	rBV5	12734	14652	0.72%	0.088%
23	6.155	786	791	802	rVB	60414	75585	3.72%	0.453%
24	6.497	846	855	860	rBV9	7799	13407	0.66%	0.080%
25	6.572	860	869	888	rBV	1134405	1409229	69.35%	8.444%
26	6.780	903	908	913	rBV5	17462	23409	1.15%	0.140%
27	6.930	932	936	940	rVB6	8982	11173	0.55%	0.067%
28	7.031	950	955	958	rBV	21793	26253	1.29%	0.157%
29	7.069	958	962	966	rVB	20775	24391	1.20%	0.146%
30	7.218	985	990	995	rBV9	5260	8452	0.42%	0.051%
31	7.486	1035	1040	1042	rBV5	11828	17184	0.85%	0.103%
32	7.512	1042	1045	1049	rVV5	13829	23974	1.18%	0.144%
33	7.550	1049	1052	1061	rVB4	17067	32456	1.60%	0.194%
34	7.640	1061	1069	1072	rBV9	11537	20240	1.00%	0.121%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.689	1073	1078	1085	rBV9	7305	12988	0.64%	0.078%
36	7.779	1090	1095	1107	rVB2	132730	177043	8.71%	1.061%
37	7.966	1126	1130	1136	rVB9	7488	10409	0.51%	0.062%
38	8.020	1136	1140	1147	rBV8	5896	9974	0.49%	0.060%
39	8.116	1150	1158	1165	rBV	63234	81065	3.99%	0.486%
40	8.175	1165	1169	1176	rVB4	22481	28692	1.41%	0.172%
41	8.282	1181	1189	1200	rBV	1373010	1622903	79.86%	9.724%
42	8.356	1200	1203	1206	rVB2	5730	6698	0.33%	0.040%
43	8.538	1233	1237	1244	rBV10	3883	8857	0.44%	0.053%
44	8.602	1244	1249	1256	rVB	32538	41634	2.05%	0.249%
45	8.704	1265	1268	1273	rBV7	4652	7306	0.36%	0.044%
46	8.789	1279	1284	1293	rBV7	6924	12466	0.61%	0.075%
47	8.875	1294	1300	1310	rVB7	6857	16911	0.83%	0.101%
48	8.981	1316	1320	1329	rVB10	6269	12582	0.62%	0.075%
49	9.062	1330	1335	1343	rBV10	6196	15710	0.77%	0.094%
50	9.126	1343	1347	1350	rBV6	8981	10336	0.51%	0.062%
51	9.195	1356	1360	1369	rVB6	5254	11843	0.58%	0.071%
52	9.329	1377	1385	1398	rBV	1298790	1586717	78.08%	9.507%
53	9.414	1398	1401	1404	rVV4	5875	7153	0.35%	0.043%
54	9.451	1404	1408	1412	rVB	24917	31060	1.53%	0.186%
55	9.521	1412	1421	1424	rBV	41452	54430	2.68%	0.326%
56	9.564	1424	1429	1433	rVV	80612	117737	5.79%	0.705%
57	9.606	1433	1437	1449	rVB	61988	92750	4.56%	0.556%
58	9.761	1457	1466	1475	rBV	9619	25044	1.23%	0.150%
59	9.847	1475	1482	1484	rBV8	3850	7266	0.36%	0.044%
60	10.050	1514	1520	1524	rBV7	7083	13123	0.65%	0.079%
61	10.141	1526	1537	1547	rBV2	179964	250675	12.34%	1.502%
62	10.247	1554	1557	1564	rVB9	6395	9101	0.45%	0.055%
63	10.488	1597	1602	1610	rVB9	9156	15385	0.76%	0.092%
64	10.589	1616	1621	1625	rBV7	6813	11100	0.55%	0.067%
65	10.867	1668	1673	1676	rBV6	6610	9236	0.45%	0.055%
66	10.910	1678	1681	1684	rBV5	9127	9859	0.49%	0.059%
67	10.942	1685	1687	1692	rVB2	11101	11314	0.56%	0.068%
68	11.006	1695	1699	1704	rBV	19971	24219	1.19%	0.145%
69	11.065	1707	1710	1716	rBV4	16040	25060	1.23%	0.150%
70	11.113	1716	1719	1723	rVV3	20337	22517	1.11%	0.135%
71	11.156	1724	1727	1733	rVB4	18875	21745	1.07%	0.130%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	11.220	1733	1739	1742	rBV4	15529	24825	1.22%	0.149%
73	11.252	1742	1745	1748	rVV5	11958	12225	0.60%	0.073%
74	11.284	1748	1751	1757	rVV5	18070	28420	1.40%	0.170%
75	11.337	1757	1761	1765	rVB2	27786	37592	1.85%	0.225%
76	11.407	1771	1774	1781	rVB4	12280	12686	0.62%	0.076%
77	11.471	1781	1786	1792	rVB8	8483	12758	0.63%	0.076%
78	11.562	1800	1803	1809	rBV8	7013	15071	0.74%	0.090%
79	11.642	1811	1818	1828	rBV2	1476640	1745432	85.89%	10.458%
80	11.722	1830	1833	1844	rVB7	25459	39964	1.97%	0.239%
81	11.797	1844	1847	1853	rBV6	13316	17105	0.84%	0.102%
82	11.845	1854	1856	1862	rVB7	5280	6951	0.34%	0.042%
83	12.064	1894	1897	1904	rVB7	10898	12979	0.64%	0.078%
84	12.123	1904	1908	1910	rVV4	6801	9611	0.47%	0.058%
85	12.149	1910	1913	1924	rVB4	14341	25891	1.27%	0.155%
86	12.497	1972	1978	1990	rBV4	19302	52474	2.58%	0.314%
87	13.164	2099	2103	2107	rBV7	8014	12336	0.61%	0.074%
88	13.218	2108	2113	2125	rVB	173468	193882	9.54%	1.162%
89	13.378	2139	2143	2147	rVB2	29583	29559	1.45%	0.177%
90	13.448	2153	2156	2160	rBV6	8246	13817	0.68%	0.083%
91	13.544	2171	2174	2187	rVB	26921	29088	1.43%	0.174%
92	13.709	2199	2205	2224	rVB	2124624	2032060	100.00%	12.176%
93	14.142	2283	2286	2295	rVB	8794	15841	0.78%	0.095%
94	14.313	2315	2318	2328	rVB4	21440	25862	1.27%	0.155%
95	14.692	2386	2389	2393	rBV6	11968	14265	0.70%	0.085%
96	14.847	2413	2418	2428	rBV	1736285	1704648	83.89%	10.214%
97	14.911	2428	2430	2443	rVB	25923	32909	1.62%	0.197%
98	15.365	2513	2515	2519	rBV5	11247	11629	0.57%	0.070%
99	16.236	2673	2678	2688	rBV	115013	164332	8.09%	0.985%
100	16.327	2688	2695	2718	rVB	1212042	1493543	73.50%	8.949%

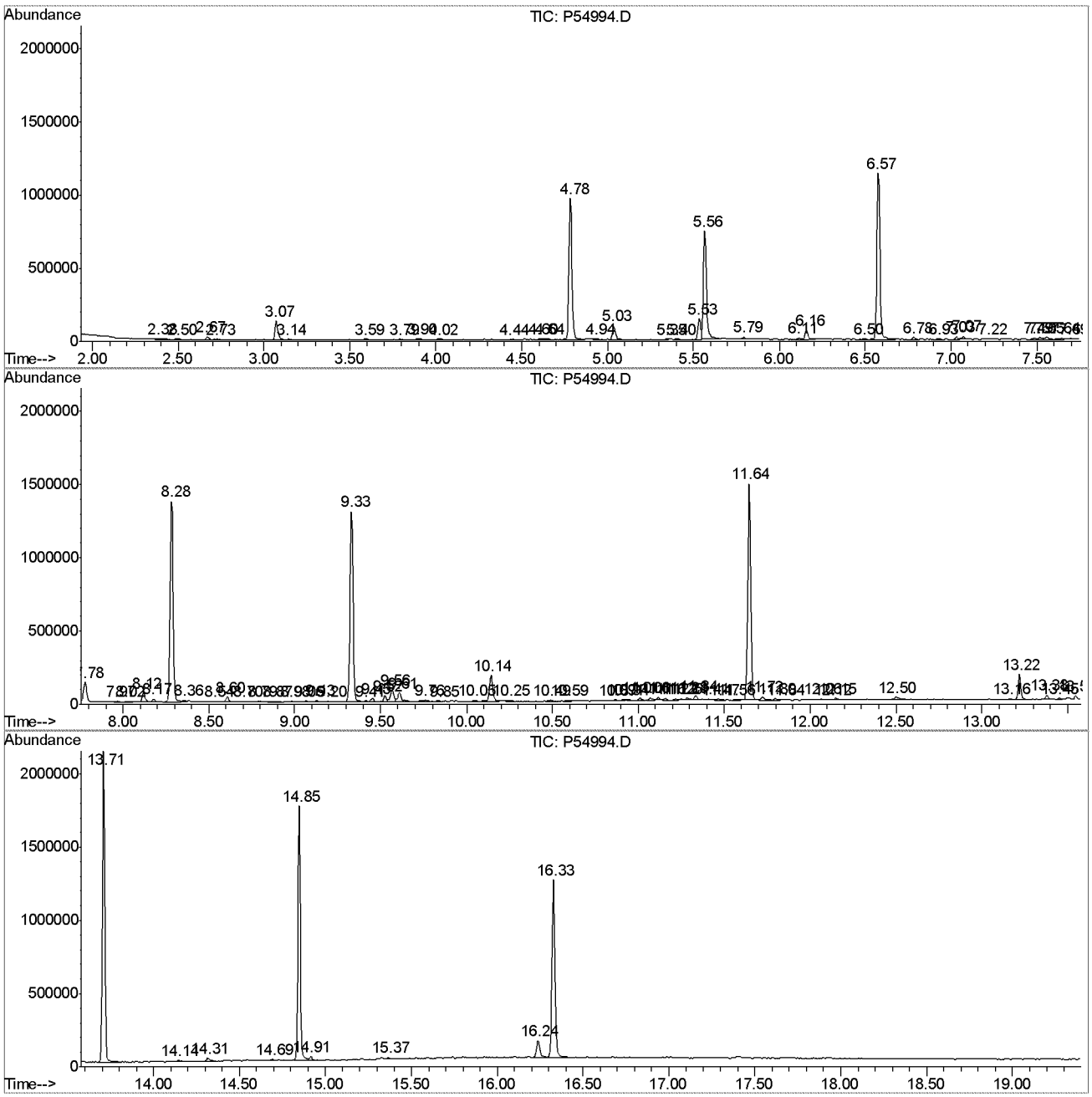
Sum of corrected areas: 16689743

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

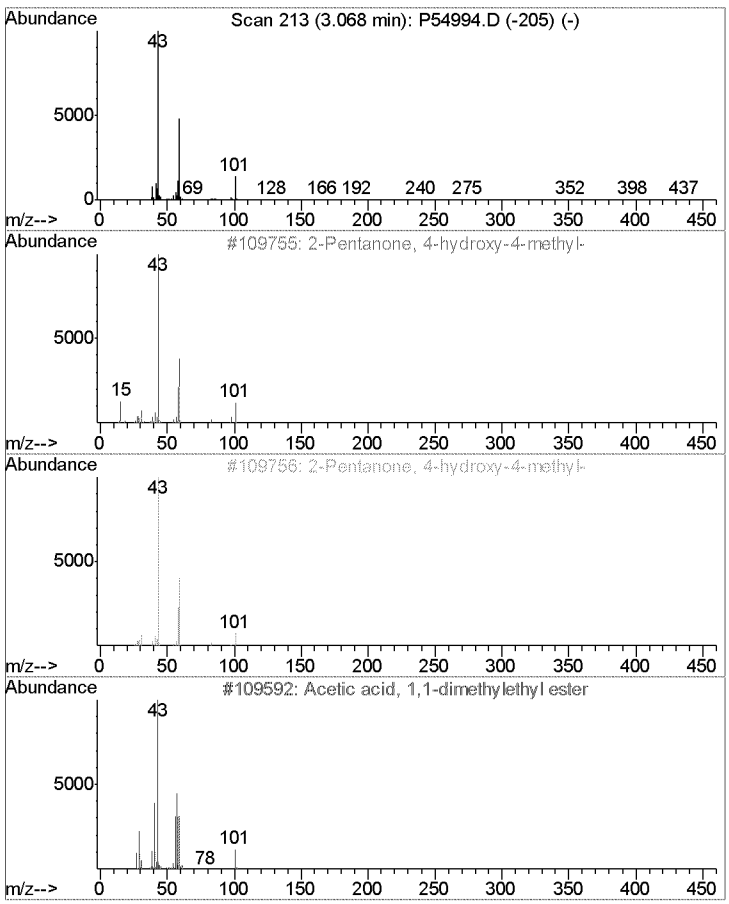
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

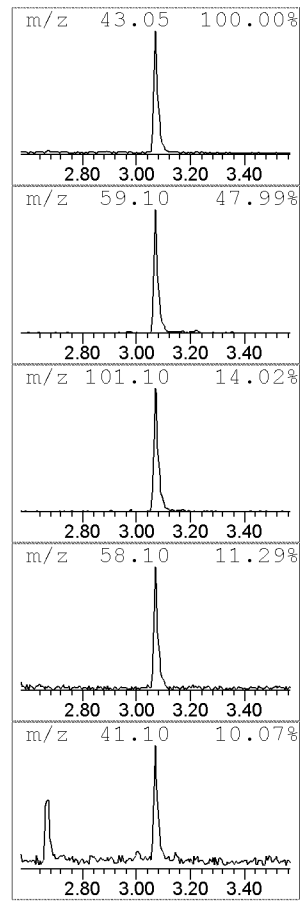
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	5.45 ppb	158651	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	1-Butene, 4-ethoxy-	100	C6H12O	044611-46-3	23
5	Diacetamide	101	C4H7NO2	000625-77-4	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

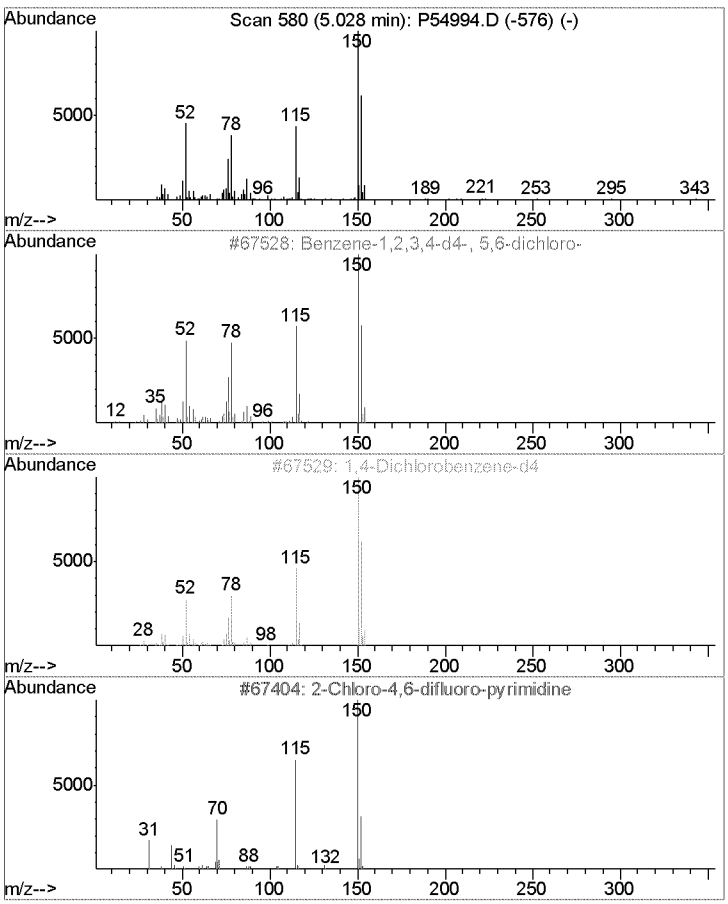
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

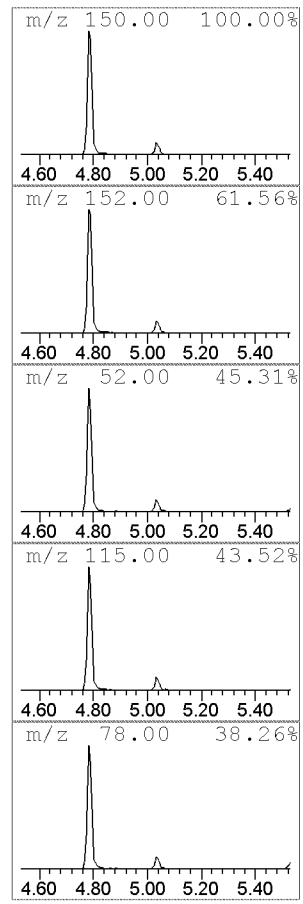
****

Peak Number 2 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.13 ppb	120255	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	90
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
4	Benzeneacetonitrile, 2,4-dichloro-	185	C8H5Cl2N	006306-60-1	10
5	Ethanone, 1-(3,5-dimethylpyrazin...	150	C8H10N2O	054300-08-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

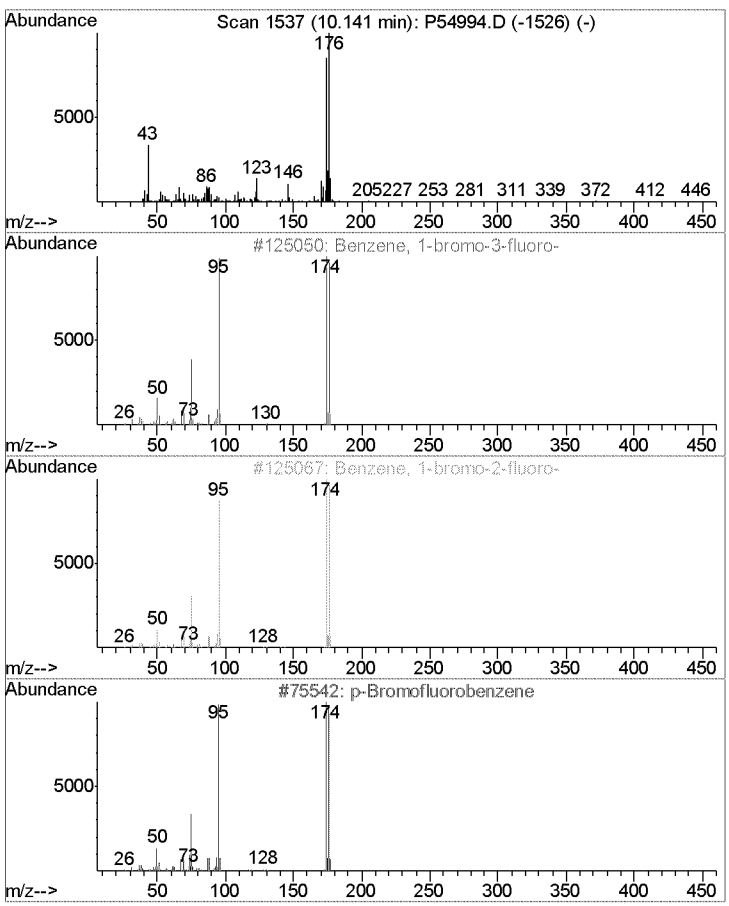
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

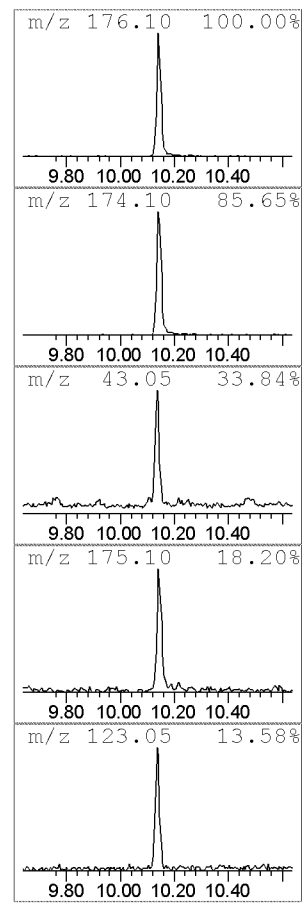
****

Peak Number 3 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.55 ppb	180600	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	53
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	42
3	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	36
4	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	27
5	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

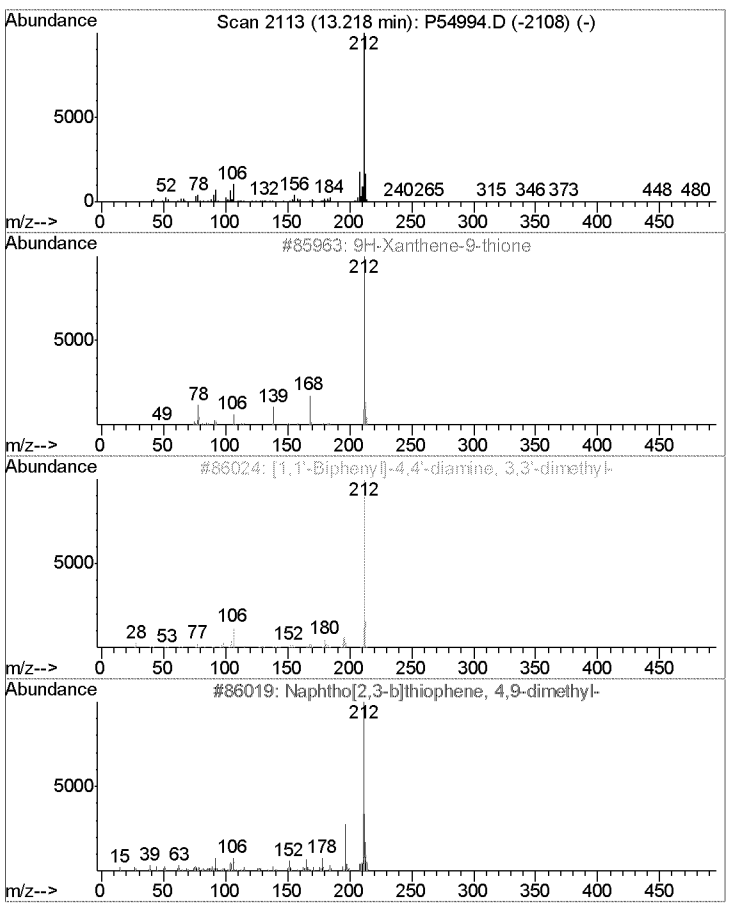
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

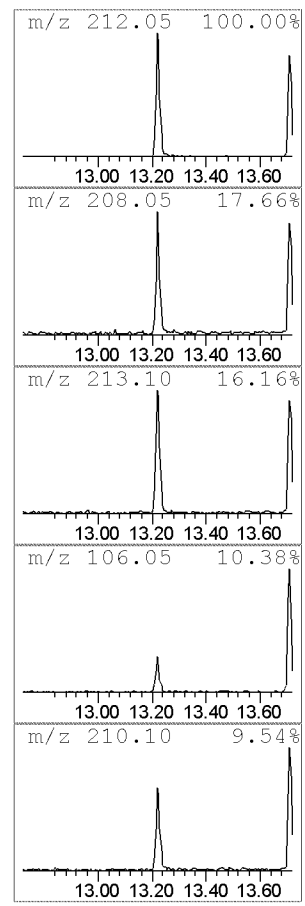
****

Peak Number 4 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.44 ppb	193882	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
4	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	59
5	Harmine	212	C13H12N2O	000442-51-3	59





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

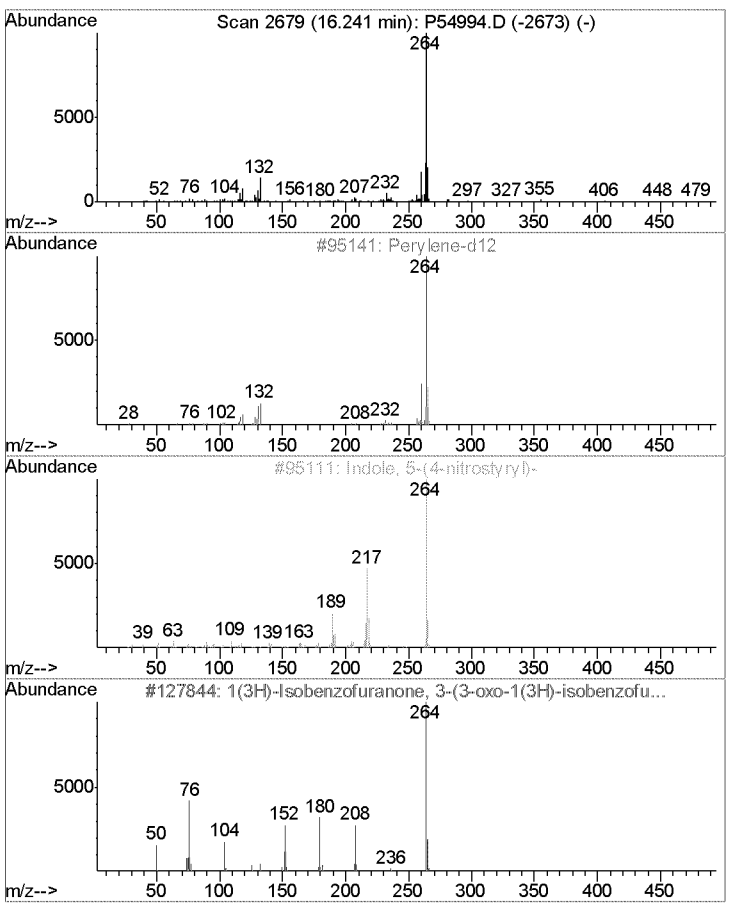
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

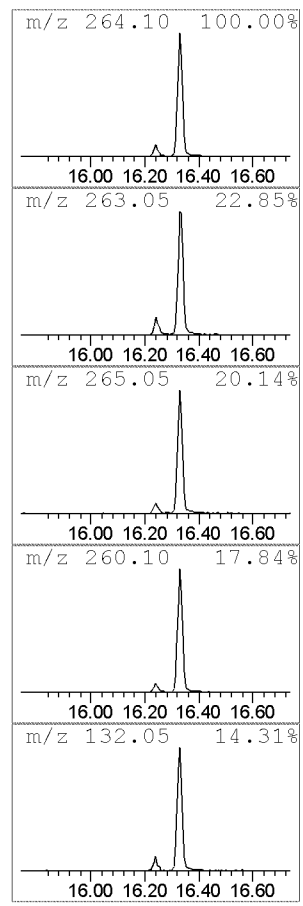
****

Peak Number 5 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.40 ppb	164332	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	94
2	Indole, 5-(4-nitrostyryl)-	264	C16H12N2O2	1000151-40-1	50
3	1(3H)-Isobenzofuranone, 3-(3-oxo...	264	C16H8O4	000482-23-5	47
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	45
5	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	45





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	5.5	ppb	158651	1	4.78	1164580	40.0
Internal standard...	5.03	4.1	ppb	120255	2	4.78	1164580	40.0
Internal standard...	10.14	4.5	ppb	180600	5	9.33	1586720	40.0
Internal standard...	13.22	4.4	ppb	193882	7	11.64	1745430	40.0
Internal standard...	16.24	4.4	ppb	164332	10	16.33	1493540	40.0

8.1.8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:39:00 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	161372	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	575979	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	355651	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	609508	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	672762	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	576551	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	161372	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	609508	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	355651	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	672762	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	308955	42.58	ppb	-0.08
Spiked Amount 50.000			Recovery =	85.16%		
51) 2-Fluorobiphenyl	8.29	172	500372	40.97	ppb	-0.08
Spiked Amount 50.000			Recovery =	81.94%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	505683	31.81	ppb	-0.06
Spiked Amount 50.000			Recovery =	63.62%		

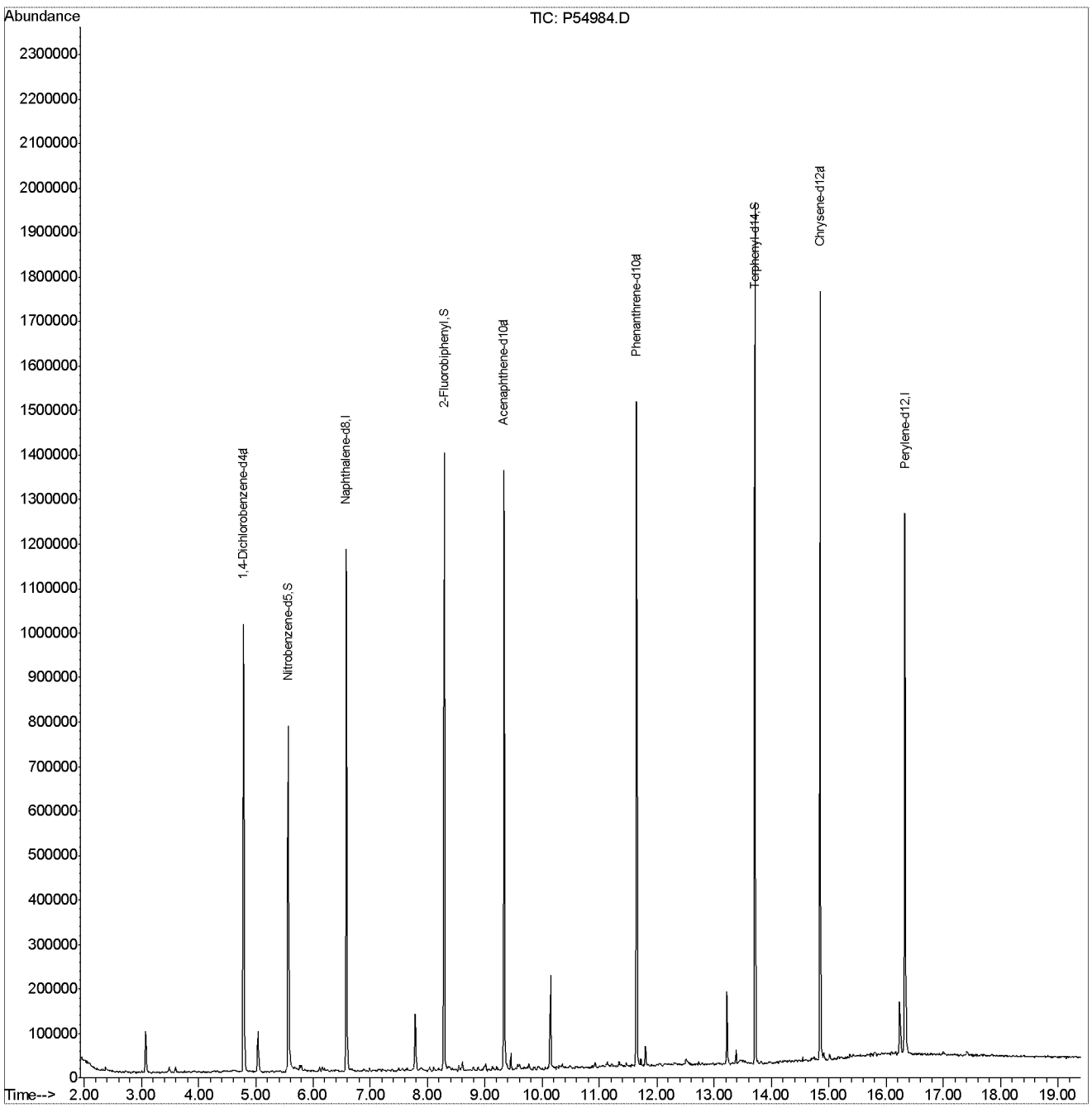
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:39:00 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



8.1.9

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.373	80	83	85	rBV4	6542	3938	0.22%	0.025%
2	2.496	102	106	114	rVB8	5104	10746	0.60%	0.067%
3	2.587	117	123	127	rVB8	2929	5260	0.29%	0.033%
4	2.715	143	147	158	rVB8	4253	9160	0.51%	0.057%
5	2.789	159	161	167	rVB7	2784	4393	0.24%	0.028%
6	2.838	167	170	173	rBV5	3273	4147	0.23%	0.026%
7	2.880	174	178	183	rVB7	2769	4932	0.27%	0.031%
8	3.003	197	201	205	rBV6	4846	5912	0.33%	0.037%
9	3.067	209	213	224	rVB	91427	121119	6.72%	0.758%
10	3.206	235	239	246	rBV10	3898	8365	0.46%	0.052%
11	3.361	261	268	271	rBV8	3609	7422	0.41%	0.046%
12	3.484	284	291	297	rVB3	11553	18357	1.02%	0.115%
13	3.596	304	312	321	rBV7	12070	21541	1.19%	0.135%
14	4.323	444	448	453	rVB8	3576	7466	0.41%	0.047%
15	4.446	465	471	478	rVB8	3432	5802	0.32%	0.036%
16	4.595	495	499	506	rVB9	4263	10068	0.56%	0.063%
17	4.643	506	508	513	rBV6	3924	4199	0.23%	0.026%
18	4.782	526	534	550	rBV	1005446	1199272	66.52%	7.509%
19	5.033	576	581	595	rVB	91561	124605	6.91%	0.780%
20	5.471	659	663	667	rVB7	3032	4455	0.25%	0.028%
21	5.562	671	680	698	rBV	779481	1017424	56.44%	6.370%
22	5.669	699	700	705	rVB5	4586	6834	0.38%	0.043%
23	5.765	714	718	720	rBV4	9937	9965	0.55%	0.062%
24	5.792	720	723	731	rVB5	14055	21223	1.18%	0.133%
25	5.851	731	734	736	rBV4	4650	4439	0.25%	0.028%
26	5.920	743	747	749	rVB5	3690	4050	0.22%	0.025%
27	5.989	757	760	764	rBV6	4082	4680	0.26%	0.029%
28	6.112	776	783	787	rBV10	10344	16704	0.93%	0.105%
29	6.160	787	792	795	rVV5	10660	14169	0.79%	0.089%
30	6.193	795	798	802	rVB4	7615	8230	0.46%	0.052%
31	6.390	834	835	840	rBV4	3980	4359	0.24%	0.027%
32	6.433	840	843	848	rVB7	5202	6367	0.35%	0.040%
33	6.492	851	854	861	rVB9	2843	5652	0.31%	0.035%
34	6.572	863	869	881	rBV	1175311	1443233	80.06%	9.037%

MP2364.M Tue Feb 22 12:39:37 2011 MSP

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	6.785	904	909	913	rVB7	3039	4991	0.28%	0.031%
36	6.887	926	928	933	rVB6	4919	5548	0.31%	0.035%
37	6.983	942	946	950	rVB4	9700	12055	0.67%	0.075%
38	7.031	950	955	958	rBV7	3337	5378	0.30%	0.034%
39	7.133	967	974	980	rBV7	5871	13866	0.77%	0.087%
40	7.208	984	988	995	rBV10	4730	10969	0.61%	0.069%
41	7.304	1000	1006	1016	rBV10	4857	13106	0.73%	0.082%
42	7.378	1016	1020	1024	rVV7	5154	6903	0.38%	0.043%
43	7.491	1036	1041	1044	rBV7	6548	8259	0.46%	0.052%
44	7.549	1048	1052	1062	rVB7	7667	13041	0.72%	0.082%
45	7.640	1062	1069	1074	rBV7	7166	16362	0.91%	0.102%
46	7.747	1084	1089	1090	rBV5	4818	7081	0.39%	0.044%
47	7.779	1090	1095	1106	rVB2	128463	171472	9.51%	1.074%
48	7.870	1107	1112	1114	rBV5	5871	7810	0.43%	0.049%
49	7.966	1128	1130	1134	rVB5	3866	4553	0.25%	0.029%
50	8.025	1134	1141	1147	rBV6	11024	19704	1.09%	0.123%
51	8.105	1150	1156	1162	rBV9	8870	14554	0.81%	0.091%
52	8.180	1166	1170	1173	rBV6	4765	6560	0.36%	0.041%
53	8.287	1182	1190	1199	rBV	1389393	1672012	92.75%	10.469%
54	8.356	1200	1203	1207	rVB2	5594	6407	0.36%	0.040%
55	8.426	1213	1216	1220	rVB6	3727	4129	0.23%	0.026%
56	8.543	1233	1238	1242	rBV7	12747	20016	1.11%	0.125%
57	8.607	1243	1250	1257	rVB3	20693	36332	2.02%	0.227%
58	8.794	1279	1285	1294	rBV3	8535	14012	0.78%	0.088%
59	8.874	1295	1300	1308	rVB3	8430	15235	0.85%	0.095%
60	8.986	1316	1321	1322	rBV5	9049	12812	0.71%	0.080%
61	9.008	1322	1325	1331	rVB8	17327	24330	1.35%	0.152%
62	9.125	1344	1347	1350	rBV4	9296	11120	0.62%	0.070%
63	9.206	1358	1362	1367	rVB7	7766	10761	0.60%	0.067%
64	9.328	1375	1385	1403	rBV	1349310	1648572	91.45%	10.322%
65	9.451	1403	1408	1415	rVV	37332	44549	2.47%	0.279%
66	9.526	1418	1422	1424	rBV5	4755	6382	0.35%	0.040%
67	9.569	1425	1430	1432	rVV3	11130	14398	0.80%	0.090%
68	9.596	1432	1435	1441	rVB5	9686	16536	0.92%	0.104%
69	9.676	1449	1450	1457	rBV7	4397	7444	0.41%	0.047%
70	9.761	1463	1466	1475	rVB7	13479	17242	0.96%	0.108%
71	9.868	1479	1486	1489	rBV9	6824	13816	0.77%	0.087%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	9.921	1493	1496	1507	rVB9	7978	20107	1.12%	0.126%
73	10.050	1518	1520	1525	rBV6	5039	4571	0.25%	0.029%
74	10.140	1531	1537	1548	rVB2	210068	287896	15.97%	1.803%
75	10.258	1555	1559	1563	rBV7	5958	9975	0.55%	0.062%
76	10.295	1563	1566	1569	rBV4	8205	10650	0.59%	0.067%
77	10.349	1572	1576	1581	rVB8	11751	16560	0.92%	0.104%
78	10.397	1583	1585	1590	rVB6	5173	5740	0.32%	0.036%
79	10.578	1616	1619	1620	rBV3	4883	4283	0.24%	0.027%
80	10.685	1636	1639	1642	rBV5	3940	4940	0.27%	0.031%
81	10.867	1669	1673	1677	rBV6	6358	9117	0.51%	0.057%
82	10.915	1677	1682	1687	rVV8	11388	17814	0.99%	0.112%
83	11.113	1715	1719	1720	rBV4	6029	7109	0.39%	0.045%
84	11.284	1748	1751	1756	rBV7	5914	8386	0.47%	0.053%
85	11.337	1756	1761	1767	rBV7	11235	21528	1.19%	0.135%
86	11.465	1781	1785	1794	rBV9	9423	18649	1.03%	0.117%
87	11.642	1811	1818	1829	rBV2	1494682	1752564	97.22%	10.973%
88	11.716	1829	1832	1840	rVB6	16557	23172	1.29%	0.145%
89	11.797	1843	1847	1854	rBV	44487	51412	2.85%	0.322%
90	12.293	1937	1940	1942	rBV4	5431	4926	0.27%	0.031%
91	12.507	1975	1980	1988	rBV4	12484	27822	1.54%	0.174%
92	12.726	2018	2021	2027	rVB8	7944	10246	0.57%	0.064%
93	13.218	2107	2113	2124	rVB	164306	202251	11.22%	1.266%
94	13.378	2140	2143	2147	rVB2	30036	28894	1.60%	0.181%
95	13.709	2199	2205	2220	rBV	1935285	1802752	100.00%	11.288%
96	14.542	2359	2361	2364	rBV3	8490	5443	0.30%	0.034%
97	14.847	2411	2418	2428	rBV	1728510	1760338	97.65%	11.022%
98	14.911	2428	2430	2438	rVB2	16742	19383	1.08%	0.121%
99	16.236	2673	2678	2687	rBV2	117108	159898	8.87%	1.001%
100	16.327	2688	2695	2721	rVB	1216490	1587658	88.07%	9.941%

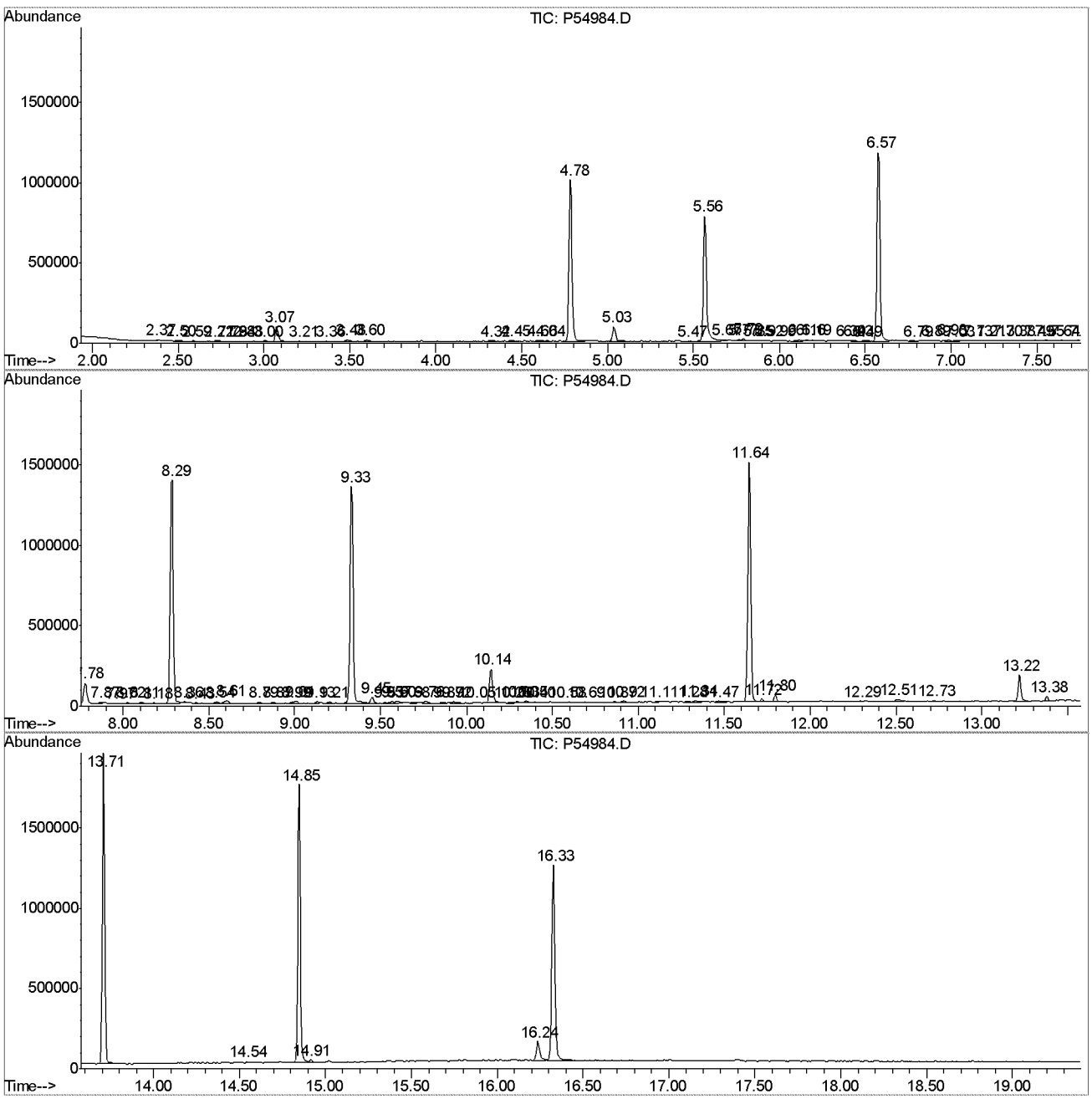
Sum of corrected areas: 15970889

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

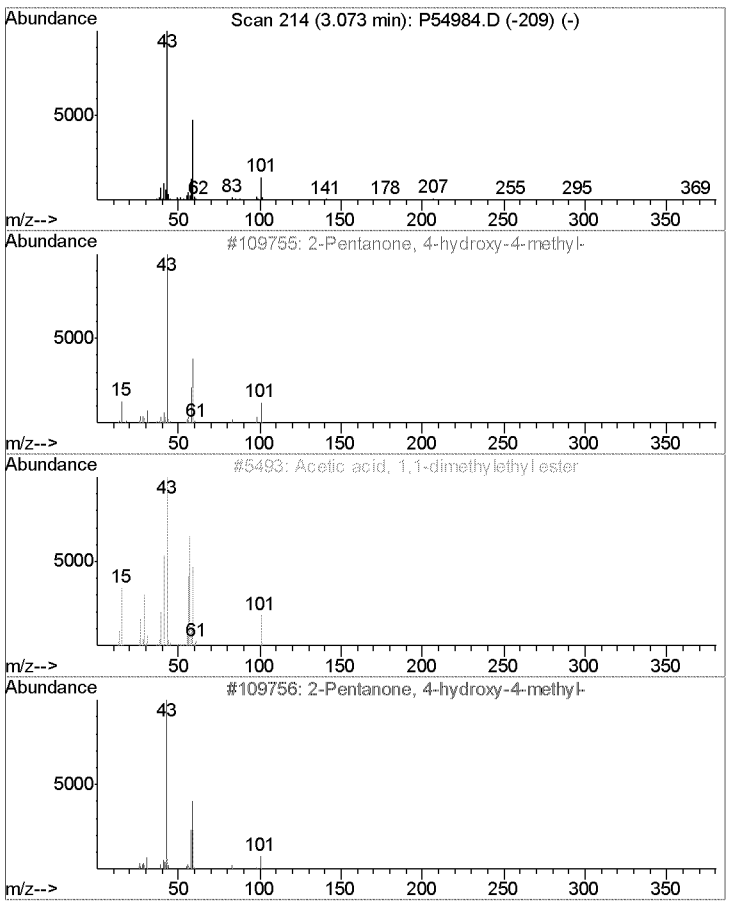
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

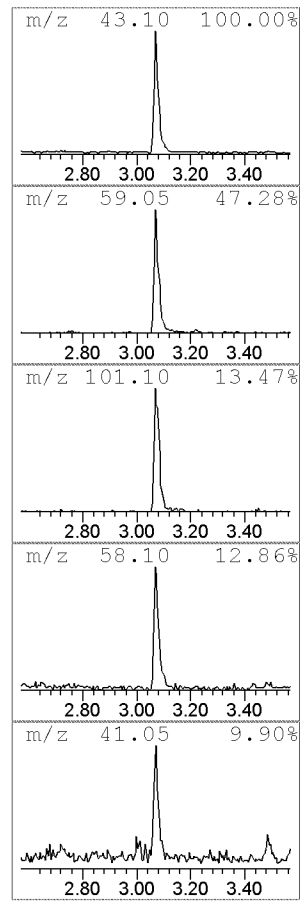
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.04 ppb	121119	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	39
5	Diacetamide	101	C4H7NO2	000625-77-4	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

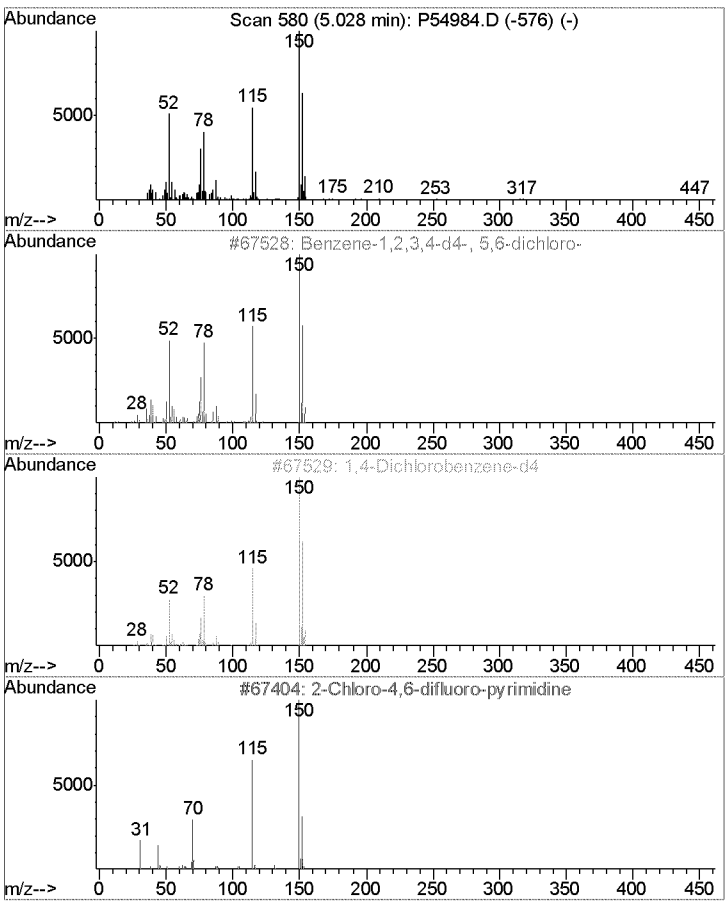
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

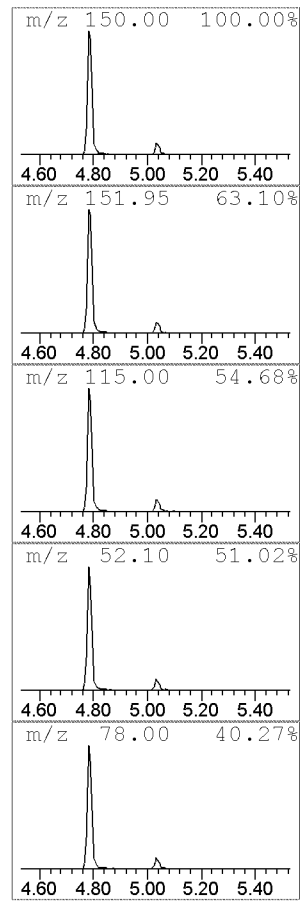
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.16 ppb	124605	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	14
4	Dezaguanine	150	C6H6N4O	041729-52-6	12
5	Ethanone, 1-(2-nitrophenyl)-	165	C8H7NO3	000577-59-3	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

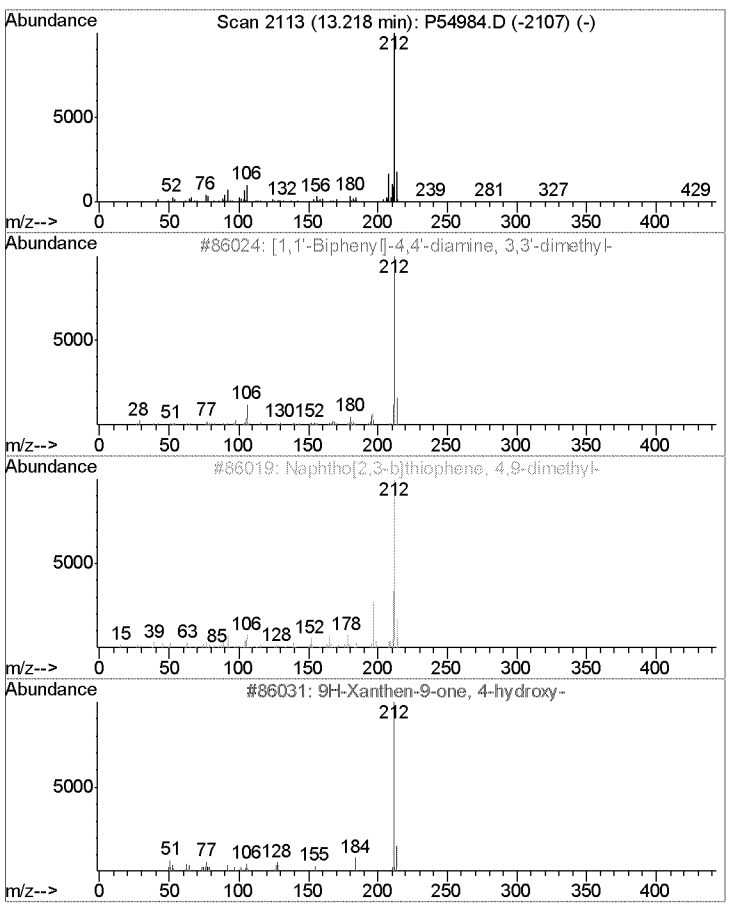
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

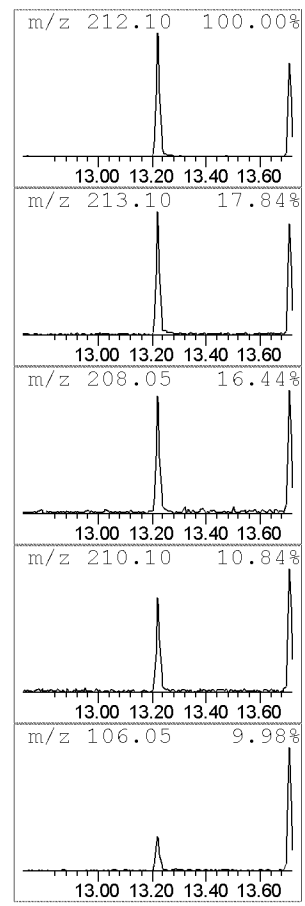
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.62 ppb	202251	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	72
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	64
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	59
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
5	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	53





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.0	ppb	121119	1	4.78	1199270	40.0
Internal standard...	5.03	4.2	ppb	124605	2	4.78	1199270	40.0
Internal standard...	13.22	4.6	ppb	202251	7	11.64	1752560	40.0

8.1.10
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 23 11:21:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	170412	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	597617	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	377525	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	634571	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	709052	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	600666	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	170412	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	634571	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	377525	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	709052	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	329145	43.72	ppb	-0.07
Spiked Amount 50.000			Recovery =	87.44%		
51) 2-Fluorobiphenyl	8.29	172	531982	41.04	ppb	-0.08
Spiked Amount 50.000			Recovery =	82.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	535665	31.97	ppb	-0.06
Spiked Amount 50.000			Recovery =	63.94%		

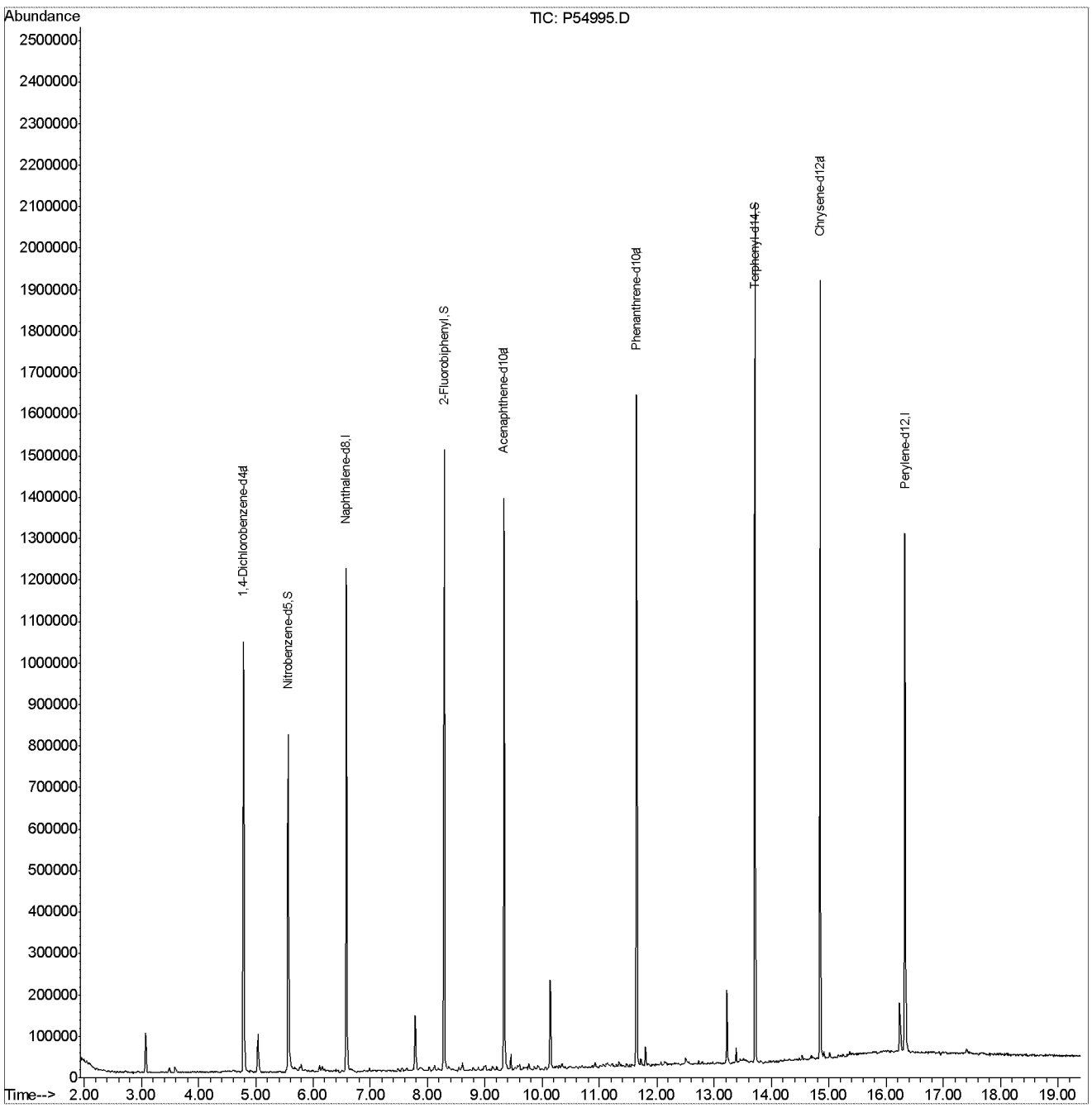
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 23 11:21:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.346	75	78	84	rVB7	5018	7662	0.40%	0.045%
2	2.496	103	106	112	rVB5	4373	5370	0.28%	0.032%
3	2.715	144	147	155	rVB8	4232	7748	0.41%	0.046%
4	2.827	165	168	173	rVB7	3287	4568	0.24%	0.027%
5	2.934	184	188	194	rVB7	2358	4689	0.25%	0.028%
6	3.003	194	201	208	rBV10	4029	7191	0.38%	0.043%
7	3.067	208	213	223	rBV	94948	124985	6.54%	0.742%
8	3.489	287	292	296	rBV3	11492	15997	0.84%	0.095%
9	3.591	306	311	321	rBV6	14212	21199	1.11%	0.126%
10	4.419	460	466	468	rBV7	3147	6044	0.32%	0.036%
11	4.601	495	500	505	rBV9	3722	7137	0.37%	0.042%
12	4.782	527	534	548	rBV	1037128	1255148	65.63%	7.447%
13	5.033	576	581	592	rBV	92326	124902	6.53%	0.741%
14	5.252	618	622	626	rVB7	3133	4784	0.25%	0.028%
15	5.418	646	653	657	rVB9	3860	9024	0.47%	0.054%
16	5.562	667	680	696	rBV	816768	1075474	56.24%	6.381%
17	5.674	699	701	705	rVB5	5258	5150	0.27%	0.031%
18	5.760	714	717	721	rBV5	7815	12144	0.64%	0.072%
19	5.792	721	723	729	rVB3	14759	16321	0.85%	0.097%
20	5.851	730	734	742	rVB10	4482	9686	0.51%	0.057%
21	5.915	744	746	752	rVB6	4483	5449	0.28%	0.032%
22	5.990	757	760	765	rBV7	4705	6034	0.32%	0.036%
23	6.112	777	783	788	rBV8	15316	21503	1.12%	0.128%
24	6.161	788	792	795	rVV4	12685	17428	0.91%	0.103%
25	6.193	795	798	803	rVV6	7248	10638	0.56%	0.063%
26	6.246	803	808	816	rVV6	4274	9360	0.49%	0.056%
27	6.358	826	829	834	rVB6	3609	4741	0.25%	0.028%
28	6.396	834	836	839	rVV4	5930	4948	0.26%	0.029%
29	6.428	839	842	851	rVB4	6323	10575	0.55%	0.063%
30	6.492	851	854	858	rBV5	5536	6815	0.36%	0.040%
31	6.572	861	869	881	rBV	1214121	1500748	78.47%	8.904%
32	6.892	925	929	934	rVB8	5398	7244	0.38%	0.043%
33	6.983	942	946	950	rVB4	8986	10185	0.53%	0.060%
34	7.069	957	962	967	rVB8	4423	7180	0.38%	0.043%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.128	970	973	977	rBV5	3250	5562	0.29%	0.033%
36	7.224	986	991	999	rVB5	4792	8921	0.47%	0.053%
37	7.485	1035	1040	1045	rBV9	6400	12857	0.67%	0.076%
38	7.550	1047	1052	1057	rVB8	8394	16281	0.85%	0.097%
39	7.640	1062	1069	1072	rVB9	6853	9591	0.50%	0.057%
40	7.742	1084	1088	1090	rBV5	6832	8633	0.45%	0.051%
41	7.779	1090	1095	1107	rVV2	133269	181811	9.51%	1.079%
42	7.865	1107	1111	1124	rVB2	6425	19253	1.01%	0.114%
43	8.020	1135	1140	1146	rVB7	9749	16534	0.86%	0.098%
44	8.116	1147	1158	1166	rBV9	14845	35415	1.85%	0.210%
45	8.287	1182	1190	1200	rBV	1496861	1767789	92.44%	10.488%
46	8.356	1200	1203	1213	rVV7	8158	18061	0.94%	0.107%
47	8.538	1233	1237	1242	rBV8	10733	17479	0.91%	0.104%
48	8.602	1242	1249	1257	rVB2	20139	36289	1.90%	0.215%
49	8.746	1269	1276	1278	rBV8	3400	5791	0.30%	0.034%
50	8.784	1278	1283	1290	rBV8	7587	14358	0.75%	0.085%
51	8.874	1296	1300	1304	rBV6	7158	9303	0.49%	0.055%
52	8.981	1316	1320	1322	rBV4	11398	13851	0.72%	0.082%
53	9.008	1322	1325	1330	rVB6	13157	17477	0.91%	0.104%
54	9.126	1343	1347	1355	rVB10	9995	15301	0.80%	0.091%
55	9.206	1357	1362	1370	rVB10	10884	18909	0.99%	0.112%
56	9.329	1375	1385	1403	rBV	1380569	1748749	91.44%	10.375%
57	9.451	1403	1408	1412	rVB	38223	46437	2.43%	0.276%
58	9.526	1419	1422	1424	rBV2	4820	4556	0.24%	0.027%
59	9.569	1425	1430	1432	rBV4	9522	12520	0.65%	0.074%
60	9.601	1433	1436	1440	rVB3	12315	16183	0.85%	0.096%
61	9.660	1444	1447	1450	rBV5	5284	4359	0.23%	0.026%
62	9.761	1462	1466	1472	rBV5	15716	19050	1.00%	0.113%
63	9.863	1480	1485	1490	rBV9	7478	12154	0.64%	0.072%
64	9.922	1491	1496	1503	rVB10	10923	21955	1.15%	0.130%
65	10.050	1514	1520	1526	rBV10	8954	18358	0.96%	0.109%
66	10.135	1526	1536	1548	rVV2	217023	322233	16.85%	1.912%
67	10.215	1548	1551	1555	rVV6	5214	6853	0.36%	0.041%
68	10.247	1555	1557	1562	rVB6	7287	9446	0.49%	0.056%
69	10.295	1562	1566	1569	rBV6	9372	13054	0.68%	0.077%
70	10.349	1570	1576	1582	rVV6	13486	25635	1.34%	0.152%
71	10.397	1582	1585	1589	rVB6	6317	6639	0.35%	0.039%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.450	1589	1595	1596	rBV6	4446	5143	0.27%	0.031%
73	10.477	1597	1600	1611	rVB6	6428	13369	0.70%	0.079%
74	10.589	1618	1621	1627	rVB8	6211	10332	0.54%	0.061%
75	10.685	1636	1639	1645	rVB8	6763	8455	0.44%	0.050%
76	10.867	1671	1673	1677	rVB5	5827	5107	0.27%	0.030%
77	10.915	1678	1682	1688	rVV9	11778	14199	0.74%	0.084%
78	11.006	1695	1699	1702	rBV6	4901	6599	0.35%	0.039%
79	11.059	1706	1709	1715	rVB8	6462	8686	0.45%	0.052%
80	11.134	1716	1723	1733	rVV8	8951	21216	1.11%	0.126%
81	11.337	1757	1761	1765	rVB6	9711	12717	0.66%	0.075%
82	11.465	1782	1785	1793	rVV8	7542	13124	0.69%	0.078%
83	11.524	1793	1796	1799	rVB5	6281	7029	0.37%	0.042%
84	11.562	1800	1803	1807	rBV5	5045	7727	0.40%	0.046%
85	11.642	1812	1818	1829	rBV2	1617010	1834079	95.90%	10.882%
86	11.722	1829	1833	1843	rVB8	16642	24738	1.29%	0.147%
87	11.797	1844	1847	1852	rBV	45498	51224	2.68%	0.304%
88	12.064	1892	1897	1902	rVB9	8959	13680	0.72%	0.081%
89	12.133	1904	1910	1913	rBV8	8182	16655	0.87%	0.099%
90	12.496	1975	1978	1994	rVB8	14769	35824	1.87%	0.213%
91	12.726	2018	2021	2025	rVB6	7836	7987	0.42%	0.047%
92	13.218	2107	2113	2125	rVB	178215	209813	10.97%	1.245%
93	13.378	2139	2143	2148	rVB4	34784	31047	1.62%	0.184%
94	13.709	2200	2205	2221	rVB	2074617	1912421	100.00%	11.347%
95	14.698	2386	2390	2392	rBV5	8907	10014	0.52%	0.059%
96	14.847	2412	2418	2427	rBV	1877904	1846708	96.56%	10.957%
97	14.911	2428	2430	2436	rVB2	17464	18877	0.99%	0.112%
98	15.013	2447	2449	2463	rVB5	15526	19076	1.00%	0.113%
99	16.236	2673	2678	2689	rBV2	115950	164178	8.58%	0.974%
100	16.327	2689	2695	2714	rVB	1252625	1638963	85.70%	9.724%

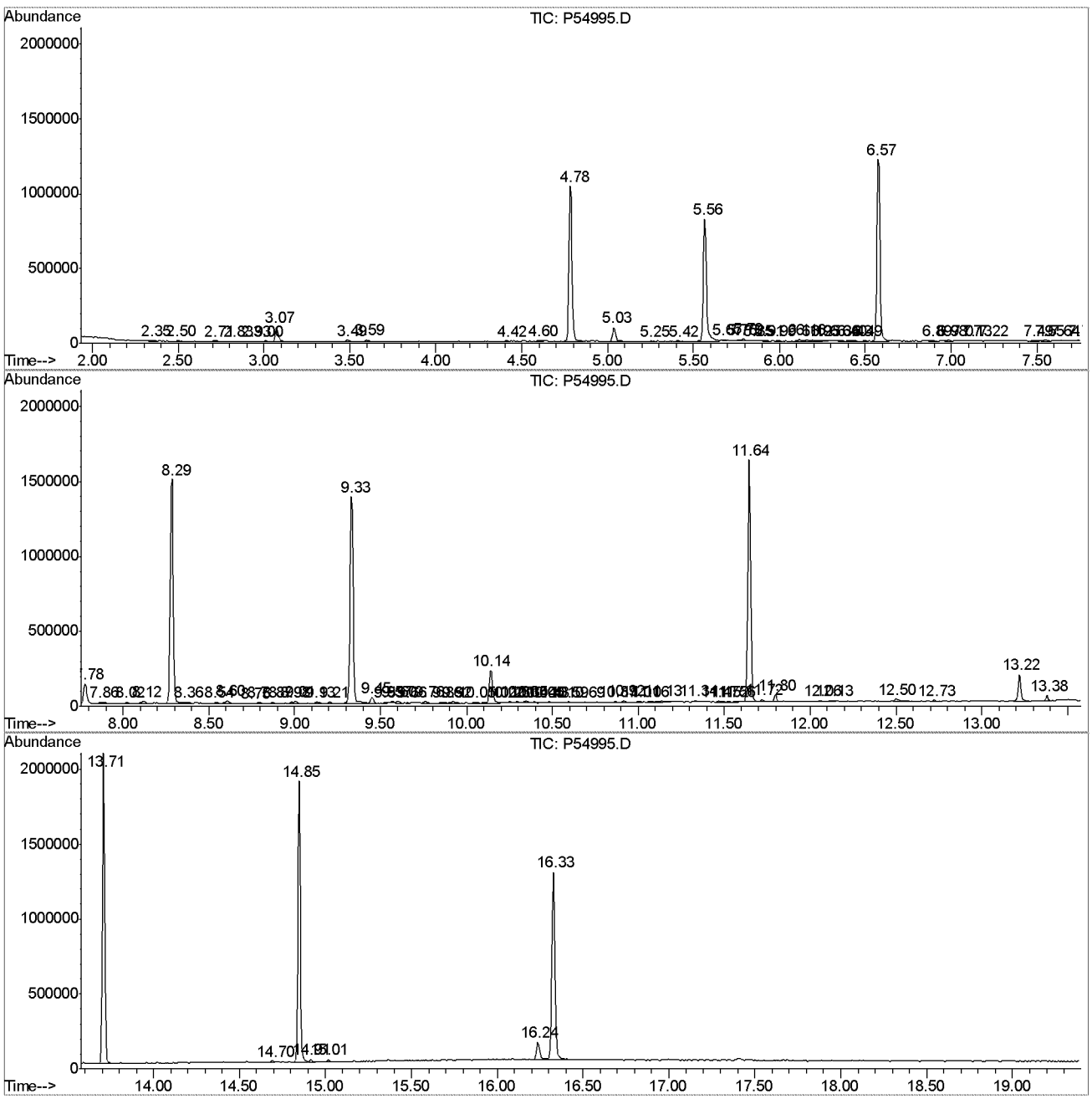
Sum of corrected areas: 16854705

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

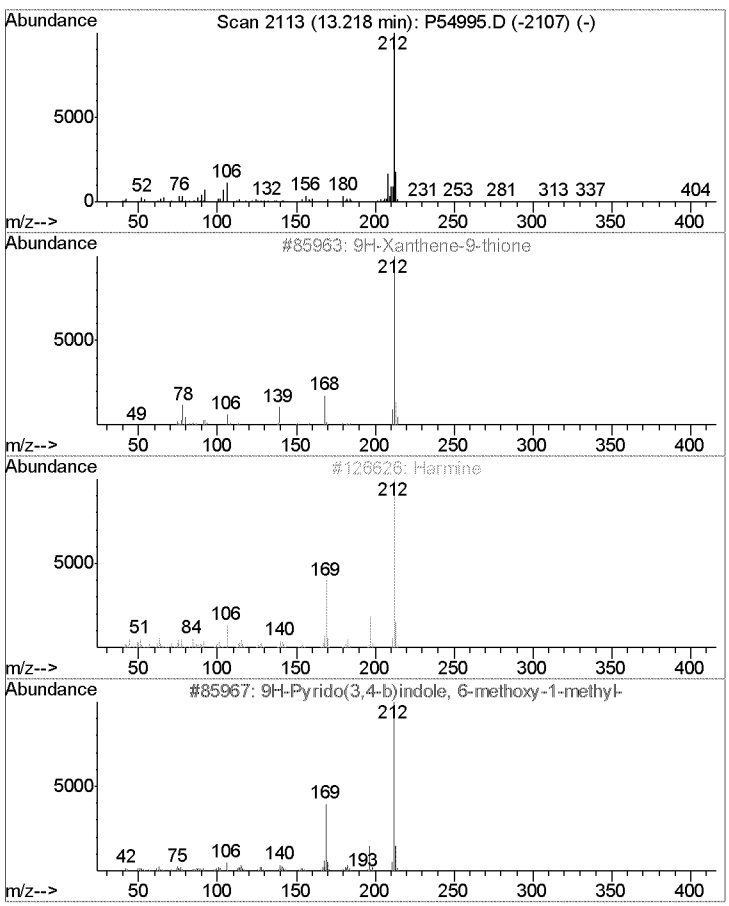
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

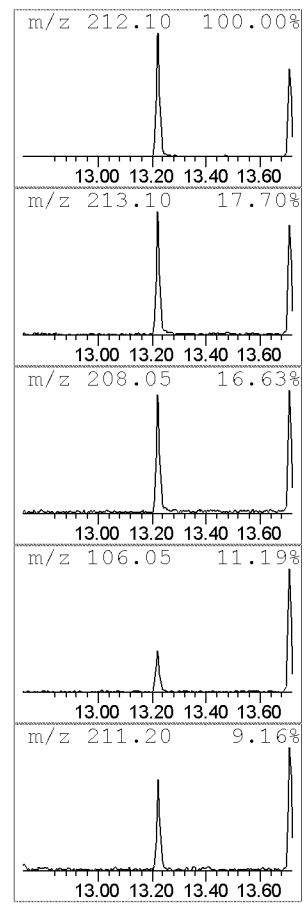
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.58 ppb	209813	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	80
2	Harmine	212	C13H12N2O	000442-51-3	72
3	9H-Pyrido(3,4-b)indole, 6-methox...	212	C13H12N2O	003589-72-8	64
4	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	64
5	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	13.22	4.6	ppb	209813	7	11.64	1834080	40.0

8.1.12
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 23 11:22:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	158740	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	558030	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	333733	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	543598	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	636496	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	548275	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	158740	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	543598	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	333733	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	636496	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	296988	42.24	ppb	-0.07
Spiked Amount 50.000			Recovery =	84.48%		
51) 2-Fluorobiphenyl	8.29	172	471262	41.12	ppb	-0.08
Spiked Amount 50.000			Recovery =	82.24%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	494447	32.88	ppb	-0.06
Spiked Amount 50.000			Recovery =	65.76%		

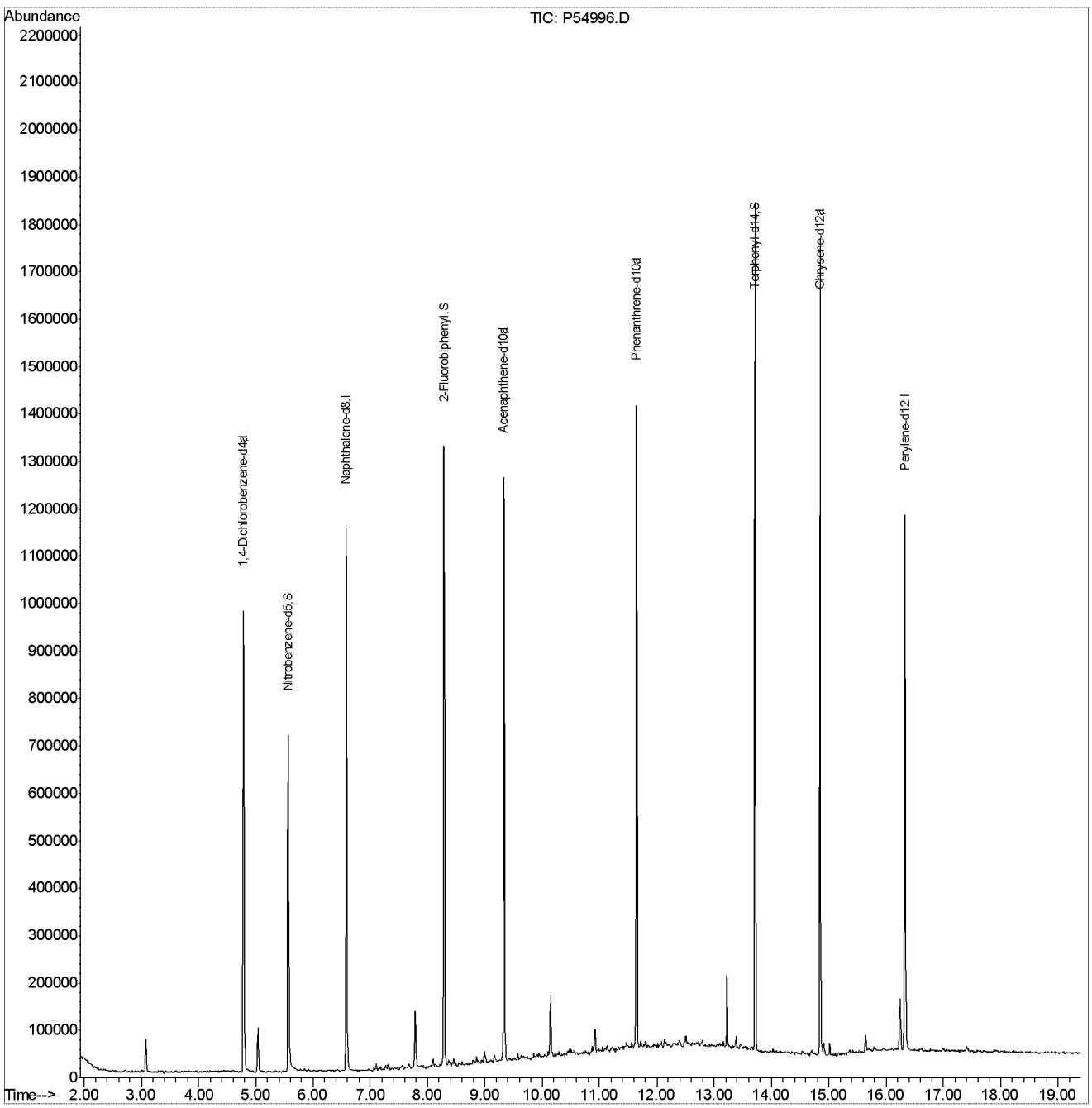
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 23 11:22:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.362	75	81	87	rVB9	4176	8794	0.50%	0.060%
2	2.720	144	148	157	rVB10	3516	6864	0.39%	0.046%
3	2.832	165	169	173	rBV6	4141	4748	0.27%	0.032%
4	2.955	187	192	194	rBV6	2346	4016	0.23%	0.027%
5	3.003	194	201	202	rBV6	3290	4312	0.25%	0.029%
6	3.073	208	214	225	rBV	71168	99603	5.67%	0.674%
7	3.297	254	256	262	rVB6	2931	4369	0.25%	0.030%
8	3.351	262	266	270	rBV6	3367	4861	0.28%	0.033%
9	3.420	274	279	282	rBV6	4012	6476	0.37%	0.044%
10	3.505	294	295	304	rBV9	2700	4852	0.28%	0.033%
11	3.949	374	378	381	rVB4	3031	3745	0.21%	0.025%
12	4.024	387	392	395	rVB6	2494	3545	0.20%	0.024%
13	4.323	443	448	451	rVB7	2142	3796	0.22%	0.026%
14	4.430	464	468	477	rBV7	3128	4793	0.27%	0.032%
15	4.601	497	500	505	rBV7	3250	4082	0.23%	0.028%
16	4.782	527	534	550	rBV	971395	1181750	67.23%	7.999%
17	5.033	573	581	594	rBV	94953	121536	6.91%	0.823%
18	5.562	673	680	700	rBV	710333	965387	54.92%	6.535%
19	5.776	717	720	727	rVB9	4098	5932	0.34%	0.040%
20	5.845	729	733	741	rVV9	4967	10451	0.59%	0.071%
21	5.915	741	746	752	rVB10	7044	12313	0.70%	0.083%
22	6.011	762	764	771	rVB7	3074	5343	0.30%	0.036%
23	6.112	778	783	788	rBV8	4051	6779	0.39%	0.046%
24	6.438	840	844	848	rVB7	4192	5690	0.32%	0.039%
25	6.572	863	869	888	rVB	1143283	1406446	80.01%	9.520%
26	6.748	899	902	906	rVB6	4405	5890	0.34%	0.040%
27	6.892	927	929	933	rVB5	3573	3938	0.22%	0.027%
28	6.930	933	936	941	rBV7	2610	4919	0.28%	0.033%
29	6.967	941	943	949	rVB7	2990	4546	0.26%	0.031%
30	7.058	954	960	963	rBV7	6774	12445	0.71%	0.084%
31	7.101	963	968	973	rVB8	14743	20156	1.15%	0.136%
32	7.176	973	982	984	rBV10	7130	11027	0.63%	0.075%
33	7.261	993	998	1002	rBV6	10334	11608	0.66%	0.079%
34	7.309	1002	1007	1016	rVB8	12814	23735	1.35%	0.161%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.379	1016	1020	1024	rBV6	5074	7621	0.43%	0.052%
36	7.421	1025	1028	1034	rBV7	4114	7080	0.40%	0.048%
37	7.555	1043	1053	1058	rVB7	9994	21617	1.23%	0.146%
38	7.619	1060	1065	1067	rBV6	4826	5591	0.32%	0.038%
39	7.667	1071	1074	1080	rVB6	10877	14943	0.85%	0.101%
40	7.726	1081	1085	1088	rBV6	4718	4810	0.27%	0.033%
41	7.779	1088	1095	1102	rBV3	120053	165551	9.42%	1.121%
42	7.982	1130	1133	1137	rBV6	3540	6019	0.34%	0.041%
43	8.089	1148	1153	1157	rBV4	17254	21759	1.24%	0.147%
44	8.132	1158	1161	1168	rVB9	6490	11355	0.65%	0.077%
45	8.217	1174	1177	1181	rBV6	5515	7114	0.40%	0.048%
46	8.281	1181	1189	1199	rVV	1307151	1586076	90.23%	10.736%
47	8.362	1200	1204	1212	rVB8	13243	28541	1.62%	0.193%
48	8.420	1212	1215	1217	rBV4	7457	8933	0.51%	0.060%
49	8.452	1217	1221	1225	rVB5	13747	18715	1.06%	0.127%
50	8.533	1234	1236	1246	rVB5	4817	9846	0.56%	0.067%
51	8.597	1246	1248	1253	rBV5	7049	7442	0.42%	0.050%
52	8.789	1282	1284	1290	rBV7	7076	12543	0.71%	0.085%
53	8.848	1291	1295	1299	rBV7	13065	16363	0.93%	0.111%
54	8.939	1309	1312	1317	rBV6	7081	10621	0.60%	0.072%
55	8.992	1317	1322	1329	rVV4	24324	38077	2.17%	0.258%
56	9.168	1350	1355	1363	rBV4	15774	24509	1.39%	0.166%
57	9.329	1377	1385	1396	rVB	1231280	1524883	86.75%	10.322%
58	9.569	1427	1430	1434	rVB	13026	13387	0.76%	0.091%
59	10.141	1532	1537	1547	rVB	130998	170387	9.69%	1.153%
60	10.482	1598	1601	1605	rBV2	12828	15393	0.88%	0.104%
61	10.867	1670	1673	1676	rBV5	10744	12864	0.73%	0.087%
62	10.915	1678	1682	1687	rVB	47129	57240	3.26%	0.387%
63	11.642	1811	1818	1828	rVB2	1353304	1548870	88.11%	10.484%
64	13.218	2109	2113	2127	rVB	154122	182450	10.38%	1.235%
65	13.378	2140	2143	2152	rVB5	27315	32913	1.87%	0.223%
66	13.709	2199	2205	2218	rVB	1791610	1757848	100.00%	11.899%
67	14.847	2413	2418	2427	rBV	1710150	1663694	94.64%	11.261%
68	14.911	2427	2430	2444	rVB	25252	34609	1.97%	0.234%
69	15.018	2447	2450	2458	rVB	26433	29242	1.66%	0.198%
70	15.638	2562	2566	2574	rBV2	36266	48763	2.77%	0.330%
71	16.241	2673	2679	2687	rVB	106951	153345	8.72%	1.038%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	16.327	2689	2695	2712	rVB	1128235	1503861	85.55%	10.179%

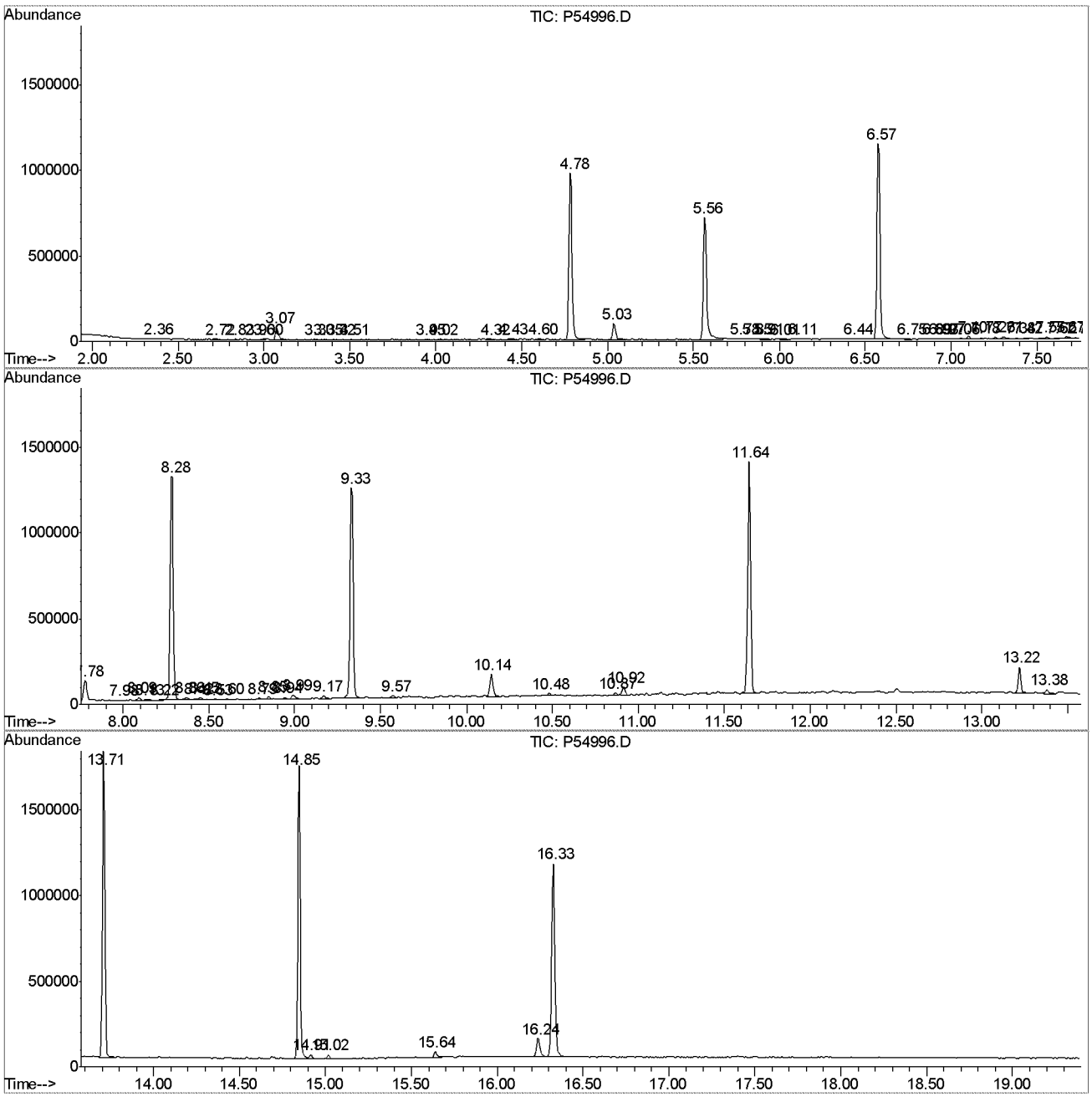
Sum of corrected areas: 14773622

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

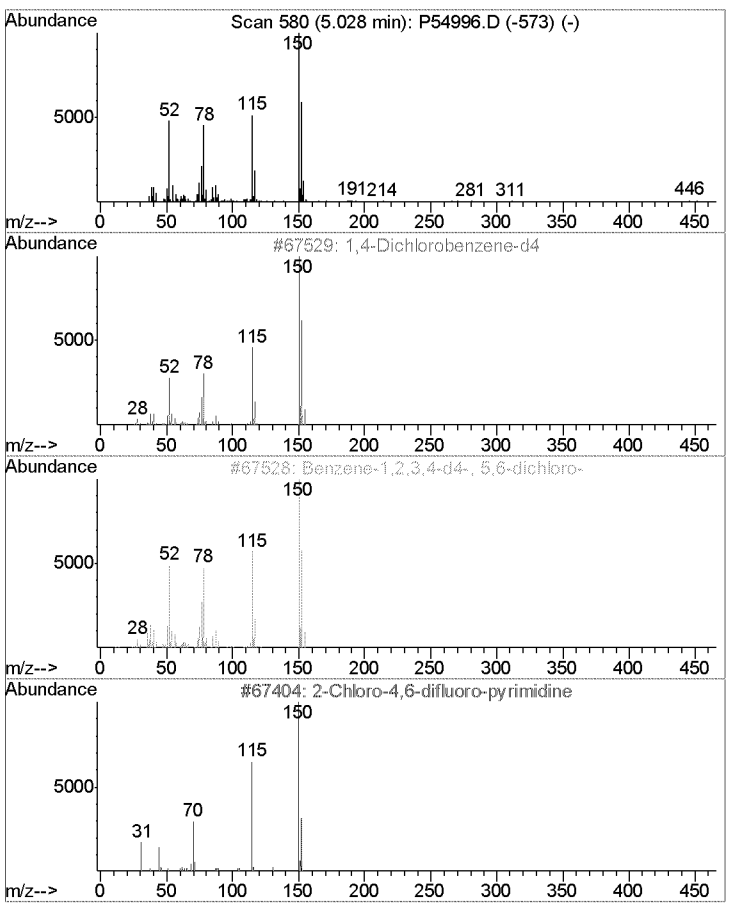
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

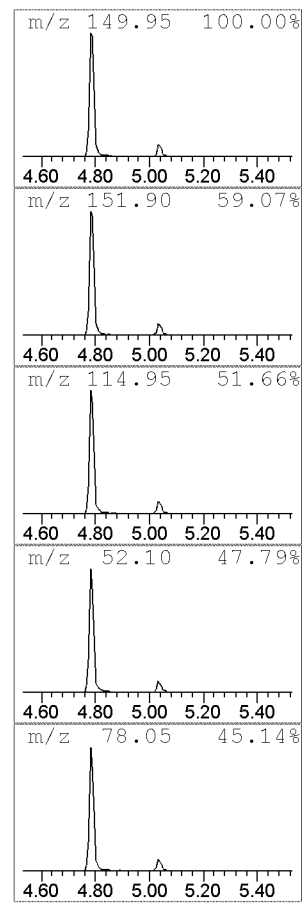
****

Peak Number 1 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.11 ppb	121536	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	94
2	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	72
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	12
4	2-Bromo-3'-nitroacetophenone	243	C8H6BrNO3	002227-64-7	10
5	Cyclobuta[1,2-A:3,4-A']diindene,...	300	C18H14Cl2	110848-73-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

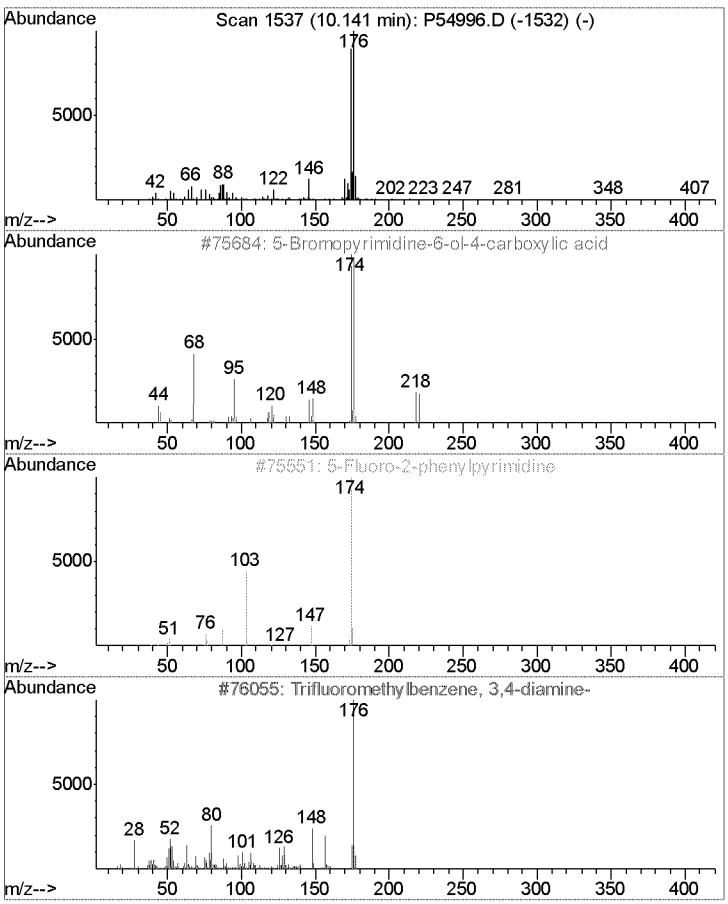
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

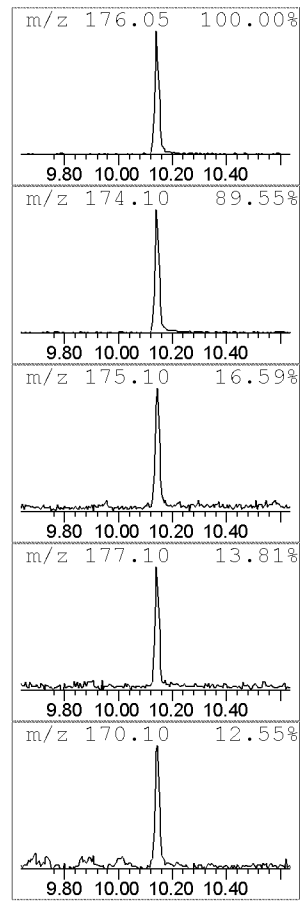
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.47 ppb	170387	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	38
2	5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	35
3	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	35
4	6-Amino-2,3-diethyl-1H-pyrrolo[2...	189	C11H15N3	055463-66-6	32
5	Benzenemethanol, .alpha.-1-penty...	174	C12H14O	108946-34-5	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

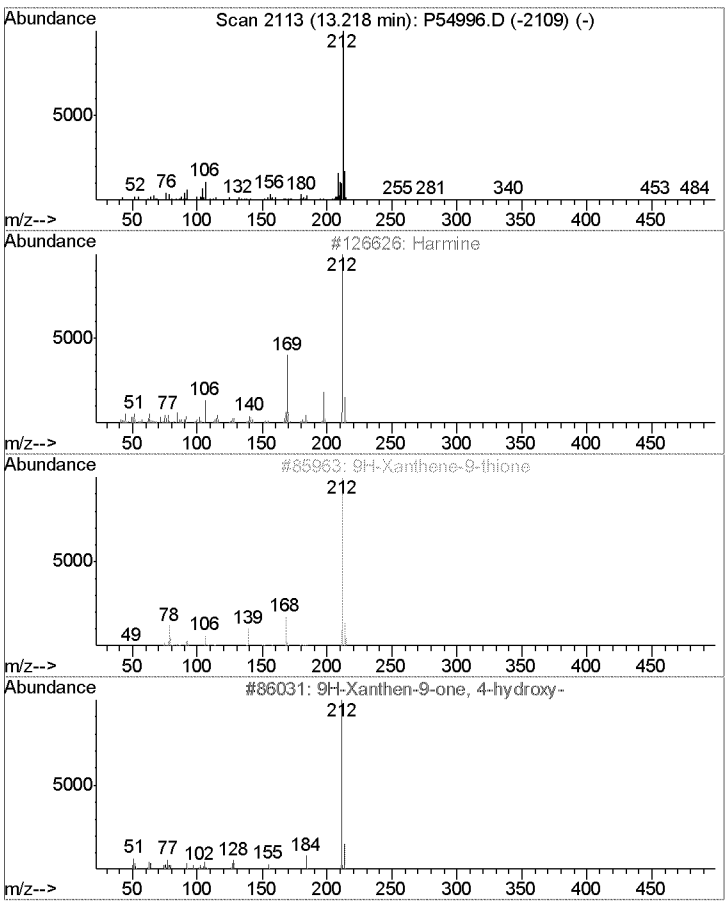
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

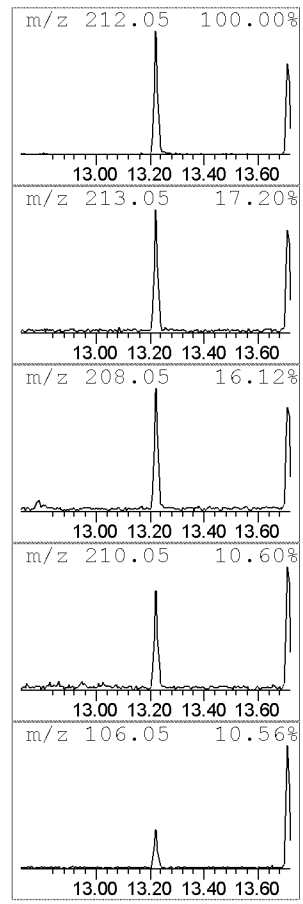
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.71 ppb	182450	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Harmine	212	C13H12N2O	000442-51-3	64
2	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	50
4	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	50
5	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	45





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

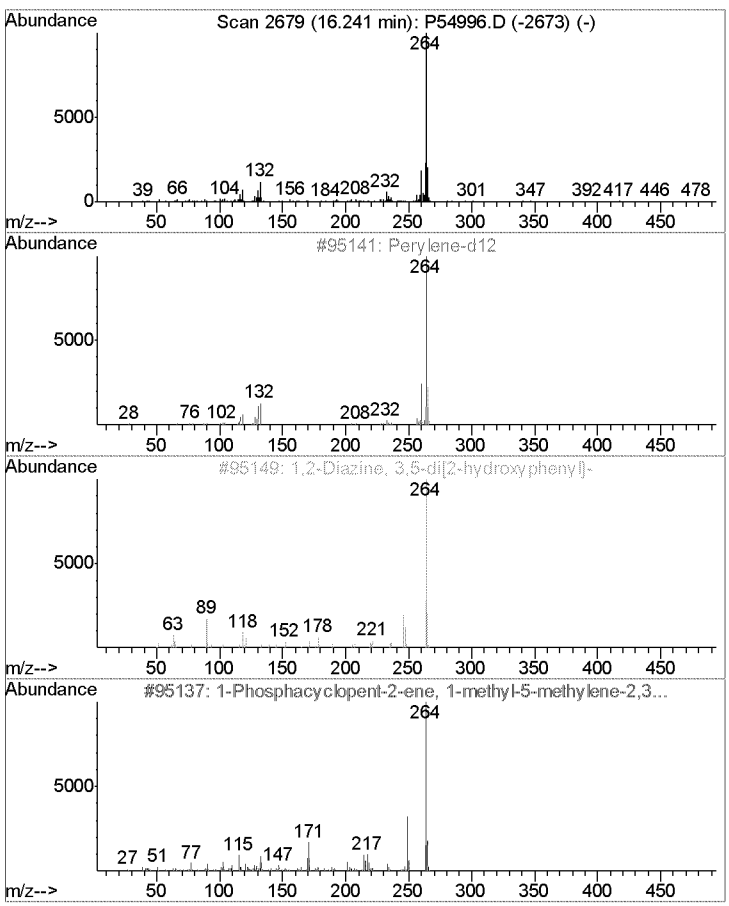
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

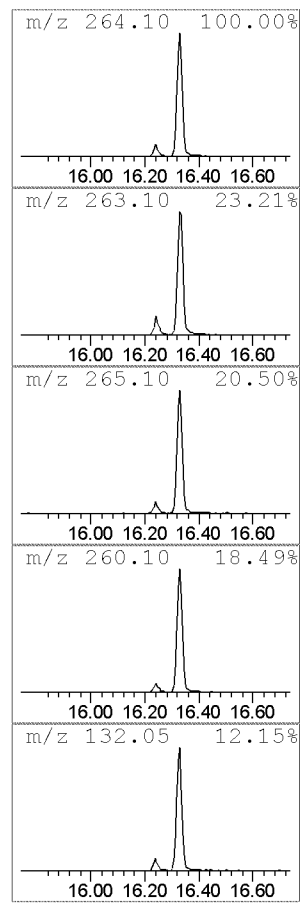
****

Peak Number 4 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.08 ppb	153345	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	94
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	59
4	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	59
5	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	53





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	5.03	4.1	ppb	121536	2	4.78	1181750	40.0
Internal standard...	10.14	4.5	ppb	170387	5	9.33	1524880	40.0
Internal standard...	13.22	4.7	ppb	182450	7	11.64	1548870	40.0
Internal standard...	16.24	4.1	ppb	153345	10	16.33	1503860	40.0

8.1.14
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 12:39:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	160648	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	557580	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	360586	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	622742	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	684669	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	571229	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	160648	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	622742	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	360586	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	684669	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	327557	46.63	ppb	-0.07
Spiked Amount 50.000			Recovery =	93.26%		
51) 2-Fluorobiphenyl	8.28	172	532909	43.04	ppb	-0.09
Spiked Amount 50.000			Recovery =	86.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	529825	32.75	ppb	-0.06
Spiked Amount 50.000			Recovery =	65.50%		

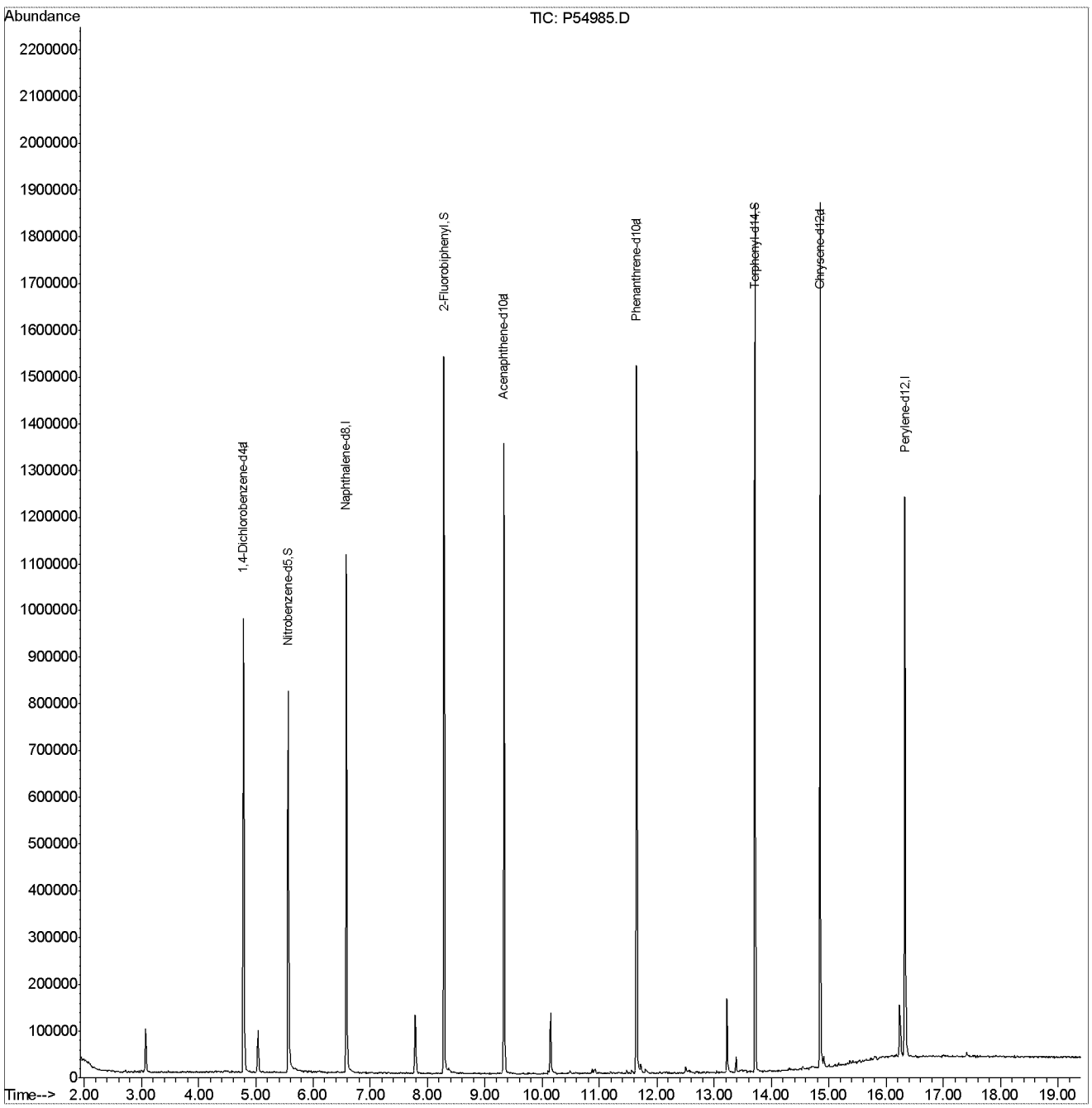
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 12:39:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.416	88	91	94	rBV5	3322	4177	0.22%	0.027%
2	2.496	104	106	114	rVB8	4757	7509	0.40%	0.049%
3	2.726	141	149	155	rBV8	5399	11693	0.62%	0.076%
4	2.886	176	179	183	rVB6	3247	4680	0.25%	0.030%
5	3.009	199	202	206	rVB6	4245	5144	0.27%	0.033%
6	3.067	208	213	226	rVB	94669	124197	6.61%	0.802%
7	3.238	241	245	251	rVB8	2377	3686	0.20%	0.024%
8	4.782	527	534	553	rBV	970941	1170438	62.32%	7.562%
9	5.033	574	581	588	rBV	89849	116878	6.22%	0.755%
10	5.333	628	637	639	rBV10	2642	4125	0.22%	0.027%
11	5.562	671	680	699	rBV	817938	1055587	56.21%	6.820%
12	5.835	730	731	737	rBV5	2720	3952	0.21%	0.026%
13	5.926	746	748	752	rBV5	3065	3695	0.20%	0.024%
14	6.572	863	869	892	rBV	1108642	1422632	75.75%	9.191%
15	6.780	906	908	913	rVB5	2770	3656	0.19%	0.024%
16	7.229	990	992	1000	rVB9	2095	3814	0.20%	0.025%
17	7.528	1044	1048	1052	rBV7	2425	4275	0.23%	0.028%
18	7.779	1087	1095	1108	rBV2	126276	177087	9.43%	1.144%
19	8.046	1141	1145	1149	rVB5	2880	3913	0.21%	0.025%
20	8.281	1181	1189	1200	rBV	1536057	1783248	94.95%	11.521%
21	8.356	1200	1203	1212	rVB7	9763	21624	1.15%	0.140%
22	8.452	1219	1221	1226	rVB6	3253	3545	0.19%	0.023%
23	8.602	1245	1249	1256	rBV10	2665	4154	0.22%	0.027%
24	8.992	1318	1322	1328	rVB9	3164	5640	0.30%	0.036%
25	9.072	1332	1337	1344	rVB10	2365	3542	0.19%	0.023%
26	9.216	1360	1364	1368	rBV7	2988	4191	0.22%	0.027%
27	9.259	1369	1372	1375	rVB5	3570	5077	0.27%	0.033%
28	9.329	1375	1385	1401	rBV	1350200	1640155	87.33%	10.597%
29	9.446	1404	1407	1413	rVB8	3705	5447	0.29%	0.035%
30	9.660	1441	1447	1452	rBV8	2963	6041	0.32%	0.039%
31	10.103	1527	1530	1532	rBV4	6915	6921	0.37%	0.045%
32	10.141	1532	1537	1550	rVB	129910	175495	9.34%	1.134%
33	10.477	1597	1600	1610	rVB10	5994	10233	0.54%	0.066%
34	10.600	1616	1623	1627	rVB9	3692	7503	0.40%	0.048%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	10.760	1649	1653	1655	rBV5	3413	3502	0.19%	0.023%
36	10.867	1669	1673	1677	rBV3	10818	12768	0.68%	0.082%
37	10.915	1677	1682	1688	rVV4	10477	17191	0.92%	0.111%
38	10.958	1688	1690	1697	rVB8	2607	4744	0.25%	0.031%
39	11.193	1731	1734	1740	rVB9	3865	4987	0.27%	0.032%
40	11.241	1740	1743	1749	rBV7	2118	3541	0.19%	0.023%
41	11.321	1756	1758	1765	rVB8	3091	4195	0.22%	0.027%
42	11.471	1775	1786	1791	rBV5	9151	18559	0.99%	0.120%
43	11.562	1799	1803	1811	rVB6	6618	8949	0.48%	0.058%
44	11.642	1811	1818	1828	rBV2	1515115	1758878	93.65%	11.364%
45	11.722	1828	1833	1843	rVV4	18120	32197	1.71%	0.208%
46	11.802	1843	1848	1861	rVB4	9876	18942	1.01%	0.122%
47	12.048	1890	1894	1901	rVB9	4721	7590	0.40%	0.049%
48	12.128	1904	1909	1912	rVB7	3009	5165	0.28%	0.033%
49	12.165	1912	1916	1920	rBV7	4017	4941	0.26%	0.032%
50	12.326	1940	1946	1950	rVB9	2906	5160	0.27%	0.033%
51	12.363	1950	1953	1956	rBV4	2483	3527	0.19%	0.023%
52	12.497	1972	1978	1986	rBV10	13019	25122	1.34%	0.162%
53	12.561	1987	1990	1996	rVB5	6775	10989	0.59%	0.071%
54	13.041	2077	2080	2084	rBV5	4767	5516	0.29%	0.036%
55	13.218	2108	2113	2125	rBV	158629	196059	10.44%	1.267%
56	13.378	2138	2143	2149	rBV3	34072	38226	2.04%	0.247%
57	13.447	2154	2156	2160	rBV5	4911	6232	0.33%	0.040%
58	13.474	2160	2161	2165	rVB4	3841	3844	0.20%	0.025%
59	13.544	2170	2174	2181	rVB10	7233	14782	0.79%	0.096%
60	13.586	2181	2182	2186	rBV3	3545	4726	0.25%	0.031%
61	13.709	2199	2205	2223	rBV	1857459	1878100	100.00%	12.134%
62	13.864	2231	2234	2238	rBV5	3049	4719	0.25%	0.030%
63	14.313	2316	2318	2321	rBV4	4468	3615	0.19%	0.023%
64	14.425	2333	2339	2343	rBV9	3635	6597	0.35%	0.043%
65	14.543	2357	2361	2367	rBV9	5945	7981	0.42%	0.052%
66	14.847	2411	2418	2428	rBV	1851905	1795283	95.59%	11.599%
67	14.917	2428	2431	2439	rVB	22246	27998	1.49%	0.181%
68	15.168	2474	2478	2489	rBV	7733	18580	0.99%	0.120%
69	15.365	2512	2515	2520	rBV7	7592	10305	0.55%	0.067%
70	16.236	2673	2678	2688	rBV	110213	156405	8.33%	1.011%
71	16.327	2688	2695	2710	rVB	1196317	1533985	81.68%	9.911%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

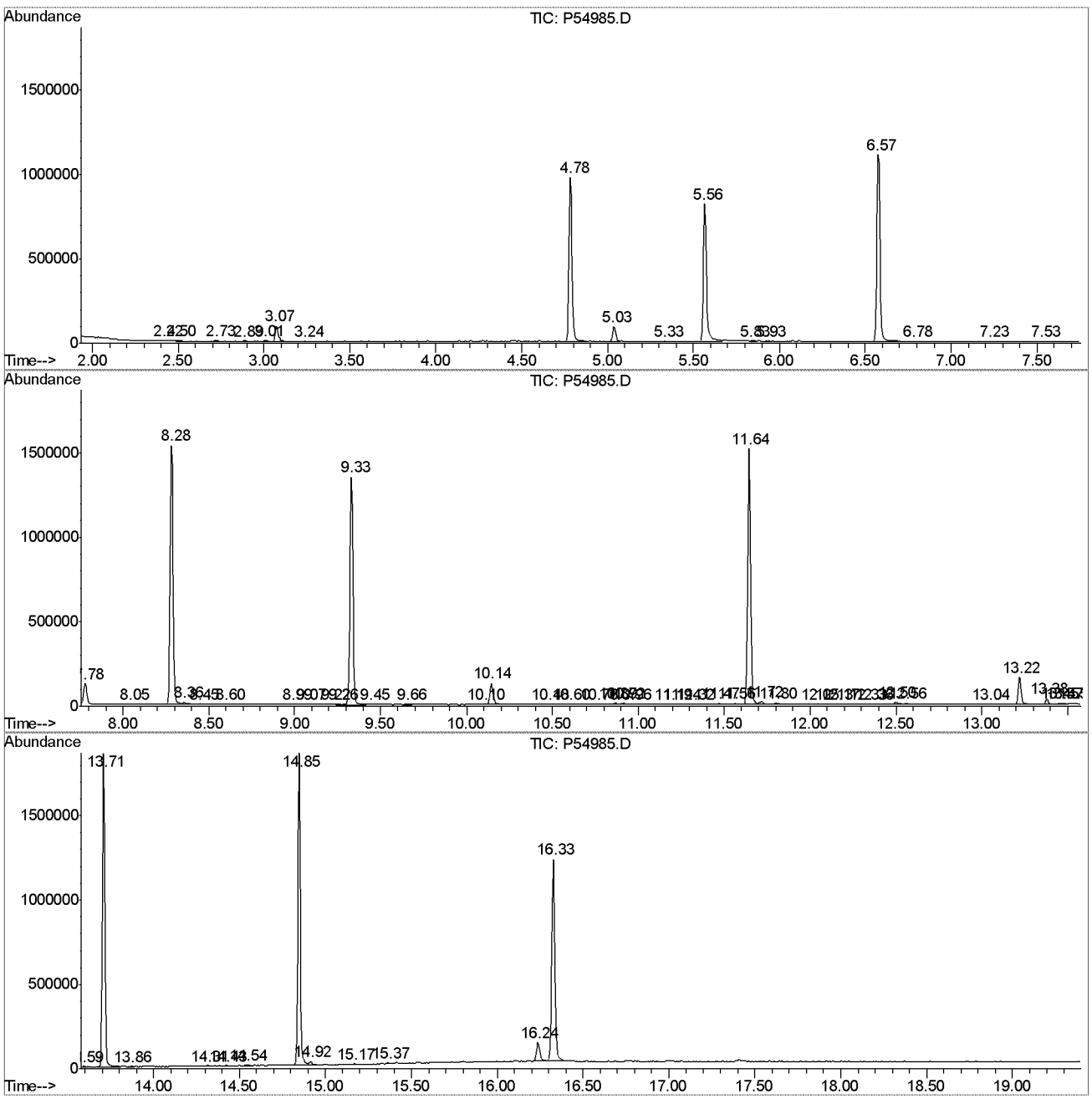
Sum of corrected areas: 15477854

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

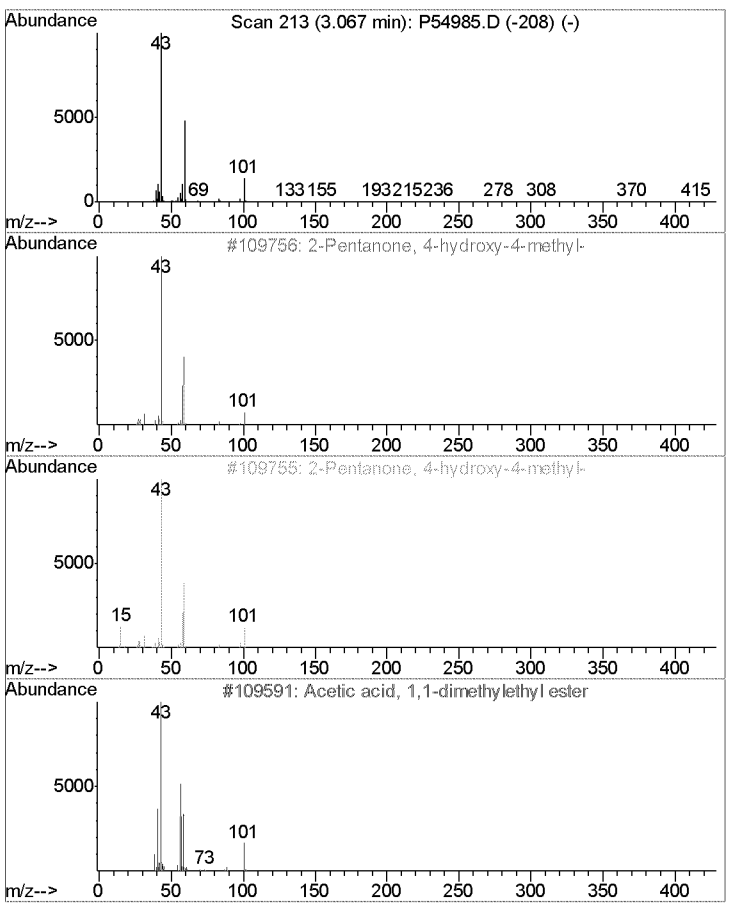
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

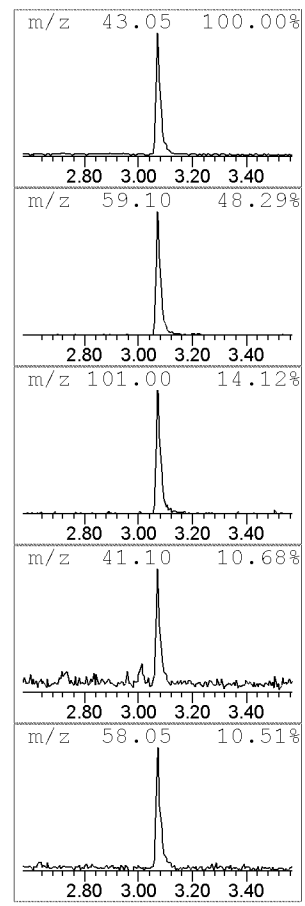
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.24 ppb	124197	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
5	Propanenitrile, 3-ethoxy-	99	C5H9NO	002141-62-0	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

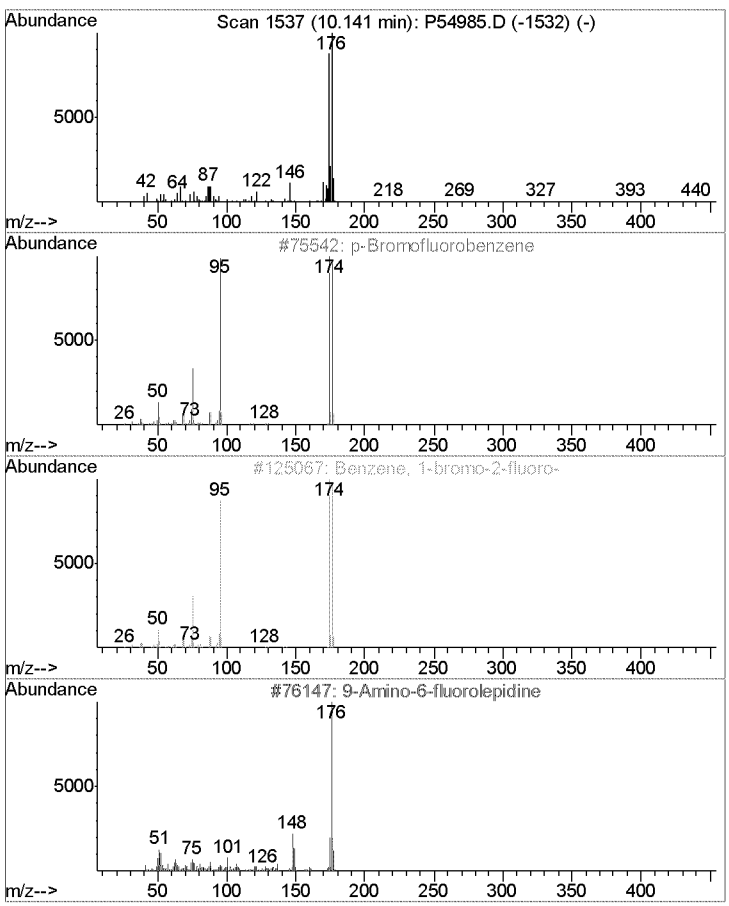
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

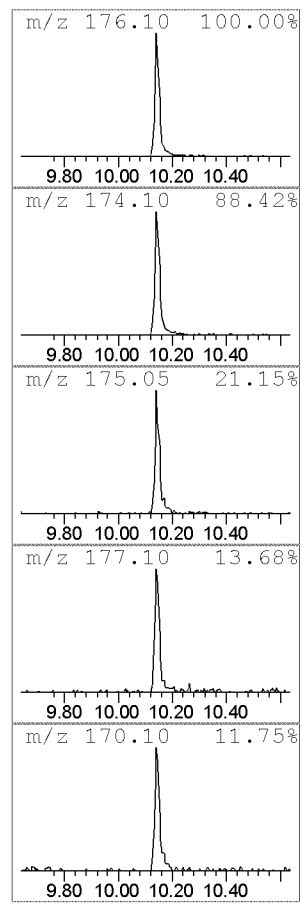
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.28 ppb	175495	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	59
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	45
3	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	30
4	Silanamine, 1,1,1-trimethyl-N-(2...	265	C14H27NSi2	058367-45-6	27
5	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

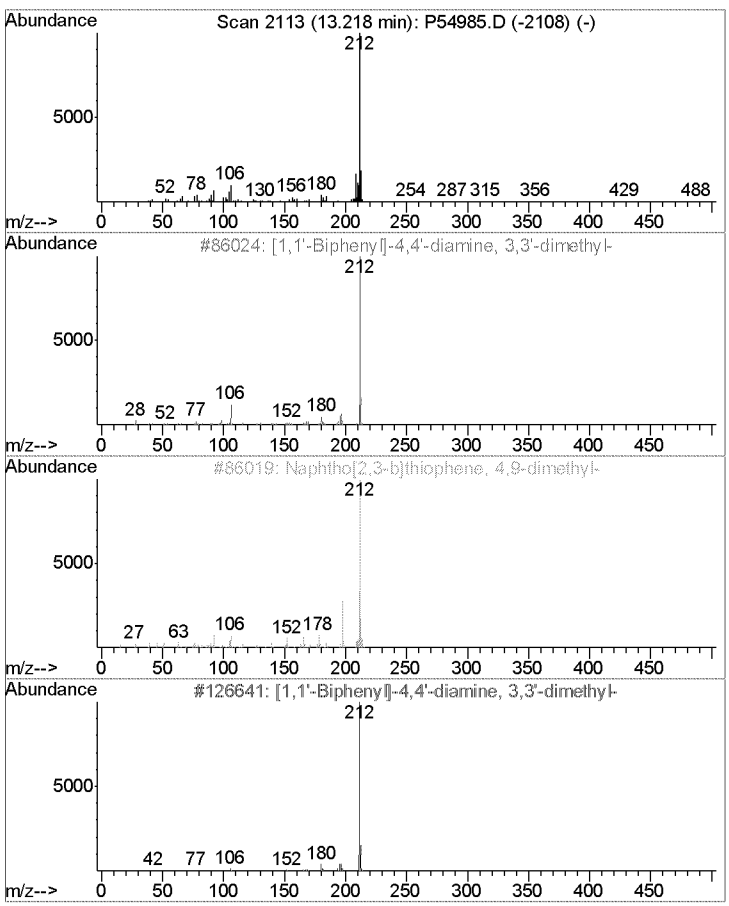
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

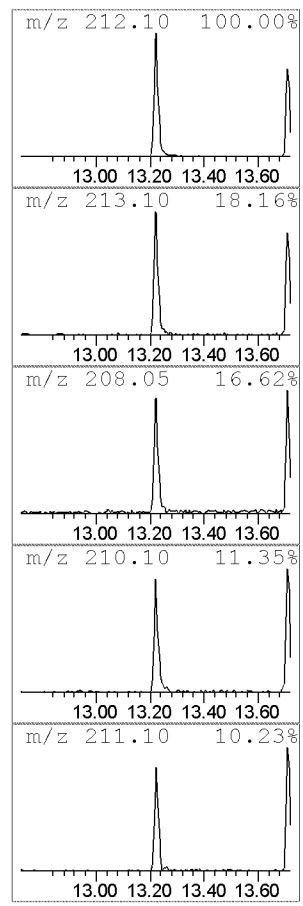
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.46 ppb	196059	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	74
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
3	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	53
5	Benzenamine, 3-methoxy-N-(3-pyri...	212	C13H12N2O	041855-70-3	52





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

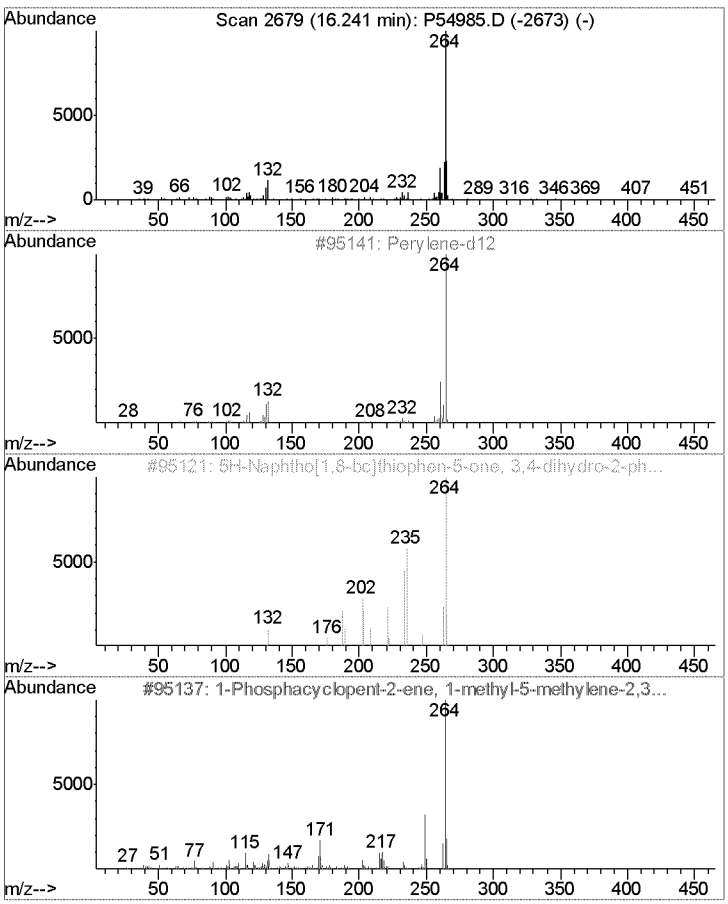
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

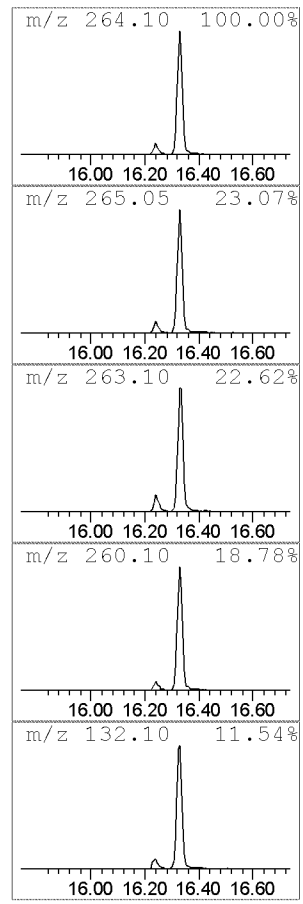
****

Peak Number 4 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.08 ppb	156405	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	81
2	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	58
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	50
5	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	50





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.2	ppb	124197	1	4.78	1170440	40.0
Internal standard...	10.14	4.3	ppb	175495	5	9.33	1640160	40.0
Internal standard...	13.22	4.5	ppb	196059	7	11.64	1758880	40.0
Internal standard...	16.24	4.1	ppb	156405	10	16.33	1533990	40.0

8.1.16
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23778.D
Acq On : 22 Feb 2011 10:05 am
Operator : ninap
Sample : ja68506-1
Misc : op48193a,e4m1040,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:39:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

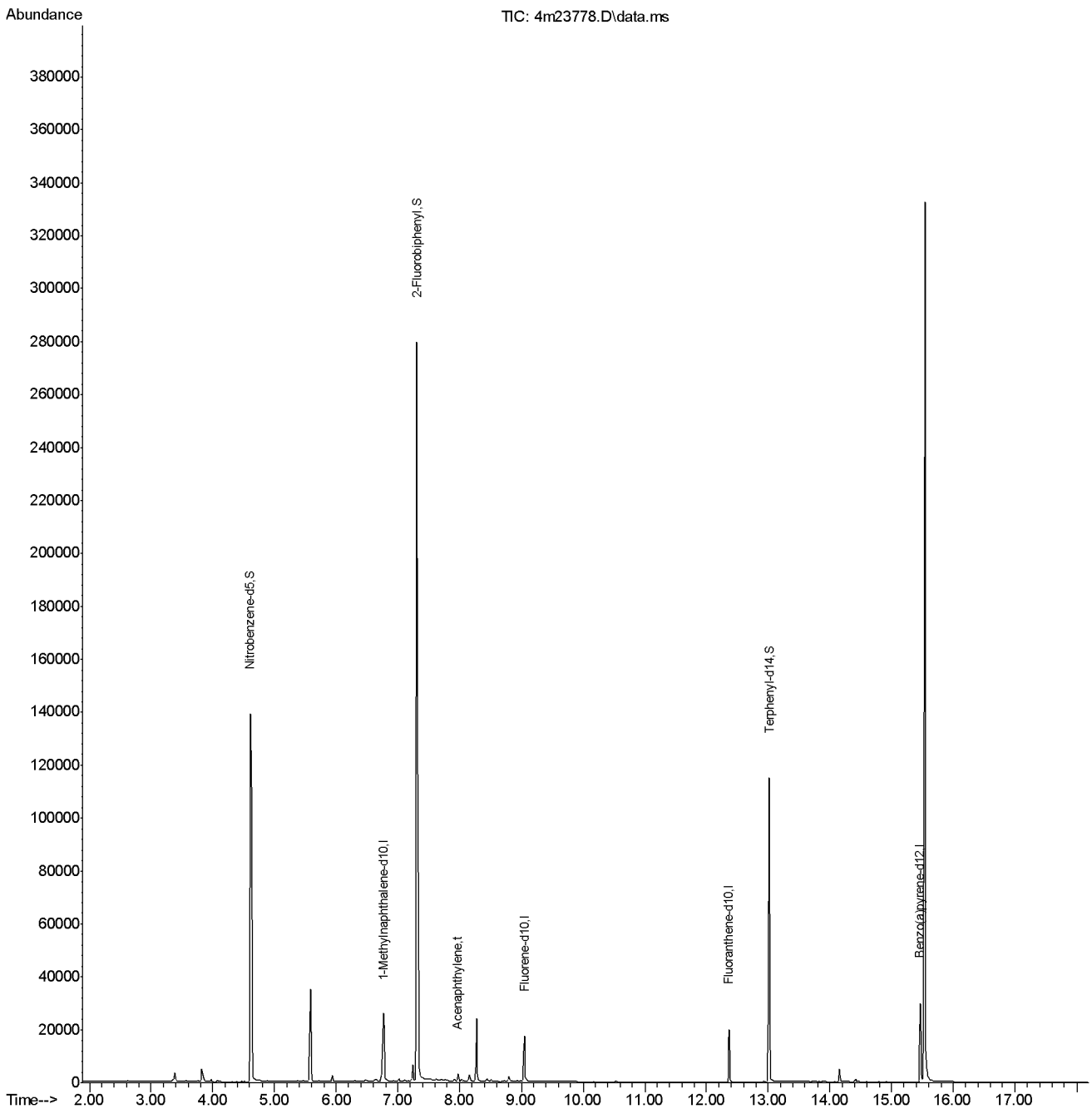
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	19324	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	12584	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22191	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	25321	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	106133	37.43	ppb	-0.01
Spiked Amount 50.000			Recovery =	74.86%		
11) 2-Fluorobiphenyl	7.304	172	246342	37.90	ppb	-0.02
Spiked Amount 50.000			Recovery =	75.80%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	82113	34.36	ppb	-0.02
Spiked Amount 50.000			Recovery =	68.72%		
Target Compounds						Qvalue
13) Acenaphthylene	7.972	152	3146	0.44	ppb	76

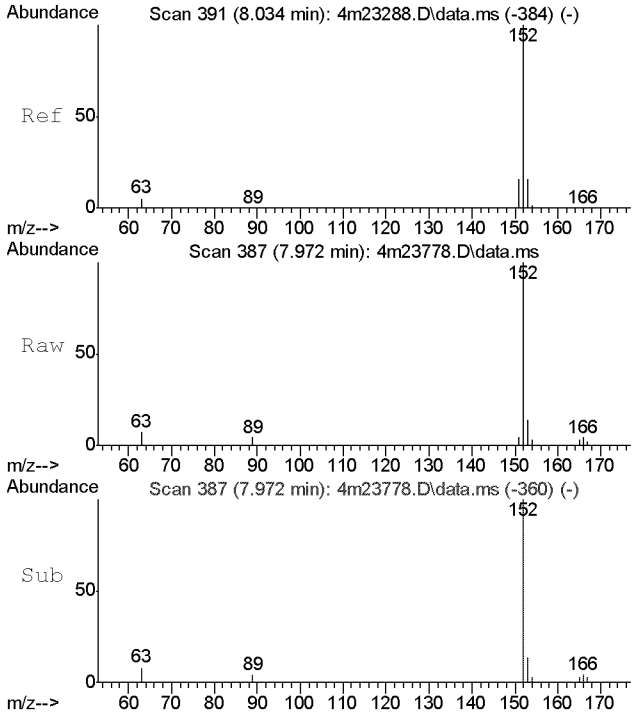
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23778.D
Acq On : 22 Feb 2011 10:05 am
Operator : ninap
Sample : ja68506-1
Misc : op48193a,e4m1040,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:39:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

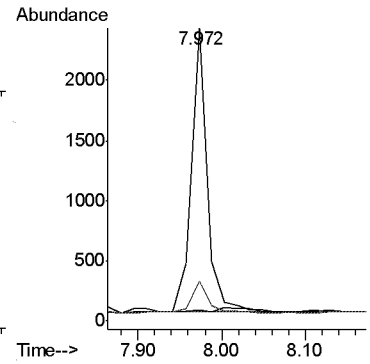




#13
Acenaphthylene
Concen: 0.44 ppb
RT: 7.972 min Scan# 387
Delta R.T. -0.062 min
Lab File: 4m23778.D
Acq: 22 Feb 2011 10:05 am

Tgt Ion:152 Resp: 3146

Ion	Ratio	Lower	Upper
152	100		
151	0.5	0.0	45.6
153	10.9	0.0	45.7



8.1.17

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23779.D
Acq On : 22 Feb 2011 10:29 am
Operator : ninap
Sample : ja68506-2
Misc : op48193a,e4m1040,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:43:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

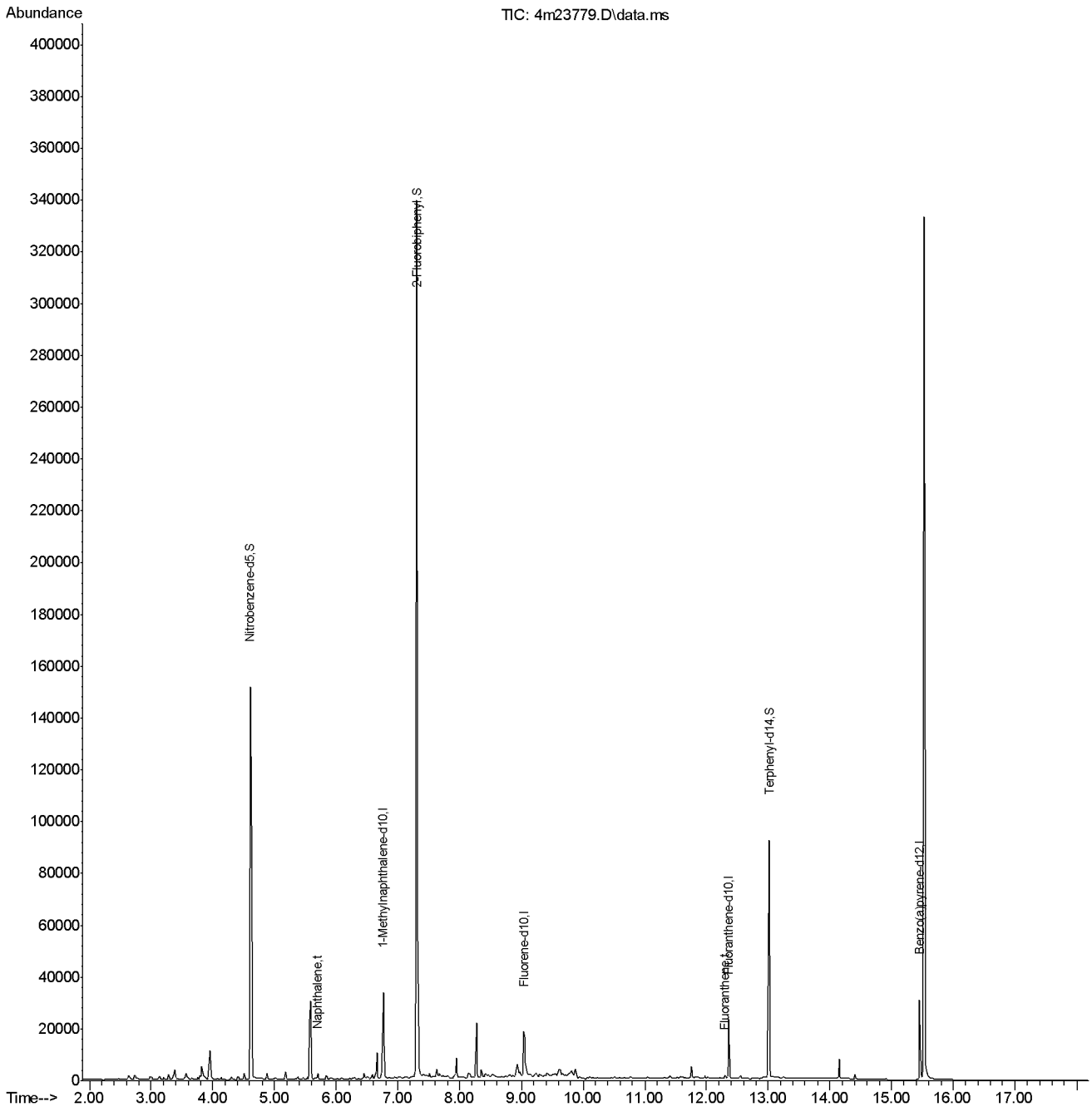
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	17238	4.00	ppb	0.00
12) Fluorene-d10	9.039	174	13210	4.00	ppb	# 0.00
23) Fluoranthene-d10	12.357	212	22959	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.452	264	25739	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	108931	43.06	ppb	0.00
Spiked Amount 50.000			Recovery =	86.12%		
11) 2-Fluorobiphenyl	7.303	172	254751	43.94	ppb	0.00
Spiked Amount 50.000			Recovery =	87.88%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	71731	29.01	ppb	0.00
Spiked Amount 50.000			Recovery =	58.02%		
Target Compounds						Qvalue
7) Naphthalene	5.694	128	2200	0.29	ppb	98
24) Fluoranthene	12.305	202	1528	0.22	ppb	93

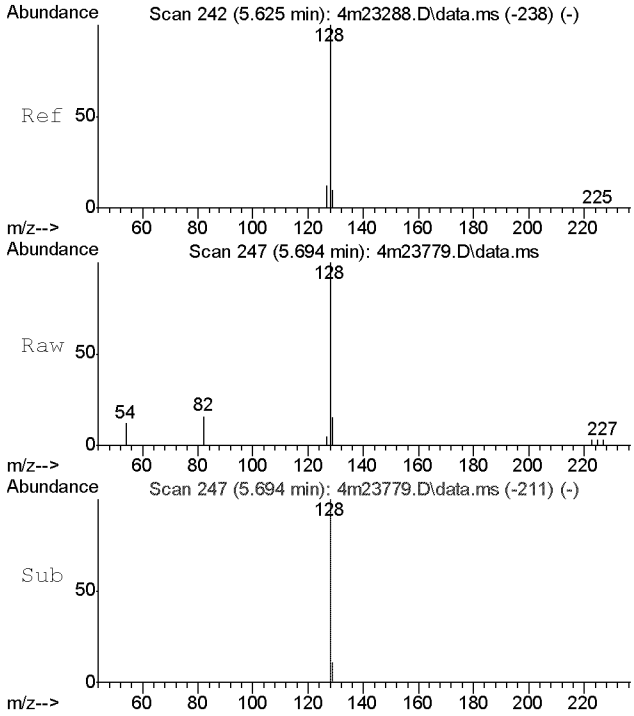
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23779.D
Acq On : 22 Feb 2011 10:29 am
Operator : ninap
Sample : ja68506-2
Misc : op48193a,e4m1040,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:43:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

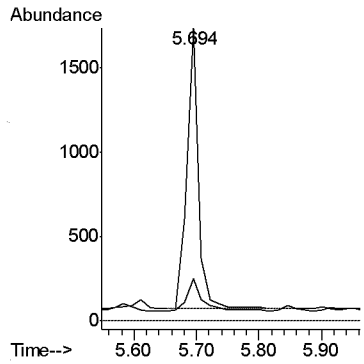


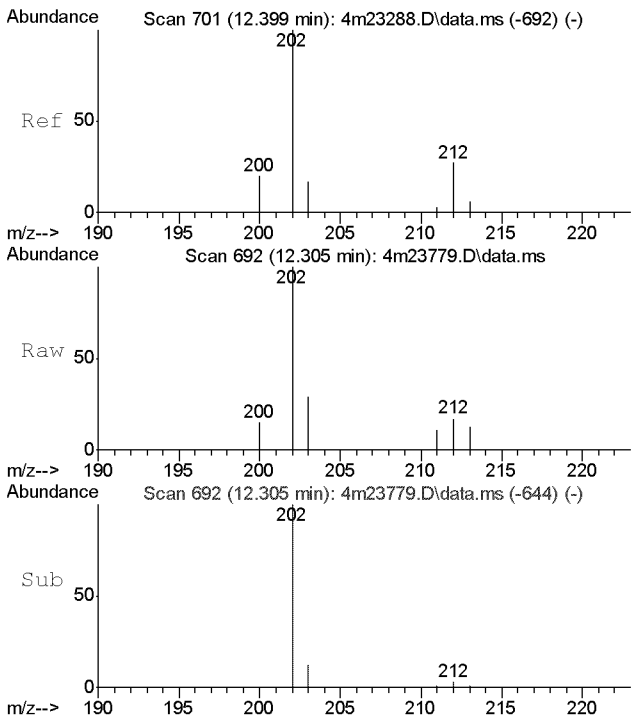


#7
Naphthalene
Concen: 0.29 ppb
RT: 5.694 min Scan# 247
Delta R.T. 0.000 min
Lab File: 4m23779.D
Acq: 22 Feb 2011 10:29 am

Tgt Ion:128 Resp: 2200

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.4
122	0.0	0.0	30.0

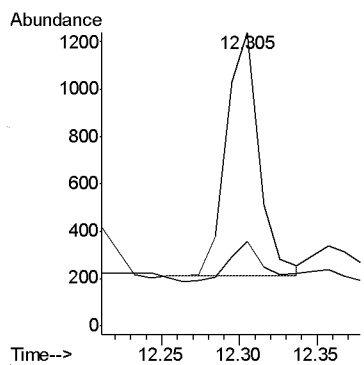




#24
Fluoranthene
Concen: 0.22 ppb
RT: 12.305 min Scan# 692
Delta R.T. 0.000 min
Lab File: 4m23779.D
Acq: 22 Feb 2011 10:29 am

Tgt Ion:202 Resp: 1528

Ion	Ratio	Lower	Upper
202	100		
203	14.1	0.0	47.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23780.D
Acq On : 22 Feb 2011 10:53 am
Operator : ninap
Sample : ja68506-3
Misc : op48193a,e4m1040,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

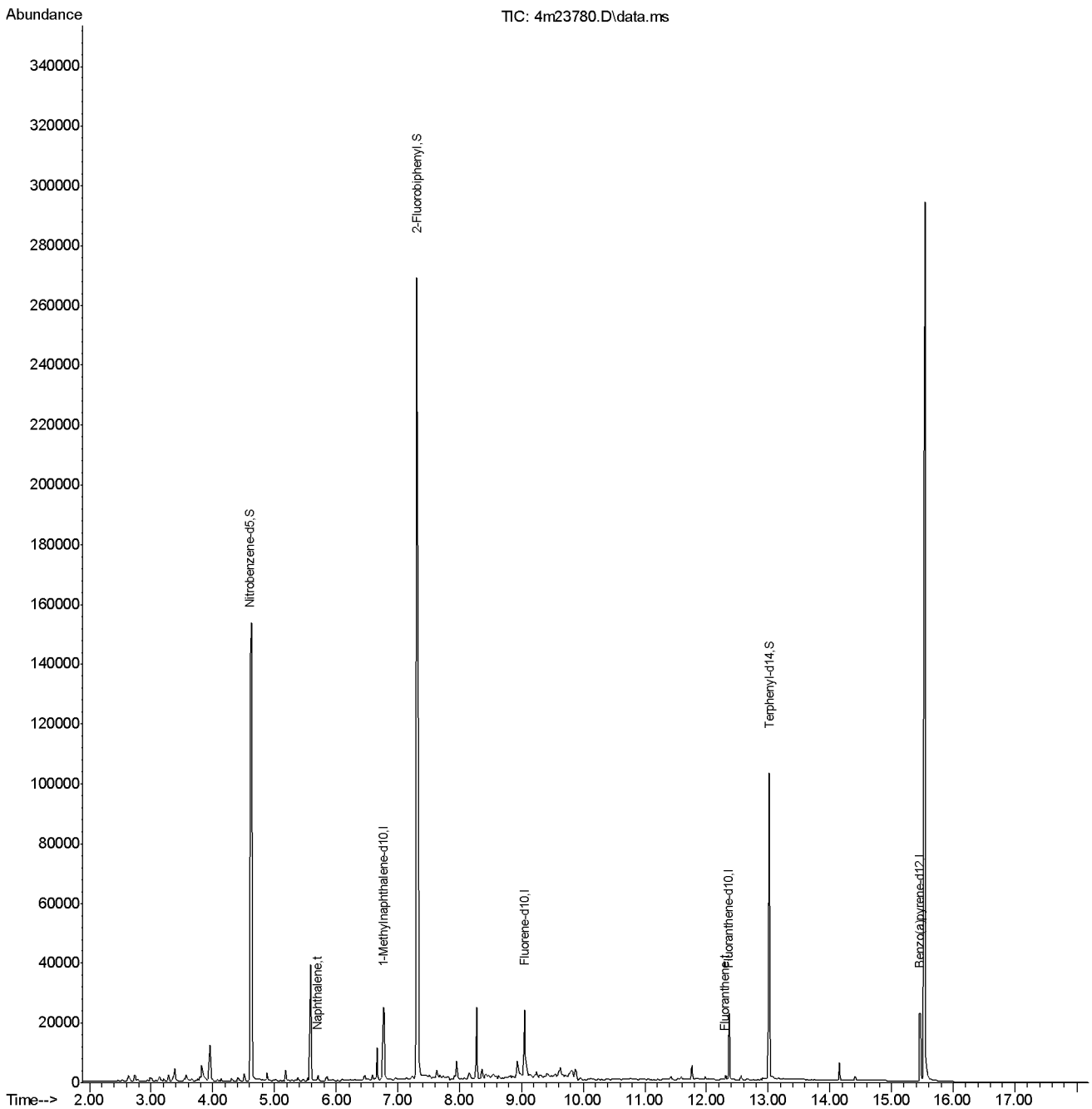
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	17113	4.00	ppb	0.02
12) Fluorene-d10	9.055	174	13034	4.00	ppb	# 0.02
23) Fluoranthene-d10	12.368	212	22864	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.452	264	25099	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	128017	50.97	ppb	0.00
Spiked Amount 50.000			Recovery =	101.94%		
11) 2-Fluorobiphenyl	7.303	172	281095	48.84	ppb	0.00
Spiked Amount 50.000			Recovery =	97.68%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	74042	30.07	ppb	0.00
Spiked Amount 50.000			Recovery =	60.14%		
Target Compounds						Qvalue
7) Naphthalene	5.694	128	1967	0.26	ppb	99
24) Fluoranthene	12.306	202	1565	0.23	ppb	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

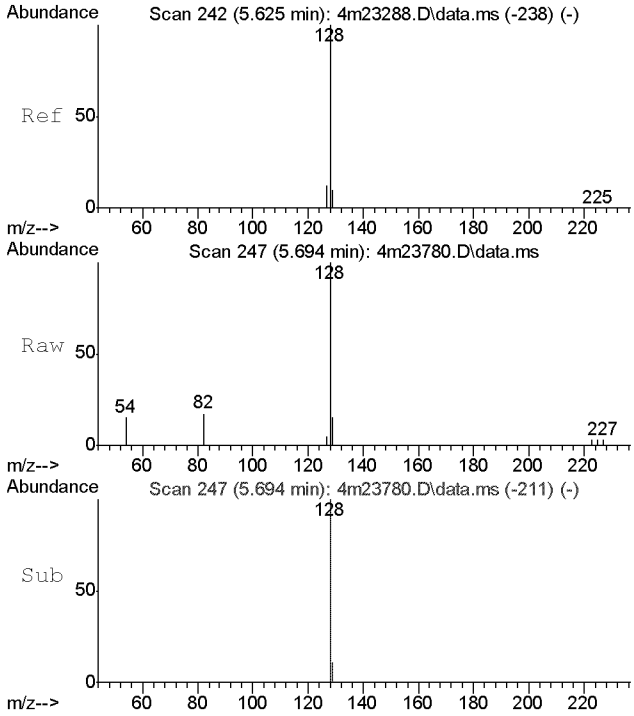
Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23780.D
Acq On : 22 Feb 2011 10:53 am
Operator : ninap
Sample : ja68506-3
Misc : op48193a,e4m1040,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration



M4M1016SIM.M Tue Feb 22 14:44:54 2011 RPT1 Page: 2

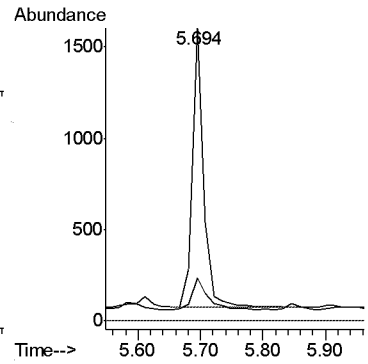
8.1.19 8

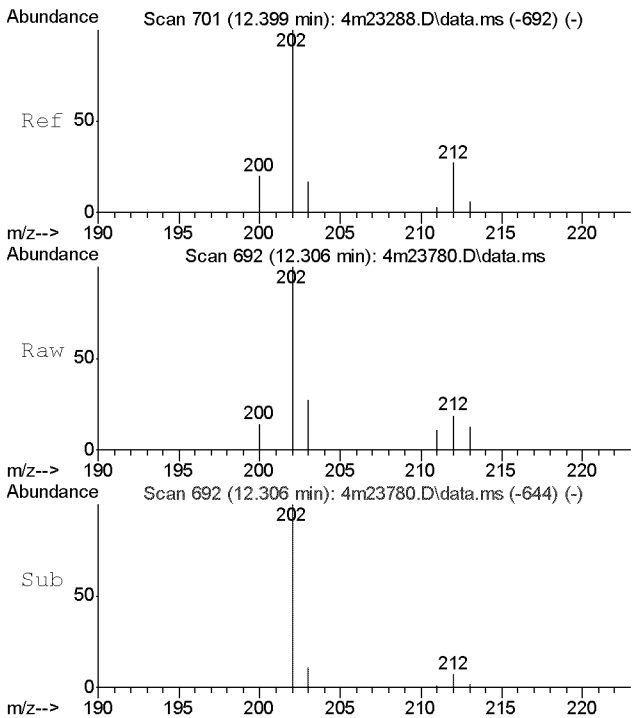


#7
Naphthalene
Concen: 0.26 ppb
RT: 5.694 min Scan# 247
Delta R.T. 0.000 min
Lab File: 4m23780.D
Acq: 22 Feb 2011 10:53 am

Tgt Ion:128 Resp: 1967

Ion	Ratio	Lower	Upper
128	100		
129	10.6	0.0	40.4
122	0.0	0.0	30.0

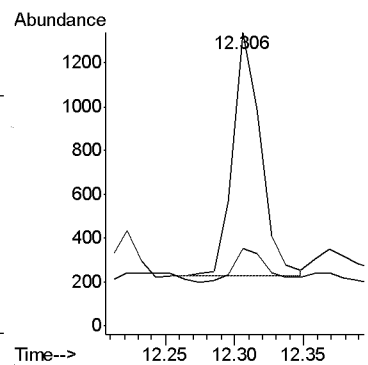




#24
Fluoranthene
Concen: 0.23 ppb
RT: 12.306 min Scan# 692
Delta R.T. 0.000 min
Lab File: 4m23780.D
Acq: 22 Feb 2011 10:53 am

Tgt Ion:202 Resp: 1565

Ion	Ratio	Lower	Upper
202	100		
203	11.2	0.0	47.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23781.D
Acq On : 22 Feb 2011 11:17 am
Operator : ninap
Sample : ja68506-4
Misc : op48193a,e4m1040,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 14:45:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

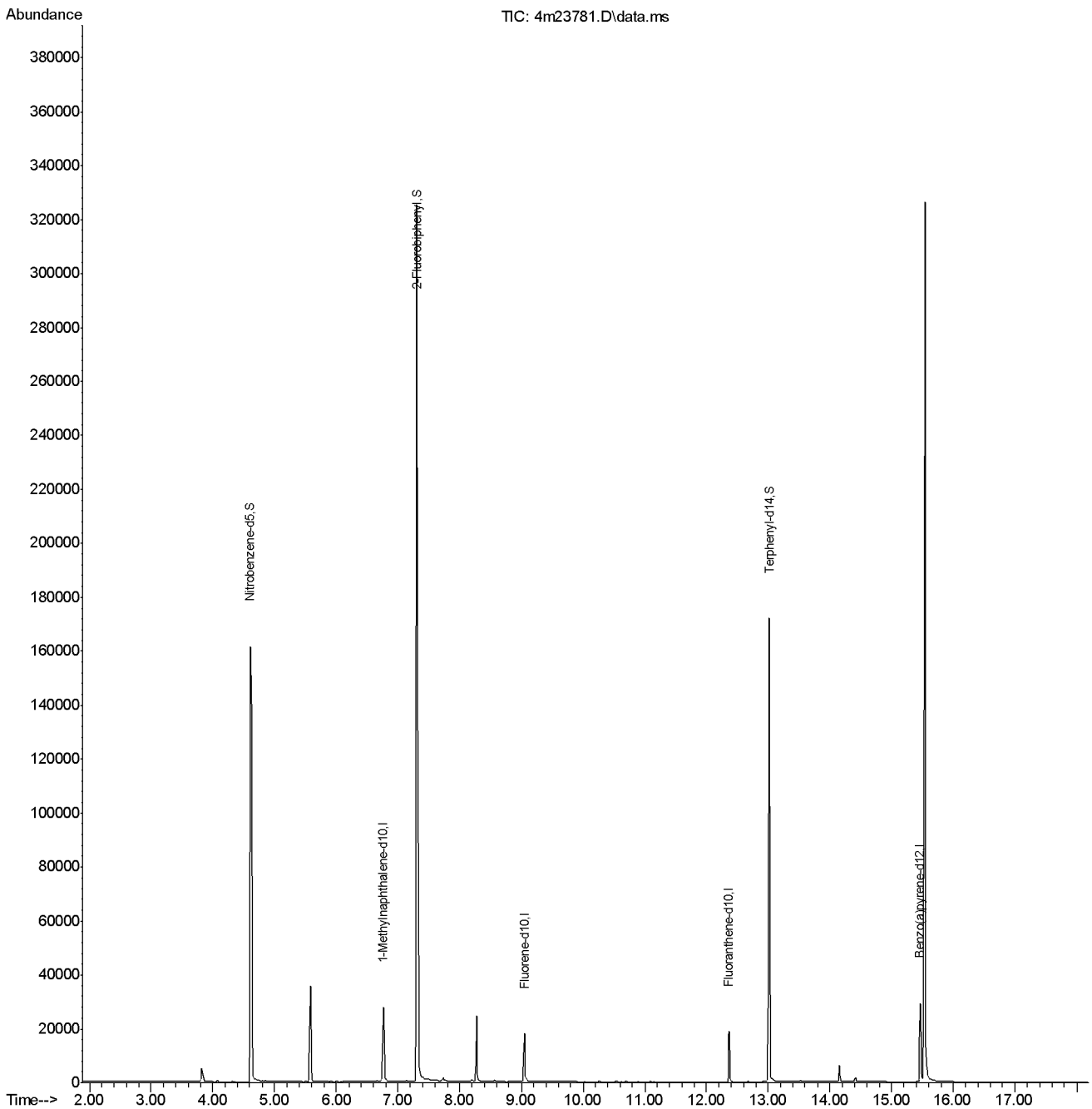
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	16866	4.00	ppb	-0.02
12) Fluorene-d10	9.055	174	13018	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22030	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	26242	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	127851	51.65	ppb	-0.01
Spiked Amount 50.000			Recovery =	103.30%		
11) 2-Fluorobiphenyl	7.303	172	283931	50.06	ppb	-0.02
Spiked Amount 50.000			Recovery =	100.12%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	124185	52.34	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.68%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23781.D
Acq On : 22 Feb 2011 11:17 am
Operator : ninap
Sample : ja68506-4
Misc : op48193a,e4m1040,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 14:45:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



M4M1016SIM.M Tue Feb 22 14:45:44 2011 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23782.D
Acq On : 22 Feb 2011 11:40 am
Operator : ninap
Sample : ja68506-5
Misc : op48193a,e4m1040,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 14:46:24 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	16782	4.00	ppb	-0.02
12) Fluorene-d10	9.039	174	12101	4.00	ppb	-0.03
23) Fluoranthene-d10	12.357	212	19877	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	22306	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	128869	52.33	ppb	-0.01
Spiked Amount 50.000			Recovery =	104.66%		
11) 2-Fluorobiphenyl	7.303	172	297895	52.78	ppb	-0.02
Spiked Amount 50.000			Recovery =	105.56%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	112201	52.41	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.82%		

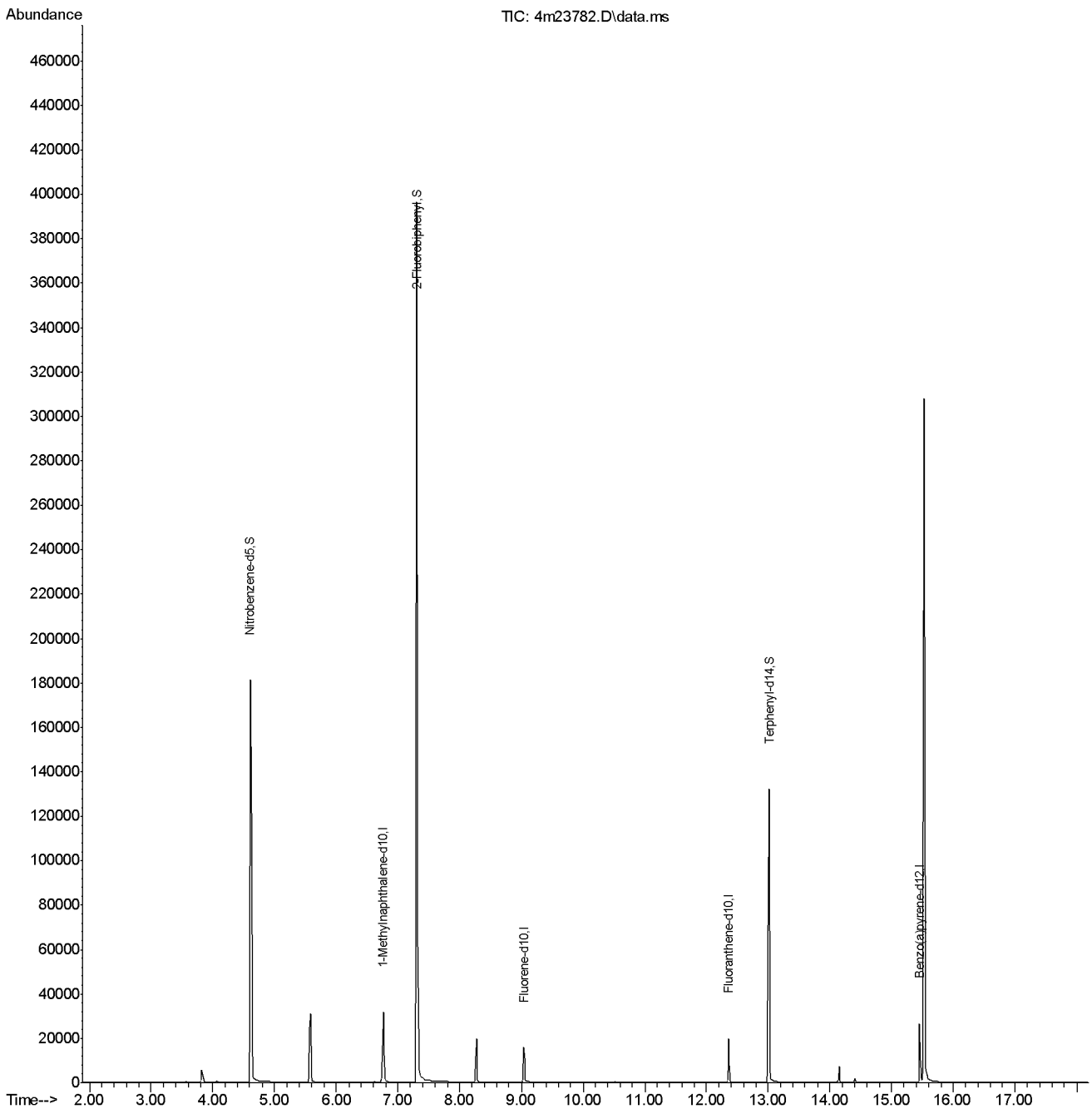
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23782.D
Acq On : 22 Feb 2011 11:40 am
Operator : ninap
Sample : ja68506-5
Misc : op48193a,e4m1040,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 14:46:24 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23783.D
Acq On : 22 Feb 2011 12:04 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193a,e4m1040,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 25 14:24:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

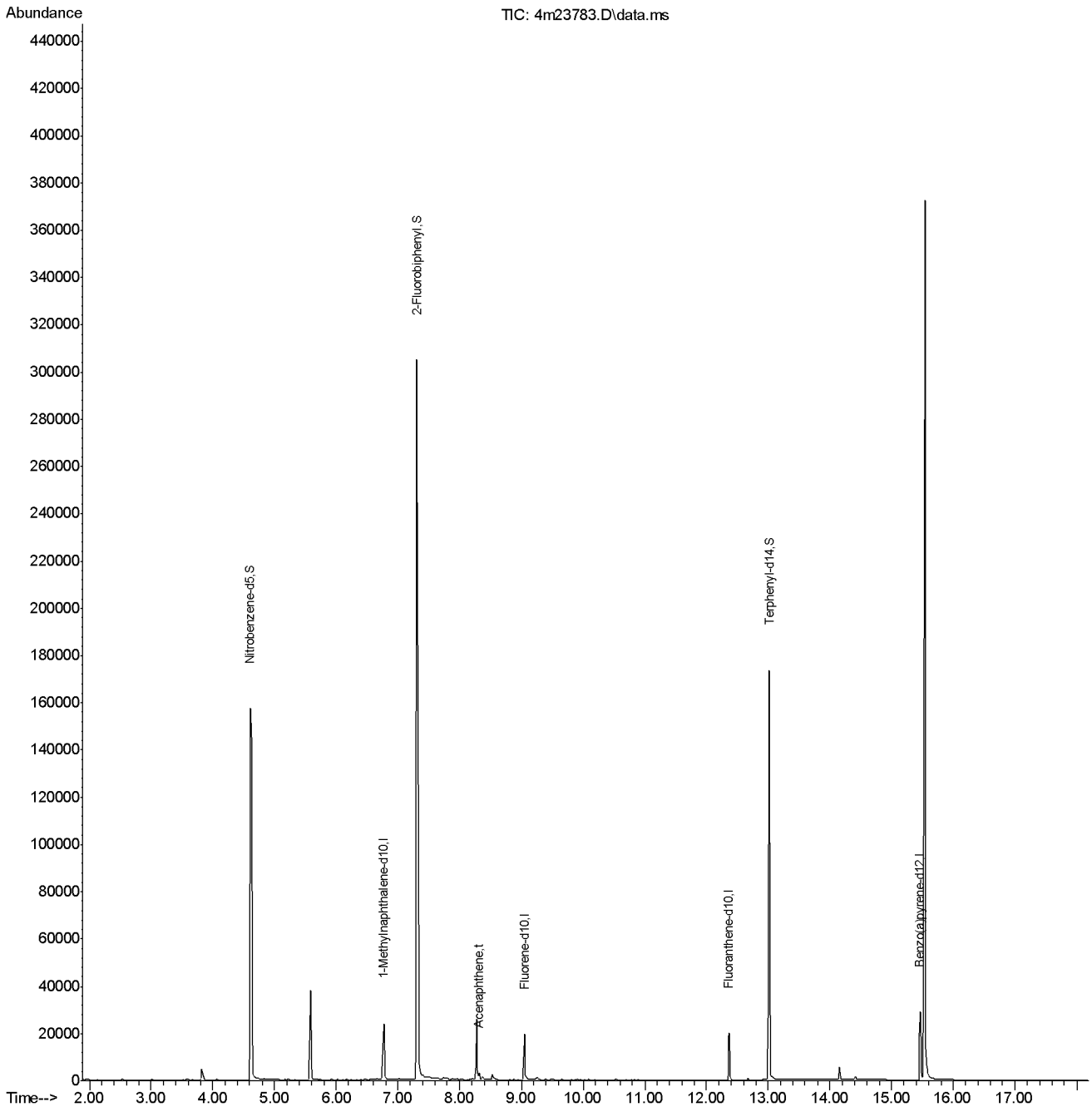
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	16649	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	13067	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22964	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.463	264	27759	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	129266	52.91	ppb	-0.01
Spiked Amount 50.000			Recovery =	105.82%		
11) 2-Fluorobiphenyl	7.304	172	303411	54.19	ppb	-0.02
Spiked Amount 50.000			Recovery =	108.38%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	122653	49.59	ppb	-0.02
Spiked Amount 50.000			Recovery =	99.18%		
Target Compounds						Qvalue
14) Acenaphthene	8.312	153	1552	0.28	ppb	95

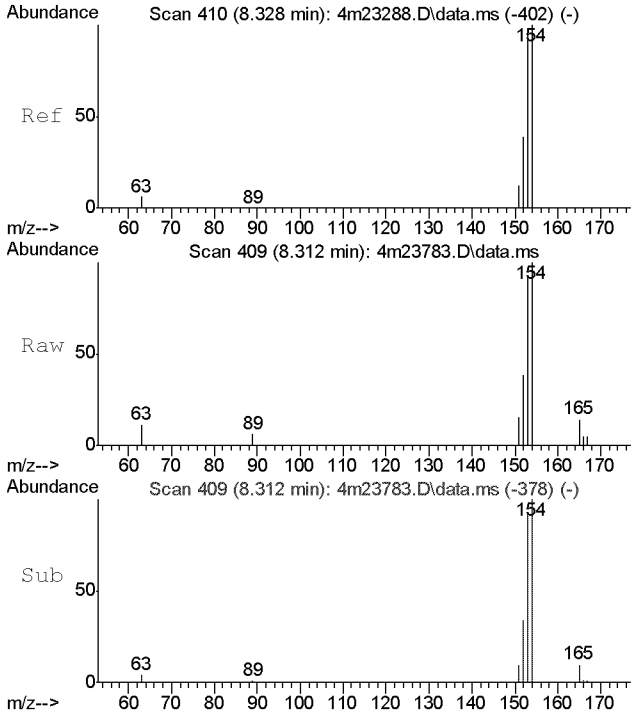
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23783.D
Acq On : 22 Feb 2011 12:04 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193a,e4m1040,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 25 14:24:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

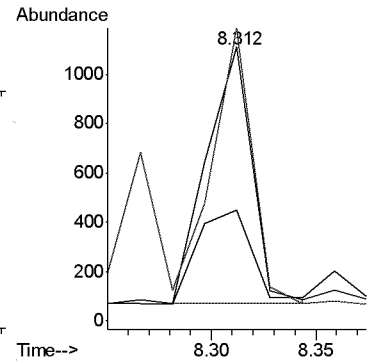




#14
Acenaphthene
Concen: 0.28 ppb
RT: 8.312 min Scan# 409
Delta R.T. -0.016 min
Lab File: 4m23783.D
Acq: 22 Feb 2011 12:04 pm

Tgt Ion:153 Resp: 1552

Ion	Ratio	Lower	Upper
153	100		
152	35.7	9.6	69.6
154	105.5	71.6	131.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23796.D
Acq On : 22 Feb 2011 5:18 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193a,e4m1040,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 10:25:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

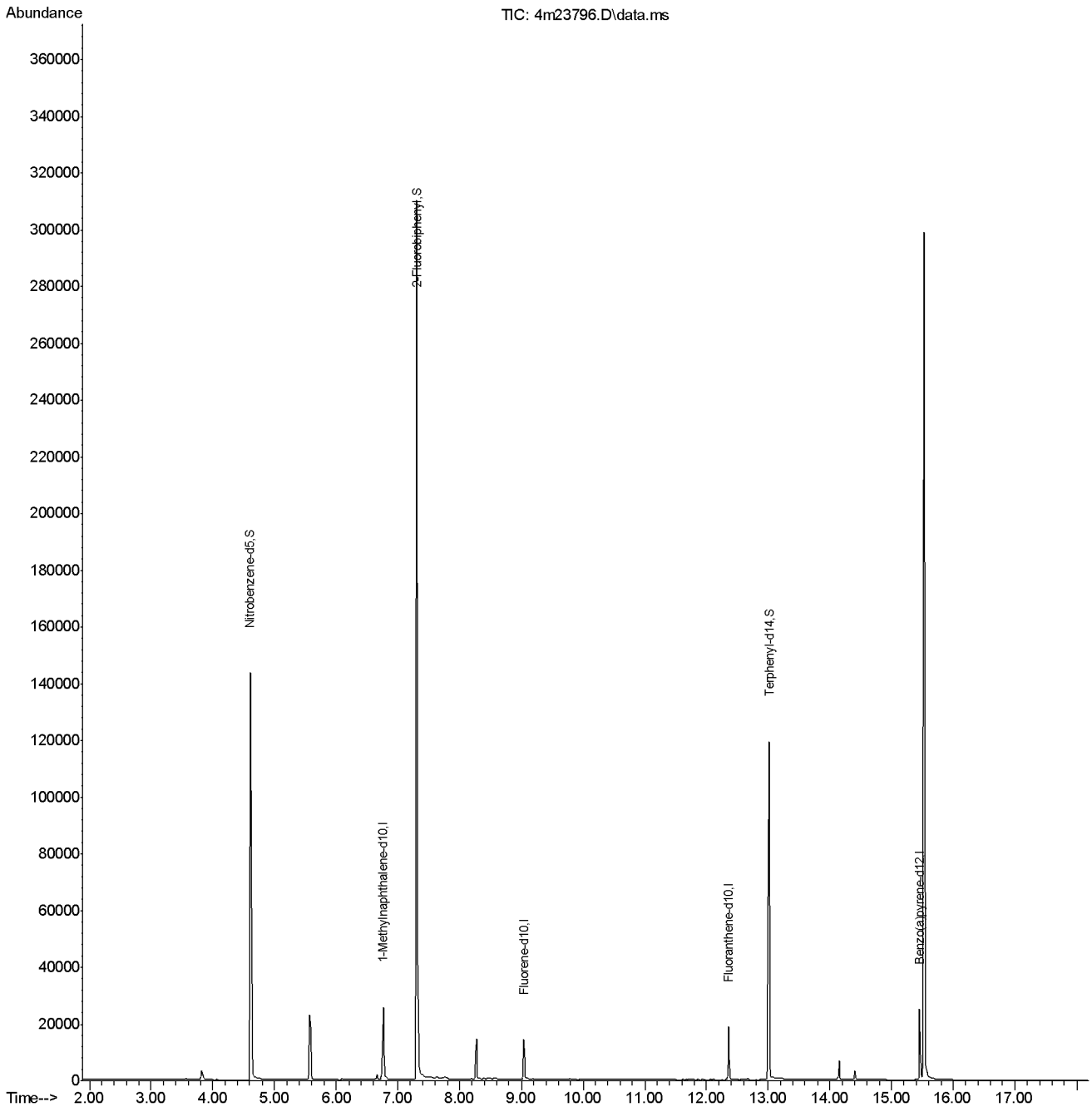
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	13339	4.00	ppb	-0.02
12) Fluorene-d10	9.039	174	10388	4.00	ppb	-0.03
23) Fluoranthene-d10	12.357	212	18708	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	22359	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	95357	48.71	ppb	-0.01
Spiked Amount 50.000			Recovery =	97.42%		
11) 2-Fluorobiphenyl	7.303	172	240215	53.55	ppb	-0.02
Spiked Amount 50.000			Recovery =	107.10%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	99033	49.15	ppb	-0.02
Spiked Amount 50.000			Recovery =	98.30%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23796.D
Acq On : 22 Feb 2011 5:18 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193a,e4m1040,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 10:25:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23785.D
Acq On : 22 Feb 2011 12:52 pm
Operator : ninap
Sample : ja68506-8
Misc : op48193a,e4m1040,1000
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:48:33 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

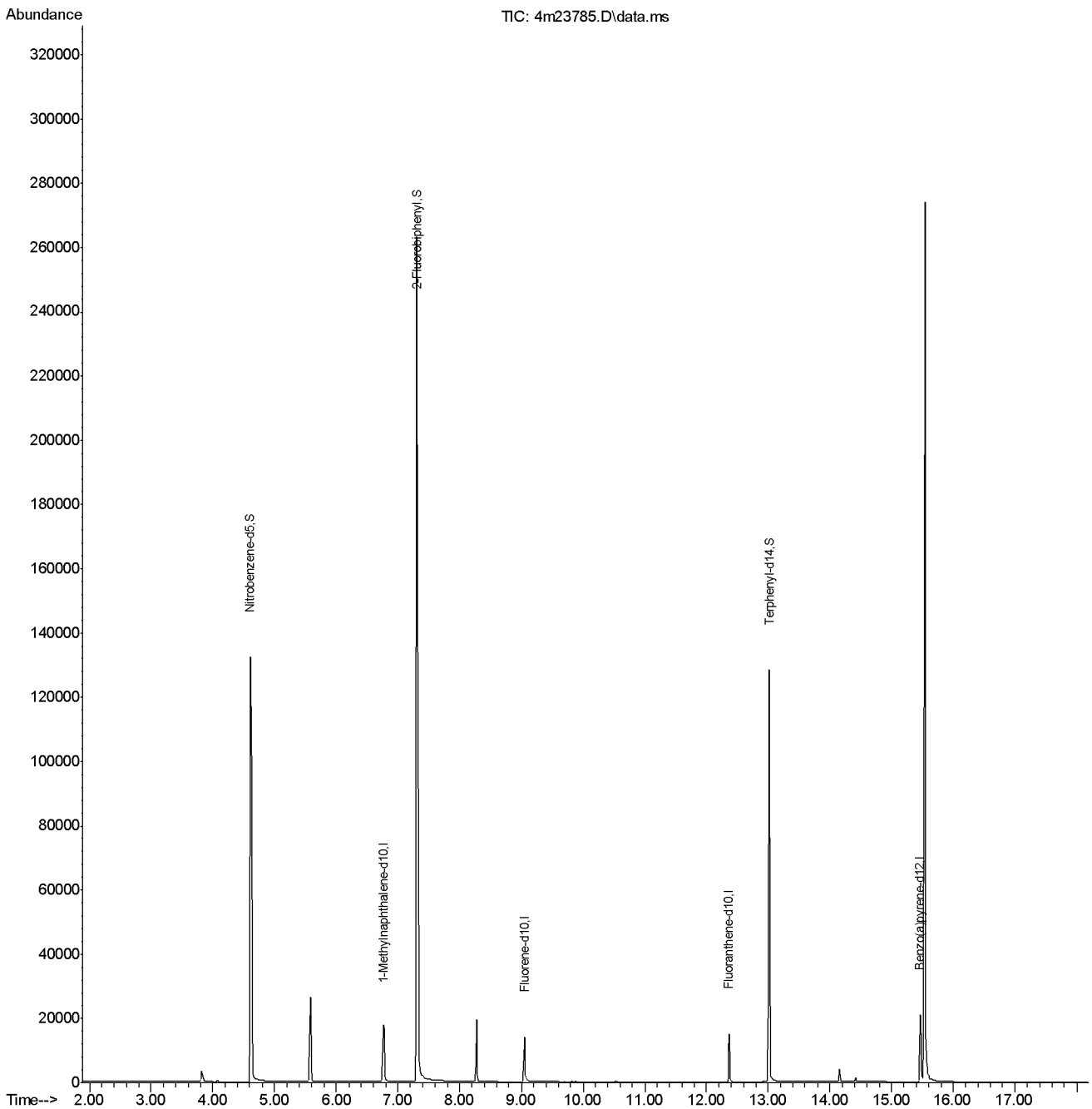
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	12931	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	9689	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	17530	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	19408	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	100605	53.02	ppb	-0.01
Spiked Amount 50.000			Recovery =	106.04%		
11) 2-Fluorobiphenyl	7.303	172	248779	57.20	ppb	-0.02
Spiked Amount 50.000			Recovery =	114.40%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	93507	49.53	ppb	-0.02
Spiked Amount 50.000			Recovery =	99.06%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23785.D
Acq On : 22 Feb 2011 12:52 pm
Operator : ninap
Sample : ja68506-8
Misc : op48193a,e4m1040,1000
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:48:33 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23774.D
Acq On : 22 Feb 2011 8:27 am
Operator : ninap
Sample : op48193a-mb1
Misc : op48193a,e4m1040,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 09:44:01 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

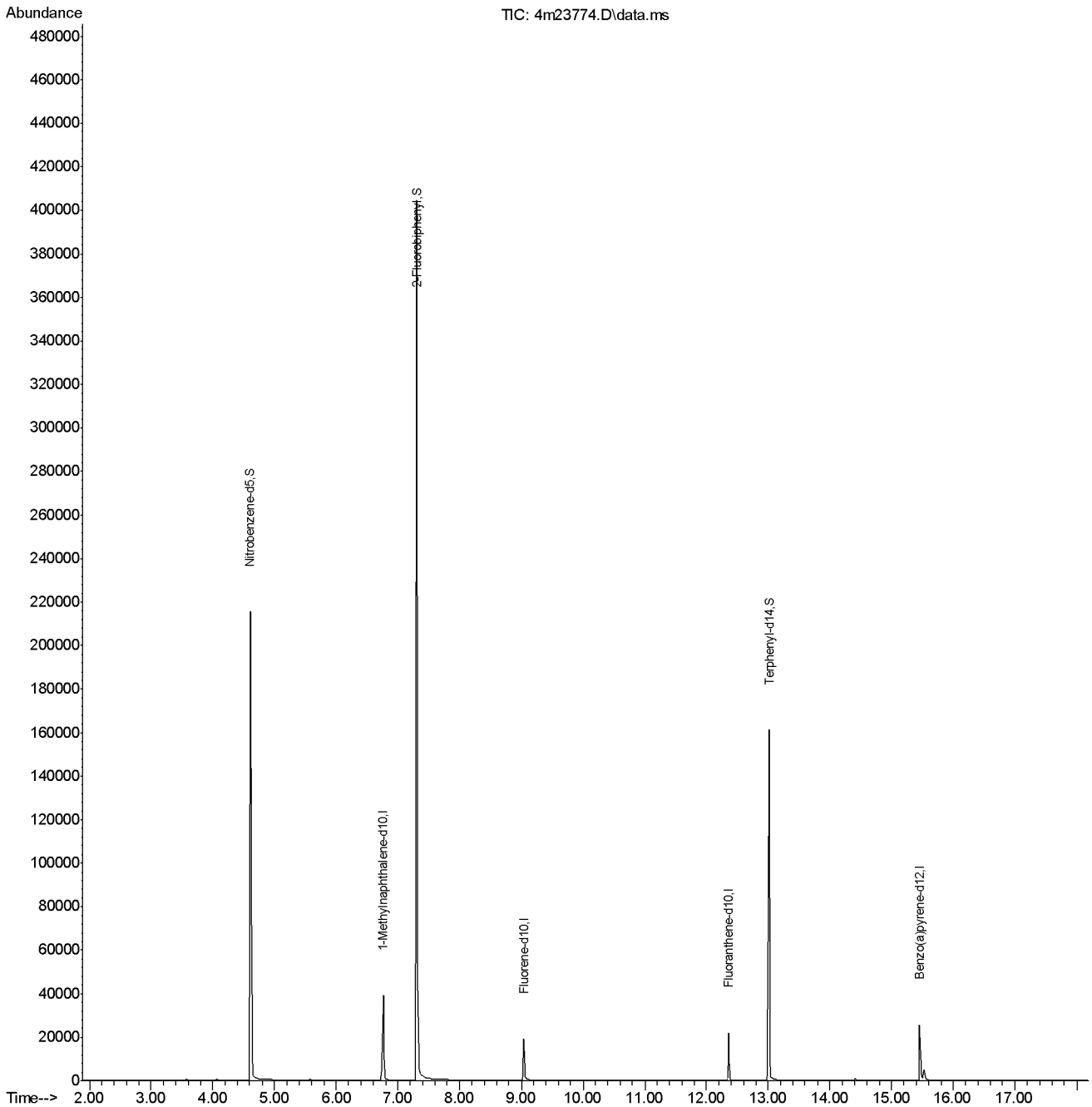
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	19201	4.00	ppb	-0.02
12) Fluorene-d10	9.040	174	12967	4.00	ppb	-0.03
23) Fluoranthene-d10	12.358	212	22653	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	23394	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	131105	46.53	ppb	-0.01
Spiked Amount 50.000			Recovery =	93.06%		
11) 2-Fluorobiphenyl	7.304	172	302519	46.85	ppb	-0.02
Spiked Amount 50.000			Recovery =	93.70%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	127724	52.35	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.70%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23774.D
Acq On : 22 Feb 2011 8:27 am
Operator : ninap
Sample : op48193a-mb1
Misc : op48193a,e4m1040,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 09:44:01 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 10:04:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	156843	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	544048	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	344454	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	607637	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	671707	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	561533	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	156843	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	607637	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	344454	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	671707	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	336734	49.13	ppb	-0.07
Spiked Amount 50.000			Recovery =	98.26%		
51) 2-Fluorobiphenyl	8.29	172	536493	45.36	ppb	-0.08
Spiked Amount 50.000			Recovery =	90.72%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	608732	38.35	ppb	-0.06
Spiked Amount 50.000			Recovery =	76.70%		

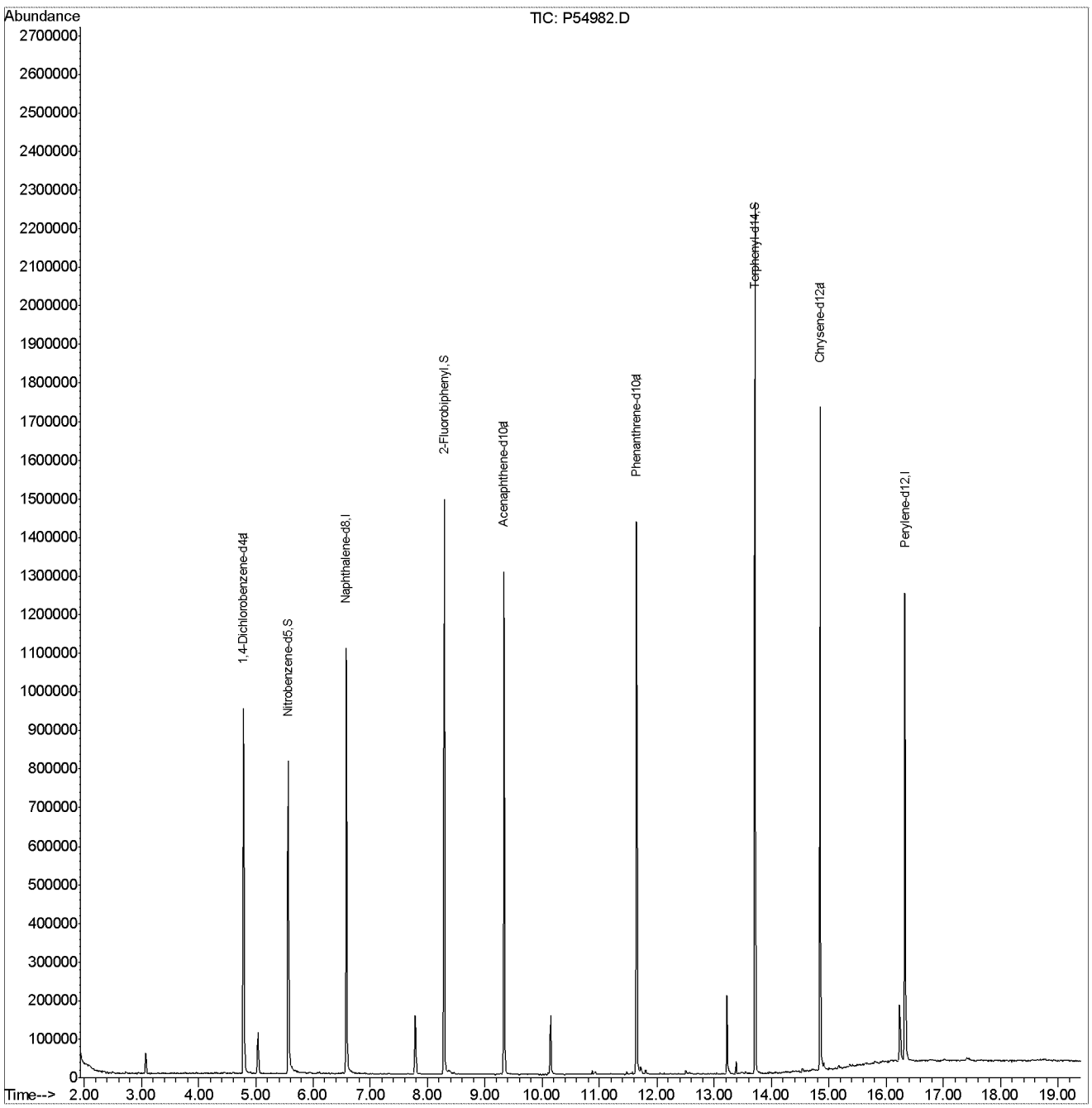
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 10:04:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.496	103	106	115	rVB9	4163	8053	0.37%	0.052%
2	2.725	143	149	154	rBV10	4249	7515	0.35%	0.048%
3	2.832	165	169	171	rBV5	3453	3738	0.17%	0.024%
4	2.891	177	180	185	rVB4	3932	4588	0.21%	0.029%
5	3.073	210	214	224	rBV	52168	69555	3.21%	0.445%
6	3.586	306	310	314	rVB7	2504	4432	0.20%	0.028%
7	3.837	355	357	364	rBV6	2723	4380	0.20%	0.028%
8	4.285	435	441	443	rBV7	3029	4698	0.22%	0.030%
9	4.595	495	499	504	rBV6	3583	6736	0.31%	0.043%
10	4.782	527	534	550	rBV	945457	1158558	53.50%	7.410%
11	4.905	555	557	562	rVB6	3512	3644	0.17%	0.023%
12	5.033	576	581	594	rVB	107451	140943	6.51%	0.901%
13	5.365	640	643	653	rVB	3296	6799	0.31%	0.043%
14	5.562	673	680	699	rBV	810422	1056986	48.81%	6.760%
15	6.112	779	783	787	rVB7	4761	6297	0.29%	0.040%
16	6.278	811	814	819	rVB6	3539	4563	0.21%	0.029%
17	6.492	850	854	859	rBV7	3081	6169	0.28%	0.039%
18	6.572	862	869	891	rBV	1102153	1371847	63.35%	8.774%
19	6.791	907	910	916	rBV8	2440	3527	0.16%	0.023%
20	6.898	927	930	935	rVB7	3792	5340	0.25%	0.034%
21	7.624	1062	1066	1070	rBV6	2172	3540	0.16%	0.023%
22	7.779	1084	1095	1104	rBV2	152883	218131	10.07%	1.395%
23	8.287	1181	1190	1201	rBV	1490810	1790755	82.70%	11.453%
24	8.362	1201	1204	1207	rVV4	4887	6375	0.29%	0.041%
25	8.549	1231	1239	1241	rBV9	2477	3984	0.18%	0.025%
26	9.328	1376	1385	1403	rBV	1303024	1591781	73.51%	10.180%
27	9.441	1404	1406	1411	rVV5	3845	4534	0.21%	0.029%
28	9.494	1411	1416	1421	rVB9	3147	4077	0.19%	0.026%
29	9.665	1444	1448	1458	rVB10	4198	7043	0.33%	0.045%
30	10.044	1515	1519	1524	rBV9	2466	4120	0.19%	0.026%
31	10.103	1524	1530	1532	rBV4	5786	7647	0.35%	0.049%
32	10.140	1532	1537	1554	rVB	152453	213297	9.85%	1.364%
33	10.408	1582	1587	1590	rBV7	2391	4288	0.20%	0.027%
34	10.488	1597	1602	1607	rVB6	3574	5289	0.24%	0.034%

MP2364.M Tue Feb 22 10:05:06 2011 MSP

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	10.595	1618	1622	1628	rVB8	3275	5963	0.28%	0.038%
36	10.867	1668	1673	1677	rVB4	9008	8858	0.41%	0.057%
37	10.910	1677	1681	1688	rVB5	8225	12323	0.57%	0.079%
38	11.193	1730	1734	1739	rBV8	2856	4266	0.20%	0.027%
39	11.332	1754	1760	1763	rBV7	2299	4073	0.19%	0.026%
40	11.369	1766	1767	1775	rVB8	2422	3763	0.17%	0.024%
41	11.471	1780	1786	1790	rBV2	8183	14780	0.68%	0.095%
42	11.567	1794	1804	1806	rBV7	6484	9236	0.43%	0.059%
43	11.642	1811	1818	1828	rBV2	1431138	1705146	78.75%	10.905%
44	11.722	1829	1833	1840	rVB6	15709	22927	1.06%	0.147%
45	11.802	1844	1848	1861	rVB6	10792	22552	1.04%	0.144%
46	12.053	1889	1895	1898	rBV7	3929	5618	0.26%	0.036%
47	12.502	1974	1979	1984	rBV7	8626	14532	0.67%	0.093%
48	13.127	2092	2096	2099	rBV6	2979	4396	0.20%	0.028%
49	13.223	2108	2114	2136	rVB	203239	254567	11.76%	1.628%
50	13.378	2136	2143	2148	rBV2	34178	41309	1.91%	0.264%
51	13.474	2154	2161	2171	rBV2	4860	16283	0.75%	0.104%
52	13.544	2171	2174	2179	rVB7	4028	4254	0.20%	0.027%
53	13.709	2198	2205	2217	rBV	2257409	2165395	100.00%	13.849%
54	14.238	2302	2304	2310	rBV7	2878	5002	0.23%	0.032%
55	14.366	2325	2328	2334	rBV8	3771	7049	0.33%	0.045%
56	14.537	2358	2360	2366	rBV7	7832	9868	0.46%	0.063%
57	14.708	2386	2392	2395	rBV7	4858	9461	0.44%	0.061%
58	14.847	2412	2418	2428	rBV	1717143	1765294	81.52%	11.290%
59	14.916	2428	2431	2443	rVB2	17580	25214	1.16%	0.161%
60	15.173	2474	2479	2485	rBV10	8499	14764	0.68%	0.094%
61	16.236	2673	2678	2688	rBV	145098	193251	8.92%	1.236%
62	16.327	2688	2695	2719	rVB	1213341	1542357	71.23%	9.864%

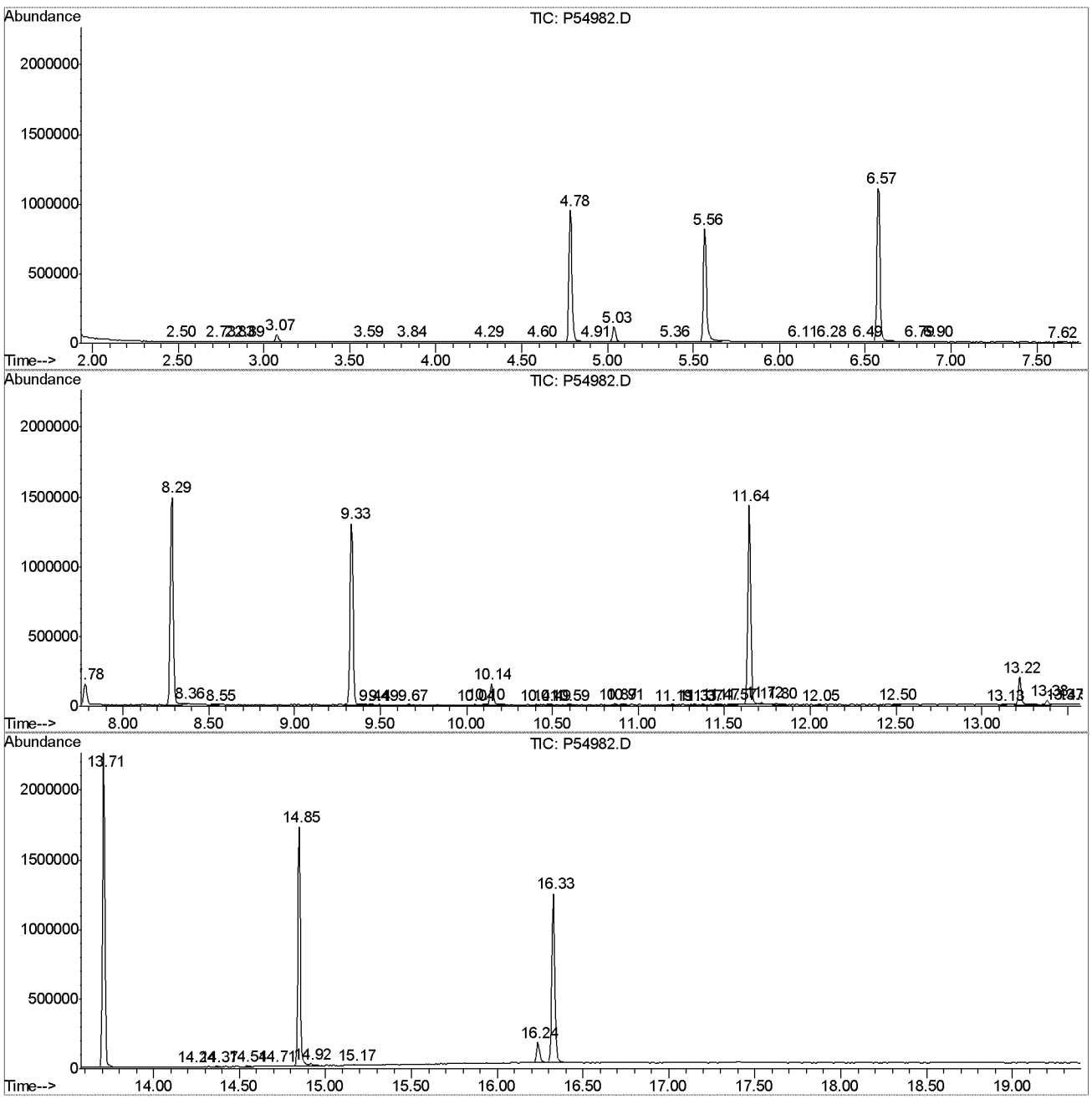
Sum of corrected areas: 15635730

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

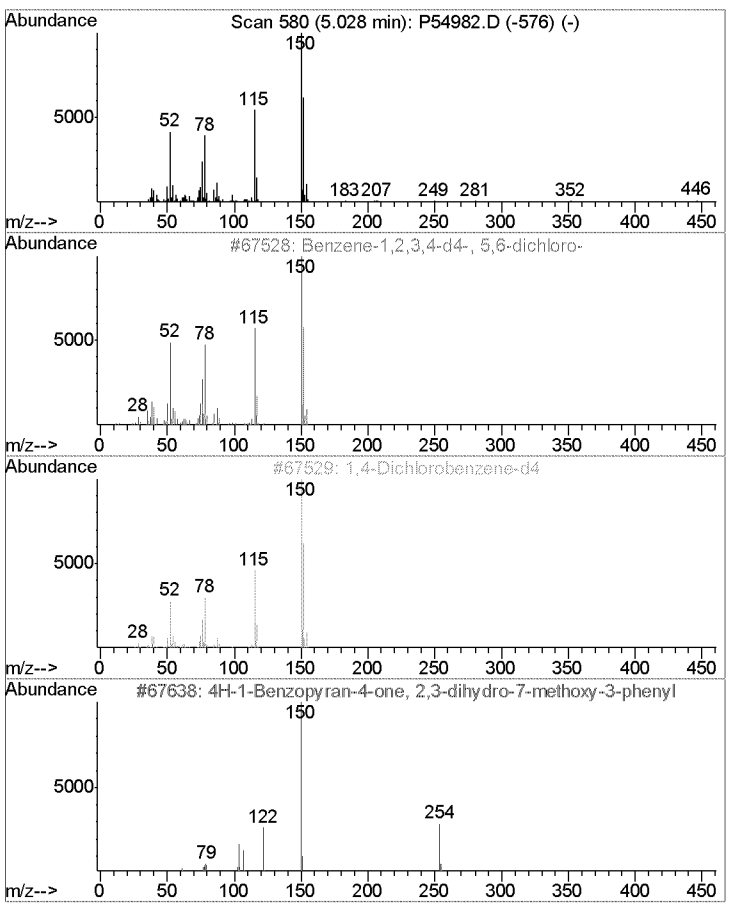
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

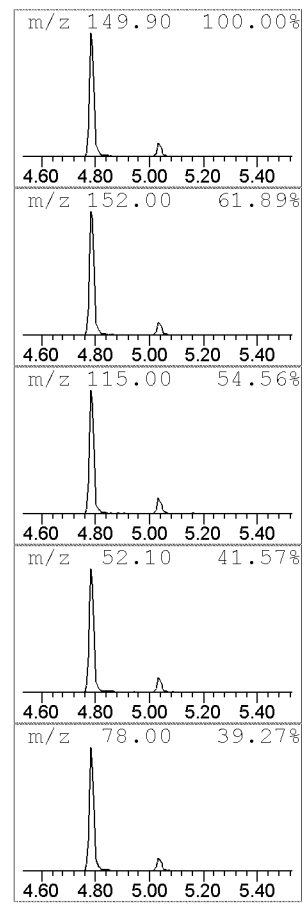
****

Peak Number 1 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.87 ppb	140943	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	95
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	4H-1-Benzopyran-4-one, 2,3-dihyd...	254	C16H14O3	005128-69-8	10
4	Ethanone, 1-(3-nitrophenyl)-	165	C8H7NO3	000121-89-1	10
5	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	9





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

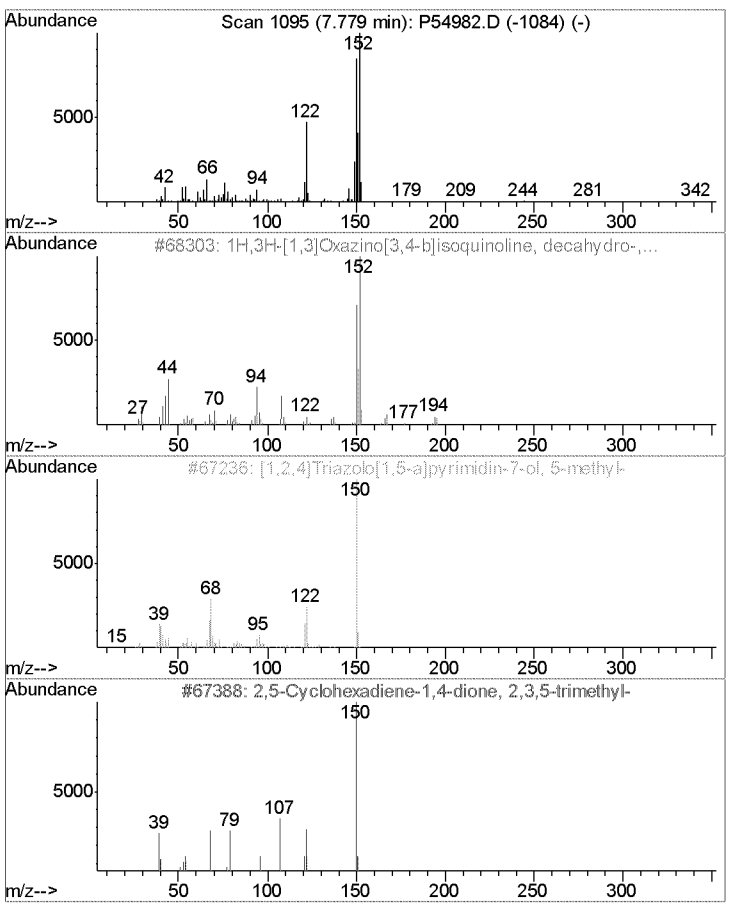
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

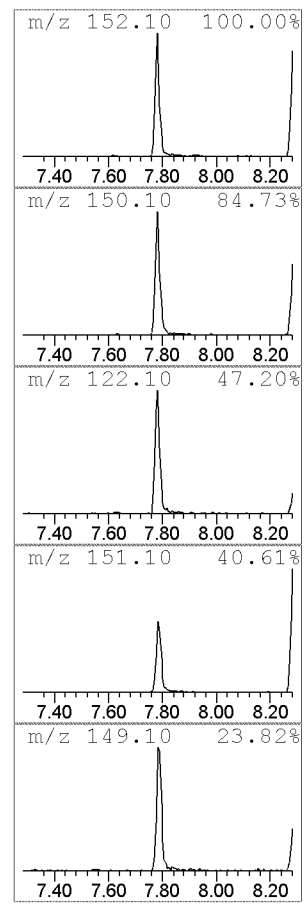
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.78	4.32 ppb	148162	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H,3H-[1,3]Oxazino[3,4-b]isoquin...	195	C12H21NO	076097-55-7	36
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	2,5-Cyclohexadiene-1,4-dione, 2,...	150	C9H10O2	000935-92-2	27
4	Acenaphthylene	152	C12H8	000208-96-8	25
5	Biphenylene	152	C12H8	000259-79-0	25





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

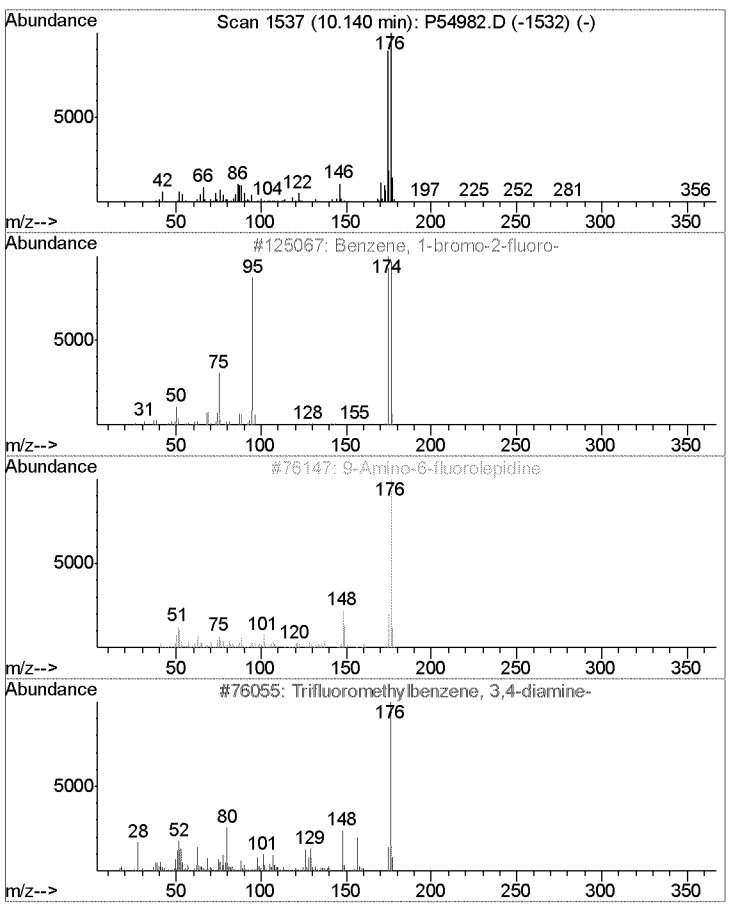
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

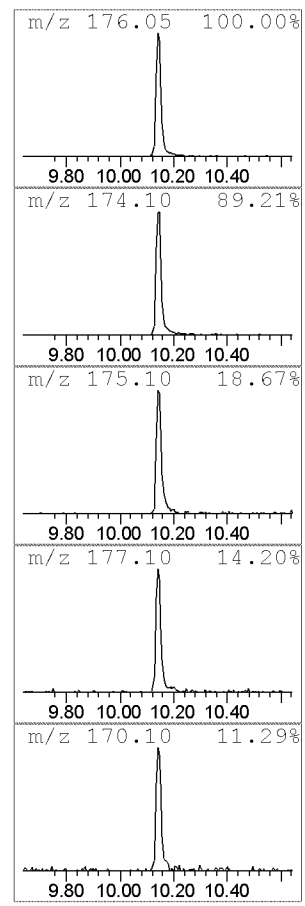
****

Peak Number 3 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.36 ppb	213297	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	64
2	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	30
3	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	25
4	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	25
5	Benzenemethanol, .alpha.-1-penty...	174	C12H14O	108946-34-5	22





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

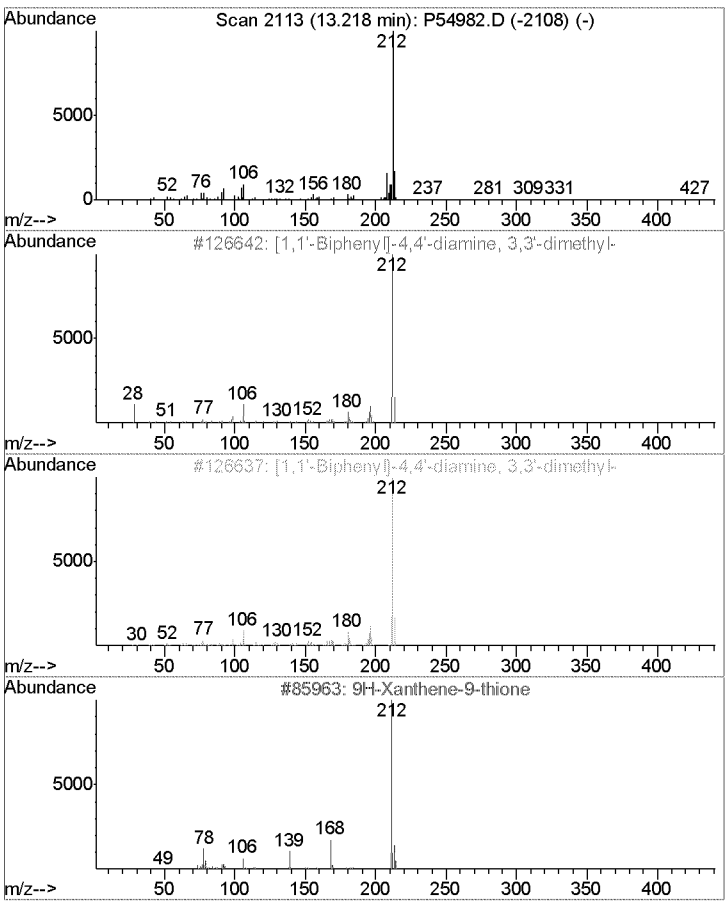
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

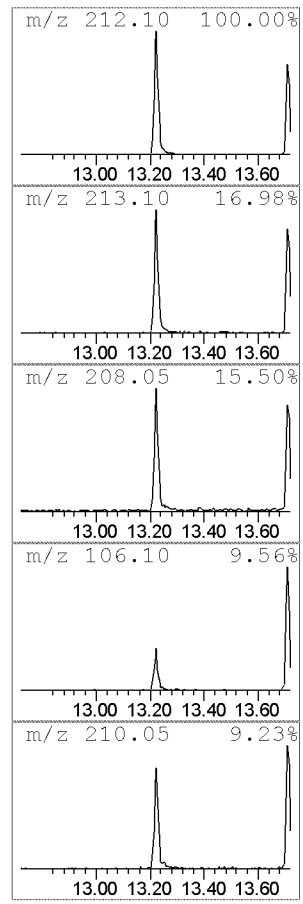
****

Peak Number 4 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.97 ppb	254567	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	53
5	2,8-Dimethyldibenzo(B,D)thiophene	212	C14H12S	001207-15-4	50





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

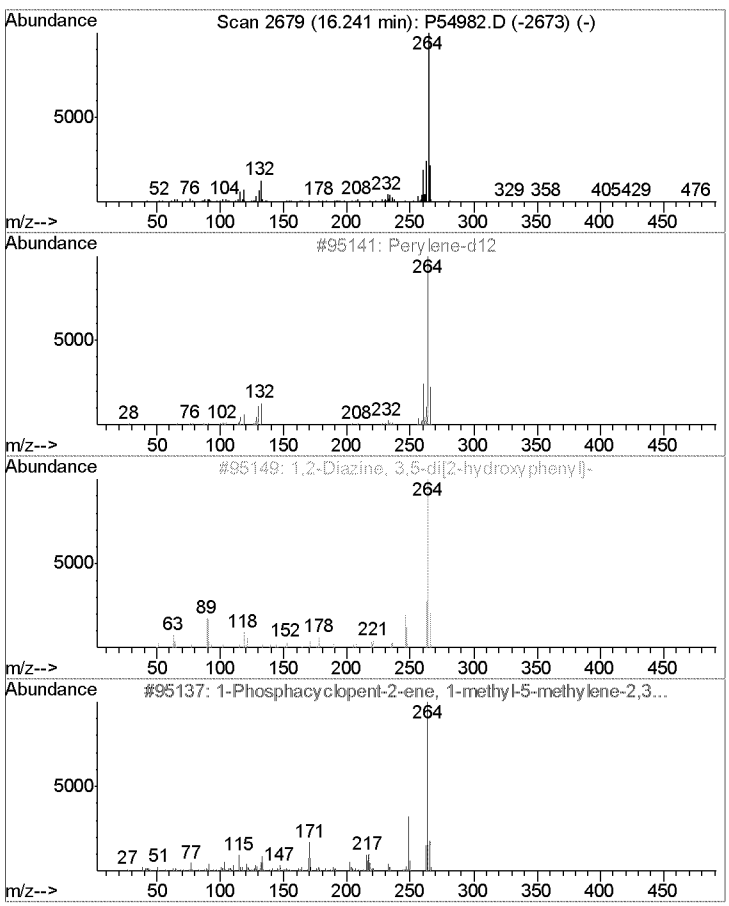
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

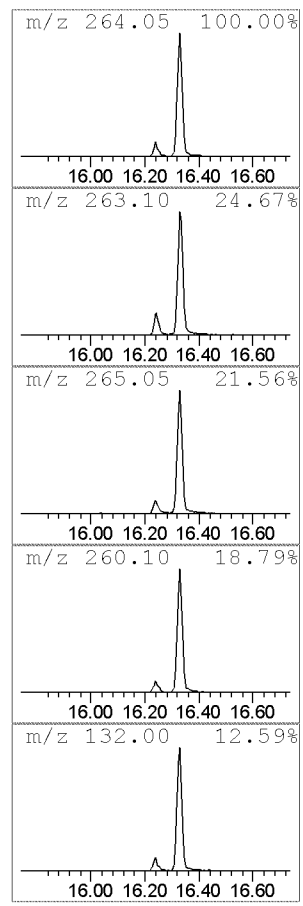
****

Peak Number 5 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	5.01 ppb	193251	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	95
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	72
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	64
4	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	49
5	2,4,6,8-Tetrathiatricyclo[3.3.1....	264	C10H16S4	007000-79-5	47





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	5.03	4.9	ppb	140943	2	4.78	1158560	40.0
Internal standard...	7.78	4.3	ppb	148162	3	6.57	1371850	40.0
Internal standard...	10.14	5.4	ppb	213297	5	9.33	1591780	40.0
Internal standard...	13.22	6.0	ppb	254567	7	11.64	1705150	40.0
Internal standard...	16.24	5.0	ppb	193251	10	16.33	1542360	40.0

SII-SSA-0014-005485

ARCADIS

Appendix C

Well Records and Form Bs

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County, New Jersey

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-CF

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.5" Latitude: North 39° 27' 47.6"

North 231,085 East 199,497

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.28 Pvc 98.80

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0 E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

12/27/10
DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County, New Jersey

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-CE

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.3" Latitude: North 39° 27' 48.2"

North 231,147 East 199,512

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.26 Pvc 98.84

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0 E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

12/27/10
DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County, New Jersey

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-CD

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 10.6" Latitude: North 39° 27' 47.7"

North 231,092 East 199,562

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.32 Pvc 98.94

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0 E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

12/27/10
DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County, New Jersey

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-CC

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 11.5" Latitude: North 39° 27' 47.9"

North 231,116 East 199,495

Elevation of Top of Inner Casing (Cap off) at Reference mark (to nearest 0.01' in relation to permanent on-site datum) Rim 99.37 Pvc 99.08

Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0 E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

SEAL

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

12/27/10
DATE

RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

ARCADIS

Appendix D

Well Construction and Soil Boring Logs

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well MW-CC Project/No. NP000603.0010 Page 1 of 1

Site Location PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey Drilling Started 11/4/2010 Drilling Completed 11/4/2010

Total Depth Drilled 9.55-feet Hole Diameter 8-inches Type of Sample/ Coring Device Air Knife

Length and Diameter of Coring Device NA Sampling Interval NA

Land-Surface Elev. -0.63 ft amsl [X] Surveyed [ ] Estimated Datum Site Datum

Drilling Method Air Knife/Vac Ex Bit Size NA

Drilling Contractor Uni-Tech Drilling Company, Inc. Driller Dan Evans

Geologist Robert Miller Hammer Weight NA Hammer Drop NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	10		0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to moist
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well: MW-CD | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 11/3/2010 | Drilling Completed: 11/3/2010

Total Depth Drilled: 8.33-feet | Hole Diameter: 8-inches | Type of Sample/Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: -0.68 ft amsl | [X] Surveyed [ ] Estimated | Datum: Site Datum

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Uni-Tech Drilling Company, Inc. | Driller: Dan Evans

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	10		0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to moist
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well MW-CE Project/No. NP000603.0010 Page 1 of 1

Site Location PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey Drilling Started 11/1/2010 Drilling Completed 11/1/2010

Total Depth Drilled 6.22-feet Hole Diameter 8-inches Type of Sample/ Coring Device Air Knife

Length and Diameter of Coring Device NA Sampling Interval NA

Land-Surface Elev. -0.74 ft amsl [X] Surveyed [ ] Estimated Datum Site Datum

Drilling Method Air Knife/Vac Ex Bit Size NA

Drilling Contractor Uni-Tech Drilling Company, Inc. Driller Dan Evans

Geologist Robert Miller Hammer Weight NA Hammer Drop NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	10		0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to moist
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well: MW-CF | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 11/2/2010 | Drilling Completed: 11/2/2010

Total Depth Drilled: 9.55-feet | Hole Diameter: 8-inches | Type of Sample/Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: -0.72 ft amsl | [X] Surveyed [ ] Estimated | Datum: Site Datum

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Uni-Tech Drilling Company, Inc. | Driller: Dan Evans

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	10		0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to moist
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well: OFT-E+5 Project/No.: NP000603.0010 Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey

Drilling Started: 11/11/2010 Drilling Completed: 11/11/2010

Total Depth Drilled: 2.0 Hole Diameter: 8-inches Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA Sampling Interval: NA

Land-Surface Elev.: ☐ Surveyed ☐ Estimated Datum:

Drilling Method: Air Knife/Vac Ex Bit Size: NA

Drilling Contractor: Underground Services Driller: NA

Geologist: Robert Miller Hammer Weight: NA Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	2	NA	0.0	Tan fine to coarse SAND and SILT, little fine to course subrounded to subangular gravel, medium firm, dry to moist
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well: OFT-NE | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 11/11/2010 | Drilling Completed: 11/11/2010

Total Depth Drilled: 2.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	2	NA	0.0	Tan fine to coarse SAND and SILT, little fine to course subrounded to subangular gravel, medium firm, dry to moist
Notes:				NA-Not applicable.

ARCADIS

SOIL DESCRIPTION LOG

Boring/Well: FHD | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey

Drilling Started: 5/27/2010 | Drilling Completed: 5/27/2010

Total Depth Drilled: 4.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	4	NA	0.0	Tan fine to coarse SAND and SILT, little fine to course subrounded to subangular gravel, medium firm, dry to wet at 4.0' bgs
Notes:				NA-Not applicable.

ARCADIS

SOIL DESCRIPTION LOG

Boring/Well: OFT-E | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 5/4/2010 | Drilling Completed: 5/4/2010

Total Depth Drilled: 4.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	4	NA	0.0	Tan fine to coarse SAND and SILT, little fine to course subrounded to subangular gravel, medium firm, dry to wet at 4.0' bgs
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well: OFT-N | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 5/4/2010 | Drilling Completed: 5/4/2010

Total Depth Drilled: 4.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	4	NA	0.0	Tan fine to coarse SAND and SILT, little fine to course subrounded to subangular gravel, medium firm, dry to wet at 4.0' bgs
Notes:				NA-Not applicable.

ARCADIS

SOIL DESCRIPTION LOG

Boring/Well: OFT-W | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 5/4/2010 | Drilling Completed: 5/4/2010

Total Depth Drilled: 4.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	4	NA	0.0	Tan fine to coarse SAND and SILT, little fine to course subrounded to subangular gravel, medium firm, dry to wet at 4.0' bgs
Notes:				NA-Not applicable.

ARCADIS

SOIL DESCRIPTION LOG

Boring/Well: EFV-N | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 5/4/2010 | Drilling Completed: 5/4/2010

Total Depth Drilled: 4.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	4	NA	0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to wet at 4.0' bgs
Notes:				NA-Not applicable.

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well: EFV-W | Project/No.: NP000603.0010 | Page: 1 of 1

Site Location: PSE&G Salem Diesel Unit 2 - Hancock's Bridge, New Jersey | Drilling Started: 5/4/2010 | Drilling Completed: 5/4/2010

Total Depth Drilled: 4.0 | Hole Diameter: 8-inches | Type of Sample/ Coring Device: Air Knife

Length and Diameter of Coring Device: NA | Sampling Interval: NA

Land-Surface Elev.: | ☐ Surveyed ☐ Estimated | Datum:

Drilling Method: Air Knife/Vac Ex | Bit Size: NA

Drilling Contractor: Underground Services | Driller: NA

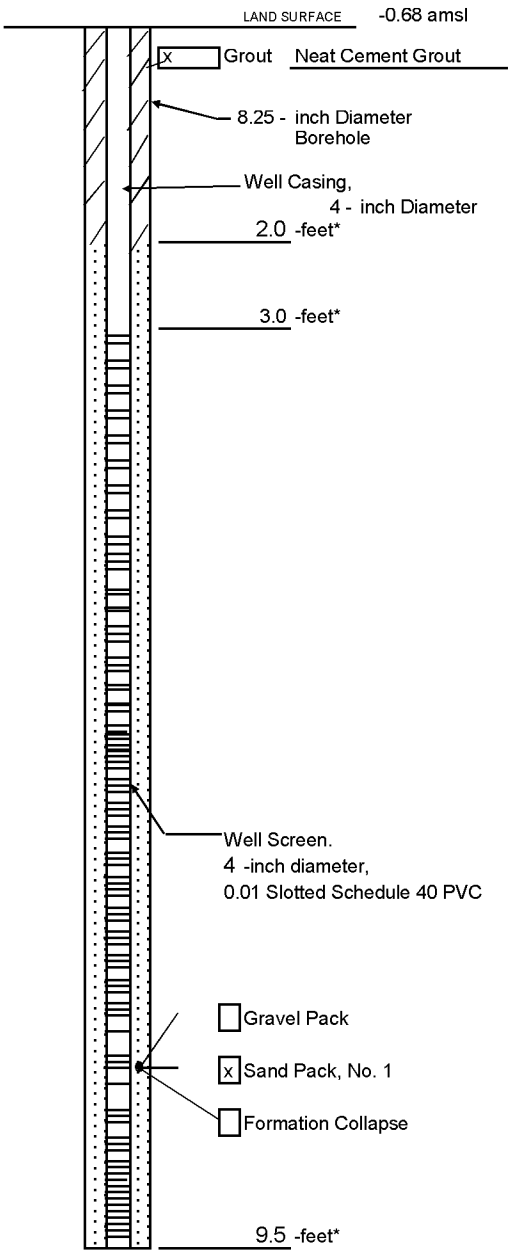
Geologist: Robert Miller | Hammer Weight: NA | Hammer Drop: NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	4	NA	0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to wet at 4.0' bgs
Notes:				NA-Not applicable.

ARCADIS US

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project NP000603.0010 Well MW-CD

Town/City Hancock's Bridge

County Salem State NJ

Permit No. E201006623

Land-Surface Elevation and Datum:

-1.06 amsl (site datum) [X] Surveyed [ ] Estimated

Installation Date(s) 11/3/2010

Drilling Method Air Knife/Vac Ex

Drilling Contractor Uni-Tech Drilling Company, Inc.

Drilling Fluid NA

Development Technique(s) and Date(s)

Pump and Surge development techniques

Water Removed During Development NA -gallons

Static Depth to Water 4.0 - feet below M.P.

Well Purpose Diesel Monitoring Program

Remarks

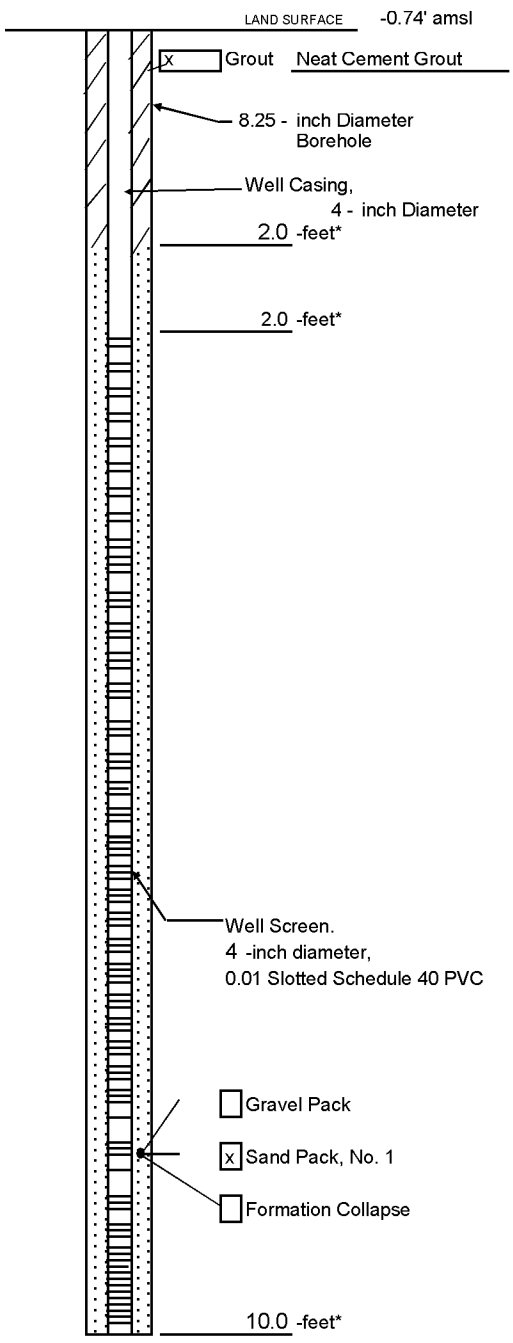
Reference elevations for ground surface and top of PVC are relative to the Plant Datum

Geologist Robert Miller

ARCADIS US

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project NP000603.0010 Well MW-CE

Town/City Hancock's Bridge

County Salem State NJ

Permit No. E201006622

Land-Surface Elevation and Datum:

-1.20' amsl (site datum)

[X] Surveyed

[ ] Estimated

Installation Date(s) 11/1/2010

Drilling Method Air Knife/Vac Ex

Drilling Contractor Uni-Tech Drilling Company, Inc.

Drilling Fluid NA

Development Technique(s) and Date(s)

Pump and Surge development techniques

Water Removed During Development NA -gallons

Static Depth to Water 5.0 - feet below M.P.

Well Purpose Diesel Monitoring Program

Remarks

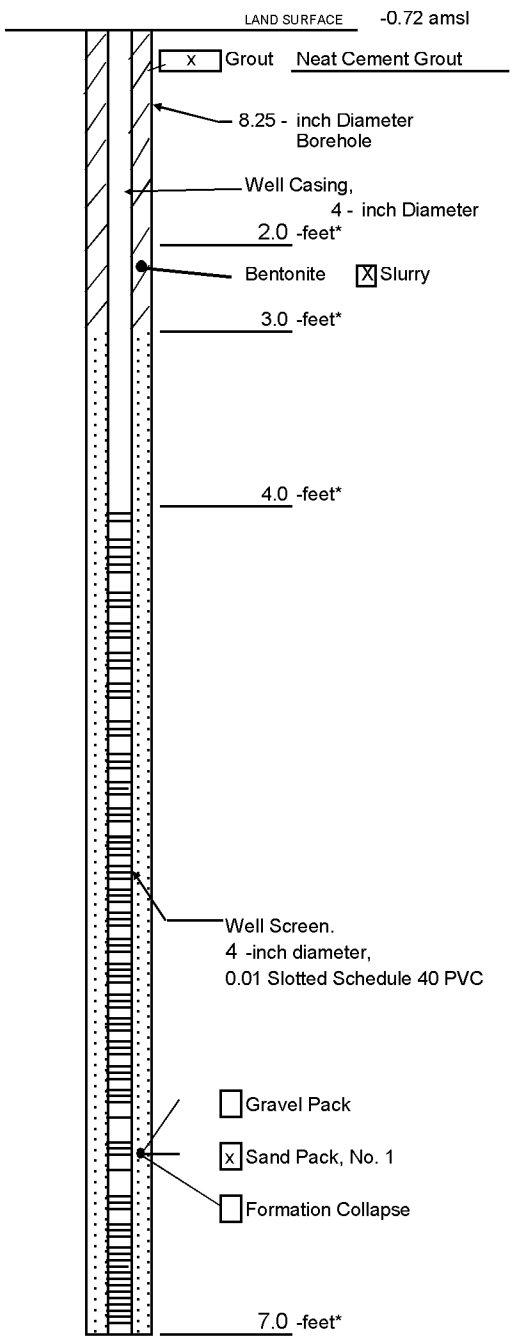
Reference elevations for ground surface and top of PVC are relative to the Plant Datum

Geologist Robert Miller

ARCADIS US

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project NP000603.0010 Well MW-CF

Town/City Hancock's Bridge

County Salem State NJ

Permit No. E201006620

Land-Surface Elevation and Datum:

-1.16 amsl (site datum) [X] Surveyed [ ] Estimated

Installation Date(s) 11/1/2010

Drilling Method Mud Rotary

Drilling Contractor Uni-Tech Drilling Company, Inc.

Drilling Fluid NA

Development Technique(s) and Date(s)

Pump and Surge development techniques

Water Removed During Development NA -gallons

Static Depth to Water 4.6 - feet below M.P.

Well Purpose Diesel Monitoring Program

Remarks

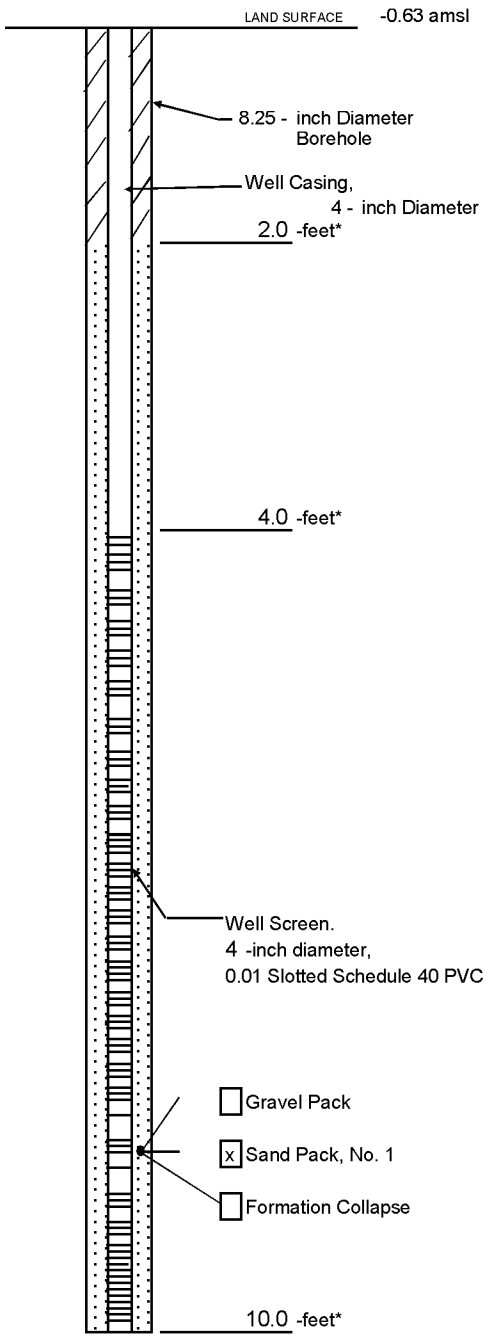
Reference elevations for ground surface and top of PVC are relative to the Plant Datum

Geologist Robert Miller

ARCADIS US

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project	NP000603.0010	Well	MW-CC
Town/City	Hancock's Bridge		
County	Salem	State	NJ
Permit No.	E201006621		

Land-Surface Elevation and Datum:

-0.092 amsl (site datum) [X] Surveyed [ ] Estimated

Installation Date(s): 11/4/2010

Drilling Method: Mud Rotary

Drilling Contractor: Uni-Tech Drilling Company, Inc.

Drilling Fluid: NA

Development Technique(s) and Date(s)

Pump and Surge development techniques

Water Removed During Development: NA

Static Depth to Water: 4.25 - feet below M.P.

Well Purpose: Diesel Monitoring Program

Remarks

Reference elevations for ground surface and top of PVC are relative to the Plant Datum

Geologist: Robert Miller

ARCADIS

Appendix E

Groundwater Sampling Logs

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID CC Date 2/18/2011

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Overcast, 50°F

Measuring Pt. Description TOC | Screen Setting (ft-bmp) | Casing Diameter (4 | Well Material X PVC / SS

Static Water Level (ft-bmp) 4.15 | Total Depth (ft-bmp) 10.05 | Water Column/ Gallons in 5.9 3.835

MP Elevation | Pump Intake (ft-bmp) 8.00 | Purge Method: Centrifugal / Submersi X / Other | Sample Method Bladder Pump

Pump On/Off 1000/1050 | Volumes Purged

Sample Time: Label ST-1040, Start 1040, End 1050 | Replicate/ Code No.

Sampled by F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		
1005	5	200	4.25		11.18	0.679	3.3	8.03	10.12	-16.5	none	none
1010	10	200	4.27		11.39	0.695	2.1	6.01	9.81	-22.5	none	none
1015	15	200	4.30		11.46	0.696	1.7	5.30	9.56	-29.2	none	none
1020	20	200	4.31		11.51	0.697	1.3	4.75	9.45	-34.1	none	none
1025	25	200	4.31		11.51	0.686	1.2	4.66	9.39	-36.0	none	none
1030	30	200	4.31		11.54	0.687	1.2	4.61	9.34	-36.1	none	none
1035	35	200	4.32		11.54	0.687	1.1	4.63	9.30	-38.8	none	none

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location: | Well Locked at Arrival: Yes / No

Condition of Well: | Well Locked at Departure: Yes / No

Well Completion: Flush Mount / Stick Up | Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID MW-CC Date 1/20/2011

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Sunny, 30°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (i 4
Well Material X PVC / SS

Static Water Level (ft-bm 4.51
Total Depth (ft-bmp) 10.08
Water Column/ Gallons in 5.57 3.6205

MP Elevation
Pump Intake (ft-bmp 7.5
Purge Method: Centrifugal / Submersib X / Other
Sample Method Bladder Pump

Pump On/C 1455
Volumes Purged

Sample Tir Label 1540
Start
End
Replicate/ Code No.

Sampled by R. Miller

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		
1500	5	300	4.69		11.48	0.543	54	10.18	9.40	-72.2	none	none
1505	10	300	4.85		11.57	0.517	50.2	7.34	9.51	-63.4	none	none
1510	15	300	4.74		11.61	0.510	40.7	6.93	9.14	-61.0	none	none
1515	20	300	4.66		11.62	0.495	36.9	5.72	8.77	-56.7	none	none
1520	25	300	4.66		11.57	0.476	36.3	4.76	8.68	-52.5	none	none
1525	30	300	4.66		11.56	0.470	35.9	4.67	8.66	-51.0	none	none
1530	35	300	4.66		11.54	0.466	34	4.47	8.70	-50.2	none	none
1535	40	300	4.66		11.53	0.463	34	4.36	8.67	-49.7	none	none

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.5" = 0.09 2.5" = 0.26 3.5" = 0.50 6" = 1.47
1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID MW-CD Date 1/20/2011

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Sunny, 30°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (in) 4
Well Material X PVC ___ SS

Static Water Level (ft-bmp) 3.86
Total Depth (ft-bmp) 8.9
Water Column/ Gallons in Well 5.04 3.276

MP Elevation
Pump Intake (ft-bmp) 6.5
Purge Method: Centrifugal ___ Submersible X Other ___
Sample Method Bladder Pump

Pump On/Off 1345
Volumes Purged

Sample Tir Label 1430
Start ___
End ___
Replicate/ Code No. ___

Sampled by R. Miller

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		
1350	5	300	3.95		7.09	9.192	20.3	1.29	5.98	-20.9	clear	none
1355	10	300	4.00		7.01	8.961	21.3	0.50	6.04	-26.9	clear	none
1400	15	300	4.01		6.94	8.442	22	0.45	6.03	-25.5	clear	none
1405	20	300	4.06		6.89	8.143	20	0.47	6.08	32.5	clear	none
1410	25	300	4.12		6.84	7.890	11.2	0.39	6.13	34.4	clear	none
1415	30	300	4.16		6.83	7.696	6.45	0.32	6.18	36.2	clear	none
1420	35	300	4.19		6.83	7.625	5.79	0.29	6.19	38.6	clear	none
1425	40	300	4.22		6.82	7.575	5.58	0.27	6.21	39.4	clear	none

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location: ___
Condition of Well: ___
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID CD Date 2/17/2011

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Sunny, 55°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (in) 4
Well Material X PVC / SS

Static Water Level (ft-bmp) 3.65
Total Depth (ft-bmp) 8.81
Water Column/ Gallons in Well 5.16 3.354

MP Elevation
Pump Intake (ft-bmp) 8.00
Purge Method: Centrifugal / Submersible X / Other
Sample Method Bladder Pump

Pump On/Off 1305/1402
Volumes Purged

Sample Tir Label ST-1345
Start 1341
End 1400
Replicate/ Code No. CD-DUP (1350)

Sampled by F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		
1310	5	210	3.70		6.3	3.334	36	3.05	8.71	-39.3	none	none
1315	10	210	3.71		6.33	3.376	19	2.08	8.27	-46.9	none	none
1320	15	210	3.71		6.34	3.359	18	1.82	8.06	-48.8	none	none
1325	20	210	3.72		6.36	3.337	16	1.55	7.91	-50.8	none	none
1330	25	210	3.72		6.38	3.314	15	1.34	7.82	-51.8	none	none
1335	30	210	3.74		6.39	3.312	15	1.32	7.82	-52.9	none	none
1340	35	210	3.75		6.39	3.308	14	1.30	7.86	-54.2	none	none

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	6	HCL
SVOC	1 L Amber Glass	4	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location:
Condition of Well:
Well Completion: Flush Mount / Stick Up
Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID CE Date 12/16/2010

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Snowy, 28°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (in) 4
Well Material X PVC ___ SS

Static Water Level (ft-bmp) 4.15
Total Depth (ft-bmp) 9.9
Water Column/ Gallons in Well 5.75 3.7375

MP Elevation
Pump Intake (ft-bmp) 8.5
Purge Method: Centrifugal ___ Submersible X Other ___
Sample Method Bladder Pump

Pump On/Off 1315/1400
Volumes Purged

Sample Tir Label ST-1355
Start 1300
End 1400
Replicate/ Code No.

Sampled by F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		
1320	5	200	4.50		11.89	0.720	14	3.98	18.15	-25.8	none	none
1325	10	200	4.60		11.89	0.720	12	3.98	18.76	-25.8	none	none
1330	15	200	4.75		11.36	0.553	13	1.62	19.05	-25.2	none	none
1335	20	200	4.86		11.36	0.552	10	1.37	19.03	-26.8	none	none
1340	25	200	4.90		11.36	0.553	10	1.36	19.12	-27.2	none	none
1345	30	200	4.94		11.37	0.553	9	1.39	19.14	-28.9	none	none
1350	35	200	4.93		11.36	0.553	8.8	1.38	19.09	-28.7	none	none

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location:
Condition of Well:
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID CE Date 2/17/2011

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Sunny, 55°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (in) 4
Well Material X PVC ___ SS

Static Water Level (ft-bmp) 4.12
Total Depth (ft-bmp) 9.9
Water Column/ Gallons in Well 5.78 3.757

MP Elevation
Pump Intake (ft-bmp) 8.00
Purge Method: Centrifugal ___ Submersible X Other ___
Sample Method Bladder Pump

Pump On/Off 1420/1506
Volumes Purged

Sample Tir Label ST-1455
Start 1456
End 1505
Replicate/ Code No.

Sampled by F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		
1425	5	220	4.45		11.26	0.636	18	3.03	17.57	-212.6	none	none
1430	10	220	4.40		11.51	0.616	17	2.51	17.94	-160.5	none	none
1435	15	220	4.41		11.51	0.616	15	2.36	17.65	-147.9	none	none
1440	20	220	4.41		11.50	0.617	15	2.32	17.68	-140.7	none	none
1445	25	220	4.41		11.50	0.618	16	2.33	17.70	-146.3	none	none
1450	30	220	4.41		11.51	0.618	15	2.31	17.73	-142.1	none	none

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location:
Condition of Well:
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID CF Date 12/17/2010

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Partly Sunny, 23°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (in) 4
Well Material X PVC ___ SS

Static Water Level (ft-bmp) 4.6
Total Depth (ft-bmp) 6.7
Water Column/ Gallons in Well 2.1 1.365

MP Elevation
Pump Intake (ft-bmp)
Purge Meth None / Centrifugal / Submersible / Other
Sample Method Bailer

Pump On/Off
Volumes Purged

Sample Tir Label ST-1000
Start
End
Replicate/ Code No.

Sampled by F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location:
Condition of Well:
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00001 Well ID CF Date 2/18/2011

Project Name/Location PSEG/Hancock's Bridge, NJ Weather Overcast, 50°F

Measuring Pt. Description TOC
Screen Setting (ft-bmp)
Casing Diameter (i 4
Well Material X PVC / SS

Static Water Level (ft-bm 4.37
Total Depth (ft-bmp) 6.7
Water Column/ Gallons in \ 2.33 1.5145

MP Elevation
Pump Intake (ft-bmp)
Purge Meth None / Centrifugal / Submersible / Other
Sample Method Bailer

Pump On/Off
Volumes Purged

Sample Tir Label ST-1130
Start
End
Replicate/ Code No.

Sampled by F. Straker

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
		200ml/min +	-0.3		+/- 0.1 unit	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10mV		

Constituents Sampled	Container	Number	Preservative
VOC	40 ml VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.5" = 0.09 2.5" = 0.26 3.5" = 0.50 6" = 1.47
1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No
Well Locked at Departure: Yes / No
Key Number To Well:

ARCADIS
Infrastructure, environment, buildings

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Ms. Linda S. Range
New Jersey Dept. of Environmental Protection
Site Remediation Program
401 East State Street
Trenton, NJ 08625

Environment

Subject:
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey, Incident No. 10-0416-164911, Remedial Action Work Plan, PSEG Correspondence # LR-E11-0126

Date:
September 9, 2011

Contact:
Brad Pierce

Phone:
484-688-0397

Email:
Bradley.Pierce@arcadis-us.com

Our ref:
NP000603.0009

ARCADIS U.S., Inc. (ARCADIS), on behalf of PSEG Nuclear, LLC (PSEG), has prepared this Remedial Action Work Plan (RAWP) to present details regarding proposed remedial actions to address soil contamination resulting from a diesel-fuel discharge from the Salem Generating Station Unit 2 diesel fuel system. The Station is located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. **Figure 1** depicts the Station location and **Figure 2** provides the Station Layout and the location of the Unit 2 Diesel Fuel Oil system components. As presented in more detail below, a suspected diesel fuel release was identified in April 2010 during the completion of subsurface investigations associated with a separate and independent investigation. Following the observation, PSEG notified the New Jersey Department of Environmental Protection (NJDEP) through its spill hotline, and the spill was assigned the incident No. 10-0416-164911.

Details regarding the diesel release and the results of investigation activities to evaluate groundwater quality and delineate the extent of the soil contamination were presented in the Remedial Investigation Report (RIR) submitted to the New Jersey Department of Environmental Protection (NJDEP) on May 17, 2011. Remedial investigation activities identified soil containing total petroleum hydrocarbons (TPHC) above applicable New Jersey Soil Remediation Standards as promulgated under N.J.A.C. 7.26E-4.1(a). This RAWP provides relevant background information, a summary of the investigation activities completed to date, and proposed remedial actions. Further details regarding the project background and the details and results of investigation activities completed to date are presented in the May 2011 RIR. This report has been prepared in accordance with Chapter 26E - Technical Requirements for Site Remediation (Technical Requirements).

Project Background and Previous Investigation

On April 16, 2010, while completing groundwater investigation activities associated with a separate and independent investigation, PSEG personnel observed suspected diesel-related odors and staining in soil and groundwater during the opening of a temporary utility clearance, identified as TW-2 on **Figure 2**. At this time, PSEG notified the NJDEP through its spill hotline (incident No. 10-0416-164911).

The temporary utility clearance consisted of a Schedule 40 polyvinyl chloride (PVC) sleeve installed to an approximate depth of 10-feet below ground surface (bgs) using vacuum excavation equipment. The utility clearance was installed to allow the safe advancement of direct-push borings for the collection of groundwater samples. During the advancement of the vacuum excavation, diesel fuel odors were noted and a suspected petroleum hydrocarbon sheen was observed on the water once the water table was encountered. To facilitate the collection of a groundwater sample and to evaluate for the presence of separate-phase hydrocarbon (SPH) at the location of TW-2, and subsequently at the locations of TW-37 and TW-50 (see **Figure 2**), PVC well screen was installed in lieu of the solid PVC sleeve. The three locations were then identified as temporary observation point TW-2, TW-37 and TW-50. Over the next several days, the temporary observation points were evaluated for the presence of SPH and groundwater samples were collected for laboratory analysis. Results for these samples are shown on **Figure 3**.

Investigations into the source of the suspected diesel fuel revealed the presence of the following components of the Salem Unit 2 Diesel Fuel Oil System within the vicinity of TW-2:

1. Diesel fuel above ground storage tanks (AST);
2. Diesel fuel underground piping;
3. An emergency fill valve; and;
4. An overflow tank.

The location of these system components are identified on **Figure 2**. PSEG performed both a pressure test and a guided wave test on the underground piping and the results of the tests did not identify any integrity issues associated with the piping. Initial soil and groundwater investigation activities were completed in association with the emergency fill valve and the overflow tank, at the three

temporary observation points (TW-2, TW-37, and TW-50), and in an area that was excavated to expose the underground piping during the guided wave testing. The details and results of these investigation activities were provided in the July 12, 2010 Site Investigation Report (SIR)/ Remedial Investigation Workplan (RIWP).

In June 2010, ARCADIS advanced five soil borings, **Figure 4**, to investigate soil adjacent to the emergency fill valve (EFV-W and EFV-N) and overflow tank (OFT-W, OFT-N and OFT-E). ARCADIS collected discrete interval soil samples from 0.0 to 0.5 feet bgs and 2.0 to 2.5 feet bgs to characterize soil in the vicinity of these potential source features. In addition, ARCADIS collected a soil sample TPHC analysis and 2-methylnaphthalene and naphthalene contingent analyses from immediately above the water table in excavation No. 2.

In accordance with analytical requirements for diesel fuel contained within Table 2-1 of the Technical Requirements for Site Remediation (TRSR) and the *Protocol for Addressing Extractable Hydrocarbons* (NJDEP 2010), soil samples were analyzed for TPHC via method NJDEP OQA-QAM-025. In addition, ARCADIS collected soil samples from each of the discrete intervals for contingency semi-volatile organic compound (SVOC) analysis (naphthalene and 2-methylnaphthalene if TPHC analytical results exceeded 1,000 mg/kg).

Analytical data presented in **Table 1** indicate one (OFT-E[0-0.5]) sample exceeded the NJDEP soil remediation standard (SRS) for TPHC of 5,100 milligrams per kilogram (mg/kg), with a concentration of 5,510 mg/kg. Five results exceeded the contingency threshold screening criterion of 1,000 mg/kg. As such, contingency sample analyses was conducted on the highest two TPHC concentration samples (OFT-E[0-0.5] and OFT-N[0-0.5]). **Table 1** presents the analytical results for 2-methylnaphthalene and naphthalene, which did not indicate concentrations above the method detection limits.

Based on the results of these initial investigation activities, additional soil and groundwater investigation activities were conducted in accordance with the SIR / RIWP as amended in a letter dated October 28, 2010 and verbally agreed upon in meeting with NJDEP on August 25, 2010.

In November 2010 soil samples were collected to horizontally delineate TPHC impacts identified in soil sample OFT-E (0.0 – 0.5) to the east and northeast. Soil boring OFT-E+5 and OFT-NE were advanced 5 feet to the east and northeast of boring OFT-E, respectively. Both soil samples OFT-E+5 and OFT-NE had

concentrations of TPHC below the standard of 5,100, 536 and 1,350 mg/kg respectively. A summary of the soil analytical results is provided in **Table 1** and illustrated on **Figure 4**. Analytical results of these samples indicate that soil delineation is complete. Remedial action is required to address the soil containing concentrations of TPHC above its applicable soil remediation standard. Details regarding the proposed remedial action are presented below.

To evaluate groundwater quality within the source area, PSEG installed four monitoring wells (Well CC, CD, CE and CF) to evaluate for the presence of SPH, and characterize dissolved-phase constituents in groundwater, in November 2010. **Figure 3** shows the locations of the monitoring wells. Details of the well construction can be found on **Table 2**.

Prior to the collection of groundwater samples from the wells, depth-to-water and separate-phase product thickness measurements were collected using an electronic oil/water interface probe. The measurement data was used along with the surveyed top of casing elevation data to calculate groundwater elevations for the wells, **Table 3**. Separate phase product has never been detected in these wells.

Following the installation of the wells, two-rounds of groundwater samples were collected, in December 2010 and January 2011 and analyzed for volatile organic compounds plus library search (VOC+10) and semi-volatile organic compounds plus library search (SVOC+15). The groundwater sampling results, from both events, did not indicate concentrations of constituents of concern above the groundwater quality standards. The groundwater analytical results are summarized in **Tables 4A** and **4B** and **Figure 3**. Analytical results indicate that groundwater investigation is complete and that remedial actions for groundwater are not required

Remedial Action

The proposed remedial action for soil contamination associated with incident No. 10-0416-164911 is excavation and removal of soil for off-site disposal. The approximate extent of the soil excavation is shown on **Figure 4**. Based on soil analytical results, approximately 2.5 cubic yards of impacted soil will be excavated from an approximate area of 34 square feet. The excavation depth will be to approximately 2 feet below ground surface. Following completion of the excavated soil, post excavation samples will be completed in accordance with the technical requirement N.J.A.C. 7.26E-6.4(a) to document that soil containing TPHC above the applicable NJDEP SRS has been removed.

The proposed area of excavation is located above the service water pipes and nearby other facility critical infrastructure. Due to the sensitive nature of this area the soil excavation is proposed to be completed prior to or during the facility decommission. In the interim, groundwater monitoring is being proposed to confirm that the THPC impacts do not result in concentrations of dissolved phase constituents of concerns in groundwater. PSEG is proposing to sample monitoring well CD, the well closest to the soil impacts, on a semi-annual basis. The groundwater samples will be analyzed for VOC+10 and SVOC+15. If dissolved phase constituents of concern are observed during this interim period, PSEG may reconsider the schedule for completing the soil remediation. Details and results of the groundwater monitoring and an update of the remedial action schedule, if warranted, will be provided in semi-annual Remedial Action Progress Reports (RAPRs).

Schedule and Reporting

Upon the completion of the soil excavation a Remedial Action Report (RAR) will be submitted that details the remedial action details and results. In the interim the groundwater sampling is proposed to be completed in June and December, to coincide with groundwater sampling associated with the Salem Unit 1 diesel fuel project, Incident Number 04-08-02-2350-16. The results will be reported along with the Salem Unit 1 diesel project in RAPRs to be submitted in September and March.

If you have any questions, please do not hesitate to contact me at 484.688.0397.

Sincerely,

Bradley D. Pierce
Project Manager

ARCADIS U.S., Inc.

Attachments:

Figure 1 Site Location
Figure 2 Site Layout
Figure 3 Groundwater Analytical Results
Figure 4 Soil Analytical Results and Excavation Area

Table 1 Soil analytical Results
Table 2 Monitoring Well Construction
Table 3 Groundwater Elevations
Table 4A Groundwater Analytical Results – VOCs
Table 4B Groundwater Analytical Results – SVOCs

Copies:
Ms. Helen Gregory (PSEG)

Table 1. Summary of Soil Analytical Results, PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey

					Sample ID	EFV-N	EFV-W	EFV-W	FHD	OFT-E	OFT-E+5	OFT-N	OFT-NE	OFT-NE	OFT-W	OFT-W	OFT-W
					Sample Type Code	N	N	N	N	N	N	N	N	FD	N	N	FD
					Sample Date	5/4/2010	5/4/2010	5/4/2010	5/27/2010	5/4/2010	11/11/2010	5/4/2010	11/11/2010	11/11/2010	5/4/2010	5/4/2010	5/4/2010
					Depth Interval (ft bgs)	2 - 2.5	0 - .5	2 - 2.5	2.4 - 2.9	0 - .5	0 - .5	2 - 2.5	0 - .5	0 - .5	0 - .5	2 - 2.5	2 - 2.5
		Action Level															
Chemical Name	Unit	RDCSRS	NRDCSRS	IGWSSL													
Solids, Percent	%	--	--	--		**91.2**	**81**	**92.2**	**89.3**	**86.7**	**84.9**	**90.7**	**92.6**	**92.7**	**83.4**	**91.5**	**90.9**
Naphthalene	mg/kg	6	17	16		< 0.038 U	--	--	--	< 0.038 U	--	--	**--**	**--**	--	--	--
2-Methylnaphthalene	mg/kg	230	2400	5		< 0.075 U	--	--	--	< 0.075 U	--	--	**--**	**--**	--	--	--
EPH (>C28-C40)	mg/kg	--	--	--		--	--	--	--	--	**31.9**	--	**85.9**	**126**	--	--	--
EPH (C9-C28)	mg/kg	--	--	--		--	--	--	--	--	**506**	--	**986**	***1230***	--	--	--
Total EPH (C9-C40)	mg/kg	--	--	--		--	--	--	--	--	**538**	--	***1070***	***1350***	--	--	--
Total PHC	mg/kg	5100	5100	5100		***5000***	**21.9**	***2520***	***4380***	***5510***	--	**366**	--	--	***2510***	**16.5**	**19.2**

Notes:
All concentrations detected above the laboratory detection limit are boldfaced.
Concentrations above the RRS are shaded in gray.
Concentrations above the contingent trigger threshhold for total EPH (1,000 mg/kg) for analysis of naphthalene and 2-methylnaphthalene are shown in bold italics.
Concentrations shown in brackets represent duplicate samples values.
"U" indicates constituent was not detected above the laboratory detection limit.
mg/kg = milligrams per kilogram
EPH = extractable petroleum hydrocarbons
PHC = petroleum hydrocarbons
RDCSRS = Residential Direct Contact Soil Remediation Standard
NRDCSRS = Non-Residential Direct Contact Soil Remediation Sta
IGWSSL = Impact to Groundwater Soil Screening Level
ft bgs = feet below ground surface

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Table 02. Well Construction Details, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well ID	Installation Date	Well Permit Number	Well Purpose	Construction Materials	Diameter (inches)	GS Elevation (feet amsl)	MP Elevation (feet amsl)	Northing (NAD 83)	Easting (NAD 83)	Total Depth (feet bgs)	Monitoring Interval (feet bgs)	Monitoring Interval (feet amsl)
Well CC	11/04/10	E201006621	Monitoring	Sch-40 PVC	4.0	9.45	9.16	231,116	199,495	9.55	9.55 to 3.55	-0.1 to 5.9
Well CD	11/03/10	E201006623	Monitoring	Sch-40 PVC	4.0	9.4	9.02	231,092	199,562	8.33	8.33 to 1.83	1.1 to 7.6
Well CE	11/01/10	E201006622	Monitoring	Sch-40 PVC	4.0	9.34	8.92	231,147	199,512	6.22	6.22 to 3.22	3.1 to 6.1
Well CF	11/02/10	E201006620	Monitoring	Sch-40 PVC	4.0	9.36	8.88	231,085	199,497	9.55	9.55 to 1.55	-0.2 to 7.8

Notes:

GS	Ground Surface
MP	Measuring Point
bgs	Below ground surface
amsl	Feet above mean sea level (NAVD88)

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey.

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well CC	01/20/11	9.16	--	4.51	--	4.65	--
	02/17/11	9.16	--	4.15	--	5.01	--
Well CD	01/20/11	9.02	--	3.86	--	5.16	--
	02/17/11	9.02	--	3.65	--	5.37	--
Well CE	12/16/10	8.92	--	4.15	--	4.77	--
	02/17/11	8.92	--	4.12	--	4.80	--
Well CF	01/20/11	8.88	--	4.60	--	4.28	--
	02/17/11	8.88	--	4.37	--	4.51	--

Notes

--	Separate-phase product was not detected in well at time of measurement.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).

Table 4A. Summary of Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey

	Well ID	MW-CC		MW-CD			MW-CE		MW-CF	
	Sample Date	1/20/2011	2/18/2011	1/20/2011	2/17/2011	2/17/2011	12/16/2010	2/17/2011	1/21/2011	2/18/2011
	Sample Type Code	N	N	N	FD	N	N	N	N	N
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	GWQC									
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,3-Trichlorobenzene	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2,4-Trichlorobenzene	9	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
1,2-Dichlorobenzene	600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	**3.1 J**	**25**	< 10 U	**5.6 J**	< 10 U	< 10 U	**9.6 J**	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromochloromethane	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
CFC-11	2000	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
CFC-12	1000	< 5 U	< 5 U	**17.1**	**4.1 J**	**2.2 J**	< 5 U	< 5 U	< 5 U	< 5 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Cyclohexane	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Freon 113	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Isopropylbenzene	700	< 2 U	< 2 U	**0.9 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
m,p-Xylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
METHYL ACETATE	7000	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Methyl tertiary butyl ether (MTBE)	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylcyclohexane	---	< 5 U	< 5 U	**0.86 J**	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
o-Xylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:
GWQC = New Jersey Groundwater Quality Criteria for Class IIA aquifers
µg/L = micrograms per liter (equivalent to parts per billion)
Bold value indicates concentration was detected above the method detection limit.
Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U = The compound was not detected at the indicated concentration.
J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero; concentration given is an approximate value.

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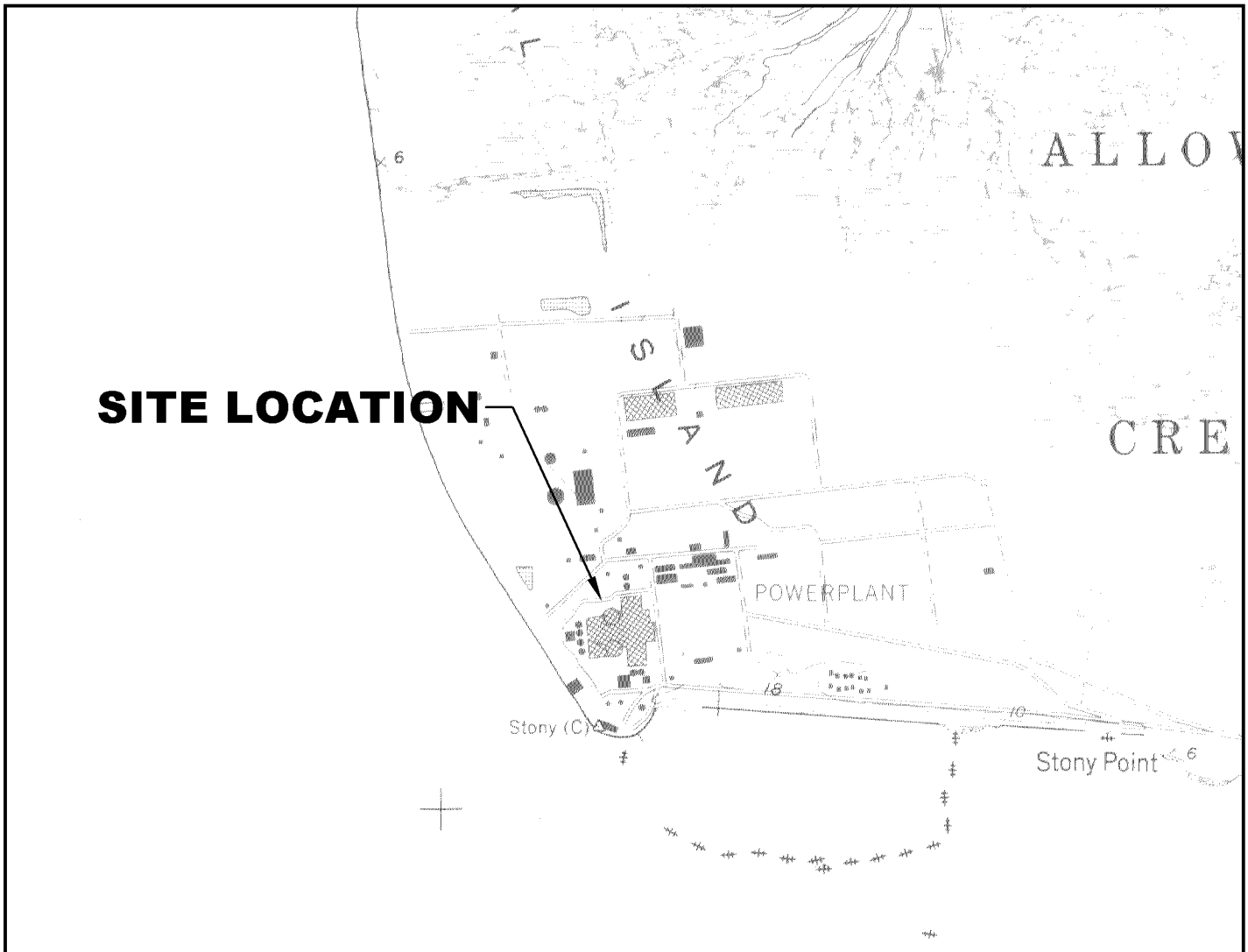
Table 4B. Summary of Groundwater Analytical Results, Semi Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Unit 2 Generating Station, Hancock's Bridge, New Jersey

	Well ID	MW-CC		MW-CD			MW-CE		MW-CF	
	Sample Date	1/20/2011	2/18/2011	1/20/2011	2/17/2011	2/17/2011	12/16/2010	2/17/2011	1/21/2011	2/18/2011
	Sample Type Code	N	N	N	FD	N	N	N	N	N
	Unit	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Chemical Name	GWQC									
1,1'-Biphenyl	400	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4,5-Tetrachlorobenzene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2,4-Dinitrotoluene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2,6-Dinitrotoluene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
2-Methylnaphthalene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
4-Chloroaniline	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acenaphthene	400	**0.844**	**0.281**	**0.362**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Acenaphthylene	---	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
ACETOPHENONE	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Anthracene	2000	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
ATRAZINE	3	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzaldehyde	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Benzo(a)anthracene	0.1	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(a)pyrene	0.1	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(b)fluoranthene	0.2	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(g,h,i)perylene	---	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Benzo(k)fluoranthene	0.5	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Caprolactam	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbazole	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chrysene	5	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Dibenzo(a,h)anthracene	0.3	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Dibenzofuran	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Dimethyl phthalate	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Fluoranthene	300	**0.131**	< 0.1 U	< 0.1 U	**0.229**	**0.223**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Fluorene	300	< 0.1 U	< 0.1 U	**0.687**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Hexachlorobenzene	0.02	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U
Hexachlorobutadiene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
Hexachloroethane	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	0.2	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Isophorone	40	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Naphthalene	300	< 0.1 U	< 0.1 U	**1.54**	**0.258**	**0.287**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Phenanthrene	---	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Pyrene	200	**0.111**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U

Notes:
GWQC = New Jersey Groundwater Quality Criteria for Class IIA aquifers
µg/L = micrograms per liter (equivalent to parts per billion)
Bold value indicates concentration was detected above the method detection limit.
Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U = The compound was not detected at the indicated concentration.
J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero; concentration given is an approximate value.

SII-SSA-0014-005527



QUADRANGLE LOCATION

SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL ACTION WORKPLAN

SITE LOCATION

ARCADIS

FIGURE
1

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski, J.MEYER LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
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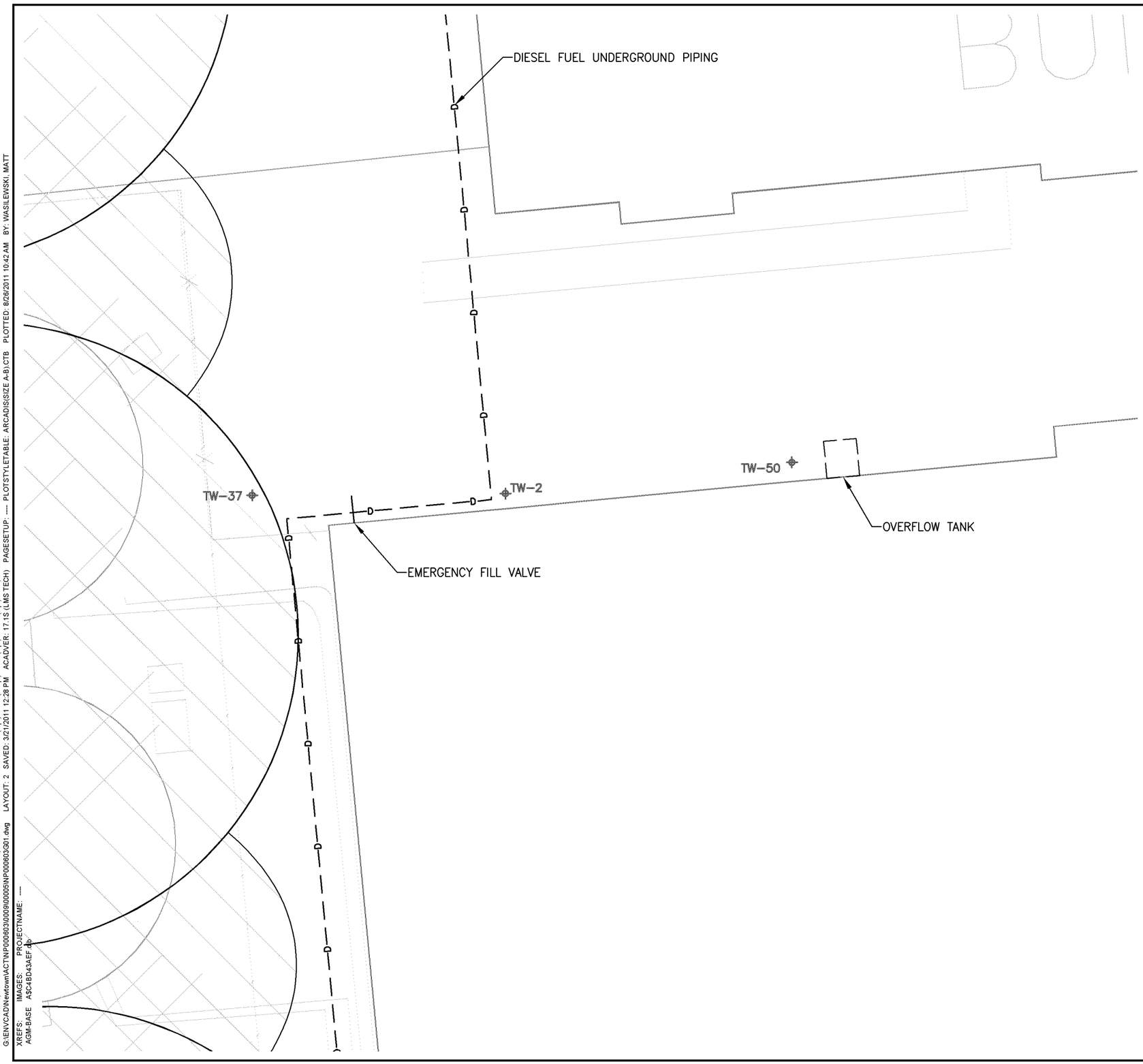
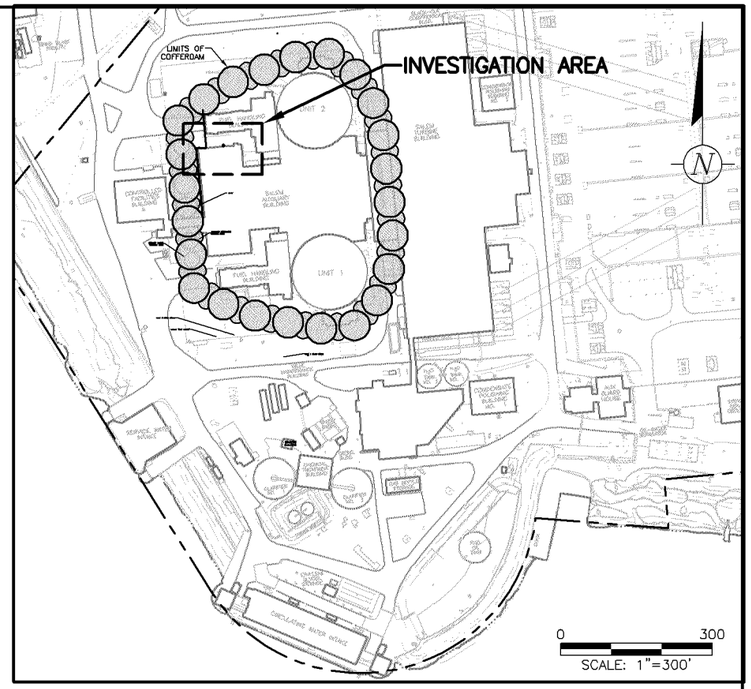




KEYMAP
SCALE: 1"=300'

LEGEND:

TW-13	TEMPORARY OBSERVATION POINT
	PROPERTY BOUNDARY
ST	STORM SEWER PIPING
	CATCH BASIN
M	MANHOLE (STORM SEWER)
	SHEET PILE

0 10
SCALE: 1"=10'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL ACTION WORKPLAN

UNIT 2 DIESEL FUEL OIL SYSTEM COMPONENTS

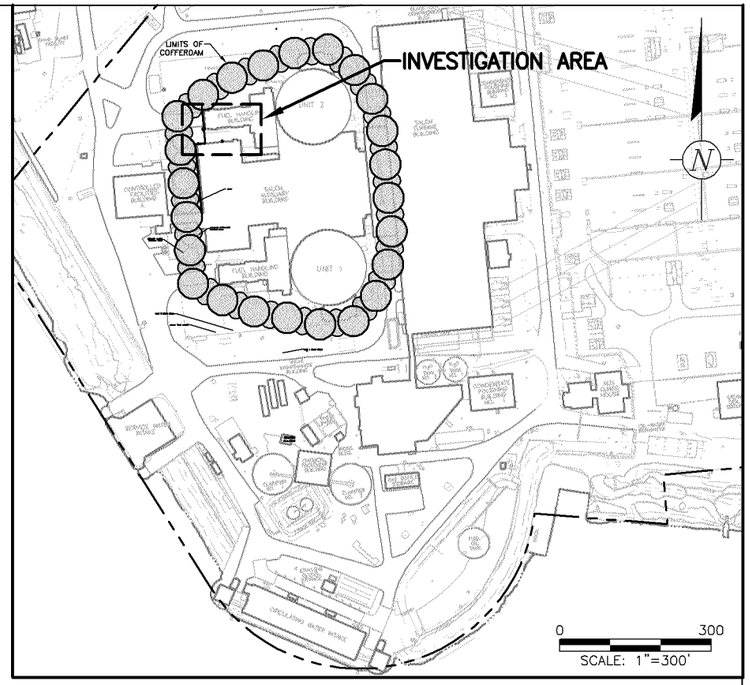
ARCADIS

FIGURE
2

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski, JMEYER LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=REF*
G:\ENVCAD\Newtown\ACTIVE\P0006030009000005\NP0006030901.dwg LAYOUT: 2 SAVED: 3/21/2011 12:28 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 8/26/2011 10:42 AM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
AGM-BASE ASC48D43AEF.dib

Well CE		
Date	12/16/2011	2/17/2011
Compound		
Acetone	<10 U	**9.6 J**

GWQC	
Acetone	6000
Acenaphthene	400
Flouranthene	300
Pyrene	200
CFC-12	1000
Isopropylbenzene	700
Methylcyclohexane	NS
Flourene	300
Naphthalene	300
TPHC (mg/L)	NS



KEYMAP
SCALE: 1"=300'

Well CC		
Date	1/20/2011	2/18/2011
Compound		
Acetone	**3.1 J**	**25**
Acenaphthene	**0.8440**	**0.2810**
Flouranthene	**0.1310**	<0.1 U
Pyrene	**0.1110**	<0.1 U

MW-CE

DIESEL FUEL UNDERGROUND PIPING

EXCAVATION No. 2

MW-CC

Well CD		
Date	1/20/2011	2/17/2011
Compound		
Acetone	<10 U	**5.6 J**
Isopropylbenzene	**0.9 J**	<2 U
Methylcyclohexane	**0.86 J**	<5 U
CFC-12	**17.1**	**4.1 J**
Acenaphthene	**0.632**	<1.0 U
Flouranthene	<0.1 U	**0.229**
Flourene	**0.6870**	<0.1 U
Naphthalene	**1.54**	**0.287**

TW-02 JUNE 2010
TPHC (mg/L)
372

TW-50 JUNE 2010
TPHC (mg/L)
1.84

OVERFLOW TANK

TW-50

MW-CD

TW-37

MW-CF

TW-2

EMERGENCY FILL VALVE

TW-37 JUNE 2010
TPHC (mg/L)
3.42

Well CF		
Date	1/21/2011	2/18/2011
Compound		
All Compounds Below Method Detection Limits		

NOTES:

ALL RESULTS ARE SHOWN IN ug/L, UNLESS OTHERWISE NOTED.

THE HIGH CONCENTRATION OF THE PARENT AND THE DUPLICATE IS SHOWN.

<10 U CONCENTRATION IS BELOW DETECTION LIMITS

2.72 **BOLD** VALUES INDICATE CONCENTRATIONS THAT WERE ABOVE THE METHOD OF DETECTION LIMIT.

37.8 **BOLD AND SHADED** VALUES INDICATE CONCENTRATIONS ABOVE THEIR GROUNDWATER QUALITY CRITERIA

J CONCENTRATION GIVE IS AN APPROXIMATE VALUE

LEGEND:

MW-CF ⊗ MONITORING WELL

TW-13 ⊕ TEMPORARY OBSERVATION POINT

——·——·—— PROPERTY BOUNDARY

– –ST– – – STORM SEWER PIPING

□ CATCH BASIN

Ⓜ MANHOLE (STORM SEWER)

SHEET PILE

TPHC – Total Petroleum Hydrocarbons

mg/L – milligrams per Liter

NS – Criteria or Standard not available

GWQC – Groundwater Quality Criteria

0 10
SCALE: 1"=10'

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SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL ACTION WORKPLAN

GROUNDWATER ANALYTICAL RESULTS

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FIGURE
3

CITY: Newtown, Pa DIV/GROUP: ENV DB: M. Wasilewski,JMEYER LD: M. Wasilewski PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
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XREFS: IMAGES: PROJECTNAME: ---
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DIESEL FUEL UNDERGROUND PIPING

FORMER EXCAVATION No. 2

FHD

FHD JUNE 2010	
Depth	TPHC (mg/kg)
2 – 2.5	4,380

EFV–N JUNE 2010	
Depth	TPHC (mg/kg)
0 – .5	785
2 – 2.5	1,720

EFV–W JUNE 2010	
Depth	TPHC (mg/kg)
0 – .5	21.9
2 – 2.5	2,520

OFT–E JUNE 2010			
Depth	TPHC (mg/kg)	2–METHYLNAPHTHALENE	NAPHTHALENE
0 – .5	**5,510**	<75	<38
2 – 2.5	338	NA	NA

OFT–N JUNE 2010			
Depth	TPHC (mg/kg)	2–METHYLNAPHTHALENE	NAPHTHALENE
0 – .5	5,000	<75	<38
2 – 2.5	366	NA	NA

OFT–W JUNE 2010	
Depth	TPHC (mg/kg)
0 – .5	2,510
2 – 2.5	19.2

PROPOSED EXCAVATION AREA

OFT–N

OFT–NE

OFT–E

OFT–W

OFT–E+5

OFT–NE NOV 2010	
Depth	Total EPH (mg/kg)
0.0–0.05	1350

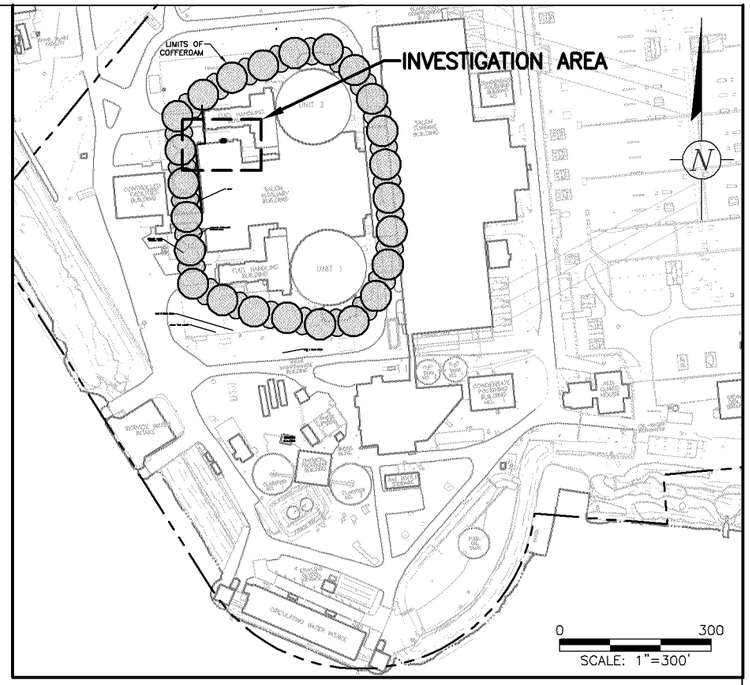
OFT–E+5 NOV 2010	
Depth	Total EPH (mg/kg)
0.0–0.05	536

OVERFLOW TANK

EFV–N

EFV–W

EMERGENCY FILL VALVE



KEYMAP
SCALE: 1"=300'

LEGEND:

EFV–W ● SOIL SAMPLING LOCATION POINT BELOW SOIL REMEDIATION STANDARD

EFV–W ● SOIL SAMPLING LOCATION POINT ABOVE SOIL REMEDIATION STANDARD

PROPERTY BOUNDARY

STORM SEWER PIPING

CATCH BASIN

MANHOLE (STORM SEWER)

SHEET PILE

EXCAVATION AREA
DEPTH 2.0 FEET
AREA = 33.9 Sq.Ft.
VOLUME = 2.5 Cu.Yd.

NRDCSRS – NON–RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

RDCSRS – RESIDENTIAL DIRECT CONTACT SOIL REMEDIATION STANDARD

IGWSRS – IMPACT TO GROUNDWATER SOIL REMEDIATION STANDARD

Depths recorded in feet below ground surface

TPHC – Total Petroleum Hydrocarbons

mg/kg – milligrams per kilogram

<75 – Concentrations below method detection limit

NA – Not Analyzed

	RDCSRS	NRDCSRS	IGWSSL
TPHC (mg/kg)	5,100	54,000	NS
2–METHYLNAPHTHALENE (mg/kg)	230	2,400	5
NAPHTHALENE (mg/kg)	6	17	16
Total EPH (mg/kg)	5,100	54,000	NS

0 10
SCALE: 1"=10'

NOTES:

ALL RESULTS ARE SHOWN IN ug/L, UNLESS OTHERWISE NOTED.

THE HIGH CONCENTRATION OF THE PARENT AND THE DUPLICATE IS SHOWN.

<10 U CONCENTRATION IS BELOW DETECTION LIMITS

2.72 **BOLD** VALUES INDICATE CONCENTRATIONS THAT WERE ABOVE THE METHOD OF DETECTION LIMIT.

37.8 **BOLD AND SHADED** VALUES INDICATE CONCENTRATIONS ABOVE THEIR GROUNDWATER QUALITY CRITERIA

J CONCENTRATION GIVE IS AN APPROXIMATE VALUE

EPH EXTRACTABLE HYDROCARBONS

ALL SAMPLES COLLECTED IN NOVEMBER 2010 ANALYZED VIA THE EXTRABLE HYDROCARBON METHOD

PSEG NUCLEAR, LLC
SALEM GENERATING STATION
ARTIFICIAL ISLAND HANCOCK'S BRIDGE, NEW JERSEY
REMEDIAL ACTION WORKPLAN

SOIL ANALYTICAL RESULTS AND EXCAVATION AREA

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FIGURE
4

ARCADIS
Infrastructure, environment, buildings

Imagine the result

Remedial Action Progress Report
July 2010 through January 2011

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

October 2011

ARCADIS

Jonathan Shafer
Staff Scientist

Bradley D. Pierce
Project Manager

Remedial Action Progress July 2010 through January 2011

PSEG Nuclear, LLC
Salem Generating Station
Hancock's Bridge, New Jersey
Incident No. 04-08-02-2350-16

Prepared for:
PSEG Nuclear, LLC
Salem Generating Station
Alloway Creek Neck Road
Hancock's Bridge, New Jersey 08038

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Our Ref.:
NP000603.0011
Date:
October 2011

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Table 2 Monitoring Well Construction Details

Table 3 Groundwater Elevations and Product Thickness

Table 4 Summary of VOC Groundwater Analytical Results

Table 5 Summary of SVOC Groundwater Analytical Results

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Figure 1 Station Location

Figure 2 Station Layout

Figure 3 Results of Groundwater Monitoring Activities

Appendices

A Low-flow Groundwater Sampling Logs

B Groundwater Analytical Results (December 2010 - February 2011)

C Well CG Monitoring Well Record, Form B, and Well Construction Diagram

1. Introduction

ARCADIS U.S., Inc. (ARCADIS), on behalf of PSEG Nuclear LLC (PSEG), has prepared this Remedial Action Progress Report (RAPR) to present the details and results of ongoing groundwater monitoring and product recovery activities being conducted at the PSEG Nuclear, LLC Salem Generating Station (the Station). The Station is located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. The Station location and layout are depicted on **Figures 1** and **2**, respectively.

Groundwater monitoring and product recovery activities are being conducted in accordance with the scope of work proposed in the Remedial Investigation Report (RIR) that was submitted to the New Jersey Department of Environmental Protection (NJDEP) in June 2005. The remedial investigation was conducted to determine the extent of constituents of concern in soil and groundwater associated with a release of diesel fuel (Incident Number 04-08-02-2350-16).

This RAPR includes activities completed at the Station from July 2010 through February 2011 including the completion of the semiannual groundwater monitoring activities conducted in December 2010 through February 2011 and the ongoing operation of the Separate-Phase Hydrocarbons (SPH) recovery systems in Wells AU and AW. These activities are discussed in Sections 3, 4 and 5 respectively, followed by the proposed schedule for subsequent reporting periods.

2. Project Background

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the storm water collection system just to the south of the Salem Unit 1 Auxiliary Building. Investigation of the catch basin, which is identified as "Catch Basin 27" on **Figure 2**, revealed the presence of a red-dyed diesel fuel (the red-dye is more typical of a recent release of diesel fuel). At this time, PSEG notified the NJDEP through its spill hotline.

Investigations into the source of the diesel fuel focused on the underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tanks to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. The location of the underground piping is shown on **Figure 2**. PSEG performed a pressure test on this underground piping. The results revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot

section of piping, PSEG subcontracted Praxair Services, Inc. to perform a "Tracer Tight" gas analysis. The results of this test showed that the location of the leak was directly adjacent to Catch Basin 27. The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). SPH was observed on standing water within the excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation.

In November 2004, PSEG initiated remedial investigation and interim product recovery activities. As presented in the Remedial Investigation Work Plan (RIWP) submitted to the NJDEP in January 2005, soil borings were advanced at locations down gradient of the source area to delineate the horizontal extent of diesel related constituents of concern in soil. Due to the presence of extensive, facility-critical infrastructure within the area of investigation, the boring locations were limited. Soil samples collected from the borings were submitted for total petroleum hydrocarbons (TPHC) analysis. Analytical results of the soil samples did not indicate concentrations of TPHC above laboratory detection limits. Results of the soil investigation indicated that the release of diesel fuel had not migrated a significant distance beyond the source area and that diesel related constituents of concern in soil were likely limited to the source area and the "smear-zone" where SPH had migrated.

The soil borings were converted to monitoring/product recovery wells to facilitate the collection of groundwater samples and for the recovery of SPH, if present. Water-level and product gauging and groundwater sampling were completed following installation of the wells. These activities utilized six monitoring wells (the five newly installed wells, and one previously existing monitoring well). The locations of the monitoring wells are shown on **Figure 2**. Water-level and product measurements indicated that the extent of measurable product is limited to the area of Well AU, located at the source area, and Well AW, located down gradient of the source area along the service water pipes. Measurable product was detected during a single gauging event in Well AZ. In April 2009, SPH was also observed in Well AI. This well is not sampled as part of the diesel remediation and investigation program.

The extent to which product has migrated is controlled by the significant facility-related subsurface infrastructure. The foundation for the primary water storage tank located to the west of Well AU has prevented the migration of SPH in this direction. The service

water piping that runs to the south from Well AU provided a preferential pathway for the migration of SPH towards Well AW. To delineate the extent of SPH to the south of Well AW along the service water piping, an additional monitoring well, Well BV, was installed in December 2006, as required by the NJDEP. In a June 21, 2010 Notice of Deficiency (NOD) to PSEG, the NJDEP required the installation of a shallow monitoring well adjacent to Well AI to delineate separate phase product (SPH) observed in April 2009. In addition, the NJDEP required the submission of a proposal for an active remediation system to recover SPH at the Station. In December 2010 well CG was installed to fulfill this requirement, details below in section 3. In January and February 2011 well CG was gauged for presence of separate phase product and sampled for VOCs and SVOCs, details below in section 4. Product recovery efforts completed to date, also presented in Section 4, have included the installation of a Spill Buster® Unit in Wells AU and/or AW, the installation and operation of a passive skimmer in Well AW, and the installation of sorbent socks within Wells AZ and AU.

Groundwater monitoring activities were completed on a quarterly basis following the installation of the monitoring wells through December 2007. However, in the Remedial Action Progress Report dated February 2008 PSEG recommended moving from quarterly groundwater sampling to semiannual sampling. In a March 24, 2008 letter, the NJDEP approved reducing groundwater monitoring to semi-annual events, completed in June and December. During the sampling events, groundwater samples are collected from wells that do not indicate the presence of SPH. The groundwater samples are submitted to a laboratory and are analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The details of groundwater monitoring activities completed during the reporting period and the results of groundwater monitoring activities completed to date are presented in Section 4.

3. Well CG Installation

In accordance with the previous Remedial Action Progress Report dated September 20, 2010, an additional groundwater monitoring well (Well CG) was installed on December 22, 2010. The monitoring well was installed in order to verify delineation of separate phase product in the area of well AI.

The monitoring well was installed using vacuum excavation techniques due to the extensive subsurface utilities and infrastructure located within the area of investigation. The location and well construction details of the groundwater monitoring well is shown on **Figure 2** and are summarized in **Table 2**, respectively. NJDEP Bureau of Water Allocation Monitoring Well Records, well construction logs, and boring logs are included in **Appendix C**. The monitoring well was developed using a combination of

surging and pumping techniques. In accordance with N.J.A.C. 7:26E-4.4(g) [7], the monitoring well was surveyed by a New Jersey-licensed surveyor. The Monitoring Well Certification Form B is provided in **Appendix C**. Well CG was sampled twice during the reporting period and details are below. Diesel fuel was not observed during monitoring well installation.

4. December 2010 through January 2011 Semiannual Groundwater Monitoring

On December 15, 2010 and January 21, 2011, semi-annual groundwater monitoring activities were conducted. Details regarding the sampling activities are presented in **Table 1**. The monitoring well network associated with the semi-annual gauging and sampling activities consists of the following seven monitoring wells: Well X, Well AU, Well AV, Well AW, Well AY, Well AZ, Well BV, and Well CG. A summary table of well construction details for these wells is presented in **Table 2**. Semiannual groundwater monitoring activities consist of the gauging of groundwater and SPH levels and the collection and analysis of groundwater samples from those wells that do not contain SPH. The following sections provide the details and results of the gauging and sampling activities.

4.1 Water Level and Separate Phase Product Measurements

Prior to the initiation of groundwater sampling activities, water-level and SPH measurements were obtained from each monitoring well using an electronic oil/water interface probe. Water-level and SPH measurements were also collected during routine maintenance of the product recovery systems. A summary of historic product gauging and groundwater elevation data is presented in **Table 3**. With the exception of a onetime detection of product in Well AZ and a recent detection in Well AI, measurable product is historically limited to the area of Well AU and down gradient towards Well AW, consistent with the previous reporting period. The extent to which product has migrated to date has been generally controlled by the subsurface infrastructure located within the investigation area. With the repair of the diesel fuel underground piping, the ongoing product recovery efforts being conducted in Well AU and Well AW, when in operation (see Section 4), are successfully preventing further migration of product. SPH measurements obtained from Well AY, located to the south and down gradient of Well AW along the service water pipes, provide delineation of the extent of SPH. After the recent installation of Well CG, SPH gauging was performed. No SPH was ever detected in this well, so the expansion of the remedial system to the southern portion of the well network is not needed.

4.2 Monitoring Well Sampling

As discussed above, semiannual groundwater monitoring activities were completed in December 2010 and January 2011. During this sampling event, groundwater samples were only collected from monitoring wells that did not indicate a measurable thickness (i.e., greater than 0.01 feet) of SPH. As such, Wells AU and AW were not sampled during the reporting period.

Due to the nature of the analytes being monitored and to ensure the quality of the groundwater data, groundwater samples are collected utilizing low-flow sampling methodology. Due to insufficient water in the wells and slow recharge rates, select wells need to be sampled with a disposable bailer to enable collection of sufficient sample volumes. Wells AY and X were sampled with a bailer during the December 2010 event. Sample collection procedures, as well as quality assurance/quality control (QA/QC) sampling requirements, were completed in accordance with the Quality Assurance Project Plan (QAPP) presented in the January 2005 RIWP. Groundwater sampling logs for the samples collected during the reporting period are included in **Appendix A**. Groundwater samples were submitted to Accutest Laboratories, a NJDEP certified laboratory, of Dayton, New Jersey. The groundwater samples were analyzed for priority pollutant list VOCs and SVOCs including a library search. Laboratory reports and HazSite deliverables for the groundwater monitoring events are included as **Appendix B**. Analytical results of the groundwater samples collected during the reporting period, as well as analytical results of groundwater samples collected since the initiation of investigation activities, are discussed in the following section.

4.3 Analytical Results

Tables 4 and **5** presents groundwater analytical results for VOCs and SVOCs obtained since December 2004 from monitoring wells utilized in the Salem Unit 1 diesel investigation. **Figure 3** illustrates the locations of monitoring wells and constituent detections during the recent sampling event. The following summary compares analytical results to the NJDEP Groundwater Quality Standards (GWQS) listed at New Jersey Administrative Code (N.J.A.C.) 7:9C. Analytical results of these samples indicate the following:

- Benzene was detected in monitoring well CG, just above the GWQS of 1 microgram per liter (µg/l) with a concentration of 1.1 µg/l.

- Concentrations of VOCs and SVOCs were not detected above their respective GWQS in Wells AV, AZ, BV, and X.

- Analytical results for groundwater monitoring activities completed to date continue to indicate that impacts associated with the release of diesel fuel from the bulk storage tanks are limited to the area of SPH, which extends down gradient from the source area to Well AI.

5. Ongoing Product Recovery

SPH recovery continues at Well AU, installed within the source area, and Well AW, installed immediately down gradient of the source area along the service water piping. SPH recovery includes the intermittent operation and maintenance of the Spill Buster® product recovery system, the operation of a passive skimmer, and the use of sorbent socks. Use of these methods has resulted in the recovery of approximately 718.9 gallons of SPH to date. During the reporting period, approximately 4.6 gallons of SPH were recovered. Due to the absence of SPH in the recently installed Well CG, there is no need to expand the remedial system at this time.

6. Future Actions

Based on the results of investigation activities and interim remedial actions completed to date, the following actions are planned for the upcoming reporting period, February 2011 through June 2011:

- PSEG will continue to collect groundwater samples on a semiannual basis with the next event to be conducted in June 2011. Groundwater monitoring will continue to consist of the collection and analysis of groundwater samples from those wells not indicating the presence of SPH. Groundwater samples will be analyzed for VOCs and SVOCs to evaluate the extent, if any, of dissolved phase constituents of concern. In addition, product recovery efforts will remain ongoing.

- Semiannual Remedial Action Progress Reports will continue to be prepared to update the NJDEP with the status of product recovery efforts and groundwater analytical results;

- Following completion of the product recovery efforts (i.e., measurable SPH is no longer detected) eight consecutive rounds of quarterly sampling will be completed (assuming concentrations of constituents of concern are above applicable GWQC) as required by the Mann-Whitney U-Test. The analytical results from these

sampling events will be evaluated to determine if there are decreasing analytical trends; and,

- Following completion of the eight consecutive rounds of quarterly sampling, PSEG will either: 1) propose no further action for groundwater if groundwater analytical results continue to be below applicable GWQC; or, 2) establish a classification exception area and prepare a Remedial Action Work Plan that proposes a groundwater remediation strategy.

7. Groundwater Monitoring Program Details and Schedule

Following completion of the next semiannual groundwater monitoring event, currently scheduled for June 2011, groundwater analytical results and the results of product recovery efforts will be reported in Remedial Action Progress Report February through June 2011. The anticipated schedule for the groundwater monitoring program through the next reporting period is summarized below.

Groundwater Monitoring:

Semiannual event (VOCs and SVOCs)	June 2011

Reporting:

Remedial Action Progress Report January 2011 through June 2011	November 31, 2011

Table 01. Summary of Sampling Activities Completed During the Reporting Period (Semiannual, December 2010 through February 2011), PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Sampling Event	Wells Sampled*	Wells Not Sampled
Dec-10 through Feb-11	MW-AY MW-AZ MW-BV MW-X MW-AV MW-CG	MW-AU MW-AW

Notes

* Groundwater samples analyzed for VOCs and SVOCs analysis using methods 8260b and 8270c, respectively.

Table 02. Well Construction Details, PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey.

Well ID	Installation Date	Well Permit Number	Well Purpose	Construction Materials	Diameter (inches)	GS Elevation (feet amsl)	MP Elevation (feet amsl)	Northing (NAD 83)	Easting (NAD 83)	Total Depth (feet bgs)	Monitoring Interval (feet bgs)	Monitoring Interval (feet amsl)
Well X	06/11/03	3400007018	Monitoring	Sch-40 PVC	1.0	9.47	12.00	230,851	199,547	10.0	2.0 to 10.0	7.5 to -0.5
Well AU	11/09/04	3400007375	Product Recovery	Sch-40 PVC	6.0	9.44	8.46	230,868	199,525	7.0	4.0 to 7.0	5.4 to 2.4
Well AV	11/08/04	3400007370	Monitoring	Sch-40 PVC	4.0	9.17	8.82	230,831	199,469	10.0	3.0 to 10.0	6.2 to -0.8
Well AW	11/08/04	3400007372	Product Recovery	Sch-40 PVC	4.0	9.48	9.16	230,837	199,516	9.0	3.0 to 9.0	6.5 to 0.5
Well AY	11/08/04	3400007373	Monitoring	Sch-40 PVC	4.0	9.40	9.04	230,805	199,521	8.0	3.0 to 8.0	6.4 to 1.4
Well AZ	11/08/04	3400007374	Monitoring	Sch-40 PVC	4.0	9.33	8.66	230,764	199,551	9.0	3.0 to 9.0	6.3 to 0.3
Well BV	12/05/06	3400007816	Monitoring	Sch-40 PVC	4.0	9.32	8.85	230,768	199,526	10.0	3.0 to 10.0	6.3 to -0.7
Well CG	12/22/11	E201006624	Monitoring	Sch-40 PVC	4.0	9.31	8.95	230,801	199,559	10.0	3.0 to 10.0	6.3 to -0.7

Notes:

GS	Ground Surface
MP	Measuring Point
bgs	Below ground surface
amsl	Feet above mean sea level (NAVD88)

Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well X	12/07/04	12.00	--	7.16	--	4.84	--
	12/10/04	12.00	--	6.36	--	5.64	--
	12/13/04	12.00	--	6.68	--	5.32	--
	12/22/04	12.00	NM	NM	NM	NM	NM
	1/13/05	12.00	--	7.66	--	4.34	--
	1/27/05	12.00	--	8.11	--	3.89	--
	2/10/05	12.00	--	7.70	--	4.30	--
	2/23/05	12.00	Sheen	7.47	<0.01	4.53	--
	3/24/05	12.00	--	7.81	--	4.19	--
	4/8/05	12.00	--	6.78	--	5.22	--
	4/26/05	12.00	--	7.65	--	4.35	--
	6/28/05	12.00	--	8.57	--	3.43	--
	7/20/05	12.00	--	8.01	--	3.99	--
	8/17/05	12.00	--	7.60	--	4.40	--
	9/13/05	12.00	--	8.45	--	3.55	--
	10/3/05	12.00	--	9.46	--	2.54	--
	12/15/05	12.00	--	9.28	--	2.72	--
	3/28/06	12.00	Dry	Dry	--	--	--
	9/26/06	12.00	--	8.74	--	3.26	--
	12/4/06	12.00	--	8.09	--	3.91	--
	3/6/07	12.00	--	8.81	--	3.19	--
	6/12/07	12.00	--	8.16	--	3.84	--
	9/25/07	12.00	--	9.98	--	2.02	--
	12/10/07	12.00	--	9.08	--	2.92	--
	6/26/08	12.00	--	7.88	--	4.12	--
	12/15/08	12.00	--	8.20	--	3.80	--
	6/1/09	12.00	--	8.02	--	3.98	--
	12/7/09	12.00	--	6.77	--	5.23	--
	6/23/10	12.00	--	8.42	--	3.58	--
	12/14/10	12.00	--	8.15	--	3.85	--
Well AU	12/07/04	8.46	NM	NM	NM	NM	NM
	12/10/04	8.46	1.84	2.29	0.45	6.17	6.50
	12/13/04	8.46	2.84	3.35	0.51	5.11	5.49
	12/22/04	8.46	4.22	5.45	1.23	3.01	3.92
	1/13/05	8.46	3.68	5.44	1.76	3.02	4.32
	1/17/05*	9.81	4.15	4.40	0.25	5.41	5.60
	1/24/05	9.81	5.40	5.50	0.10	4.31	4.38
	1/26/05	9.81	4.90	5.10	0.20	4.71	4.86
	1/27/05	9.81	5.50	5.69	0.19	4.12	4.26
	1/31/05	9.81	5.45	5.50	0.05	4.31	4.35
	2/4/05	9.81	5.40	5.60	0.20	4.21	4.36
	2/8/05	9.81	5.15	5.40	0.25	4.41	4.60
	2/10/05	9.81	5.34	5.68	0.34	4.13	4.38
	2/16/05	9.81	3.90	4.30	0.40	5.51	5.81
	2/22/05	9.81	4.60	4.80	0.20	5.01	5.16
	2/23/05	9.81	4.96	5.12	0.16	4.69	4.81
	2/28/05	9.81	4.60	4.78	0.18	5.03	5.16
	3/7/05	9.81	4.74	5.00	0.26	4.81	5.00
	3/14/05	9.81	5.16	5.48	0.32	4.33	4.57
	3/21/05	9.81	5.40	5.70	0.30	4.11	4.33
	3/24/05	9.81	3.41	3.42	0.01	6.39	6.40
	3/29/05	9.81	3.10	3.70	0.60	6.11	6.55
	4/5/05	9.81	4.00	4.10	0.10	5.71	5.78
	4/8/05	9.81	2.87	2.91	0.04	6.90	6.93

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	4/26/05	9.81	4.35	4.55	0.20	5.26	5.41
	6/28/05	9.81	5.66	5.74	0.08	4.07	4.13
	7/8/05	9.81	1.10	1.20	0.10	8.61	8.68
	7/20/05	9.81	5.25	5.60	0.35	4.21	4.47
	7/25/05	9.81	4.78	5.05	0.27	4.76	4.96
	7/28/05	9.81	3.08	3.55	0.47	6.26	6.61
	8/1/05	9.81	5.08	5.30	0.22	4.51	4.67
	8/5/05	9.81	5.50	5.85	0.35	3.96	4.22
	8/8/05	9.81	5.35	5.60	0.25	4.21	4.40
	8/12/05	9.81	4.75	4.85	0.10	4.96	5.03
	8/16/05	9.81	4.60	4.70	0.10	5.11	5.18
	8/17/05	9.81	3.36	3.38	0.02	6.43	6.44
	8/19/05	9.81	4.05	4.20	0.15	5.61	5.72
	8/22/05	9.81	5.65	5.85	0.20	3.96	4.11
	8/26/05	9.81	5.35	5.55	0.20	4.26	4.41
	8/29/05	9.81	4.75	5.15	0.40	4.66	4.96
	9/2/05	9.81	4.75	5.10	0.35	4.71	4.97
	9/6/05	9.81	5.50	5.75	0.25	4.06	4.25
	9/9/05	9.81	5.55	5.65	0.10	4.16	4.23
	9/12/05	9.81	5.70	6.00	0.30	3.81	4.03
	10/3/05	9.81	6.34	NA	NA	NA	NA
	10/10/05	9.81	3.35	4.70	1.35	5.11	6.11
	10/14/05	9.81	3.05	3.35	0.30	6.46	6.68
	10/28/05	9.81	4.00	4.20	0.20	5.61	5.76
	10/19/05	9.81	4.86	5.65	0.79	4.16	4.74
	10/31/05	9.81	4.60	5.20	0.60	4.61	5.05
	11/4/05	9.81	5.45	5.55	0.10	4.26	4.33
	11/7/05	9.81	5.90	6.15	0.25	3.66	3.85
	11/11/05	9.81	6.01	6.58	0.57	3.23	3.65
	11/15/05	9.81	6.30	NA	NA	NA	NA
	11/18/05	9.81	5.58	6.40	0.82	3.41	4.02
	11/28/05	9.81	5.86	6.45	0.59	3.36	3.80
	12/2/05	9.81	4.20	5.60	1.40	4.21	5.25
	12/5/05	9.81	5.40	5.50	0.10	4.31	4.38
	12/8/05	9.81	6.05	6.58	0.53	3.23	3.62
	12/12/05	9.81	5.20	6.58	1.38	3.23	4.25
	12/15/05	9.81	5.99	6.06	0.07	3.75	3.80
	12/16/05	9.81	3.20	6.58	3.38	3.23	5.73
	12/23/05	9.81	5.95	6.58	0.63	3.23	3.70
	12/27/05	9.81	5.85	6.58	0.73	3.23	3.77
	12/30/05	9.81	4.10	4.25	0.15	5.56	5.67
	1/3/06	9.81	3.35	3.45	0.10	6.36	6.43
	1/6/06	9.81	4.55	4.75	0.20	5.06	5.21
	1/10/06	9.81	5.90	6.05	0.15	3.76	3.87
	1/12/06	9.81	5.95	6.00	0.05	3.81	3.85
	1/16/06	9.81	5.80	6.25	0.45	3.56	3.89
	1/16/06	9.81	6.15	6.25	0.10	3.56	3.63
	1/19/06	9.81	4.25	4.30	0.05	5.51	5.55
	1/23/06	9.81	2.20	2.40	0.20	7.41	7.56
	1/30/06	9.81	5.15	5.25	0.10	4.56	4.63
	2/3/06	9.81	5.75	5.85	0.10	3.96	4.03
	2/6/06	9.81	5.45	5.55	0.10	4.26	4.33
	2/9/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/13/06	9.81	4.50	5.20	0.70	4.61	5.13
	2/17/06	9.81	4.70	4.90	0.20	4.91	5.06
	2/21/06	9.81	5.60	5.75	0.15	4.06	4.17
	2/24/06	9.81	5.95	6.05	0.10	3.76	3.83
	2/27/06	9.81	6.20	6.35	0.15	3.46	3.57
	3/3/06	9.81	6.30	6.55	0.25	3.26	3.45
	3/6/06	9.81	6.40	NA	NA	NA	NA
	3/10/06	9.81	6.53	NA	NA	NA	NA
	3/13/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/20/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/24/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/28/06	9.81	Dry	Dry	Dry	Dry	Dry
	3/29/06	9.81	Dry	Dry	Dry	Dry	Dry

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	4/4/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/10/06	9.81	6.38	6.40	0.02	3.41	3.42
	4/17/06	9.81	Dry	Dry	Dry	Dry	Dry
	4/24/06	9.81	3.15	3.60	0.45	6.21	6.54
	4/28/06	9.81	4.70	4.80	0.10	5.01	5.08
	5/1/06	9.81	5.85	5.90	0.05	3.91	3.95
	5/5/06	9.81	6.10	6.20	0.10	3.61	3.68
	5/9/06	9.81	6.28	NA	NA	NA	NA
	5/12/06	9.81	5.44	6.15	0.71	3.66	4.19
	5/12/06	9.81	5.92	6.00	0.08	3.81	3.87
	5/15/06	9.81	4.60	4.70	0.10	5.11	5.18
	5/19/06	9.81	5.80	5.90	0.10	3.91	3.98
	5/22/06	9.81	6.25	6.38	0.13	3.43	3.53
	5/30/06	9.81	Dry	Dry	Dry	Dry	Dry
	6/6/06	9.81	4.30	4.90	0.60	4.91	5.35
	6/16/06	9.81	5.10	5.25	0.15	4.56	4.67
	6/22/06	9.81	5.50	5.70	0.20	4.11	4.26
	6/23/06	9.81	5.70	5.80	0.10	4.01	4.08
	6/30/06	9.81	3.08	3.15	0.07	6.66	6.71
	7/5/06	9.81	2.25	2.35	0.10	7.46	7.53
	7/10/06	9.81	3.40	3.50	0.10	6.31	6.38
	7/14/06	9.81	3.65	3.75	0.10	6.06	6.13
	7/17/06	9.81	4.07	4.25	0.18	5.56	5.69
	7/21/06	9.81	4.35	4.50	0.15	5.31	5.42
	7/24/06	9.81	2.55	2.70	0.15	7.11	7.22
	7/28/06	9.81	3.35	3.45	0.10	6.36	6.43
	7/31/06	9.81	3.55	3.60	0.05	6.21	6.25
	8/3/06	9.81	3.70	3.75	0.05	6.06	6.10
	8/7/06	9.81	4.20	4.25	0.05	5.56	5.60
	8/11/06	9.81	4.55	4.60	0.05	5.21	5.25
	8/14/06	9.81	5.00	5.05	0.05	4.76	4.80
	8/18/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/21/06	9.81	5.45	5.55	0.10	4.26	4.33
	8/28/06	9.81	3.15	3.20	0.05	6.61	6.65
	8/31/06	9.81	3.90	3.95	0.05	5.86	5.90
	9/5/06	9.81	3.55	3.60	0.05	6.21	6.25
	9/8/06	9.81	3.75	3.80	0.05	6.01	6.05
	9/11/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/14/06	9.81	4.90	4.95	0.05	4.86	4.90
	9/22/06	9.81	4.40	4.45	0.05	5.36	5.40
	9/25/06	9.81	4.60	4.65	0.05	5.16	5.20
	10/2/06	9.81	4.50	4.65	0.15	5.16	5.27
	10/5/06	9.81	5.05	5.10	0.05	4.71	4.75
	10/9/06	9.81	3.80	3.90	0.10	5.91	5.98
	10/12/06	9.81	2.65	2.70	0.05	7.11	7.15
	10/17/06	9.81	4.35	4.40	0.05	5.41	5.45
	10/20/06	9.81	1.85	1.90	0.05	7.91	7.95
	10/23/06	9.81	3.85	3.90	0.05	5.91	5.95
	10/31/06	9.81	3.80	3.85	0.05	5.96	6.00
	11/6/06	9.81	5.45	5.50	0.05	4.31	4.35
	11/10/06	9.81	3.25	3.30	0.05	6.51	6.55
	11/13/06	9.81	2.60	2.65	0.05	7.16	7.20
	11/20/06	9.81	3.65	3.70	0.05	6.11	6.15
	11/27/06	9.81	4.10	4.15	0.05	5.66	5.70
	12/4/06	9.81	5.05	5.10	0.05	4.71	4.75
	12/8/06	9.81	5.80	5.85	0.05	3.96	4.00
	12/11/06	9.81	6.00	6.05	0.05	3.76	3.80
	9/25/07	9.81	--	5.15	--	4.66	--
	12/10/07	9.81	3.75	4.02	0.27	5.79	5.99
	6/25/08	9.81	3.46	3.62	0.16	6.19	6.31
	7/21/08	9.81	3.50	3.62	0.12	6.19	6.28
	8/15/08	9.81	3.25	3.42	0.17	6.39	6.52
	9/11/08	9.81	3.05	3.20	0.15	6.61	6.72
	10/8/08	9.81	4.21	4.45	0.24	5.36	5.54
	11/4/08	9.81	4.36	5.30	0.94	4.51	5.21
	12/15/08	9.81	3.31	3.90	0.59	5.91	6.35
	1/14/09	9.81	6.15	6.24	0.09	3.57	3.64

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AU (continued)	2/12/09	9.81	5.81	5.83	0.02	3.98	3.99
	3/9/09	9.81	--	7.20	--	2.61	--
	3/30/09	9.81	6.78	6.80	0.02	3.01	3.02
	5/28/09	9.81	5.55	5.90	0.35	3.91	4.17
	6/1/09	9.81	4.76	4.81	0.05	5.00	5.04
	6/30/09	9.81	4.65	4.67	0.02	5.14	5.15
	7/28/09	9.81	5.65	5.71	0.06	4.10	4.14
	8/24/09	9.81	3.23	3.24	0.01	6.57	6.58
	9/17/09	9.81	4.25	4.27	0.02	5.54	5.55
	10/13/09	9.81	6.17	6.20	0.03	3.61	3.63
	11/6/09	9.81	5.07	5.46	0.39	4.35	4.64
	12/7/09	9.81	4.55	4.61	0.06	5.20	5.24
	1/27/10	9.81	4.61	4.64	0.03	5.17	5.19
	2/25/10	9.81	3.36	3.38	0.02	6.43	6.44
	4/23/10	9.81	5.15	5.17	0.02	4.64	4.65
	5/21/10	9.81	4.25	4.26	0.01	5.55	5.56
	6/22/10	9.81	6.01	6.10	0.09	3.71	3.78
	12/14/10	9.81	5.68	5.72	0.04	4.09	4.12
Well AV	12/07/04	8.82	--	4.85	--	3.97	--
	12/10/04	8.82	--	4.60	--	4.22	--
	12/13/04	8.82	--	4.55	--	4.27	--
	12/22/04	8.82	--	5.11	--	3.71	--
	1/13/05	8.82	--	5.09	--	3.73	--
	2/10/05	8.82	--	4.86	--	3.96	--
	2/23/05	8.82	--	4.69	--	4.13	--
	3/24/05	8.82	--	4.83	--	3.99	--
	4/8/05	8.82	--	4.20	--	4.62	--
	4/26/05	8.82	--	4.72	--	4.10	--
	6/28/05	8.82	--	5.07	--	3.75	--
	7/20/05	8.82	--	4.81	--	4.01	--
	8/17/05	8.82	--	5.10	--	3.72	--
	9/13/05	8.82	--	5.21	--	3.61	--
	10/3/05	8.82	--	5.89	--	2.93	--
	12/15/05	8.82	--	6.14	--	2.68	--
	3/28/06	8.82	--	7.04	--	1.78	--
	6/22/06	8.82	--	5.86	--	2.96	--
	9/26/06	8.82	--	5.44	--	3.38	--
	12/4/06	8.82	--	5.28	--	3.54	--
	3/6/07	8.82	--	6.07	--	2.75	--
	6/12/07	8.82	--	4.90	--	3.92	--
	9/25/07	8.82	--	6.21	--	2.61	--
	12/10/07	8.82	--	5.88	--	2.94	--
	6/26/08	8.82	--	4.63	--	4.19	--
	12/15/08	8.82	--	5.17	--	3.65	--
	6/1/09	8.82	--	4.67	--	4.15	--
	12/7/09	8.82	--	3.70	--	5.12	--
	6/22/10	8.82	--	4.80	--	4.02	--
	12/14/10	8.82	--	4.50	--	4.32	--

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AW	12/07/04	9.16	4.14	4.17	0.03	4.99	5.01
	12/10/04	9.16	3.71	5.83	2.12	3.33	4.90
	12/13/04	9.16	3.99	7.06	3.07	2.10	4.37
	12/22/04*	10.10	6.06	6.16	0.10	3.94	4.01
	12/27/04*	10.10	6.70	6.75	0.05	3.35	3.39
	1/3/05*	10.10	6.30	6.50	0.20	3.60	3.75
	1/10/05*	10.10	5.90	6.00	0.10	4.10	4.17
	1/13/05*	10.10	6.95	7.01	0.06	3.09	3.13
	1/27/05	9.16	5.37	6.12	0.75	3.04	3.60
	2/10/05	9.16	5.11	6.11	1.00	3.05	3.79
	2/23/05	9.16	4.78	6.11	1.33	3.05	4.03
	3/24/05	9.16	4.44	6.25	1.81	2.91	4.25
	4/8/05	9.16	3.66	6.05	2.39	3.11	4.88
	4/26/05	9.16	4.72	6.85	2.13	2.31	3.89
	6/28/05	9.16	5.31	7.29	1.98	1.87	3.34
	7/20/05	9.16	4.78	6.84	2.06	2.32	3.84
	8/17/05	9.16	4.69	6.33	1.64	2.83	4.04
	9/9/05	9.16	5.40	7.20	1.80	1.96	3.29
	9/13/05	9.16	5.57	7.41	1.84	1.75	3.11
	10/3/05	9.16	6.12	7.49	1.37	1.67	2.68
	12/12/05	9.16	5.90	6.90	1.00	2.26	3.00
	12/15/005	9.16	5.92	6.97	1.05	2.19	2.97
	2/17/06	9.16	5.70	5.90	0.20	3.26	3.41
	3/3/06	9.16	6.25	7.00	0.75	2.16	2.72
	3/10/06	9.16	6.40	7.05	0.65	2.11	2.59
	3/28/06	9.16	7.01	7.65	0.64	1.51	1.98
	5/15/06	9.16	7.50	7.85	0.35	1.31	1.57
	6/22/06	9.16	5.90	6.15	0.25	3.01	3.20
	8/21/06	9.16	5.80	6.45	0.65	2.71	3.19
	12/4/06	9.16	5.97	6.41	0.44	2.75	3.08
	3/6/07	9.16	7.00	7.02	0.02	2.14	2.15
	6/12/07	9.16	6.13	6.51	0.38	2.65	2.93
	9/25/07	9.16	6.72	6.87	0.15	2.29	2.40
	12/10/07	9.16	6.30	6.40	0.10	2.76	2.83
	6/25/08	9.16	5.61	6.61	1.00	2.55	3.29
	7/21/08	9.16	6.65	7.71	1.06	1.45	2.23
	8/15/08	9.16	6.35	7.25	0.90	1.91	2.58
	9/11/08	9.16	6.08	6.81	0.73	2.35	2.89
	10/8/08	9.16	6.78	6.90	0.12	2.26	2.35
	11/4/08	9.16	7.16	7.21	0.05	1.95	1.99
	12/15/08	9.16	6.42	6.45	0.03	2.71	2.73
	1/14/09	9.16	5.70	5.80	0.10	3.36	3.43
	2/12/09	9.16	--	6.71	--	2.45	--
	3/9/09	9.16	--	6.85	--	2.31	--
	3/30/09	9.16	--	6.81	--	2.35	--
	5/28/09	9.16	5.54	5.75	0.21	3.41	3.57
	6/1/09	9.16	5.51	5.62	0.11	3.54	3.62
	6/30/09	9.16	4.81	5.25	0.44	3.91	4.24
	9/17/09	9.16	4.22	4.41	0.19	4.75	4.89
	10/13/09	9.16	5.36	6.19	0.83	2.97	3.58
	11/6/09	9.16	5.00	5.65	0.65	3.51	3.99
	12/7/09	9.16	4.15	4.70	0.55	4.46	4.87
	1/27/10	9.16	4.04	4.38	0.34	4.78	5.03
	2/25/10	9.16	2.60	2.76	0.16	6.40	6.52
	4/23/10	9.16	--	5.57	--	3.59	--
	5/21/10	9.16	--	4.10	--	5.06	--
	6/22/10	9.16	5.56	5.57	0.01	3.59	3.60
	12/14/10	9.16	5.79	5.80	0.01	3.36	3.37

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well AY	12/07/04	9.04	--	4.68	--	4.36	--
	12/10/04	9.04	--	4.35	--	4.69	--
	12/13/04	9.04	--	4.43	--	4.61	--
	12/22/04	9.04	--	5.13	--	3.91	--
	1/13/05	9.04	--	5.08	--	3.96	--
	1/27/05	9.04	--	5.29	--	3.75	--
	2/23/05	9.04	--	4.82	--	4.22	--
	3/24/05	9.04	--	4.82	--	4.22	--
	4/8/05	9.04	--	4.03	--	5.01	--
	4/26/05	9.04	--	4.77	--	4.27	--
	6/28/05	9.04	--	5.51	--	3.53	--
	7/20/05	9.04	--	5.04	--	4.00	--
	8/17/05	9.04	--	5.10	--	3.94	--
	9/13/05	9.04	--	5.57	--	3.47	--
	10/3/05	9.04	--	6.18	--	2.86	--
	12/15/05	9.04	--	6.12	--	2.92	--
	3/28/06	9.04	--	6.76	--	2.28	--
	6/23/06	9.04	--	5.97	--	3.07	--
	9/26/06	9.04	--	5.58	--	3.46	--
	12/4/06	9.04	--	5.35	--	3.69	--
	3/6/07	9.04	--	6.84	--	2.20	--
	6/12/07	9.04	--	5.32	--	3.72	--
	9/25/07	9.04	--	6.51	--	2.53	--
	12/10/07	9.04	--	6.34	--	2.70	--
	6/26/08	9.04	--	6.95	--	2.09	--
	12/15/08	9.04	--	6.57	--	2.47	--
	6/1/09	9.04	--	5.95	--	3.09	--
	12/7/09	9.04	--	4.07	--	4.97	--
	6/22/10	9.04	--	5.76	--	3.28	--
	12/14/10	9.04	--	5.35	--	3.69	--
Well AZ	12/07/04	8.66	--	4.45	--	4.21	--
	12/10/04	8.66	--	4.09	--	4.57	--
	12/13/04	8.66	--	4.08	--	4.58	--
	12/22/04	8.66	--	4.69	--	3.97	--
	1/13/05	8.66	--	4.70	--	3.96	--
	1/27/05	8.66	--	4.91	--	3.75	--
	2/10/05	8.66	--	4.69	--	3.97	--
	2/23/05	8.66	--	4.46	--	4.20	--
	3/24/2005**	8.66	4.66	4.75	0.09	3.91	3.98
	4/8/05	8.66	--	3.78	--	4.88	--
	4/26/05	8.66	--	4.74	--	3.92	--
	6/28/05	8.66	--	5.42	--	3.24	--
	7/20/05	8.66	--	5.10	--	3.56	--
	8/17/05	8.66	--	5.41	--	3.25	--
	9/13/05	8.66	--	5.46	--	3.20	--
	10/3/05	8.66	--	6.11	--	2.55	--
	12/15/05	8.66	--	6.05	--	2.61	--
	3/28/06	8.66	--	6.59	--	2.07	--
	6/22/2006	8.66	--	5.99	--	2.67	--
	9/26/2006	8.66	--	5.66	--	3.00	--
	12/4/2006	8.66	--	5.21	--	3.45	--
	1/2/2007	8.66	--	5.51	--	3.15	--
	3/6/07	8.66	--	6.09	--	2.57	--
	6/12/07	8.66	--	5.20	--	3.46	--
	9/25/07	8.66	--	6.31	--	2.35	--
	12/10/07	8.66	--	6.50	--	2.16	--
	6/26/08	8.66	--	4.62	--	4.04	--
	12/15/08	8.66	--	5.16	--	3.50	--
	6/1/09	8.66	--	4.85	--	3.81	--
	12/7/09	8.66	--	4.23	--	4.43	--
	6/22/10	8.66	--	5.55	--	3.11	--
	12/14/10	8.66	--	5.50	--	3.16	--

Notes: See Last Page for Notes.

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Table 03. Groundwater Elevations and Product Thickness, PSEG Salem Generating Station, Hancock's Bridge, New Jersey

Well Identification	Date of Measurement	Reference Point Elevation (NGVD 1988)	Depth to Product (ft btoc)	Depth to Water (ft btoc)	Product Thickness (feet)	Water-Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)
Well BV	3/6/07	8.85	--	5.95	--	2.90	--
	6/12/07	8.85	--	5.12	--	3.73	--
	9/25/07	8.85	--	6.23	--	2.62	--
	12/10/07	8.85	--	6.00	--	2.85	--
	6/26/08	8.85	--	4.66	--	4.19	--
	12/15/08	8.85	--	5.33	--	3.52	--
	6/1/09	8.85	--	4.74	--	4.11	--
	12/7/09	8.85	--	4.21	--	4.64	--
	6/22/10	8.85	--	5.45	--	3.40	--
	12/14/10	8.85	--	5.25	--	3.60	--
Well CG	1/21/11	8.95	--	5.17	--	3.78	--
	2/17/11	8.95	--	5.24	--	3.71	--

--	Separate-phase product was not detected in well at time of measurement.
NM	Measurement not collected.
NAVD 1988	North American Vertical Datum established in 1988.
ft btoc	Feet below the top of the well casing.
ft amsl	Feet above mean sea level (NAVD 1988).
*	A PVC riser was added to top of wellhead to facilitate installation of Spillbuster unit, accounting for change in wellhead elevation
**	Due to the operation of a groundwater extraction well (Well AO) in the vicinity of Well AZ, separate-phase product migrated in the direction of this well. Following the detection of separate-phase product in Well AZ, groundwater extraction from Well AO was discontinued.

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Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AV													
	Sample Date	12/13/2004	3/15/2005		8/17/2005		10/4/2005	3/28/2006		6/22/2006		9/27/2006		12/4/2006	
	Sample Type Code	N	FD	N	FD	N	N	FD	N	FD	N	FD	N	FD	N
	GWQC (ug/L)														
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**7.9 J**	**7.9 J**	< 10	< 10	< 10	< 10
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5	< 5
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5	< 5
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**11.8**	**8.1 J**	< 10	< 10	< 10	< 10
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4	< 4	< 4	< 4
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2	< 2
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2	< 2
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2	< 2
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5	< 5
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	< 1
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1	**0.43**

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AV													
	Sample Date	9/26/2007		12/11/2007		6/26/2008		12/16/2008		6/2/2009		6/24/2010		12/15/2010	
	Sample Type Code	FD	N	FD	N	FD	N	N	FD	FD	N	FD	N	FD	N
	GWQC (ug/L)														
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	**0.26 J**	**0.25 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AY															
	Sample Date	12/13/2004	7/21/2005	10/4/2005	3/29/2006	6/23/2006	9/27/2006	12/5/2006	9/27/2007	12/12/2007	6/27/2008	12/17/2008	6/3/2009	12/8/2009	12/8/2009	6/24/2010	1/21/2011
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
	GWQC (ug/L)																
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.4**	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4	< 4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	**2**	< 1 U	< 1	< 1	< 1 U	**2**	< 1 U	**1.2**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	**1.2**	< 1 U	< 1	< 1	< 1 U	**2.7**	< 1 U	**2.5**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AZ														
	Sample Date	12/10/2004	8/17/2005	10/4/2005	3/28/2006	6/22/2006	9/27/2006	12/5/2006	9/26/2007	12/11/2007	6/26/2008	12/16/2008	6/2/2009	6/2/2009	6/23/2010	12/15/2010
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)															
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	**0.42 J**	< 1 U	< 1 U	< 1 U	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4	< 4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-BV							Well - CG		WELL-X		
	Sample Date	12/8/2009	12/12/2007	6/26/2008	12/17/2008	6/2/2009	6/23/2010	1/21/2011	1/21/2011	2/17/2011	12/13/2004		3/15/2005
	Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N	N
	GWQC (ug/L)												
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	NA	NA	NA
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**6.7 J**	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Benzene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**1.1**	**0.34 J**	< 1 U	< 1 U	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.4**	< 1 U	< 1 U	< 1 U	**0.83 J**
Methylene chloride	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**0.87 J**	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**1.3**	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 4. Summary of Historic Groundwater Analytical Results, Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-X										
	Sample Date	7/21/2005	10/4/2005	9/27/2006	12/5/2006	12/12/2007	6/27/2008	12/16/2008	6/3/2009	12/8/2009	6/23/2010	1/21/2011
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)											
1,1,1-Trichloroethane	30	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	3	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	50	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	2	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethene (total)	---	NA	NA	NA	NA	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	300	< 10 U	< 10 U	< 10	< 10	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	---	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
4-Methyl-2-pentanone(MIBK)	---	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Acetone	6000	< 10 U	< 10 U	< 10	< 10	< 10 U	**44.8**	< 10 U	**15.2**	< 10 U	< 10 U	< 10 U
Benzene	1	**2.3**	< 1 U	**10.2**	**6.9**	**5.2**	**0.92 J**	< 1 U	**0.38 J**	< 1 U	**0.39 J**	< 1 U
Bromodichloromethane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	4	< 4 U	< 4 U	< 4	< 4	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
Bromomethane	10	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon disulfide	700	< 2 U	< 2 U	< 2	< 2	**1.2 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Carbon tetrachloride	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	50	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	---	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	70	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	---	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	70	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dibromochloromethane	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	700	< 1 U	< 1 U	< 1	**0.58**	**0.94 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene chloride	3	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
Styrene	100	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Tetrachloroethene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	1000	< 1 U	< 1 U	< 1	< 1	< 1 U	**0.41 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	100	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	1	< 1 U	< 1 U	< 1	< 1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylene (total)	1000	< 1 U	< 1 U	< 1	**1**	**1.4**	< 1 U	< 1 U	< 1 U	**0.54 J**	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers
ug/L	Micrograms per liter (equivalent to parts per billion)
2.3	Bold value indicates concentration is above the method detection limit.
2.3	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
--	No standard published
NA	Not analyzed
N	Parent environmental sample
FD	Blind duplicate

Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AV																							
	Sample Date	12/13/2004	3/15/2005		8/17/2005		10/4/2005	1/3/2006	3/28/2006		6/22/2006		9/27/2006		12/4/2006		9/26/2007		12/11/2007		6/26/2008		12/16/2008	
	Sample Type Code	N	FD	N	FD	N	N	N	FD	N	FD	N	FD	N	FD	N	FD	N	FD	N	FD	N	N	FD
	GWQC (ug/L)																								
1,2,4-Trichlorobenzene	9	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
1,2-Dichlorobenzene	600	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
1,3-Dichlorobenzene	600	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
1,4-Dichlorobenzene	75	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2,4,5-Trichlorophenol	700	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4,6-Trichlorophenol	20	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4-Dichlorophenol	20	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4-Dimethylphenol	100	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2,4-Dinitrophenol	40	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U
2,4-Dinitrotoluene	10	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2,6-Dinitrotoluene	10	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2-Chloronaphthalene	600	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2-Chlorophenol	40	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2-Methylnaphthalene	---	**1.8 J**	**2.3**	**2**	**7.6**	**8**	**4.6**	**2**	**1.2 J**	**0.84 J**	< 2 U	< 2.1 U	**2.7**	**2.2**	**1.2**	**1.3**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**1 J**	< 2.1 U	< 2.1 U
2-Methylphenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
2-Nitroaniline	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
2-Nitrophenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
3&4-Methylphenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	**6.7**	**9.1**	< 2.1 U	< 2.1 U
3,3'-Dichlorobenzidine	30	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
3-Nitroaniline	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4,6-Dinitro-o-cresol	---	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U
4-Bromophenyl phenyl ether	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
4-Chloro-3-methyl phenol	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4-Chloroaniline	30	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4-Chlorophenyl phenyl ether	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
4-Nitroaniline	---	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
4-Nitrophenol	---	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 11 U
Acenaphthene	400	**0.64 J**	**5.1**	**5**	**1.7 J**	**1.8 J**	**1.5 J**	**1.1 J**	**3.3**	**2.4**	**2.5**	**2.3**	**1.3**	**1.1**	**0.93**	**1.1**	**1.1 J**	**1.1 J**	< 2 U	< 2 U	**0.62 J**	**0.44 J**	< 1 U	< 1.1 U
Acenaphthylene	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Anthracene	2000	< 2.2 U	**0.97 J**	**0.95 J**	< 2 U	< 2 U	**0.54 J**	**0.53 J**	**1.1 J**	**0.92 J**	**0.62 J**	**0.5 J**	**0.54**	**0.44**	< 2	< 2	**0.61 J**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(a)anthracene	0.1	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	0.43	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(a)pyrene	0.1	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(b)fluoranthene	0.2	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(g,h,i)perylene	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Benzo(k)fluoranthene	0.5	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
bis(2-Chloroethoxy)methane	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
bis(2-Chloroethyl)ether	7	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
bis(2-Chloroisopropyl)ether	300	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
bis(2-Ethylhexyl)phthalate	3	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**1 J**	< 2 U	**1.1 J**	< 2 U	< 2.1 U	< 2	< 2	**1.1**	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**1.8 J**	< 2.1 U	**1.4 J**
Butyl benzyl phthalate	100	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Carbazole	---	< 2.2 U	**10**	**9.9**	< 2 U	< 2 U	< 2 U	< 2 U	**1.2 J**	**0.87 J**	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Chrysene	5	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	**0.42**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Dibenzo(a,h)anthracene	0.3	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Dibenzofuran	---	**0.71 J**	**2.7 J**	**2.7 J**	**2.1 J**	**2.2 J**	**1.3 J**	**1.1 J**	**2 J**	**1.7 J**	**2 J**	**1.8 J**	< 5	< 5	**0.97**	**0.93**	**0.97 J**	**0.95 J**	**0.66 J**	**0.56 J**	**0.89 J**	**0.76 J**	< 5.2 U	< 5.3 U
Diethyl phthalate	6000	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Dimethyl phthalate	---	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Di-n-butyl phthalate	700	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Di-n-octyl phthalate	100	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Fluoranthene	300	**1 J**	**1.4 J**	**1.4 J**	**0.84 J**	**0.86 J**	**1.2 J**	**0.96 J**	**1.1 J**	**1.1 J**	**1.2 J**	**1.2 J**	**1.1**	**1.1**	**0.88**	**1.1**	**2.7**	**3**	< 2 U	< 2 U	< 2 U	**0.36 J**	< 1 U	< 1.1 U
Fluorene	300	**1.4 J**	**4.7**	**4.4**	**3.3**	**3.5**	**2.4**	**2**	**3**	**2.4**	**3.5**	**3.1**	**2.6**	**2.4**	**2.3**	**2**	**2.3**	**2**	**0.99 J**	**0.81 J**	**1.6 J**	**1.6 J**	< 1 U	< 1.1 U
Hexachlorobenzene	0.02	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Hexachlorobutadiene	1	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Hexachlorocyclopentadiene	40	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 21 U
Hexachloroethane	7	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
Indeno(1,2,3-cd)pyrene	.2	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1.1 U
Isophorone	40	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Naphthalene	300	**3.9**	**4.6**	**4.3**	**5.5**	**5.6**	**3.1**	**2.3**	**1.3 J**	**1.2 J**	**1.8 J**	**1.6 J**	**2.5**	**2.1**	**1.9**	**2**	**0.44 J**	< 2 U	**0.68 J**	**0.61 J**	**0.89 J**	**1.3 J**	< 1 U	< 1.1 U
Nitrobenzene	6	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
N-Nitroso-di-n-propylamine	10	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2	< 2	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
N-Nitrosodiphenylamine	10	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.3 U
Pentachlorophenol	0.3	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20	< 20	< 20	< 20	< 20 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U
Phenanthrene	---	< 2.2 U	**5.6**	**5.3**	**2.3**	**2.5**	**2.7**	**1 J**	**1.9 J**	**1.7 J**	**1.3 J**	**1.2 J**	**0.86**	**0.75**	**0.68**	**0.69**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**0.62 J**	< 1 U	< 1.1 U
Phenol	2000	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5	< 5	< 5	< 5	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 2.1 U	< 2.1 U
Pyrene	200	**0.96 J**	**0.97 J**	**0.94 J**	**0.74 J**	**0.74 J**	**1 J**	**1 J**	**0.64 J**	**0.65 J**	**1.4 J**	**1.3 J**	**0.99**	**1**	**0.63**	**0.86**	**2.1**	**2.4**	**0.42 J**	**0.41 J**	< 2 U	**0.46 J**	< 1 U	< 1.1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-005558

Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AY																							
	Sample Date	6/2/2009		6/24/2010		12/15/2010		12/13/2004	3/15/2005	7/21/2005	10/4/2005	3/29/2006	6/23/2006	9/27/2006	12/5/2006	9/27/2007	12/12/2007	6/27/2008	12/17/2008	6/3/2009	12/8/2009		6/24/2010	1/21/2011
	Sample Type Code	FD	N	FD	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
	GWQC (ug/L)																							
1,2,4-Trichlorobenzene	9	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
2,4,5-Trichlorophenol	700	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4,6-Trichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dimethylphenol	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U
2,4-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2,6-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 5 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 2 U	< 2 U
2-Chlorophenol	40	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Methylnaphthalene	---	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
2-Methylphenol	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Nitrophenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3&4-Methylphenol	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4,6-Dinitro-o-cresol	---	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Chloro-3-methyl phenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chloroaniline	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Nitrophenol	---	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Acenaphthene	400	**0.58 J**	**0.4 J**	**0.54 J**	**0.44 J**	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Acenaphthylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Anthracene	2000	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)anthracene	0.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)pyrene	0.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(b)fluoranthene	0.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(k)fluoranthene	0.5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	**2.7**	**1.3 J**	< 2 U	**2.2**	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Carbazole	---	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
Chrysene	5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzo(a,h)anthracene	0.3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzofuran	---	**0.64 J**	**0.45 J**	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	**8.7**
Dimethyl phthalate	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	**2.4**	< 2 U	< 2.1 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	**1.5 J**
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Fluoranthene	300	**0.39 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Fluorene	300	**1.2**	**0.88 J**	**0.87 J**	**0.77 J**	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorobenzene	0.02	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 1 U	< 1 U
Hexachlorobutadiene	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U
Hexachloroethane	7	< 5 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Isophorone	40	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Naphthalene	300	**0.67 J**	**0.5 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Pentachlorophenol	0.3	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 21 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 22 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Phenanthrene	---	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Phenol	2000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1	< 5	< 5 U	< 5.5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Pyrene	200	**0.47 J**	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-005559

Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	WELL-AZ															WELL-BV							
	Sample Date	12/10/2004	8/17/2005	10/4/2005	3/28/2006	6/22/2006	9/27/2006	12/5/2006	9/26/2007	12/11/2007	6/26/2008	12/16/2008	6/2/2009	12/8/2009	6/23/2010	12/15/2010	9/27/2007	12/12/2007	6/26/2008	12/17/2008	6/2/2009	12/8/2009	6/23/2010	1/21/2011
	Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)																							
1,2,4-Trichlorobenzene	9	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
2,4,5-Trichlorophenol	700	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4,6-Trichlorophenol	20	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4-Dichlorophenol	20	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4-Dimethylphenol	100	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U	< 20 U
2,4-Dinitrotoluene	10	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
2,6-Dinitrotoluene	10	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 2 U	< 2 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 2 U	< 2 U
2-Chlorophenol	40	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2-Methylnaphthalene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
2-Methylphenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 5 U	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
2-Nitroaniline	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
2-Nitrophenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
3&4-Methylphenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 5 U	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4,6-Dinitro-o-cresol	---	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U	< 20 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
4-Chloro-3-methyl phenol	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4-Chloroaniline	30	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
4-Nitrophenol	---	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Acenaphthene	400	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Acenaphthylene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Anthracene	2000	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)anthracene	0.1	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)pyrene	0.1	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(b)fluoranthene	0.2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(k)fluoranthene	0.5	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	**1.3**	< 2	< 2 U	< 2 U	< 2 U	**1.4 J**	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Carbazole	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
Chrysene	5	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzo(a,h)anthracene	0.3	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzofuran	---	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Dimethyl phthalate	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Fluoranthene	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	**0.24 J**	< 1.1 U	< 1 U	< 1 U
Fluorene	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorobenzene	0.02	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 1 U	< 1 U
Hexachlorobutadiene	1	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 20 U	< 22 U	< 20 U	< 22 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 21 U	< 20 U	< 22 U	< 20 U	< 20 U
Hexachloroethane	7	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 2 U	< 2 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	.2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Isophorone	40	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Naphthalene	300	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 5 U	< 5.4 U	< 5.1 U	< 5.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	< 5 U	< 5 U
Pentachlorophenol	0.3	< 20 U	< 20 U	< 21 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 20 U	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Phenanthrene	---	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Phenol	2000	< 5 U	< 5.1 U	< 5.2 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5.1 U	< 2 U	< 2.2 U	< 2 U	< 2.2 U	< 2 U	< 2 U	< 5 U	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.2 U	< 2 U	< 2 U
Pyrene	200	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 1 U	**0.25 J**	< 1.1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-005560

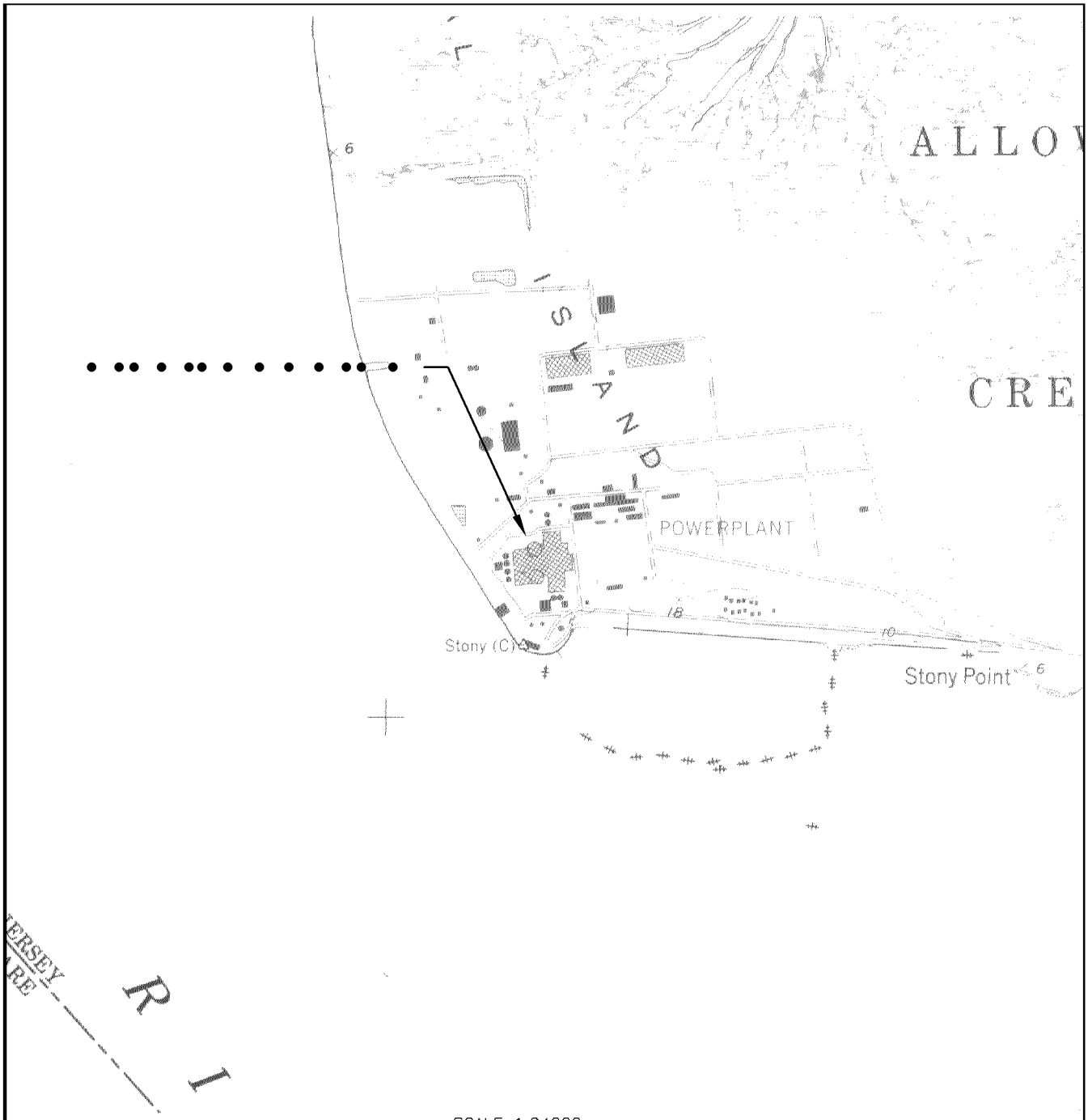
Table 5. Summary of Historic Groundwater Analytical Results, Semi-Volatile Organic Compounds
PSEG Nuclear, LLC, Salem Generating Station, Hancock's Bridge, New Jersey

Constituent of Concern	Location ID	Well CG		WELL-X													
	Sample Date	1/21/2011	2/17/2011	12/13/2004		3/15/2005	7/21/2005	10/4/2005	9/27/2006	12/5/2006	12/12/2007	6/27/2008	12/16/2008	6/3/2009	12/8/2009	6/23/2010	1/21/2011
	Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
	GWQC (ug/L)																
1,2,4-Trichlorobenzene	9	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,2-Dichlorobenzene	600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	600	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	75	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
2,4,5-Trichlorophenol	700	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4,6-Trichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dichlorophenol	20	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dimethylphenol	100	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2,4-Dinitrophenol	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U
2,4-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2,6-Dinitrotoluene	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Chloronaphthalene	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 2 U	< 2 U
2-Chlorophenol	40	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Methylnaphthalene	---	**0.84 J**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	**1.7 J**	< 2 U	< 2.1 U	< 2 U	**1.9 J**	< 1 U	< 1 U
2-Methylphenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
2-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
2-Nitrophenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3&4-Methylphenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	**4.4 J**	**25.4**	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
3,3'-Dichlorobenzidine	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
3-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4,6-Dinitro-o-cresol	---	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U
4-Bromophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Chloro-3-methyl phenol	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chloroaniline	30	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Chlorophenyl phenyl ether	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
4-Nitroaniline	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
4-Nitrophenol	---	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Acenaphthene	400	**0.33**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	**1.6**	< 2 U	< 2 U	< 1 U	< 1 U	**0.64 J**	< 1 U	< 1 U
Acenaphthylene	---	< 2 U	**0.442**	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Anthracene	2000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	**0.73 J**	< 1 U	< 1 U
Benzo(a)anthracene	0.1	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(a)pyrene	0.1	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(b)fluoranthene	0.2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(g,h,i)perylene	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Benzo(k)fluoranthene	0.5	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
bis(2-Chloroethoxy)methane	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroethyl)ether	7	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Chloroisopropyl)ether	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
bis(2-Ethylhexyl)phthalate	3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	**2 J**	< 2 U	< 2.1 U	< 2 U	< 2 U
Butyl benzyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Carbazole	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	**0.51 J**	< 1 U	< 1 U
Chrysene	5	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzo(a,h)anthracene	0.3	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Dibenzofuran	---	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Diethyl phthalate	6000	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Dimethyl phthalate	---	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Di-n-butyl phthalate	700	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Di-n-octyl phthalate	100	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Fluoranthene	300	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Fluorene	300	**0.203**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	**0.74 J**	< 2	< 2	**0.38 J**	< 2 U	< 1 U	**0.42 J**	**0.81 J**	< 1 U	< 1 U
Hexachlorobenzene	0.02	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 1 U	< 1 U
Hexachlorobutadiene	1	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Hexachlorocyclopentadiene	40	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 20 U	< 21 U	< 20 U	< 21 U	< 20 U	< 20 U
Hexachloroethane	7	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 2 U	< 2 U
Indeno(1,2,3-cd)pyrene	.2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U
Isophorone	40	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
Naphthalene	300	**2.13**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	**1.5**	**0.85 J**	< 2 U	< 1 U	**0.89 J**	< 1.1 U	< 1 U	< 1 U
Nitrobenzene	6	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitroso-di-n-propylamine	10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 2.1 U	< 2 U	< 2.1 U	< 2 U	< 2 U
N-Nitrosodiphenylamine	10	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 5 U	< 5.2 U	< 5 U	< 5.3 U	< 5 U	< 5 U
Pentachlorophenol	0.3	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20	< 20	< 20 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U
Phenanthrene	---	**0.11**	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	**1.3**	< 1 U	< 1 U
Phenol	2000	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5	< 5	< 5 U	< 2 U	< 2.1 U	< 2 U	**3.2**	< 2 U	< 2 U
Pyrene	200	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2	< 2	< 2 U	< 2 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U

Notes:

GWQC	New Jersey Groundwater Quality Criteria for Class IIA aquifers.
ug/L	Micrograms per liter (equivalent to parts per billion)
5.0	Bold value indicates concentration is above the method detection limit.
27.0	Bold and shaded concentrations are above the applicable New Jersey Groundwater Quality Criteria for Class IIA aquifers.
U	The compound was not detected at the indicated concentration.
J	Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.
---	No standard published
N	Parent environmental sample
FD	Blind duplicate

SII-SSA-0014-005561



SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

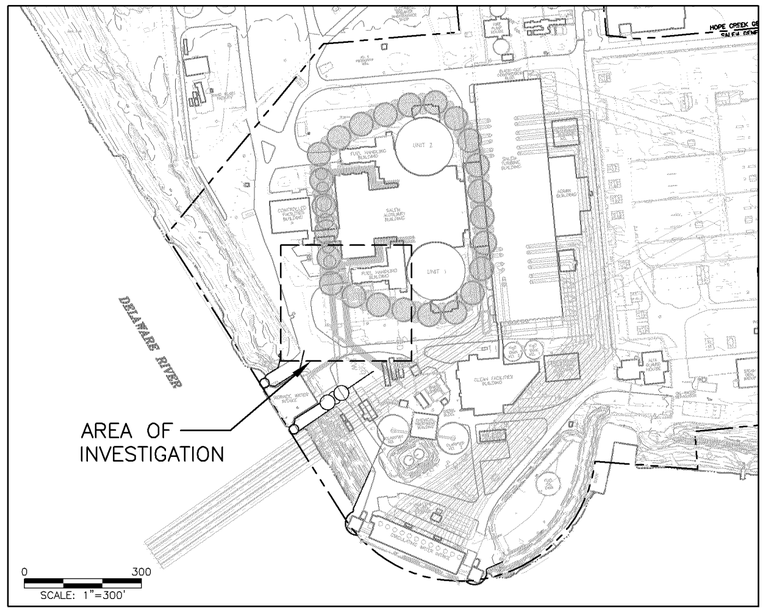
PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
REMEDIAL ACTION PROGRESS REPORT

SITE LOCATION

ARCADIS

FIGURE
1

CITY: Newtown_Pa DIV/GROUP: Env. DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(Opt)ON='QFF*REF*
G:\APROJECTIPSE&GNP000603 - Salem - Diesel\NP000603.0007\Task 2 - RAPR\Sept. 2009\Draft\Figures\Figure 01 - Station Location.dwg LAYOUT: 1 SAVED: 9/3/2009 7:16 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 11/11/2009 11:36
AM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
taylors bridge.jpg



SITE LAYOUT
SCALE: 1"=300'

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
WELL–AU
HEAVY HAUL PATH
WELL–X
WELL–AW
FUEL HANDLING BUILDING
WELL–AV
LIMITS OF COFFERDAM
WELL–AY
Well AI
WELL–CG
WELL BV
Well AO
WELL–AZ
N

LEGEND:

WELL–AZ — MONITORING WELL UTILIZED IN THE DIESEL INVESTIGATION AND SCREENED ACROSS THE WATER TABLE.

WELL AO — MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.

- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST AUXILIARY FEEDWATER STORAGE TANK
- PWST PRIMARY WATER STORAGE TANK

NOTE:

1. PUMPING AT WELL AO WILL BE PERMANENTLY SUSPENDED.

0 20 20
SCALE: 1"=20'

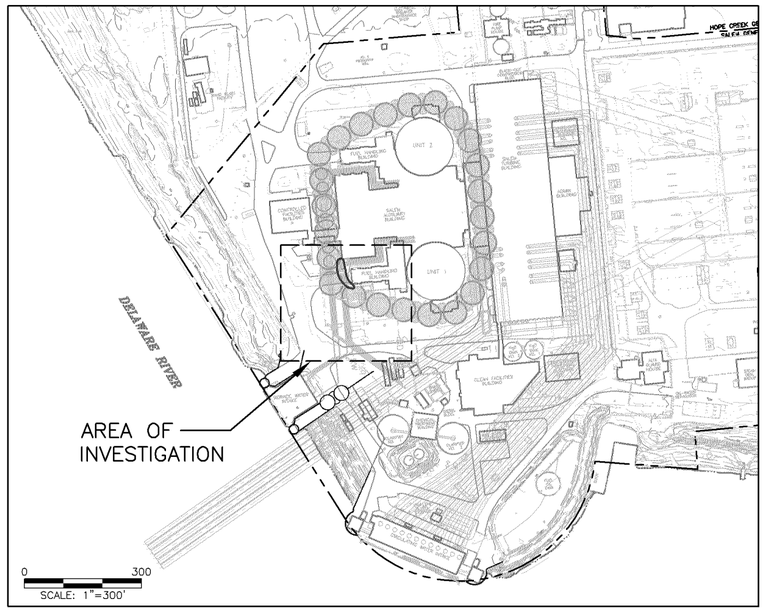
PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
REMEDIAL ACTION PROGRESS REPORT

STATION LAYOUT

ARCADIS

FIGURE **2**

CITY: Newtown, Pa DIV/GROUP: Env DB: M.Wasilewski LD: M.Wasilewski PIC: J.Balletto PM: B.Pierce TM: B.Pierce LYR:(On)(On)=OFF=*REF*
G:\ENVCADD\Newtown\ACTIVE\100603001\100002\Figure 02- STATION LAYOUT.dwg LAYOUT: 2 SAVED: 5/24/2011 4:49 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 8/13/2011 2:27 PM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME:
AGM-BASE_12-01-04

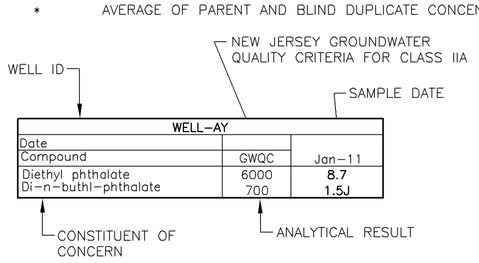


SITE LAYOUT

SCALE: 1"=300'

LEGEND:

- WELL-AZ ⊗ — MONITORING WELL UTILIZED IN THE DIESEL INVESTIGATION AND SCREENED ACROSS THE WATER TABLE.
- WELL AO ▣ — MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.
- APPROXIMATE EXTENT OF SEPERATE – PHASE DIESEL FUEL
- DIESEL FUEL UNDERGROUND PIPING
- PROPERTY BOUNDARY
- BD — BLOW DOWN PIPING
- RW — LIQUID "RAD" WASTE LINE
- SERVICE WATER PIPING
- CIRCULATING WATER OUTLET PIPING
- CIRCULATING WATER INLET PIPING
- ST — STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- SHEET PILE
- AFST — AUXILIARY FEEDWATER STORAGE TANK
- PWST — PRIMARY WATER STORAGE TANK
- GWQC — NEW JERSEY GROUND WATER QUALITY CRITERIA FOR CLASS IIA AQUIFERS
- NS — NO STANDARD
- J — ESTIMATED VALUE
- 1.1 — BOLD AND GRAY-SHADED VALUES ARE ABOVE THEIR RESPECTIVE GWQC.
- -- — NO GROUNDWATER QUALITY CRITERIA AVAILABLE
- * — AVERAGE OF PARENT AND BLIND DUPLICATE CONCENTRATION



NOTES:

1. PRIOR TO INITIATING GROUNDWATER SAMPLE COLLECTION, DEPTH-TO-WATER AND SEPARATE PHASE PRODUCT THICKNESS MEASUREMENTS WERE COLLECTED FROM THE INDIVIDUAL WELLS USING AN ELECTRONIC OIL-WATER INTERFACE PROBE.
2. MONITORING WELLS NOT INDICATING A MEASURABLE THICKNESS OF SEPARATE PRODUCT (I.E., GREATER THAN 0.01 FEET) WERE SAMPLED UTILIZING LOW-FLOW SAMPLING METHODS.
3. GROUNDWATER SAMPLES WERE ANALYZED FOR PRIORITY POLLUTANT SEMI-VOLATILE AND VOLATILE ORGANICS INCLUDING A LIBRARY SEARCH.
4. UNITS ARE IN ug/l – MICROGRAMS PER LITER (EQUIVALENT TO PARTS PER BILLION) CONCENTRATIONS ARE ONLY SHOWN FOR THOSE CONSTITUENTS DETECTED ABOVE THE LABORTORY DETECTION LIMITS.
5. WELL AO IS A PUMPING EXTRACTION WELL UTILIZED IN A SEPARATE INVESTIGATION.

AFST
CATCH BASIN 27
APPROXIMATE LIMITS OF EXCAVATION
PWST
HEAVY HAUL PATH
LIMITS OF COFFERDAM
WELL-AU
WELL-AV
WELL-AW
WELL-AY
WELL-X
WELL-CG
WELL BV
WELL AO
WELL-AZ
Well AI
FUEL HANDLING BUILDING

WELL-X	
Date	Jan-11
All constituents below reporting limit	

Well-AV	
Date	Dec-10
All constituents below reporting limit	

WELL-AY		
Date		
Compound	GWQC	Jan-11
Diethyl phthalate	6000	8.7
Di-n-buthl-phthalate	700	1.5J

WELL-BV	
Date	Jan-11
All constituents below reporting limit	

Well-AZ	
Date	Dec-10
All constituents below reporting limit	

WELL-CG			
Date			
Compound	GWQC	Jan-11	Feb-11
Benzene	1	1.1	0.34J
Ethylbenzene	700	2.4	<1U
Xylene (total)	1000	1.3	<1U
2-Methylnapthalene	NS	0.84J	<1U
Acenapthene	400	0.33	<1U
Fluorene	300	0.203	<1U
Napthalene	300	2.13	<1U
Phenanthrene	NS	0.11	<1U
Acenapthylene	NS	<2U	0.442

0 20 20
SCALE: 1"=20'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
REMEDIAL ACTION PROGRESS REPORT

GROUNDWATER MONITORING RESULTS DECEMBER 2010 THROUGH JANUARY 2011

ARCADIS

FIGURE 3

CITY: Newtown, Pa DIV/GROUP: Env DB: M Wasilewski LD: M Wasilewski PIC: J. Ballido PM: B. Pierce TM: B. Pierce LYR:(On)=On*;Off=*REF*
G:\PSEG\Salem\Remedial Action\ACTIVITY\60000\30011\60002\Figure 03 - GROUNDWATER MONITORING RESULTS - DEC 2009.dwg LAYOUT: 3 SAVED: 8/13/2011 2:29 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 8/13/2011 2:29 PM BY: WASILEVSKI, MATT
XREFS: IMAGES: PROJECTNAME: AGM-BASE_12-01-04

ARCADIS

Appendix A

Low-flow Groundwater Sampling Logs

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID AV | Date 12/15/2010

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather cloudy, 25

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3 - 10 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 4.50 | Total Depth (ft-bmp): 10 | Water Column/ Gallons in Well: NA

MP Elevation: 8.82 | Pump Intake (ft-bmp): 8 | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Low Flow

Pump On/Off: 1235/1325 | Volumes Purged: NA | Sampled by: FS

Sample Time: Label 1310, Start 1306, End 1325 | Replicate/ Code No.: VV | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1240	5	220	4.80		4.92	0.069	30	4.18	10.57	160.2	none	none
1245	10	220	4.95		4.73	0.071	22	2.93	10.65	176.0	none	none
1250	15	220	4.96		4.71	0.078	10	2.27	10.65	189.1	none	none
1255	20	220	4.97		5.19	0.080	9	2.25	10.55	175.1	none	none
1300	25	220	4.98		5.20	0.081	9	2.29	10.54	173.8	none	none
1305	30	220	4.99		5.20	0.081	8.2	2.27	10.54	171.2	none	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	6	HCL
SVOC	1 L Amber Glass	4	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID AY | Date 12/17/2010

Project Name/Location PSEG / Hancock's Bridge, NJ | Weather sunny, 23

Measuring Pt. Description: Top-of-Casing | Screen Setting (ft-bmp): 3 - 8 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 6.15 | Total Depth (ft-bmp): 8 | Water Column/ Gallons in Well: N/A

MP Elevation: 9.04 | Pump Intake (ft-bmp): N/A | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Bailer

Pump On/Off: N/A | Volumes Purged: N/A | Sampled by: F. Straker

Sample Time: Label 0855, Start, End | Replicate/ Code No. | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Other
		GRAB SAMPLE W/ BAILER										
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	6	HCL
SVOC	1 L Amber Glass	4	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location: | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: | Key Number To Well:

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID AZ | Date 12/15/2010

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather sunny, 25

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3 - 9 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.55 | Total Depth (ft-bmp): 9 | Water Column/ Gallons in Well: NA

MP Elevation: 8.66 | Pump Intake (ft-bmp): 7.0 | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Low Flow

Pump On/Off: 1010/1059 | Volumes Purged: NA | Sampled by: FS

Sample Time: Label 1050, Start 1046, End 1058 | Replicate/ Code No.: NA | PID Reading (wellhead): | PID Reading (background):

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1015	5	250	5.75		7.15	0.418	100	39.0	12.97	80.4	none	none
1020	10	251	5.75		7.20	0.428	75	7.80	13.06	84.3	none	none
1025	15	252	5.75		7.20	0.428	50	7.80	12.84	85.8	none	none
1030	20	253	5.76		7.21	0.431	37	7.75	12.82	88.0	none	none
1035	25	254	5.76		7.21	0.432	35	7.70	12.87	89.4	none	none
1040	30	255	5.78		7.21	0.432	35	7.70	12.88	89.1	none	none
1045	35	256	5.78		7.21	0.430	33	7.71	12.90	89.3	none	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID BV | Date 1/21/2011

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather sunny, 20's

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3 - 10 | Casing Diameter (in.): 4 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 5.52 | Total Depth (ft-bmp): 9 | Water Column/ Gallons in Well: NA

MP Elevation: 8.85 | Pump Intake (ft-bmp): 7.5 | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Low Flow

Pump On/Off: 1030 | Volumes Purged | Sampled by: R. Miller

Sample Time: Label 1115, Start 1110, End 1115 | Replicate/ Code No.: NA | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1035	5	250	5.77		7.88	0.121	571	11.23	5.57	114.9	grey	none
1040	10	251	5.86		8.03	0.119	542	10.85	5.38	111.8	grey	none
1045	15	252	5.91		8.19	0.117	453	10.33	5.52	105.3	grey	none
1050	20	253	5.99		8.27	0.117	389	10.19	5.43	101.9	grey	none
1055	25	254	6.02		8.32	0.116	356	10.20	5.31	97.0	grey	none
1100	30	255	6.03		8.35	0.115	400	10.21	5.24	94.9	grey	none
1105	35	256	6.02		8.35	0.115	395	10.19	5.27	94.2	grey	none
1110	40	257	6.02		8.35	0.115	412	10.15	5.21	93.9	grey	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID CG | Date 2/17/2011

Project Name/Location PSEG - Diesel, Salem, New Jersey | Weather sunny, 50

Measuring Pt. Description: TOC | Screen Setting (ft-bmp): 3-10 | Casing Diameter (in.): 4 | Well Material: X PVC, ___ SS

Static Water Level (ft-bmp): 5.02 | Total Depth (ft-bmp): 10 | Water Column/ Gallons in Well: NA

MP Elevation: 8.95 | Pump Intake (ft-bmp): 8 | Purge Method (mark one): Centrifugal ___, Submersible X, Bailer ___, Other ___ | Sample Method: Low Flow

Pump On/Off: 1120/1220 | Volumes Purged ___ | Sampled by: FS

Sample Time: Label 1205, Start 1202, End 1218 | Replicate/ Code No. NA | PID Reading (wellhead) ___ | PID Reading (background) ___

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (uS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1125	5	200	5.25		5.61	0.402	110	8.62	16.34	211.4	some	none
1130	10	200	5.30		5.71	0.404	100	7.99	16.46	215.7	some	none
1135	15	200	5.40		5.70	0.406	95	7.94	16.47	218.3	cloudy	none
1140	20	200	5.40		5.70	0.409	80	7.55	16.48	220.4	cloudy	none
1145	25	200	5.45		5.70	0.410	65	7.59	16.52	220.6	cloudy	none
1150	30	200	5.45		5.70	0.411	62	7.54	16.59	221.0	cloudy	none
1155	35	200	5.45		5.70	0.410	59	7.55	16.57	220.6	cloudy	none
1200	40	200	5.45		5.70	0.410	58	7.52	16.53	222.7	cloudy	none
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

ARCADIS

Groundwater Sampling Form

Project No. NP000603.0008.00002 | Well ID X | Date 12/17/2010

Project Name/Location PSEG / Hancock's Bridge, NJ | Weather sunny, 23

Measuring Pt. Description: Top-of-Casing | Screen Setting (ft-bmp): 2 - 10 | Casing Diameter (in.): 1 | Well Material: X PVC, SS

Static Water Level (ft-bmp): 8.15 | Total Depth (ft-bmp): 10 | Water Column/ Gallons in Well: N/A

MP Elevation: 12.00 | Pump Intake (ft-bmp): N/A | Purge Method (mark one): Centrifugal, Submersible X, Bailer, Other | Sample Method: Bailer

Pump On/Off: N/A | Volumes Purged: N/A | Sampled by: F. Straker

Sample Time: Label 0930, Start, End | Replicate/ Code No.: N/A | PID Reading (wellhead) | PID Reading (background)

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Other
		GRAB SAMPLE W/ BAILER										
Notes:												

NR - Not Recorded

Constituents Sampled	Container	Number	Preservative
VOC	40 ML VOA	3	HCL
SVOC	1 L Amber Glass	2	None
only able to collect 1.5L of sample for SVOC bottles			

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Well Information

Well Location: | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: | Key Number To Well:

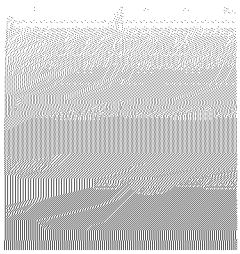
ARCADIS

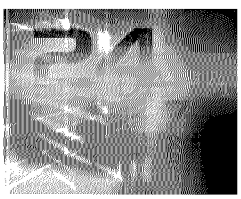
Appendix B

Groundwater Analytical Results
(December 2010)

New Jersey
ACCUTEST
LABORATORIES

01/10/11





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

NP000603.0008

Accutest Job Number: JA64438

Sampling Dates: 12/15/10 - 12/16/10

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **281**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

Arcadis

Job No: JA64438

PSEG-Diesel, Salem, NJ
Project No: NP000603.0008

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA64438-1	12/15/10	10:50	FS	12/17/10	AQ	Ground Water	AZ
JA64438-2	12/15/10	13:10	FS	12/17/10	AQ	Ground Water	AV
JA64438-3	12/15/10	13:30	FS	12/17/10	AQ	Ground Water	VV
JA64438-4	12/15/10	14:30	FS	12/17/10	AQ	Field Blank Water	FB-20101215
JA64438-5	12/16/10	13:55	FS	12/17/10	AQ	Ground Water	CE
JA64438-6	12/16/10	14:40	FS	12/17/10	AQ	Field Blank Water	FB-20101216
JA64438-7	12/16/10	14:40	FS	12/17/10	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA64438
Site:	PSEG-Diesel, Salem, NJ	**Report Date**	1/10/2011 11:33:25 A

On 12/17/2010, 4 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 2.3 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA64438 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V2A4429

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA65148-1MS, JA65148-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V3D2360

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA64438-1MS, JA64438-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** V3D2361

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA64509-8MS, JA64509-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP47365

- All samples were extracted within the recommended method holding time.
- Sample(s) JA64353-2MS, JA64353-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorocyclopentadiene are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Recovery(s) for 2-Methylnaphthalene, 4-Nitroaniline, Atrazine, Caprolactam, Dibenzofuran, Hexachlorocyclopentadiene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 4-Nitroaniline, Atrazine, Caprolactam, Dibenzofuran, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, 3-Nitroaniline are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/ MSD for 3-Nitroaniline are outside control limits for sample OP47365-MSD. Outside of in house control limits.
- OP47365-BS1 for Hexachloroethane: Outside of in house control limits, but within reasonable method recovery limits.
- OP47365-MS for Hexachlorobutadiene: Outside of in house control limits, but within reasonable method recovery limits.
- OP47365-MS for Hexachloroethane: Outside of in house control limits, but within reasonable method recovery limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP47365A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA64353-2MS, JA64353-2MSD were used as the QC samples indicated.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Fluorene, Hexachlorobenzene, Naphthalene, Phenanthrene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Acenaphthene are outside control limits. Outside of in house control limits, but within reasonable method recovery limits.
- JA64438-5 for Terphenyl-d14: Outside of in house control limits, but within reasonable method recovery limits.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54538.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	101%		76-117%
460-00-4	4-Bromofluorobenzene	94%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84731.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		25-112%
321-60-8	2-Fluorobiphenyl	78%		31-106%
1718-51-0	Terphenyl-d14	78%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AZ		
Lab Sample ID:	JA64438-1	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22982.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	111%		18-119%
321-60-8	2-Fluorobiphenyl	99%		18-104%
1718-51-0	Terphenyl-d14	98%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54544.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	94%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84732.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	92%		25-112%
321-60-8	2-Fluorobiphenyl	81%		31-106%
1718-51-0	Terphenyl-d14	86%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.7	ug/l	J
	Internal standard added for SIM test	15.60	4.3	ug/l	J
	Internal standard added for SIM test	20.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	AV		
Lab Sample ID:	JA64438-2	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22983.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		18-119%
321-60-8	2-Fluorobiphenyl	98%		18-104%
1718-51-0	Terphenyl-d14	105%		13-109%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54545.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	93%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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RL = Reporting Limit
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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84733.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		25-112%
321-60-8	2-Fluorobiphenyl	77%		31-106%
1718-51-0	Terphenyl-d14	82%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.3	ug/l	J
	Internal standard added for SIM test	15.60	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	VV		
Lab Sample ID:	JA64438-3	**Date Sampled:**	12/15/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22984.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	104%		18-119%
321-60-8	2-Fluorobiphenyl	94%		18-104%
1718-51-0	Terphenyl-d14	96%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54564.D	1	12/29/10	TYG	n/a	n/a	V3D2361
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	93%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84729.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.1	0.42	ug/l	
1912-24-9	Atrazine	ND	5.2	0.41	ug/l	
100-52-7	Benzaldehyde	ND	5.2	0.42	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.36	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.26	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.44	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.43	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	0.26	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.1	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.32	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.23	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.2	0.31	ug/l	
132-64-9	Dibenzofuran	ND	5.2	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.41	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.25	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.22	ug/l	
78-59-1	Isophorone	ND	2.1	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.69	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	0.30	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	0.19	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.26	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	81%		31-106%
1718-51-0	Terphenyl-d14	87%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.5	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101215		
Lab Sample ID:	JA64438-4	**Date Sampled:**	12/15/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22985.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	108%		18-119%
321-60-8	2-Fluorobiphenyl	98%		18-104%
1718-51-0	Terphenyl-d14	105%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D54546.D	1	12/28/10	TYG	n/a	n/a	V3D2360
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	94%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84734.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		25-112%
321-60-8	2-Fluorobiphenyl	81%		31-106%
1718-51-0	Terphenyl-d14	94%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.5	ug/l	J
	Internal standard added for SIM test	20.24	4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA64438-5	**Date Sampled:**	12/16/10
Matrix:	AQ - Ground Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22986.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	108%		18-119%
321-60-8	2-Fluorobiphenyl	99%		18-104%
1718-51-0	Terphenyl-d14	114% [a]		13-109%

(a) Outside of in house control limits, but within reasonable method recovery limits.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A103869.D	1	12/29/10	HSS	n/a	n/a	V2A4429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	97%		64-135%
2037-26-5	Toluene-D8	97%		76-117%
460-00-4	4-Bromofluorobenzene	96%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R84730.D	1	12/30/10	LP	12/20/10	OP47365	ER3201
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	79%		31-106%
1718-51-0	Terphenyl-d14	76%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	12.09	4.2	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-20101216		
Lab Sample ID:	JA64438-6	**Date Sampled:**	12/16/10
Matrix:	AQ - Field Blank Water	**Date Received:**	12/17/10
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M22987.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		18-119%
321-60-8	2-Fluorobiphenyl	96%		18-104%
1718-51-0	Terphenyl-d14	93%		13-109%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA64438-7	**Date Sampled:**	12/16/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2A103870.D	1	12/29/10	HSS	n/a	n/a	V2A4429
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA64438-7	**Date Sampled:**	12/16/10
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/17/10
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	97%		64-135%
2037-26-5	Toluene-D8	97%		76-117%
460-00-4	4-Bromofluorobenzene	96%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

SW FB W-TB

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

PAGE ___ OF ___

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA64438

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 FRIENDS LN
City / State / Zip: NEWTOWN PA 18940
Project Contact: Jim Shaffer | E-mail:
Phone #: 267-685-1800 | Fax #:
Sampler(s) Name(s): Frank Stalter | Phone #:

Project Information

Project Name: PSEG
Street:
City: Salem | State: NJ
Project #: NP000603-0008
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	8260B VOC	8270C SVOC	LAB USE ONLY
1	AZ		12-15-10	1050	FS	GW	5	3				2				X	X	48T
2	AV			1310		GW												72990
3	VV			1330		GW												
4	FB-20101215			1430		AQ	4	2										
5	CE		12-16-10	1355		GW	5	3										
6	FB-20101216		12-16-10	1440		AQ	4	2										
7	TRIP BLANK		12-13-10	0600		AQ	2											

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 6 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Labink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		12-17-10 1545	1	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [X] Cooler Temp. 2-3C

1A

XN

4.1 4

JA64438: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA64438 Client: Immediate Client Services Action Required: No

Date / Time Received: 12/17/2010 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200
2235 US Highway 130
F: 732.329.3499
Dayton, New Jersey
www/accutest.com

JA64438: Chain of Custody
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Internal Sample Tracking Chronicle

Arcadis

Job No: JA64438

PSEG-Diesel, Salem, NJ
Project No: NP000603.0008

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA64438-1	Collected: 15-DEC-10 10:50 By: FS		Received: 17-DEC-10 By: MPC			
AZ						
JA64438-1	SW846 8270C BY SIM	23-DEC-10 17:56	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-1	SW846 8260B	28-DEC-10 16:06	TYG			V8260NJPTCL11+
JA64438-1	SW846 8270C	30-DEC-10 10:25	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-2	Collected: 15-DEC-10 13:10 By: FS		Received: 17-DEC-10 By: MPC			
AV						
JA64438-2	SW846 8270C BY SIM	23-DEC-10 18:27	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-2	SW846 8260B	28-DEC-10 18:48	TYG			V8260NJPTCL11+
JA64438-2	SW846 8270C	30-DEC-10 11:07	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-3	Collected: 15-DEC-10 13:30 By: FS		Received: 17-DEC-10 By: MPC			
VV						
JA64438-3	SW846 8270C BY SIM	23-DEC-10 18:57	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-3	SW846 8260B	28-DEC-10 19:14	TYG			V8260NJPTCL11+
JA64438-3	SW846 8270C	30-DEC-10 11:40	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-4	Collected: 15-DEC-10 14:30 By: FS		Received: 17-DEC-10 By: MPC			
FB-20101215						
JA64438-4	SW846 8270C BY SIM	23-DEC-10 19:28	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-4	SW846 8260B	29-DEC-10 03:46	TYG			V8260NJPTCL11+
JA64438-4	SW846 8270C	30-DEC-10 09:19	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-5	Collected: 16-DEC-10 13:55 By: FS		Received: 17-DEC-10 By: MPC			
CE						
JA64438-5	SW846 8270C BY SIM	23-DEC-10 19:59	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-5	SW846 8260B	28-DEC-10 19:41	TYG			V8260NJPTCL11+
JA64438-5	SW846 8270C	30-DEC-10 12:17	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-6	Collected: 16-DEC-10 14:40 By: FS		Received: 17-DEC-10 By: MPC			
FB-20101216						
JA64438-6	SW846 8270C BY SIM	23-DEC-10 20:29	NAP	20-DEC-10	RSJ	B8270SIMNJ
JA64438-6	SW846 8260B	29-DEC-10 20:44	HSS			V8260NJPTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA64438

PSEG-Diesel, Salem, NJ
Project No: NP000603.0008

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA64438-6	SW846 8270C	30-DEC-10 09:56	LP	20-DEC-10	RSJ	B8270NJTCL11+
JA64438-7	Collected: 16-DEC-10 14:40 By: FS		Received: 17-DEC-10 By: MPC			
TRIP BLANK						
JA64438-7	SW846 8260B	29-DEC-10 21:13	HSS			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 12/17/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA64438-1.2	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-1.2	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-1.2.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-1.2
JA64438-1.2.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-1.2
JA64438-1.2.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-1.2.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-1.2.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-1.2.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-1.2.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-1.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-1.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-1.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-1.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-1.3	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-1.3	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-1.3	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-1.3	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-2.2	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-2.2	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-2.2.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-2.2
JA64438-2.2.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-2.2
JA64438-2.2.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-2.2.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-2.2.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-2.2.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-2.2.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-2.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-2.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-2.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-2.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-2.4	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-2.4	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-2.4	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-2.4	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-3.1	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-3.1	Reginald Saint-Juste		12/20/10 18:15	Depleted

Accutest Internal Chain of Custody

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 12/17/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA64438-3.1.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-3.1
JA64438-3.1.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-3.1
JA64438-3.1.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-3.1.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-3.1.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-3.1.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-3.1.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-3.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-3.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-3.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-3.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-3.4	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-3.4	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-3.4	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-3.4	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-4.1	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-4.1	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-4.1.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-4.1
JA64438-4.1.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-4.1
JA64438-4.1.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-4.1.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-4.1.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-4.1.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-4.1.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-4.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-4.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-4.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-4.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-4.3	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-4.3	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-4.3	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-4.3	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-5.2	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-5.2	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-5.2.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-5.2
JA64438-5.2.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-5.2
JA64438-5.2.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 12/17/10

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA64438-5.2.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-5.2.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-5.2.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-5.2.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-5.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-5.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-5.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-5.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-5.4	Secured Storage	Tamika Yvonne Ginn	12/28/10 16:55	Retrieve from Storage
JA64438-5.4	Tamika Yvonne Ginn	GCMS3D	12/28/10 16:55	Load on Instrument
JA64438-5.4	GCMS3D	Tamika Yvonne Ginn	12/29/10 14:14	Unload from Instrument
JA64438-5.4	Tamika Yvonne Ginn	Secured Storage	12/29/10 14:14	Return to Storage
JA64438-6.1	Secured Storage	Reginald Saint-Juste	12/20/10 09:06	Retrieve from Storage
JA64438-6.1	Reginald Saint-Juste		12/20/10 18:15	Depleted
JA64438-6.1.1	Reginald Saint-Juste	Organics Prep	12/20/10 09:06	Extract from JA64438-6.1
JA64438-6.1.1	Organics Prep	Reginald Saint-Juste	12/20/10 18:12	Extract from JA64438-6.1
JA64438-6.1.1	Reginald Saint-Juste	Extract Storage	12/20/10 18:12	Return to Storage
JA64438-6.1.1	Extract Storage	Nina Pandya	12/23/10 13:03	Retrieve from Storage
JA64438-6.1.1	Nina Pandya	GCMS4M	12/23/10 13:03	Load on Instrument
JA64438-6.1.1	GCMS4M	Nina Pandya	12/28/10 13:50	Unload from Instrument
JA64438-6.1.1	Nina Pandya	Extract Freezer	12/28/10 13:50	Return to Storage
JA64438-6.3	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-6.3	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-6.3	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-6.3	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-6.3	Secured Storage	Henny Salim	12/29/10 15:02	Retrieve from Storage
JA64438-6.3	Henny Salim	GCMS2A	12/29/10 15:03	Load on Instrument
JA64438-6.3	GCMS2A	Henny Salim	12/30/10 07:46	Unload from Instrument
JA64438-6.3	Henny Salim	Secured Storage	12/30/10 07:46	Return to Storage
JA64438-7.1	Secured Storage	Tamika Yvonne Ginn	12/23/10 17:10	Retrieve from Storage
JA64438-7.1	Tamika Yvonne Ginn	GCMS3D	12/23/10 17:10	Load on Instrument
JA64438-7.1	GCMS3D	Tamika Yvonne Ginn	12/28/10 10:23	Unload from Instrument
JA64438-7.1	Tamika Yvonne Ginn	Secured Storage	12/28/10 10:23	Return to Storage
JA64438-7.1	Secured Storage	Henny Salim	12/29/10 15:02	Retrieve from Storage
JA64438-7.1	Henny Salim	GCMS2A	12/29/10 15:03	Load on Instrument
JA64438-7.1	GCMS2A	Henny Salim	12/30/10 07:46	Unload from Instrument
JA64438-7.1	Henny Salim	Secured Storage	12/30/10 07:46	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-MB	3D54530.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-MB	3D54530.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	113%	76-120%
17060-07-0	1,2-Dichloroethane-D4	110%	64-135%
2037-26-5	Toluene-D8	113%	76-117%
460-00-4	4-Bromofluorobenzene	104%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-MB	3D54553.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-MB	3D54553.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	96%	64-135%
2037-26-5	Toluene-D8	101%	76-117%
460-00-4	4-Bromofluorobenzene	92%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-MB	2A103849.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-MB	2A103849.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	96%	76-117%
460-00-4	4-Bromofluorobenzene	96%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-BS	3D54531.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	46.6	93	51-151
71-43-2	Benzene	50	50.9	102	75-122
74-97-5	Bromochloromethane	50	53.2	106	78-124
75-27-4	Bromodichloromethane	50	55.9	112	77-128
75-25-2	Bromoform	50	53.2	106	67-141
74-83-9	Bromomethane	50	58.9	118	53-152
78-93-3	2-Butanone (MEK)	50	55.2	110	64-130
75-15-0	Carbon disulfide	50	49.5	99	59-140
56-23-5	Carbon tetrachloride	50	54.3	109	75-148
108-90-7	Chlorobenzene	50	51.9	104	76-124
75-00-3	Chloroethane	50	52.0	104	54-147
67-66-3	Chloroform	50	52.5	105	77-124
74-87-3	Chloromethane	50	46.1	92	46-144
110-82-7	Cyclohexane	50	51.0	102	62-127
124-48-1	Dibromochloromethane	50	53.8	108	76-132
95-50-1	1,2-Dichlorobenzene	50	52.0	104	74-125
541-73-1	1,3-Dichlorobenzene	50	52.4	105	73-124
106-46-7	1,4-Dichlorobenzene	50	51.3	103	71-123
75-71-8	Dichlorodifluoromethane	50	45.0	90	42-152
75-34-3	1,1-Dichloroethane	50	51.0	102	72-124
107-06-2	1,2-Dichloroethane	50	53.5	107	66-150
75-35-4	1,1-Dichloroethene	50	50.4	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.1	114	71-119
156-60-5	trans-1,2-Dichloroethene	50	44.1	88	71-123
78-87-5	1,2-Dichloropropane	50	51.9	104	75-120
10061-01-5	cis-1,3-Dichloropropene	50	53.9	108	77-124
10061-02-6	trans-1,3-Dichloropropene	50	54.7	109	75-132
100-41-4	Ethylbenzene	50	50.8	102	77-124
76-13-1	Freon 113	50	54.0	108	58-149
591-78-6	2-Hexanone	50	58.0	116	58-136
98-82-8	Isopropylbenzene	50	54.8	110	60-136
79-20-9	Methyl Acetate	50	51.9	104	57-139
108-87-2	Methylcyclohexane	50	53.5	107	73-130
1634-04-4	Methyl Tert Butyl Ether	100	99.2	99	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	55.2	110	63-135
75-09-2	Methylene chloride	50	49.7	99	69-122

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2360-BS	3D54531.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.2	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	50.8	102	66-125
127-18-4	Tetrachloroethene	50	51.9	104	70-136
108-88-3	Toluene	50	52.5	105	76-126
87-61-6	1,2,3-Trichlorobenzene	50	55.0	110	62-132
120-82-1	1,2,4-Trichlorobenzene	50	54.4	109	67-132
71-55-6	1,1,1-Trichloroethane	50	52.7	105	77-136
79-00-5	1,1,2-Trichloroethane	50	53.3	107	75-123
79-01-6	Trichloroethene	50	53.9	108	79-126
75-69-4	Trichlorofluoromethane	50	55.1	110	56-154
75-01-4	Vinyl chloride	50	50.7	101	56-146
	m,p-Xylene	100	105	105	77-125
95-47-6	o-Xylene	50	52.8	106	76-126
1330-20-7	Xylene (total)	150	158	105	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	115%	76-120%
17060-07-0	1,2-Dichloroethane-D4	118%	64-135%
2037-26-5	Toluene-D8	117%	76-117%
460-00-4	4-Bromofluorobenzene	106%	72-122%

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-BS	3D54554.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.8	96	51-151
71-43-2	Benzene	50	48.0	96	75-122
74-97-5	Bromochloromethane	50	51.3	103	78-124
75-27-4	Bromodichloromethane	50	53.3	107	77-128
75-25-2	Bromoform	50	49.5	99	67-141
74-83-9	Bromomethane	50	54.1	108	53-152
78-93-3	2-Butanone (MEK)	50	52.4	105	64-130
75-15-0	Carbon disulfide	50	46.1	92	59-140
56-23-5	Carbon tetrachloride	50	50.8	102	75-148
108-90-7	Chlorobenzene	50	50.0	100	76-124
75-00-3	Chloroethane	50	49.2	98	54-147
67-66-3	Chloroform	50	50.1	100	77-124
74-87-3	Chloromethane	50	44.1	88	46-144
110-82-7	Cyclohexane	50	46.8	94	62-127
124-48-1	Dibromochloromethane	50	51.8	104	76-132
95-50-1	1,2-Dichlorobenzene	50	49.8	100	74-125
541-73-1	1,3-Dichlorobenzene	50	49.8	100	73-124
106-46-7	1,4-Dichlorobenzene	50	49.2	98	71-123
75-71-8	Dichlorodifluoromethane	50	39.8	80	42-152
75-34-3	1,1-Dichloroethane	50	48.4	97	72-124
107-06-2	1,2-Dichloroethane	50	51.2	102	66-150
75-35-4	1,1-Dichloroethene	50	47.7	95	61-132
156-59-2	cis-1,2-Dichloroethene	50	54.5	109	71-119
156-60-5	trans-1,2-Dichloroethene	50	41.7	83	71-123
78-87-5	1,2-Dichloropropane	50	49.7	99	75-120
10061-01-5	cis-1,3-Dichloropropene	50	49.7	99	77-124
10061-02-6	trans-1,3-Dichloropropene	50	50.2	100	75-132
100-41-4	Ethylbenzene	50	49.4	99	77-124
76-13-1	Freon 113	50	49.6	99	58-149
591-78-6	2-Hexanone	50	55.5	111	58-136
98-82-8	Isopropylbenzene	50	52.3	105	60-136
79-20-9	Methyl Acetate	50	50.1	100	57-139
108-87-2	Methylcyclohexane	50	49.5	99	73-130
1634-04-4	Methyl Tert Butyl Ether	100	95.7	96	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.9	104	63-135
75-09-2	Methylene chloride	50	47.5	95	69-122

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D2361-BS	3D54554.D	1	12/28/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	48.5	97	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.2	98	66-125
127-18-4	Tetrachloroethene	50	49.5	99	70-136
108-88-3	Toluene	50	50.1	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	52.1	104	62-132
120-82-1	1,2,4-Trichlorobenzene	50	51.5	103	67-132
71-55-6	1,1,1-Trichloroethane	50	50.1	100	77-136
79-00-5	1,1,2-Trichloroethane	50	52.1	104	75-123
79-01-6	Trichloroethene	50	51.6	103	79-126
75-69-4	Trichlorofluoromethane	50	51.2	102	56-154
75-01-4	Vinyl chloride	50	47.7	95	56-146
	m,p-Xylene	100	99.8	100	77-125
95-47-6	o-Xylene	50	51.5	103	76-126
1330-20-7	Xylene (total)	150	151	101	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	95%	72-122%

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-BS	2A103850.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	51.1	102	51-151
71-43-2	Benzene	50	48.3	97	75-122
74-97-5	Bromochloromethane	50	52.5	105	78-124
75-27-4	Bromodichloromethane	50	53.6	107	77-128
75-25-2	Bromoform	50	57.0	114	67-141
74-83-9	Bromomethane	50	56.8	114	53-152
78-93-3	2-Butanone (MEK)	50	49.5	99	64-130
75-15-0	Carbon disulfide	50	49.3	99	59-140
56-23-5	Carbon tetrachloride	50	53.8	108	75-148
108-90-7	Chlorobenzene	50	52.3	105	76-124
75-00-3	Chloroethane	50	53.4	107	54-147
67-66-3	Chloroform	50	52.2	104	77-124
74-87-3	Chloromethane	50	51.4	103	46-144
110-82-7	Cyclohexane	50	48.3	97	62-127
124-48-1	Dibromochloromethane	50	52.8	106	76-132
95-50-1	1,2-Dichlorobenzene	50	54.2	108	74-125
541-73-1	1,3-Dichlorobenzene	50	55.0	110	73-124
106-46-7	1,4-Dichlorobenzene	50	53.6	107	71-123
75-71-8	Dichlorodifluoromethane	50	37.7	75	42-152
75-34-3	1,1-Dichloroethane	50	51.1	102	72-124
107-06-2	1,2-Dichloroethane	50	51.3	103	66-150
75-35-4	1,1-Dichloroethene	50	50.3	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.0	114	71-119
156-60-5	trans-1,2-Dichloroethene	50	46.2	92	71-123
78-87-5	1,2-Dichloropropane	50	50.9	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	51.7	103	75-132
100-41-4	Ethylbenzene	50	49.9	100	77-124
76-13-1	Freon 113	50	53.1	106	58-149
591-78-6	2-Hexanone	50	52.8	106	58-136
98-82-8	Isopropylbenzene	50	53.9	108	60-136
79-20-9	Methyl Acetate	50	48.6	97	57-139
108-87-2	Methylcyclohexane	50	48.4	97	73-130
1634-04-4	Methyl Tert Butyl Ether	100	108	108	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	50.0	100	63-135
75-09-2	Methylene chloride	50	50.9	102	69-122

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2A4429-BS	2A103850.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	49.3	99	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	54.2	108	66-125
127-18-4	Tetrachloroethene	50	52.7	105	70-136
108-88-3	Toluene	50	49.3	99	76-126
87-61-6	1,2,3-Trichlorobenzene	50	56.4	113	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.9	112	67-132
71-55-6	1,1,1-Trichloroethane	50	53.5	107	77-136
79-00-5	1,1,2-Trichloroethane	50	53.1	106	75-123
79-01-6	Trichloroethene	50	52.6	105	79-126
75-69-4	Trichlorofluoromethane	50	53.6	107	56-154
75-01-4	Vinyl chloride	50	52.7	105	56-146
	m,p-Xylene	100	100	100	77-125
95-47-6	o-Xylene	50	52.7	105	76-126
1330-20-7	Xylene (total)	150	153	102	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	97%	64-135%
2037-26-5	Toluene-D8	96%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64438-1MS	3D54541.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1MSD	3D54542.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1	3D54538.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	JA64438-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	47.5	95	46.8	94	1	44-157/20
71-43-2	Benzene	ND		50	43.3	87	45.7	91	5	38-139/13
74-97-5	Bromochloromethane	ND		50	49.6	99	51.7	103	4	70-129/11
75-27-4	Bromodichloromethane	ND		50	49.2	98	50.7	101	3	70-135/13
75-25-2	Bromoform	ND		50	47.1	94	48.0	96	2	53-139/13
74-83-9	Bromomethane	ND		50	49.7	99	54.3	109	9	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	53.0	106	54.5	109	3	58-140/14
75-15-0	Carbon disulfide	ND		50	33.8	68	36.6	73	8	34-136/21
56-23-5	Carbon tetrachloride	ND		50	40.9	82	43.3	87	6	50-161/18
108-90-7	Chlorobenzene	ND		50	45.6	91	47.6	95	4	65-128/12
75-00-3	Chloroethane	ND		50	42.7	85	45.7	91	7	41-151/18
67-66-3	Chloroform	ND		50	45.8	92	48.1	96	5	66-132/14
74-87-3	Chloromethane	ND		50	41.3	83	44.4	89	7	35-149/22
110-82-7	Cyclohexane	ND		50	39.8	80	42.3	85	6	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.4	99	51.0	102	3	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	47.2	94	48.9	98	4	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	45.3	91	47.1	94	4	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	45.6	91	47.1	94	3	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	40.3	81	44.0	88	9	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	43.9	88	46.1	92	5	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	50.4	101	51.2	102	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	39.3	79	41.9	84	6	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.0	90	47.6	95	6	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	41.6	83	43.8	88	5	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	46.3	93	48.8	98	5	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	46.3	93	48.6	97	5	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.6	95	49.1	98	3	68-134/13
100-41-4	Ethylbenzene	ND		50	43.1	86	45.5	91	5	37-143/13
76-13-1	Freon 113	ND		50	34.9	70	37.4	75	7	33-159/19
591-78-6	2-Hexanone	ND		50	55.5	111	57.5	115	4	53-145/17
98-82-8	Isopropylbenzene	ND		50	44.0	88	46.7	93	6	48-141/15
79-20-9	Methyl Acetate	ND		50	52.8	106	52.0	104	2	46-147/18
108-87-2	Methylcyclohexane	ND		50	34.7	69	37.3	75	7	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	49.3	99	50.4	101	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	53.1	106	53.2	106	0	57-141/14
75-09-2	Methylene chloride	ND		50	46.2	92	48.0	96	4	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64438-1MS	3D54541.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1MSD	3D54542.D	1	12/28/10	TYG	n/a	n/a	V3D2360
JA64438-1	3D54538.D	1	12/28/10	TYG	n/a	n/a	V3D2360

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-1, JA64438-2, JA64438-3, JA64438-5

CAS No.	Compound	JA64438-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.6	89	46.5	93	4	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	50.3	101	50.5	101	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	43.7	87	46.5	93	6	48-145/15
108-88-3	Toluene	ND		50	43.8	88	46.9	94	7	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	49.9	100	51.7	103	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	48.2	96	51.1	102	6	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	42.3	85	45.0	90	6	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	50.5	101	51.9	104	3	70-127/12
79-01-6	Trichloroethene	ND		50	44.3	89	46.6	93	5	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	41.9	84	45.7	91	9	35-169/23
75-01-4	Vinyl chloride	ND		50	39.3	79	42.7	85	8	34-151/20
	m,p-Xylene	ND		100	87.8	88	93.2	93	6	32-146/13
95-47-6	o-Xylene	ND		50	45.0	90	47.3	95	5	46-141/12
1330-20-7	Xylene (total)	ND		150	133	89	140	93	5	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA64438-1	Limits
1868-53-7	Dibromofluoromethane	101%	102%	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	104%	104%	96%	64-135%
2037-26-5	Toluene-D8	103%	104%	101%	76-117%
460-00-4	4-Bromofluorobenzene	95%	95%	94%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64509-8MS	3D54559.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8MSD	3D54560.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8	3D54558.D	5	12/29/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	JA64509-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		250	237	95	242	97	2	44-157/20
71-43-2	Benzene	5.5		250	237	93	236	92	0	38-139/13
74-97-5	Bromochloromethane	ND		250	243	97	241	96	1	70-129/11
75-27-4	Bromodichloromethane	ND		250	243	97	246	98	1	70-135/13
75-25-2	Bromoform	ND		250	224	90	229	92	2	53-139/13
74-83-9	Bromomethane	ND		250	255	102	253	101	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		250	235	94	245	98	4	58-140/14
75-15-0	Carbon disulfide	ND		250	216	86	214	86	1	34-136/21
56-23-5	Carbon tetrachloride	ND		250	244	98	242	97	1	50-161/18
108-90-7	Chlorobenzene	ND		250	232	93	232	93	0	65-128/12
75-00-3	Chloroethane	ND		250	242	97	239	96	1	41-151/18
67-66-3	Chloroform	ND		250	237	95	236	94	0	66-132/14
74-87-3	Chloromethane	ND		250	240	96	238	95	1	35-149/22
110-82-7	Cyclohexane	ND		250	258	103	249	100	4	29-158/18
124-48-1	Dibromochloromethane	ND		250	238	95	243	97	2	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		250	232	93	231	92	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		250	229	92	231	92	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		250	227	91	228	91	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		250	275	110	266	106	3	24-170/24
75-34-3	1,1-Dichloroethane	ND		250	232	93	231	92	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		250	239	96	243	97	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		250	234	94	233	93	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		250	232	93	231	92	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		250	231	92	228	91	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		250	232	93	236	94	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		250	231	92	231	92	0	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		250	233	93	235	94	1	68-134/13
100-41-4	Ethylbenzene	27.3		250	264	95	263	94	0	37-143/13
76-13-1	Freon 113	ND		250	222	89	215	86	3	33-159/19
591-78-6	2-Hexanone	ND		250	255	102	264	106	3	53-145/17
98-82-8	Isopropylbenzene	ND		250	246	98	243	97	1	48-141/15
79-20-9	Methyl Acetate	ND		250	266	106	271	108	2	46-147/18
108-87-2	Methylcyclohexane	ND		250	227	91	223	89	2	36-156/18
1634-04-4	Methyl Tert Butyl Ether	858		250	1100	97	1110	101	1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		250	241	96	255	102	6	57-141/14
75-09-2	Methylene chloride	ND		250	228	91	230	92	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA64509-8MS	3D54559.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8MSD	3D54560.D	5	12/29/10	TYG	n/a	n/a	V3D2361
JA64509-8	3D54558.D	5	12/29/10	TYG	n/a	n/a	V3D2361

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-4

CAS No.	Compound	JA64509-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		250	239	96	240	96	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	227	91	235	94	3	62-126/13
127-18-4	Tetrachloroethene	ND		250	244	98	239	96	2	48-145/15
108-88-3	Toluene	253		250	485	93	479	90	1	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		250	236	94	245	98	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		250	238	95	242	97	2	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		250	243	97	240	96	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		250	238	95	242	97	2	70-127/12
79-01-6	Trichloroethene	ND		250	243	97	243	97	0	53-141/15
75-69-4	Trichlorofluoromethane	ND		250	258	103	249	100	4	35-169/23
75-01-4	Vinyl chloride	ND		250	240	96	234	94	3	34-151/20
	m,p-Xylene	121		500	597	95	592	94	1	32-146/13
95-47-6	o-Xylene	111		250	348	95	348	95	0	46-141/12
1330-20-7	Xylene (total)	232		750	945	95	940	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA64509-8	Limits
1868-53-7	Dibromofluoromethane	102%	103%	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	105%	96%	64-135%
2037-26-5	Toluene-D8	104%	104%	103%	76-117%
460-00-4	4-Bromofluorobenzene	96%	95%	94%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA65148-1MS	2A103857.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1MSD	2A103858.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1	2A103852.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	JA65148-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	44.6	89	49.0	98	9	44-157/20
71-43-2	Benzene	ND		50	43.0	86	43.1	86	0	38-139/13
74-97-5	Bromochloromethane	ND		50	46.9	94	49.9	100	6	70-129/11
75-27-4	Bromodichloromethane	ND		50	48.3	97	50.1	100	4	70-135/13
75-25-2	Bromoform	ND		50	51.4	103	54.6	109	6	53-139/13
74-83-9	Bromomethane	ND		50	46.8	94	46.5	93	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.2	90	46.6	93	3	58-140/14
75-15-0	Carbon disulfide	ND		50	40.5	81	39.8	80	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	46.5	93	45.1	90	3	50-161/18
108-90-7	Chlorobenzene	ND		50	45.8	92	47.1	94	3	65-128/12
75-00-3	Chloroethane	ND		50	45.2	90	43.4	87	4	41-151/18
67-66-3	Chloroform	ND		50	46.7	93	46.8	94	0	66-132/14
74-87-3	Chloromethane	ND		50	48.4	97	46.6	93	4	35-149/22
110-82-7	Cyclohexane	ND		50	43.0	86	42.4	85	1	29-158/18
124-48-1	Dibromochloromethane	ND		50	48.6	97	51.7	103	6	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	48.2	96	50.1	100	4	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.9	96	49.7	99	4	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	46.8	94	49.3	99	5	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	43.2	86	41.0	82	5	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	44.9	90	44.7	89	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	48.1	96	49.6	99	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	43.2	86	42.0	84	3	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.1	90	46.1	92	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	44.7	89	44.4	89	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	46.7	93	47.8	96	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	48.1	96	49.9	100	4	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.4	95	49.5	99	4	68-134/13
100-41-4	Ethylbenzene	ND		50	44.1	88	44.1	88	0	37-143/13
76-13-1	Freon 113	ND		50	43.1	86	42.0	84	3	33-159/19
591-78-6	2-Hexanone	ND		50	46.2	92	49.6	99	7	53-145/17
98-82-8	Isopropylbenzene	ND		50	45.2	90	45.9	92	2	48-141/15
79-20-9	Methyl Acetate	ND		50	44.7	89	46.7	93	4	46-147/18
108-87-2	Methylcyclohexane	ND		50	39.7	79	38.7	77	3	36-156/18
1634-04-4	Methyl Tert Butyl Ether	55.1		50	103	96	108	106	5	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.3	91	48.7	97	7	57-141/14
75-09-2	Methylene chloride	ND		50	46.2	92	47.3	95	2	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA65148-1MS	2A103857.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1MSD	2A103858.D	1	12/29/10	HSS	n/a	n/a	V2A4429
JA65148-1	2A103852.D	1	12/29/10	HSS	n/a	n/a	V2A4429

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA64438-6, JA64438-7

CAS No.	Compound	JA65148-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.2	88	45.5	91	3	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	49.1	98	53.5	107	9	62-126/13
127-18-4	Tetrachloroethene	ND		50	46.7	93	46.1	92	1	48-145/15
108-88-3	Toluene	ND		50	43.8	88	43.6	87	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	49.3	99	53.3	107	8	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	49.0	98	52.5	105	7	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	46.1	92	45.1	90	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	49.2	98	51.6	103	5	70-127/12
79-01-6	Trichloroethene	ND		50	45.4	91	45.4	91	0	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	43.8	88	42.1	84	4	35-169/23
75-01-4	Vinyl chloride	ND		50	42.5	85	40.8	82	4	34-151/20
	m,p-Xylene	ND		100	87.8	88	87.9	88	0	32-146/13
95-47-6	o-Xylene	ND		50	44.8	90	45.7	91	2	46-141/12
1330-20-7	Xylene (total)	ND		150	133	89	134	89	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA65148-1	Limits
1868-53-7	Dibromofluoromethane	100%	100%	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	96%	95%	64-135%
2037-26-5	Toluene-D8	98%	97%	97%	76-117%
460-00-4	4-Bromofluorobenzene	99%	101%	97%	72-122%

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2A4305-BFB	**Injection Date:**	10/14/10
Lab File ID:	2A100913.D	**Injection Time:**	09:43
Instrument ID:	GCMS2A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	8062	17.8		Pass
75	30.0 - 60.0% of mass 95	20133	44.3		Pass
95	Base peak, 100% relative abundance	45416	100.0		Pass
96	5.0 - 9.0% of mass 95	2989	6.58		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	46458	102.3		Pass
175	5.0 - 9.0% of mass 174	3610	7.95	(7.77) [a]	Pass
176	95.0 - 101.0% of mass 174	45408	100.0	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	3048	6.71	(6.71) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2A4305-IC4305	2A100914.D	10/14/10	10:17	00:34	Initial cal 0.5
V2A4305-IC4305	2A100915.D	10/14/10	10:46	01:03	Initial cal 1
V2A4305-IC4305	2A100916.D	10/14/10	11:16	01:33	Initial cal 2
V2A4305-IC4305	2A100917.D	10/14/10	11:45	02:02	Initial cal 5
V2A4305-IC4305	2A100918.D	10/14/10	12:15	02:32	Initial cal 20
V2A4305-ICC4305	2A100919.D	10/14/10	12:44	03:01	Initial cal 50
V2A4305-IC4305	2A100920.D	10/14/10	13:14	03:31	Initial cal 100
V2A4305-IC4305	2A100921.D	10/14/10	13:43	04:00	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2A4429-BFB	**Injection Date:**	12/29/10
Lab File ID:	2A103847.D	**Injection Time:**	09:31
Instrument ID:	GCMS2A		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10097	16.8		Pass
75	30.0 - 60.0% of mass 95	26888	44.7		Pass
95	Base peak, 100% relative abundance	60216	100.0		Pass
96	5.0 - 9.0% of mass 95	3934	6.53		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	63096	104.8		Pass
175	5.0 - 9.0% of mass 174	4820	8.00	(7.64) [a]	Pass
176	95.0 - 101.0% of mass 174	61821	102.7	(98.0) [a]	Pass
177	5.0 - 9.0% of mass 176	4136	6.87	(6.69) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2A4429-CC4305	2A103848.D	12/29/10	09:59	00:28	Continuing cal 20
V2A4429-MB	2A103849.D	12/29/10	10:35	01:04	Method Blank
V2A4429-BS	2A103850.D	12/29/10	11:10	01:39	Blank Spike
ZZZZZZ	2A103851.D	12/29/10	11:49	02:18	(unrelated sample)
JA65148-1	2A103852.D	12/29/10	12:19	02:48	(used for QC only; not part of job JA64438)
ZZZZZZ	2A103853.D	12/29/10	12:48	03:17	(unrelated sample)
ZZZZZZ	2A103854.D	12/29/10	13:18	03:47	(unrelated sample)
ZZZZZZ	2A103855.D	12/29/10	13:48	04:17	(unrelated sample)
ZZZZZZ	2A103856.D	12/29/10	14:18	04:47	(unrelated sample)
JA65148-1MS	2A103857.D	12/29/10	14:47	05:16	Matrix Spike
JA65148-1MSD	2A103858.D	12/29/10	15:17	05:46	Matrix Spike Duplicate
ZZZZZZ	2A103859.D	12/29/10	15:47	06:16	(unrelated sample)
ZZZZZZ	2A103860.D	12/29/10	16:17	06:46	(unrelated sample)
ZZZZZZ	2A103861.D	12/29/10	16:46	07:15	(unrelated sample)
ZZZZZZ	2A103862.D	12/29/10	17:16	07:45	(unrelated sample)
ZZZZZZ	2A103863.D	12/29/10	17:46	08:15	(unrelated sample)
ZZZZZZ	2A103864.D	12/29/10	18:15	08:44	(unrelated sample)
ZZZZZZ	2A103865.D	12/29/10	18:45	09:14	(unrelated sample)
ZZZZZZ	2A103866.D	12/29/10	19:14	09:43	(unrelated sample)
ZZZZZZ	2A103867.D	12/29/10	19:44	10:13	(unrelated sample)
ZZZZZZ	2A103868.D	12/29/10	20:14	10:43	(unrelated sample)
JA64438-6	2A103869.D	12/29/10	20:44	11:13	FB-20101216
JA64438-7	2A103870.D	12/29/10	21:13	11:42	TRIP BLANK

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3D2292-BFB	**Injection Date:**	11/15/10
Lab File ID:	3D52923.D	**Injection Time:**	20:35
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9835	20.8		Pass
75	30.0 - 60.0% of mass 95	22834	48.2		Pass
95	Base peak, 100% relative abundance	47341	100.0		Pass
96	5.0 - 9.0% of mass 95	3170	6.70		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	37010	78.2		Pass
175	5.0 - 9.0% of mass 174	2760	5.83	(7.46) [a]	Pass
176	95.0 - 101.0% of mass 174	36328	76.7	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	2413	5.10	(6.64) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D2292-IC2292	3D52924.D	11/15/10	21:01	00:26	Initial cal 1
ZZZZZZ	3D52924A.D	11/15/10	21:01	00:26	(unrelated sample)
V3D2292-IC2292	3D52925.D	11/15/10	21:28	00:53	Initial cal 2
V3D2292-IC2292	3D52926.D	11/15/10	21:55	01:20	Initial cal 5
V3D2292-IC2292	3D52927.D	11/15/10	22:21	01:46	Initial cal 10
V3D2292-IC2292	3D52928.D	11/15/10	22:48	02:13	Initial cal 20
V3D2292-ICC2292	3D52929.D	11/15/10	23:15	02:40	Initial cal 50
V3D2292-IC2292	3D52930.D	11/15/10	23:42	03:07	Initial cal 100
V3D2292-IC2292	3D52931.D	11/16/10	00:08	03:33	Initial cal 200

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3D2360-BFB	**Injection Date:**	12/28/10
Lab File ID:	3D54526.D	**Injection Time:**	09:05
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14311	20.3		Pass
75	30.0 - 60.0% of mass 95	34549	48.9		Pass
95	Base peak, 100% relative abundance	70602	100.0		Pass
96	5.0 - 9.0% of mass 95	4856	6.88		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	55101	78.0		Pass
175	5.0 - 9.0% of mass 174	4402	6.23	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	53877	76.3	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3573	5.06	(6.63) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D2360-CC2292	3D54528.D	12/28/10	10:40	01:35	Continuing cal 20
V3D2360-MB	3D54530.D	12/28/10	11:51	02:46	Method Blank
V3D2360-BS	3D54531.D	12/28/10	12:28	03:23	Blank Spike
ZZZZZZ	3D54532.D	12/28/10	13:25	04:20	(unrelated sample)
ZZZZZZ	3D54533.D	12/28/10	13:52	04:47	(unrelated sample)
ZZZZZZ	3D54535.D	12/28/10	14:45	05:40	(unrelated sample)
ZZZZZZ	3D54536.D	12/28/10	15:12	06:07	(unrelated sample)
ZZZZZZ	3D54537.D	12/28/10	15:39	06:34	(unrelated sample)
JA64438-1	3D54538.D	12/28/10	16:06	07:01	AZ
ZZZZZZ	3D54539.D	12/28/10	16:33	07:28	(unrelated sample)
ZZZZZZ	3D54540.D	12/28/10	17:00	07:55	(unrelated sample)
JA64438-1MS	3D54541.D	12/28/10	17:27	08:22	Matrix Spike
JA64438-1MSD	3D54542.D	12/28/10	17:54	08:49	Matrix Spike Duplicate
ZZZZZZ	3D54543.D	12/28/10	18:21	09:16	(unrelated sample)
JA64438-2	3D54544.D	12/28/10	18:48	09:43	AV
JA64438-3	3D54545.D	12/28/10	19:14	10:09	VV
JA64438-5	3D54546.D	12/28/10	19:41	10:36	CE
ZZZZZZ	3D54547.D	12/28/10	20:08	11:03	(unrelated sample)
ZZZZZZ	3D54548.D	12/28/10	20:35	11:30	(unrelated sample)
ZZZZZZ	3D54549.D	12/28/10	21:02	11:57	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3D2361-BFB	**Injection Date:**	12/28/10
Lab File ID:	3D54550.D	**Injection Time:**	21:29
Instrument ID:	GCMS3D		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	10016	20.2		Pass
75	30.0 - 60.0% of mass 95	24565	49.5		Pass
95	Base peak, 100% relative abundance	49613	100.0		Pass
96	5.0 - 9.0% of mass 95	3360	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	41605	83.9		Pass
175	5.0 - 9.0% of mass 174	3390	6.83	(8.15) [a]	Pass
176	95.0 - 101.0% of mass 174	40160	80.9	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	2565	5.17	(6.39) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D2361-CC2292	3D54551.D	12/28/10	21:56	00:27	Continuing cal 50
V3D2361-MB	3D54553.D	12/28/10	22:50	01:21	Method Blank
V3D2361-BS	3D54554.D	12/28/10	23:17	01:48	Blank Spike
ZZZZZZ	3D54555.D	12/28/10	23:44	02:15	(unrelated sample)
ZZZZZZ	3D54556.D	12/29/10	00:11	02:42	(unrelated sample)
ZZZZZZ	3D54557.D	12/29/10	00:38	03:09	(unrelated sample)
JA64509-8	3D54558.D	12/29/10	01:05	03:36	(used for QC only; not part of job JA64438)
JA64509-8MS	3D54559.D	12/29/10	01:32	04:03	Matrix Spike
JA64509-8MSD	3D54560.D	12/29/10	01:59	04:30	Matrix Spike Duplicate
ZZZZZZ	3D54562.D	12/29/10	02:52	05:23	(unrelated sample)
ZZZZZZ	3D54563.D	12/29/10	03:19	05:50	(unrelated sample)
JA64438-4	3D54564.D	12/29/10	03:46	06:17	FB-20101215
ZZZZZZ	3D54565.D	12/29/10	04:13	06:44	(unrelated sample)
ZZZZZZ	3D54566.D	12/29/10	04:40	07:11	(unrelated sample)
ZZZZZZ	3D54568.D	12/29/10	05:34	08:05	(unrelated sample)
ZZZZZZ	3D54569.D	12/29/10	06:01	08:32	(unrelated sample)
ZZZZZZ	3D54570.D	12/29/10	06:28	08:59	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2A4429-CC4305	**Injection Date:**	12/29/10
Lab File ID:	2A103848.D	**Injection Time:**	09:59
Instrument ID:	GCMS2A	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	68321	8.24	206993	10.67	256456	11.59	220153	14.59	114553	16.74
Upper Limit [a]	136642	8.74	413986	11.17	512912	12.09	440306	15.09	229106	17.24
Lower Limit [b]	34161	7.74	103497	10.17	128228	11.09	110077	14.09	57277	16.24

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2A4429-MB	61001	8.23	193313	10.66	232437	11.59	195440	14.59	102476	16.74
V2A4429-BS	55270	8.24	171024	10.66	215000	11.59	186529	14.59	93229	16.74
ZZZZZZ	68006	8.23	203317	10.66	250253	11.59	210992	14.59	112796	16.74
JA65148-1	67502	8.23	216896	10.66	267090	11.59	226223	14.59	119955	16.74
ZZZZZZ	66557	8.24	212946	10.67	263381	11.59	222013	14.59	118148	16.74
ZZZZZZ	65413	8.24	209638	10.66	257829	11.59	222070	14.59	117434	16.74
ZZZZZZ	61441	8.23	202699	10.67	249800	11.59	212455	14.59	112039	16.74
ZZZZZZ	59305	8.23	195350	10.67	241595	11.59	204054	14.59	108834	16.74
JA65148-1MS	58047	8.23	185833	10.66	232838	11.59	203690	14.59	103746	16.74
JA65148-1MSD	57089	8.24	181637	10.67	227785	11.59	199472	14.59	100165	16.74
ZZZZZZ	65790	8.24	213199	10.67	261615	11.59	223692	14.59	114889	16.74
ZZZZZZ	65883	8.24	213261	10.67	262760	11.59	221659	14.59	117307	16.74
ZZZZZZ	69251	8.24	217419	10.67	268268	11.59	228009	14.59	119869	16.74
ZZZZZZ	65927	8.23	209156	10.67	259322	11.59	220293	14.59	118014	16.74
ZZZZZZ	67166	8.24	208789	10.67	257883	11.59	221057	14.59	116561	16.74
ZZZZZZ	61916	8.24	190844	10.67	236004	11.59	202964	14.59	105759	16.74
ZZZZZZ	66865	8.23	212914	10.67	262126	11.59	223324	14.59	117949	16.74
ZZZZZZ	62393	8.23	194236	10.66	240319	11.59	204550	14.59	109886	16.74
ZZZZZZ	65418	8.24	203289	10.67	252153	11.59	216165	14.59	116126	16.74
ZZZZZZ	63021	8.24	200906	10.67	248780	11.59	210777	14.59	112887	16.74
JA64438-6	63238	8.23	204630	10.67	251800	11.59	216936	14.59	114585	16.74
JA64438-7	65884	8.24	211973	10.66	259632	11.59	222234	14.59	117336	16.74

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3D2360-CC2292	**Injection Date:**	12/28/10
Lab File ID:	3D54528.D	**Injection Time:**	10:40
Instrument ID:	GCMS3D	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	109439	6.98	212042	9.19	295088	10.11	237611	13.29	123284	15.61
Upper Limit [a]	218878	7.48	424084	9.69	590176	10.61	475222	13.79	246568	16.11
Lower Limit [b]	54720	6.48	106021	8.69	147544	9.61	118806	12.79	61642	15.11

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D2360-MB	107276	6.98	181924	9.20	264897	10.11	212664	13.29	108316	15.61
V3D2360-BS	102141	6.98	177530	9.19	260643	10.11	213614	13.29	106690	15.61
ZZZZZZ	107234	6.97	179980	9.19	260740	10.11	215709	13.29	109982	15.61
ZZZZZZ	108980	6.98	181469	9.19	270221	10.11	224251	13.29	111450	15.61
ZZZZZZ	100776	6.98	186710	9.19	269203	10.11	219513	13.29	110605	15.61
ZZZZZZ	108583	6.98	181228	9.19	262929	10.11	214559	13.29	109362	15.61
ZZZZZZ	112122	6.98	185100	9.19	266234	10.11	217192	13.29	110684	15.61
JA64438-1	106633	6.98	182198	9.19	264330	10.11	212688	13.29	108806	15.61
ZZZZZZ	103811	6.98	180033	9.19	263151	10.11	216458	13.29	107604	15.61
ZZZZZZ	108440	6.97	181195	9.19	263356	10.11	213914	13.29	107757	15.61
JA64438-1MS	110079	6.98	183071	9.19	270126	10.11	216945	13.29	108613	15.61
JA64438-1MSD	106525	6.98	182365	9.19	270357	10.10	218611	13.29	109949	15.61
ZZZZZZ	109593	6.98	183070	9.19	265914	10.11	216391	13.29	109785	15.61
JA64438-2	107909	6.98	184979	9.19	268737	10.11	219785	13.29	112532	15.61
JA64438-3	103944	6.97	182490	9.19	265251	10.10	217397	13.29	111125	15.61
JA64438-5	103802	6.97	184396	9.19	266953	10.10	218352	13.29	111209	15.61
ZZZZZZ	109239	6.98	181753	9.19	263644	10.11	215924	13.29	110114	15.61
ZZZZZZ	100861	6.98	180987	9.19	262504	10.11	214395	13.29	109370	15.61
ZZZZZZ	98558	6.98	179406	9.19	258210	10.11	211522	13.29	108337	15.61

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3D2361-CC2292	**Injection Date:**	12/28/10
Lab File ID:	3D54551.D	**Injection Time:**	21:56
Instrument ID:	GCMS3D	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	102774	6.98	178703	9.19	262944	10.11	212614	13.29	107282	15.61
Upper Limit [a]	205548	7.48	357406	9.69	525888	10.61	425228	13.79	214564	16.11
Lower Limit [b]	51387	6.48	89352	8.69	131472	9.61	106307	12.79	53641	15.11

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3D2361-MB	97766	6.98	178750	9.19	258408	10.11	207974	13.29	107757	15.61
V3D2361-BS	97357	6.98	177854	9.19	263189	10.10	214232	13.29	107210	15.61
ZZZZZZ	99346	6.98	179947	9.19	259249	10.11	210935	13.29	107254	15.61
ZZZZZZ	105047	6.98	178931	9.19	256091	10.11	209619	13.29	107888	15.61
ZZZZZZ	98667	6.97	176367	9.19	255273	10.10	208605	13.29	106178	15.61
JA64509-8	98783	6.98	177929	9.19	258939	10.10	213954	13.29	107914	15.61
JA64509-8MS	102385	6.98	176967	9.19	261446	10.11	213268	13.29	107558	15.61
JA64509-8MSD	108306	6.98	176278	9.19	261634	10.11	213422	13.29	107459	15.61
ZZZZZZ	96159	6.98	178758	9.19	258030	10.11	211556	13.29	109598	15.61
ZZZZZZ	95576	6.98	176191	9.19	254138	10.11	207799	13.29	107692	15.61
JA64438-4	95050	6.97	176467	9.19	255399	10.11	207922	13.29	105947	15.61
ZZZZZZ	100958	6.97	175160	9.19	254271	10.11	208119	13.29	104988	15.61
ZZZZZZ	108533	6.97	177482	9.19	258403	10.10	212732	13.29	105741	15.61
ZZZZZZ	100792	6.98	178426	9.19	260080	10.11	215829	13.29	109219	15.61
ZZZZZZ	102633	6.98	181359	9.19	262047	10.11	213826	13.29	108823	15.61
ZZZZZZ	101702	6.98	180886	9.19	263069	10.11	214506	13.29	110541	15.61

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA64438-1	3D54538.D	101.0	96.0	101.0	94.0
JA64438-2	3D54544.D	100.0	96.0	102.0	94.0
JA64438-3	3D54545.D	100.0	96.0	103.0	93.0
JA64438-4	3D54564.D	101.0	96.0	102.0	93.0
JA64438-5	3D54546.D	99.0	96.0	102.0	94.0
JA64438-6	2A103869.D	99.0	97.0	97.0	96.0
JA64438-7	2A103870.D	99.0	97.0	97.0	96.0
JA64438-1MS	3D54541.D	101.0	104.0	103.0	95.0
JA64438-1MSD	3D54542.D	102.0	104.0	104.0	95.0
JA64509-8MS	3D54559.D	102.0	103.0	104.0	96.0
JA64509-8MSD	3D54560.D	103.0	105.0	104.0	95.0
JA65148-1MS	2A103857.D	100.0	99.0	98.0	99.0
JA65148-1MSD	2A103858.D	100.0	96.0	97.0	101.0
V2A4429-BS	2A103850.D	99.0	97.0	96.0	100.0
V2A4429-MB	2A103849.D	94.0	91.0	96.0	96.0
V3D2360-BS	3D54531.D	115.0	118.0	117.0	106.0
V3D2360-MB	3D54530.D	113.0	110.0	113.0	104.0
V3D2361-BS	3D54554.D	102.0	104.0	104.0	95.0
V3D2361-MB	3D54553.D	100.0	96.0	101.0	92.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICC4305
Lab FileID: 2A100919.D

Response Factor Report MS2A

Method : C:\MSDCHEM\1\METHODS\M2A4305.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Mon Oct 18 11:06:16 2010
Response via : Initial Calibration

Calibration Files
1 =2A100915.D 2 =2A100916.D 100 =2A100920.D 50 =2A100919.D
20 =2A100918.D 200 =2A100921.D 5 =2A100917.D 0.5 =2A100914.D

Compound	1	2	100	50	20	200	5	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9			ISTD							
2) tertiary but			1.264	1.393	1.119	1.256	1.211		1.249	7.94
3) 1,4-dioxane			0.096	0.102	0.089	0.102	0.090		0.096	6.65
4) I pentafluorobenzene			ISTD							
5) chlorodifluo		0.304	0.360	0.379	0.335	0.398	0.277		0.342	13.47
6) dichlorodifl		0.504	0.650	0.673	0.613	0.680	0.486		0.601	14.20
7) chloromethan	0.569	0.592	0.684	0.707	0.622	0.705	0.566	0.477	0.615	13.11
8) vinyl chlori	0.471	0.506	0.640	0.674	0.596	0.680	0.510		0.582	14.86
9) bromomethane	0.288	0.315	0.376	0.399	0.364	0.389	0.334	0.279	0.343	13.37
10) chloroethane	0.203	0.274	0.305	0.326	0.296	0.307	0.282		0.285	14.02
11) trichloroflu		0.511	0.632	0.677	0.616	0.650	0.506		0.599	12.15
12) ethyl ether		0.162	0.213	0.230	0.208	0.218	0.179		0.202	12.72
13) acrolein	0.070	0.070		0.078	0.072		0.070		0.072	4.48
14) 1,1-dichloro	0.321	0.309	0.354	0.382	0.354	0.355	0.337		0.345	7.05
15) acetone			0.084	0.097	0.092	0.088	0.080		0.088	7.26
16) allyl chlori		0.167	0.215	0.232	0.216	0.217	0.188		0.206	11.56
17) acetonitrile	0.027	0.030	0.032	0.035	0.032	0.033	0.032		0.031	7.97
18) iodomethane	0.573	0.597	0.688	0.742	0.678	0.706	0.633	0.530	0.643	11.30
19) iso-butyl al			0.011	0.012	0.011	0.011	0.009		0.011	8.09
20) carbon disul	1.160	1.145	1.325	1.434	1.306	1.351	1.200	1.056	1.247	10.14
21) methylene ch	0.364	0.381	0.395	0.429	0.397	0.403	0.375	0.298	0.380	10.14
22) methyl aceta	0.290	0.271	0.247	0.274	0.249	0.251	0.241		0.260	6.99
23) methyl tert	1.817	1.888	1.935	2.148	1.951	1.981	1.880	1.711	1.914	6.65
24) trans-1,2-di	0.346	0.353	0.369	0.406	0.387	0.370	0.345	0.300	0.359	8.88
25) di-isopropyl	1.234	1.248	1.280	1.399	1.254	1.303	1.251	0.998	1.246	9.08
26) 2-butanone			0.037	0.040	0.038	0.038	0.019		0.034	24.94
----- Linear regression ----- Coefficient = 0.9990										
Response Ratio = -0.00085 + 0.03829 *A										
27) 1,1-dichloro	0.572	0.607	0.651	0.714	0.669	0.655	0.625	0.581	0.634	7.49
28) chloroprene	0.370	0.424	0.483	0.521	0.465	0.489	0.433		0.455	11.03
29) acrylonitril	0.108	0.114	0.121	0.135	0.130	0.123	0.117	0.096	0.118	10.45
30) vinyl acetat			0.063	0.069	0.061	0.066	0.054		0.063	9.09
31) ethyl tert-b	1.027	1.051	1.103	1.194	1.097	1.150	1.073		1.099	5.22
32) ethyl acetat			0.046	0.050	0.046	0.047	0.043		0.046	5.21
33) 2,2-dichloro	0.493	0.522	0.537	0.596	0.561	0.550	0.509	0.481	0.531	7.14
34) cis-1,2-dich	0.372	0.388	0.409	0.447	0.420	0.418	0.387		0.406	6.31
35) methylacryla			0.047	0.050	0.049	0.048	0.034		0.046	14.28
36) propionitril	0.039	0.042	0.046	0.050	0.048	0.047	0.045	0.030	0.043	14.81
37) bromochlorom		0.175	0.201	0.217	0.204	0.205	0.183		0.198	7.92
38) tetrahydrofu		0.115	0.109	0.120	0.113	0.113	0.116		0.114	3.20
39) chloroform	0.372	0.386	0.396	0.432	0.406	0.404	0.386	0.357	0.392	5.81
40) t-butyl form		0.318	0.330	0.364	0.343	0.346	0.323		0.337	5.11
41) dibromofluor		0.318	0.336	0.365	0.333	0.350	0.307		0.335	6.29
42) 1,2-dichloro		0.340	0.337	0.373	0.337	0.345	0.324		0.343	4.77

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICC4305
Lab FileID: 2A100919.D

43)	freon 113		0.270	0.343	0.376	0.337	0.351	0.298		0.329	11.70
44)	methacryloni	0.172	0.181	0.204	0.219	0.210	0.214	0.192		0.199	8.84
45)	1,1,1-trichl	0.458	0.493	0.542	0.593	0.550	0.559	0.502	0.402	0.512	12.03
46)	Cyclohexane	0.523	0.515	0.573	0.632	0.579	0.585	0.528	0.375	0.539	14.25
47)	I 1,4-difluorobenzene	----------	ISTD	----------							
48)	epichlorohyd		0.023	0.023	0.026	0.024	0.024	0.023		0.024	5.08
49)	n-butyl alco			0.006	0.007	0.007	0.006	0.006		0.007#	3.94
50)	carbon tetra	0.357	0.355	0.367	0.407	0.387	0.373	0.368	0.237	0.356	14.35
51)	1,1-dichloro	0.350	0.351	0.384	0.420	0.395	0.392	0.366	0.266	0.365	12.73
52)	hexane	0.276	0.336	0.394	0.432	0.393	0.396	0.341		0.367	14.21
53)	TERT AMYL AL		0.026	0.032	0.036	0.034	0.033	0.034		0.032	10.09
54)	2,2,4-TRIMET		1.045	1.190	1.337	1.161	1.172	1.087		1.165	8.65
55)	benzene	1.144	1.145	1.100	1.218	1.168	1.106	1.114	1.164	1.145	3.43
56)	tert-amyl me			0.164	0.183	0.176	0.168	0.170		0.172	4.34
57)	heptane		0.197	0.231	0.252	0.227	0.231	0.203		0.224	9.15
58)	isopropyl ac		0.984	0.936	1.049	0.976	0.942	0.982		0.978	4.12
59)	1,2-dichloro	0.296	0.308	0.303	0.341	0.334	0.303	0.314	0.286	0.311	6.00
60)	trichloroeth	0.259	0.261	0.289	0.312	0.294	0.300	0.268	0.252	0.279	7.99
61)	TERT-AMYL ET	0.612	0.636	0.613	0.668	0.636	0.643	0.596	0.487	0.611	9.02
62)	methyl metha	0.345	0.387	0.376	0.423	0.398	0.381	0.376	0.302	0.374	9.71
63)	2-nitropropa			0.011	0.013	0.013	0.012	0.009		0.012	13.19
64)	2-chloroethy	0.138	0.139	0.145	0.162	0.146	0.149	0.142	0.120	0.143	8.32
65)	1,2-dichloro	0.270	0.275	0.280	0.308	0.296	0.282	0.279	0.207	0.275	10.87
66)	dibromometha	0.127	0.148	0.163	0.176	0.167	0.165	0.152		0.157	10.35
67)	methylcycloh	0.404	0.473	0.512	0.576	0.517	0.516	0.467		0.495	10.87
68)	bromodichlor	0.331	0.336	0.360	0.390	0.361	0.369	0.337	0.291	0.347	8.62
69)	cis-1,3-dich	0.406	0.432	0.461	0.504	0.465	0.474	0.431	0.355	0.441	10.43
70)	toluene-d8 (		0.960	0.952	1.057	0.957	0.971	0.913		0.968	4.94
71)	4-methyl-2-p		0.084	0.090	0.100	0.096	0.092	0.092		0.092	5.67
72)	toluene	0.682	0.668	0.670	0.736	0.692	0.680	0.661	0.664	0.682	3.55
73)	3-methyl-1-b	0.009	0.010	0.010	0.011	0.011	0.010	0.010		0.010	8.52
74)	trans-1,3-di	0.356	0.373	0.389	0.428	0.397	0.398	0.375	0.368	0.386	5.87
75)	ethyl methac	0.283	0.277	0.306	0.337	0.309	0.319	0.288	0.258	0.297	8.54
76)	1,1,2-trichl	0.183	0.173	0.198	0.218	0.200	0.206	0.193	0.147	0.190	11.71
77)	2-hexanone		0.066	0.081	0.090	0.086	0.084	0.076		0.081	10.75
78)	I chlorobenzene-d5	----------	ISTD	----------							
79)	tetrachloroe	0.296	0.293	0.302	0.325	0.309	0.304	0.291	0.230	0.294	9.53
80)	1,3-dichloro	0.401	0.404	0.401	0.444	0.428	0.395	0.401	0.363	0.404	5.83
81)	butyl acetat	0.157	0.171	0.164	0.185	0.173	0.164	0.179		0.171	5.77
82)	3,3-dimethyl		0.028	0.023	0.029	0.028	0.024	0.029		0.027	9.48
83)	dibromochlor	0.307	0.313	0.326	0.355	0.335	0.331	0.308	0.281	0.319	7.06
84)	1,2-dibromoe	0.236	0.256	0.275	0.299	0.283	0.280	0.268	0.199	0.262	12.13
85)	chlorobenzen	0.809	0.804	0.851	0.913	0.866	0.858	0.800	0.811	0.839	4.75
86)	1,1,1,2-tetr	0.272	0.300	0.301	0.330	0.322	0.303	0.288	0.239	0.294	9.75
87)	ethylbenzene	1.351	1.408	1.374	1.509	1.438	1.367	1.324	1.333	1.388	4.46
88)	m,p-xylene	0.542	0.537	0.526	0.579	0.554	0.529	0.524	0.512	0.538	3.87
89)	o-xylene	0.531	0.523	0.550	0.593	0.560	0.562	0.515	0.514	0.544	5.10
90)	styrene	0.864	0.898	0.926	1.006	0.953	0.933	0.883	0.937	0.925	4.80
91)	bromoform	0.194	0.209	0.242	0.260	0.242	0.253	0.216	0.188	0.225	12.24
92)	I 1,4-dichlorobenzene-d	----------	ISTD	----------							
93)	isopropylben	2.576	2.483	2.735	2.964	2.779	2.733	2.586	2.505	2.670	6.08
94)	4-bromofluor		0.740	0.744	0.808	0.733	0.763	0.709		0.750	4.48
95)	cyclohexanon			0.011	0.016	0.017	0.011	0.014		0.014	21.36
	----- Quadratic regression -----								Coefficient =		0.9846
	Response Ratio = 0.01642 + 0.01239 *A + -0.00006 *A^2										
96)	bromobenzene	0.708	0.751	0.768	0.843	0.780	0.771	0.734	0.677	0.754	6.62

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICC4305
Lab FileID: 2A100919.D

97)	1,1,2,2-tetr	0.577	0.610	0.647	0.705	0.664	0.665	0.626	0.550	0.631	7.98
98)	trans-1,4-di			0.158	0.155	0.141	0.151	0.117		0.144	11.49
99)	1,2,3-trichl		0.129	0.151	0.166	0.157	0.156	0.155		0.153	8.34
100)	n-propylbenz	0.671	0.663	0.713	0.781	0.728	0.731	0.686	0.516	0.686	11.45
101)	2-chlorotolu	0.589	0.581	0.654	0.720	0.674	0.671	0.632	0.625	0.643	7.19
102)	4-chlorotolu	0.643	0.654	0.682	0.738	0.686	0.705	0.645	0.635	0.674	5.32
103)	1,3,5-trimet	2.215	2.081	2.256	2.440	2.272	2.341	2.092	2.172	2.234	5.45
104)	tert-butylbe	2.192	1.884	2.065	2.199	2.035	2.140	1.871	1.743	2.016	8.29
105)	pentachloroe	0.433	0.423	0.493	0.542	0.492	0.516	0.454		0.479	9.17
106)	1,2,4-trimet	2.162	2.134	2.265	2.473	2.289	2.331	2.145	2.107	2.238	5.59
107)	sec-butylben	2.789	2.684	3.037	3.287	3.031	3.159	2.850		2.977	7.17
108)	1,3-dichloro	1.331	1.333	1.457	1.582	1.474	1.514	1.380	1.239	1.414	7.96
109)	p-isopropylt	2.450	2.321	2.549	2.748	2.510	2.665	2.366	2.242	2.481	6.94
110)	1,4-dichloro	1.333	1.418	1.461	1.587	1.470	1.529	1.382	1.296	1.434	6.79
111)	1,2-dichloro	1.354	1.355	1.463	1.572	1.446	1.532	1.340	1.261	1.415	7.46
112)	benzyl chlor	1.348	1.329	1.350	1.468	1.351	1.397	1.300	1.205	1.344	5.62
113)	n-butylbenze	1.159	1.152	1.360	1.447	1.310	1.432	1.156	1.001	1.252	12.67
114)	1,2-dibromo-		0.127	0.166	0.176	0.153	0.167	0.131		0.153	13.23
115)	1,3,5-TRICHL	1.250	1.217	1.460	1.525	1.391	1.459	1.221	1.125	1.331	10.93
116)	1,2,4-trichl	1.172	1.126	1.383	1.454	1.319	1.345	1.125	1.017	1.243	12.31
117)	hexachlorobu	0.643	0.609	0.731	0.775	0.709	0.689	0.606		0.680	9.41
118)	naphthalene	2.167	2.123	2.458	2.635	2.456	2.365	2.127	2.011	2.293	9.44
119)	1,2,3-trichl	1.001	0.977	1.185	1.260	1.143	1.151	0.991	0.852	1.070	12.65
120)	hexachloroet	0.424	0.444	0.557	0.591	0.533	0.587	0.471		0.515	13.35

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2A4305.M Mon Oct 18 11:11:30 2010 MS2A

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICV4305
Lab FileID: 2A100930.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2A100930.D Vial: 5
Acq On : 14 Oct 2010 7:11 pm Operator: HennyS
Sample : icv4305-50 Inst : MS2A
Misc : MS2967,V2A4305,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2A4305.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Mon Oct 18 11:06:16 2010
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	111	0.00	8.25
2	M	tertiary butyl alcohol	1.249	1.174	6.0	94	0.00	8.39
3	M	1,4-dioxane	0.096	0.084	12.5	91	0.00	12.31
4	I	pentafluorobenzene	1.000	1.000	0.0	111	0.00	10.68
5	M	chlorodifluoromethane	0.342	0.346	-1.2	102	0.00	4.37
6	M	dichlorodifluoromethane	0.601	0.621	-3.3	103	0.00	4.35
7	M	chloromethane	0.615	0.658	-7.0	104	0.00	4.73
8	M	vinyl chloride	0.582	0.624	-7.2	103	0.00	5.01
9	M	bromomethane	0.343	0.375	-9.3	105	0.00	5.77
10	M	chloroethane	0.285	0.309	-8.4	106	0.01	5.98
11	M	trichlorofluoromethane	0.599	0.627	-4.7	103	0.00	6.49
12	M	ethyl ether	0.202	0.211	-4.5	102	0.00	6.97
13	M	acrolein	0.072	0.075	-4.2	108	0.00	7.28
14	M	1,1-dichloroethene	0.345	0.356	-3.2	104	0.00	7.45
15	M	acetone	0.088	0.092	-4.5	106	0.00	7.53
16	M	allyl chloride	0.206	0.221	-7.3	106	0.00	8.06
17	M	acetonitrile	0.031	0.031	0.0	99	0.00	8.05
18	M	iodomethane	0.643	0.690	-7.3	103	0.00	7.77
19	M	iso-butyl alcohol	0.011	0.011	0.0	100	0.00	11.23
20	M	carbon disulfide	1.247	1.336	-7.1	104	0.00	7.90
21	M	methylene chloride	0.380	0.399	-5.0	104	0.00	8.28
22	M	methyl acetate	0.260	0.241	7.3	98	0.00	8.05
23	M	methyl tert butyl ether	1.914	1.958	-2.3	102	0.00	8.63
24	M	trans-1,2-dichloroethene	0.359	0.336	6.4	92	0.00	8.69
25	M	di-isopropyl ether	1.246	1.232	1.1	98	0.00	9.29
		----------	True	Calc.	% Drift	----------		
26	M	2-butanone	50.000	50.486	-1.0	106	0.00	10.10
		----------	AvgRF	CCRF	% Dev	----------		
27	M	1,1-dichloroethane	0.634	0.668	-5.4	104	0.00	9.32
28	M	chloroprene	0.455	0.452	0.7	97	0.00	9.43
29	M	acrylonitrile	0.118	0.124	-5.1	102	0.00	8.67
30	M	vinyl acetate	0.063	0.061	3.2	99	0.00	9.31
31	M	ethyl tert-butyl ether	1.099	1.066	3.0	99	0.00	9.80
32	M	ethyl acetate	0.046	0.045	2.2	100	0.00	10.11
33	M	2,2-dichloropropane	0.531	0.557	-4.9	104	0.00	10.12
34	M	cis-1,2-dichloroethene	0.406	0.462	-13.8	115	0.00	10.12
35		methylacrylate	0.046	0.047	-2.2	104	0.00	10.19
36	M	propionitrile	0.043	0.046	-7.0	103	0.00	10.21
37	M	bromochloromethane	0.198	0.202	-2.0	104	0.00	10.46

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICV4305
Lab FileID: 2A100930.D

38	M	tetrahydrofuran	0.114	0.113	0.9	106	0.00	10.50
39	M	chloroform	0.392	0.408	-4.1	105	0.00	10.53
40		t-butyl formate	0.337	0.326	3.3	100	0.00	10.55
41	S	dibromofluoromethane (s)	0.335	0.336	-0.3	102	0.00	10.74
42	S	1,2-dichloroethane-d4 (s)	0.343	0.346	-0.9	103	0.00	11.17
43	M	freon 113	0.329	0.312	5.2	92	0.00	7.42
44	M	methacrylonitrile	0.199	0.211	-6.0	107	0.00	10.40
45	M	1,1,1-trichloroethane	0.512	0.546	-6.6	102	0.00	10.78
46	M	Cyclohexane	0.539	0.562	-4.3	99	0.00	10.84
47	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	11.60
48	M	epichlorohydrin	0.024	0.023	4.2	97	0.00	12.83
49	M	n-butyl alcohol	0.007	0.006#	14.3	99	0.00	11.75
50	M	carbon tetrachloride	0.356	0.379	-6.5	103	0.00	10.98
51	M	1,1-dichloropropene	0.365	0.392	-7.4	104	0.00	10.96
52	M	hexane	0.367	0.367	0.0	94	0.00	9.01
53		TERT AMYL ALCOHOL	0.032	0.033	-3.1	103	0.00	11.12
54		2,2,4-TRIMETHYLPENTANE	1.165	1.121	3.8	93	0.00	11.21
55	M	benzene	1.145	1.143	0.2	104	0.00	11.23
56	M	tert-amyl methyl ether	0.172	0.163	5.2	99	0.00	11.25
57	M	heptane	0.224	0.218	2.7	96	0.00	11.39
58	M	isopropyl acetate	0.978	0.931	4.8	99	0.00	11.16
59	M	1,2-dichloroethane	0.311	0.320	-2.9	104	0.00	11.26
60	M	trichloroethene	0.279	0.295	-5.7	105	0.00	11.93
61		TERT-AMYL ETHYL ETHER	0.611	0.603	1.3	100	0.00	12.08
62	M	methyl methacrylate	0.374	0.395	-5.6	104	0.00	12.20
63	M	2-nitropropane	0.012	0.012	0.0	101	0.00	13.02
64	M	2-chloroethyl vinyl ether	0.143	0.138	3.5	94	0.00	12.70
65	M	1,2-dichloropropane	0.275	0.295	-7.3	106	0.00	12.20
66	M	dibromomethane	0.157	0.163	-3.8	103	0.00	12.36
67	M	methylcyclohexane	0.495	0.486	1.8	94	0.00	12.13
68	M	bromodichloromethane	0.347	0.376	-8.4	107	0.00	12.48
69	M	cis-1,3-dichloropropene	0.441	0.476	-7.9	105	0.00	12.91
70	S	toluene-d8 (s)	0.968	1.002	-3.5	105	0.00	13.17
71	M	4-methyl-2-pentanone	0.092	0.098	-6.5	110	0.00	13.00
72	M	toluene	0.682	0.697	-2.2	105	0.00	13.25
73	M	3-methyl-1-butanol	0.010	0.010	0.0	100	0.00	13.02
74	M	trans-1,3-dichloropropene	0.386	0.412	-6.7	107	0.00	13.44
75	M	ethyl methacrylate	0.297	0.328	-10.4	108	0.00	13.42
76	M	1,1,2-trichloroethane	0.190	0.207	-8.9	105	0.00	13.64
77	M	2-hexanone	0.081	0.091	-12.3	112	0.00	13.80
78	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.60
79	M	tetrachloroethene	0.294	0.304	-3.4	104	0.00	13.79
80	M	1,3-dichloropropane	0.404	0.422	-4.5	106	0.00	13.82
81	M	butyl acetate	0.171	0.163	4.7	98	0.00	13.85
82		3,3-dimethyl-1-butanol	0.027	0.026	3.7	102	0.00	13.96
83	M	dibromochloromethane	0.319	0.326	-2.2	102	0.00	14.06
84	M	1,2-dibromoethane	0.262	0.279	-6.5	104	0.00	14.20
85	M	chlorobenzene	0.839	0.863	-2.9	105	0.00	14.63
86	M	1,1,1,2-tetrachloroethane	0.294	0.310	-5.4	105	0.00	14.69
87	M	ethylbenzene	1.388	1.408	-1.4	104	0.00	14.67
88	M	m,p-xylene	0.538	0.544	-1.1	105	0.00	14.76
89	M	o-xylene	0.544	0.567	-4.2	106	0.00	15.16
90	M	styrene	0.925	0.936	-1.2	104	0.00	15.17
91	M	bromoform	0.225	0.242	-7.6	104	0.00	15.43
92	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	16.75
93	M	isopropylbenzene	2.670	2.883	-8.0	106	0.00	15.47
94	S	4-bromofluorobenzene (s)	0.750	0.767	-2.3	104	0.00	15.67

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4305-ICV4305
Lab FileID: 2A100930.D

			True	Calc.	% Drift			
95		cyclohexanone	500.000	456.317	8.7	83	0.00	15.65

			AvgRF	CCRF	% Dev			
96	M	bromobenzene	0.754	0.787	-4.4	102	0.00	15.85
97	M	1,1,2,2-tetrachloroethane	0.631	0.663	-5.1	103	0.00	15.77
98	M	trans-1,4-dichloro-2-bute	0.144	0.175	-21.5#	123	0.00	15.80
99	M	1,2,3-trichloropropane	0.153	0.160	-4.6	105	0.00	15.84
100	M	n-propylbenzene	0.686	0.730	-6.4	102	0.00	15.85
101	M	2-chlorotoluene	0.643	0.695	-8.1	106	0.00	15.99
102	M	4-chlorotoluene	0.674	0.682	-1.2	101	0.00	16.08
103	M	1,3,5-trimethylbenzene	2.234	2.352	-5.3	105	0.00	15.98
104	M	tert-butylbenzene	2.016	2.106	-4.5	105	0.00	16.31
105	M	pentachloroethane	0.479	0.529	-10.4	107	0.00	16.40
106	M	1,2,4-trimethylbenzene	2.238	2.325	-3.9	103	0.00	16.35
107	M	sec-butylbenzene	2.977	3.095	-4.0	103	0.00	16.51
108	M	1,3-dichlorobenzene	1.414	1.508	-6.6	104	0.00	16.69
109	M	p-isopropyltoluene	2.481	2.661	-7.3	106	0.00	16.62
110	M	1,4-dichlorobenzene	1.434	1.493	-4.1	103	0.00	16.77
111	M	1,2-dichlorobenzene	1.415	1.502	-6.1	105	0.00	17.15
112	M	benzyl chloride	1.344	1.288	4.2	96	0.00	16.88
113	M	n-butylbenzene	1.252	1.397	-11.6	106	0.00	17.01
114	M	1,2-dibromo-3-chloropropa	0.153	0.169	-10.5	105	0.00	18.09
115		1,3,5-TRICHLOROBENZENE	1.331	1.441	-8.3	103	0.00	18.09
116	M	1,2,4-trichlorobenzene	1.243	1.365	-9.8	103	0.00	18.73
117	M	hexachlorobutadiene	0.680	0.694	-2.1	98	0.00	18.84
118	M	naphthalene	2.293	2.502	-9.1	104	0.00	19.02
119	M	1,2,3-trichlorobenzene	1.070	1.186	-10.8	103	0.00	19.27
120	M	hexachloroethane	0.515	0.566	-9.9	105	0.00	17.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2A100919.D M2A4305.M Mon Oct 18 11:13:39 2010 MS2A

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4429-CC4305
Lab FileID: 2A103848.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\2ADATA\v2a4429-4430\2A103848.D Vial: 2
Acq On : 29 Dec 2010 9:59 am Operator: HennyS
Sample : cc4305-20 Inst : MS2A
Misc : MS6454,V2A4429,,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2A4305.M (RTE Integrator)
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
Last Update : Tue Oct 19 14:51:50 2010
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	96	-0.01	8.24
2	M	tertiary butyl alcohol	1.249	1.092	12.6	94	-0.02	8.37
3	M	1,4-dioxane	0.096	0.092	4.2	99	-0.01	12.30
4	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.67
5	M	chlorodifluoromethane	0.342	0.383	-12.0	120	0.00	4.37
6	M	dichlorodifluoromethane	0.601	0.579	3.7	99	0.02	4.36
7	M	chloromethane	0.615	0.673	-9.4	114	0.00	4.73
8	M	vinyl chloride	0.582	0.579	0.5	102	0.00	5.01
9	M	bromomethane	0.343	0.379	-10.5	110	0.00	5.76
10	M	chloroethane	0.285	0.299	-4.9	107	0.00	5.97
11	M	trichlorofluoromethane	0.599	0.580	3.2	99	-0.02	6.48
12	M	ethyl ether	0.202	0.201	0.5	102	0.00	6.97
13	M	acrolein	0.072	0.062	13.9	90	0.00	7.27
14	M	1,1-dichloroethene	0.345	0.337	2.3	100	0.00	7.45
15	M	acetone	0.088	0.080	9.1	92	0.00	7.53
16	M	allyl chloride	0.206	0.199	3.4	97	0.00	8.06
17	M	acetonitrile	0.031	0.031	0.0	104	0.00	8.04
18	M	iodomethane	0.643	0.692	-7.6	108	0.00	7.76
19	M	iso-butyl alcohol	0.011	0.011	0.0	101	-0.01	11.22
20	M	carbon disulfide	1.247	1.278	-2.5	103	0.00	7.89
21	M	methylene chloride	0.380	0.380	0.0	101	-0.01	8.27
22	M	methyl acetate	0.260	0.239	8.1	101	0.00	8.04
23	M	methyl tert butyl ether	0.957	0.980	-2.4	106	0.00	8.62
24	M	trans-1,2-dichloroethene	0.359	0.371	-3.3	101	-0.01	8.68
25	M	di-isopropyl ether	1.246	1.176	5.6	99	0.00	9.28
		----------	True	Calc.	% Drift	----------		
26	M	2-butanone	20.000	18.656	6.7	94	-0.01	10.09
		----------	AvgRF	CCRF	% Dev	----------		
27	M	1,1-dichloroethane	0.634	0.631	0.5	99	-0.01	9.31
28	M	chloroprene	0.455	0.520	-14.3	118	-0.01	9.42
29	M	acrylonitrile	0.118	0.117	0.8	95	0.00	8.65
30	M	vinyl acetate	0.063	0.056	11.1	97	-0.01	9.30
31	M	ethyl tert-butyl ether	1.099	1.112	-1.2	107	-0.01	9.78
32	M	ethyl acetate	0.046	0.040	13.0	92	-0.01	10.10
33	M	2,2-dichloropropane	0.531	0.533	-0.4	100	-0.01	10.11
34	M	cis-1,2-dichloroethene	0.406	0.400	1.5	100	-0.01	10.11
35		methylacrylate	0.046	0.045	2.2	98	0.00	10.19
36	M	propionitrile	0.043	0.044	-2.3	97	-0.01	10.20
37	M	bromochloromethane	0.198	0.196	1.0	101	0.00	10.45

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4429-CC4305
Lab FileID: 2A103848.D

38	M	tetrahydrofuran	0.114	0.103	9.6	96	0.00	10.50
39	M	chloroform	0.392	0.393	-0.3	102	-0.02	10.51
40		t-butyl formate	0.337	0.331	1.8	102	-0.01	10.54
41	S	dibromofluoromethane (s)	0.335	0.337	-0.6	107	-0.01	10.73
42	S	1,2-dichloroethane-d4 (s)	0.343	0.331	3.5	104	-0.01	11.15
43	M	freon 113	0.329	0.309	6.1	96	0.00	7.42
44	M	methacrylonitrile	0.199	0.187	6.0	94	-0.01	10.39
45	M	1,1,1-trichloroethane	0.512	0.525	-2.5	101	-0.01	10.76
46	M	Cyclohexane	0.539	0.509	5.6	93	0.00	10.83
47	I	1,4-difluorobenzene	1.000	1.000	0.0	105	-0.01	11.59
48	M	epichlorohydrin	0.024	0.022	8.3	97	-0.01	12.82
49	M	n-butyl alcohol	0.007	0.007#	0.0	106	-0.01	11.74
50	M	carbon tetrachloride	0.356	0.375	-5.3	102	0.00	10.97
51	M	1,1-dichloropropene	0.365	0.368	-0.8	98	-0.01	10.95
52	M	hexane	0.367	0.336	8.4	90	-0.01	9.00
53		TERT AMYL ALCOHOL		----------NA----------				
54		2,2,4-TRIMETHYLPENTANE	1.165	0.870	25.3#	79	-0.02	11.20
55	M	benzene	1.145	1.094	4.5	99	-0.01	11.22
56	M	tert-amyl methyl ether	0.172	0.184	-7.0	110	0.00	11.25
57	M	heptane	0.224	0.162	27.7#	75	-0.01	11.37
58	M	isopropyl acetate	0.978	0.837	14.4	90	-0.01	11.14
59	M	1,2-dichloroethane	0.311	0.321	-3.2	101	-0.01	11.24
60	M	trichloroethene	0.279	0.277	0.7	99	-0.01	11.92
61		TERT-AMYL ETHYL ETHER		----------NA----------				
62	M	methyl methacrylate	0.374	0.365	2.4	97	-0.01	12.19
63	M	2-nitropropane	0.012	0.010	16.7	85	0.00	13.02
64	M	2-chloroethyl vinyl ether	0.143	0.157	-9.8	113	-0.01	12.69
65	M	1,2-dichloropropane	0.275	0.271	1.5	96	0.00	12.19
66	M	dibromomethane	0.157	0.162	-3.2	102	-0.01	12.35
67	M	methylcyclohexane	0.495	0.413	16.6	84	0.00	12.13
68	M	bromodichloromethane	0.347	0.350	-0.9	102	0.00	12.47
69	M	cis-1,3-dichloropropene	0.441	0.438	0.7	99	0.00	12.90
70	S	toluene-d8 (s)	0.968	0.927	4.2	102	0.00	13.17
71	M	4-methyl-2-pentanone	0.092	0.085	7.6	94	0.00	12.99
72	M	toluene	0.682	0.642	5.9	98	0.00	13.24
73	M	3-methyl-1-butanol	0.010	0.010	0.0	94	0.00	13.02
74	M	trans-1,3-dichloropropene	0.386	0.377	2.3	100	-0.01	13.43
75	M	ethyl methacrylate	0.297	0.278	6.4	95	-0.01	13.41
76	M	1,1,2-trichloroethane	0.190	0.202	-6.3	106	-0.01	13.63
77	M	2-hexanone	0.081	0.077	4.9	94	-0.01	13.79
78	I	chlorobenzene-d5	1.000	1.000	0.0	103	-0.01	14.59
79	M	tetrachloroethene	0.294	0.297	-1.0	99	0.00	13.79
80	M	1,3-dichloropropane	0.404	0.411	-1.7	99	-0.01	13.81
81	M	butyl acetate	0.171	0.162	5.3	97	0.00	13.85
82		3,3-dimethyl-1-butanol	0.027	0.026	3.7	95	0.00	13.95
83	M	dibromochloromethane	0.319	0.336	-5.3	103	-0.01	14.05
84	M	1,2-dibromoethane	0.262	0.278	-6.1	101	-0.01	14.19
85	M	chlorobenzene	0.839	0.832	0.8	99	0.00	14.62
86	M	1,1,1,2-tetrachloroethane	0.294	0.323	-9.9	104	0.00	14.67
87	M	ethylbenzene	1.388	1.356	2.3	97	0.00	14.66
88	M	m,p-xylene	0.538	0.530	1.5	99	0.00	14.76
89	M	o-xylene	0.544	0.529	2.8	97	0.00	15.15
90	M	styrene	0.925	0.893	3.5	97	0.00	15.16
91	M	bromoform	0.225	0.254	-12.9	109	-0.01	15.42
92	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	102	-0.01	16.74
93	M	isopropylbenzene	2.670	2.634	1.3	97	-0.01	15.46
94	S	4-bromofluorobenzene (s)	0.750	0.726	3.2	101	-0.01	15.66

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2A4429-CC4305
Lab FileID: 2A103848.D

			True	Calc.	% Drift			
95		cyclohexanone	200.000	59.797	70.1#	47	0.00	15.64

			AvgRF	CCRF	% Dev			
96	M	bromobenzene	0.754	0.772	-2.4	101	-0.01	15.84
97	M	1,1,2,2-tetrachloroethane	0.631	0.649	-2.9	100	-0.01	15.76
98	M	trans-1,4-dichloro-2-bute	0.144	0.133	7.6	97	-0.01	15.79
99	M	1,2,3-trichloropropane	0.153	0.160	-4.6	104	-0.01	15.83
100	M	n-propylbenzene	0.686	0.687	-0.1	96	0.00	15.84
101	M	2-chlorotoluene	0.643	0.663	-3.1	100	-0.01	15.98
102	M	4-chlorotoluene	0.674	0.680	-0.9	101	0.00	16.08
103	M	1,3,5-trimethylbenzene	2.234	2.149	3.8	96	0.00	15.98
104	M	tert-butylbenzene	2.016	2.168	-7.5	109	0.00	16.30
105	M	pentachloroethane	0.479	0.503	-5.0	104	0.00	16.39
106	M	1,2,4-trimethylbenzene	2.238	2.196	1.9	98	0.00	16.34
107	M	sec-butylbenzene	2.977	2.807	5.7	94	0.00	16.50
108	M	1,3-dichlorobenzene	1.414	1.425	-0.8	98	0.00	16.69
109	M	p-isopropyltoluene	2.481	2.359	4.9	96	0.00	16.61
110	M	1,4-dichlorobenzene	1.434	1.410	1.7	98	0.00	16.77
111	M	1,2-dichlorobenzene	1.415	1.402	0.9	99	0.00	17.14
112	M	benzyl chloride	1.344	1.340	0.3	101	0.00	16.88
113	M	n-butylbenzene	1.252	1.198	4.3	93	-0.01	17.00
114	M	1,2-dibromo-3-chloropropa	0.153	0.145	5.2	96	0.00	18.08
115		1,3,5-TRICHLOROBENZENE	1.331	1.333	-0.2	98	0.00	18.08
116	M	1,2,4-trichlorobenzene	1.243	1.223	1.6	94	0.00	18.73
117	M	hexachlorobutadiene	0.680	0.654	3.8	94	0.00	18.83
118	M	naphthalene	2.293	2.228	2.8	92	0.00	19.02
119	M	1,2,3-trichlorobenzene	1.070	1.053	1.6	94	-0.01	19.26
120	M	hexachloroethane	0.515	0.551	-7.0	105	0.00	17.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2A100918.D M2A4305.M Wed Dec 29 14:45:56 2010 RPT1

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

Response Factor Report MS3D

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

Calibration Files
5 =3D52926.D 2 =3D52925.D 50 =3D52929.D 100 =3D52930.D
1 =3D52924.D 200 =3D52931.D 20 =3D52928.D 10 =3D52927.D
= =

Compound	5	2	50	100	1	200	20	10	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD									
2) 1,4-dioxane	0.058	0.077	0.078		0.064	0.071	0.080		0.071	12.24
3) tertiary butyl alcohol	0.938	1.096	1.000	1.057		0.984	0.987	1.079	1.020	5.70
4) I pentafluorobenzene	ISTD									
5) chlorodifluoromethane	0.687	0.708	0.668	0.702	0.623	0.648	0.668	0.673	0.672	4.15
6) dichlorodifluoromethane	0.879	0.792	0.764	0.798	0.708	0.798	0.813	0.805	0.795	6.04
7) chloromethane	0.934	0.900	0.847	0.899	0.860	0.911	0.896	0.884	0.891	3.11
8) vinyl chloride	0.750	0.742	0.655	0.701	0.716	0.711	0.692	0.682	0.706	4.39
9) bromomethane	0.395	0.408	0.362	0.330	0.348	0.335	0.380	0.392	0.369	7.94
10) chloroethane	0.410	0.372	0.349	0.349	0.338	0.316	0.377	0.388	0.362	8.26
11) vinyl bromide									0.000#	-1.00
12) trichlorofluoromethane	0.835	0.784	0.737	0.774	0.699	0.773	0.789	0.770	0.770	5.11
13) pentane	1.265	1.351	1.092	1.136	1.351	1.005	1.130	1.174	1.188	10.46
14) ethyl ether	0.244	0.225	0.258	0.261	0.202	0.264	0.260	0.262	0.247	9.07
15) acrolein	0.102	0.117	0.120		0.120	0.115	0.109		0.114	6.31
16) 1,1-dichloroethene	0.449	0.477	0.407	0.422	0.503	0.413	0.429	0.435	0.442	7.49
17) acetone		0.195	0.181		0.189	0.204	0.226		0.199	8.72
18) allyl chloride	0.220	0.282	0.244	0.253	0.226	0.255	0.229	0.215	0.241	9.31
19) acetonitrile		0.054	0.057		0.050	0.053	0.053		0.053	5.09
20) iodomethane	0.782	0.834	0.734	0.754	0.751	0.761	0.750	0.796	0.771	4.18
21) iso-butyl alcohol	0.136	0.146	0.117	0.119	0.151	0.116	0.120	0.126	0.129	10.81
22) carbon disulfide	1.885	1.969	1.665	1.734	1.924	1.708	1.746	1.816	1.806	6.11
23) methylene chloride										

SII-SSA-0014-005656

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

		0.503	0.562	0.482	0.486	0.535	0.491	0.494	0.523	0.509	5.49
24)	methyl acetate										
		0.314		0.436	0.471		0.450	0.394	0.404	0.412	13.49
25)	methyl tert butyl ether										
		1.545	1.674	1.494	1.503	1.570	1.500	1.511	1.631	1.553	4.32
26)	trans-1,2-dichloroethene										
		0.472	0.493	0.434	0.442	0.519	0.432	0.457	0.479	0.466	6.55
27)	di-isopropyl ether										
		1.878	2.148	1.847	1.917	1.929	1.769	1.852	1.946	1.911	5.81
28)	ethyl tert-butyl ether										
		1.729	1.942	1.684	1.748	1.758	1.631	1.687	1.773	1.744	5.31
29)	2-butanone										
				0.054	0.057		0.059	0.048	0.043	0.052	12.02
30)	1,1-dichloroethane										
		0.950	0.972	0.893	0.901	0.927	0.882	0.922	0.982	0.929	3.96
31)	chloroprene										
		0.699	0.753	0.657	0.685	0.662	0.630	0.671	0.697	0.682	5.35
32)	acrylonitrile										
		0.221	0.220	0.224	0.219		0.217	0.219	0.239	0.223	3.28
33)	vinyl acetate										
				0.071	0.078		0.075	0.060	0.050	0.067	17.04

----- Linear regression ----- Coefficient = 0.9992
Response Ratio = -0.00509 + 0.07732 *A

34)	ethyl acetate									
	0.065		0.087	0.091		0.084	0.087	0.083	0.083	10.98
35)	2,2-dichloropropane									
	0.734	0.766	0.666	0.674	0.748	0.644	0.687	0.729	0.706	6.24
36)	cis-1,2-dichloroethene									
	0.499	0.523	0.470	0.472	0.497	0.469	0.482	0.507	0.490	4.00
37)	propionitrile									
	0.079	0.079	0.085	0.086	0.068	0.087	0.085	0.089	0.082	8.28
38)	methyl acrylate									
				0.572	0.602		0.617	0.535	0.485	0.562	9.51
39)	bromochloromethane									
	0.226	0.242	0.220	0.221	0.199	0.226	0.223	0.227	0.223	5.29
40)	tetrahydrofuran									
	0.230		0.197	0.201		0.205	0.196	0.213	0.207	6.26
41)	chloroform									
	0.851	0.897	0.797	0.801	0.860	0.800	0.818	0.861	0.836	4.43
42)	Tert-Butyl Formate									
	0.534	0.586	0.525	0.559	0.469	0.509	0.526	0.562	0.534	6.73
43)	dibromofluoromethane (s)									
	0.398	0.438	0.389	0.389	0.454	0.392	0.388	0.427	0.409	6.47
44)	1,2-dichloroethane-d4 (s)									
	0.513	0.621	0.532	0.530	0.595	0.505	0.505	0.592	0.549	8.40
45)	freon 113									
	0.372	0.372	0.343	0.358	0.316	0.322	0.350	0.356	0.349	6.03
46)	methacrylonitrile									
				0.320	0.349		0.367	0.297	0.308	0.328	8.95
47)	1,1,1-trichloroethane									
	0.727	0.760	0.682	0.702	0.751	0.687	0.702	0.731	0.718	4.04
48)	tert amyl alcohol									
										0.000# -1.00
49)	2,2,4-Trimethylpentane									
	2.028	2.093	1.922	2.035	1.939	1.789	1.943	1.941	1.961	4.71
50)	tert-amyl methyl ether									
	1.550	1.807	1.491	1.555	1.639	1.436	1.506	1.602	1.573	7.24

51) I 1,4-difluorobenzene ----------ISTD----------

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

52)	epichlorohydrin									
	0.035	0.039	0.033	0.036	0.034	0.033	0.035		0.035	6.01
53)	n-butyl alcohol									
	0.009	0.010	0.010	0.011	0.008	0.009	0.010	0.010	0.010#	8.45
54)	cyclohexane									
	0.514	0.551	0.452	0.457	0.554	0.438	0.471	0.486	0.490	9.13
55)	carbon tetrachloride									
	0.441	0.461	0.399	0.407	0.442	0.394	0.411	0.432	0.424	5.65
56)	1,1-dichloropropene									
	0.459	0.486	0.426	0.427	0.454	0.416	0.439	0.455	0.445	5.14
57)	hexane									
	0.488	0.499	0.443	0.451	0.476	0.396	0.456	0.466	0.459	6.95
58)	benzene									
	1.338	1.491	1.222	1.226	1.394	1.195	1.267	1.332	1.308	7.70
59)	heptane									
	0.269	0.256	0.239	0.244	0.222	0.214	0.242	0.246	0.241	7.23
60)	isopropyl acetate									
	0.666		0.795	0.759		0.718	0.816	0.766	0.753	7.24
61)	1,2-dichloroethane									
	0.451	0.475	0.432	0.428	0.417	0.431	0.451	0.472	0.445	4.76
62)	trichloroethene									
	0.313	0.346	0.297	0.301	0.291	0.301	0.301	0.308	0.307	5.54
63)	tert amyl ethyl ether									
									0.000#	-1.00
64)	2-nitropropane									
			0.007	0.007		0.007	0.007	0.006	0.007#	8.70
65)	2-chloroethyl vinyl ether									
	0.214	0.241	0.212	0.217	0.196	0.198	0.215	0.228	0.215	6.74
66)	methyl methacrylate									
			0.577	0.579		0.592	0.569	0.585	0.580	1.52
67)	1,2-dichloropropane									
	0.348	0.385	0.340	0.339	0.341	0.340	0.346	0.357	0.350	4.47
68)	methylcyclohexane									
	0.575		0.525	0.547		0.485	0.539	0.553	0.537	5.65
69)	dibromomethane									
	0.194	0.206	0.192	0.193	0.179	0.198	0.196	0.205	0.195	4.26
70)	bromodichloromethane									
	0.406	0.435	0.404	0.408	0.409	0.420	0.405	0.421	0.414	2.68
71)	cis-1,3-dichloropropene									
	0.509	0.544	0.499	0.503	0.498	0.518	0.501	0.522	0.512	3.06
72)	toluene-d8 (s)									
	0.955	1.088	0.898	0.902	1.089	0.913	0.897	1.008	0.969	8.57
73)	4-methyl-2-pentanone									
	0.129	0.136	0.139	0.141		0.144	0.137	0.146	0.139	4.00
74)	toluene									
	0.709	0.838	0.664	0.680	0.731	0.685	0.686	0.721	0.714	7.66
75)	3-methyl-1-butanol									
	0.007	0.007	0.008	0.009		0.008	0.008	0.008	0.008#	6.97
76)	trans-1,3-dichloropropene									
	0.452	0.474	0.448	0.453	0.428	0.458	0.452	0.473	0.455	3.23
77)	ethyl methacrylate									
	0.361	0.378	0.381	0.386	0.340	0.391	0.379	0.401	0.377	5.01
78)	1,1,2-trichloroethane									
	0.221	0.230	0.221	0.223	0.233	0.228	0.222	0.230	0.226	2.17
79)	2-hexanone									
	0.087		0.106	0.113		0.117	0.097	0.088	0.101	12.65
80)	I chlorobenzene-d5	----------ISTD----------								
81)	tetrachloroethene									
	0.354	0.384	0.342	0.347	0.359	0.346	0.346	0.358	0.355	3.79

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

82)	1,3-dichloropropane										
		0.545	0.566	0.524	0.521	0.520	0.530	0.531	0.552	0.536	3.09
83)	butyl acetate										
		0.214	0.239	0.242	0.254		0.241	0.239	0.246	0.239	5.08
84)	3,3-Dimethyl-1-Butanol										
		0.038	0.043	0.039	0.042	0.046	0.037	0.039	0.042	0.041	7.24
85)	dibromochloromethane										
		0.354	0.357	0.356	0.359	0.330	0.371	0.358	0.372	0.357	3.58
86)	1,2-dibromoethane										
		0.328	0.332	0.316	0.318	0.300	0.327	0.326	0.336	0.323	3.55
87)	n-Butyl Ether										
		1.514	1.544	1.531	1.586	1.296	1.673	1.653	1.472	1.534	7.70
88)	chlorobenzene										
		0.904	0.968	0.859	0.861	0.845	0.879	0.881	0.908	0.888	4.38
89)	1,1,1,2-tetrachloroethane										
		0.347	0.339	0.337	0.338	0.345	0.346	0.344	0.345	0.343	1.16
90)	ethylbenzene										
		1.615	1.767	1.526	1.531	1.656	1.525	1.585	1.633	1.605	5.18
91)	m,p-xylene										
		0.598	0.638	0.552	0.554	0.592	0.550	0.571	0.594	0.581	5.25
92)	o-xylene										
		0.598	0.654	0.557	0.561	0.599	0.566	0.575	0.606	0.590	5.48
93)	styrene										
		0.976	1.010	0.946	0.946	0.962	0.962	0.963	0.990	0.969	2.25
94)	Butyl Acrylate										
										0.000#	-1.00
95)	bromoform										
		0.241	0.268	0.255	0.261	0.223	0.272	0.254	0.261	0.254	6.31
96)	I 1,4-dichlorobenzene-d ----------ISTD----------										
97)	isopropylbenzene										
		2.995	3.262	2.955	2.966	3.047	2.903	3.033	3.066	3.028	3.58
98)	4-bromofluorobenzene (s)										
		0.871	0.997	0.846	0.836	1.037	0.845	0.841	0.943	0.902	8.81
99)	bromobenzene										
		0.741	0.780	0.742	0.738	0.750	0.750	0.751	0.774	0.753	2.05
100)	cyclohexanone										
		0.070	0.067	0.081	0.070	0.102	0.060	0.086	0.085	0.078	17.49
	----- Quadratic regression ----- Coefficient = 0.9993										
	Response Ratio = 0.00560 + 0.08248 *A + -0.00056 *A^2										
101)	1,1,2,2-tetrachloroethane										
		0.906	0.993	0.885	0.887	0.999	0.880	0.910	0.957	0.927	5.26
102)	trans-1,4-dichloro-2-butene										
		0.202	0.212	0.234	0.241	0.183	0.245	0.230	0.232	0.222	9.62
103)	1,2,3-trichloropropane										
		0.190	0.215	0.196	0.195	0.181	0.193	0.191	0.214	0.197	5.95
104)	n-propylbenzene										
		3.678	4.056	3.441	3.460	3.637	3.368	3.636	3.708	3.623	5.93
105)	4-Ethyltoluene										
										0.000#	-1.00
106)	2-chlorotoluene										
		0.677	0.744	0.679	0.685	0.715	0.678	0.694	0.706	0.697	3.35
107)	4-chlorotoluene										
		0.693	0.741	0.694	0.703	0.686	0.709	0.703	0.712	0.705	2.40
108)	1,3,5-trimethylbenzene										
		2.484	2.922	2.476	2.493	2.562	2.456	2.532	2.609	2.567	5.92
109)	tert-butylbenzene										
		1.991	2.195	1.994	2.056	2.112	2.069	2.036	2.061	2.064	3.21
110)	pentachloroethane										

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2292-ICC2292
Lab FileID: 3D52929.D

	0.486	0.508	0.501	0.513	0.518	0.526	0.497	0.496	0.506	2.63
111)	1,2,4-trimethylbenzene									
	2.511	2.911	2.459	2.490	2.628	2.512	2.497	2.595	2.575	5.70
112)	sec-butylbenzene									
	3.205	3.566	3.151	3.228	3.265	3.157	3.204	3.283	3.257	4.09
113)	1,3-dichlorobenzene									
	1.422	1.546	1.385	1.401	1.515	1.433	1.417	1.485	1.451	3.99
114)	p-isopropyltoluene									
	2.573	2.806	2.550	2.601	2.557	2.568	2.592	2.614	2.608	3.19
115)	1,4-dichlorobenzene									
	1.512	1.663	1.446	1.449	1.616	1.483	1.477	1.554	1.525	5.22
116)	1,2-dichlorobenzene									
	1.419	1.540	1.427	1.433	1.534	1.466	1.436	1.509	1.470	3.39
117)	1,4-Diethylbenzene									
									0.000#	-1.00
118)	n-butylbenzene									
	1.436	1.536	1.405	1.456	1.419	1.421	1.452	1.453	1.447	2.79
119)	1,2,4,5-Tetramethylbenzene									
									0.000#	-1.00
120)	1,2-dibromo-3-chloropropane									
	0.183	0.197	0.189	0.188	0.181	0.187	0.188	0.197	0.189	3.15
121)	1,3,5-trichlorobenzene									
	1.222	1.248	1.227	1.266	1.242	1.217	1.225	1.238	1.236	1.31
122)	1,2,4-trichlorobenzene									
	1.093	1.093	1.199	1.195	1.043	1.119	1.172	1.169	1.135	5.00
123)	hexachlorobutadiene									
	0.619	0.612	0.614	0.648	0.630	0.576	0.624	0.621	0.618	3.29
124)	naphthalene									
	2.438	2.430	2.721	2.688	2.420	2.484	2.692	2.689	2.570	5.36
125)	1,2,3-trichlorobenzene									
	0.930	0.978	1.045	1.039	0.877	0.965	1.033	1.022	0.986	6.10
126)	hexachloroethane									
	0.500	0.541	0.550	0.580	0.515	0.577	0.541	0.528	0.541	5.12
127)	Benzyl chloride									
	1.510	1.794	1.591	1.653	1.706	1.531	1.567	1.647	1.625	5.85

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3D2292.M Tue Nov 16 14:09:00 2010 VOA-05

SII-SSA-0014-005660

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2293-ICV2292
Lab FileID: 3D52936.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D...3d2292final\3D52936.D Vial: 2
Acq On : 16 Nov 2010 1:17 pm Operator: TAMIKAG
Sample : ICV2292-50 Inst : MS3D
Misc : MS4814,V3D2293,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	113	0.00	6.99
2		1,4-dioxane	0.071	0.076	-7.0	112	0.00	10.85
3	M	tertiary butyl alcohol	1.020	1.032	-1.2	117	0.00	7.11
4	I	pentafluorobenzene	1.000	1.000	0.0	109	0.00	9.20
5		chlorodifluoromethane	0.672	0.497	26.0#	81	0.00	3.72
6		dichlorodifluoromethane	0.795	0.825	-3.8	117	0.01	3.71
7		chloromethane	0.891	0.930	-4.4	119	0.00	4.03
8		vinyl chloride	0.706	0.718	-1.7	119	0.00	4.27
9		bromomethane	0.369	0.409	-10.8	123	0.00	4.87
10		chloroethane	0.362	0.373	-3.0	116	0.00	5.04
11		vinyl bromide		----------NA----------				
12		trichlorofluoromethane	0.770	0.802	-4.2	118	0.00	5.49
13		pentane	1.188	0.537	54.8#	53	0.00	5.56
14		ethyl ether	0.247	0.252	-2.0	106	0.00	5.88
15		acrolein	0.114	0.128	-12.3	119	0.00	6.13
16		1,1-dichloroethene	0.442	0.400	9.5	107	0.00	6.29
17		acetone	0.199	0.203	-2.0	113	0.00	6.42
18		allyl chloride	0.241	0.247	-2.5	110	0.00	6.81
19		acetonitrile	0.053	0.057	-7.5	115	0.00	6.81
20		iodomethane	0.771	0.719	6.7	106	0.00	6.56
21		iso-butyl alcohol	0.129	0.117	9.3	109	0.00	9.36
22		carbon disulfide	1.806	1.623	10.1	106	0.00	6.69
23		methylene chloride	0.509	0.477	6.3	107	0.00	7.00
24		methyl acetate	0.412	0.423	-2.7	105	0.00	6.83
25		methyl tert butyl ether	1.553	1.502	3.3	109	0.00	7.31
26		trans-1,2-dichloroethene	0.466	0.383	17.8	96	0.00	7.37
27		di-isopropyl ether	1.911	1.891	1.0	111	0.00	7.91
28		ethyl tert-butyl ether	1.744	1.693	2.9	109	0.00	8.37
29		2-butanone	0.052	0.058	-11.5	116	0.00	8.67
30	M	1,1-dichloroethane	0.929	0.896	3.6	109	0.00	7.93
31		chloroprene	0.682	0.695	-1.9	115	0.00	8.04
32		acrylonitrile	0.223	0.229	-2.7	111	0.00	7.34
		----------	True	Calc.	% Drift	----------		
33		vinyl acetate	50.000	53.042	-6.1	118	0.00	7.94
		----------	AvgRF	CCRF	% Dev	----------		
34		ethyl acetate	0.083	0.089	-7.2	111	0.00	8.67
35		2,2-dichloropropane	0.706	0.746	-5.7	122	0.00	8.66
36		cis-1,2-dichloroethene	0.490	0.529	-8.0	122	0.00	8.68
37		propionitrile	0.082	0.085	-3.7	109	0.00	8.75

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2293-ICV2292
Lab FileID: 3D52936.D

38		methyl acrylate	0.562	0.578	-2.8	110	0.00	8.76
39		bromochloromethane	0.223	0.220	1.3	109	0.00	8.98
40		tetrahydrofuran	0.207	0.203	1.9	112	0.00	9.03
41		chloroform	0.836	0.810	3.1	110	0.00	9.04
42		Tert-Butyl Formate	0.534	0.562	-5.2	116	0.00	9.07
43	S	dibromofluoromethane (s)	0.409	0.410	-0.2	114	0.00	9.24
44	S	1,2-dichloroethane-d4 (s)	0.549	0.564	-2.7	115	0.00	9.66
45		freon 113	0.349	0.319	8.6	101	0.00	6.26
46		methacrylonitrile	0.328	0.341	-4.0	116	0.00	8.93
47		1,1,1-trichloroethane	0.718	0.691	3.8	110	0.00	9.28
48		tert amyl alcohol		----------NA----------				
49		2,2,4-Trimethylpentane	1.961	1.668	14.9	94	0.00	9.72
50		tert-amyl methyl ether	1.573	1.501	4.6	109	0.00	9.76
51	I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00	10.11
52		epichlorohydrin	0.035	0.037	-5.7	118	0.00	11.39
53		n-butyl alcohol	0.010	0.010	0.0	115	0.02	10.28
54	M	cyclohexane	0.490	0.442	9.8	106	0.00	9.34
55		carbon tetrachloride	0.424	0.406	4.2	110	0.00	9.48
56		1,1-dichloropropene	0.445	0.428	3.8	109	0.00	9.46
57		hexane	0.459	0.309	32.7#	75	0.00	7.66
58	M	benzene	1.308	1.224	6.4	108	0.00	9.73
59		heptane	0.241	0.193	19.9	87	0.00	9.89
60		isopropyl acetate	0.753	0.823	-9.3	112	0.00	9.66
61		1,2-dichloroethane	0.445	0.433	2.7	108	0.00	9.75
62		trichloroethene	0.307	0.301	2.0	110	0.00	10.45
63		tert amyl ethyl ether		----------NA----------				
64		2-nitropropane	0.007	0.007#	0.0	106	0.00	11.25
65		2-chloroethyl vinyl ether	0.215	0.177	17.7	90	0.00	11.26
66		methyl methacrylate	0.580	0.577	0.5	108	0.00	10.73
67		1,2-dichloropropane	0.350	0.339	3.1	108	0.00	10.72
68		methylcyclohexane	0.537	0.432	19.6	89	0.00	10.66
69		dibromomethane	0.195	0.193	1.0	109	0.00	10.88
70		bromodichloromethane	0.414	0.417	-0.7	112	0.00	11.02
71		cis-1,3-dichloropropene	0.512	0.512	0.0	111	0.00	11.48
72	S	toluene-d8 (s)	0.969	0.952	1.8	115	0.00	11.77
73		4-methyl-2-pentanone	0.139	0.145	-4.3	113	0.00	11.58
74		toluene	0.714	0.677	5.2	110	0.00	11.84
75		3-methyl-1-butanol	0.008	0.009#	-12.5	117	0.00	11.61
76		trans-1,3-dichloropropene	0.455	0.466	-2.4	113	0.00	12.05
77		ethyl methacrylate	0.377	0.398	-5.6	113	0.00	12.04
78		1,1,2-trichloroethane	0.226	0.224	0.9	110	0.00	12.26
79		2-hexanone	0.101	0.117	-15.8	120	0.00	12.45
80	I	chlorobenzene-d5	1.000	1.000	0.0	109	0.00	13.29
81		tetrachloroethene	0.355	0.332	6.5	106	0.00	12.43
82		1,3-dichloropropane	0.536	0.520	3.0	108	0.00	12.45
83		butyl acetate	0.239	0.249	-4.2	112	0.00	12.52
84		3,3-Dimethyl-1-Butanol	0.041	0.044	-7.3	122	0.00	12.62
85		dibromochloromethane	0.357	0.354	0.8	108	0.00	12.71
86		1,2-dibromoethane	0.323	0.318	1.5	110	0.00	12.86
87		n-Butyl Ether	1.534	1.574	-2.6	112	0.00	13.24
88		chlorobenzene	0.888	0.855	3.7	109	0.00	13.32
89		1,1,1,2-tetrachloroethane	0.343	0.339	1.2	110	0.00	13.38
90		ethylbenzene	1.605	1.515	5.6	108	0.00	13.38
91		m,p-xylene	0.581	0.555	4.5	110	0.00	13.49
92		o-xylene	0.590	0.570	3.4	112	0.00	13.90
93		styrene	0.969	0.937	3.3	108	0.00	13.92
94		Butyl Acrylate		----------NA----------				
95		bromoform	0.254	0.257	-1.2	110	0.00	14.18

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2293-ICV2292
Lab FileID: 3D52936.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	0.00	15.61
97		isopropylbenzene	3.028	3.022	0.2	110	0.00	14.24
98	S	4-bromofluorobenzene (s)	0.902	0.873	3.2	111	0.00	14.45
99		bromobenzene	0.753	0.742	1.5	108	0.00	14.64
			True	Calc.	% Drift			
100		cyclohexanone	500.000	696.680	-39.3#	138	0.00	14.41
			AvgRF	CCRF	% Dev			
101		1,1,2,2-tetrachloroethane	0.927	0.884	4.6	108	0.00	14.56
102		trans-1,4-dichloro-2-bute	0.222	0.283	-27.5#	130	0.00	14.60
103		1,2,3-trichloropropane	0.197	0.197	0.0	108	0.00	14.63
104		n-propylbenzene	3.623	3.411	5.9	107	0.00	14.65
105		4-Ethyltoluene		----------NA----------				
106		2-chlorotoluene	0.697	0.698	-0.1	111	0.00	14.80
107		4-chlorotoluene	0.705	0.695	1.4	108	0.00	14.90
108		1,3,5-trimethylbenzene	2.567	2.526	1.6	110	0.00	14.81
109		tert-butylbenzene	2.064	2.085	-1.0	113	0.00	15.15
110		pentachloroethane	0.506	0.553	-9.3	119	0.00	15.23
111		1,2,4-trimethylbenzene	2.575	2.482	3.6	109	0.00	15.20
112		sec-butylbenzene	3.257	3.230	0.8	111	0.00	15.36
113		1,3-dichlorobenzene	1.451	1.418	2.3	110	0.00	15.56
114		p-isopropyltoluene	2.608	2.666	-2.2	113	0.00	15.48
115		1,4-dichlorobenzene	1.525	1.463	4.1	109	0.00	15.64
116		1,2-dichlorobenzene	1.470	1.437	2.2	109	0.00	16.02
117		1,4-Diethylbenzene		----------NA----------				
118		n-butylbenzene	1.447	1.477	-2.1	113	0.00	15.89
119		1,2,4,5-Tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.189	0.191	-1.1	109	0.00	16.76
121		1,3,5-trichlorobenzene	1.236	1.254	-1.5	110	0.00	16.92
122		1,2,4-trichlorobenzene	1.135	1.196	-5.4	108	0.00	17.50
123		hexachlorobutadiene	0.618	0.611	1.1	107	0.00	17.60
124		naphthalene	2.570	2.753	-7.1	109	0.00	17.75
125		1,2,3-trichlorobenzene	0.986	1.064	-7.9	110	0.00	17.97
126		hexachloroethane	0.541	0.563	-4.1	110	0.00	16.26
127		Benzyl chloride	1.625	1.981	-21.9#	134	0.00	15.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3D52929.D M3D2292.M Tue Nov 16 14:03:35 2010 VOA-05

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2360-CC2292
Lab FileID: 3D54528.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D...\v3d2360-61\3D54528.D Vial: 3
Acq On : 28 Dec 2010 10:40 am Operator: TAMIKAG
Sample : CC2292-20 Inst : MS3D
Misc : MS6495,V3D2360,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	105	0.00	6.98
2		1,4-dioxane	0.071	0.068	4.2	100	0.00	10.85
3	M	tertiary butyl alcohol	1.020	1.015	0.5	109	0.00	7.11
4	I	pentafluorobenzene	1.000	1.000	0.0	133	0.00	9.19
5		chlorodifluoromethane	0.672	0.638	5.1	127	0.00	3.72
6		dichlorodifluoromethane	0.795	0.852	-7.2	139	0.00	3.70
7		chloromethane	0.891	0.697	21.8#	103	-0.01	4.02
8		vinyl chloride	0.706	0.577	18.3	111	-0.02	4.25
9		bromomethane	0.369	0.382	-3.5	133	0.00	4.87
10		chloroethane	0.362	0.324	10.5	114	0.00	5.04
11		vinyl bromide		----------NA----------				
12		trichlorofluoromethane	0.770	0.758	1.6	128	0.00	5.49
13		pentane	1.188	0.871	26.7#	102	0.00	5.56
14		ethyl ether	0.247	0.227	8.1	116	0.00	5.89
15		acrolein	0.114	0.083	27.2#	95	0.02	6.15
16		1,1-dichloroethene	0.442	0.391	11.5	121	0.00	6.29
17		acetone	0.199	0.144	27.6#	93	0.05	6.47
18		allyl chloride	0.241	0.201	16.6	117	0.00	6.82
19		acetonitrile	0.053	0.041	22.6#	103	0.02	6.83
20		iodomethane	0.771	0.717	7.0	127	0.00	6.57
21		iso-butyl alcohol	0.129	0.102	20.9#	112	0.00	9.36
22		carbon disulfide	1.806	1.594	11.7	121	0.00	6.69
23		methylene chloride	0.509	0.440	13.6	118	0.00	7.00
24		methyl acetate	0.412	0.314	23.8#	106	0.03	6.85
25		methyl tert butyl ether	1.553	1.300	16.3	114	0.00	7.31
26		trans-1,2-dichloroethene	0.466	0.413	11.4	120	0.00	7.37
27		di-isopropyl ether	1.911	1.470	23.1#	105	0.00	7.91
28		ethyl tert-butyl ether	1.744	1.408	19.3	111	0.00	8.37
29		2-butanone	0.052	0.043	17.3	118	0.03	8.70
30	M	1,1-dichloroethane	0.929	0.780	16.0	112	0.00	7.93
31		chloroprene	0.682	0.640	6.2	127	0.00	8.04
32		acrylonitrile	0.223	0.182	18.4	110	0.02	7.36
		----------	True	Calc.	% Drift	----------		
33		vinyl acetate	20.000	17.828	10.9	124	0.03	7.97
		----------	AvgRF	CCRF	% Dev	----------		
34		ethyl acetate	0.083	0.069	16.9	106	0.02	8.69
35		2,2-dichloropropane	0.706	0.652	7.6	126	0.00	8.66
36		cis-1,2-dichloroethene	0.490	0.436	11.0	120	0.00	8.68
37		propionitrile	0.082	0.071	13.4	111	0.01	8.76

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2360-CC2292
Lab FileID: 3D54528.D

38		methyl acrylate	0.562	0.439	21.9#	109	0.03	8.79
39		bromochloromethane	0.223	0.215	3.6	129	0.00	8.99
40		tetrahydrofuran	0.207	0.161	22.2#	109	0.01	9.04
41		chloroform	0.836	0.731	12.6	119	0.00	9.04
42		Tert-Butyl Formate	0.534	0.439	17.8	111	0.00	9.07
43	S	dibromofluoromethane (s)	0.409	0.440	-7.6	151	0.00	9.24
44	S	1,2-dichloroethane-d4 (s)	0.549	0.538	2.0	142	0.00	9.66
45		freon 113	0.349	0.353	-1.1	134	0.00	6.26
46		methacrylonitrile	0.328	0.253	22.9#	113	0.01	8.95
47		1,1,1-trichloroethane	0.718	0.633	11.8	120	0.00	9.28
48		tert amyl alcohol		----------NA----------				
49		2,2,4-Trimethylpentane	1.961	1.657	15.5	113	0.00	9.71
50		tert-amyl methyl ether	1.573	1.308	16.8	115	0.00	9.75
51	I	1,4-difluorobenzene	1.000	1.000	0.0	126	0.00	10.11
52		epichlorohydrin	0.035	0.031	11.4	118	0.01	11.40
53		n-butyl alcohol	0.010	0.008#	20.0	104	0.01	10.27
54	M	cyclohexane	0.490	0.463	5.5	124	0.00	9.34
55		carbon tetrachloride	0.424	0.413	2.6	127	0.00	9.48
56		1,1-dichloropropene	0.445	0.404	9.2	116	0.00	9.46
57		hexane	0.459	0.406	11.5	112	0.00	7.66
58	M	benzene	1.308	1.207	7.7	120	0.00	9.73
59		heptane	0.241	0.224	7.1	117	0.00	9.89
60		isopropyl acetate	0.753	0.658	12.6	101	0.00	9.67
61		1,2-dichloroethane	0.445	0.412	7.4	115	0.00	9.75
62		trichloroethene	0.307	0.297	3.3	124	0.00	10.45
63		tert amyl ethyl ether		----------NA----------				
64		2-nitropropane	0.007	0.006#	14.3	107	0.00	11.26
65		2-chloroethyl vinyl ether	0.215	0.194	9.8	113	0.00	11.26
66		methyl methacrylate	0.580	0.491	15.3	109	0.01	10.74
67		1,2-dichloropropane	0.350	0.309	11.7	112	0.00	10.72
68		methylcyclohexane	0.537	0.501	6.7	117	0.00	10.65
69		dibromomethane	0.195	0.192	1.5	123	0.00	10.88
70		bromodichloromethane	0.414	0.393	5.1	122	0.00	11.02
71		cis-1,3-dichloropropene	0.512	0.472	7.8	119	0.00	11.48
72	S	toluene-d8 (s)	0.969	1.098	-13.3	154	0.00	11.77
73		4-methyl-2-pentanone	0.139	0.121	12.9	111	0.00	11.59
74		toluene	0.714	0.672	5.9	123	0.00	11.84
75		3-methyl-1-butanol	0.008	0.007#	12.5	111	0.00	11.62
76		trans-1,3-dichloropropene	0.455	0.423	7.0	118	0.00	12.05
77		ethyl methacrylate	0.377	0.316	16.2	105	0.00	12.05
78		1,1,2-trichloroethane	0.226	0.212	6.2	120	0.00	12.26
79		2-hexanone	0.101	0.084	16.8	108	0.01	12.46
80	I	chlorobenzene-d5	1.000	1.000	0.0	127	0.00	13.29
81		tetrachloroethene	0.355	0.359	-1.1	132	0.00	12.43
82		1,3-dichloropropane	0.536	0.479	10.6	115	0.00	12.45
83		butyl acetate	0.239	0.206	13.8	110	0.00	12.53
84		3,3-Dimethyl-1-Butanol	0.041	0.033	19.5	108	0.00	12.62
85		dibromochloromethane	0.357	0.356	0.3	126	0.00	12.71
86		1,2-dibromoethane	0.323	0.312	3.4	122	0.00	12.86
87		n-Butyl Ether		----------NA----------				
88		chlorobenzene	0.888	0.848	4.5	123	0.00	13.32
89		1,1,1,2-tetrachloroethane	0.343	0.330	3.8	122	0.00	13.38
90		ethylbenzene	1.605	1.476	8.0	119	0.00	13.38
91		m,p-xylene	0.581	0.562	3.3	125	0.00	13.48
92		o-xylene	0.590	0.558	5.4	123	0.00	13.90
93		styrene	0.969	0.878	9.4	116	0.00	13.92
94		Butyl Acrylate		----------NA----------				
95		bromoform	0.254	0.248	2.4	124	0.00	14.18

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2360-CC2292
Lab FileID: 3D54528.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	131	0.00	15.61
97		isopropylbenzene	3.028	2.791	7.8	121	0.00	14.24
98	S	4-bromofluorobenzene (s)	0.902	0.907	-0.6	141	0.00	14.45
99		bromobenzene	0.753	0.731	2.9	127	0.00	14.64
			True	Calc.	% Drift			
100		cyclohexanone	200.000	57.220	71.4#	38	0.00	14.41
			AvgRF	CCRF	% Dev			
101		1,1,2,2-tetrachloroethane	0.927	0.808	12.8	116	0.00	14.56
102		trans-1,4-dichloro-2-bute	0.222	0.213	4.1	121	0.00	14.60
103		1,2,3-trichloropropane	0.197	0.186	5.6	128	0.00	14.63
104		n-propylbenzene	3.623	3.217	11.2	116	0.00	14.65
105		4-Ethyltoluene		----------NA----------				
106		2-chlorotoluene	0.697	0.655	6.0	124	0.00	14.80
107		4-chlorotoluene	0.705	0.668	5.2	124	0.00	14.90
108		1,3,5-trimethylbenzene	2.567	2.349	8.5	121	0.00	14.80
109		tert-butylbenzene	2.064	1.912	7.4	123	0.00	15.15
110		pentachloroethane	0.506	0.495	2.2	130	0.00	15.23
111		1,2,4-trimethylbenzene	2.575	2.312	10.2	121	0.00	15.19
112		sec-butylbenzene	3.257	2.987	8.3	122	0.00	15.36
113		1,3-dichlorobenzene	1.451	1.364	6.0	126	0.00	15.56
114		p-isopropyltoluene	2.608	2.433	6.7	123	0.00	15.48
115		1,4-dichlorobenzene	1.525	1.417	7.1	126	0.00	15.64
116		1,2-dichlorobenzene	1.470	1.393	5.2	127	0.00	16.02
117		1,4-Diethylbenzene		----------NA----------				
118		n-butylbenzene	1.447	1.293	10.6	117	0.00	15.89
119		1,2,4,5-Tetramethylbenzen		----------NA----------				
120		1,2-dibromo-3-chloropropa	0.189	0.154	18.5	107	0.00	16.76
121		1,3,5-trichlorobenzene	1.236	1.209	2.2	129	0.00	16.92
122		1,2,4-trichlorobenzene	1.135	1.149	-1.2	128	0.00	17.50
123		hexachlorobutadiene	0.618	0.621	-0.5	130	0.00	17.60
124		naphthalene	2.570	2.569	0.0	125	0.00	17.75
125		1,2,3-trichlorobenzene	0.986	1.012	-2.6	128	0.00	17.97
126		hexachloroethane	0.541	0.499	7.8	121	0.00	16.26
127		Benzyl chloride	1.625	1.679	-3.3	140	0.00	15.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3D52928.D M3D2292.M Wed Dec 29 08:32:19 2010 VOA-05

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2361-CC2292
Lab FileID: 3D54551.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\3D...\v3d2360-61\3D54551.D Vial: 26
Acq On : 28 Dec 2010 9:56 pm Operator: TAMIKAG
Sample : CC2292-50 Inst : MS3D
Misc : MS6405,V3D2361,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M3D2292.M (RTE Integrator)
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
Last Update : Tue Nov 16 13:50:31 2010
Response via : Single Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	101	-0.01	6.98
2		1,4-dioxane	0.071	0.076	-7.0	100	0.00	10.85
3	M	tertiary butyl alcohol	1.020	1.034	-1.4	105	-0.01	7.10
4	I	pentafluorobenzene	1.000	1.000	0.0	112	0.00	9.19
5		chlorodifluoromethane	0.672	0.734	-9.2	123	0.00	3.72
6		dichlorodifluoromethane	0.795	0.857	-7.8	125	0.00	3.71
7		chloromethane	0.891	0.849	4.7	112	0.00	4.03
8		vinyl chloride	0.706	0.657	6.9	112	0.00	4.27
9		bromomethane	0.369	0.380	-3.0	118	0.00	4.88
10		chloroethane	0.362	0.347	4.1	111	0.00	5.04
11		vinyl bromide		----------NA----------				
12		trichlorofluoromethane	0.770	0.776	-0.8	118	0.00	5.50
13		pentane	1.188	0.977	17.8	100	0.00	5.55
14		ethyl ether	0.247	0.252	-2.0	109	0.00	5.88
15		acrolein	0.114	0.103	9.6	98	0.00	6.14
16		1,1-dichloroethene	0.442	0.402	9.0	110	0.00	6.29
17		acetone	0.199	0.159	20.1#	91	0.00	6.42
18		allyl chloride	0.241	0.221	8.3	101	0.00	6.81
19		acetonitrile	0.053	0.051	3.8	106	0.00	6.80
20		iodomethane	0.771	0.726	5.8	110	0.00	6.57
21		iso-butyl alcohol	0.129	0.115	10.9	110	0.00	9.36
22		carbon disulfide	1.806	1.656	8.3	111	0.00	6.68
23		methylene chloride	0.509	0.474	6.9	110	0.00	7.00
24		methyl acetate	0.412	0.415	-0.7	107	0.00	6.82
25		methyl tert butyl ether	1.553	1.456	6.2	109	0.00	7.31
26		trans-1,2-dichloroethene	0.466	0.422	9.4	109	0.00	7.36
27		di-isopropyl ether	1.911	1.791	6.3	108	0.00	7.90
28		ethyl tert-butyl ether	1.744	1.660	4.8	110	0.00	8.37
29		2-butanone	0.052	0.053	-1.9	110	0.00	8.67
30	M	1,1-dichloroethane	0.929	0.855	8.0	107	0.00	7.93
31		chloroprene	0.682	0.749	-9.8	127	0.00	8.04
32		acrylonitrile	0.223	0.208	6.7	104	0.00	7.34
		----------	True	Calc.	% Drift	----------		
33		vinyl acetate	50.000	48.853	2.3	112	0.00	7.94
		----------	AvgRF	CCRF	% Dev	----------		
34		ethyl acetate	0.083	0.083	0.0	107	0.00	8.67
35		2,2-dichloropropane	0.706	0.640	9.3	107	0.00	8.66
36		cis-1,2-dichloroethene	0.490	0.459	6.3	109	0.00	8.67
37		propionitrile	0.082	0.082	0.0	108	0.00	8.75

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2361-CC2292
Lab FileID: 3D54551.D

38		methyl acrylate	0.562	0.552	1.8	108	0.00	8.75
39		bromochloromethane	0.223	0.220	1.3	112	0.00	8.98
40		tetrahydrofuran	0.207	0.193	6.8	109	0.00	9.03
41		chloroform	0.836	0.786	6.0	110	0.00	9.04
42		Tert-Butyl Formate	0.534	0.515	3.6	110	0.00	9.06
43	S	dibromofluoromethane (s)	0.409	0.417	-2.0	120	0.00	9.24
44	S	1,2-dichloroethane-d4 (s)	0.549	0.562	-2.4	118	0.00	9.66
45		freon 113	0.349	0.347	0.6	113	0.00	6.26
46		methacrylonitrile	0.328	0.328	0.0	115	0.00	8.93
47		1,1,1-trichloroethane	0.718	0.683	4.9	112	0.00	9.27
48		tert amyl alcohol		----------NA----------				
49		2,2,4-Trimethylpentane	1.961	1.793	8.6	104	0.00	9.71
50		tert-amyl methyl ether	1.573	1.508	4.1	113	0.00	9.75
51	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	10.11
52		epichlorohydrin	0.035	0.035	0.0	115	0.00	11.39
53		n-butyl alcohol	0.010	0.010#	0.0	107	0.00	10.26
54	M	cyclohexane	0.490	0.449	8.4	110	0.00	9.34
55		carbon tetrachloride	0.424	0.405	4.5	113	0.00	9.48
56		1,1-dichloropropene	0.445	0.410	7.9	107	0.00	9.46
57		hexane	0.459	0.401	12.6	101	0.00	7.65
58	M	benzene	1.308	1.204	8.0	109	0.00	9.72
59		heptane	0.241	0.216	10.4	100	0.00	9.89
60		isopropyl acetate	0.753	0.795	-5.6	111	0.00	9.66
61		1,2-dichloroethane	0.445	0.437	1.8	112	0.00	9.75
62		trichloroethene	0.307	0.296	3.6	111	0.00	10.45
63		tert amyl ethyl ether		----------NA----------				
64		2-nitropropane	0.007	0.007#	0.0	117	0.00	11.25
65		2-chloroethyl vinyl ether	0.215	0.213	0.9	111	0.00	11.26
66		methyl methacrylate	0.580	0.587	-1.2	113	0.00	10.73
67		1,2-dichloropropane	0.350	0.333	4.9	109	0.00	10.71
68		methylcyclohexane	0.537	0.505	6.0	107	0.00	10.65
69		dibromomethane	0.195	0.197	-1.0	114	0.00	10.88
70		bromodichloromethane	0.414	0.420	-1.4	115	0.00	11.02
71		cis-1,3-dichloropropene	0.512	0.501	2.1	111	0.00	11.48
72	S	toluene-d8 (s)	0.969	1.009	-4.1	125	0.00	11.77
73		4-methyl-2-pentanone	0.139	0.140	-0.7	111	0.00	11.58
74		toluene	0.714	0.679	4.9	113	0.00	11.84
75		3-methyl-1-butanol	0.008	0.008#	0.0	108	0.00	11.61
76		trans-1,3-dichloropropene	0.455	0.450	1.1	112	0.00	12.05
77		ethyl methacrylate	0.377	0.363	3.7	106	0.00	12.04
78		1,1,2-trichloroethane	0.226	0.225	0.4	113	0.00	12.26
79		2-hexanone	0.101	0.106	-5.0	111	0.00	12.45
80	I	chlorobenzene-d5	1.000	1.000	0.0	112	0.00	13.29
81		tetrachloroethene	0.355	0.334	5.9	110	0.00	12.43
82		1,3-dichloropropane	0.536	0.516	3.7	111	0.00	12.44
83		butyl acetate	0.239	0.245	-2.5	114	0.00	12.52
84		3,3-Dimethyl-1-Butanol	0.041	0.039	4.9	113	0.00	12.61
85		dibromochloromethane	0.357	0.367	-2.8	116	0.00	12.71
86		1,2-dibromoethane	0.323	0.319	1.2	113	0.00	12.86
87		n-Butyl Ether		----------NA----------				
88		chlorobenzene	0.888	0.843	5.1	110	0.00	13.32
89		1,1,1,2-tetrachloroethane	0.343	0.333	2.9	111	0.00	13.38
90		ethylbenzene	1.605	1.507	6.1	111	0.00	13.37
91		m,p-xylene	0.581	0.549	5.5	112	0.00	13.48
92		o-xylene	0.590	0.554	6.1	112	0.00	13.90
93		styrene	0.969	0.912	5.9	108	0.00	13.92
94		Butyl Acrylate		----------NA----------				
95		bromoform	0.254	0.251	1.2	111	0.00	14.18

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3D2361-CC2292
Lab FileID: 3D54551.D

96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	15.61
97		isopropylbenzene	3.028	2.911	3.9	111	0.00	14.24
98	S	4-bromofluorobenzene (s)	0.902	0.858	4.9	114	0.00	14.45
99		bromobenzene	0.753	0.728	3.3	111	0.00	14.64
			True	Calc.	% Drift			
100		cyclohexanone	500.000	165.104	67.0#	38	0.00	14.41
			AvgRF	CCRF	% Dev			
101		1,1,2,2-tetrachloroethane	0.927	0.883	4.7	113	0.00	14.55
102		trans-1,4-dichloro-2-bute	0.222	0.209	5.9	101	0.00	14.60
103		1,2,3-trichloropropane	0.197	0.195	1.0	113	0.00	14.63
104		n-propylbenzene	3.623	3.378	6.8	111	0.00	14.65
105		4-Ethyltoluene			NA			
106		2-chlorotoluene	0.697	0.663	4.9	110	0.00	14.80
107		4-chlorotoluene	0.705	0.667	5.4	109	0.00	14.90
108		1,3,5-trimethylbenzene	2.567	2.438	5.0	111	0.00	14.80
109		tert-butylbenzene	2.064	1.994	3.4	113	0.00	15.15
110		pentachloroethane	0.506	0.508	-0.4	115	0.00	15.23
111		1,2,4-trimethylbenzene	2.575	2.400	6.8	110	0.00	15.19
112		sec-butylbenzene	3.257	3.098	4.9	111	0.00	15.36
113		1,3-dichlorobenzene	1.451	1.364	6.0	111	0.00	15.56
114		p-isopropyltoluene	2.608	2.515	3.6	111	0.00	15.48
115		1,4-dichlorobenzene	1.525	1.424	6.6	111	0.00	15.63
116		1,2-dichlorobenzene	1.470	1.390	5.4	110	0.00	16.02
117		1,4-Diethylbenzene			NA			
118		n-butylbenzene	1.447	1.374	5.0	110	0.00	15.89
119		1,2,4,5-Tetramethylbenzen			NA			
120		1,2-dibromo-3-chloropropa	0.189	0.173	8.5	104	0.00	16.76
121		1,3,5-trichlorobenzene	1.236	1.170	5.3	108	0.00	16.92
122		1,2,4-trichlorobenzene	1.135	1.141	-0.5	107	0.00	17.50
123		hexachlorobutadiene	0.618	0.560	9.4	103	0.00	17.60
124		naphthalene	2.570	2.646	-3.0	110	0.00	17.74
125		1,2,3-trichlorobenzene	0.986	0.998	-1.2	108	0.00	17.96
126		hexachloroethane	0.541	0.531	1.8	109	0.00	16.26
127		Benzyl chloride	1.625	1.651	-1.6	117	0.00	15.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3D52929.D M3D2292.M Wed Dec 29 09:38:31 2010 VOA-05

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 29 08:36:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

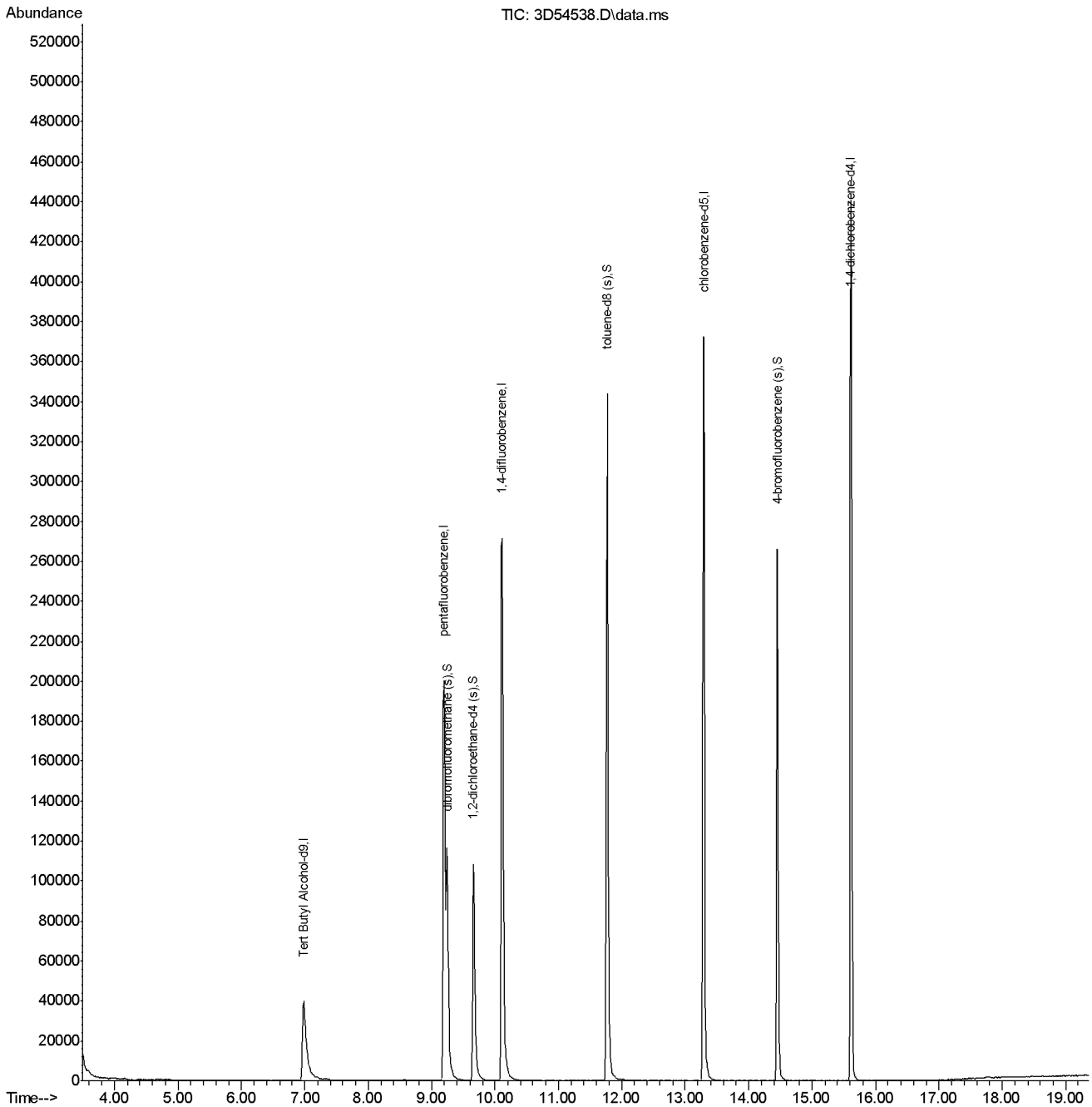
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.984	65	106633	500.00	ug/L	0.00
4) pentafluorobenzene	9.191	168	182198	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	264330	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	212688	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	108806	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	75163	50.37	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.74%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	96177	48.06	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.12%			
72) toluene-d8 (s)	11.765	98	259727	50.71	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 101.42%			
98) 4-bromofluorobenzene (s)	14.450	95	92253	47.01	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 94.02%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 29 08:36:42 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54538.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.147	125	126	138	rVB3	723	1386	0.20%	0.032%
2	6.979	656	666	716	rBV2	39676	184181	26.32%	4.237%
3	7.335	732	734	750	rVB6	597	1316	0.19%	0.030%
4	9.191	1075	1088	1094	rBV	199934	468400	66.92%	10.776%
5	9.238	1094	1097	1132	rVB2	116020	280249	40.04%	6.447%
6	9.658	1167	1177	1206	rBV	108174	261121	37.31%	6.007%
7	10.109	1251	1263	1309	rBV	271266	638160	91.18%	14.681%
8	11.766	1570	1579	1614	rBV	343719	699888	100.00%	16.101%
9	13.286	1859	1869	1901	rBV	372439	671252	95.91%	15.442%
10	14.450	2080	2091	2121	rBV	266127	447032	63.87%	10.284%
11	15.609	2304	2312	2338	rBV	440727	693869	99.14%	15.963%

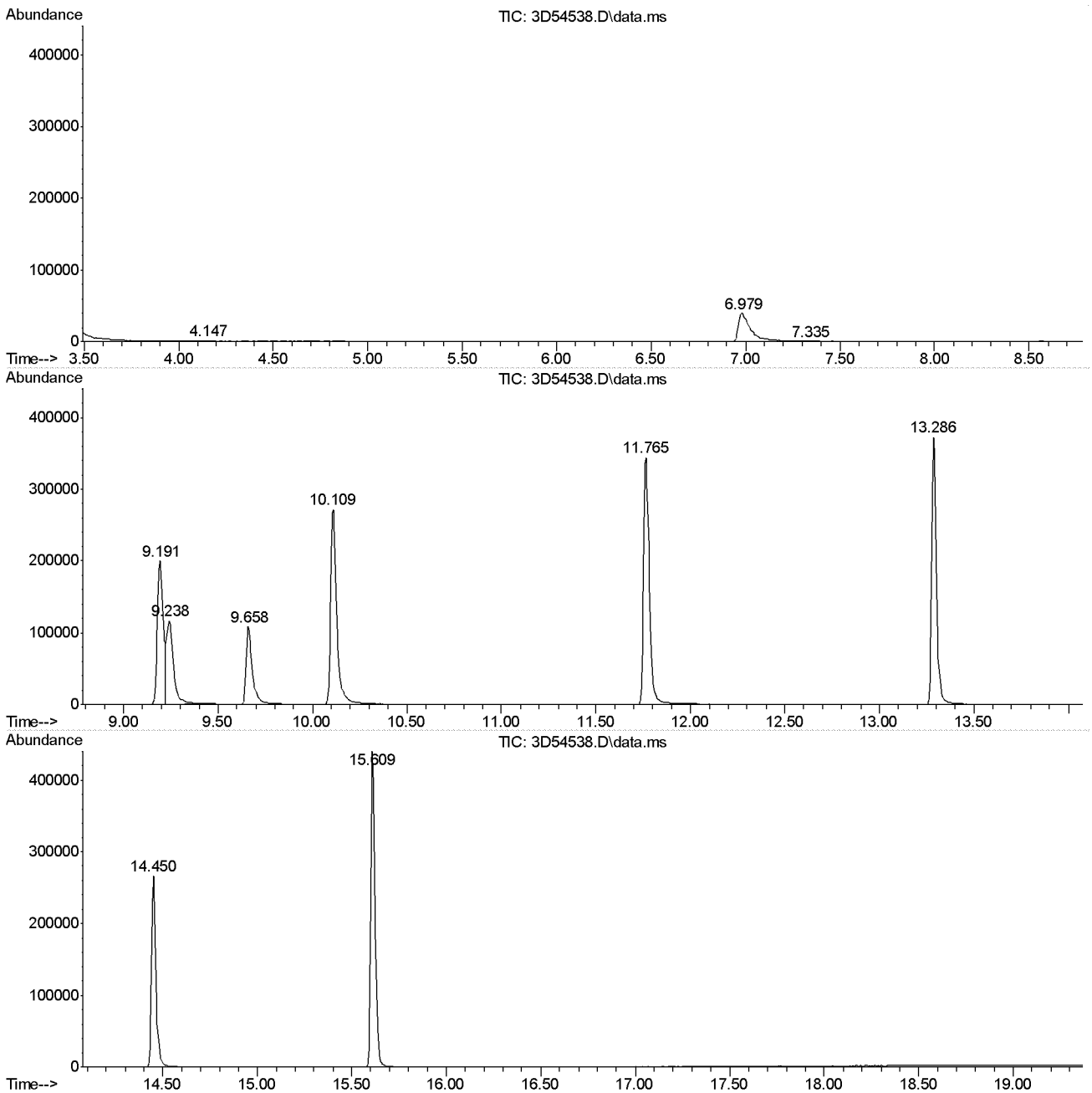
Sum of corrected areas: 4346854

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54538.D
Acq On : 28 Dec 2010 4:06 pm
Operator : TAMIKAG
Sample : JA64438-1
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

6.1.2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 29 09:16:39 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

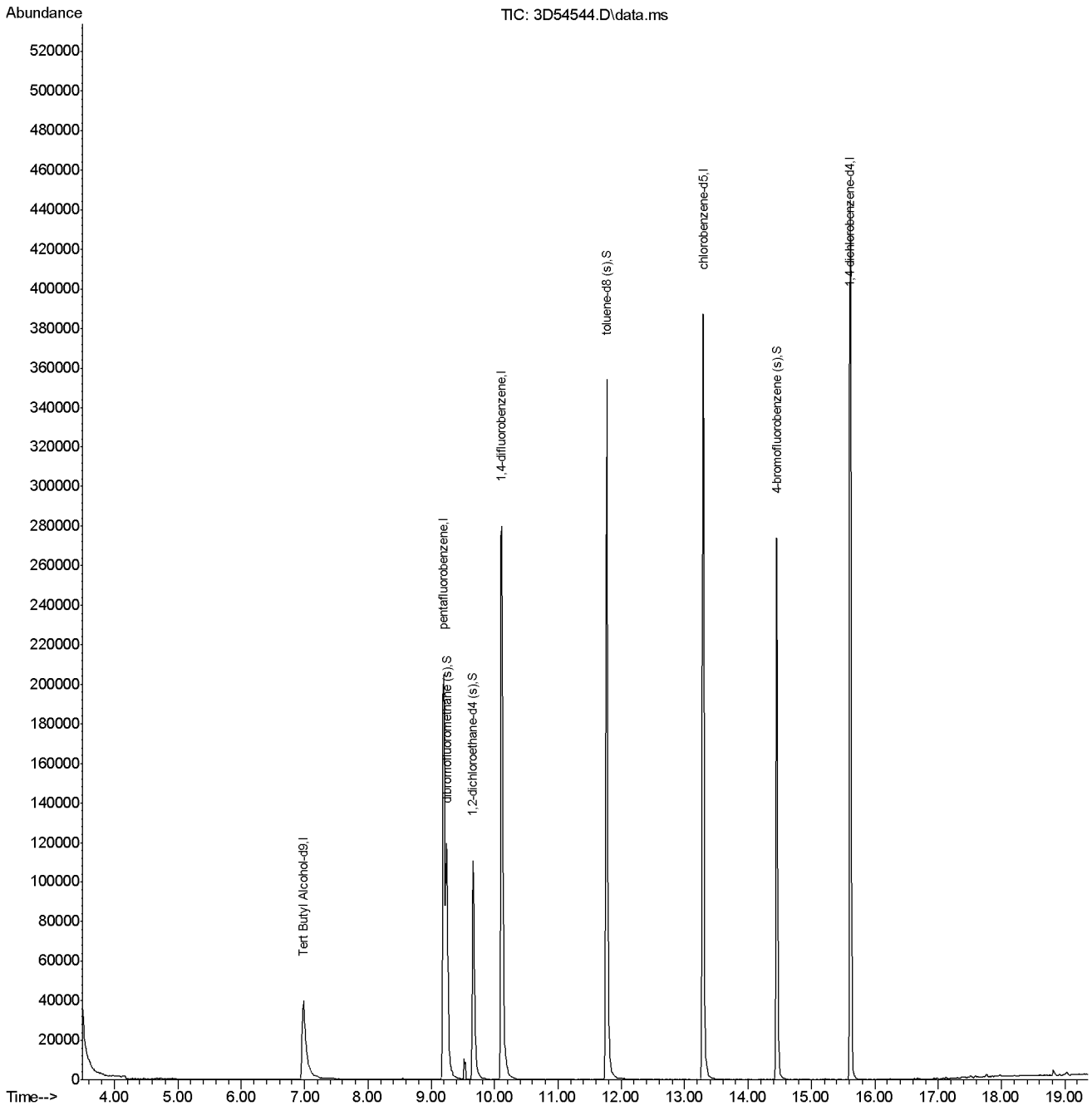
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.979	65	107909	500.00	ug/L	-0.01
4) pentafluorobenzene	9.191	168	184979	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	268737	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	219785	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	112532	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	76049	50.20	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.40%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	97404	47.94	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.88%			
72) toluene-d8 (s)	11.766	98	265959	51.08	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.16%			
98) 4-bromofluorobenzene (s)	14.450	95	95891	47.24	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 94.48%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 29 09:16:39 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54544.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.142	118	125	141	rVB2	1270	5526	0.77%	0.124%
2	6.979	655	666	707	rBV	39709	179751	25.09%	4.037%
3	8.552	962	966	978	rBV3	475	1358	0.19%	0.030%
4	9.191	1077	1088	1093	rBV	204907	451133	62.96%	10.131%
5	9.238	1094	1097	1130	rVB	119031	279107	38.95%	6.268%
6	9.511	1146	1149	1157	rVB	10255	14144	1.97%	0.318%
7	9.658	1165	1177	1216	rBV	110639	267372	37.31%	6.004%
8	10.109	1253	1263	1314	rBV	279678	647969	90.43%	14.551%
9	11.766	1568	1579	1610	rBV	353779	716546	100.00%	16.091%
10	13.286	1858	1869	1902	rBV	386961	691211	96.46%	15.522%
11	14.450	2081	2091	2123	rBV	273862	461765	64.44%	10.370%
12	15.215	2226	2237	2248	rBV4	503	1094	0.15%	0.025%
13	15.609	2302	2312	2342	rBV	444887	714764	99.75%	16.051%
14	17.113	2597	2599	2605	rVB5	819	1291	0.18%	0.029%
15	17.386	2643	2651	2652	rBV5	574	1252	0.17%	0.028%
16	17.507	2669	2674	2684	rVB5	1193	2422	0.34%	0.054%
17	17.591	2684	2690	2698	rBV9	1464	3078	0.43%	0.069%
18	17.769	2717	2724	2729	rBV4	1138	2146	0.30%	0.048%
19	17.973	2759	2763	2768	rBV5	1291	1805	0.25%	0.041%
20	18.817	2919	2924	2936	rVB3	2799	5300	0.74%	0.119%
21	19.027	2958	2964	2973	rVB5	1906	4009	0.56%	0.090%

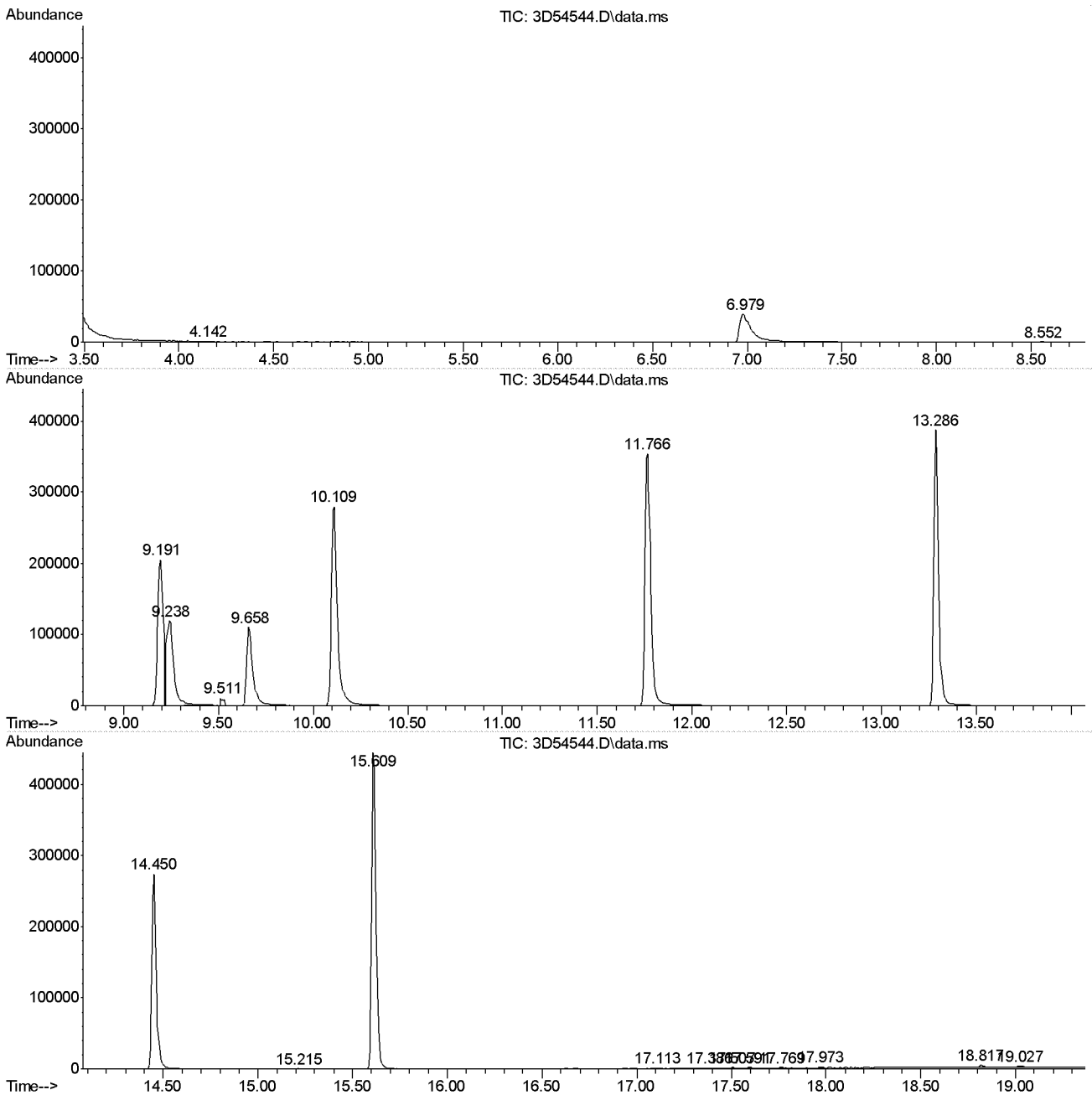
Sum of corrected areas: 4453043

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54544.D
Acq On : 28 Dec 2010 6:48 pm
Operator : TAMIKAG
Sample : JA64438-2
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 29 09:23:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

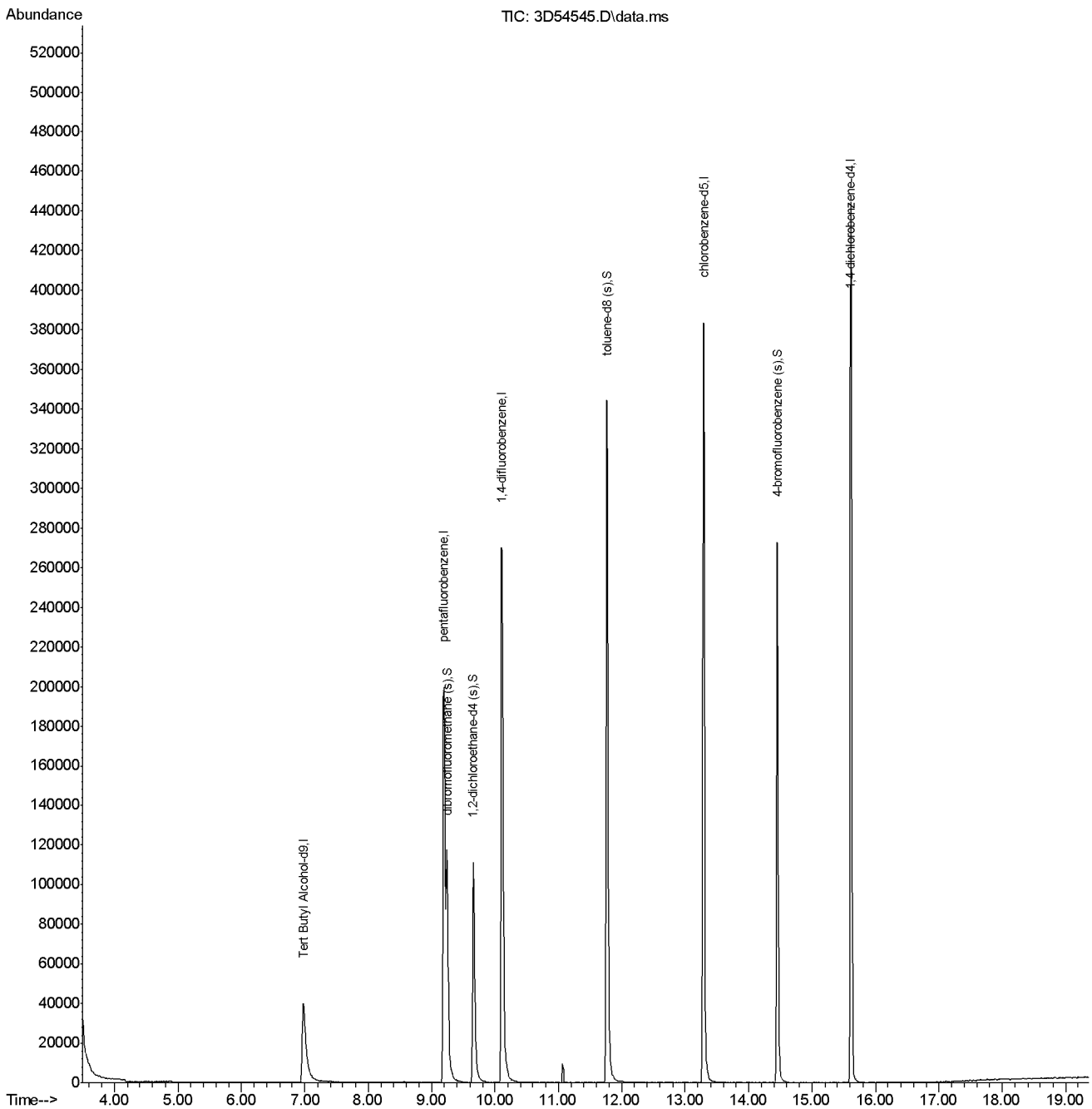
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.973	65	103944	500.00	ug/L	-0.02
4) pentafluorobenzene	9.191	168	182490	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.104	114	265251	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	217397	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	111125	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	75004	50.19	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.38%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	96139	47.97	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.94%			
72) toluene-d8 (s)	11.760	98	263488	51.27	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.54%			
98) 4-bromofluorobenzene (s)	14.450	95	93431	46.61	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 93.22%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Dec 29 09:23:51 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54545.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.973	654	665	711	rBV	39872	177953	25.09%	4.055%
2	8.552	961	966	979	rVB4	512	1423	0.20%	0.032%
3	9.191	1077	1088	1094	rBV	199634	476655	67.19%	10.862%
4	9.238	1094	1097	1122	rVB	116711	266370	37.55%	6.070%
5	9.658	1167	1177	1207	rBV	111044	263793	37.19%	6.011%
6	10.104	1254	1262	1305	rBV	269747	635908	89.64%	14.491%
7	11.053	1438	1443	1451	rBV	9525	13427	1.89%	0.306%
8	11.760	1569	1578	1612	rBV	344208	709375	100.00%	16.166%
9	13.286	1858	1869	1902	rBV	383662	685567	96.64%	15.623%
10	14.450	2083	2091	2121	rBV	272903	453433	63.92%	10.333%
11	15.609	2303	2312	2338	rBV	444547	701708	98.92%	15.991%
12	17.507	2666	2674	2677	rVB5	622	1263	0.18%	0.029%
13	17.758	2715	2722	2725	rBV5	611	1319	0.19%	0.030%

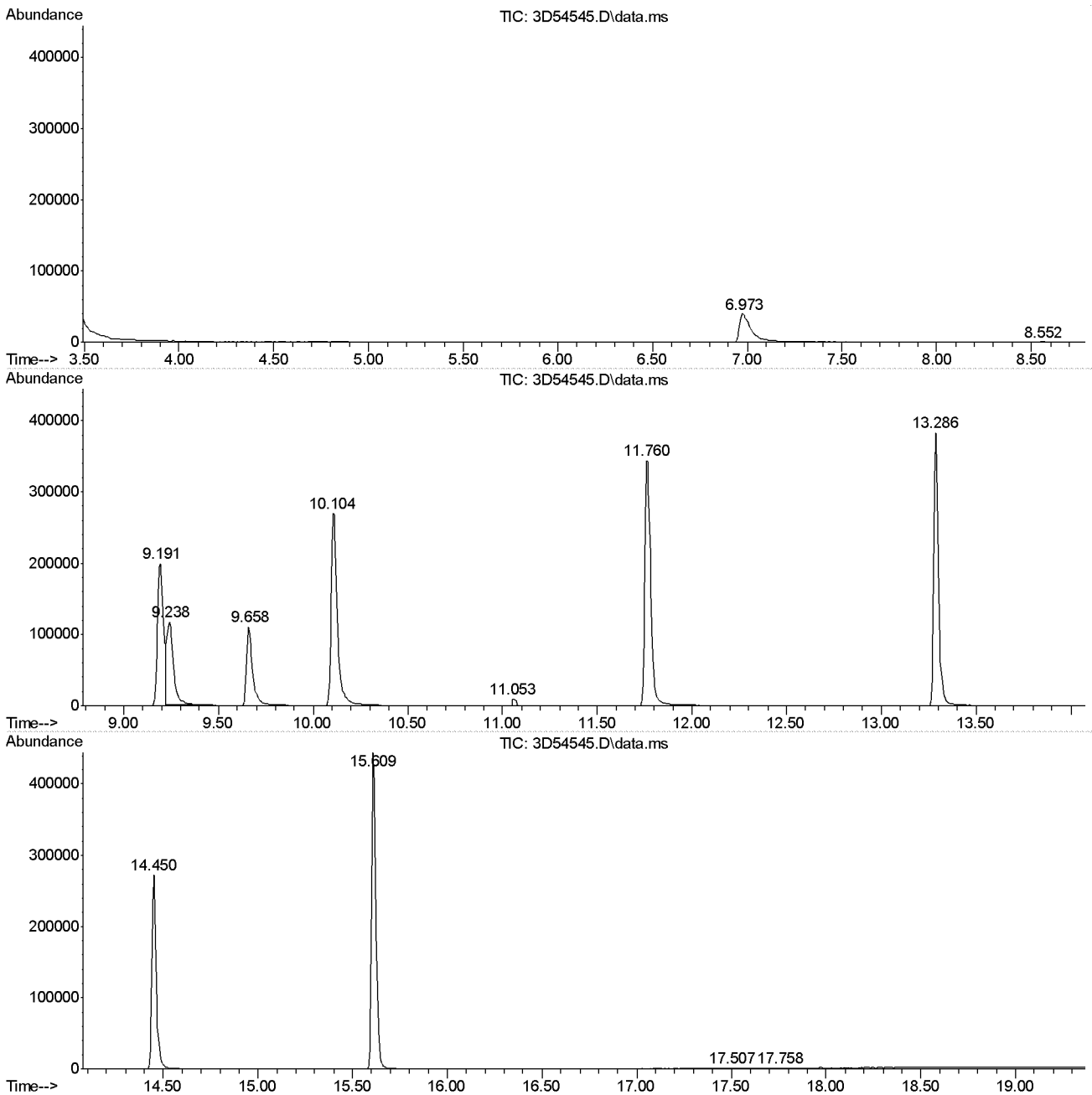
Sum of corrected areas: 4388194

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54545.D
Acq On : 28 Dec 2010 7:14 pm
Operator : TAMIKAG
Sample : JA64438-3
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 29 09:46:08 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

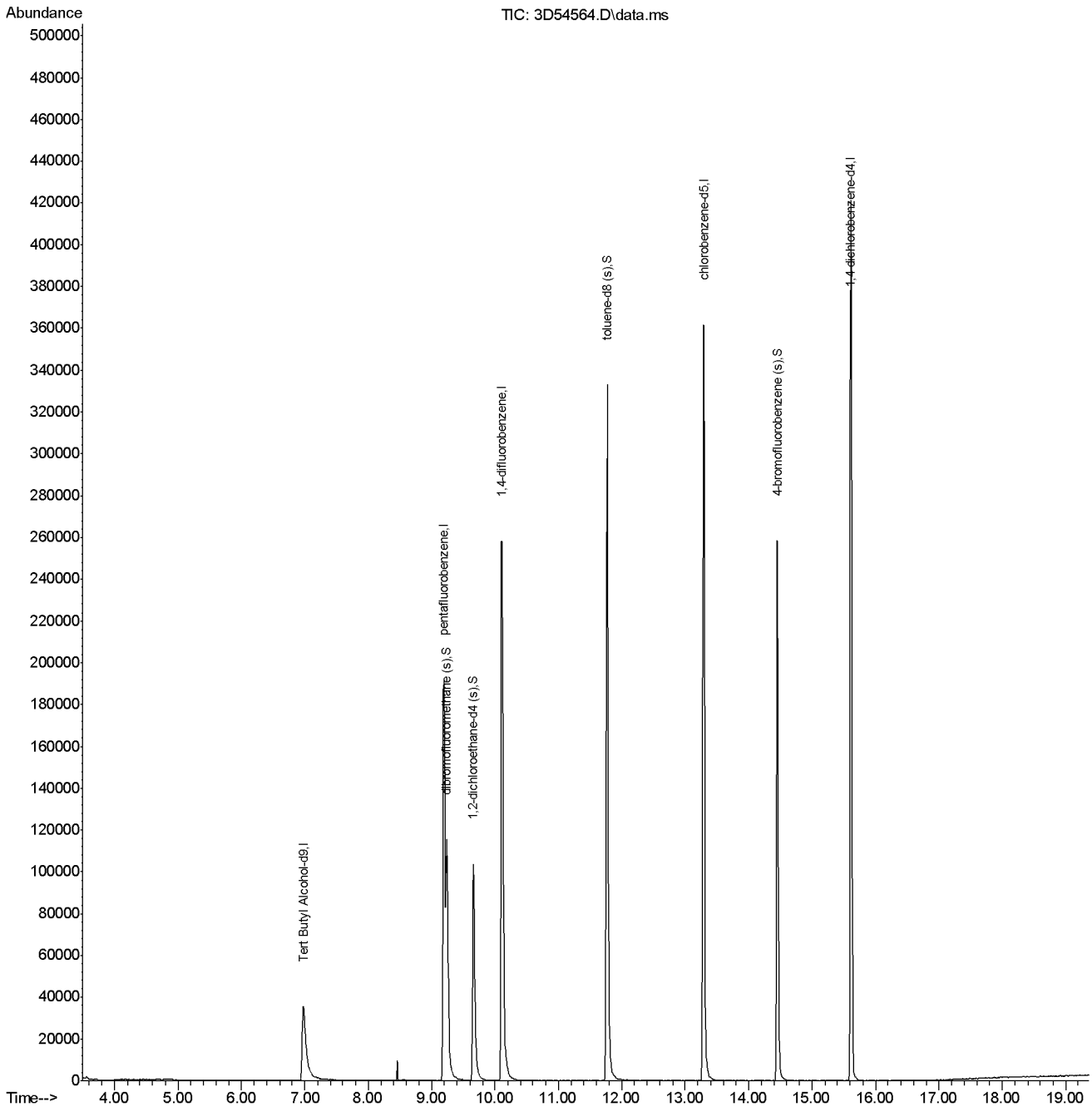
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.973	65	95050	500.00	ug/L	-0.02
4) pentafluorobenzene	9.191	168	176467	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	255399	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	207922	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	105947	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.238	113	73054	50.55	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.10%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	92741	47.85	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.70%			
72) toluene-d8 (s)	11.765	98	252401	51.01	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.02%			
98) 4-bromofluorobenzene (s)	14.450	95	89146	46.65	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 93.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Dec 29 09:46:08 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54564.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.555	8	13	23	rVB4	1408	2936	0.43%	0.070%
2	6.973	653	665	704	rBV	35400	160148	23.59%	3.812%
3	8.452	944	947	953	rBV	9519	12189	1.80%	0.290%
4	8.546	960	965	979	rBV4	501	1813	0.27%	0.043%
5	9.191	1076	1088	1093	rBV2	191772	434170	63.95%	10.333%
6	9.238	1093	1097	1132	rVB	114881	289724	42.68%	6.896%
7	9.658	1168	1177	1217	rBV	103572	253413	37.33%	6.031%
8	10.103	1254	1262	1311	rBV	258152	610209	89.89%	14.523%
9	11.765	1569	1579	1610	rBV	332974	678877	100.00%	16.158%
10	13.286	1858	1869	1900	rBV	361793	652944	96.18%	15.540%
11	14.450	2083	2091	2114	rBV	258230	432190	63.66%	10.286%
12	15.609	2303	2312	2336	rBV	421275	672978	99.13%	16.017%

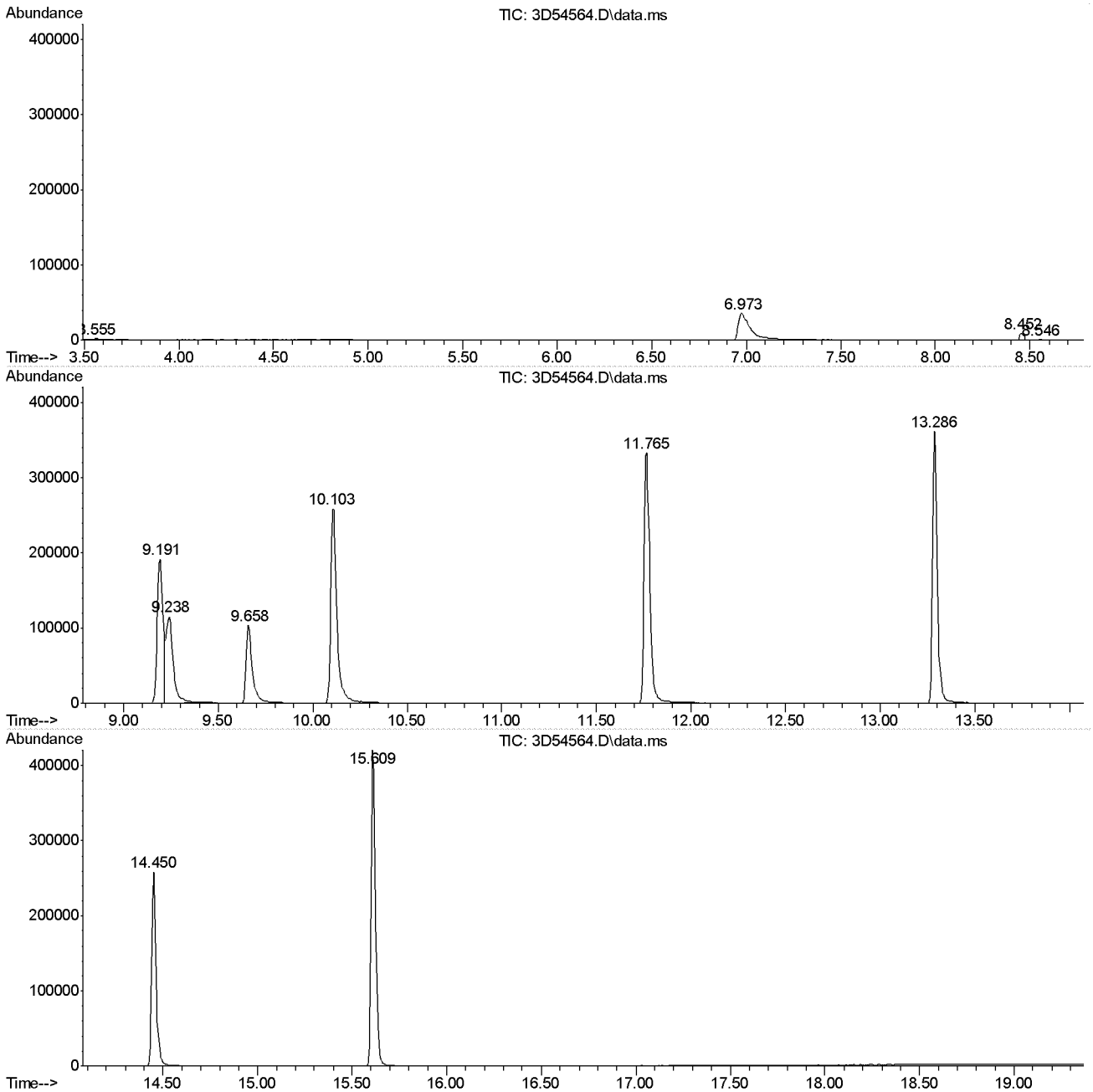
Sum of corrected areas: 4201591

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54564.D
Acq On : 29 Dec 2010 3:46 am
Operator : TAMIKAG
Sample : JA64438-4
Misc : MS6492,V3D2361,W,,,,1
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 29 09:28:55 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

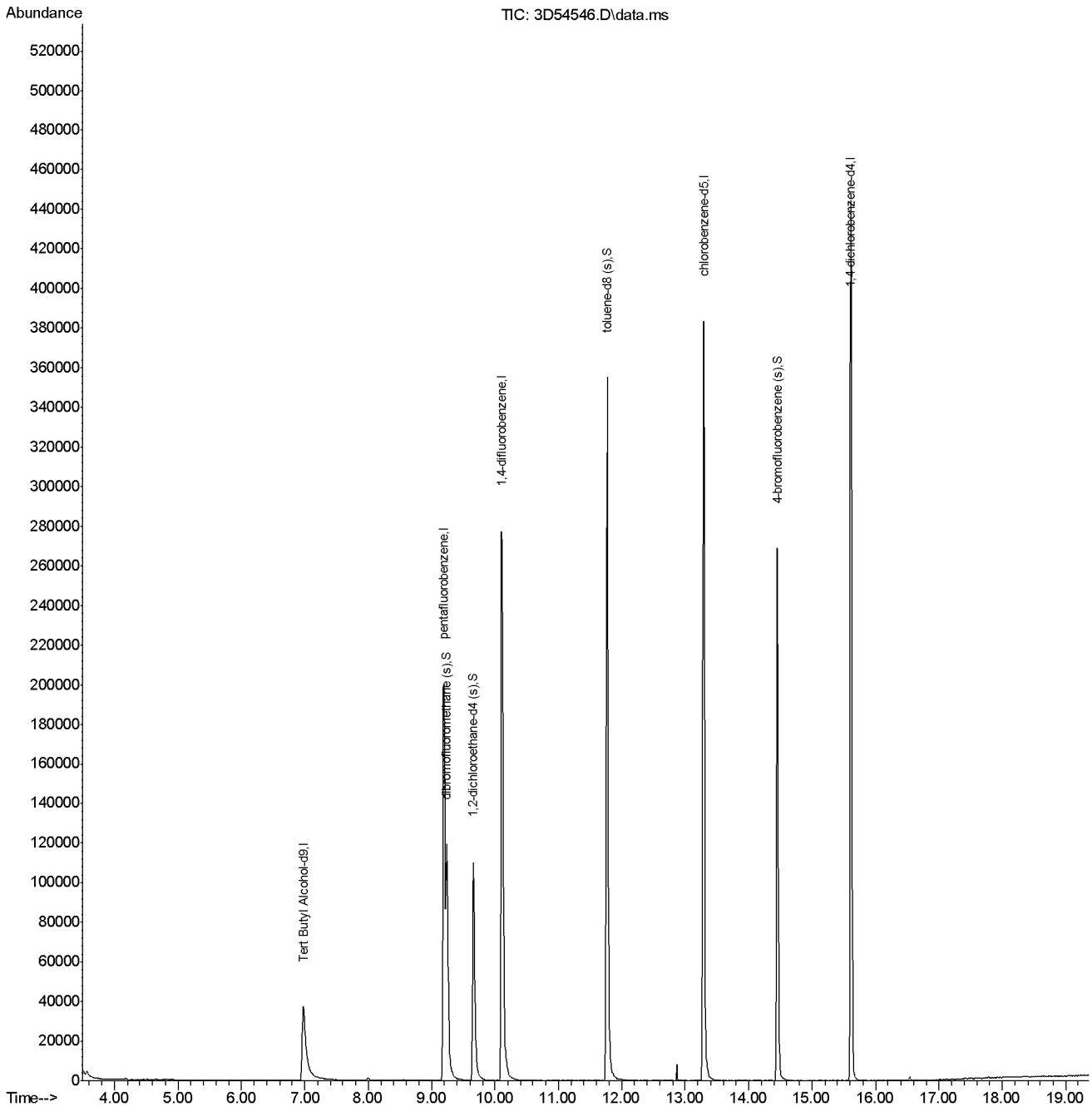
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.973	65	103802	500.00	ug/L	-0.02
4) pentafluorobenzene	9.191	168	184396	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.104	114	266953	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	218352	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	111209	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.238	113	75109	49.74	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.48%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	97296	48.04	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.08%			
72) toluene-d8 (s)	11.766	98	263926	51.03	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.06%			
98) 4-bromofluorobenzene (s)	14.450	95	94442	47.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 94.16%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Dec 29 09:28:55 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54546.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.566	10	15	42	rVB5	3920	13787	1.93%	0.313%
2	4.163	124	129	142	rVB5	964	2337	0.33%	0.053%
3	6.973	656	665	722	rBV	37436	176516	24.71%	4.004%
4	7.991	851	859	872	rBV5	1281	3404	0.48%	0.077%
5	8.557	959	967	978	rBV5	542	1600	0.22%	0.036%
6	9.191	1077	1088	1093	rBV	200294	454905	63.68%	10.320%
7	9.238	1094	1097	1129	rVB	118843	268190	37.54%	6.084%
8	9.658	1167	1177	1221	rBV	110276	265114	37.11%	6.014%
9	10.104	1250	1262	1303	rBV	277212	644055	90.15%	14.611%
10	11.766	1568	1579	1620	rBV	355281	714392	100.00%	16.207%
11	12.867	1784	1789	1794	rBV	8095	8959	1.25%	0.203%
12	13.286	1860	1869	1906	rBV	383620	688432	96.37%	15.618%
13	14.450	2083	2091	2125	rBV	269086	456593	63.91%	10.358%
14	15.609	2300	2312	2342	rBV	444543	706316	98.87%	16.023%
15	16.542	2483	2490	2499	rBV4	1763	2406	0.34%	0.055%
16	17.774	2718	2725	2727	rBV7	538	1005	0.14%	0.023%

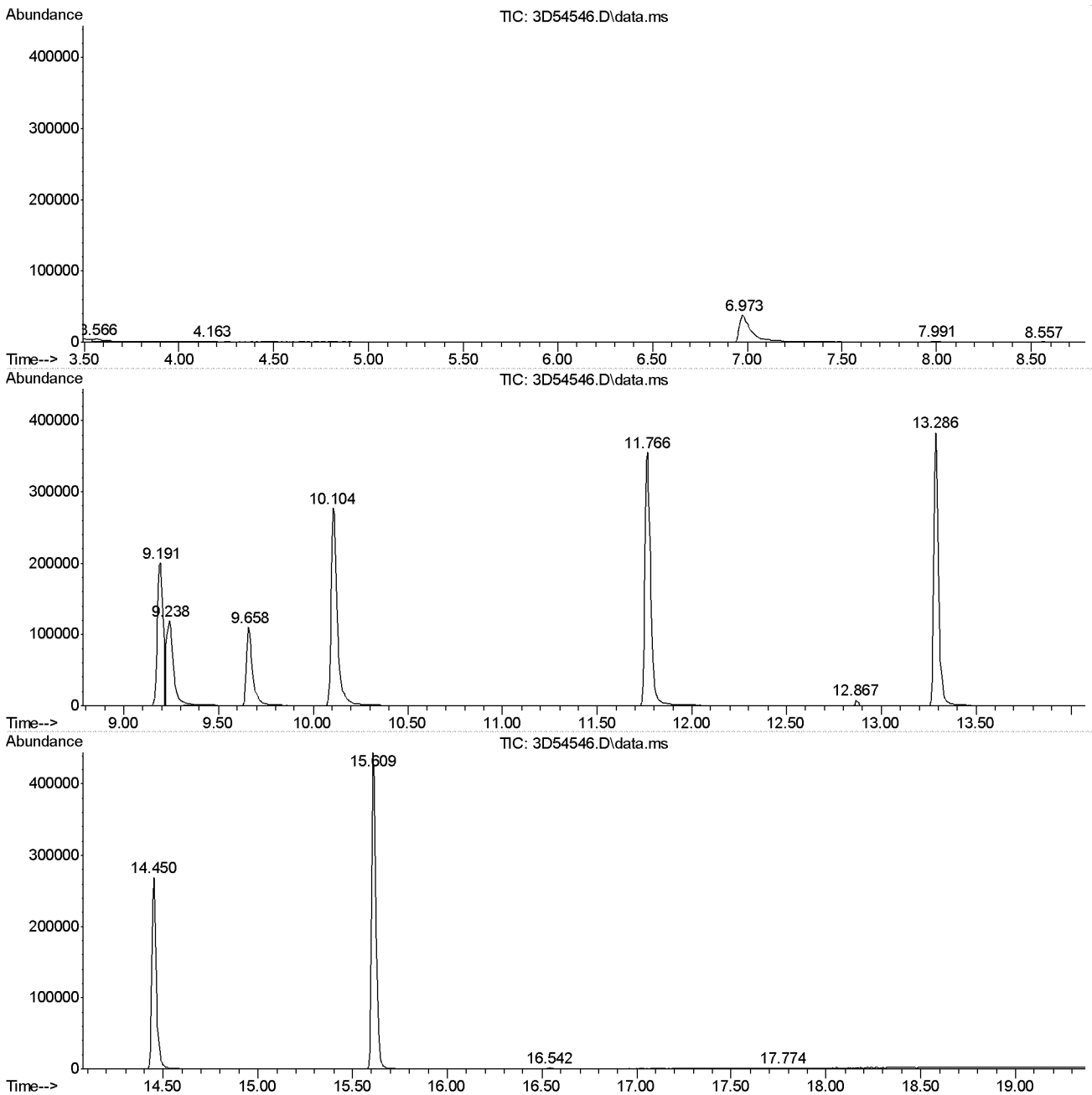
Sum of corrected areas: 4408011

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54546.D
Acq On : 28 Dec 2010 7:41 pm
Operator : TAMIKAG
Sample : JA64438-5
Misc : MS6495,V3D2360,W,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 03 14:17:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration

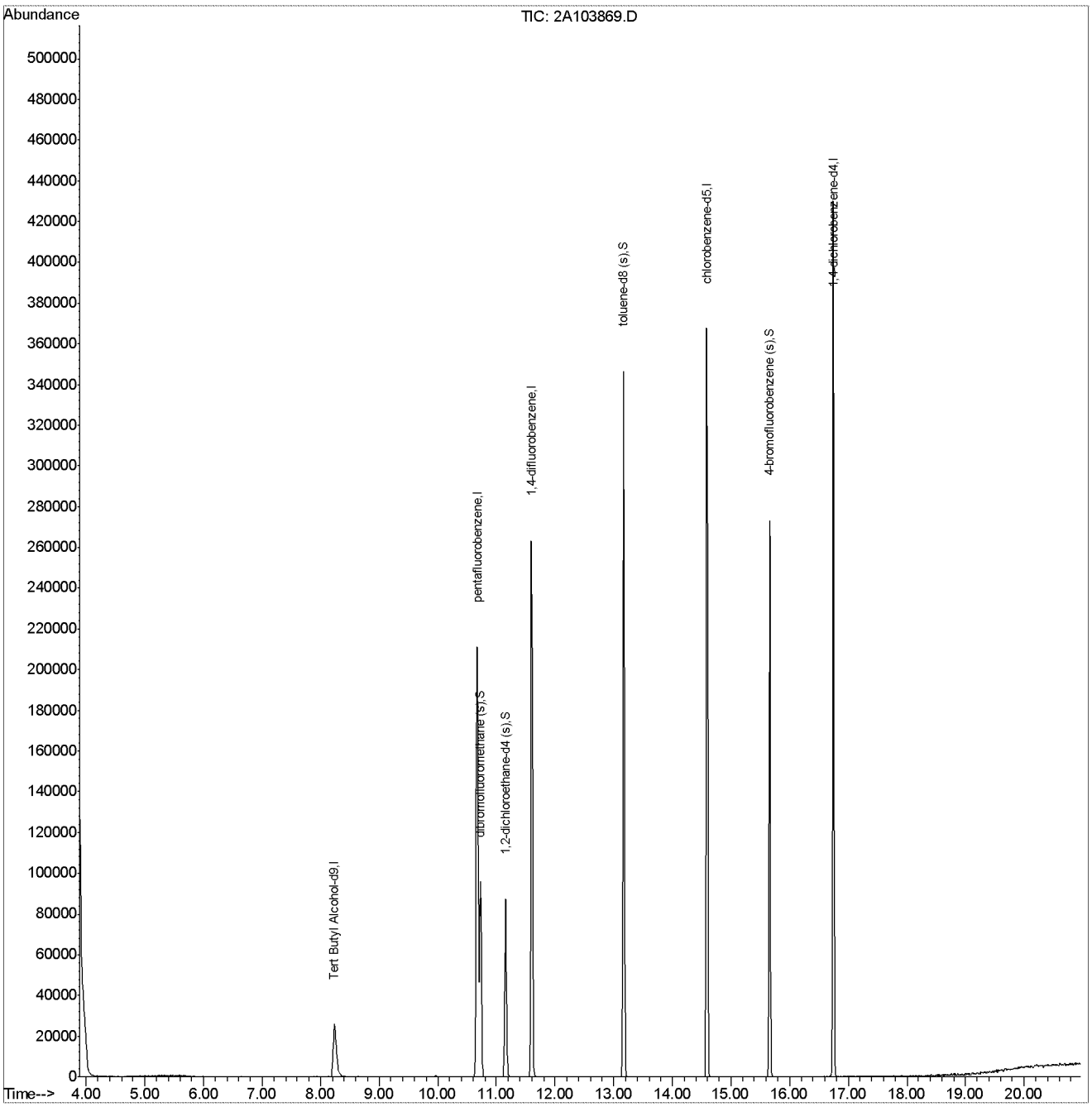
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	63238	500.00	ug/L	-0.02
4) pentafluorobenzene	10.67	168	204630	50.00	ug/L	0.00
47) 1,4-difluorobenzene	11.59	114	251800	50.00	ug/L	-0.01
78) chlorobenzene-d5	14.59	117	216936	50.00	ug/L	0.00
92) 1,4-dichlorobenzene-d4	16.74	152	114585	50.00	ug/L	-0.01
System Monitoring Compounds						
41) dibromofluoromethane (s)	10.73	113	68090	49.72	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.44%			
42) 1,2-dichloroethane-d4 (s)	11.16	65	67846	48.40	ug/L	-0.01
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.80%			
70) toluene-d8 (s)	13.17	98	236255	48.45	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 96.90%			
94) 4-bromofluorobenzene (s)	15.66	95	82432	47.98	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 122		Recovery = 95.96%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jan 03 14:17:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.178	55	57	64	rVB	379	595	0.09%	0.015%
2	4.581	133	134	139	rVB	367	421	0.07%	0.011%
3	4.868	186	189	193	rVB	351	432	0.07%	0.011%
4	4.921	197	199	203	rBV	473	405	0.06%	0.010%
5	5.166	243	246	251	rBV	462	386	0.06%	0.010%
6	5.344	275	280	282	rVB	363	393	0.06%	0.010%
7	5.438	294	298	303	rBV	599	661	0.10%	0.017%
8	5.506	308	311	315	rVV	469	427	0.07%	0.011%
9	5.559	317	321	323	rVV	436	415	0.06%	0.011%
10	5.600	327	329	332	rVV	560	474	0.07%	0.012%
11	5.862	378	379	385	rVB	570	604	0.09%	0.016%
12	5.920	385	390	391	rBV	328	482	0.08%	0.012%
13	6.019	408	409	418	rBB	453	739	0.12%	0.019%
14	6.129	429	430	436	rBB	461	477	0.07%	0.012%
15	6.171	436	438	442	rBB	405	569	0.09%	0.015%
16	6.228	445	449	452	rBB	435	384	0.06%	0.010%
17	6.359	471	474	481	rBB	271	603	0.09%	0.016%
18	6.516	502	504	508	rBB	452	380	0.06%	0.010%
19	6.558	508	512	514	rBB	417	514	0.08%	0.013%
20	6.647	523	529	535	rBB	398	699	0.11%	0.018%
21	6.955	586	588	595	rBB	228	451	0.07%	0.012%
22	7.049	605	606	612	rBB	246	413	0.06%	0.011%
23	7.358	660	665	667	rBB	395	369	0.06%	0.010%
24	7.442	676	681	683	rBB	230	379	0.06%	0.010%
25	7.755	736	741	743	rBB	329	383	0.06%	0.010%
26	7.808	748	751	758	rBB	233	511	0.08%	0.013%
27	7.923	770	773	779	rBB	276	497	0.08%	0.013%
28	8.106	800	808	809	rBB	244	471	0.07%	0.012%
29	8.137	810	814	818	rBB	246	479	0.07%	0.012%
30	8.231	819	832	857	rBV2	26109	103784	16.24%	2.690%
31	8.373	857	859	863	rVV2	592	874	0.14%	0.023%
32	8.414	866	867	871	rVV	685	608	0.10%	0.016%
33	8.493	881	882	888	rBB	404	422	0.07%	0.011%
34	8.582	894	899	904	rVB	284	638	0.10%	0.017%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

35	8.665	914	915	921	rVB	322	497	0.08%	0.013%
36	8.775	929	936	938	rBB	277	570	0.09%	0.015%
37	8.916	961	963	967	rBB	305	403	0.06%	0.010%
38	9.073	992	993	999	rBB	265	447	0.07%	0.012%
39	9.173	1008	1012	1018	rBB	241	561	0.09%	0.015%
40	9.277	1027	1032	1034	rBB	270	407	0.06%	0.011%
41	9.314	1036	1039	1043	rBV	321	492	0.08%	0.013%
42	9.398	1050	1055	1057	rVB	273	436	0.07%	0.011%
43	9.497	1072	1074	1078	rVB	260	377	0.06%	0.010%
44	9.575	1085	1089	1093	rBB	292	485	0.08%	0.013%
45	9.685	1108	1110	1114	rBB	261	359	0.06%	0.009%
46	9.779	1124	1128	1132	rBB	230	372	0.06%	0.010%
47	9.963	1156	1163	1170	rBB	827	1798	0.28%	0.047%
48	10.669	1287	1298	1304	rBV	211173	498328	77.97%	12.918%
49	10.726	1304	1309	1323	rVB2	96011	211324	33.06%	5.478%
50	11.155	1381	1391	1405	rBB	87502	187637	29.36%	4.864%
51	11.594	1465	1475	1498	rBB	263393	532473	83.31%	13.803%
52	13.169	1767	1776	1792	rBB	346783	598243	93.60%	15.508%
53	14.586	2039	2047	2058	rBB	367835	598453	93.64%	15.514%
54	15.658	2244	2252	2263	rBB	273217	419206	65.59%	10.867%
55	16.343	2381	2383	2388	rBB	416	439	0.07%	0.011%
56	16.579	2427	2428	2435	rBV	284	595	0.09%	0.015%
57	16.631	2435	2438	2442	rVB	310	472	0.07%	0.012%
58	16.741	2447	2459	2473	rBB	430373	639126	100.00%	16.568%
59	16.835	2473	2477	2481	rBV	343	666	0.10%	0.017%
60	16.898	2486	2489	2491	rVB	449	387	0.06%	0.010%
61	16.914	2491	2492	2495	rBV	558	447	0.07%	0.012%
62	17.593	2619	2622	2628	rVB	313	441	0.07%	0.011%
63	17.651	2628	2633	2637	rBV	350	562	0.09%	0.015%
64	18.001	2699	2700	2707	rBV	209	374	0.06%	0.010%
65	18.148	2726	2728	2735	rVB	294	380	0.06%	0.010%
66	18.216	2735	2741	2744	rBV	331	632	0.10%	0.016%
67	18.247	2744	2747	2754	rBV	386	472	0.07%	0.012%
68	18.415	2776	2779	2783	rVV	641	564	0.09%	0.015%
69	18.519	2796	2799	2801	rVV2	600	399	0.06%	0.010%
70	18.556	2804	2806	2810	rBV	792	529	0.08%	0.014%
71	18.592	2810	2813	2815	rVV	454	504	0.08%	0.013%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

72	18.619	2815	2818	2821	rVB	549	732	0.11%	0.019%
73	18.671	2826	2828	2840	rBV2	487	853	0.13%	0.022%
74	18.755	2840	2844	2848	rBV	737	688	0.11%	0.018%
75	18.802	2849	2853	2856	rVB2	718	713	0.11%	0.018%
76	18.823	2856	2857	2862	rBV2	779	679	0.11%	0.018%
77	18.864	2862	2865	2869	rVB	662	649	0.10%	0.017%
78	18.906	2870	2873	2876	rVB2	458	448	0.07%	0.012%
79	18.932	2876	2878	2884	rVB2	748	948	0.15%	0.025%
80	18.974	2884	2886	2888	rBV	550	553	0.09%	0.014%
81	19.037	2895	2898	2900	rBV2	845	629	0.10%	0.016%
82	19.058	2900	2902	2903	rVB	741	411	0.06%	0.011%
83	19.068	2903	2904	2908	rVB	738	643	0.10%	0.017%
84	19.105	2908	2911	2912	rBV	673	722	0.11%	0.019%
85	19.157	2920	2921	2924	rBV2	545	375	0.06%	0.010%
86	19.178	2924	2925	2928	rBV2	491	368	0.06%	0.010%
87	19.199	2928	2929	2936	rVB3	743	1058	0.17%	0.027%
88	19.262	2939	2941	2949	rBV3	987	2160	0.34%	0.056%
89	19.319	2949	2952	2955	rVV4	612	464	0.07%	0.012%
90	19.377	2960	2963	2966	rBV3	654	744	0.12%	0.019%
91	19.461	2977	2979	2984	rBV2	743	746	0.12%	0.019%
92	19.502	2984	2987	2990	rBV2	534	717	0.11%	0.019%
93	19.560	2996	2998	3001	rBV2	787	719	0.11%	0.019%
94	19.618	3005	3009	3017	rVV5	857	1247	0.20%	0.032%
95	19.691	3017	3023	3028	rBV5	925	2135	0.33%	0.055%
96	19.774	3036	3039	3044	rBV3	1245	2080	0.33%	0.054%
97	20.041	3060	3090	3095	rBV6	1492	10096	1.58%	0.262%
98	20.161	3111	3113	3119	rBV3	684	1149	0.18%	0.030%
99	20.266	3131	3133	3147	rVB4	929	1990	0.31%	0.052%
100	20.501	3173	3178	3198	rBV8	771	2630	0.41%	0.068%

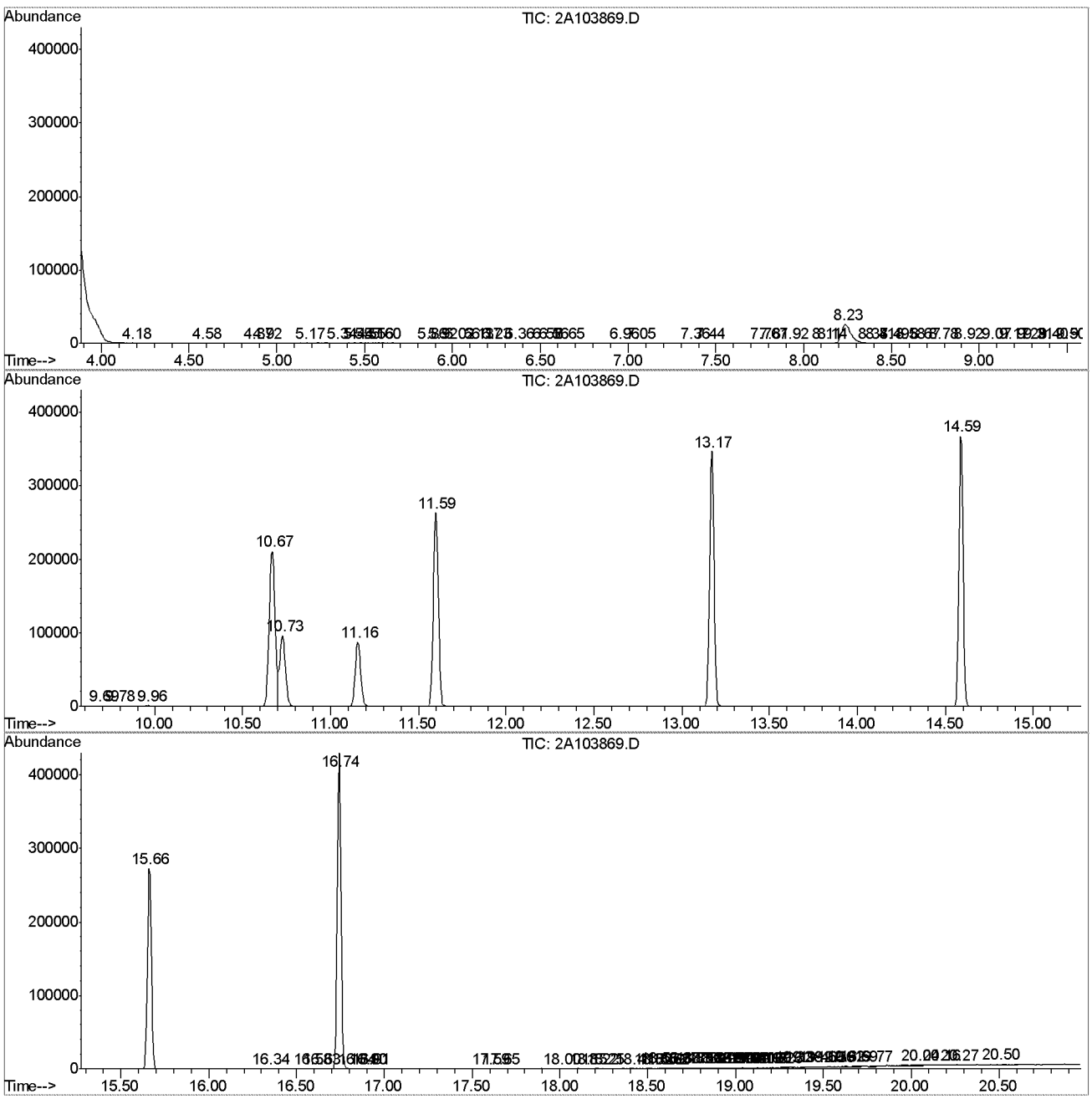
Sum of corrected areas: 3857542

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103869.D
Acq On : 29 Dec 2010 8:44 pm
Operator : HennyS
Sample : ja64438-6
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 03 14:17:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration

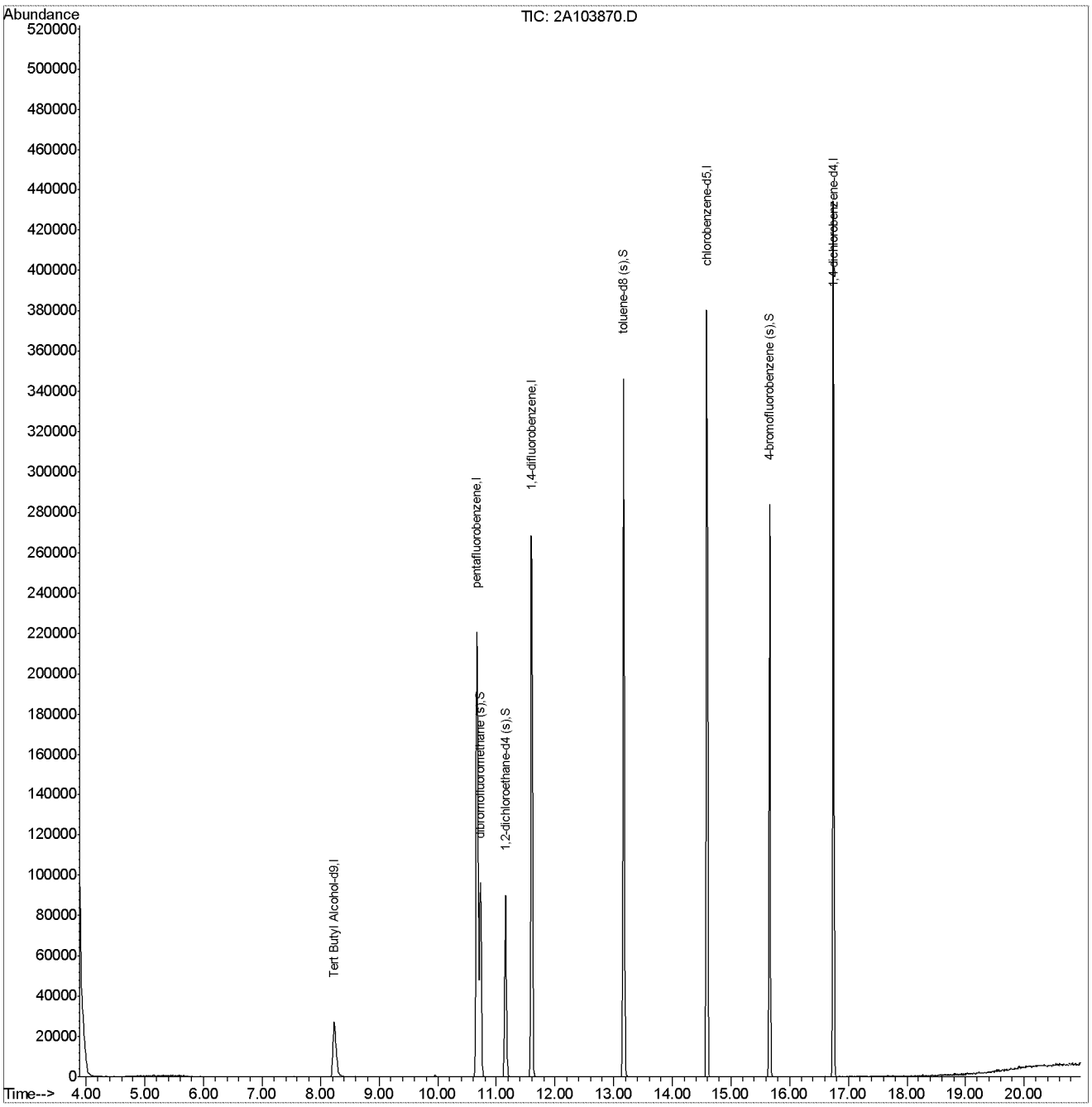
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	65884	500.00	ug/L	-0.01
4) pentafluorobenzene	10.66	168	211973	50.00	ug/L	-0.01
47) 1,4-difluorobenzene	11.59	114	259632	50.00	ug/L	-0.01
78) chlorobenzene-d5	14.59	117	222234	50.00	ug/L	-0.01
92) 1,4-dichlorobenzene-d4	16.74	152	117336	50.00	ug/L	-0.01
System Monitoring Compounds						
41) dibromofluoromethane (s)	10.73	113	70013	49.35	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.70%			
42) 1,2-dichloroethane-d4 (s)	11.16	65	70212	48.35	ug/L	-0.01
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.70%			
70) toluene-d8 (s)	13.17	98	243855	48.50	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 97.00%			
94) 4-bromofluorobenzene (s)	15.66	95	84418	47.99	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 122		Recovery = 95.98%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\2ADATA\V2A4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jan 03 14:17:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.345	84	89	97	rVB2	364	661	0.10%	0.017%
2	4.633	138	144	145	rBB2	250	360	0.05%	0.009%
3	4.654	145	148	150	rBV	289	404	0.06%	0.010%
4	4.685	150	154	156	rVV	274	409	0.06%	0.010%
5	4.732	159	163	172	rVV	275	782	0.12%	0.020%
6	4.795	172	175	178	rVV	373	373	0.06%	0.009%
7	4.821	178	180	185	rVV	358	444	0.07%	0.011%
8	4.879	185	191	195	rVV	539	508	0.08%	0.013%
9	4.978	204	210	213	rBV	375	530	0.08%	0.013%
10	5.119	235	237	239	rBV	475	359	0.05%	0.009%
11	5.146	239	242	251	rVV	517	749	0.11%	0.019%
12	5.318	272	275	278	rVB	456	358	0.05%	0.009%
13	5.360	281	283	287	rVB	496	348	0.05%	0.009%
14	5.470	302	304	308	rVB	352	351	0.05%	0.009%
15	5.517	308	313	317	rBV	465	757	0.12%	0.019%
16	5.585	322	326	328	rVV	383	525	0.08%	0.013%
17	5.616	328	332	336	rVV	441	734	0.11%	0.019%
18	5.648	336	338	347	rVB	460	759	0.12%	0.019%
19	5.873	375	381	385	rVB2	528	987	0.15%	0.025%
20	6.019	402	409	411	rVB	503	718	0.11%	0.018%
21	6.071	418	419	425	rBB	260	423	0.06%	0.011%
22	7.489	688	690	695	rBB	214	364	0.06%	0.009%
23	7.531	695	698	704	rBB	396	589	0.09%	0.015%
24	7.583	704	708	713	rBB	291	450	0.07%	0.011%
25	7.687	727	728	736	rBB	285	432	0.07%	0.011%
26	8.226	817	831	858	rBV2	27463	108000	16.50%	2.728%
27	8.373	858	859	868	rVB2	581	1091	0.17%	0.028%
28	8.566	891	896	898	rBV	282	493	0.08%	0.012%
29	8.624	902	907	908	rBB	264	358	0.05%	0.009%
30	8.681	914	918	921	rBB	295	432	0.07%	0.011%
31	8.713	921	924	928	rBB	301	492	0.08%	0.012%
32	8.749	928	931	933	rBV	288	361	0.06%	0.009%
33	8.781	933	937	941	rVB	283	514	0.08%	0.013%
34	8.812	941	943	947	rBB	239	343	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

35	8.890	954	958	963	rVB	385	632	0.10%	0.016%
36	9.032	983	985	991	rBB	285	434	0.07%	0.011%
37	9.126	1000	1003	1007	rBB	241	381	0.06%	0.010%
38	9.162	1007	1010	1014	rBB	435	349	0.05%	0.009%
39	9.288	1030	1034	1037	rBB	333	432	0.07%	0.011%
40	9.351	1042	1046	1050	rBB	311	542	0.08%	0.014%
41	9.419	1054	1059	1062	rBB	263	460	0.07%	0.012%
42	9.523	1073	1079	1081	rBB	301	485	0.07%	0.012%
43	9.555	1082	1085	1089	rBB	274	364	0.06%	0.009%
44	9.691	1108	1111	1115	rBB	301	347	0.05%	0.009%
45	9.952	1156	1161	1168	rBB2	915	1995	0.30%	0.050%
46	10.663	1286	1297	1304	rBV	220633	520948	79.57%	13.157%
47	10.721	1304	1308	1323	rVB2	96491	212762	32.50%	5.373%
48	11.155	1381	1391	1405	rBB2	90088	194214	29.66%	4.905%
49	11.594	1465	1475	1496	rBB	268759	547571	83.63%	13.829%
50	13.169	1766	1776	1792	rBB	346603	619038	94.55%	15.634%
51	14.586	2039	2047	2059	rBB	380596	614976	93.93%	15.531%
52	15.658	2244	2252	2264	rBB	283924	431169	65.86%	10.889%
53	16.328	2376	2380	2385	rBV	215	511	0.08%	0.013%
54	16.432	2393	2400	2402	rBB	379	516	0.08%	0.013%
55	16.464	2402	2406	2409	rBB	246	357	0.05%	0.009%
56	16.563	2423	2425	2429	rBB	454	418	0.06%	0.011%
57	16.615	2431	2435	2438	rBV	418	556	0.08%	0.014%
58	16.668	2442	2445	2447	rBB	456	357	0.05%	0.009%
59	16.741	2450	2459	2471	rVB	434528	654724	100.00%	16.535%
60	16.903	2489	2490	2500	rVB	505	901	0.14%	0.023%
61	16.982	2500	2505	2509	rBV	339	797	0.12%	0.020%
62	17.416	2586	2588	2594	rVV	383	450	0.07%	0.011%
63	17.484	2594	2601	2606	rVV	321	419	0.06%	0.011%
64	17.515	2606	2607	2613	rBV	387	354	0.05%	0.009%
65	17.635	2627	2630	2634	rBV	381	339	0.05%	0.009%
66	18.069	2707	2713	2717	rBV	477	503	0.08%	0.013%
67	18.127	2721	2724	2727	rVV2	328	371	0.06%	0.009%
68	18.185	2732	2735	2739	rVB	392	371	0.06%	0.009%
69	18.216	2739	2741	2745	rBV	435	443	0.07%	0.011%
70	18.273	2751	2752	2755	rVV	689	489	0.07%	0.012%
71	18.368	2768	2770	2773	rVB	327	344	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

72	18.441	2779	2784	2787	rVB	372	550	0.08%	0.014%
73	18.493	2792	2794	2798	rVB	440	398	0.06%	0.010%
74	18.551	2803	2805	2808	rBV	451	452	0.07%	0.011%
75	18.603	2813	2815	2817	rBV	620	399	0.06%	0.010%
76	18.640	2819	2822	2826	rVB	638	725	0.11%	0.018%
77	18.671	2826	2828	2830	rBV	396	338	0.05%	0.009%
78	18.708	2833	2835	2839	rBV	518	442	0.07%	0.011%
79	18.744	2840	2842	2847	rVB	469	636	0.10%	0.016%
80	18.807	2847	2854	2857	rBV2	856	1254	0.19%	0.032%
81	18.828	2857	2858	2862	rBV	953	753	0.12%	0.019%
82	18.864	2862	2865	2867	rVB2	499	560	0.09%	0.014%
83	18.932	2874	2878	2880	rBV3	897	1028	0.16%	0.026%
84	18.990	2886	2889	2891	rVB2	479	400	0.06%	0.010%
85	19.006	2891	2892	2896	rBV2	477	439	0.07%	0.011%
86	19.058	2900	2902	2906	rBV2	528	790	0.12%	0.020%
87	19.136	2915	2917	2924	rBV4	575	1085	0.17%	0.027%
88	19.183	2924	2926	2932	rVV4	628	1020	0.16%	0.026%
89	19.225	2932	2934	2936	rVV2	880	581	0.09%	0.015%
90	19.246	2936	2938	2943	rVB3	584	632	0.10%	0.016%
91	19.340	2953	2956	2957	rVB3	612	478	0.07%	0.012%
92	19.351	2957	2958	2961	rBV3	802	860	0.13%	0.022%
93	19.382	2961	2964	2967	rVV3	907	905	0.14%	0.023%
94	19.440	2971	2975	2982	rVB3	738	1346	0.21%	0.034%
95	19.492	2982	2985	2987	rBV3	836	811	0.12%	0.020%
96	19.565	2998	2999	3006	rBV5	810	984	0.15%	0.025%
97	19.612	3006	3008	3011	rBV	816	770	0.12%	0.019%
98	19.738	3030	3032	3034	rBV3	989	816	0.12%	0.021%
99	19.910	3061	3065	3071	rBV4	1246	1994	0.30%	0.050%
100	20.679	3210	3212	3226	rVB6	905	2371	0.36%	0.060%

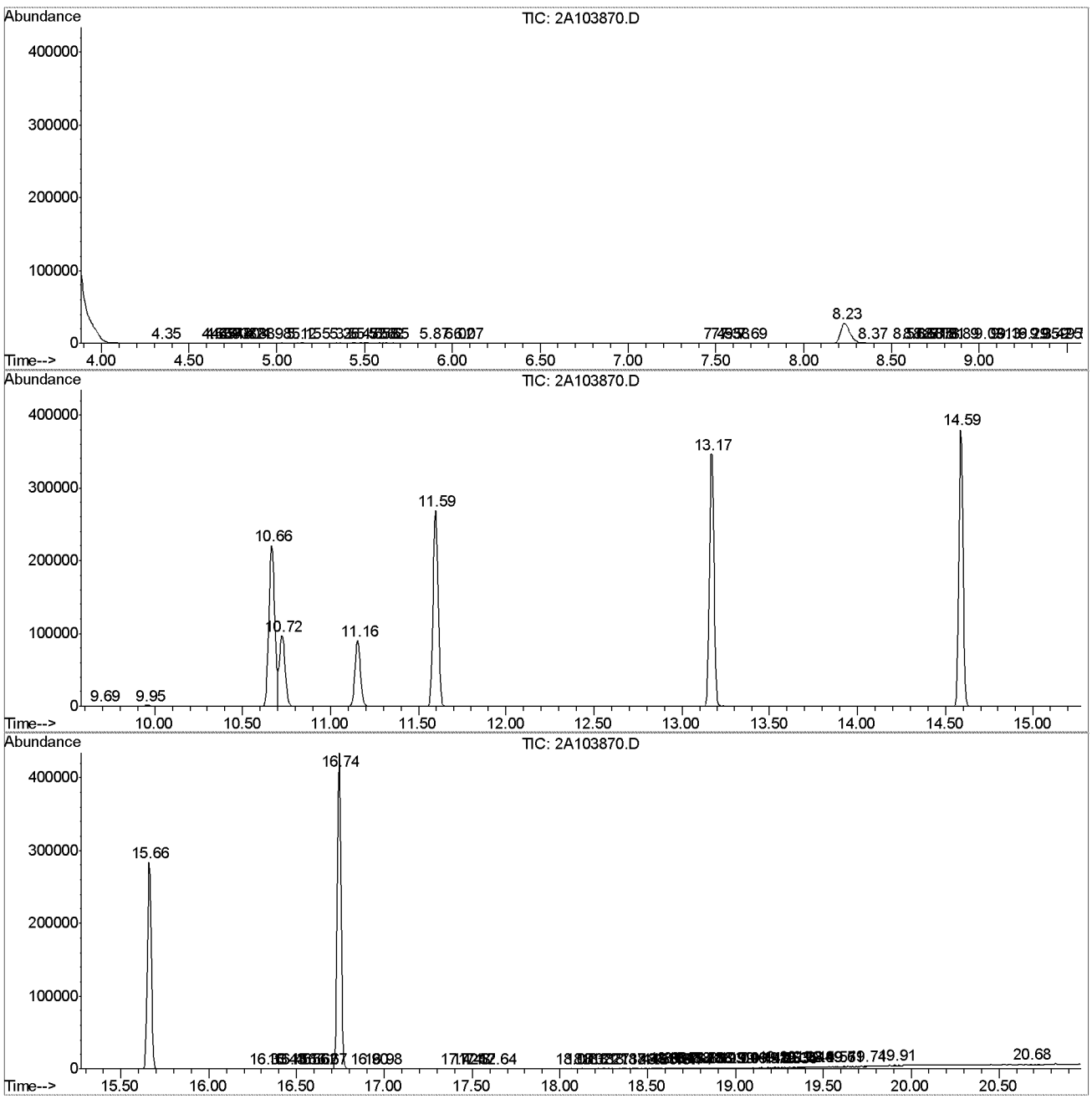
Sum of corrected areas: 3959594

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103870.D
Acq On : 29 Dec 2010 9:13 pm
Operator : HennyS
Sample : ja64438-7
Misc : MS6495,V2A4429,,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 29 14:49:24 2010
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	61001	500.00	ug/L	-0.02
4) pentafluorobenzene	10.66	168	193313	50.00	ug/L	-0.01
47) 1,4-difluorobenzene	11.59	114	232437	50.00	ug/L	-0.01
78) chlorobenzene-d5	14.59	117	195440	50.00	ug/L	-0.01
92) 1,4-dichlorobenzene-d4	16.74	152	102476	50.00	ug/L	-0.01
System Monitoring Compounds						
41) dibromofluoromethane (s)	10.72	113	60915	47.08	ug/L	-0.02
Spiked Amount 50.000	Range 76 - 120		Recovery = 94.16%			
42) 1,2-dichloroethane-d4 (s)	11.15	65	60556	45.72	ug/L	-0.02
Spiked Amount 50.000	Range 64 - 135		Recovery = 91.44%			
70) toluene-d8 (s)	13.16	98	214948	47.75	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 117		Recovery = 95.50%			
94) 4-bromofluorobenzene (s)	15.66	95	73748	48.00	ug/L	-0.01
Spiked Amount 50.000	Range 72 - 122		Recovery = 96.00%			

Target Compounds	Qvalue

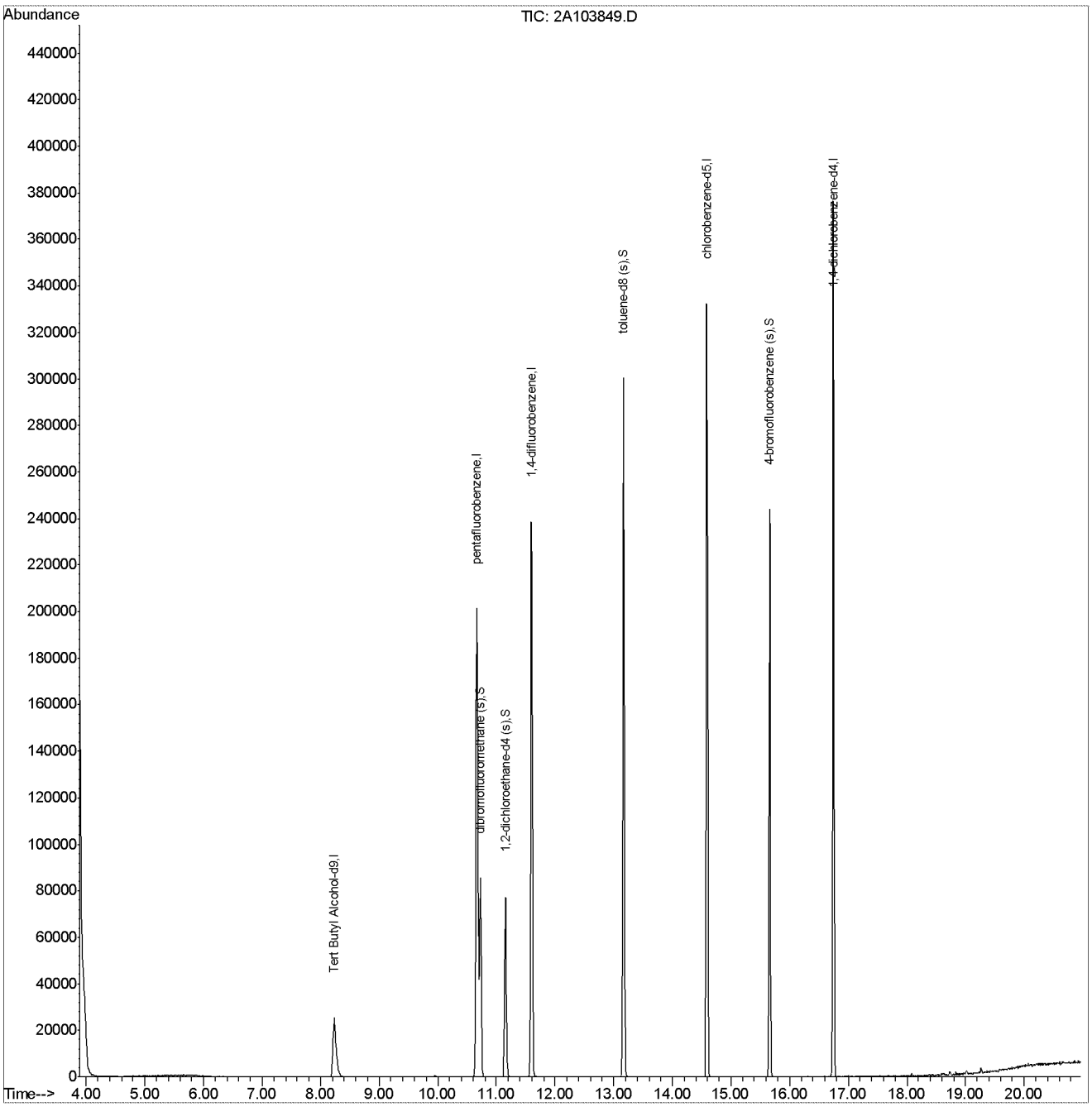
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SII-SSA-0014-005710

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 29 14:49:24 2010
Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Oct 19 14:51:50 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.162	52	54	64	rVB	243	455	0.08%	0.013%
2	4.513	118	121	130	rVB	356	965	0.17%	0.027%
3	4.570	130	132	136	rBV	351	484	0.08%	0.014%
4	4.659	142	149	152	rBV	309	403	0.07%	0.011%
5	4.712	153	159	167	rVV	170	507	0.09%	0.014%
6	4.827	178	181	190	rBV	170	308	0.05%	0.009%
7	4.905	194	196	198	rBV	354	265	0.05%	0.008%
8	4.984	206	211	213	rBV	282	351	0.06%	0.010%
9	5.297	269	271	274	rVB	284	261	0.05%	0.007%
10	5.318	274	275	282	rBV	314	347	0.06%	0.010%
11	5.386	283	288	291	rVB	232	262	0.05%	0.007%
12	5.538	314	317	320	rVB	398	338	0.06%	0.010%
13	5.559	320	321	326	rBV	440	451	0.08%	0.013%
14	5.700	347	348	355	rBV	231	456	0.08%	0.013%
15	5.867	378	380	394	rVB	488	1009	0.18%	0.029%
16	5.982	399	402	406	rVB	410	516	0.09%	0.015%
17	6.155	432	435	440	rVB	448	583	0.10%	0.017%
18	6.213	440	446	448	rBV	418	635	0.11%	0.018%
19	6.265	455	456	461	rVB	248	342	0.06%	0.010%
20	6.359	470	474	475	rBB	234	276	0.05%	0.008%
21	6.474	491	496	501	rBB	240	393	0.07%	0.011%
22	6.526	502	506	509	rBB	371	302	0.05%	0.009%
23	6.594	512	519	522	rBB	270	435	0.08%	0.012%
24	6.835	561	565	567	rBB	382	361	0.06%	0.010%
25	6.866	567	571	577	rBB	433	521	0.09%	0.015%
26	7.013	596	599	603	rBB	389	366	0.06%	0.010%
27	8.231	817	832	856	rBV	25476	99105	17.36%	2.822%
28	8.394	862	863	868	rVB	449	326	0.06%	0.009%
29	8.446	869	873	876	rBB	278	269	0.05%	0.008%
30	8.660	910	914	916	rBB	270	276	0.05%	0.008%
31	8.864	949	953	956	rBB	417	313	0.05%	0.009%
32	9.947	1157	1160	1166	rBB	643	979	0.17%	0.028%
33	10.664	1285	1297	1303	rBV	201430	464999	81.43%	13.241%
34	10.721	1303	1308	1321	rVB	85480	191649	33.56%	5.457%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

35	11.155	1381	1391	1404	rBB	77506	167553	29.34%	4.771%
36	11.595	1464	1475	1497	rBB	238664	489855	85.79%	13.948%
37	11.746	1502	1504	1508	rBB	396	268	0.05%	0.008%
38	13.164	1766	1775	1790	rBB	300565	542973	95.09%	15.461%
39	14.586	2039	2047	2059	rBB	332516	536413	93.94%	15.274%
40	15.658	2244	2252	2262	rBB	244231	375397	65.74%	10.689%
41	16.192	2349	2354	2356	rBB	260	298	0.05%	0.008%
42	16.234	2356	2362	2364	rBB	390	443	0.08%	0.013%
43	16.307	2371	2376	2381	rBB	255	469	0.08%	0.013%
44	16.427	2394	2399	2402	rBB	269	419	0.07%	0.012%
45	16.495	2409	2412	2413	rBB	429	275	0.05%	0.008%
46	16.548	2419	2422	2425	rVB	395	441	0.08%	0.013%
47	16.616	2428	2435	2440	rBB	411	872	0.15%	0.025%
48	16.741	2448	2459	2473	rBV	376739	571023	100.00%	16.260%
49	16.820	2473	2474	2478	rVB	490	439	0.08%	0.013%
50	16.856	2478	2481	2483	rBV	500	552	0.10%	0.016%
51	17.003	2504	2509	2514	rVB2	668	774	0.14%	0.022%
52	17.348	2572	2575	2580	rBV	332	270	0.05%	0.008%
53	17.536	2608	2611	2620	rVB	380	570	0.10%	0.016%
54	17.656	2628	2634	2637	rVB	281	470	0.08%	0.013%
55	17.892	2674	2679	2682	rBV	294	300	0.05%	0.009%
56	17.928	2682	2686	2689	rVV	511	413	0.07%	0.012%
57	17.965	2689	2693	2695	rVV	343	300	0.05%	0.009%
58	18.028	2704	2705	2711	rVV	300	406	0.07%	0.012%
59	18.080	2711	2715	2722	rVV2	1061	1616	0.28%	0.046%
60	18.206	2738	2739	2749	rVB	316	410	0.07%	0.012%
61	18.300	2755	2757	2765	rVB	348	579	0.10%	0.016%
62	18.357	2765	2768	2772	rBV	422	716	0.13%	0.020%
63	18.540	2802	2803	2807	rBV	535	445	0.08%	0.013%
64	18.582	2808	2811	2815	rVB	764	598	0.10%	0.017%
65	18.619	2815	2818	2820	rBV	1048	671	0.12%	0.019%
66	18.634	2820	2821	2823	rVB	874	303	0.05%	0.009%
67	18.676	2827	2829	2832	rBV	429	358	0.06%	0.010%
68	18.729	2832	2839	2848	rVB2	1703	3209	0.56%	0.091%
69	18.802	2848	2853	2855	rBV	682	837	0.15%	0.024%
70	18.833	2855	2859	2863	rBV3	1390	1288	0.23%	0.037%
71	18.859	2863	2864	2867	rVB	657	389	0.07%	0.011%

LSC Area Percent Report

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

72	18.886	2867	2869	2870	rBV	829	326	0.06%	0.009%
73	18.906	2871	2873	2875	rVB	597	394	0.07%	0.011%
74	18.933	2875	2878	2884	rVB3	755	1126	0.20%	0.032%
75	18.969	2884	2885	2890	rBV2	746	940	0.16%	0.027%
76	19.016	2890	2894	2900	rVB3	1901	2989	0.52%	0.085%
77	19.063	2900	2903	2905	rBV3	722	665	0.12%	0.019%
78	19.105	2908	2911	2914	rVB	527	400	0.07%	0.011%
79	19.131	2914	2916	2918	rBV	664	555	0.10%	0.016%
80	19.168	2921	2923	2927	rVB2	553	607	0.11%	0.017%
81	19.199	2927	2929	2931	rBV2	458	398	0.07%	0.011%
82	19.225	2931	2934	2937	rBV2	666	444	0.08%	0.013%
83	19.262	2937	2941	2947	rVB3	2212	3117	0.55%	0.089%
84	19.346	2950	2957	2958	rBV3	941	1812	0.32%	0.052%
85	19.403	2963	2968	2969	rBV3	582	792	0.14%	0.023%
86	19.424	2969	2972	2981	rBV5	923	1929	0.34%	0.055%
87	19.565	2998	2999	3001	rBV	807	436	0.08%	0.012%
88	19.592	3001	3004	3009	rVV4	812	1261	0.22%	0.036%
89	19.628	3009	3011	3015	rVB4	796	892	0.16%	0.025%
90	19.654	3015	3016	3019	rBV2	1103	693	0.12%	0.020%
91	19.707	3019	3026	3028	rVV3	814	775	0.14%	0.022%
92	19.728	3028	3030	3035	rBV5	943	1137	0.20%	0.032%
93	19.790	3035	3042	3044	rBV3	1018	1386	0.24%	0.039%
94	19.806	3044	3045	3052	rBV4	844	1374	0.24%	0.039%
95	19.853	3052	3054	3058	rBV3	816	1230	0.22%	0.035%
96	19.879	3058	3059	3066	rBV5	842	1064	0.19%	0.030%
97	19.963	3066	3075	3079	rBV5	1199	3447	0.60%	0.098%
98	20.193	3110	3119	3120	rBV6	682	1428	0.25%	0.041%
99	20.397	3135	3158	3160	rBV8	1324	6192	1.08%	0.176%
100	20.507	3176	3179	3189	rBV5	1011	1963	0.34%	0.056%

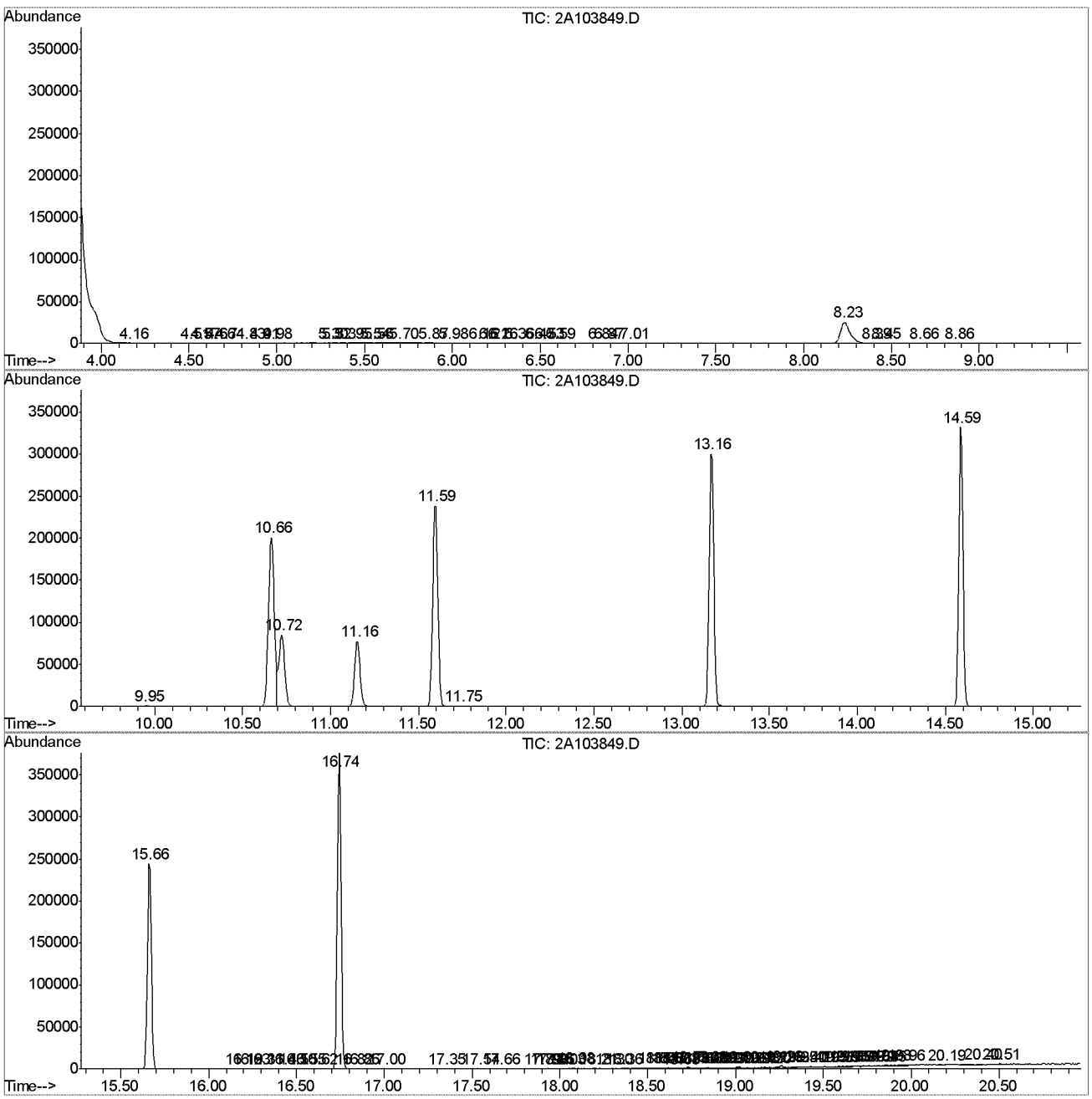
Sum of corrected areas: 3511892

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\2ADATA\v2a4429-4430\
Data File : 2A103849.D
Acq On : 29 Dec 2010 10:35 am
Operator : HennyS
Sample : mb
Misc : MS6101,V2A4429,,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2A4305.M
Quant Title : Method SW846 8260B, ZB624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 29 08:32:58 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

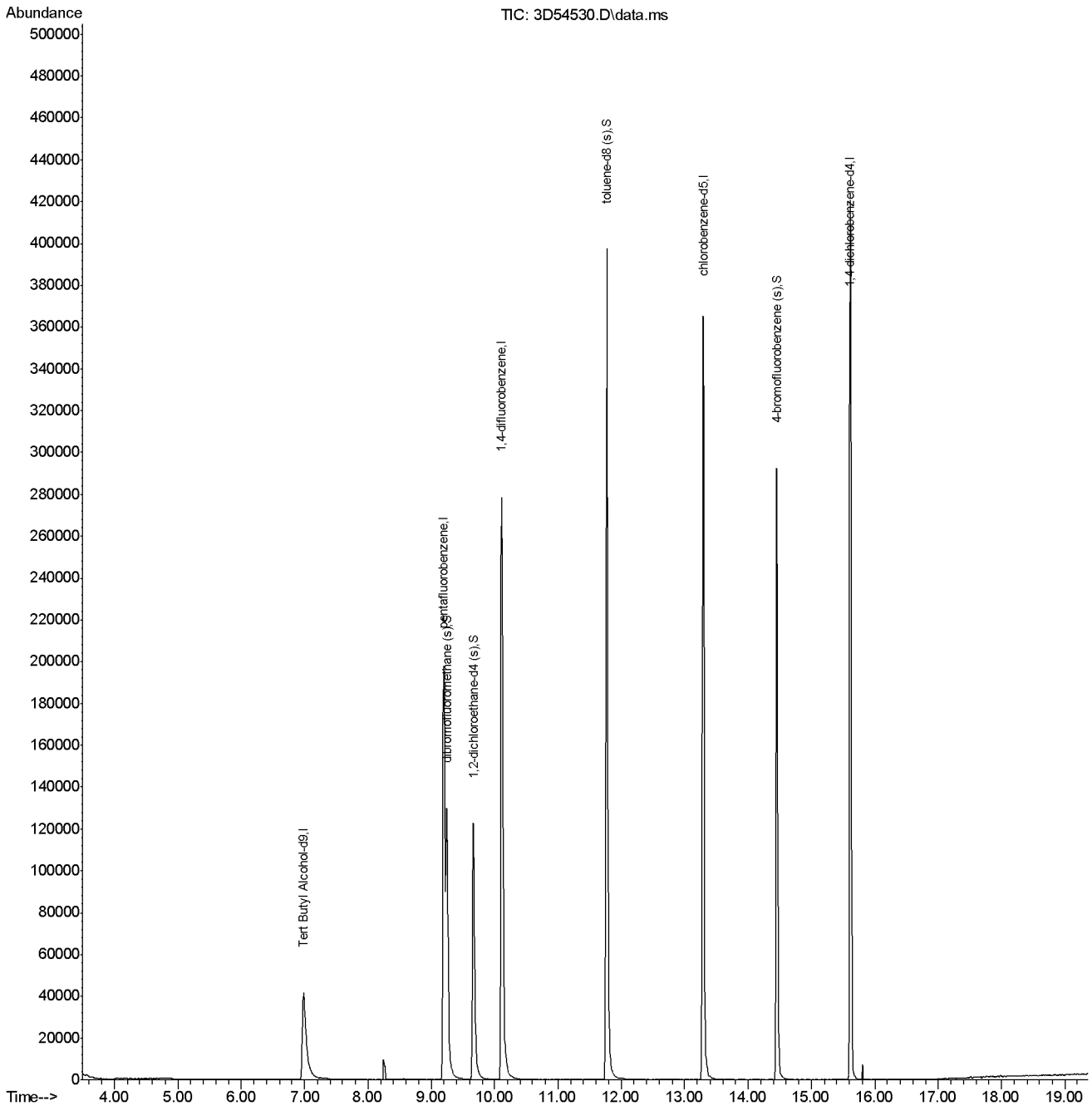
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.979	65	107276	500.00	ug/L	-0.01
4) pentafluorobenzene	9.196	168	181924	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	264897	50.00	ug/L	0.00
80) chlorobenzene-d5	13.291	117	212664	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	108316	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	84429	56.67	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 113.34%			
44) 1,2-dichloroethane-d4 (s)	9.663	65	109720	54.91	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 109.82%			
72) toluene-d8 (s)	11.766	98	290987	56.70	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 113.40%			
98) 4-bromofluorobenzene (s)	14.450	95	101725	52.07	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.14%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 29 08:32:58 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54530.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.560	11	14	27	rVB4	1509	3318	0.42%	0.072%
2	4.174	126	131	139	rVB3	491	1027	0.13%	0.022%
3	6.979	657	666	705	rBV	41579	183273	23.24%	4.002%
4	8.242	902	907	917	rBV	9592	14537	1.84%	0.317%
5	9.191	1078	1088	1094	rBV	197606	459918	58.33%	10.044%
6	9.244	1094	1098	1139	rVV2	129863	325433	41.27%	7.107%
7	9.469	1139	1141	1154	rVB3	586	1377	0.17%	0.030%
8	9.663	1166	1178	1213	rBV	122671	298476	37.85%	6.518%
9	10.109	1253	1263	1302	rBV	278432	636544	80.73%	13.901%
10	11.766	1564	1579	1615	rBV	397419	788473	100.00%	17.219%
11	13.286	1861	1869	1896	rBV	365261	666734	84.56%	14.561%
12	13.433	1896	1897	1911	rVB3	629	1459	0.19%	0.032%
13	14.450	2081	2091	2127	rBV	292680	498331	63.20%	10.883%
14	15.609	2302	2312	2344	rBV	420698	686376	87.05%	14.990%
15	15.797	2344	2348	2355	rVB	7110	10384	1.32%	0.227%
16	17.517	2669	2676	2680	rVB3	747	1258	0.16%	0.027%
17	17.973	2760	2763	2768	rVB4	660	1091	0.14%	0.024%
18	18.089	2781	2785	2788	rBV4	563	1013	0.13%	0.022%

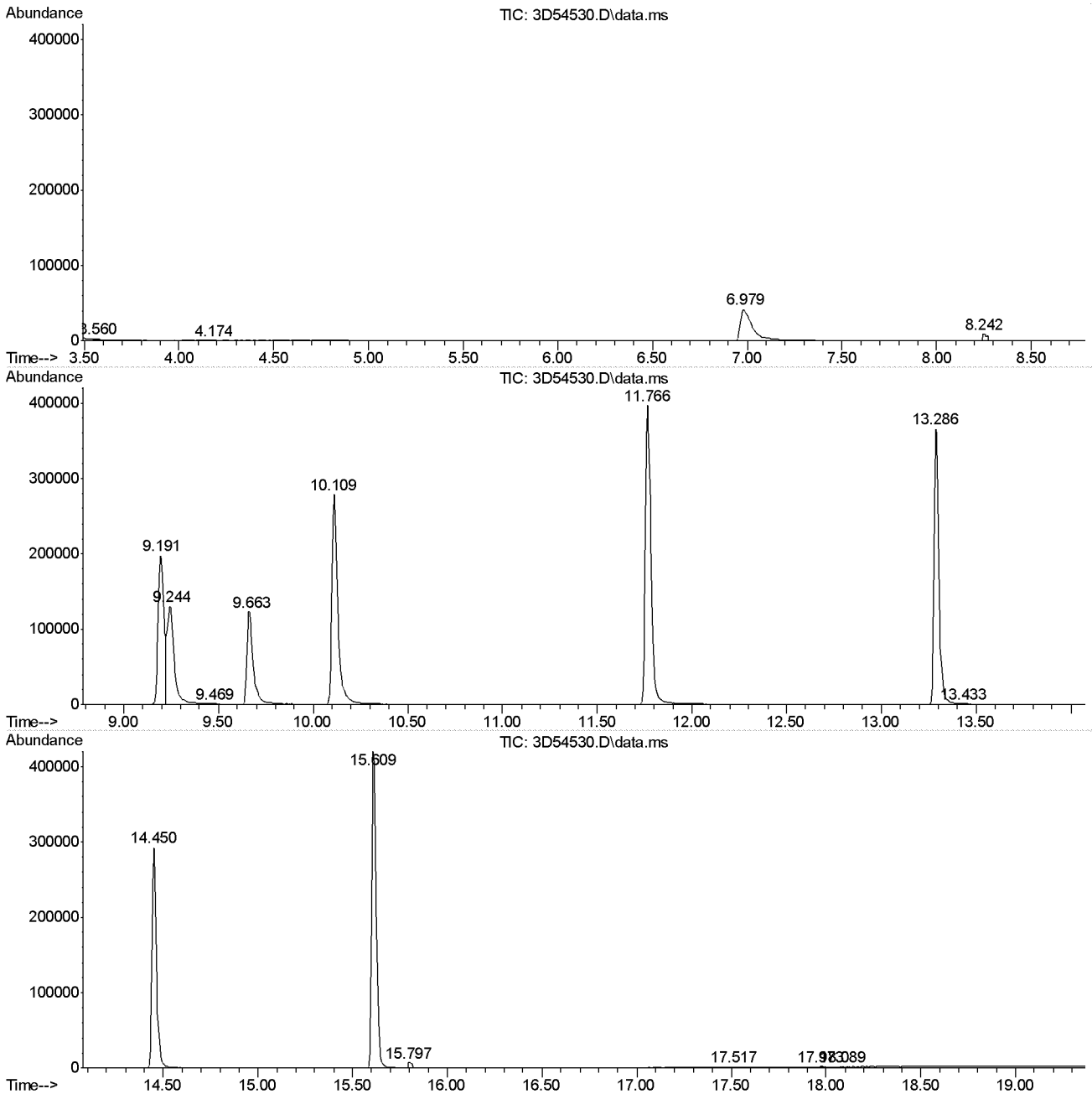
Sum of corrected areas: 4579022

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54530.D
Acq On : 28 Dec 2010 11:51 am
Operator : TAMIKAG
Sample : MB
Misc : MS6272,V3D2360,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6495,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 29 09:39:15 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration

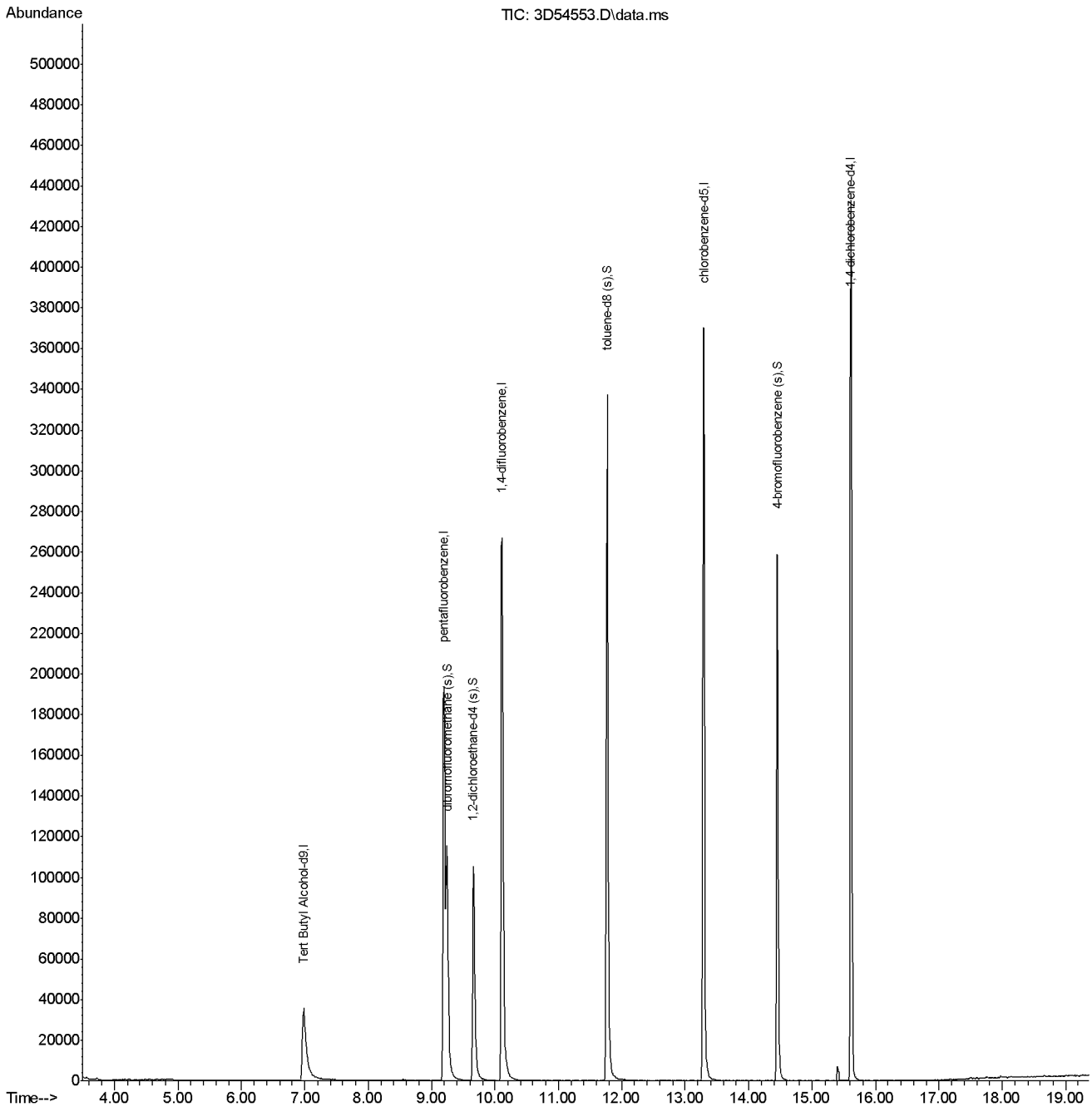
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	6.979	65	97766	500.00	ug/L	-0.01
4) pentafluorobenzene	9.191	168	178750	50.00	ug/L	0.00
51) 1,4-difluorobenzene	10.109	114	258408	50.00	ug/L	0.00
80) chlorobenzene-d5	13.286	117	207974	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	15.609	152	107757	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	9.244	113	73202	50.01	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.02%			
44) 1,2-dichloroethane-d4 (s)	9.658	65	94473	48.12	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.24%			
72) toluene-d8 (s)	11.766	98	253830	50.70	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 101.40%			
98) 4-bromofluorobenzene (s)	14.450	95	89833	46.22	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 92.44%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6495,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 29 09:39:15 2010
Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um
QLast Update : Tue Nov 16 13:50:31 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA64438

SII-SSA-0014-005723

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6405,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

Signal : TIC: 3D54553.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.555	9	13	26	rVB4	1024	2336	0.34%	0.055%
2	6.979	652	666	695	rBV2	35309	158154	23.11%	3.750%
3	9.191	1078	1088	1093	rBV	193708	436766	63.82%	10.357%
4	9.238	1094	1097	1132	rVB2	115121	269258	39.35%	6.385%
5	9.658	1168	1177	1219	rBV	105415	258012	37.70%	6.118%
6	10.109	1252	1263	1295	rBV	266764	617031	90.16%	14.632%
7	11.766	1569	1579	1615	rBV	337074	684342	100.00%	16.228%
8	13.286	1857	1869	1895	rBV	370196	655785	95.83%	15.551%
9	14.450	2081	2091	2125	rBV	258932	437398	63.92%	10.372%
10	15.399	2268	2272	2279	rBV2	6944	10752	1.57%	0.255%
11	15.609	2305	2312	2341	rBV	432910	683852	99.93%	16.216%
12	17.512	2666	2675	2679	rVB6	849	1557	0.23%	0.037%
13	17.973	2758	2763	2769	rBV4	1149	1802	0.26%	0.043%

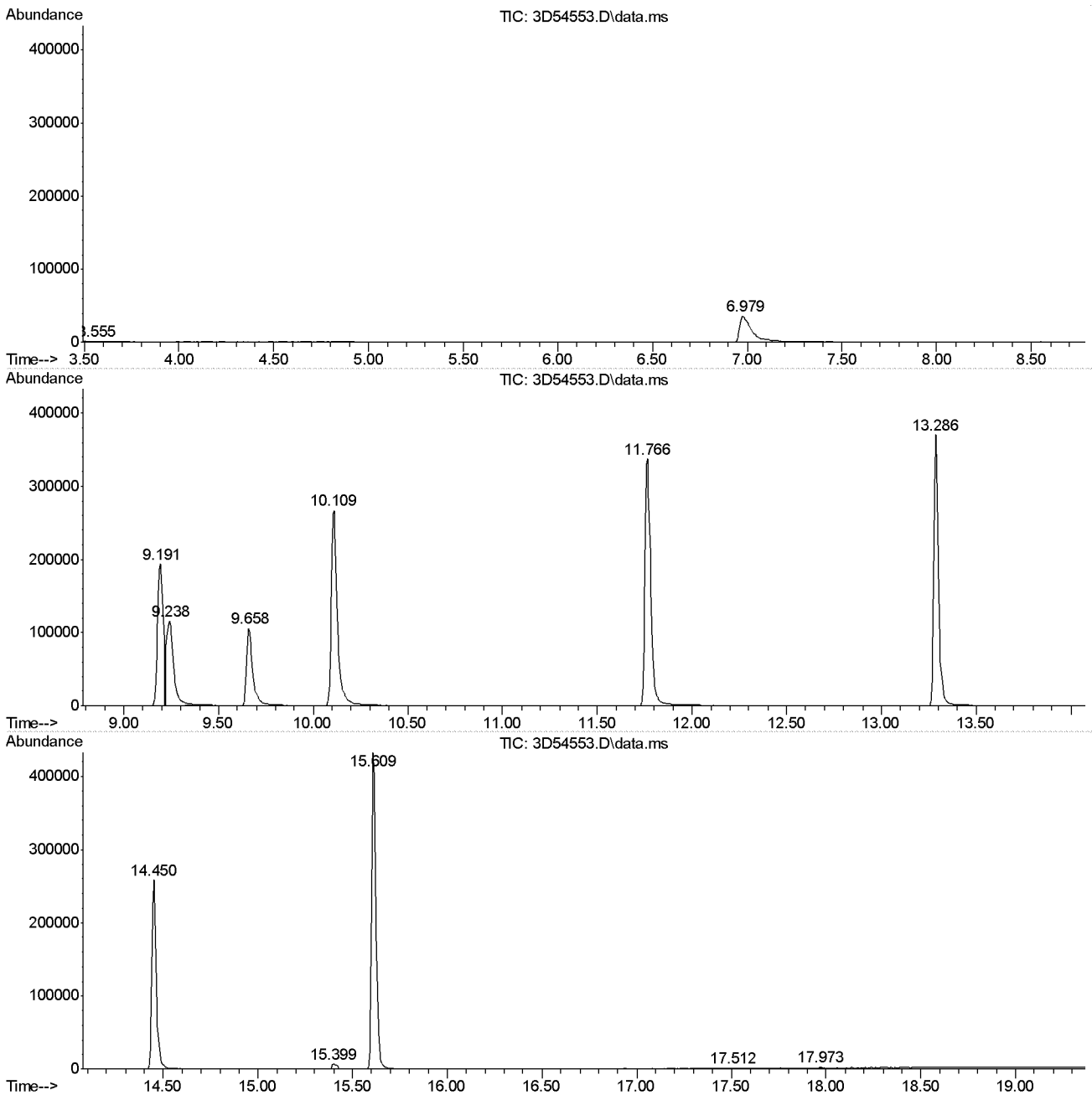
Sum of corrected areas: 4217045

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6405,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p



ACCUTEST LABORATORIES
JA64438

SII-SSA-0014-005725

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\3D-CORE\v3d2360-61\
Data File : 3D54553.D
Acq On : 28 Dec 2010 10:50 pm
Operator : TAMIKAG
Sample : MB
Misc : MS6405,V3D2361,W,,,,1
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3D2292.M
Quant Title : Method SW846 8260B, ZB 624 60m x 0.25mm x 1.4 um

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MB1	R84606.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MB1	R84606.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	87%	25-112%
321-60-8	2-Fluorobiphenyl	82%	31-106%
1718-51-0	Terphenyl-d14	76%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365A-MB1	4M22977.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	110%	18-119%
321-60-8	2-Fluorobiphenyl	99%	18-104%
1718-51-0	Terphenyl-d14	90%	13-109%

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-BS1	R84607.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	42.9	86	46-113
1912-24-9	Atrazine	50	51.2	102	55-127
100-52-7	Benzaldehyde	50	53.8	108	31-130
101-55-3	4-Bromophenyl phenyl ether	50	55.0	110	55-121
85-68-7	Butyl benzyl phthalate	50	47.2	94	55-132
92-52-4	1,1'-Biphenyl	50	41.2	82	43-107
91-58-7	2-Chloronaphthalene	50	46.3	93	39-108
106-47-8	4-Chloroaniline	50	35.7	71	34-103
86-74-8	Carbazole	50	49.8	100	63-122
105-60-2	Caprolactam	50	5.6	11	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	51.0	102	43-119
111-44-4	bis(2-Chloroethyl)ether	50	45.9	92	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	48.4	97	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	51.6	103	50-117
121-14-2	2,4-Dinitrotoluene	50	52.5	105	56-124
606-20-2	2,6-Dinitrotoluene	50	54.4	109	55-128
91-94-1	3,3'-Dichlorobenzidine	50	37.0	74	42-116
132-64-9	Dibenzofuran	50	45.9	92	53-109
84-74-2	Di-n-butyl phthalate	50	47.9	96	58-130
117-84-0	Di-n-octyl phthalate	50	46.2	92	55-133
84-66-2	Diethyl phthalate	50	46.3	93	52-123
131-11-3	Dimethyl phthalate	50	42.5	85	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	46.6	93	57-134
87-68-3	Hexachlorobutadiene	50	49.2	98	11-100
77-47-4	Hexachlorocyclopentadiene	100	130	130* [a]	5-120
67-72-1	Hexachloroethane	50	45.0	90* [b]	13-88
78-59-1	Isophorone	50	50.9	102	43-120
91-57-6	2-Methylnaphthalene	50	43.0	86	33-103
88-74-4	2-Nitroaniline	50	51.8	104	48-132
99-09-2	3-Nitroaniline	50	42.9	86	48-115
100-01-6	4-Nitroaniline	50	44.4	89	51-125
98-95-3	Nitrobenzene	50	47.5	95	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	52.3	105	41-121
86-30-6	N-Nitrosodiphenylamine	50	47.2	94	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	36.1	72	18-130

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-BS1	R84607.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	89%	25-112%
321-60-8	2-Fluorobiphenyl	83%	31-106%
1718-51-0	Terphenyl-d14	91%	14-122%

(a) High percent recoveries and no associated positive found in the QC batch.
(b) Outside of in house control limits, but within reasonable method recovery limits.

Blank Spike Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365A-BS12	4M22978.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.916	92	42-105
208-96-8	Acenaphthylene	1	0.747	75	36-99
120-12-7	Anthracene	1	0.880	88	44-111
56-55-3	Benzo(a)anthracene	1	0.908	91	33-130
50-32-8	Benzo(a)pyrene	1	0.977	98	35-117
205-99-2	Benzo(b)fluoranthene	1	1.29	129	26-145
191-24-2	Benzo(g,h,i)perylene	1	1.10	110	29-130
207-08-9	Benzo(k)fluoranthene	1	0.752	75	33-142
218-01-9	Chrysene	1	0.929	93	41-127
53-70-3	Dibenzo(a,h)anthracene	1	1.15	115	27-135
206-44-0	Fluoranthene	1	0.917	92	40-112
86-73-7	Fluorene	1	0.892	89	45-104
118-74-1	Hexachlorobenzene	1	1.04	104	30-110
193-39-5	Indeno(1,2,3-cd)pyrene	1	1.16	116	32-131
91-20-3	Naphthalene	1	0.810	81	21-120
85-01-8	Phenanthrene	1	0.862	86	38-114
129-00-0	Pyrene	1	0.956	96	38-124

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	98%	18-119%
321-60-8	2-Fluorobiphenyl	90%	18-104%
1718-51-0	Terphenyl-d14	108%	13-109%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MS	R84612.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
OP47365-MSD	R84613.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
JA64353-2	R84611.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	JA64353-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		112	118	105	121	108	3	25-127/35
1912-24-9	Atrazine	ND		112	151	134* [a]	175	156* [a]	15	40-133/27
100-52-7	Benzaldehyde	ND		112	105	93	112	100	6	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		112	119	106	124	110	4	47-123/28
85-68-7	Butyl benzyl phthalate	ND		112	103	92	104	93	1	47-137/27
92-52-4	1,1'-Biphenyl	ND		112	90.3	80	90.3	80	0	36-113/32
91-58-7	2-Chloronaphthalene	ND		112	99.9	89	101	90	1	35-110/32
106-47-8	4-Chloroaniline	ND		112	82.0	73	92.7	83	12	22-98/36
86-74-8	Carbazole	ND		112	113	101	115	102	2	54-127/26
105-60-2	Caprolactam	ND		112	ND	0* [a]	ND	0* [a]	nc	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		112	110	98	112	100	2	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		112	95.0	85	99.4	88	5	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		112	105	93	107	95	2	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		112	117	104	116	103	1	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		112	142	126	143	127	1	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		112	51.5	46	58.9	52	13	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		112	79.3	71	90.2	80	13	17-119/36
132-64-9	Dibenzofuran	1.9	J	112	145	127* [a]	145	127* [a]	0	44-114/30
84-74-2	Di-n-butyl phthalate	ND		112	102	91	104	93	2	49-134/26
117-84-0	Di-n-octyl phthalate	ND		112	103	92	106	94	3	46-140/25
84-66-2	Diethyl phthalate	ND		112	75.1	67	73.8	66	2	46-123/27
131-11-3	Dimethyl phthalate	ND		112	89.7	80	90.6	81	1	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		112	104	93	105	93	1	49-141/27
87-68-3	Hexachlorobutadiene	ND		112	129	115* [b]	131	117* [a]	2	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		225	310	138* [a]	290	129* [a]	7	4-124/39
67-72-1	Hexachloroethane	ND		112	106	94* [b]	110	98* [b]	4	16-86/39
78-59-1	Isophorone	ND		112	110	98	111	99	1	33-117/36
91-57-6	2-Methylnaphthalene	14.1		112	535	464* [a]	572	497* [a]	7	22-117/37
88-74-4	2-Nitroaniline	ND		112	94.3	84	93.4	83	1	37-135/29
99-09-2	3-Nitroaniline	ND		112	104	93	146	130* [a]	34* [c]	34-115/28
100-01-6	4-Nitroaniline	ND		112	177	158* [a]	173	154* [a]	2	36-128/30
98-95-3	Nitrobenzene	ND		112	113	101	122	109	8	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		112	111	99	114	101	3	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		112	158	141	159	142	1	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		112	99.1	88	95.9	85	3	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365-MS	R84612.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
OP47365-MSD	R84613.D	1	12/23/10	LP	12/20/10	OP47365	ER3195
JA64353-2	R84611.D	1	12/22/10	LP	12/20/10	OP47365	ER3195

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Surrogate Recoveries	MS	MSD	JA64353-2	Limits
4165-60-0	Nitrobenzene-d5	99%	98%	86%	25-112%
321-60-8	2-Fluorobiphenyl	89%	87%	80%	31-106%
1718-51-0	Terphenyl-d14	70%	64%	66%	14-122%

(a) Outside control limits due to matrix interference.
(b) Outside of in house control limits, but within reasonable method recovery limits.
(c) Outside of in house control limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47365A-MS	R84612.D	1	12/23/10	LP	12/20/10	OP47365A	ER3195
OP47365A-MSD	R84613.D	1	12/23/10	LP	12/20/10	OP47365A	ER3195
JA64353-2	4M22989.D	1	12/23/10	NAP	12/20/10	OP47365A	E4M999

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA64438-1, JA64438-2, JA64438-3, JA64438-4, JA64438-5, JA64438-6

CAS No.	Compound	JA64353-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	1.23		112	125	110	135	119* [a]	8	33-117/32
208-96-8	Acenaphthylene	ND		112	66.7	59	68.6	61	3	32-107/31
120-12-7	Anthracene	ND		112	76.1	68	80.4	72	5	44-126/28
56-55-3	Benzo(a)anthracene	0.215		112	113	100	116	103	3	45-127/30
50-32-8	Benzo(a)pyrene	ND		112	115	102	116	103	1	40-131/31
205-99-2	Benzo(b)fluoranthene	ND		112	114	101	118	105	3	36-134/32
191-24-2	Benzo(g,h,i)perylene	ND		112	124	110	125	111	1	37-134/32
207-08-9	Benzo(k)fluoranthene	ND		112	101	90	94.6	84	7	37-135/34
218-01-9	Chrysene	0.117		112	104	92	107	95	3	46-125/28
53-70-3	Dibenzo(a,h)anthracene	ND		112	133	118	136	121	2	36-139/31
206-44-0	Fluoranthene	0.297		112	119	106	121	107	2	41-130/29
86-73-7	Fluorene	3.41		112	158	138* [b]	157	137* [b]	1	38-124/31
118-74-1	Hexachlorobenzene	ND		112	138	123* [b]	141	125* [b]	2	42-120/28
193-39-5	Indeno(1,2,3-cd)pyrene	ND		112	130	116	132	117	2	37-137/33
91-20-3	Naphthalene	ND		112	167	149* [b]	168	150* [b]	1	16-114/35
85-01-8	Phenanthrene	5.41	E	112	196	170* [b]	195	169* [b]	1	44-125/29
129-00-0	Pyrene	0.809		112	115	102	118	104	3	39-134/29

CAS No.	Surrogate Recoveries	MS	MSD	JA64353-2	Limits
4165-60-0	Nitrobenzene-d5	99%	98%	82%	18-119%
321-60-8	2-Fluorobiphenyl	89%	87%	69%	18-104%
1718-51-0	Terphenyl-d14	70%	64%	75%	13-109%

(a) Outside of in house control limits, but within reasonable method recovery limits.
(b) Outside control limits due to matrix interference.

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M911-DFTPP	**Injection Date:**	09/07/10
Lab File ID:	4M21042.D	**Injection Time:**	08:10
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20513	39.2		Pass
68	Less than 2.0% of mass 69	332	0.64	(1.76) [a]	Pass
69	Mass 69 relative abundance	18850	36.1		Pass
70	Less than 2.0% of mass 69	56	0.11	(0.30) [a]	Pass
127	40.0 - 60.0% of mass 198	24459	46.8		Pass
197	Less than 1.0% of mass 198	244	0.47		Pass
198	Base peak, 100% relative abundance	52275	100.0		Pass
199	5.0 - 9.0% of mass 198	3533	6.76		Pass
275	10.0 - 30.0% of mass 198	13045	25.0		Pass
365	1.0 - 100.0% of mass 198	1531	2.93		Pass
441	Present, but less than mass 443	5883	11.3	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	41283	79.0		Pass
443	17.0 - 23.0% of mass 442	7922	15.2	(19.2) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M911-IC911	4M21044.D	09/07/10	09:58	01:48	Initial cal .01
E4M911-IC911	4M21045.D	09/07/10	10:27	02:17	Initial cal .02
E4M911-IC911	4M21046.D	09/07/10	10:57	02:47	Initial cal .05
E4M911-IC911	4M21047.D	09/07/10	11:27	03:17	Initial cal .1
E4M911-IC911	4M21048.D	09/07/10	11:56	03:46	Initial cal .2
E4M911-IC911	4M21049.D	09/07/10	12:26	04:16	Initial cal 2.5
E4M911-IC911	4M21050.D	09/07/10	12:56	04:46	Initial cal 5
E4M911-IC911	4M21051.D	09/07/10	13:26	05:16	Initial cal .5
E4M911-ICC911	4M21043.D	09/07/10	14:55	06:45	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M999-DFTPP	**Injection Date:**	12/23/10
Lab File ID:	4M22969.D	**Injection Time:**	11:16
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	12126	43.9		Pass
68	Less than 2.0% of mass 69	139	0.50	(1.15) [a]	Pass
69	Mass 69 relative abundance	12107	43.8		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	14389	52.1		Pass
197	Less than 1.0% of mass 198	220	0.80		Pass
198	Base peak, 100% relative abundance	27641	100.0		Pass
199	5.0 - 9.0% of mass 198	1876	6.79		Pass
275	10.0 - 30.0% of mass 198	7421	26.8		Pass
365	1.0 - 100.0% of mass 198	1149	4.16		Pass
441	Present, but less than mass 443	3349	12.1	(77.8) [b]	Pass
442	40.0 - 100.0% of mass 198	22593	81.7		Pass
443	17.0 - 23.0% of mass 442	4305	15.6	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M999-CC911	4M22970.D	12/23/10	11:35	00:19	Continuing cal 1
OP47081A-MB1	4M22971.D	12/23/10	12:23	01:07	Method Blank
OP47081A-BS12	4M22972.D	12/23/10	12:53	01:37	Blank Spike
ZZZZZZ	4M22973.D	12/23/10	13:23	02:07	(unrelated sample)
ZZZZZZ	4M22974.D	12/23/10	13:54	02:38	(unrelated sample)
ZZZZZZ	4M22975.D	12/23/10	14:24	03:08	(unrelated sample)
ZZZZZZ	4M22976.D	12/23/10	14:54	03:38	(unrelated sample)
OP47365A-MB1	4M22977.D	12/23/10	15:25	04:09	Method Blank
OP47365A-BS12	4M22978.D	12/23/10	15:55	04:39	Blank Spike
JA64438-1	4M22982.D	12/23/10	17:56	06:40	AZ
JA64438-2	4M22983.D	12/23/10	18:27	07:11	AV
JA64438-3	4M22984.D	12/23/10	18:57	07:41	VV
JA64438-4	4M22985.D	12/23/10	19:28	08:12	FB-20101215
JA64438-5	4M22986.D	12/23/10	19:59	08:43	CE
JA64438-6	4M22987.D	12/23/10	20:29	09:13	FB-20101216
ZZZZZZ	4M22988.D	12/23/10	20:59	09:43	(unrelated sample)
JA64353-2	4M22989.D	12/23/10	21:30	10:14	(used for QC only; not part of job JA64438)
ZZZZZZ	4M22990.D	12/23/10	22:00	10:44	(unrelated sample)
ZZZZZZ	4M22991.D	12/23/10	22:31	11:15	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M999-DFTPP	**Injection Date:**	12/23/10
Lab File ID:	4M22969.D	**Injection Time:**	11:16
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M22992.D	12/23/10	23:01	11:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3151-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83633.D	**Injection Time:**	14:32
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28061	32.8		Pass
68	Less than 2.0% of mass 69	193	0.23	(0.58) [a]	Pass
69	Mass 69 relative abundance	33117	38.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	49981	58.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85475	100.0		Pass
199	5.0 - 9.0% of mass 198	5967	6.98		Pass
275	10.0 - 30.0% of mass 198	20633	24.1		Pass
365	1.0 - 100.0% of mass 198	2654	3.11		Pass
441	Present, but less than mass 443	13020	15.2	(77.0) [b]	Pass
442	40.0 - 100.0% of mass 198	84667	99.1		Pass
443	17.0 - 23.0% of mass 442	16907	19.8	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3151-IC3151	R83635.D	11/15/10	14:42	00:10	Initial cal 1
ER3151-IC3151	R83634.D	11/15/10	15:23	00:51	Initial cal 100
ER3151-IC3151	R83636.D	11/15/10	16:01	01:29	Initial cal 80
ER3151-IC3151	R83637.D	11/15/10	16:37	02:05	Initial cal 2
ER3151-IC3151	R83639.D	11/15/10	17:09	02:37	Initial cal 5
ER3151-IC3151	R83640.D	11/15/10	17:48	03:16	Initial cal 10
ER3151-ICC3151	R83638.D	11/15/10	18:22	03:50	Initial cal 50
ER3151-IC3151	R83641.D	11/15/10	18:58	04:26	Initial cal 25

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3152-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83642.D	**Injection Time:**	22:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22024	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25432	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37435	55.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	67512	100.0		Pass
199	5.0 - 9.0% of mass 198	4664	6.91		Pass
275	10.0 - 30.0% of mass 198	16603	24.6		Pass
365	1.0 - 100.0% of mass 198	2164	3.21		Pass
441	Present, but less than mass 443	9844	14.6	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	67437	99.9		Pass
443	17.0 - 23.0% of mass 442	13161	19.5	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3152-IC3152	R83643.D	11/15/10	23:00	00:23	Initial cal 100
ER3152-IC3152	R83644.D	11/15/10	23:36	00:59	Initial cal 80
ER3152-ICC3152	R83645.D	11/16/10	00:12	01:35	Initial cal 50
ER3152-IC3152	R83646.D	11/16/10	00:48	02:11	Initial cal 25
ER3152-IC3152	R83647.D	11/16/10	01:24	02:47	Initial cal 10
ER3152-IC3152	R83648.D	11/16/10	01:53	03:16	Initial cal 5
ER3152-IC3152	R83649.D	11/16/10	02:29	03:52	Initial cal 2
ER3152-IC3152	R83650.D	11/16/10	03:06	04:29	Initial cal 1
ER3152-ICV3151	R83651.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3152	R83651A.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3151	R83652.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3152	R83652A.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3151	R83653.D	11/16/10	04:54	06:17	Initial cal verification 50
ER3152-ICV3151	R83655.D	11/16/10	06:07	07:30	Initial cal verification 50
ER3152-ICV3152	R83655A.D	11/16/10	06:07	07:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3195-DFTPP	**Injection Date:**	12/22/10
Lab File ID:	R84603.D	**Injection Time:**	19:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18700	36.8		Pass
68	Less than 2.0% of mass 69	309	0.61	(1.39) [a]	Pass
69	Mass 69 relative abundance	22238	43.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	30317	59.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	50877	100.0		Pass
199	5.0 - 9.0% of mass 198	3430	6.74		Pass
275	10.0 - 30.0% of mass 198	12129	23.8		Pass
365	1.0 - 100.0% of mass 198	1545	3.04		Pass
441	Present, but less than mass 443	6276	12.3	(74.1) [b]	Pass
442	40.0 - 100.0% of mass 198	42277	83.1		Pass
443	17.0 - 23.0% of mass 442	8465	16.6	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3195-CC3151	R84604.D	12/22/10	19:51	00:14	Continuing cal 25
ER3195-CC3152	R84605.D	12/22/10	20:28	00:51	Continuing cal 25
OP47365-MB1	R84606.D	12/22/10	21:04	01:27	Method Blank
OP47365-BS1	R84607.D	12/22/10	21:34	01:57	Blank Spike
ZZZZZZ	R84608.D	12/22/10	22:11	02:34	(unrelated sample)
ZZZZZZ	R84609.D	12/22/10	22:47	03:10	(unrelated sample)
ZZZZZZ	R84610.D	12/22/10	23:23	03:46	(unrelated sample)
JA64353-2	R84611.D	12/22/10	23:59	04:22	(used for QC only; not part of job JA64438)
OP47365-MS	R84612.D	12/23/10	00:36	04:59	Matrix Spike
OP47365A-MS	R84612.D	12/23/10	00:36	04:59	Matrix Spike
OP47365-MSD	R84613.D	12/23/10	01:12	05:35	Matrix Spike Duplicate
OP47365A-MSD	R84613.D	12/23/10	01:12	05:35	Matrix Spike Duplicate
ZZZZZZ	R84614.D	12/23/10	01:48	06:11	(unrelated sample)
ZZZZZZ	R84615.D	12/23/10	02:24	06:47	(unrelated sample)
ZZZZZZ	R84616.D	12/23/10	03:00	07:23	(unrelated sample)
ZZZZZZ	R84617.D	12/23/10	03:36	07:59	(unrelated sample)
ZZZZZZ	R84618.D	12/23/10	04:13	08:36	(unrelated sample)
ZZZZZZ	R84619.D	12/23/10	04:42	09:05	(unrelated sample)
ZZZZZZ	R84620.D	12/23/10	05:18	09:41	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3195-DFTPP	**Injection Date:**	12/22/10
Lab File ID:	R84603.D	**Injection Time:**	19:37
Instrument ID:	GCMSR		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	R84621.D	12/23/10	05:54	10:17	(unrelated sample)
ZZZZZZ	R84622.D	12/23/10	06:30	10:53	(unrelated sample)
ZZZZZZ	R84623.D	12/23/10	07:06	11:29	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3201-DFTPP	**Injection Date:**	12/30/10
Lab File ID:	R84726.D	**Injection Time:**	07:50
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22376	37.1		Pass
68	Less than 2.0% of mass 69	350	0.58	(1.35) [a]	Pass
69	Mass 69 relative abundance	25917	42.9		Pass
70	Less than 2.0% of mass 69	10	0.02	(0.04) [a]	Pass
127	40.0 - 60.0% of mass 198	34531	57.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	60357	100.0		Pass
199	5.0 - 9.0% of mass 198	4262	7.06		Pass
275	10.0 - 30.0% of mass 198	13915	23.1		Pass
365	1.0 - 100.0% of mass 198	1683	2.79		Pass
441	Present, but less than mass 443	7372	12.2	(75.3) [b]	Pass
442	40.0 - 100.0% of mass 198	49805	82.5		Pass
443	17.0 - 23.0% of mass 442	9794	16.2	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3201-CC3151	R84727.D	12/30/10	08:03	00:13	Continuing cal 25
ER3201-CC3152	R84728.D	12/30/10	08:43	00:53	Continuing cal 25
JA64438-4	R84729.D	12/30/10	09:19	01:29	FB-20101215
JA64438-6	R84730.D	12/30/10	09:56	02:06	FB-20101216
JA64438-1	R84731.D	12/30/10	10:25	02:35	AZ
JA64438-2	R84732.D	12/30/10	11:07	03:17	AV
JA64438-3	R84733.D	12/30/10	11:40	03:50	VV
JA64438-5	R84734.D	12/30/10	12:17	04:27	CE
ZZZZZZ	R84735.D	12/30/10	12:53	05:03	(unrelated sample)
ZZZZZZ	R84736.D	12/30/10	13:29	05:39	(unrelated sample)
ZZZZZZ	R84738.D	12/30/10	14:34	06:44	(unrelated sample)
OP47435-LS3	R84739.D	12/30/10	15:10	07:20	Leachate Spike
OP47437-LS5	R84740.D	12/30/10	15:46	07:56	Leachate Spike
ZZZZZZ	R84741.D	12/30/10	16:25	08:35	(unrelated sample)
ZZZZZZ	R84742.D	12/30/10	17:01	09:11	(unrelated sample)
ZZZZZZ	R84743.D	12/30/10	17:37	09:47	(unrelated sample)
ZZZZZZ	R84744.D	12/30/10	18:06	10:16	(unrelated sample)
ZZZZZZ	R84745.D	12/30/10	18:42	10:52	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M999-CC911	**Injection Date:**	12/23/10
Lab File ID:	4M22970.D	**Injection Time:**	11:35
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	25511	8.19	21437	11.55	37772	16.45	44137	21.12
Upper Limit [a]	51022	8.69	42874	12.05	75544	16.95	88274	21.62
Lower Limit [b]	12756	7.69	10719	11.05	18886	15.95	22069	20.62

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP47081A-MB1	25638	8.19	20217	11.55	33106	16.45	31213	21.14
OP47081A-BS12	30601	8.19	22596	11.54	36717	16.45	36853	21.14
ZZZZZZ	27323	8.19	21732	11.55	36113	16.45	37464	21.12
ZZZZZZ	22858	8.19	17770	11.55	28292	16.45	27650	21.12
ZZZZZZ	23028	8.19	18348	11.55	30050	16.45	29413	21.12
ZZZZZZ	22484	8.19	17946	11.55	30294	16.45	31724	21.12
OP47365A-MB1	27494	8.19	23543	11.55	38749	16.45	42677	21.12
OP47365A-BS12	28382	8.19	20528	11.54	34448	16.45	37929	21.12
JA64438-1	25759	8.19	20859	11.55	38210	16.45	39644	21.12
JA64438-2	26164	8.19	22111	11.54	39645	16.46	40854	21.12
JA64438-3	26324	8.19	22061	11.54	40330	16.45	42604	21.12
JA64438-4	25790	8.19	22192	11.55	38308	16.45	38618	21.14
JA64438-5	26482	8.19	21816	11.55	39090	16.45	41542	21.12
JA64438-6	26626	8.19	21473	11.55	38491	16.45	38444	21.14
ZZZZZZ	28303	8.19	23144	11.54	40891	16.45	40704	21.12
JA64353-2	40772	8.19	35294	11.55	46520	16.45	45101	21.12
ZZZZZZ	40423	8.19	34610	11.57	43790	16.45	42443	21.12
ZZZZZZ	25261	8.19	20851	11.55	36496	16.45	36818	21.12
ZZZZZZ	25994	8.19	21002	11.55	36049	16.45	36296	21.12

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3195-CC3151	**Injection Date:**	12/22/10
Lab File ID:	R84604.D	**Injection Time:**	19:51
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	504244	7.52	1804295	10.29	1088502	14.41	1762500	17.88	1832065	22.18	1726940	23.70
Upper Limit [a]	1008488	8.02	3608590	10.79	2177004	14.91	3525000	18.38	3664130	22.68	3453880	24.20
Lower Limit [b]	252122	7.02	902148	9.79	544251	13.91	881250	17.38	916033	21.68	863470	23.20
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP47365-MB1	431531	7.51	1515448	10.28	889251	14.41	1416817	17.87	1518352	22.17	1395085	23.70
OP47365-BS1	497043	7.52	1767475	10.29	1061922	14.42	1738242	17.88	1841130	22.18	1751171	23.71
ZZZZZZ	438402	7.51	1548529	10.28	899430	14.41	1441126	17.87	1495396	22.17	1422361	23.70
ZZZZZZ	447979	7.52	1582892	10.29	980760	14.44	1524151	17.90	1579595	22.17	1502088	23.70
ZZZZZZ	440782	7.52	1550575	10.28	912281	14.41	1459483	17.87	1530314	22.17	1470279	23.70
JA64353-2	449378	7.52	1534941	10.29	962312	14.43	1519082	17.90	1575805	22.17	1508565	23.70
OP47365-MS	485889	7.52	1616315	10.31	891370	14.53	1554535	17.99	1664882	22.18	1519138	23.71
OP47365A-MS	485889	7.52	1616315	10.31	891370	14.53	1554535	17.99	1664882	22.18	1519138	23.71
OP47365-MSD	454855	7.52	1539613	10.31	898744	14.53	1509789	17.98	1589635	22.18	1457991	23.71
OP47365A-MSD	454855	7.52	1539613	10.31	898744	14.53	1509789	17.98	1589635	22.18	1457991	23.71
ZZZZZZ	436706	7.51	1543330	10.28	900303	14.41	1462105	17.87	1537373	22.17	1436367	23.70
ZZZZZZ	410497	7.51	1421297	10.28	850466	14.41	1376790	17.87	1439292	22.17	1362305	23.70
ZZZZZZ	409008	7.51	1446751	10.28	898292	14.41	1506842	17.89	1604236	22.18	1508437	23.71
ZZZZZZ	400293	7.51	1431030	10.28	832658	14.40	1373896	17.87	1448496	22.17	1391306	23.70
ZZZZZZ	413241	7.52	1504001	10.29	885367	14.41	1418828	17.87	1457234	22.17	1359859	23.70
ZZZZZZ	405010	7.52	1458250	10.28	857675	14.41	1370341	17.87	1420949	22.17	1321984	23.70
ZZZZZZ	402593	7.52	1431509	10.28	845245	14.41	1394392	17.87	1424457	22.17	1343410	23.70
ZZZZZZ	404687	7.51	1455213	10.30	876828	14.40	1384637	17.87	1417267	22.17	1312853	23.69
ZZZZZZ	404320	7.51	1441458	10.28	846377	14.40	1367018	17.87	1394768	22.17	1284010	23.69
ZZZZZZ	472082	7.51	1642151	10.29	1087073	14.44	1721043	17.95	1748857	22.18	1642864	23.72

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3201-CC3151	**Injection Date:**	12/30/10
Lab File ID:	R84727.D	**Injection Time:**	08:03
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	518533	7.51	1832725	10.28	1052617	14.40	1684333	17.87	1867682	22.17	1810300	23.70
Upper Limit [a]	1037066	8.01	3665450	10.78	2105234	14.90	3368666	18.37	3735364	22.67	3620600	24.20
Lower Limit [b]	259267	7.01	916363	9.78	526309	13.90	842167	17.37	933841	21.67	905150	23.20
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
JA64438-4	545593	7.51	1849408	10.28	1071636	14.40	1680015	17.86	1706545	22.17	1649740	23.70
JA64438-6	543682	7.51	1820450	10.28	1024472	14.40	1633288	17.86	1703995	22.17	1706758	23.70
JA64438-1	507577	7.51	1734012	10.28	985270	14.40	1523969	17.86	1551186	22.16	1502238	23.70
JA64438-2	491414	7.51	1675846	10.28	939816	14.40	1518356	17.86	1623258	22.17	1614496	23.70
JA64438-3	454197	7.51	1576957	10.27	883282	14.40	1397085	17.86	1413708	22.16	1420311	23.70
JA64438-5	472022	7.51	1635721	10.27	928386	14.40	1442971	17.86	1469864	22.17	1492756	23.70
ZZZZZZ	444924	7.51	1539438	10.28	872117	14.40	1387656	17.86	1358093	22.16	1274953	23.70
ZZZZZZ	447010	7.51	1558159	10.27	889704	14.40	1387055	17.86	1384967	22.16	1304882	23.69
ZZZZZZ	486331	7.50	1670316	10.27	944488	14.40	1497236	17.86	1503149	22.16	1434196	23.70
OP47435-LS3	502885	7.53	1288201	10.42	902077	14.41	1394806	17.86	1450415	22.16	1374396	23.70
OP47437-LS5	454387	7.51	1623586	10.28	940420	14.41	1491242	17.87	1655698	22.18	1496788	23.71
ZZZZZZ	490751	7.54	1809394	10.31	973003	14.43	1524149	17.87	1548379	22.17	1496141	23.70
ZZZZZZ	483926	7.52	1699882	10.28	942350	14.40	1473497	17.86	1461960	22.16	1349279	23.70
ZZZZZZ	435658	7.51	1504807	10.27	850301	14.40	1339137	17.86	1377737	22.17	1356201	23.69
ZZZZZZ	397816	7.51	1390686	10.27	782712	14.40	1238274	17.86	1229203	22.17	1175049	23.69
ZZZZZZ	393986	7.51	1373460	10.27	755104	14.40	1195245	17.86	1182507	22.17	1128886	23.69

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA64438-1	R84731.D	88.0	78.0	78.0
JA64438-2	R84732.D	92.0	81.0	86.0
JA64438-3	R84733.D	86.0	77.0	82.0
JA64438-4	R84729.D	93.0	81.0	87.0
JA64438-5	R84734.D	91.0	81.0	94.0
JA64438-6	R84730.D	93.0	79.0	76.0
OP47365-BS1	R84607.D	89.0	83.0	91.0
OP47365-MB1	R84606.D	87.0	82.0	76.0
OP47365-MS	R84612.D	99.0	89.0	70.0
OP47365-MSD	R84613.D	98.0	87.0	64.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA64438-1	4M22982.D	111.0	99.0	98.0
JA64438-2	4M22983.D	106.0	98.0	105.0
JA64438-3	4M22984.D	104.0	94.0	96.0
JA64438-4	4M22985.D	108.0	98.0	105.0
JA64438-5	4M22986.D	108.0	99.0	114.0* [a]
JA64438-6	4M22987.D	109.0	96.0	93.0
OP47365A-BS12	4M22978.D	98.0	90.0	108.0
OP47365A-MB1	4M22977.D	110.0	99.0	90.0
OP47365A-MS	R84612.D	99.0	89.0	70.0
OP47365A-MSD	R84613.D	98.0	87.0	64.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	18-119%
S2 = 2-Fluorobiphenyl	18-104%
S3 = Terphenyl-d14	13-109%

(a) Outside of in house control limits, but within reasonable method recovery limits.

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M911-ICC911
Lab FileID: 4M21043.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\m4m911sim.m (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Tue Sep 07 15:46:41 2010
Response via : Initial Calibration

Calibration Files
0.05=4m21046.D .2 =4m21048.D 2.5 =4m21049.D .02 =4m21045.D
.1 =4m21047.D 1 =4m21043.D .01 =4m21044.D .5 =4m21051.D
5 =4m21050.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.494	0.496	0.621	0.529	0.522	0.463				0.521	10.46
3) Phenol-d5	0.583	0.607	0.735	0.605	0.607	0.493				0.605	12.80
4) Phenol	0.674	0.596	0.853	0.761	0.747	0.725				0.726	11.91
5) bis(2-Chloroethyl)ether	0.845	0.644	0.704	0.813	0.826	0.717	0.848	0.689	0.619	0.745	11.95
6) Nitrobenzene-d5	0.654	0.686	0.818	0.730	0.693	0.650				0.705	8.87
7) Naphthalene	2.051	2.119	2.637	2.187	2.211	2.093				2.216	9.67
8) Hexachlorobutadiene	0.410	0.417	0.509	0.440	0.420	0.414				0.435	8.70
9) 1-Methylnaphthalene	1.261	1.272	1.606	1.389	1.285	1.265				1.346	10.11
10) 2-Fluorobiphenyl	1.507	1.384	1.904	1.652	1.548	1.299				1.549	13.80
11) I Fluorene-d10	ISTD										
12) Acenaphthylene	1.613	1.934	2.081	1.791	1.764	1.947				1.855	8.91
13) Acenaphthene	1.059	1.207	1.372	1.182	1.147	1.210				1.196	8.59
14) Fluorene	1.286	1.332	1.658	1.309	1.329	1.317				1.372	10.28
15) 2,6-Dinitrotoluene	0.334	0.546	0.408	0.457	0.428	0.591				0.461	20.45
----- Linear regression ----- Coefficient = 0.9980											
Response Ratio = -0.01982 + 0.59970 *A											
16) 2,4,6-Tribromophenol	0.153	0.189	0.190	0.187	0.180	0.181				0.180	7.70
17) Hexachlorobenzene	0.696	0.450	0.481	0.709	0.599	0.489	0.496	0.464		0.548	19.25
----- Linear regression ----- Coefficient = 0.9997											
Response Ratio = 0.00327 + 0.46474 *A											
18) Pentachlorophenol	1.138	0.382	0.314	0.590	0.301	0.357	0.338			0.489	61.91
----- Linear regression ----- Coefficient = 0.9973											
Response Ratio = 0.01093 + 0.33002 *A											

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M911-ICC911
Lab FileID: 4M21043.D

```
19)  Phenanthrene
            1.657 1.874       2.194 1.856       1.828 1.890        1.883    9.24
20)  Anthracene
            1.429 1.835       1.849 1.697       1.616 1.859        1.714    9.94
21)  2,4-Dinitrotoluene
            0.390 0.763       0.489 0.618       0.561 0.826        0.608   27.06
            ----- Linear regression -----  Coefficient =  0.9979
              Response Ratio = -0.03151 + 0.84075 *A


22) I   Fluoranthene-d10      ----------------ISTD---------------------
23)  Fluoranthene
            1.201 1.249       1.553 1.277       1.252 1.247        1.297    9.88
24)  Pyrene
            1.054 1.265       1.368 1.254       1.203 1.271        1.236    8.43
25)  Terphenyl-d14
            0.437 0.456       0.565 0.516       0.496 0.409        0.480   11.87
26)  Benzo[a]anthracene
            0.987 1.473       1.302 1.332       1.278 1.563        1.323   14.95
27)  Chrysene
            1.485 1.739       1.965 1.763       1.702 1.728        1.730    8.84
28)  bis(2-Ethylhexyl)phthalate
            0.427 0.751       0.632 0.591       0.567 0.919        0.648   26.12
          ----- Quadratic regression -----                Coefficient =  0.9998
              Response Ratio = -0.00566 + 0.57819 *A + 0.27711 *A^2


29) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
30)  Benzo[b]fluoranthene
            0.215 0.274       0.317 0.363       0.225 0.281        0.279   20.01
            ----- Linear regression -----  Coefficient =  0.9945
              Response Ratio = 0.00146 + 0.28024 *A

31)  Benzo[k]fluoranthene
            0.293 0.322       0.426 0.306       0.313 0.311        0.329   14.83
32)  Benzo[a]pyrene
            1.581 1.387       2.145 1.483       1.360 1.331        1.548   19.82
            ----- Linear regression -----  Coefficient =  0.9994
              Response Ratio = 0.02145 + 1.32265 *A

33)  Indeno[1,2,3-cd]pyrene
            1.154 1.343       1.635 1.344       1.139 1.373        1.331   13.55
34)  Dibenz[a,h]anthracene
            0.897 1.110       1.258 1.110       0.925 1.157        1.076   12.94
35)  Benzo[g,h,i]perylene
            1.129 1.221       1.471 1.323       1.096 1.197        1.240   11.14

36) I   1-Methylnaphthalene-d ----------------ISTD---------------------
37)  2-Methylnaphthalene
            2.876 3.766       3.616 3.597       3.315 3.868        3.506   10.30
--------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          m4m911sim.m        Tue Sep 07 15:54:56 2010   RPT1
```

7.1.1

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M917-ICV911
Lab FileID: 4M21140.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m917\4m21140.D Vial: 3
Acq On : 9 Sep 2010 11:24 pm Operator: larisap
Sample : icv911-1.0 Inst : MS4M
Misc : op45262,e4m917 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Tue Sep 07 15:46:41 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	-0.02	8.52
7	t	Naphthalene	2.216	2.091	5.6	102	-0.01	6.84
8	t	Hexachlorobutadiene	0.435	0.421	3.2	102	-0.02	7.35
11	I	Fluorene-d10	1.000	1.000	0.0	80	-0.02	11.88
12	t	Acenaphthylene	1.855	1.865	-0.5	84	-0.02	10.35
13	t	Acenaphthene	1.196	1.382	-15.6	94	-0.02	10.78
14	t	Fluorene	1.372	1.489	-8.5	91	-0.03	11.92
		----------	True	Calc.	% Drift	----------		
17	t	Hexachlorobenzene	1.000	1.132	-13.2	89	-0.02	13.38
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Phenanthrene	1.883	2.026	-7.6	88	-0.03	14.06
20	t	Anthracene	1.714	1.785	-4.1	84	-0.03	14.17
		----------	True	Calc.	% Drift	----------		
		----------	AvgRF	CCRF	% Dev	----------		
22	I	Fluoranthene-d10	1.000	1.000	0.0	70	-0.03	16.76
23	t	Fluoranthene	1.297	1.446	-11.5	80	-0.03	16.79
24	t	Pyrene	1.236	1.322	-7.0	74	-0.03	17.26
26	t	Benzo[a]anthracene	1.323	1.417	-7.1	75	-0.03	19.55
27	t	Chrysene	1.730	1.842	-6.5	73	-0.03	19.60
		----------	True	Calc.	% Drift	----------		
28		bis(2-Ethylhexyl)phthalat	1.000	0.891	10.9	65	-0.02	20.03
		----------	AvgRF	CCRF	% Dev	----------		
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	72	-0.02	21.29
		----------	True	Calc.	% Drift	----------		
30	t	Benzo[b]fluoranthene	1.000	0.889	11.1	51	-0.02	20.97
		----------	AvgRF	CCRF	% Dev	----------		
31	t	Benzo[k]fluoranthene	0.329	0.365	-10.9	86	-0.03	20.99

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M917-ICV911
Lab FileID: 4M21140.D

		True	Calc.	% Drift			
32 t	Benzo[a]pyrene	1.000	1.006	-0.6	69	-0.03	21.31

		AvgRF	CCRF	% Dev			
33 t	Indeno[1,2,3-cd]pyrene	1.331	1.178	11.5	64	-0.04	22.42
34 t	Dibenz[a,h]anthracene	1.076	0.939	12.7	61	-0.03	22.47
35 t	Benzo[g,h,i]perylene	1.240	1.101	11.2	60	-0.03	22.64

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Fri Sep 10 12:43:46 2010 RPT1

7.7.2

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M917-ICV911
Lab FileID: 4M21141.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m917\4m21141.D Vial: 4
Acq On : 9 Sep 2010 11:53 pm Operator: larisap
Sample : icv911-1.0 Inst : MS4M
Misc : op45262,e4m917 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Tue Sep 07 15:46:41 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	100	-0.02	8.52
11	I	Fluorene-d10	1.000	1.000	0.0	96	-0.02	11.88
18	t	Pentachlorophenol	5.000	5.747	-14.9	124	-0.02	13.86
22	I	Fluoranthene-d10	1.000	1.000	0.0	97	-0.03	16.76
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	100	-0.02	21.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Fri Sep 10 12:47:47 2010 RPT1

7.7.3

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M918-ICV911
Lab FileID: 4M21164.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m918\4m21164.D Vial: 3
Acq On : 10 Sep 2010 12:43 pm Operator: ninap
Sample : icv911-.5 Inst : MS4M
Misc : op45262,e4m918 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Fri Sep 10 13:17:34 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	51	-0.04	8.50
11	I	Fluorene-d10	1.000	1.000	0.0	58	-0.03	11.86
		----------	True	Calc.	% Drift		----------	
15	t	2,6-Dinitrotoluene	0.500	0.598	-19.6	75	-0.03	10.55
		----------	AvgRF	CCRF	% Dev		----------	
		----------	True	Calc.	% Drift		----------	
21	t	2,4-Dinitrotoluene	0.500	0.572	-14.4	73	-0.03	11.40
		----------	AvgRF	CCRF	% Dev		----------	
		----------	AvgRF	CCRF	% Dev		----------	
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	49	-0.02	21.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21051.D M4M911SIM.M Fri Sep 10 13:22:43 2010 RPT1

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M918-ICV911
Lab FileID: 4M21165.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m918\4m21165.D Vial: 4
Acq On : 10 Sep 2010 1:13 pm Operator: ninap
Sample : icv911-1 Inst : MS4M
Misc : op45262,e4m918 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Fri Sep 10 13:24:37 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	-0.02	8.52
5	t	bis(2-Chloroethyl)ether	0.745	0.699	6.2	104	0.00	4.05
11	I	Fluorene-d10	1.000	1.000	0.0	106	-0.02	11.88
22	I	Fluoranthene-d10	1.000	1.000	0.0	108	-0.03	16.76
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	127	-0.02	21.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Fri Sep 10 13:42:18 2010 RPT1

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M918-ICV911
Lab FileID: 4M21166.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m918\4m21166.D Vial: 5
Acq On : 10 Sep 2010 1:44 pm Operator: ninap
Sample : icv911-1 Inst : MS4M
Misc : op45262,e4m918 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Fri Sep 10 13:24:37 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	91	-0.02	8.52
4	t	Phenol	0.726	0.595	18.0	71	0.02	4.01
11	I	Fluorene-d10	1.000	1.000	0.0	89	-0.02	11.88
		----------	AvgRF	CCRF	% Dev	----------		
22	I	Fluoranthene-d10	1.000	1.000	0.0	86	-0.03	16.76
		----------	AvgRF	CCRF	% Dev	----------		
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	99	-0.02	21.29
		----------	True	Calc.	% Drift	----------		
36	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	91	-0.02	8.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m21043.D M4M911SIM.M Sun Sep 12 12:25:55 2010 RPT1

7.7.6

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M999-CC911
Lab FileID: 4M22970.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m999\4m22970.D Vial: 2
Acq On : 23 Dec 2010 11:35 am Operator: ninap
Sample : cc911-1 Inst : MS4M
Misc : op47215a,e4m999,1000,,,1,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Thu Dec 23 12:01:21 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	86	0.00	8.19
2	S	2-Fluorophenol	0.521	0.528	-1.3	86	0.00	2.91
3	S	Phenol-d5	0.605	0.825	-36.4#	118	0.00	4.59
4	t	Phenol	0.726	0.979	-34.8#	111	0.00	4.61
5	t	bis(2-Chloroethyl)ether	0.745	0.709	4.8	85	0.00	3.81
6	S	Nitrobenzene-d5	0.705	0.829	-17.6	98	0.00	5.14
7	t	Naphthalene	2.216	2.233	-0.8	88	0.00	6.53
8	t	Hexachlorobutadiene	0.435	0.451	-3.7	88	0.00	6.98
9	t	1-Methylnaphthalene	1.346	1.379	-2.5	86	0.00	8.25
10	S	2-Fluorobiphenyl	1.549	1.701	-9.8	89	0.00	9.01
11	I	Fluorene-d10	1.000	1.000	0.0	85	0.00	11.55
12	t	Acenaphthylene	1.855	1.637	11.8	78	0.00	10.02
13	t	Acenaphthene	1.196	1.232	-3.0	89	0.00	10.44
14	t	Fluorene	1.372	1.617	-17.9	106	0.00	11.60
		----------	True	Calc.	% Drift		----------	
15	t	2,6-Dinitrotoluene	1.000	0.969	3.1	94	0.00	10.33
		----------	AvgRF	CCRF	% Dev		----------	
16	S	2,4,6-Tribromophenol	0.180	0.170	5.6	78	0.00	12.39
		----------	True	Calc.	% Drift		----------	
17	t	Hexachlorobenzene	1.000	1.025	-2.5	85	0.00	13.02
18	t	Pentachlorophenol	5.000	5.942	-18.8	114	0.00	13.87
		----------	AvgRF	CCRF	% Dev		----------	
19	t	Phenanthrene	1.883	1.869	0.7	86	0.00	13.75
20	t	Anthracene	1.714	1.799	-5.0	91	0.00	13.87
		----------	True	Calc.	% Drift		----------	
21	t	2,4-Dinitrotoluene	1.000	1.644	-64.4#	174	0.00	11.60
		----------	AvgRF	CCRF	% Dev		----------	
22	I	Fluoranthene-d10	1.000	1.000	0.0	90	0.00	16.45
23	t	Fluoranthene	1.297	1.265	2.5	89	0.00	16.49
24	t	Pyrene	1.236	1.263	-2.2	91	0.00	16.96
25	S	Terphenyl-d14	0.480	0.570	-18.7	100	0.00	17.60
26	t	Benzo[a]anthracene	1.323	1.365	-3.2	92	0.00	19.35
27	t	Chrysene	1.730	1.804	-4.3	92	0.00	19.41

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M999-CC911
Lab FileID: 4M22970.D

			True	Calc.	% Drift			
28		bis(2-Ethylhexyl)phthalat	1.000	1.544	-54.4#	158	0.00	19.78
			AvgRF	CCRF	% Dev			
29	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	107	0.00	21.12
			True	Calc.	% Drift			
30	t	Benzo[b]fluoranthene	1.000	1.180	-18.0	99	-0.03	20.80
			AvgRF	CCRF	% Dev			
31	t	Benzo[k]fluoranthene	0.329	0.325	1.2	114	0.00	20.83
			True	Calc.	% Drift			
32	t	Benzo[a]pyrene	1.000	1.025	-2.5	104	0.00	21.16
			AvgRF	CCRF	% Dev			
33	t	Indeno[1,2,3-cd]pyrene	1.331	1.589	-19.4	127	0.00	22.30
34	t	Dibenz[a,h]anthracene	1.076	1.280	-19.0	124	0.00	22.31
35	t	Benzo[g,h,i]perylene	1.240	1.394	-12.4	113	0.00	22.52
36	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	86	0.00	8.19
37	t	2-Methylnaphthalene		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m22970.D M4M911SIM.M Thu Dec 23 12:07:06 2010 RPT1

7.2.7

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.596	0.621	0.558	0.582	0.609	0.629	0.566	0.599	0.595	4.20
3) Pyridine	1.200	1.355	1.305	1.377	1.184	1.431	1.343	1.413	1.326	6.92
4) N-Nitrosodim	0.409	0.454	0.430	0.452	0.362	0.477	0.440	0.473	0.437	8.59
5) 2-Fluorophen	1.051	1.208	1.177	1.228	1.152	1.281	1.210	1.273	1.198	6.13
6) Indene	1.762	1.935	1.784	1.903	1.933	2.025	1.834	1.983	1.895	4.95
7) Cumene	2.610	2.815	2.485	2.648	2.889	2.905	2.544	2.797	2.712	5.93
8) Phenol-d5	1.320	1.507	1.316	1.420	1.403	1.558	1.375	1.511	1.426	6.35
9) Phenol	1.575	1.762	1.528	1.686	1.748	1.838	1.596	1.782	1.690	6.61
10) Aniline	1.895	2.053	1.667	2.001	2.063	2.093	1.697	2.107	1.947	9.06
11) bis(2-Chloro	1.139	1.288	1.119	1.208	1.251	1.333	1.159	1.286	1.223	6.42
12) 2-Chlorophen	1.295	1.442	1.337	1.417	1.394	1.498	1.385	1.472	1.405	4.79
13) Decane	1.085	1.181	0.963	1.076	1.163	1.203	1.005	1.142	1.102	7.78
14) 1,3-Dichloro	1.509	1.630	1.475	1.563	1.628	1.655	1.504	1.617	1.573	4.41
15) 1,4-Dichloro	1.507	1.663	1.481	1.586	1.704	1.697	1.515	1.623	1.597	5.54
16) Benzyl alcoh	0.723	0.859	0.814	0.888	0.712	0.927	0.847	0.926	0.837	9.93
17) 1,2-Dichloro	1.420	1.560	1.352	1.475	1.574	1.595	1.412	1.547	1.492	6.04
18) Acetophenone	1.600	1.780	1.613	1.733	1.755	1.858	1.659	1.809	1.726	5.41
19) 2-Methylphen	0.875	0.975	0.909	0.981	0.900	1.011	0.932	1.020	0.950	5.67
20) 2,2'-oxybis(	0.417	0.467	0.435	0.465	0.456	0.487	0.445	0.483	0.457	5.22
21) 3&4-Methylph	0.846	1.014	0.921	1.013	0.885	1.072	0.971	1.063	0.973	8.50
22) n-Nitroso-di	0.674	0.756	0.666	0.739	0.684	0.788	0.695	0.784	0.723	6.88
23) Hexachloroet	0.401	0.445	0.415	0.447	0.433	0.468	0.428	0.460	0.437	5.15
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.332	0.377	0.349	0.368	0.353	0.392	0.360	0.377	0.364	5.18
26) Nitrobenzene	0.183	0.206	0.192	0.202	0.197	0.216	0.197	0.208	0.200	5.13
27) Quinoline	0.604	0.700	0.666	0.698	0.658	0.733	0.682	0.714	0.682	5.84
28) Isophorone	0.591	0.654	0.585	0.627	0.625	0.684	0.601	0.653	0.628	5.55
29) 2-Nitropheno	0.172	0.206	0.201	0.213	0.184	0.222	0.208	0.220	0.203	8.61
30) 2,4-Dimethyl	0.293	0.331	0.321	0.349	0.314	0.334	0.326	0.360	0.329	6.27
31) Benzoic acid			0.215	0.195		0.115	0.216	0.167	0.182	23.33
----- Linear regression ----- Coefficient = 0.9989										
Response Ratio = -0.03508 + 0.22970 *A										
32) bis(2-Chloro	0.374	0.434	0.382	0.404	0.418	0.447	0.392	0.429	0.410	6.43
33) 2,4-Dichloro	0.245	0.293	0.287	0.299	0.260	0.313	0.293	0.311	0.288	8.28
34) 2,6-Dichloro	0.253	0.300	0.275	0.290	0.272	0.314	0.282	0.303	0.286	6.91
35) 1,3,5-Trichl	0.324	0.356	0.304	0.323	0.347	0.362	0.312	0.337	0.333	6.25
36) 1,2,4-Trichl	0.299	0.339	0.301	0.319	0.343	0.345	0.307	0.330	0.323	5.81
37) 1,2,3-Trichl	0.297	0.334	0.293	0.311	0.330	0.339	0.302	0.322	0.316	5.59
38) Naphthalene	1.107	1.222	0.949	1.068	1.265	1.242	0.996	1.150	1.125	10.32
39) 4-Chloroanil	0.437	0.512	0.424	0.481	0.492	0.537	0.442	0.518	0.481	8.74
40) 2,3-Dichloro	0.308	0.364	0.331	0.344	0.338	0.383	0.337	0.364	0.346	6.73
41) Caprolactam	0.116	0.142	0.149	0.153	0.112	0.153	0.152	0.153	0.141	12.25
42) Hexachlorobu	0.149	0.168	0.152	0.159	0.161	0.173	0.155	0.165	0.160	5.08

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

43)	4-Chloro-3-m	0.234	0.288	0.292	0.304	0.232	0.312	0.299	0.312	0.284	11.51
44)	2-Methylnaph	0.739	0.834	0.698	0.762	0.824	0.859	0.717	0.813	0.781	7.64
45)	1-Methylnaph	0.711	0.792	0.666	0.727	0.769	0.807	0.683	0.769	0.741	6.94
46)	Dimethylnaph	0.589	0.686	0.590	0.645	0.647	0.716	0.613	0.680	0.646	7.18
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.187	0.138	0.218	0.216		0.176	0.212	0.200	0.192	14.91
49)	2,4,6-Trichl	0.270	0.330	0.337	0.346	0.279	0.358	0.342	0.353	0.327	10.25
50)	2,4,5-Trichl	0.404	0.262	0.297	0.308		0.305	0.305	0.303	0.312	13.98
51)	2-Fluorobiph	1.313	1.493	1.282	1.388	1.465	1.539	1.325	1.459	1.408	6.71
52)	2-Chloronaph	1.128	1.244	1.076	1.161	1.247	1.302	1.107	1.219	1.185	6.68
53)	Biphenyl	1.520	1.740	1.437	1.567	1.764	1.778	1.490	1.661	1.620	8.26
54)	2-Nitroanili	0.252	0.319	0.307	0.330	0.244	0.349	0.317	0.336	0.307	12.55
55)	Dimethylphth	1.201	1.383	1.175	1.272	1.319	1.438	1.221	1.349	1.295	7.19
56)	Acenaphthyle	1.782	2.051	1.696	1.890	1.894	2.158	1.780	2.016	1.908	8.21
57)	2,6-Dinitrot	0.244	0.294	0.302	0.315	0.240	0.320	0.310	0.322	0.294	11.25
58)	3-Nitroanili	0.263	0.354	0.388	0.402		0.398	0.397	0.403	0.372	13.69
59)	Acenaphthene	1.190	1.338	1.163	1.247	1.361	1.382	1.203	1.301	1.273	6.60
60)	2,4-Dinitrop		0.018	0.157	0.139		0.059	0.160	0.111	0.107	53.62
	----- Linear regression ----- Coefficient = 0.9975										
	Response Ratio = -0.05587 + 0.16902 *A										
61)	4-Nitropheno		0.082	0.157	0.155		0.119	0.158	0.144	0.136	22.22
	----- Linear regression ----- Coefficient = 0.9999										
	Response Ratio = -0.00999 + 0.16197 *A										
62)	Dibenzofuran	1.604	1.809	1.524	1.662	1.800	1.882	1.578	1.748	1.701	7.50
63)	2,4-Dinitrot	0.319	0.412	0.416	0.437	0.295	0.452	0.429	0.447	0.401	14.96
64)	2,3,4,6-Tetr	0.185	0.258	0.301	0.305		0.293	0.307	0.304	0.279	16.04
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00332 + 0.30506 *A										
65)	Diethylphtha	1.345	1.511	1.299	1.432	1.599	1.553	1.359	1.473	1.446	7.37
66)	Fluorene	1.253	1.406	1.249	1.351	1.352	1.485	1.284	1.412	1.349	6.21
67)	4-Chlorophen	0.551	0.625	0.557	0.581	0.590	0.638	0.563	0.602	0.588	5.42
68)	4-Nitroanili		0.356	0.395	0.408		0.400	0.403	0.412	0.396	5.09
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-			0.143	0.141		0.100	0.147	0.130	0.132	14.60
71)	n-Nitrosodip	0.548	0.642	0.581	0.616	0.624	0.663	0.591	0.643	0.613	6.22
72)	1,2-Diphenyl	0.716	0.802	0.774	0.769	0.770	0.832	0.796	0.799	0.782	4.36
73)	2,4,6-Tribro		0.097	0.121	0.116		0.110	0.120	0.114	0.113	7.86
74)	4-Bromopheny	0.187	0.220	0.223	0.226	0.187	0.234	0.223	0.231	0.216	8.61
75)	Hexachlorobe	0.218	0.250	0.249	0.247	0.250	0.256	0.248	0.255	0.246	4.86
76)	Pentachlorop	0.108	0.100	0.164	0.154		0.128	0.163	0.144	0.137	19.12
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.01762 + 0.16671 *A										
77)	Phenanthrene	1.178	1.273	1.041	1.107	1.342	1.285	1.066	1.191	1.185	9.22
78)	Anthracene	1.122	1.272	1.090	1.180	1.266	1.305	1.121	1.250	1.201	6.91
79)	Carbazole	1.006	1.172	1.039	1.116	1.081	1.221	1.066	1.168	1.109	6.66
80)	Di-n-butylph	1.270	1.539	1.252	1.399	1.434	1.606	1.293	1.539	1.416	9.64
81)	Fluoranthene	1.048	1.221	1.032	1.119	1.206	1.272	1.069	1.206	1.147	7.94
82)	Octadecane	0.442	0.518	0.379	0.432	0.476	0.541	0.399	0.495	0.460	12.43
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.203	1.321	1.026	1.142	1.313	1.345	1.064	1.270	1.210	10.10
85)	Butyl steara	0.313	0.385		0.292		0.386		0.350	0.345	12.24
86)	Terphenyl-d1	0.705	0.798	0.690	0.745	0.760	0.834	0.706	0.793	0.754	6.87
87)	Butylbenzylp	0.570	0.673	0.567	0.644	0.653	0.719	0.594	0.702	0.640	9.07

7.7.8

7

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

```
 88) Benzo[a]anth 1.078 1.161 0.927 1.060 1.259 1.207 0.982 1.153 1.103  10.21
 89) 3,3'-Dichlor 0.339 0.407 0.398 0.439       0.436 0.419 0.442 0.412   8.81
 90) Chrysene     1.067 1.179 0.927 1.032 1.232 1.217 0.975 1.117 1.093  10.28
 91) bis(2-Ethylh 0.807 0.986 0.782 0.902       1.039 0.812 1.006 0.905  11.79

 92) I   Perylene-d12          ----------------ISTD---------------------
 93) Di-n-octylph 1.178 1.594 1.427 1.596       1.799 1.472 1.737 1.543  13.51
 94) Benzo[b]fluo 1.037 1.137 1.635 1.264 1.124 1.253 1.723 1.252 1.303  18.88
          ----- Quadratic regression -----               Coefficient =  0.9925
               Response Ratio = -0.01149 + 1.14974 *A + 0.21778 *A^2

 95) Benzo[k]fluo 1.143 1.401       1.260 1.381 1.403 0.814 1.323 1.246  17.02
          ----- Quadratic regression -----               Coefficient =  0.9935
               Response Ratio = -0.04948 + 1.85273 *A + -0.50029 *A^2

 96) Benzo[a]pyre 0.925 1.103 1.161 1.166 1.048 1.244 1.162 1.207 1.127   8.96
 97) Indeno[1,2,3 0.953 1.197 1.188 1.390 1.046 1.329 1.346 1.354 1.226  12.99
 98) Dibenz(a,h)a 0.664 0.852 0.898 1.004 0.736 0.963 0.991 0.993 0.888  14.45
 99) Dibenz[a,h]a 0.774 0.981 0.990 1.130 0.845 1.093 1.113 1.115 1.005  13.39
100) 7,12-Dimethy       0.448 0.619 0.614       0.500 0.616 0.608 0.567  13.09
101) Benzo[g,h,i] 0.800 0.986 0.825 1.085 0.892 1.087 0.979 1.091 0.968  12.21

102) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.019 0.981       0.761 0.688 0.956 0.604 0.830 0.834  18.98
          ----- Quadratic regression -----               Coefficient =  0.9994
               Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2


104) I   Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.558 0.537 0.435 0.500 0.409 0.512 0.477 0.523 0.494  10.35
106) Atrazine     0.156 0.166 0.157 0.178       0.172 0.172 0.181 0.169   5.81

107) t   Chrysene-d12a         ----------------ISTD---------------------
108) Benzidine    0.441 0.614 0.387 0.499       0.669 0.429 0.476 0.502  20.48
          ----- Quadratic regression -----               Coefficient =  0.9973
               Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2

 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MR3151.M          Wed Nov 17 15:38:13 2010   NJMSR
```

7.7.8

7

Initial Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICC3152
Lab FileID: R83645.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	1.019	0.981		0.761	0.688	0.956	0.604	0.830	0.834	18.98
----- Quadratic regression ----- Coefficient = 0.9994										
Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2										
104) I Acenaphthene-d10a	ISTD									
105) 1,2,4,5-Tetr	0.558	0.537	0.435	0.500	0.409	0.512	0.477	0.523	0.494	10.35
106) Atrazine	0.156	0.166	0.157	0.178		0.172	0.172	0.181	0.169	5.81
107) t Chrysene-d12a	ISTD									
108) Benzidine	0.441	0.614	0.387	0.499		0.669	0.429	0.476	0.502	20.48
----- Quadratic regression ----- Coefficient = 0.9973										
Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2										

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Tue Nov 16 13:42:25 2010 NJMSR

7.7.9

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83651.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.01	7.61
3	t	Pyridine	1.326	1.290	2.7	116	-0.05	3.22
4	t	N-Nitrosodimethylamine	0.437	0.436	0.2	120	-0.02	3.25
11	t	bis(2-Chloroethyl)ether	1.223	1.122	8.3	115	-0.02	7.20
14	t	1,3-Dichlorobenzene	1.573	1.409	10.4	112	-0.02	7.53
15	t	1,4-Dichlorobenzene	1.597	1.442	9.7	113	0.00	7.65
16	t	Benzyl alcohol	0.837	0.843	-0.7	118	0.00	8.00
17	t	1,2-Dichlorobenzene	1.492	1.352	9.4	114	-0.01	8.03
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.440	3.7	117	0.00	8.34
22	t	n-Nitroso-di-n-propylamin	0.723	0.719	0.6	121	-0.02	8.63
23	t	Hexachloroethane	0.437	0.414	5.3	115	0.00	8.67
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	10.39
26	t	Nitrobenzene	0.200	0.185	7.5	113	-0.01	8.89
28	t	Isophorone	0.628	0.582	7.3	115	-0.02	9.42
		----------	AvgRF	CCRF	% Dev		----------	
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	118	0.00	10.00
36	t	1,2,4-Trichlorobenzene	0.323	0.294	9.0	114	0.00	10.32
38	t	Naphthalene	1.125	0.985	12.4	114	0.00	10.44
42	t	Hexachlorobutadiene	0.160	0.152	5.0	118	0.00	10.91
44	t	2-Methylnaphthalene	0.781	0.657	15.9	106	0.00	12.04
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	14.52
48	t	Hexachlorocyclopentadiene	0.192	0.192	0.0	112	0.00	12.60
52	t	2-Chloronaphthalene	1.185	1.042	12.1	113	0.00	13.16
54	t	2-Nitroaniline	0.307	0.296	3.6	113	0.00	13.54
55	t	Dimethylphthalate	1.295	1.131	12.7	112	0.00	14.13
56	t	Acenaphthylene	1.908	1.533	19.7	102	0.00	14.14
57	t	2,6-Dinitrotoluene	0.294	0.290	1.4	116	0.00	14.25
58	t	3-Nitroaniline	0.372	0.327	12.1	102	0.00	14.55
59	t	Acenaphthene	1.273	1.137	10.7	115	0.00	14.60
		----------	AvgRF	CCRF	% Dev		----------	
62	t	Dibenzofuran	1.701	1.525	10.3	115	0.00	14.98
63	t	2,4-Dinitrotoluene	0.401	0.382	4.7	110	0.00	15.16
		----------	AvgRF	CCRF	% Dev		----------	
65	t	Diethylphthalate	1.446	1.291	10.7	113	-0.01	15.83
66	t	Fluorene	1.349	1.244	7.8	116	0.00	15.79

7.7.10

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

67	t	4-Chlorophenyl-phenylethe	0.588	0.536	8.8	116	0.00	15.87
68	t	4-Nitroaniline	0.396	0.372	6.1	115	-0.01	16.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	17.98
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	114	0.00	16.19
72	t	1,2-Diphenylhydrazine	0.782	0.699	10.6	116	0.00	16.24
74	t	4-Bromophenyl-phenylether	0.216	0.207	4.2	117	0.00	17.01
75	t	Hexachlorobenzene	0.246	0.229	6.9	119	0.00	17.29
		----------	AvgRF	CCRF	% Dev		----------	
77	t	Phenanthrene	1.185	1.042	12.1	121	0.00	18.04
78	t	Anthracene	1.201	1.074	10.6	117	0.00	18.15
79	t	Carbazole	1.109	1.048	5.5	120	0.00	18.60
80	t	Di-n-butylphthalate	1.416	1.242	12.3	114	0.00	19.56
81	t	Fluoranthene	1.147	1.006	12.3	115	0.00	20.36
83	I	Chrysene-d12	1.000	1.000	0.0	127	0.00	22.25
84	t	Pyrene	1.210	1.044	13.7	116	0.00	20.68
87	t	Butylbenzylphthalate	0.640	0.571	10.8	112	0.00	21.67
88	t	Benzo[a]anthracene	1.103	0.958	13.1	114	0.00	22.23
90	t	Chrysene	1.093	0.938	14.2	115	0.00	22.28
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.799	11.7	112	0.00	22.37
92	I	Perylene-d12	1.000	1.000	0.0	131	0.00	23.79
93	t	Di-n-octylphthalate	1.543	1.370	11.2	113	0.00	22.98
		----------	True	Calc.	% Drift		----------	
94	t	Benzo[b]fluoranthene	50.000	40.294	19.4	114	0.00	23.37
95	t	Benzo[k]fluoranthene	50.000	40.077	19.8	109	0.00	23.40
		----------	AvgRF	CCRF	% Dev		----------	
96	t	Benzo[a]pyrene	1.127	1.030	8.6	116	0.00	23.73
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.285	-4.8	121	0.00	25.17
99	t	Dibenz[a,h]anthracene	1.005	1.041	-3.6	121	0.00	25.18
101	t	Benzo[g,h,i]perylene	0.968	1.037	-7.1	126	0.00	25.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:46:13 2010 NJMSR

7.7.10

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83651A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83651A.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	0.01	14.52
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.446	9.7	122	0.00	12.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:52:58 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83652.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83652.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.01	7.61
2	t	1,4-Dioxane	0.595	0.546	8.2	111	-0.06	2.77
6	t	Indene	1.895	1.809	4.5	113	-0.01	8.19
7	t	Cumene	2.712	2.285	15.7	102	-0.02	6.13
13	t	Decane	1.102	0.975	11.5	107	-0.02	7.41
18	t	Acetophenone	1.726	1.825	-5.7	125	-0.02	8.54
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.01	10.38
27	t	Quinoline	0.682	0.724	-6.2	119	-0.03	11.21
40	t	2,3-Dichloroaniline	0.346	0.335	3.2	111	0.00	12.81
41	t	Caprolactam	0.141	0.143	-1.4	107	-0.09	11.39
45	t	1-Methylnaphthalene	0.741	0.698	5.8	110	0.00	12.29
46	t	Dimethylnaphthalene	0.646	0.655	-1.4	116	0.00	13.53
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	14.52
53	t	Biphenyl	1.620	1.527	5.7	113	0.00	13.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	17.98
82	t	Octadecane	0.460	0.455	1.1	122	0.00	18.03
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	22.24
92	I	Perylene-d12	1.000	1.000	0.0	100	0.00	23.78
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.379	33.2#	62	-0.02	23.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:50:51 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83652A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83652A.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	117	0.00	7.61
		True	Calc.	% Drift			
103	Benzaldehyde	50.000	59.481	-19.0	152	0.00	6.76
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	127	0.00	14.52
106	Atrazine	0.169	0.185	-9.5	132	0.01	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Nov 18 16:21:44 2010 NJMSR

7.7.13 7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83653.D Vial: 12
Acq On : 16 Nov 2010 4:54 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	137	0.00	7.62
9	t	Phenol	1.690	1.465	13.3	119	0.00	7.10
12	t	2-Chlorophenol	1.405	1.344	4.3	130	0.00	7.26
19	t	2-Methylphenol	0.950	1.098	-15.6	154	0.00	8.31
21	t	3&4-Methylphenol	0.973	1.156	-18.8	156	0.00	8.64
24	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	10.39
29	t	2-Nitrophenol	0.203	0.201	1.0	124	0.00	9.60
30	t	2,4-Dimethylphenol	0.329	0.323	1.8	122	0.00	9.80
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	48.929	2.1	133	0.04	10.22
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.288	0.277	3.8	122	0.00	10.14
34	t	2,6-Dichlorophenol	0.286	0.283	1.0	129	0.00	10.67
43	t	4-Chloro-3-methylphenol	0.284	0.281	1.1	122	-0.03	11.87
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	14.52
49	t	2,4,6-Trichlorophenol	0.327	0.329	-0.6	121	0.00	12.81
50	t	2,4,5-Trichlorophenol	0.312	0.370	-18.6	153	-0.02	12.88
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.410	3.6	108	-0.02	14.76
61	t	4-Nitrophenol	50.000	45.760	8.5	115	-0.01	15.04
		----------	True	Calc.	% Drift	----------		
64		2,3,4,6-Tetrachlorophenol	50.000	44.407	11.2	112	0.00	15.41
69	I	Phenanthrene-d10	1.000	1.000	0.0	129	0.00	17.99
70	t	4,6-Dinitro-2-methylpheno	0.132	0.125	5.3	115	-0.02	16.09
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	93.330	6.7	118	-0.01	17.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

R83645.D MR3151.M Wed Nov 17 15:34:26 2010 NJMSR

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83655.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83655.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	132	-0.01	22.24
89 t	3,3'-Dichlorobenzidine	0.412	0.409	0.7	123	0.00	22.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:01:54 2010 NJMSR

7.7.15

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83655A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83655A.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 t	Chrysene-d12a	1.000	1.000	0.0	148	0.00	22.24
		True	Calc.	% Drift			
108 t	Benzidine	50.000	101.157	-102.3#	232	0.00	20.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:26:56 2010 NJMSR

7.7.16

7

Initial Calibration Verification

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3153-ICV3151
Lab FileID: R83659.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3153\R83659.D Vial: 4
Acq On : 16 Nov 2010 5:43 pm Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3153,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	7.62
10	t	Aniline	1.947	1.742	10.5	131	0.00	7.07
24	I	Naphthalene-d8	1.000	1.000	0.0	135	0.00	10.40
39	t	4-Chloroaniline	0.481	0.472	1.9	133	0.00	10.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Wed Nov 17 13:22:13 2010 NJMSR

7.7.17

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3151
Lab FileID: R84604.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3195\R84604.D Vial: 2
Acq On : 22 Dec 2010 7:51 pm Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47327,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	129	-0.10	7.52
2	t	1,4-Dioxane	0.595	0.587	1.3	127	-0.08	2.75
3	t	Pyridine	1.326	1.342	-1.2	123	-0.09	3.19
4	t	N-Nitrosodimethylamine	0.437	0.470	-7.6	129	-0.09	3.19
5	S	2-Fluorophenol	1.198	1.248	-4.2	127	-0.05	5.24
6	t	Indene	1.895	1.931	-1.9	126	-0.10	8.10
7	t	Cumene	2.712	2.759	-1.7	127	-0.10	6.05
8	S	Phenol-d5	1.426	1.496	-4.9	128	-0.05	7.02
9	t	Phenol	1.690	1.665	1.5	121	-0.06	7.04
10	t	Aniline	1.947	1.717	11.8	105	-0.10	6.96
11	t	bis(2-Chloroethyl)ether	1.223	1.223	0.0	123	-0.10	7.11
12	t	2-Chlorophenol	1.405	1.442	-2.6	127	-0.09	7.18
13	t	Decane	1.102	1.105	-0.3	125	-0.10	7.32
14	t	1,3-Dichlorobenzene	1.573	1.598	-1.6	128	-0.11	7.44
15	t	1,4-Dichlorobenzene	1.597	1.623	-1.6	129	-0.10	7.55
16	t	Benzyl alcohol	0.837	0.915	-9.3	128	-0.09	7.91
17	t	1,2-Dichlorobenzene	1.492	1.513	-1.4	126	-0.11	7.93
18	t	Acetophenone	1.726	1.822	-5.6	130	-0.11	8.45
19	t	2-Methylphenol	0.950	0.964	-1.5	122	-0.06	8.25
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.477	-4.4	128	-0.10	8.24
21	t	3&4-Methylphenol	0.973	1.058	-8.7	129	-0.07	8.57
22	t	n-Nitroso-di-n-propylamin	0.723	0.808	-11.8	133	-0.11	8.54
23	t	Hexachloroethane	0.437	0.485	-11.0	136	-0.10	8.58
24	I	Naphthalene-d8	1.000	1.000	0.0	129	-0.10	10.29
25	S	Nitrobenzene-d5	0.364	0.385	-5.8	132	-0.11	8.76
26	t	Nitrobenzene	0.200	0.206	-3.0	128	-0.11	8.79
27	t	Quinoline	0.682	0.726	-6.5	131	-0.12	11.12
28	t	Isophorone	0.628	0.662	-5.4	131	-0.11	9.33
29	t	2-Nitrophenol	0.203	0.223	-9.9	131	-0.11	9.50
30	t	2,4-Dimethylphenol	0.329	0.331	-0.6	119	-0.08	9.72
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	24.961	0.2	134	-0.10	10.08
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.423	-3.2	127	-0.10	9.91
33	t	2,4-Dichlorophenol	0.288	0.315	-9.4	131	-0.08	10.07
34	t	2,6-Dichlorophenol	0.286	0.314	-9.8	133	-0.09	10.58
35	t	1,3,5-Trichlorobenzene	0.333	0.355	-6.6	135	-0.11	9.52
36	t	1,2,4-Trichlorobenzene	0.323	0.343	-6.2	134	-0.11	10.22
37	t	1,2,3-Trichlorobenzene	0.316	0.340	-7.6	136	-0.11	10.75

7.7.18

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Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3151
Lab FileID: R84604.D

38	t	Naphthalene	1.125	1.136	-1.0	127	-0.11	10.33
39	t	4-Chloroaniline	0.481	0.487	-1.2	121	-0.10	10.57
40	t	2,3-Dichloroaniline	0.346	0.382	-10.4	135	-0.10	12.70
41	t	Caprolactam	0.141	0.158	-12.1	134	-0.16	11.32
42	t	Hexachlorobutadiene	0.160	0.183	-14.4	143	-0.11	10.80
43	t	4-Chloro-3-methylphenol	0.284	0.329	-15.8	136	-0.07	11.83
44	t	2-Methylnaphthalene	0.781	0.829	-6.1	131	-0.11	11.94
45	t	1-Methylnaphthalene	0.741	0.779	-5.1	131	-0.11	12.18
46	t	Dimethylnaphthalene	0.646	0.713	-10.4	135	-0.11	13.43
47	I	Acenaphthene-d10	1.000	1.000	0.0	137	-0.11	14.41
48	t	Hexachlorocyclopentadiene	0.192	0.215	-12.0	147	-0.11	12.50
49	t	2,4,6-Trichlorophenol	0.327	0.370	-13.1	144	-0.09	12.73
50	t	2,4,5-Trichlorophenol	0.312	0.312	0.0	141	-0.07	12.83
51	S	2-Fluorobiphenyl	1.408	1.414	-0.4	133	-0.11	12.90
52	t	2-Chloronaphthalene	1.185	1.210	-2.1	136	-0.11	13.06
53	t	Biphenyl	1.620	1.604	1.0	132	-0.11	13.08
54	t	2-Nitroaniline	0.307	0.340	-10.7	139	-0.10	13.45
55	t	Dimethylphthalate	1.295	1.349	-4.2	137	-0.11	14.02
56	t	Acenaphthylene	1.908	1.936	-1.5	132	-0.11	14.03
57	t	2,6-Dinitrotoluene	0.294	0.319	-8.5	136	-0.11	14.14
58	t	3-Nitroaniline	0.372	0.377	-1.3	128	-0.10	14.45
59	t	Acenaphthene	1.273	1.260	1.0	133	-0.11	14.48
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	50.232	-0.5	155	-0.10	14.68
61	t	4-Nitrophenol	25.000	24.033	3.9	132	-0.02	15.03
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.692	0.5	133	-0.12	14.87
63	t	2,4-Dinitrotoluene	0.401	0.446	-11.2	137	-0.11	15.05
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	25.249	-1.0	137	-0.10	15.32
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.465	-1.3	136	-0.12	15.72
66	t	Fluorene	1.349	1.374	-1.9	133	-0.12	15.68
67	t	4-Chlorophenyl-phenylethe	0.588	0.623	-6.0	142	-0.12	15.76
68	t	4-Nitroaniline	0.396	0.356	10.1	118	-0.12	15.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	138	-0.11	17.88
70	t	4,6-Dinitro-2-methylpheno	0.132	0.137	-3.8	145	-0.11	16.00
71	t	n-Nitrosodiphenylamine	0.613	0.622	-1.5	133	-0.11	16.08
72	t	1,2-Diphenylhydrazine	0.782	0.778	0.5	134	-0.11	16.12
73	S	2,4,6-Tribromophenol	0.113	0.125	-10.6	152	-0.11	16.31
74	t	4-Bromophenyl-phenylether	0.216	0.233	-7.9	139	-0.11	16.89
75	t	Hexachlorobenzene	0.246	0.269	-9.3	145	-0.12	17.18
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	51.164	-2.3	149	-0.10	17.66
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.173	1.0	136	-0.12	17.92
78	t	Anthracene	1.201	1.211	-0.8	133	-0.12	18.03
79	t	Carbazole	1.109	1.098	1.0	130	-0.11	18.49
80	t	Di-n-butylphthalate	1.416	1.503	-6.1	135	-0.09	19.47
81	t	Fluoranthene	1.147	1.203	-4.9	137	-0.08	20.28
82	t	Octadecane	0.460	0.461	-0.2	128	-0.11	17.92

7.7.18
7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3151
Lab FileID: R84604.D

83	I	Chrysene-d12	1.000	1.000	0.0	141	-0.07	22.18
84	t	Pyrene	1.210	1.211	-0.1	135	-0.08	20.60
85		Butyl stearate	0.345	0.341	1.2	138	-0.07	21.66
86	S	Terphenyl-d14	0.754	0.797	-5.7	142	-0.08	20.90
87	t	Butylbenzylphthalate	0.640	0.669	-4.5	135	-0.08	21.60
88	t	Benzo[a]anthracene	1.103	1.145	-3.8	140	-0.07	22.15
89	t	3,3'-Dichlorobenzidine	0.412	0.450	-9.2	144	-0.07	22.16
90	t	Chrysene	1.093	1.087	0.5	137	-0.07	22.20
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.967	-6.9	136	-0.06	22.30
92	I	Perylene-d12	1.000	1.000	0.0	139	-0.08	23.70
93	t	Di-n-octylphthalate	1.543	1.646	-6.7	132	-0.07	22.91
			True	Calc.	% Drift			
94	t	Benzo[b]fluoranthene	25.000	25.527	-2.1	144	-0.08	23.29
95	t	Benzo[k]fluoranthene	25.000	21.987	12.1	137	-0.09	23.32
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.127	1.162	-3.1	134	-0.09	23.63
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.389	-13.3	143	-0.13	25.04
98	t	Dibenz(a,h)acridine	0.888	1.027	-15.7	144	-0.12	24.72
99	t	Dibenz[a,h]anthracene	1.005	1.158	-15.2	144	-0.13	25.05
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.538	5.1	123	-0.09	23.31
101	t	Benzo[g,h,i]perylene	0.968	1.085	-12.1	138	-0.14	25.41

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Dec 23 13:13:40 2010 NJMSR

7.7.18

7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3195-CC3152
Lab FileID: R84605.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3195\R84605.D Vial: 3
Acq On : 22 Dec 2010 8:28 pm Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47327,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	123	-0.10	7.51
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	27.073	-8.3	138	-0.09	6.67
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	131	-0.10	14.41
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.525	-6.3	131	-0.11	12.43
106	Atrazine	0.169	0.188	-11.2	136	-0.11	17.50
107 t	Chrysene-d12a	1.000	1.000	0.0	139	-0.06	22.17
		True	Calc.	% Drift			
108 t	Benzidine	25.000	25.046	-0.2	156	-0.07	20.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Dec 23 13:14:08 2010 NJMSR

7.7.19

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3151
Lab FileID: R84727.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84727.D Vial: 2
Acq On : 30 Dec 2010 8:03 am Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47327,er3201,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	133	-0.11	7.51
2	t	1,4-Dioxane	0.595	0.641	-7.7	142	-0.17	2.66
3	t	Pyridine	1.326	1.466	-10.6	138	-0.09	3.19
4	t	N-Nitrosodimethylamine	0.437	0.532	-21.7#	150	-0.08	3.19
5	S	2-Fluorophenol	1.198	1.284	-7.2	134	-0.06	5.24
6	t	Indene	1.895	1.980	-4.5	133	-0.11	8.09
7	t	Cumene	2.712	2.896	-6.8	138	-0.10	6.05
8	S	Phenol-d5	1.426	1.572	-10.2	138	-0.06	7.01
9	t	Phenol	1.690	1.760	-4.1	131	-0.07	7.03
10	t	Aniline	1.947	1.794	7.9	113	-0.10	6.96
11	t	bis(2-Chloroethyl)ether	1.223	1.295	-5.9	134	-0.11	7.11
12	t	2-Chlorophenol	1.405	1.475	-5.0	133	-0.10	7.18
13	t	Decane	1.102	1.222	-10.9	142	-0.11	7.31
14	t	1,3-Dichlorobenzene	1.573	1.619	-2.9	133	-0.11	7.43
15	t	1,4-Dichlorobenzene	1.597	1.665	-4.3	136	-0.11	7.54
16	t	Benzyl alcohol	0.837	0.947	-13.1	136	-0.10	7.90
17	t	1,2-Dichlorobenzene	1.492	1.549	-3.8	133	-0.11	7.92
18	t	Acetophenone	1.726	1.848	-7.1	136	-0.11	8.44
19	t	2-Methylphenol	0.950	1.015	-6.8	132	-0.08	8.24
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.473	-3.5	130	-0.11	8.24
21	t	3&4-Methylphenol	0.973	1.087	-11.7	136	-0.08	8.56
22	t	n-Nitroso-di-n-propylamin	0.723	0.882	-22.0#	149	-0.12	8.53
23	t	Hexachloroethane	0.437	0.462	-5.7	133	-0.11	8.56
24	I	Naphthalene-d8	1.000	1.000	0.0	131	-0.11	10.28
25	S	Nitrobenzene-d5	0.364	0.410	-12.6	142	-0.11	8.75
26	t	Nitrobenzene	0.200	0.210	-5.0	132	-0.11	8.79
27	t	Quinoline	0.682	0.731	-7.2	134	-0.12	11.11
28	t	Isophorone	0.628	0.699	-11.3	140	-0.12	9.32
29	t	2-Nitrophenol	0.203	0.221	-8.9	131	-0.11	9.50
30	t	2,4-Dimethylphenol	0.329	0.339	-3.0	123	-0.09	9.71
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	20.309	18.8	103	-0.10	10.08
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.438	-6.8	134	-0.11	9.90
33	t	2,4-Dichlorophenol	0.288	0.313	-8.7	132	-0.09	10.06
34	t	2,6-Dichlorophenol	0.286	0.311	-8.7	134	-0.10	10.57
35	t	1,3,5-Trichlorobenzene	0.333	0.340	-2.1	132	-0.12	9.51
36	t	1,2,4-Trichlorobenzene	0.323	0.332	-2.8	131	-0.11	10.21
37	t	1,2,3-Trichlorobenzene	0.316	0.328	-3.8	133	-0.11	10.75

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3151
Lab FileID: R84727.D

38	t	Naphthalene	1.125	1.166	-3.6	133	-0.12	10.32
39	t	4-Chloroaniline	0.481	0.498	-3.5	126	-0.11	10.57
40	t	2,3-Dichloroaniline	0.346	0.374	-8.1	134	-0.11	12.70
41	t	Caprolactam	0.141	0.168	-19.1	144	-0.17	11.31
42	t	Hexachlorobutadiene	0.160	0.167	-4.4	133	-0.11	10.80
43	t	4-Chloro-3-methylphenol	0.284	0.340	-19.7	143	-0.08	11.82
44	t	2-Methylnaphthalene	0.781	0.823	-5.4	133	-0.12	11.93
45	t	1-Methylnaphthalene	0.741	0.775	-4.6	132	-0.12	12.17
46	t	Dimethylnaphthalene	0.646	0.692	-7.1	133	-0.11	13.42
47	I	Acenaphthene-d10	1.000	1.000	0.0	132	-0.12	14.40
48	t	Hexachlorocyclopentadiene	0.192	0.198	-3.1	131	-0.12	12.49
49	t	2,4,6-Trichlorophenol	0.327	0.355	-8.6	133	-0.10	12.72
50	t	2,4,5-Trichlorophenol	0.312	0.305	2.2	133	-0.08	12.82
51	S	2-Fluorobiphenyl	1.408	1.437	-2.1	130	-0.12	12.89
52	t	2-Chloronaphthalene	1.185	1.232	-4.0	134	-0.12	13.05
53	t	Biphenyl	1.620	1.674	-3.3	133	-0.11	13.08
54	t	2-Nitroaniline	0.307	0.388	-26.4#	153	-0.11	13.44
55	t	Dimethylphthalate	1.295	1.351	-4.3	133	-0.11	14.02
56	t	Acenaphthylene	1.908	2.021	-5.9	133	-0.12	14.03
57	t	2,6-Dinitrotoluene	0.294	0.326	-10.9	134	-0.11	14.14
58	t	3-Nitroaniline	0.372	0.401	-7.8	132	-0.11	14.44
59	t	Acenaphthene	1.273	1.311	-3.0	133	-0.12	14.48
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	54.109	-8.2	165	-0.11	14.68
61	t	4-Nitrophenol	25.000	25.430	-1.7	136	-0.04	15.01
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.729	-1.6	131	-0.12	14.86
63	t	2,4-Dinitrotoluene	0.401	0.454	-13.2	134	-0.11	15.04
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	24.138	3.4	126	-0.11	15.31
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.486	-2.8	134	-0.12	15.72
66	t	Fluorene	1.349	1.393	-3.3	131	-0.12	15.68
67	t	4-Chlorophenyl-phenylethe	0.588	0.598	-1.7	132	-0.12	15.75
68	t	4-Nitroaniline	0.396	0.382	3.5	123	-0.13	15.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	132	-0.12	17.87
70	t	4,6-Dinitro-2-methylpheno	0.132	0.141	-6.8	143	-0.12	16.00
71	t	n-Nitrosodiphenylamine	0.613	0.645	-5.2	132	-0.12	16.07
72	t	1,2-Diphenylhydrazine	0.782	0.861	-10.1	142	-0.12	16.11
73	S	2,4,6-Tribromophenol	0.113	0.111	1.8	129	-0.12	16.30
74	t	4-Bromophenyl-phenylether	0.216	0.229	-6.0	131	-0.12	16.89
75	t	Hexachlorobenzene	0.246	0.249	-1.2	129	-0.12	17.17
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	46.734	6.5	129	-0.11	17.65
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.194	-0.8	132	-0.13	17.92
78	t	Anthracene	1.201	1.241	-3.3	131	-0.12	18.03
79	t	Carbazole	1.109	1.128	-1.7	127	-0.11	18.49
80	t	Di-n-butylphthalate	1.416	1.529	-8.0	131	-0.09	19.47
81	t	Fluoranthene	1.147	1.219	-6.3	133	-0.09	20.27
82	t	Octadecane	0.460	0.511	-11.1	136	-0.12	17.91

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3151
Lab FileID: R84727.D

83	I	Chrysene-d12	1.000	1.000	0.0	144	-0.08	22.17
84	t	Pyrene	1.210	1.156	4.5	131	-0.09	20.60
85		Butyl stearate	0.345	0.368	-6.7	151	-0.07	21.66
86	S	Terphenyl-d14	0.754	0.729	3.3	132	-0.08	20.89
87	t	Butylbenzylphthalate	0.640	0.681	-6.4	140	-0.08	21.60
88	t	Benzo[a]anthracene	1.103	1.134	-2.8	142	-0.07	22.15
89	t	3,3'-Dichlorobenzidine	0.412	0.441	-7.0	144	-0.08	22.16
90	t	Chrysene	1.093	1.091	0.2	141	-0.08	22.20
91	t	bis(2-Ethylhexyl)phthalat	0.905	1.010	-11.6	145	-0.07	22.29
92	I	Perylene-d12	1.000	1.000	0.0	146	-0.08	23.70
93	t	Di-n-octylphthalate	1.543	1.738	-12.6	146	-0.07	22.91
		----------	True	Calc.	% Drift	----------		
94	t	Benzo[b]fluoranthene	25.000	25.925	-3.7	154	-0.09	23.29
95	t	Benzo[k]fluoranthene	25.000	21.245	15.0	140	-0.09	23.32
		----------	AvgRF	CCRF	% Dev	----------		
96	t	Benzo[a]pyrene	1.127	1.180	-4.7	143	-0.09	23.64
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.297	-5.8	140	-0.12	25.05
98	t	Dibenz(a,h)acridine	0.888	0.937	-5.5	138	-0.12	24.72
99	t	Dibenz[a,h]anthracene	1.005	1.057	-5.2	138	-0.13	25.05
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.517	8.8	124	-0.09	23.31
101	t	Benzo[g,h,i]perylene	0.968	1.006	-3.9	134	-0.14	25.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Mon Jan 03 13:32:08 2011 NJMSR

7.7.20

7

Continuing Calibration Summary

Job Number: JA64438
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3201-CC3152
Lab FileID: R84728.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84728.D Vial: 3
Acq On : 30 Dec 2010 8:43 am Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47327,er3201,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	136	-0.10	7.51
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	26.593	-6.4	150	-0.10	6.66
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	-0.11	14.40
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.504	-2.0	132	-0.12	12.42
106	Atrazine	0.169	0.180	-6.5	137	-0.11	17.50
107 t	Chrysene-d12a	1.000	1.000	0.0	139	-0.07	22.17
		True	Calc.	% Drift			
108 t	Benzidine	25.000	29.249	-17.0	180	-0.07	20.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Mon Jan 03 13:32:36 2011 NJMSR

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:35 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

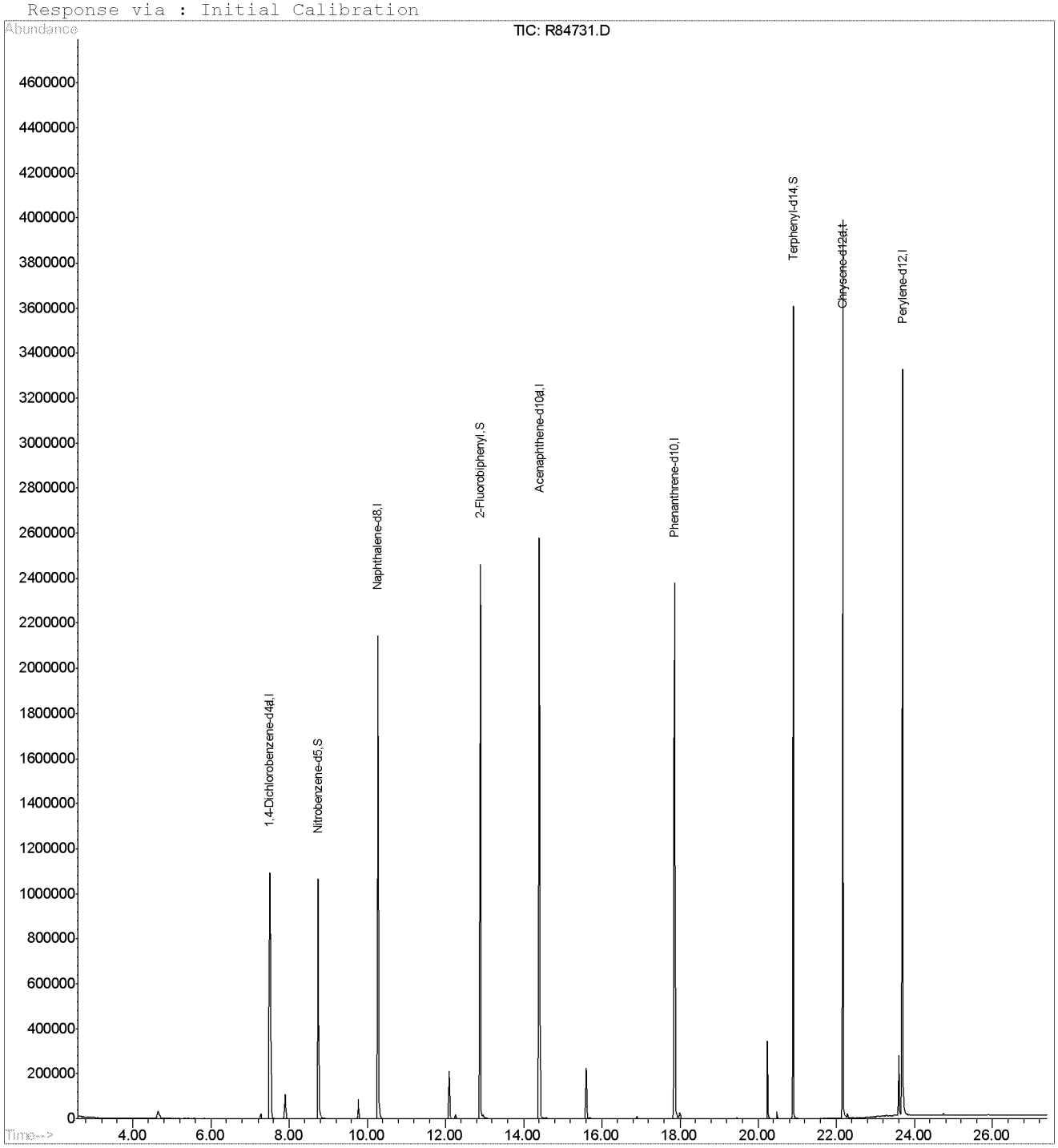
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	507577	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1734012	40.00	ppb	-0.11
47) Acenaphthene-d10	14.40	164	985270	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1523969	40.00	ppb	-0.13
83) Chrysene-d12	22.16	240	1551186	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1502238	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	507577	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	985270	40.00	ppb	-0.11
107) Chrysene-d12a	22.16	240	1551186	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.74	82	696753	44.21	ppb	-0.12
Spiked Amount 50.000			Recovery =	88.42%		
51) 2-Fluorobiphenyl	12.89	172	1346524	38.82	ppb	-0.12
Spiked Amount 50.000			Recovery =	77.64%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1142973	39.09	ppb	-0.08
Spiked Amount 50.000			Recovery =	78.18%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:35 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.654	11	12	18	rBB2	1475	1857	0.04%	0.005%
2	2.868	49	52	58	rBB4	1313	1607	0.04%	0.004%
3	3.397	149	151	158	rBB4	1226	1782	0.04%	0.005%
4	4.647	376	385	408	rBB2	33242	128933	2.84%	0.361%
5	5.203	482	489	495	rBB3	1058	2837	0.06%	0.008%
6	6.837	792	795	801	rBB	1318	1985	0.04%	0.006%
7	7.281	868	878	886	rBB2	24608	48262	1.06%	0.135%
8	7.505	909	920	947	rBB	1090708	2821258	62.07%	7.896%
9	7.895	982	993	1008	rBB	111393	257791	5.67%	0.721%
10	8.157	1037	1042	1045	rBB2	1104	1590	0.03%	0.004%
11	8.744	1145	1152	1192	rBB	1064853	1961292	43.15%	5.489%
12	9.770	1335	1344	1351	rBB	86547	121222	2.67%	0.339%
13	10.278	1429	1439	1467	rBB	2144889	3583845	78.84%	10.030%
14	10.726	1515	1523	1526	rBB	1123	2138	0.05%	0.006%
15	11.939	1744	1750	1755	rBB	1740	3353	0.07%	0.009%
16	12.094	1772	1779	1792	rBB2	213743	361619	7.96%	1.012%
17	12.254	1803	1809	1815	rBB2	21254	29912	0.66%	0.084%
18	12.890	1920	1928	1939	rBB	2458446	3825759	84.17%	10.707%
19	12.965	1939	1942	1945	rBB2	8572	7995	0.18%	0.022%
20	13.029	1949	1954	1958	rBB2	3702	4806	0.11%	0.013%
21	13.082	1959	1964	1970	rBB3	2357	3069	0.07%	0.009%
22	13.237	1986	1993	1997	rBB4	2729	4376	0.10%	0.012%
23	13.456	2031	2034	2040	rBB	732	1646	0.04%	0.005%
24	14.402	2196	2211	2237	rBB	2580227	4090885	90.00%	11.449%
25	14.567	2237	2242	2252	rBB	5931	11493	0.25%	0.032%
26	15.598	2429	2435	2450	rBB	225824	371047	8.16%	1.038%
27	15.700	2450	2454	2462	rBB3	5209	9079	0.20%	0.025%
28	16.256	2552	2558	2562	rBB2	2270	2745	0.06%	0.008%
29	16.827	2658	2665	2671	rBB2	5178	6603	0.15%	0.018%
30	16.897	2671	2678	2690	rBB4	10262	18192	0.40%	0.051%
31	17.580	2799	2806	2814	rBB	3871	6439	0.14%	0.018%
32	17.863	2850	2859	2876	rBB2	2375118	4075127	89.65%	11.405%
33	17.997	2876	2884	2893	rBB4	21674	45492	1.00%	0.127%
34	18.237	2924	2929	2934	rBB2	2334	3200	0.07%	0.009%
35	18.670	3005	3010	3018	rBB2	3307	3948	0.09%	0.011%
36	18.905	3050	3054	3059	rBB2	2930	2597	0.06%	0.007%
37	19.413	3145	3149	3151	rBB	1500	1820	0.04%	0.005%
38	19.461	3153	3158	3166	rBB	8419	10490	0.23%	0.029%

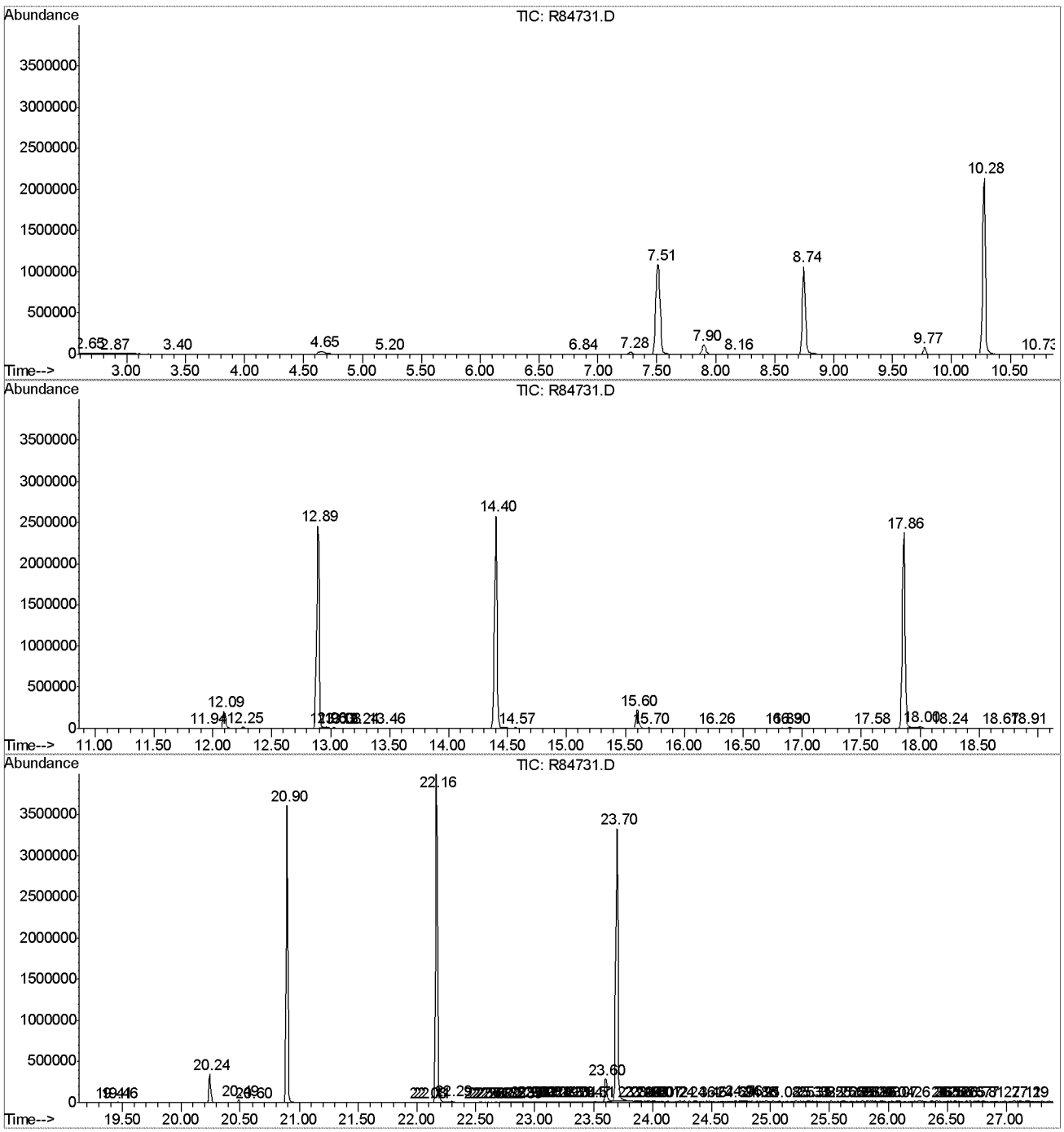
39	20.241	3295	3304	3325	rBB	346832	413916	9.11%	1.158%
40	20.486	3340	3350	3355	rBB3	30459	31359	0.69%	0.088%
41	20.599	3368	3371	3375	rBB	2355	2461	0.05%	0.007%
42	20.898	3420	3427	3445	rBB	3607724	3881398	85.39%	10.863%
43	22.078	3641	3648	3650	rBB	1070	1549	0.03%	0.004%
44	22.110	3650	3654	3655	rBB3	2106	1921	0.04%	0.005%
45	22.164	3655	3664	3684	rBB	3990498	4476214	98.48%	12.527%
46	22.292	3684	3688	3695	rBB	17392	17278	0.38%	0.048%
47	22.538	3731	3734	3737	rBB4	3153	2868	0.06%	0.008%
48	22.575	3737	3741	3743	rBB2	1584	1628	0.04%	0.005%
49	22.607	3743	3747	3749	rBB2	1943	2034	0.04%	0.006%
50	22.634	3749	3752	3756	rBB2	2906	3293	0.07%	0.009%
51	22.677	3756	3760	3763	rBB3	2376	2737	0.06%	0.008%
52	22.746	3771	3773	3779	rBB3	3701	3994	0.09%	0.011%
53	22.890	3795	3800	3803	rBB4	2872	3131	0.07%	0.009%
54	22.939	3803	3809	3813	rBB4	3094	5774	0.13%	0.016%
55	22.987	3815	3818	3820	rBB2	2192	2230	0.05%	0.006%
56	23.003	3820	3821	3824	rBB3	2501	1793	0.04%	0.005%
57	23.051	3824	3830	3832	rBB3	1790	2977	0.07%	0.008%
58	23.099	3835	3839	3842	rBB5	2305	2453	0.05%	0.007%
59	23.136	3842	3846	3850	rBB4	2161	2423	0.05%	0.007%
60	23.195	3850	3857	3859	rBB4	3314	5292	0.12%	0.015%
61	23.232	3859	3864	3866	rBB5	2583	3745	0.08%	0.010%
62	23.312	3874	3879	3882	rBB6	2044	3133	0.07%	0.009%
63	23.345	3882	3885	3889	rBB4	1690	1881	0.04%	0.005%
64	23.467	3905	3908	3909	rBB3	1988	1979	0.04%	0.006%
65	23.510	3910	3916	3918	rBB5	2732	2406	0.05%	0.007%
66	23.601	3926	3933	3943	rBB	268350	362090	7.97%	1.013%
67	23.697	3943	3951	3973	rBB	3307790	4545486	100.00%	12.721%
68	23.841	3977	3978	3986	rBB6	3965	5407	0.12%	0.015%
69	23.900	3986	3989	3992	rBB4	2457	2128	0.05%	0.006%
70	23.954	3997	3999	4002	rBB4	2067	2066	0.05%	0.006%
71	24.002	4006	4008	4013	rBB5	1682	2598	0.06%	0.007%
72	24.071	4019	4021	4028	rBB7	1953	2201	0.05%	0.006%
73	24.124	4028	4031	4037	rBB5	1654	1833	0.04%	0.005%
74	24.360	4070	4075	4080	rBB5	3998	4595	0.10%	0.013%
75	24.456	4090	4093	4095	rBB3	1726	1600	0.04%	0.004%
76	24.691	4134	4137	4142	rBB5	3441	4453	0.10%	0.012%
77	24.760	4143	4150	4159	rBB7	8893	18003	0.40%	0.050%
78	24.883	4169	4173	4176	rBB4	1971	1846	0.04%	0.005%
79	24.910	4176	4178	4180	rBB3	2620	1651	0.04%	0.005%
80	25.081	4205	4210	4212	rBB5	1959	1618	0.04%	0.005%
81	25.326	4252	4256	4259	rBB4	1728	1998	0.04%	0.006%
82	25.348	4259	4260	4263	rBB2	2020	1805	0.04%	0.005%
83	25.380	4265	4266	4270	rBB4	3017	2306	0.05%	0.006%
84	25.620	4307	4311	4316	rBB8	1617	2849	0.06%	0.008%
85	25.690	4320	4324	4330	rBB6	2581	4582	0.10%	0.013%
86	25.732	4330	4332	4335	rBB4	2259	2261	0.05%	0.006%
87	25.813	4343	4347	4349	rBB3	1851	1573	0.03%	0.004%
88	25.882	4357	4360	4364	rBB5	1649	1582	0.03%	0.004%
89	25.930	4367	4369	4378	rBB8	2598	6043	0.13%	0.017%
90	26.042	4385	4390	4393	rBB4	2488	2157	0.05%	0.006%
91	26.074	4393	4396	4404	rBB6	1979	3917	0.09%	0.011%
92	26.363	4444	4450	4455	rBB6	2226	3221	0.07%	0.009%
93	26.507	4473	4477	4479	rBB4	2050	2501	0.06%	0.007%
94	26.528	4479	4481	4484	rBB3	2093	1864	0.04%	0.005%
95	26.555	4484	4486	4492	rBB5	1681	2215	0.05%	0.006%

96	26.651	4501	4504	4508	rBB3	1387	1702	0.04%	0.005%
97	26.769	4523	4526	4528	rBB3	1890	1762	0.04%	0.005%
98	26.812	4528	4534	4538	rBB8	1292	2368	0.05%	0.007%
99	27.116	4589	4591	4596	rBB4	2114	2779	0.06%	0.008%
100	27.186	4599	4604	4612	rBB5	2597	4195	0.09%	0.012%

Sum of corrected areas: 35731213

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84731.D
Operator : larisap
Acquired : 30 Dec 2010 10:25 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-1
Misc Info : op47365,er3201,1000
Vial Number: 6
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84731.D Vial: 6
Acq On : 30 Dec 2010 10:25 am Operator: larisap
Sample : ja64438-1 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

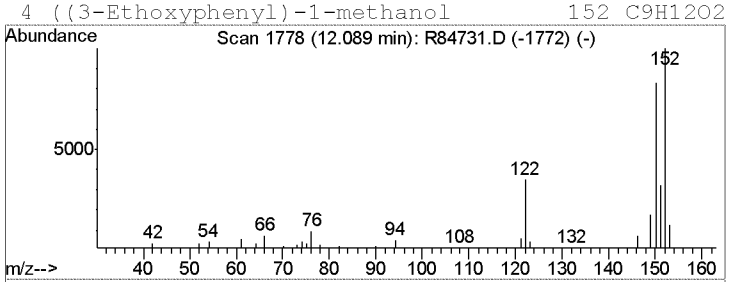
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

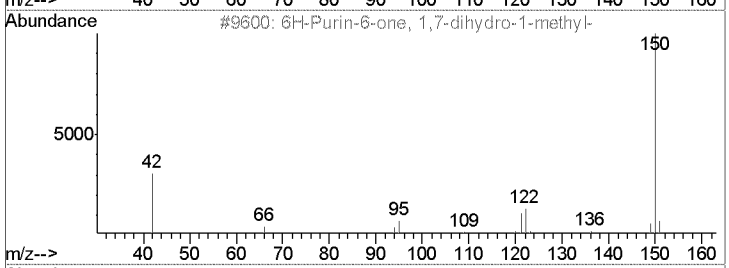
****

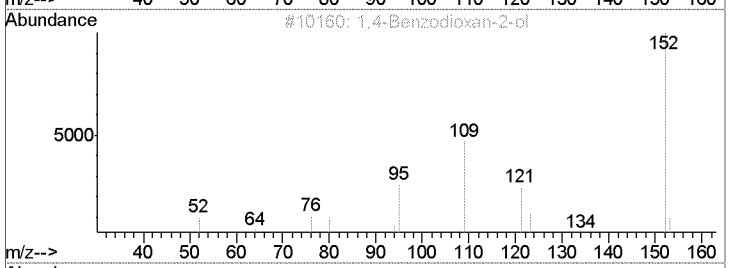
Peak Number 1 Internal standard added for... Concentration Rank 1

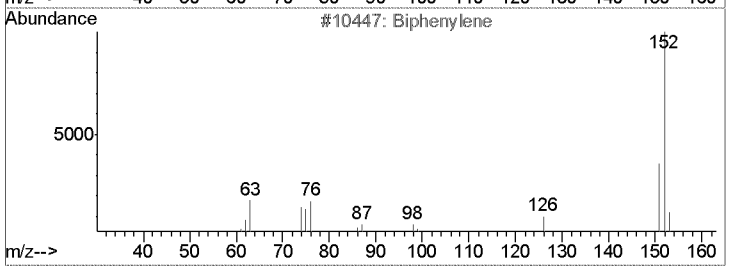
R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.04 ppb	361619	Naphthalene-d8	10.28

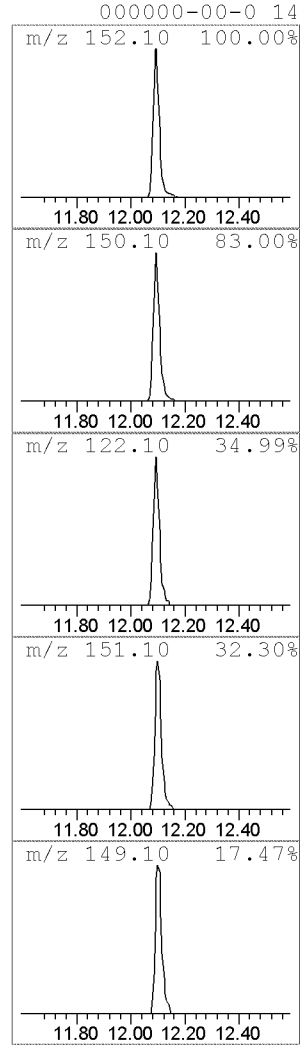
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6H-Purin-6-one, 1,7-dihydro-1-me...	150	C6H6N4O	001125-39-9	27
2	1,4-Benzodioxan-2-ol	152	C8H8O3	005770-59-2	25
3	Biphenylene	152	C12H8	000259-79-0	17
4	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14











8.1.2 8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 10:25 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84731.D
Name: ja64438-1
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.0	ppb	361619	3	10.28	3583850	40.0

8.1.2
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

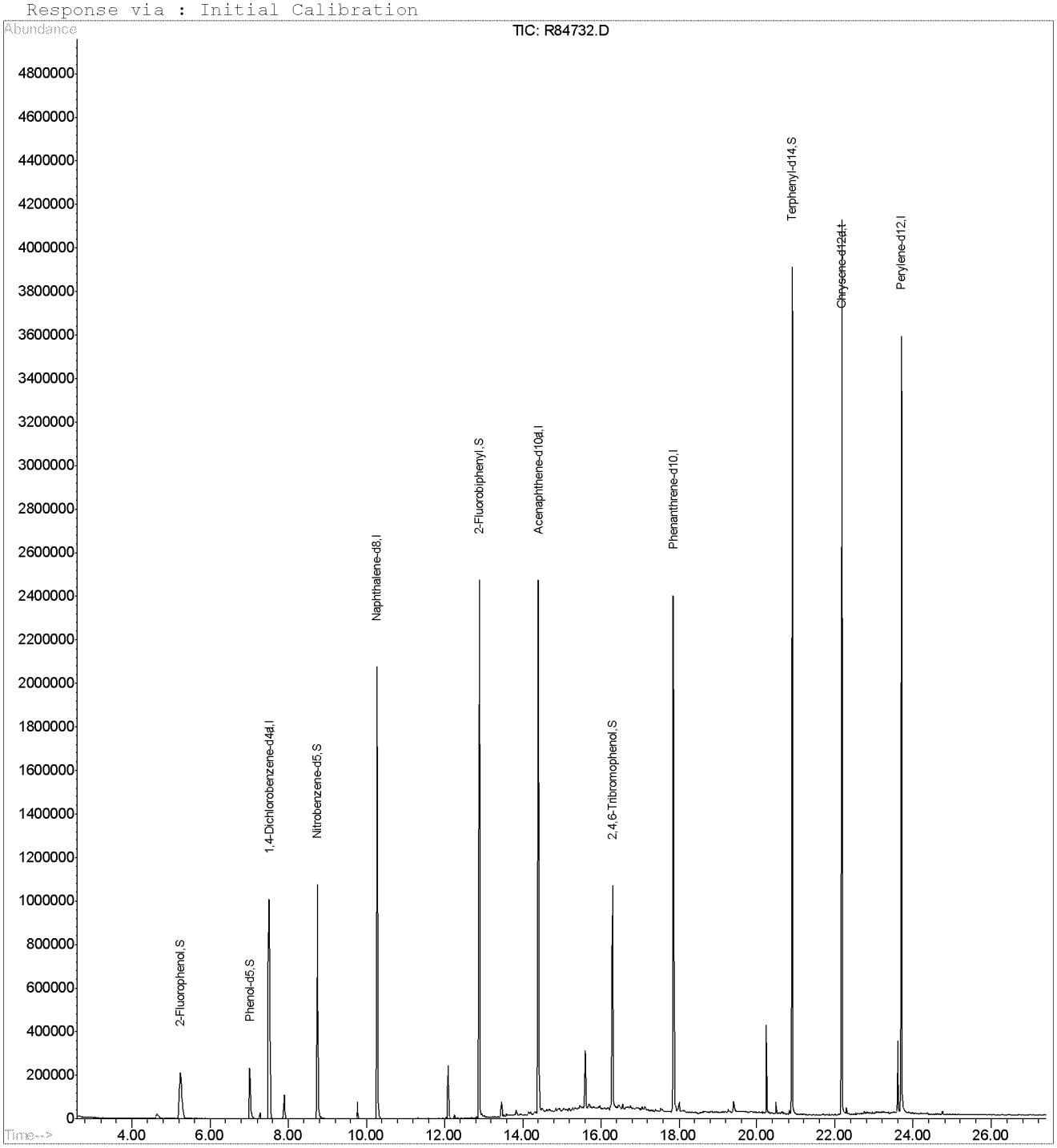
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	491414	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1675846	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	939816	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1518356	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1623258	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1614496	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	491414	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	939816	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1623258	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	5.24	112	326991	22.23	ppb	-0.06
Spiked Amount 50.000			Recovery = 44.46%			
8) Phenol-d5	7.01	99	239849	13.69	ppb	-0.06
Spiked Amount 50.000			Recovery = 27.38%			
25) Nitrobenzene-d5	8.75	82	703030	46.16	ppb	-0.12
Spiked Amount 50.000			Recovery = 92.32%			
51) 2-Fluorobiphenyl	12.89	172	1337831	40.44	ppb	-0.12
Spiked Amount 50.000			Recovery = 80.88%			
73) 2,4,6-Tribromophenol	16.30	330	206016	48.06	ppb	-0.12
Spiked Amount 50.000			Recovery = 96.12%			
86) Terphenyl-d14	20.90	244	1317459	43.06	ppb	-0.08
Spiked Amount 50.000			Recovery = 86.12%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84732.D MR3151.M Mon Jan 03 13:36:14 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.650	372	386	408	rBB2	22213	87372	1.75%	0.211%
2	5.238	486	496	522	rBB2	210996	941901	18.91%	2.274%
3	7.012	821	828	855	rBB	233145	570584	11.46%	1.377%
4	7.279	870	878	887	rBB	27510	53615	1.08%	0.129%
5	7.508	909	921	944	rBB	1007848	2749925	55.21%	6.639%
6	7.893	985	993	1007	rBB	110020	264730	5.31%	0.639%
7	8.748	1145	1153	1178	rBB	1075955	1994843	40.05%	4.816%
8	9.774	1338	1345	1351	rBB	76537	111393	2.24%	0.269%
9	10.276	1429	1439	1460	rBB	2077190	3475968	69.78%	8.392%
10	11.317	1630	1634	1640	rBB3	5577	6146	0.12%	0.015%
11	11.948	1748	1752	1763	rBB5	2955	6337	0.13%	0.015%
12	12.044	1764	1770	1773	rBB4	7646	10356	0.21%	0.025%
13	12.092	1773	1779	1792	rBB2	242197	403787	8.11%	0.975%
14	12.252	1802	1809	1818	rBB2	20183	30696	0.62%	0.074%
15	12.343	1818	1826	1831	rBB3	5637	11984	0.24%	0.029%
16	12.819	1906	1915	1920	rBB3	9161	16807	0.34%	0.041%
17	12.893	1920	1929	1938	rBB	2466698	3879699	77.89%	9.366%
18	12.963	1938	1942	1945	rBB	6381	5361	0.11%	0.013%
19	13.080	1958	1964	1973	rBB6	5494	8685	0.17%	0.021%
20	13.225	1987	1991	1997	rBB5	5075	7321	0.15%	0.018%
21	13.273	1997	2000	2006	rBB5	4228	7419	0.15%	0.018%
22	13.454	2026	2034	2041	rBB2	64759	118743	2.38%	0.287%
23	13.513	2041	2045	2050	rBB5	7674	10348	0.21%	0.025%
24	13.588	2052	2059	2063	rBB4	8001	12281	0.25%	0.030%
25	13.689	2074	2078	2086	rBB10	5629	10814	0.22%	0.026%
26	13.834	2086	2105	2118	rBB9	23299	75857	1.52%	0.183%
27	13.962	2119	2129	2133	rBB8	9837	21995	0.44%	0.053%
28	14.149	2156	2164	2169	rBB8	11298	22401	0.45%	0.054%
29	14.208	2169	2175	2181	rBB8	12300	18009	0.36%	0.043%
30	14.304	2188	2193	2202	rBB10	9180	20909	0.42%	0.050%
31	14.400	2202	2211	2223	rBB	2443037	3942571	79.15%	9.518%
32	14.496	2225	2229	2238	rBB	8225	16386	0.33%	0.040%
33	14.843	2287	2294	2301	rBB8	14856	30129	0.60%	0.073%
34	14.913	2301	2307	2310	rBB7	3359	7826	0.16%	0.019%
35	14.945	2310	2313	2320	rBB8	6103	9061	0.18%	0.022%
36	15.057	2320	2334	2345	rBB8	8245	32340	0.65%	0.078%
37	15.132	2345	2348	2353	rBB6	4736	5435	0.11%	0.013%
38	15.201	2353	2361	2367	rBB6	10146	29375	0.59%	0.071%

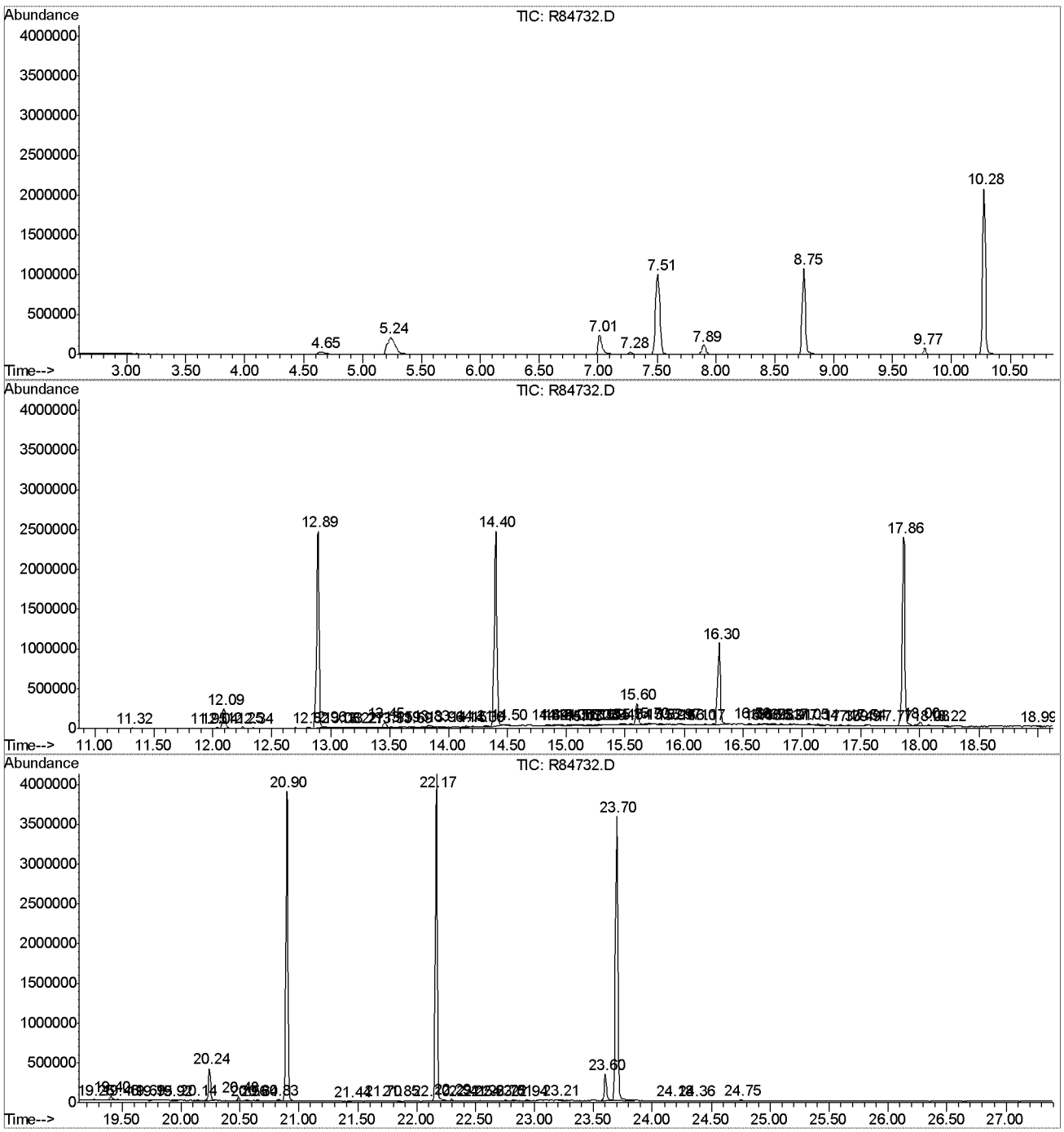
39	15.276	2367	2375	2380	rBB7	11945	24775	0.50%	0.060%
40	15.329	2380	2385	2389	rBB7	6230	10419	0.21%	0.025%
41	15.415	2396	2401	2404	rBB7	3995	6172	0.12%	0.015%
42	15.468	2405	2411	2421	rBB7	10904	21748	0.44%	0.053%
43	15.543	2421	2425	2429	rBB7	7622	9311	0.19%	0.022%
44	15.596	2429	2435	2445	rBB	262870	418995	8.41%	1.012%
45	15.698	2445	2454	2460	rBB2	17869	35025	0.70%	0.085%
46	15.816	2468	2476	2478	rBB9	6000	10013	0.20%	0.024%
47	15.906	2490	2493	2498	rBB6	6013	6309	0.13%	0.015%
48	15.970	2502	2505	2514	rBB6	8978	11509	0.23%	0.028%
49	16.099	2523	2529	2534	rBB9	6203	10954	0.22%	0.026%
50	16.173	2538	2543	2551	rBB10	9130	19374	0.39%	0.047%
51	16.296	2553	2566	2581	rBB	1026000	1719643	34.52%	4.152%
52	16.558	2609	2615	2620	rBB3	22784	33296	0.67%	0.080%
53	16.649	2627	2632	2634	rBB6	3484	8089	0.16%	0.020%
54	16.692	2636	2640	2647	rBB8	7274	12468	0.25%	0.030%
55	16.750	2647	2651	2661	rBB10	14117	30798	0.62%	0.074%
56	16.831	2661	2666	2669	rBB6	9866	12727	0.26%	0.031%
57	16.911	2676	2681	2682	rBB5	4789	8914	0.18%	0.022%
58	17.055	2702	2708	2714	rBB6	15414	25752	0.52%	0.062%
59	17.135	2718	2723	2732	rBB9	13515	21678	0.44%	0.052%
60	17.327	2754	2759	2765	rBB8	7357	15403	0.31%	0.037%
61	17.391	2766	2771	2775	rBB7	7845	12747	0.26%	0.031%
62	17.493	2786	2790	2793	rBB6	4125	5951	0.12%	0.014%
63	17.541	2795	2799	2802	rBB5	10756	12317	0.25%	0.030%
64	17.765	2837	2841	2846	rBB7	5071	9031	0.18%	0.022%
65	17.862	2848	2859	2875	rBB2	2372651	4157113	83.46%	10.036%
66	18.000	2875	2885	2891	rBB5	42578	92763	1.86%	0.224%
67	18.075	2897	2899	2904	rBB6	5787	7220	0.14%	0.017%
68	18.225	2923	2927	2931	rBB7	5247	5392	0.11%	0.013%
69	18.994	3069	3071	3080	rBB9	4005	7787	0.16%	0.019%
70	19.261	3113	3121	3126	rBB8	12451	23558	0.47%	0.057%
71	19.400	3141	3147	3156	rBB6	50425	77884	1.56%	0.188%
72	19.464	3156	3159	3161	rBB2	7165	6490	0.13%	0.016%
73	19.689	3195	3201	3203	rBB7	5761	7049	0.14%	0.017%
74	19.747	3207	3212	3214	rBB4	4315	5467	0.11%	0.013%
75	19.924	3242	3245	3254	rBB10	6102	13775	0.28%	0.033%
76	20.137	3278	3285	3289	rBB8	7194	13172	0.26%	0.032%
77	20.239	3295	3304	3314	rBB	405469	485935	9.76%	1.173%
78	20.485	3346	3350	3355	rBB2	52998	53269	1.07%	0.129%
79	20.565	3362	3365	3371	rBB7	4039	6663	0.13%	0.016%
80	20.645	3377	3380	3387	rBB6	7369	10674	0.21%	0.026%
81	20.826	3409	3414	3419	rBB3	17265	26346	0.53%	0.064%
82	20.896	3420	3427	3443	rBB	3888614	4571116	91.77%	11.036%
83	21.435	3523	3528	3531	rBB7	3220	5599	0.11%	0.014%
84	21.703	3575	3578	3583	rBB5	6558	5666	0.11%	0.014%
85	21.852	3603	3606	3609	rBB3	7427	5411	0.11%	0.013%
86	22.103	3646	3653	3656	rBB7	6005	11592	0.23%	0.028%
87	22.167	3657	3665	3683	rBB	4109749	4735361	95.07%	11.432%
88	22.290	3684	3688	3695	rBB	29094	30956	0.62%	0.075%
89	22.413	3706	3711	3719	rBB	4317	7973	0.16%	0.019%
90	22.536	3731	3734	3737	rBB4	6941	6500	0.13%	0.016%
91	22.632	3749	3752	3755	rBB4	4737	5490	0.11%	0.013%
92	22.750	3770	3774	3778	rBB4	10240	10998	0.22%	0.027%
93	22.814	3783	3786	3790	rBB5	8171	9165	0.18%	0.022%
94	22.942	3806	3810	3814	rBB7	6080	9672	0.19%	0.023%
95	23.209	3858	3860	3867	rBB7	4462	7020	0.14%	0.017%

96	23.599	3925	3933	3942	rBB	330541	427758	8.59%	1.033%
97	23.695	3942	3951	3979	rBB	3566270	4981066	100.00%	12.025%
98	24.176	4036	4041	4043	rBB4	4193	6552	0.13%	0.016%
99	24.358	4070	4075	4080	rBB6	5729	8965	0.18%	0.022%
100	24.753	4141	4149	4157	rBB5	15644	31656	0.64%	0.076%

Sum of corrected areas: 41421900

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84732.D
Operator : larisap
Acquired : 30 Dec 2010 11:07 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-2
Misc Info : op47365,er3201,1000
Vial Number: 7
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

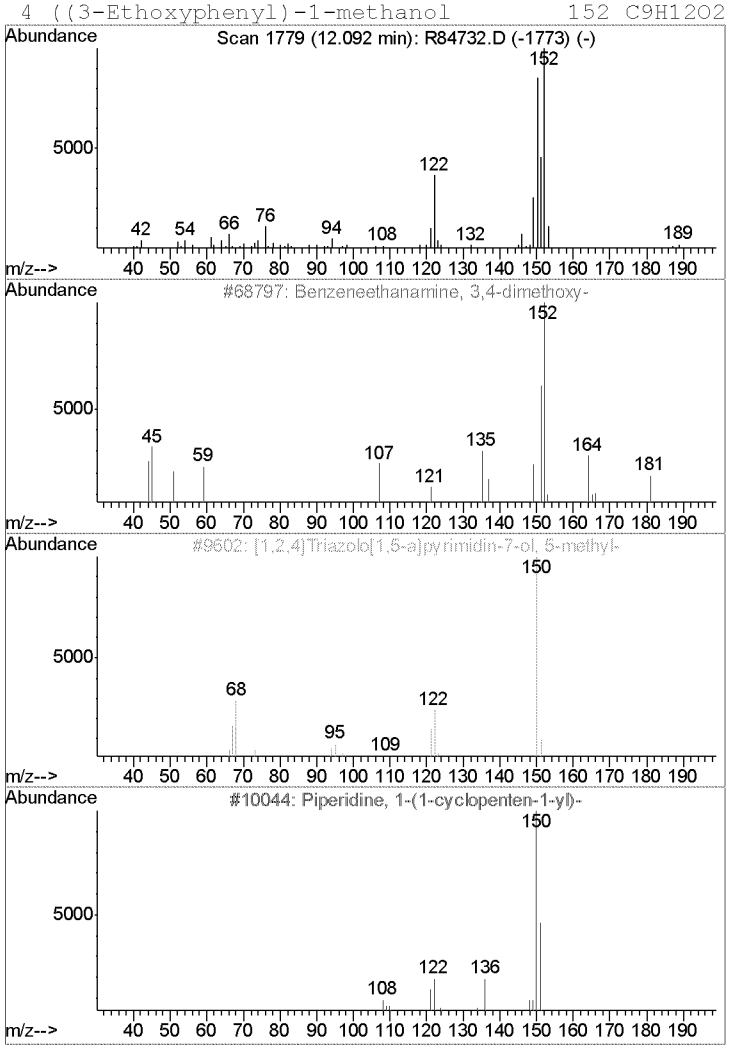
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

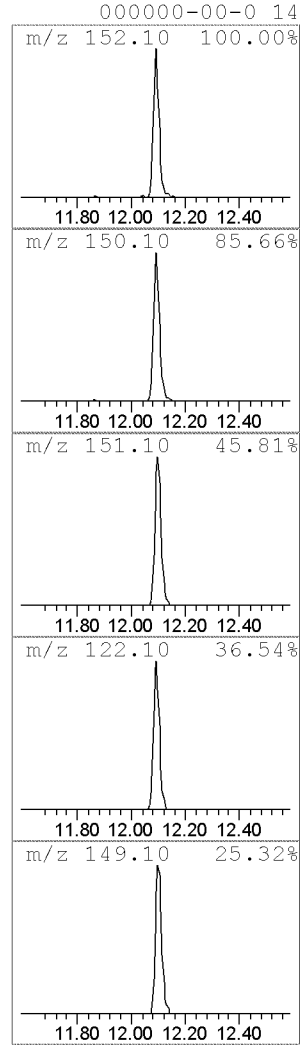
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.65 ppb	403787	Naphthalene-d8	10.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzeneethanamine, 3,4-dimethoxy-	181	C10H15NO2	000120-20-7	37
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	Piperidine, 1-(1-cyclopenten-1-yl)-	151	C10H17N	001614-92-2	25
4	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

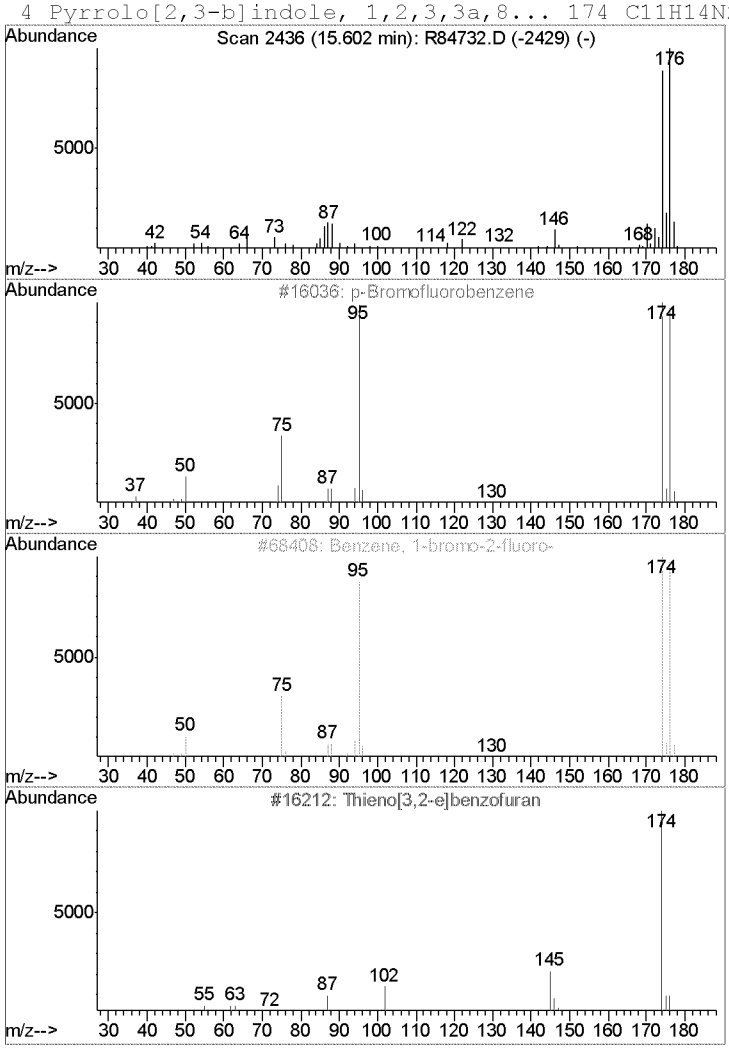
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

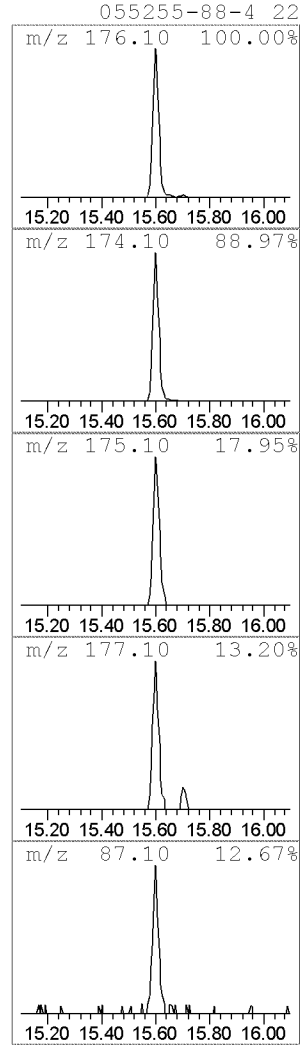
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.60	4.25 ppb	418995	Acenaphthene-d10a	14.40

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	39
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	38
3	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	35
4	Pyrrolo[2,3-b]indole, 1,2,3,3a,8...	174	C11H14N2	055255-88-4	22





8.1.4
8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84732.D Vial: 7
Acq On : 30 Dec 2010 11:07 am Operator: larisap
Sample : ja64438-2 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

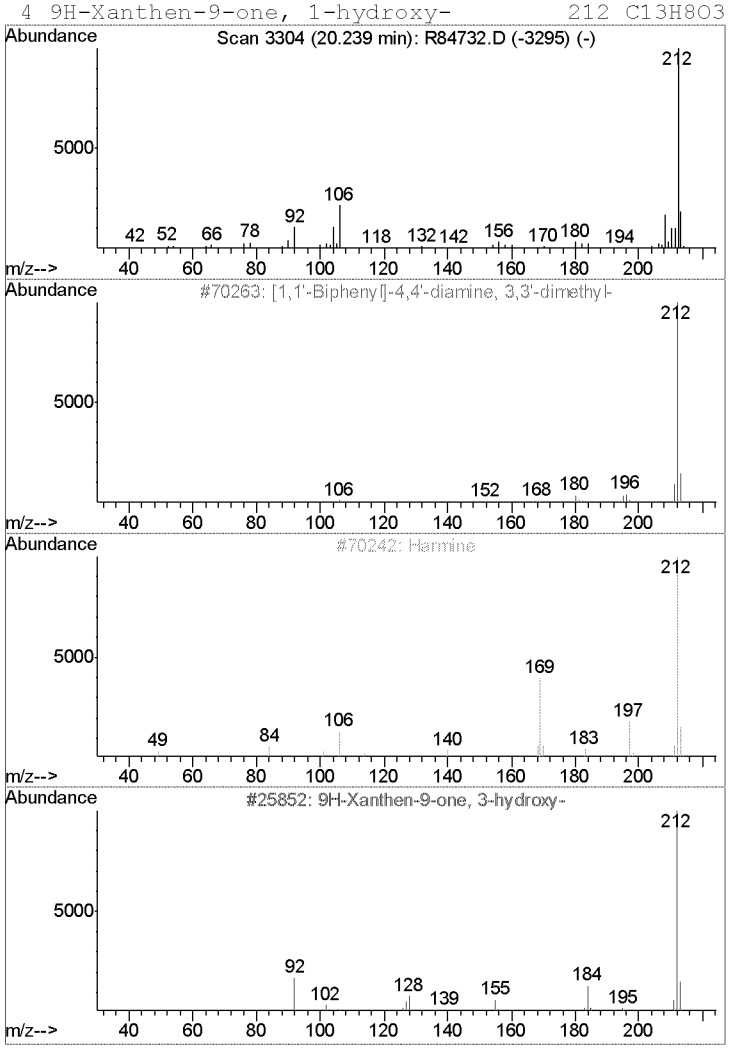
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

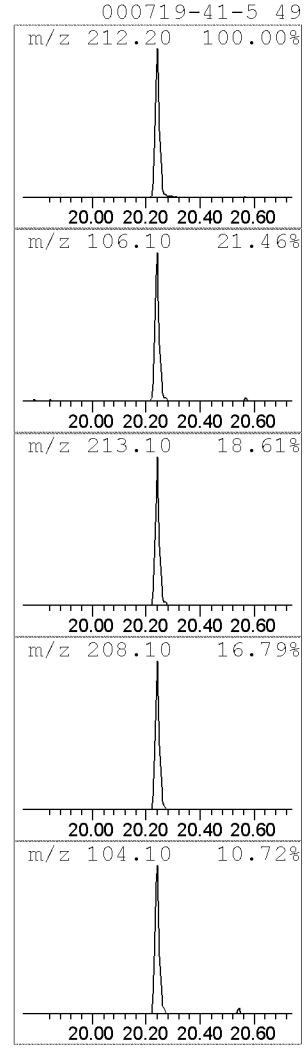
****

Peak Number 3 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.24	4.10 ppb	485935	Chrysene-d12	22.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	Harmine	212	C13H12N2O	000442-51-3	50
3	9H-Xanthen-9-one, 3-hydroxy-	212	C13H8O3	003722-51-8	50
4	9H-Xanthen-9-one, 1-hydroxy-	212	C13H8O3	000719-41-5	49





8.1.4 8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 11:07 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84732.D
Name: ja64438-2
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.7	ppb	403787	3	10.28	3475970	40.0
Internal standard...	15.60	4.3	ppb	418995	5	14.40	3942570	40.0
Internal standard...	20.24	4.1	ppb	485935	7	22.17	4735360	40.0

8.1.4
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

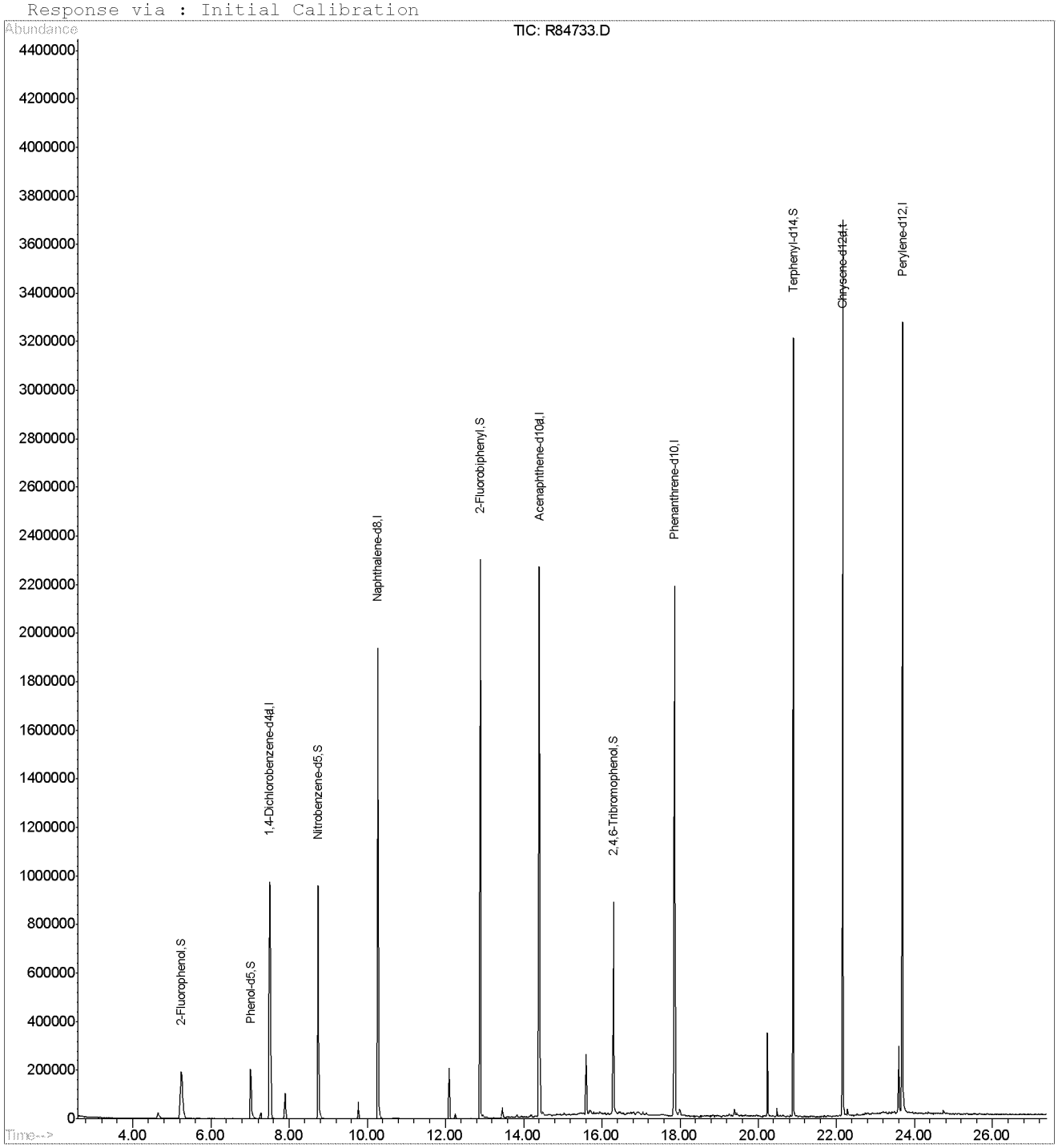
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	454197	40.00	ppb	-0.11
24) Naphthalene-d8	10.27	136	1576957	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	883282	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1397085	40.00	ppb	-0.13
83) Chrysene-d12	22.16	240	1413708	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1420311	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	454197	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	883282	40.00	ppb	-0.11
107) Chrysene-d12a	22.16	240	1413708	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	5.24	112	277958	20.44	ppb	-0.06
Spiked Amount 50.000			Recovery =	40.88%		
8) Phenol-d5	7.01	99	208313	12.86	ppb	-0.06
Spiked Amount 50.000			Recovery =	25.72%		
25) Nitrobenzene-d5	8.74	82	616395	43.01	ppb	-0.12
Spiked Amount 50.000			Recovery =	86.02%		
51) 2-Fluorobiphenyl	12.89	172	1195056	38.43	ppb	-0.12
Spiked Amount 50.000			Recovery =	76.86%		
73) 2,4,6-Tribromophenol	16.29	330	170085	43.12	ppb	-0.12
Spiked Amount 50.000			Recovery =	86.24%		
86) Terphenyl-d14	20.90	244	1089439	40.89	ppb	-0.08
Spiked Amount 50.000			Recovery =	81.78%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84733.D MR3151.M Mon Jan 03 13:36:59 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:36 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.653	375	386	410	rBB	21455	80437	1.85%	0.222%
2	5.241	485	496	530	rBB2	193011	814045	18.75%	2.246%
3	7.014	821	828	855	rBB	203852	488169	11.24%	1.347%
4	7.281	868	878	890	rBB3	26589	56232	1.30%	0.155%
5	7.506	909	920	947	rBB	974571	2533512	58.36%	6.991%
6	7.896	985	993	1007	rBB	105932	238004	5.48%	0.657%
7	8.745	1143	1152	1182	rBB	962852	1737700	40.03%	4.795%
8	9.771	1336	1344	1351	rBB	70279	100502	2.31%	0.277%
9	10.273	1428	1438	1465	rBB	1940769	3250094	74.86%	8.968%
10	10.668	1508	1512	1524	rBB2	4230	12088	0.28%	0.033%
11	12.041	1765	1769	1772	rBB	3423	4044	0.09%	0.011%
12	12.089	1772	1778	1792	rBB2	208588	352509	8.12%	0.973%
13	12.255	1799	1809	1816	rBB	21965	31355	0.72%	0.087%
14	12.816	1905	1914	1917	rBB2	4393	6528	0.15%	0.018%
15	12.890	1920	1928	1938	rBB	2297658	3437802	79.19%	9.486%
16	12.955	1938	1940	1945	rBB3	6564	7330	0.17%	0.020%
17	13.232	1983	1992	1997	rBB4	5718	11017	0.25%	0.030%
18	13.270	1997	1999	2005	rBB3	3479	4899	0.11%	0.014%
19	13.457	2024	2034	2041	rBB2	43404	72481	1.67%	0.200%
20	13.515	2041	2045	2049	rBB6	3374	4077	0.09%	0.011%
21	13.585	2052	2058	2061	rBB4	3013	5141	0.12%	0.014%
22	13.681	2069	2076	2086	rBB9	4091	10477	0.24%	0.029%
23	13.836	2097	2105	2116	rBB6	10904	25164	0.58%	0.069%
24	14.135	2156	2161	2166	rBB5	3290	5738	0.13%	0.016%
25	14.199	2169	2173	2179	rBB4	7231	9071	0.21%	0.025%
26	14.285	2186	2189	2195	rBB4	3200	5927	0.14%	0.016%
27	14.397	2201	2210	2221	rBB	2260282	3691931	85.04%	10.187%
28	14.493	2224	2228	2236	rBB10	9836	16718	0.39%	0.046%
29	14.691	2262	2265	2273	rBB6	4093	5902	0.14%	0.016%
30	14.840	2285	2293	2299	rBB7	6205	14010	0.32%	0.039%
31	14.936	2299	2311	2314	rBB8	5482	12508	0.29%	0.035%
32	15.054	2331	2333	2339	rBB6	2607	4297	0.10%	0.012%
33	15.268	2366	2373	2378	rBB7	5832	8176	0.19%	0.023%
34	15.316	2378	2382	2387	rBB8	3175	5132	0.12%	0.014%
35	15.449	2401	2407	2408	rBB7	2365	4049	0.09%	0.011%
36	15.471	2408	2411	2418	rBB6	4819	6681	0.15%	0.018%
37	15.529	2418	2422	2428	rBB7	5549	10482	0.24%	0.029%
38	15.599	2429	2435	2443	rBB	245871	382031	8.80%	1.054%

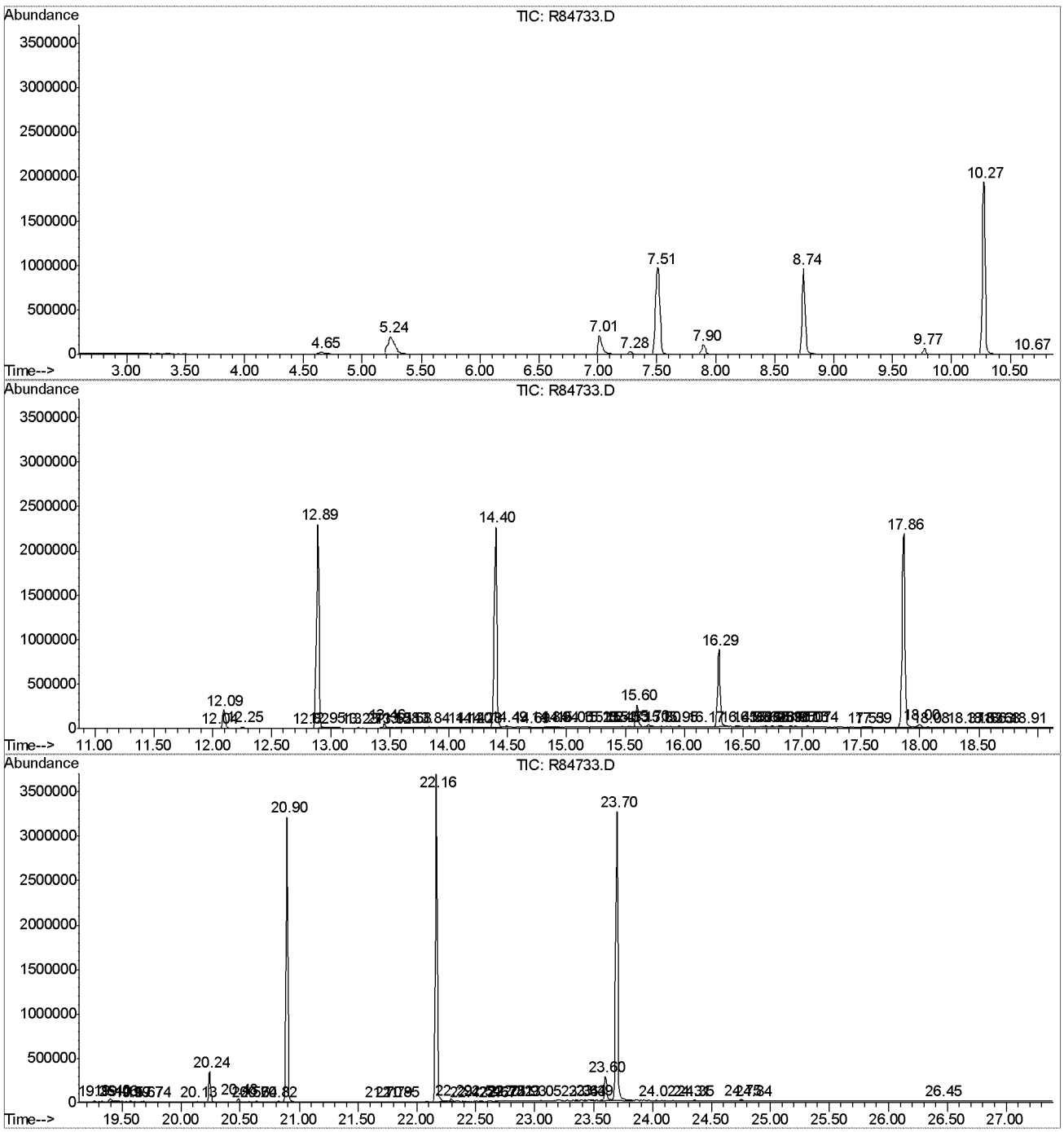
39	15.700	2444	2454	2464	rBB3	14790	35680	0.82%	0.098%
40	15.802	2471	2473	2477	rBB4	5322	4635	0.11%	0.013%
41	15.946	2496	2500	2507	rBB8	5531	9744	0.22%	0.027%
42	16.165	2537	2541	2545	rBB7	5667	9936	0.23%	0.027%
43	16.293	2551	2565	2579	rBB	871284	1422439	32.76%	3.925%
44	16.454	2590	2595	2599	rBB6	5833	9810	0.23%	0.027%
45	16.550	2608	2613	2620	rBB5	6310	11991	0.28%	0.033%
46	16.689	2633	2639	2643	rBB8	2916	4842	0.11%	0.013%
47	16.747	2645	2650	2654	rBB8	6542	6859	0.16%	0.019%
48	16.828	2659	2665	2671	rBB9	7981	14973	0.34%	0.041%
49	16.897	2672	2678	2684	rBB6	7259	14562	0.34%	0.040%
50	16.945	2684	2687	2693	rBB6	4952	7572	0.17%	0.021%
51	17.047	2701	2706	2710	rBB7	8254	12928	0.30%	0.036%
52	17.073	2710	2711	2717	rBB5	3790	4711	0.11%	0.013%
53	17.137	2719	2723	2730	rBB6	6124	9970	0.23%	0.028%
54	17.527	2789	2796	2799	rBB6	3473	5146	0.12%	0.014%
55	17.586	2799	2807	2811	rBB2	4881	9181	0.21%	0.025%
56	17.864	2848	2859	2872	rBB2	2182399	3789320	87.28%	10.456%
57	17.998	2874	2884	2894	rBB9	25512	59398	1.37%	0.164%
58	18.078	2894	2899	2902	rBB6	4187	5720	0.13%	0.016%
59	18.371	2950	2954	2958	rBB6	4978	6772	0.16%	0.019%
60	18.532	2977	2984	2986	rBB6	4207	4751	0.11%	0.013%
61	18.628	2996	3002	3005	rBB5	2866	4762	0.11%	0.013%
62	18.676	3007	3011	3014	rBB2	2991	4152	0.10%	0.011%
63	18.906	3051	3054	3059	rBB6	4956	6445	0.15%	0.018%
64	19.264	3116	3121	3127	rBB9	10271	15150	0.35%	0.042%
65	19.397	3139	3146	3153	rBB4	24476	40034	0.92%	0.110%
66	19.461	3153	3158	3163	rBB	10083	11571	0.27%	0.032%
67	19.573	3174	3179	3182	rBB4	5176	6664	0.15%	0.018%
68	19.675	3195	3198	3201	rBB4	4344	4786	0.11%	0.013%
69	19.739	3206	3210	3213	rBB6	3442	4188	0.10%	0.012%
70	20.134	3280	3284	3287	rBB5	5583	5354	0.12%	0.015%
71	20.241	3299	3304	3313	rBB	343189	411661	9.48%	1.136%
72	20.482	3344	3349	3355	rBB3	33440	37607	0.87%	0.104%
73	20.572	3356	3366	3368	rBB7	4669	6450	0.15%	0.018%
74	20.637	3376	3378	3386	rBB4	3695	4870	0.11%	0.013%
75	20.818	3408	3412	3417	rBB4	7702	10767	0.25%	0.030%
76	20.898	3417	3427	3443	rBB	3206628	3747898	86.33%	10.342%
77	21.700	3574	3577	3584	rBB5	4185	7373	0.17%	0.020%
78	21.790	3588	3594	3598	rBB7	5045	7811	0.18%	0.022%
79	21.849	3598	3605	3607	rBB5	2449	4412	0.10%	0.012%
80	22.164	3655	3664	3682	rBB	3690861	4126331	95.05%	11.386%
81	22.293	3683	3688	3693	rBB	22854	27635	0.64%	0.076%
82	22.415	3707	3711	3714	rBB6	3404	5526	0.13%	0.015%
83	22.538	3731	3734	3739	rBB6	7024	7031	0.16%	0.019%
84	22.672	3755	3759	3762	rBB6	3239	4365	0.10%	0.012%
85	22.731	3762	3770	3771	rBB6	2793	6909	0.16%	0.019%
86	22.747	3771	3773	3776	rBB4	6587	6372	0.15%	0.018%
87	22.811	3782	3785	3789	rBB5	3797	4717	0.11%	0.013%
88	22.928	3805	3807	3814	rBB6	3821	4791	0.11%	0.013%
89	23.051	3822	3830	3832	rBB6	4536	5077	0.12%	0.014%
90	23.361	3884	3888	3890	rBB5	3003	4226	0.10%	0.012%
91	23.430	3898	3901	3903	rBB4	4753	4799	0.11%	0.013%
92	23.489	3908	3912	3917	rBB5	6154	7457	0.17%	0.021%
93	23.596	3923	3932	3943	rBB	271038	360432	8.30%	0.995%
94	23.698	3943	3951	3976	rBB	3252486	4341362	100.00%	11.979%
95	24.023	4007	4012	4016	rBB7	4396	6357	0.15%	0.018%

96	24.312	4061	4066	4068	rBB6	2797	4251	0.10%	0.012%
97	24.355	4068	4074	4077	rBB5	6804	8263	0.19%	0.023%
98	24.750	4142	4148	4160	rBB5	14868	26763	0.62%	0.074%
99	24.841	4161	4165	4169	rBB7	3109	4278	0.10%	0.012%
100	26.454	4465	4467	4471	rBB4	3400	4546	0.10%	0.013%

Sum of corrected areas: 36240643

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84733.D
Operator : larisap
Acquired : 30 Dec 2010 11:40 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-3
Misc Info : op47365,er3201,1000
Vial Number: 8
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

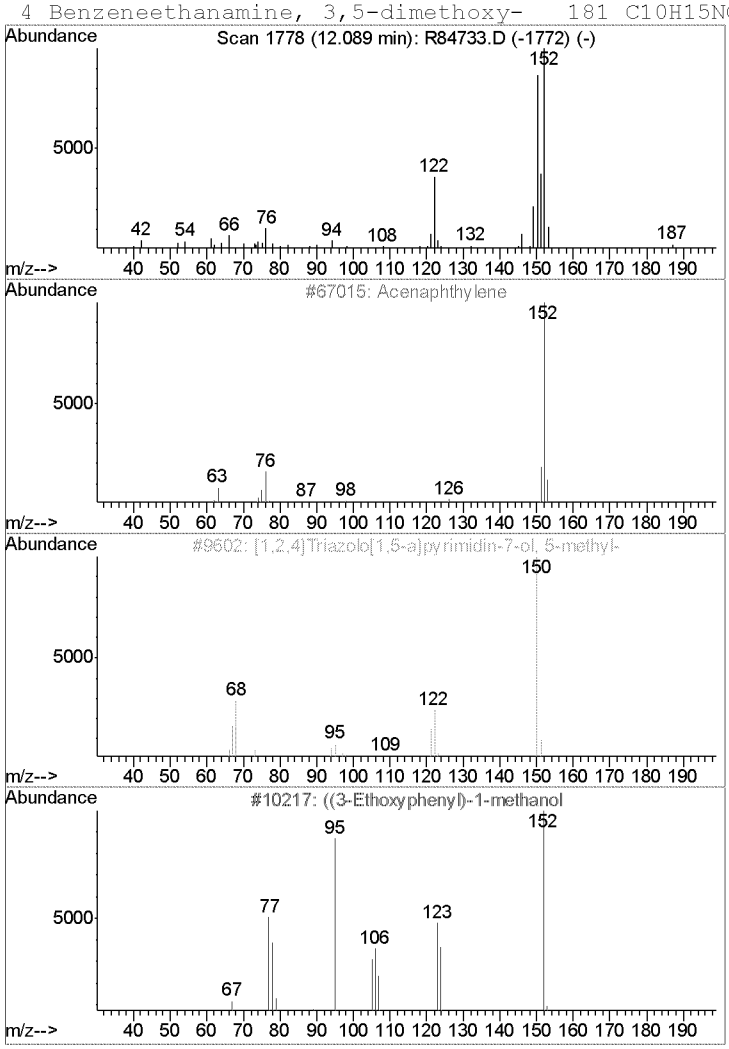
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

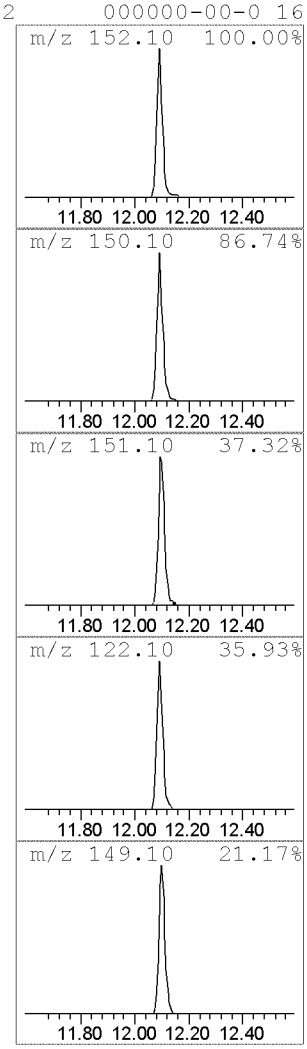
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.34 ppb	352509	Naphthalene-d8	10.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acenaphthylene	152	C12H8	000208-96-8	38
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	30
3	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	22
4	Benzeneethanamine, 3,5-dimethoxy-	181	C10H15NO2	000000-00-0	16





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84733.D Vial: 8
Acq On : 30 Dec 2010 11:40 am Operator: larisap
Sample : ja64438-3 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

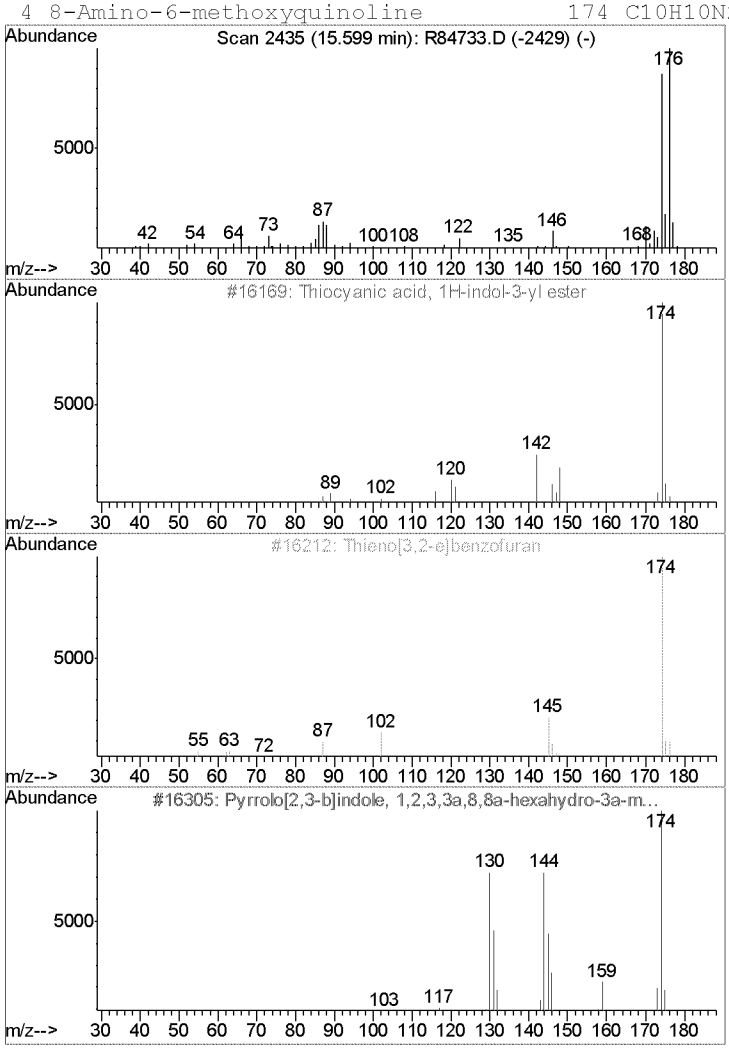
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

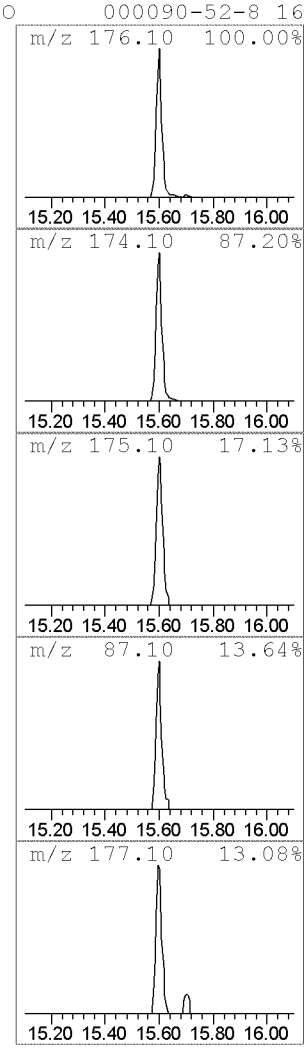
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.60	4.14 ppb	382031	Acenaphthene-d10a	14.40

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	35
2	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	35
3	Pyrrolo[2,3-b]indole, 1,2,3,3a,8...	174	C11H14N2	055255-88-4	27
4	8-Amino-6-methoxyquinoline	174	C10H10N2O	000090-52-8	16





8.1.16
8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 11:40 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84733.D
Name: ja64438-3
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.3	ppb	352509	3	10.27	3250090	40.0
Internal standard...	15.60	4.1	ppb	382031	5	14.40	3691930	40.0

8.1.6
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:33 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	545593	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1849408	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	1071636	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1680015	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1706545	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1649740	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	7.51	152	545593	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	1071636	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1706545	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.75	82	778788	46.34	ppb	-0.12
Spiked Amount 50.000			Recovery =	92.68%		
51) 2-Fluorobiphenyl	12.89	172	1529207	40.54	ppb	-0.12
Spiked Amount 50.000			Recovery =	81.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1397820	43.46	ppb	-0.07
Spiked Amount 50.000			Recovery =	86.92%		

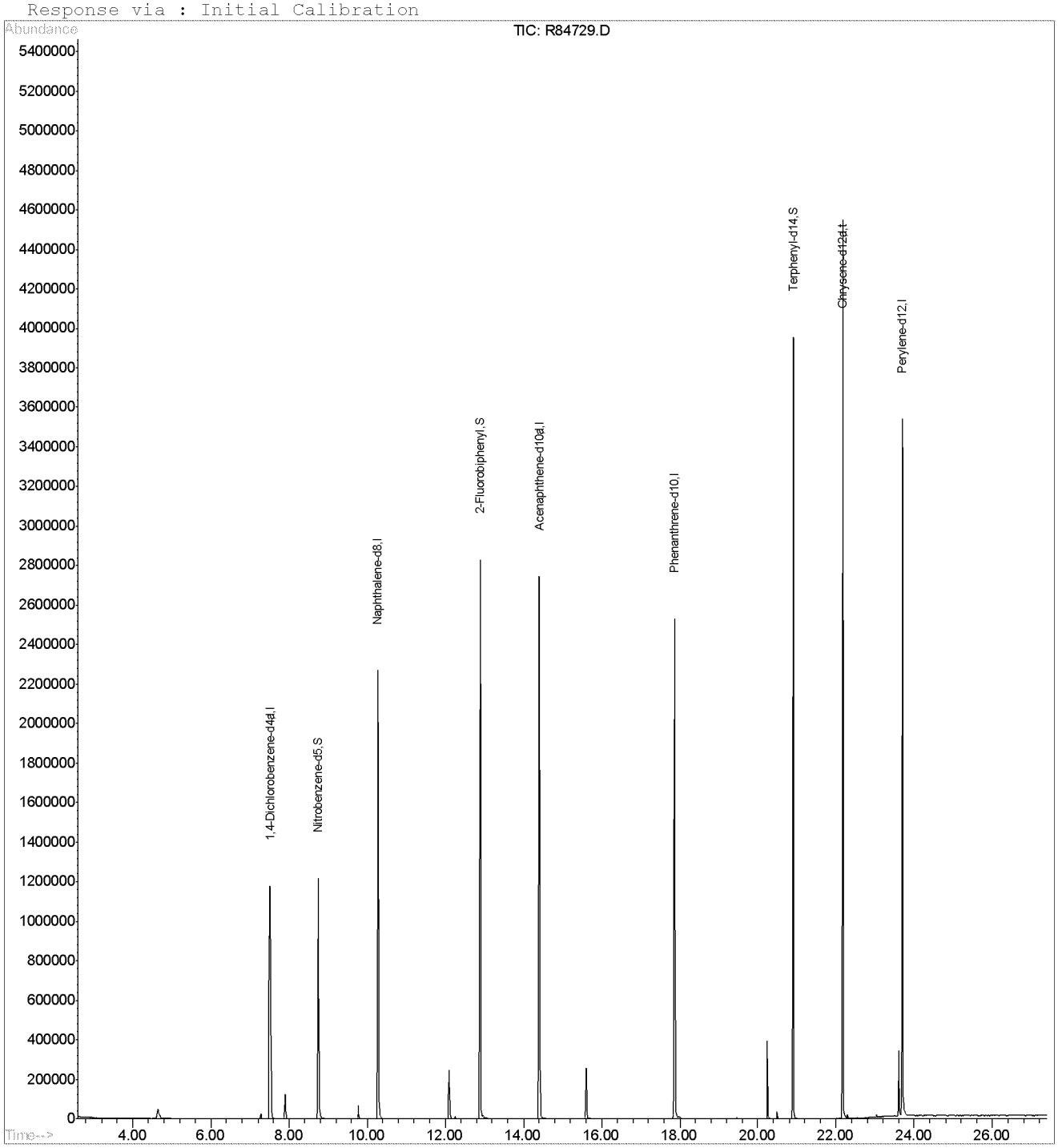
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:33 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.636	5	9	12	rBB5	1604	1882	0.04%	0.005%
2	3.411	148	154	161	rBB3	993	2716	0.05%	0.007%
3	3.790	220	225	227	rBB3	875	1382	0.03%	0.003%
4	4.506	354	359	363	rBB3	808	1720	0.03%	0.004%
5	4.640	376	384	408	rBB2	47773	174880	3.50%	0.441%
6	6.809	785	790	794	rBB	1024	1670	0.03%	0.004%
7	7.001	822	826	832	rBB	690	1537	0.03%	0.004%
8	7.279	871	878	886	rBB	26315	48983	0.98%	0.124%
9	7.396	894	900	902	rBB2	739	1727	0.03%	0.004%
10	7.508	910	921	945	rBB	1177048	3025225	60.60%	7.633%
11	7.722	957	961	964	rBB	1299	1628	0.03%	0.004%
12	7.898	983	994	1009	rBB	127616	299396	6.00%	0.755%
13	8.748	1145	1153	1184	rBB	1218336	2184961	43.77%	5.513%
14	9.768	1338	1344	1351	rBB	69362	95261	1.91%	0.240%
15	10.276	1431	1439	1474	rBB	2270860	3833682	76.79%	9.673%
16	12.092	1772	1779	1794	rBB2	247578	416492	8.34%	1.051%
17	12.252	1802	1809	1815	rBB2	15099	21564	0.43%	0.054%
18	12.893	1921	1929	1938	rBB	2822983	4343307	87.00%	10.959%
19	12.963	1938	1942	1947	rBB3	8644	8579	0.17%	0.022%
20	13.027	1949	1954	1960	rBB2	3879	4728	0.09%	0.012%
21	13.075	1960	1963	1969	rBB2	2185	2135	0.04%	0.005%
22	13.246	1987	1995	2003	rBB3	2356	4631	0.09%	0.012%
23	14.400	2202	2211	2237	rBB	2744766	4454891	89.23%	11.241%
24	14.662	2255	2260	2262	rBB2	1169	1392	0.03%	0.004%
25	15.602	2429	2436	2450	rBB	257179	424087	8.49%	1.070%
26	15.698	2450	2454	2461	rBB4	2076	3599	0.07%	0.009%
27	16.830	2660	2666	2670	rBB	3826	4553	0.09%	0.011%
28	16.895	2673	2678	2685	rBB2	3728	5832	0.12%	0.015%
29	17.578	2799	2806	2813	rBB	4991	7347	0.15%	0.019%
30	17.867	2850	2860	2876	rBB2	2526317	4475922	89.66%	11.294%
31	17.974	2876	2880	2884	rBB2	5881	7149	0.14%	0.018%
32	18.246	2928	2931	2936	rBB2	2017	2384	0.05%	0.006%
33	18.673	3006	3011	3017	rBB	2213	3389	0.07%	0.009%
34	19.464	3153	3159	3163	rBB	8857	10062	0.20%	0.025%
35	20.239	3298	3304	3326	rBB	396505	462707	9.27%	1.168%
36	20.484	3344	3350	3356	rBB2	36857	36812	0.74%	0.093%
37	20.575	3362	3367	3370	rBB2	2026	1557	0.03%	0.004%
38	20.901	3417	3428	3459	rBB	3957272	4767189	95.49%	12.029%

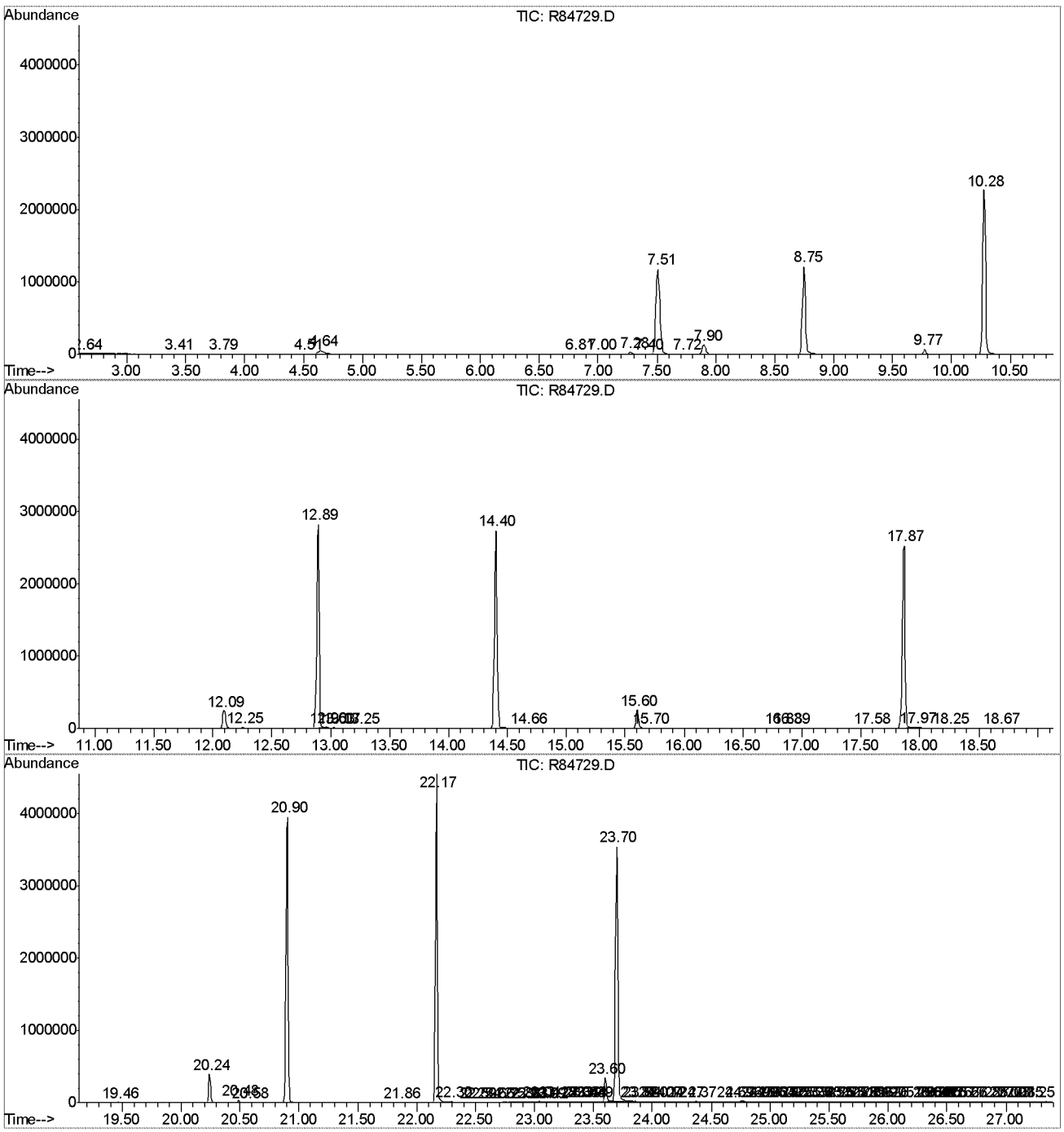
39	21.857	3603	3607	3610	rBB2	1796	1774	0.04%	0.004%
40	22.167	3656	3665	3685	rBB	4548898	4896395	98.08%	12.355%
41	22.295	3685	3689	3696	rBB	15281	16128	0.32%	0.041%
42	22.504	3723	3728	3730	rBB2	1363	1496	0.03%	0.004%
43	22.541	3730	3735	3737	rBB2	3794	3617	0.07%	0.009%
44	22.659	3754	3757	3765	rBB2	1574	2739	0.05%	0.007%
45	22.750	3765	3774	3779	rBB3	5111	6261	0.13%	0.016%
46	22.883	3790	3799	3800	rBB3	2168	2056	0.04%	0.005%
47	22.931	3806	3808	3812	rBB3	2072	1873	0.04%	0.005%
48	23.043	3825	3829	3834	rBB3	11833	12762	0.26%	0.032%
49	23.091	3834	3838	3841	rBB4	2297	2873	0.06%	0.007%
50	23.118	3841	3843	3846	rBB3	1904	1698	0.03%	0.004%
51	23.182	3849	3855	3859	rBB5	2892	3070	0.06%	0.008%
52	23.364	3885	3889	3891	rBB4	1728	1919	0.04%	0.005%
53	23.391	3891	3894	3898	rBB4	2569	3478	0.07%	0.009%
54	23.428	3898	3901	3902	rBB3	2416	1403	0.03%	0.004%
55	23.439	3902	3903	3906	rBB2	1645	1393	0.03%	0.004%
56	23.492	3906	3913	3922	rBB4	4055	8567	0.17%	0.022%
57	23.599	3928	3933	3944	rBB	329390	417559	8.36%	1.054%
58	23.695	3944	3951	3982	rBB	3523092	4992365	100.00%	12.597%
59	23.871	3982	3984	3986	rBB3	2100	1525	0.03%	0.004%
60	23.893	3986	3988	3994	rBB6	1661	2007	0.04%	0.005%
61	24.021	4011	4012	4018	rBB4	2218	2584	0.05%	0.007%
62	24.074	4018	4022	4025	rBB5	1861	2220	0.04%	0.006%
63	24.117	4025	4030	4034	rBB6	2621	4488	0.09%	0.011%
64	24.272	4058	4059	4063	rBB3	2432	2065	0.04%	0.005%
65	24.368	4071	4077	4080	rBB5	2712	3165	0.06%	0.008%
66	24.689	4133	4137	4139	rBB4	2409	2132	0.04%	0.005%
67	24.758	4143	4150	4156	rBB5	7657	13397	0.27%	0.034%
68	24.897	4169	4176	4178	rBB4	1788	2048	0.04%	0.005%
69	24.956	4186	4187	4191	rBB4	1468	1415	0.03%	0.004%
70	25.041	4200	4203	4207	rBB5	2664	2441	0.05%	0.006%
71	25.089	4209	4212	4215	rBB4	2338	1786	0.04%	0.005%
72	25.153	4220	4224	4225	rBB3	1585	1756	0.04%	0.004%
73	25.234	4234	4239	4242	rBB5	2242	3384	0.07%	0.009%
74	25.356	4257	4262	4264	rBB4	2304	2170	0.04%	0.005%
75	25.378	4264	4266	4271	rBB4	2374	1849	0.04%	0.005%
76	25.431	4271	4276	4277	rBB4	2079	2291	0.05%	0.006%
77	25.527	4290	4294	4296	rBB5	1434	2002	0.04%	0.005%
78	25.613	4306	4310	4311	rBB4	1614	1402	0.03%	0.004%
79	25.709	4323	4328	4331	rBB4	2498	2856	0.06%	0.007%
80	25.730	4331	4332	4338	rBB4	1878	2697	0.05%	0.007%
81	25.811	4342	4347	4348	rBB3	1664	2176	0.04%	0.005%
82	25.837	4348	4352	4358	rBB6	2675	2791	0.06%	0.007%
83	25.917	4361	4367	4368	rBB5	2446	2906	0.06%	0.007%
84	25.971	4374	4377	4382	rBB6	1726	2099	0.04%	0.005%
85	26.046	4389	4391	4394	rBB3	1760	1558	0.03%	0.004%
86	26.179	4414	4416	4418	rBB2	2286	1419	0.03%	0.004%
87	26.355	4446	4449	4450	rBB3	2182	1472	0.03%	0.004%
88	26.387	4450	4455	4456	rBB5	2415	2977	0.06%	0.008%
89	26.404	4456	4458	4461	rBB3	1667	1629	0.03%	0.004%
90	26.452	4464	4467	4469	rBB3	1607	1485	0.03%	0.004%
91	26.473	4469	4471	4475	rBB4	1809	1445	0.03%	0.004%
92	26.569	4486	4489	4492	rBB4	1415	1729	0.03%	0.004%
93	26.671	4506	4508	4513	rBB5	1733	1833	0.04%	0.005%
94	26.719	4513	4517	4518	rBB2	1394	1528	0.03%	0.004%
95	26.847	4539	4541	4545	rBB4	2517	2414	0.05%	0.006%

96	26.997	4563	4569	4573	rBB6	2393	4746	0.10%	0.012%
97	27.034	4573	4576	4582	rBB6	1876	3362	0.07%	0.008%
98	27.077	4582	4584	4589	rBB5	2295	2564	0.05%	0.006%
99	27.146	4593	4597	4599	rBB5	1882	1546	0.03%	0.004%
100	27.248	4613	4616	4617	rBB3	2643	1721	0.03%	0.004%

Sum of corrected areas: 39631464

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84729.D
Operator : larisap
Acquired : 30 Dec 2010 9:19 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-4
Misc Info : op47365,er3201,960
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84729.D Vial: 4
Acq On : 30 Dec 2010 9:19 am Operator: larisap
Sample : ja64438-4 Inst : MSR
Misc : op47365,er3201,960 Multiplr: 1.00
MS Integration Params: Rteint.p

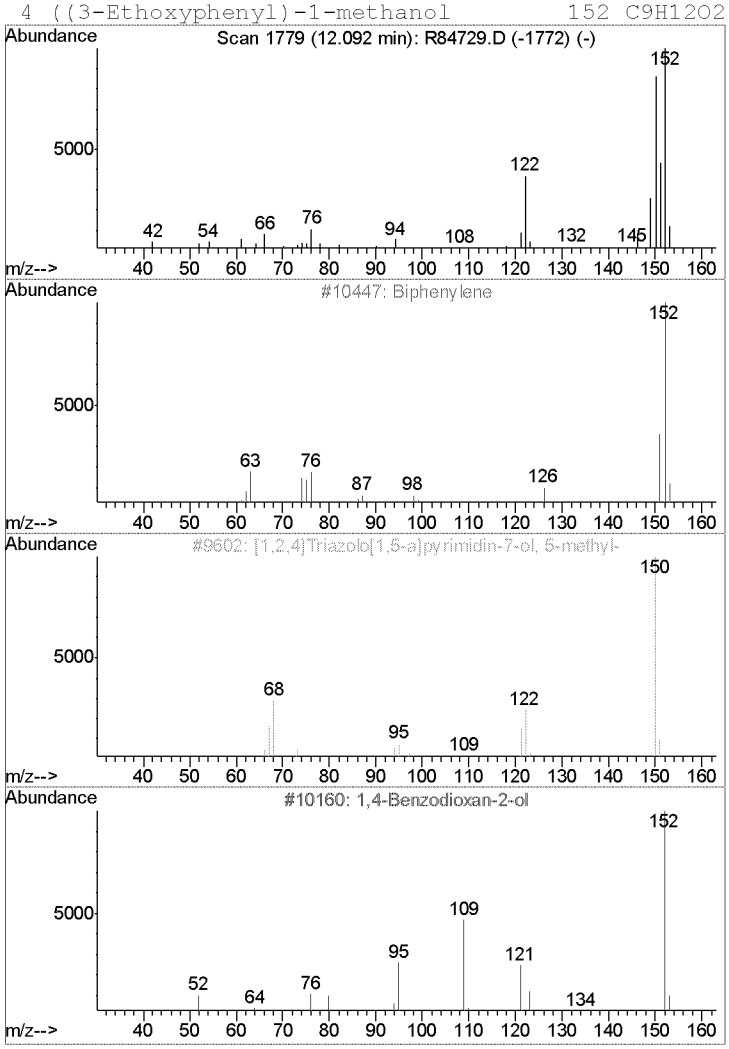
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

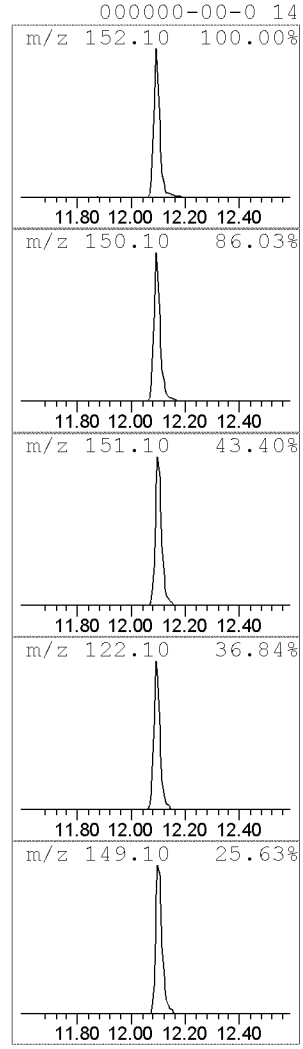
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.35 ppb	416492	Naphthalene-d8	10.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Biphenylene	152	C12H8	000259-79-0	38
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	1,4-Benzodioxan-2-ol	152	C8H8O3	005770-59-2	25
4	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 9:19 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84729.D
Name: ja64438-4
Misc: op47365,er3201,960
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.3	ppb	416492	3	10.28	3833680	40.0

8.1.8
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:37 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

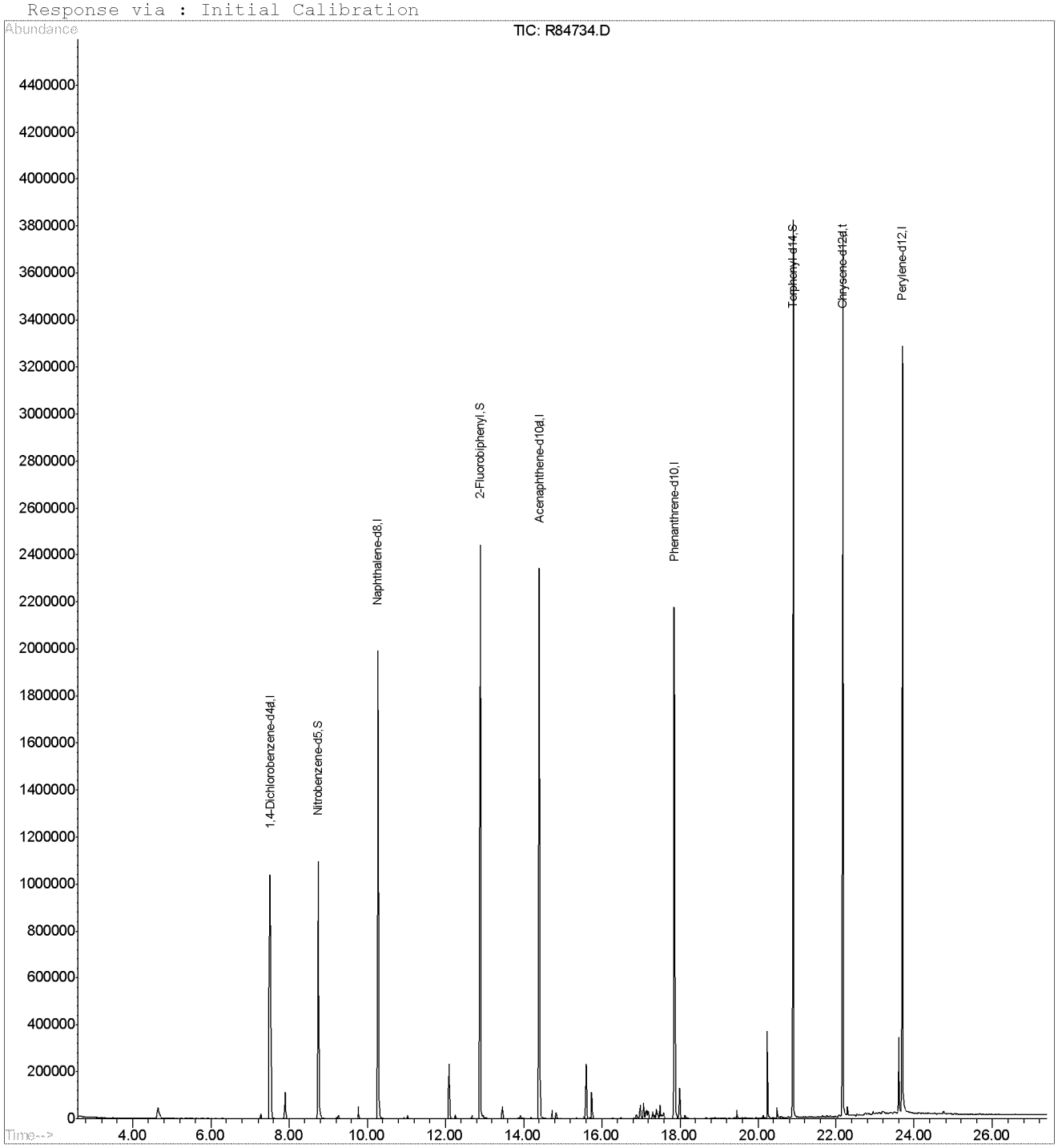
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	472022	40.00	ppb	-0.11
24) Naphthalene-d8	10.27	136	1635721	40.00	ppb	-0.12
47) Acenaphthene-d10	14.40	164	928386	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1442971	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1469864	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1492756	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	472022	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	928386	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1469864	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.75	82	679976	45.74	ppb	-0.12
Spiked Amount 50.000			Recovery =	91.48%		
51) 2-Fluorobiphenyl	12.89	172	1330853	40.72	ppb	-0.12
Spiked Amount 50.000			Recovery =	81.44%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.89	244	1299448	46.90	ppb	-0.08
Spiked Amount 50.000			Recovery =	93.80%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84734.D MR3151.M Mon Jan 03 13:37:54 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:37 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



R84734.D MR3151.M Mon Jan 03 13:37:55 2011 NJMSR Page 2

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.644	372	385	415	rBB	48116	184663	4.07%	0.502%
2	7.272	871	877	884	rBB	20397	37702	0.83%	0.103%
3	7.507	910	921	948	rBB	1038222	2619908	57.75%	7.129%
4	7.801	969	976	981	rBB2	2719	5010	0.11%	0.014%
5	7.897	984	994	1013	rBB2	113024	258220	5.69%	0.703%
6	8.544	1105	1115	1119	rBB	3196	4483	0.10%	0.012%
7	8.747	1145	1153	1185	rBB	1095075	1930053	42.55%	5.252%
8	9.131	1221	1225	1232	rBB4	3873	5883	0.13%	0.016%
9	9.217	1237	1241	1246	rBB2	7526	11671	0.26%	0.032%
10	9.270	1246	1251	1259	rBB	16628	24294	0.54%	0.066%
11	9.772	1337	1345	1351	rBB	52255	75655	1.67%	0.206%
12	10.275	1431	1439	1455	rBB	1991306	3350004	73.85%	9.116%
13	10.937	1558	1563	1574	rBB2	5962	12211	0.27%	0.033%
14	11.028	1574	1580	1586	rBB2	16041	22202	0.49%	0.060%
15	11.087	1586	1591	1598	rBB	2304	4522	0.10%	0.012%
16	11.156	1601	1604	1609	rBB2	2525	3858	0.09%	0.010%
17	12.091	1771	1779	1790	rBB2	235320	376184	8.29%	1.024%
18	12.251	1803	1809	1815	rBB2	19848	26776	0.59%	0.073%
19	12.679	1884	1889	1894	rBB	15192	18901	0.42%	0.051%
20	12.887	1921	1928	1938	rBB	2440143	3842616	84.71%	10.456%
21	12.962	1938	1942	1946	rBB2	7583	8708	0.19%	0.024%
22	13.026	1950	1954	1960	rBB3	3331	5428	0.12%	0.015%
23	13.234	1989	1993	1999	rBB3	2729	4643	0.10%	0.013%
24	13.453	2024	2034	2043	rBB	53852	87658	1.93%	0.239%
25	13.629	2062	2067	2071	rBB2	2470	3706	0.08%	0.010%
26	13.913	2111	2120	2128	rBB3	10770	19521	0.43%	0.053%
27	14.201	2170	2174	2179	rBB	7313	8405	0.19%	0.023%
28	14.399	2202	2211	2221	rBB	2341224	3837627	84.60%	10.443%
29	14.725	2267	2272	2284	rBB	37199	53613	1.18%	0.146%
30	14.831	2287	2292	2299	rBB2	26842	39964	0.88%	0.109%
31	14.949	2309	2314	2322	rBB2	3407	4511	0.10%	0.012%
32	15.355	2381	2390	2400	rBB	8329	12197	0.27%	0.033%
33	15.553	2422	2427	2429	rBB	6935	8828	0.19%	0.024%
34	15.595	2429	2435	2447	rBB	230825	371413	8.19%	1.011%
35	15.697	2449	2454	2457	rBB2	4602	4710	0.10%	0.013%
36	15.745	2457	2463	2475	rBB	112448	166316	3.67%	0.453%
37	16.482	2596	2601	2610	rBB2	7309	16485	0.36%	0.045%
38	16.824	2655	2665	2670	rBB3	6028	9434	0.21%	0.026%

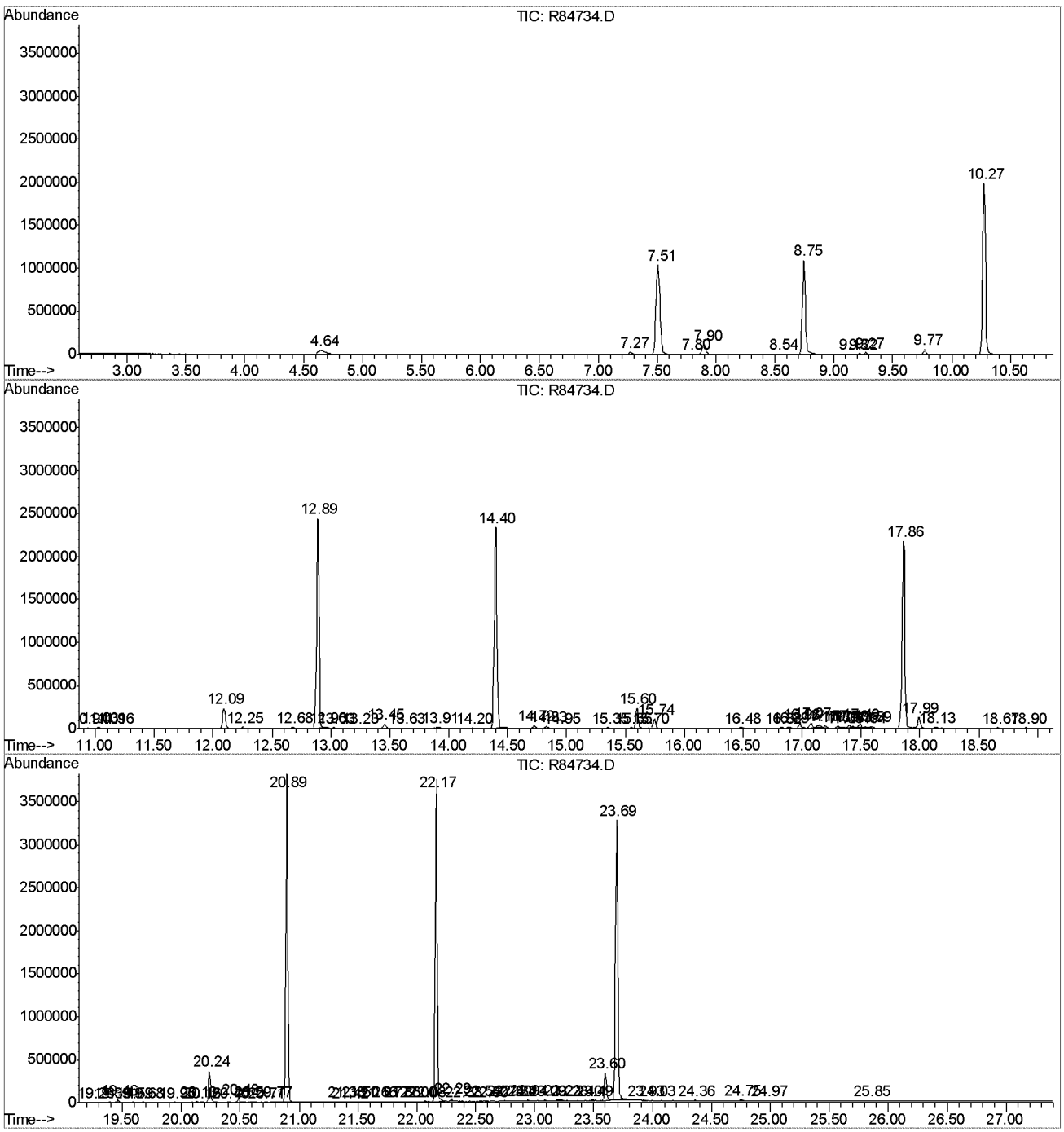
39	16.888	2670	2677	2684	rBB3	17274	32323	0.71%	0.088%
40	16.979	2686	2694	2705	rBB	58105	102829	2.27%	0.280%
41	17.070	2705	2711	2718	rBB3	63293	109218	2.41%	0.297%
42	17.150	2718	2726	2730	rBB2	27560	64968	1.43%	0.177%
43	17.193	2730	2734	2742	rBB3	22959	28929	0.64%	0.079%
44	17.305	2749	2755	2759	rBB2	24939	38416	0.85%	0.105%
45	17.348	2759	2763	2767	rBB	10412	12751	0.28%	0.035%
46	17.396	2767	2772	2776	rBB	27540	33750	0.74%	0.092%
47	17.428	2776	2778	2783	rBB3	10722	9511	0.21%	0.026%
48	17.486	2784	2789	2795	rBB	50723	76229	1.68%	0.207%
49	17.540	2795	2799	2803	rBB3	9215	11593	0.26%	0.032%
50	17.588	2803	2808	2816	rBB2	17945	28937	0.64%	0.079%
51	17.860	2843	2859	2874	rBB2	2176008	3893692	85.83%	10.595%
52	17.989	2874	2883	2893	rBB3	128789	221506	4.88%	0.603%
53	18.133	2906	2910	2916	rBB3	13029	17469	0.39%	0.048%
54	18.667	3000	3010	3015	rBB4	6068	12145	0.27%	0.033%
55	18.902	3048	3054	3060	rBB3	3836	5704	0.13%	0.016%
56	19.260	3115	3121	3131	rBB4	3023	7433	0.16%	0.020%
57	19.394	3136	3146	3154	rBB4	3323	9660	0.21%	0.026%
58	19.458	3154	3158	3165	rBB	34630	39561	0.87%	0.108%
59	19.591	3178	3183	3189	rBB4	3742	5493	0.12%	0.015%
60	19.677	3194	3199	3203	rBB2	6122	7141	0.16%	0.019%
61	19.949	3240	3250	3253	rBB4	3531	7162	0.16%	0.019%
62	20.131	3281	3284	3289	rBB2	11676	12079	0.27%	0.033%
63	20.163	3289	3290	3297	rBB3	2755	3558	0.08%	0.010%
64	20.238	3297	3304	3313	rBB	367924	433023	9.55%	1.178%
65	20.403	3330	3335	3342	rBB5	4685	8530	0.19%	0.023%
66	20.483	3342	3350	3356	rBB2	44676	48870	1.08%	0.133%
67	20.590	3368	3370	3377	rBB4	6269	6646	0.15%	0.018%
68	20.708	3388	3392	3398	rBB6	2658	4335	0.10%	0.012%
69	20.767	3400	3403	3409	rBB5	7904	10144	0.22%	0.028%
70	20.895	3421	3427	3446	rBB	3822829	4487073	98.91%	12.210%
71	21.381	3513	3518	3521	rBB3	5400	5120	0.11%	0.014%
72	21.424	3521	3526	3530	rBB5	2967	4257	0.09%	0.012%
73	21.504	3536	3541	3546	rBB6	3809	5379	0.12%	0.015%
74	21.659	3562	3570	3576	rBB5	7054	10996	0.24%	0.030%
75	21.766	3587	3590	3594	rBB3	7275	8082	0.18%	0.022%
76	21.856	3602	3607	3611	rBB5	5722	6083	0.13%	0.017%
77	21.995	3631	3633	3637	rBB4	3357	3763	0.08%	0.010%
78	22.075	3642	3648	3650	rBB5	4423	10299	0.23%	0.028%
79	22.166	3659	3665	3679	rBB	3751468	4283519	94.43%	11.656%
80	22.289	3684	3688	3695	rBB	35975	37805	0.83%	0.103%
81	22.380	3701	3705	3708	rBB5	5606	6736	0.15%	0.018%
82	22.540	3731	3735	3738	rBB4	7436	8190	0.18%	0.022%
83	22.604	3742	3747	3749	rBB5	3210	4580	0.10%	0.012%
84	22.743	3770	3773	3780	rBB6	9057	11134	0.25%	0.030%
85	22.802	3782	3784	3789	rBB4	7210	8955	0.20%	0.024%
86	22.839	3789	3791	3795	rBB5	3845	4391	0.10%	0.012%
87	22.935	3805	3809	3817	rBB7	13230	17794	0.39%	0.048%
88	23.090	3833	3838	3845	rBB8	6407	12250	0.27%	0.033%
89	23.224	3851	3863	3870	rBB8	8866	30563	0.67%	0.083%
90	23.277	3870	3873	3875	rBB4	3980	3511	0.08%	0.010%
91	23.400	3891	3896	3899	rBB5	1976	3854	0.08%	0.010%
92	23.491	3909	3913	3916	rBB3	5002	5988	0.13%	0.016%
93	23.598	3927	3933	3942	rBB	321288	399962	8.82%	1.088%
94	23.694	3942	3951	3974	rBB	3257480	4536293	100.00%	12.344%
95	23.929	3992	3995	3999	rBB5	2828	4149	0.09%	0.011%

96	24.025	4010	4013	4019	rBB7	3126	5431	0.12%	0.015%
97	24.362	4071	4076	4084	rBB7	4530	7536	0.17%	0.021%
98	24.752	4142	4149	4156	rBB4	12997	25995	0.57%	0.071%
99	24.971	4189	4190	4197	rBB7	3438	3501	0.08%	0.010%
100	25.847	4349	4354	4359	rBB4	3556	5013	0.11%	0.014%

Sum of corrected areas: 36749790

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84734.D
Operator : larisap
Acquired : 30 Dec 2010 12:17 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-5
Misc Info : op47365,er3201,1000
Vial Number: 9
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

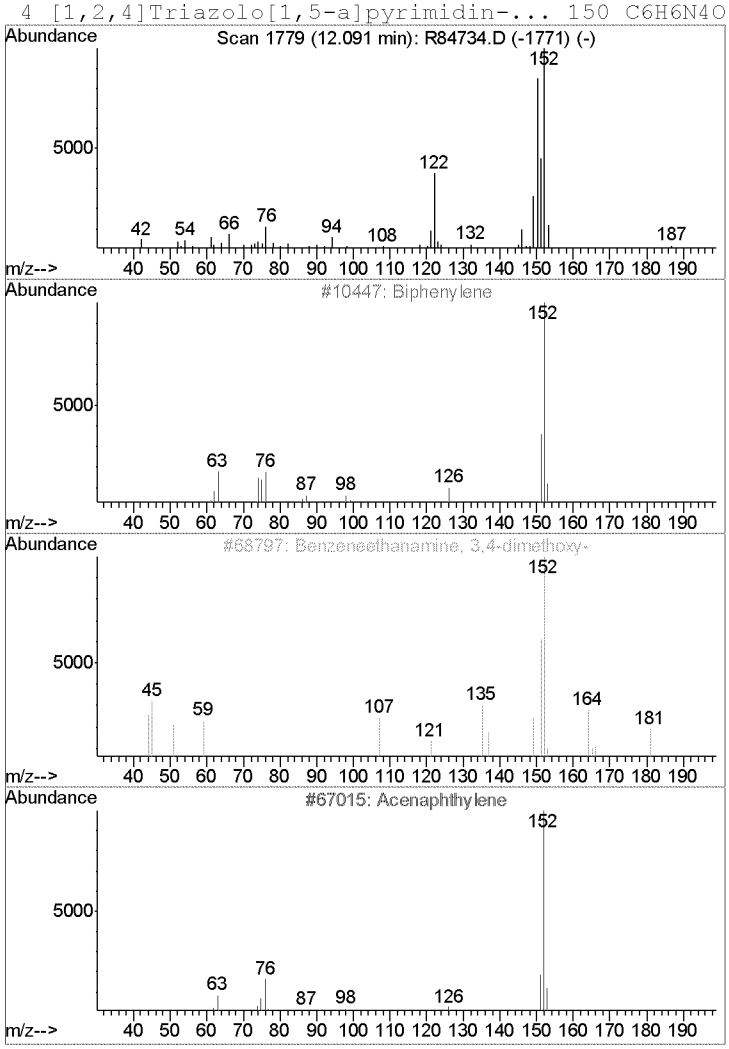
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

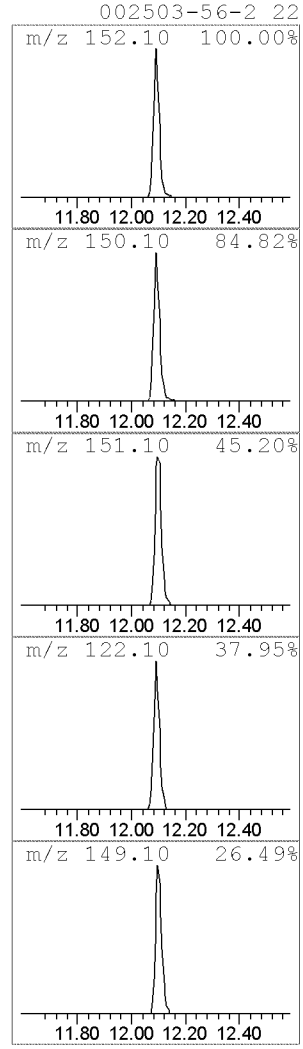
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.49 ppb	376184	Naphthalene-d8	10.27

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Biphenylene	152	C12H8	000259-79-0	27
2	Benzeneethanamine, 3,4-dimethoxy-	181	C10H15NO2	000120-20-7	25
3	Acenaphthylene	152	C12H8	000208-96-8	22
4	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	22





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84734.D Vial: 9
Acq On : 30 Dec 2010 12:17 pm Operator: larisap
Sample : ja64438-5 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

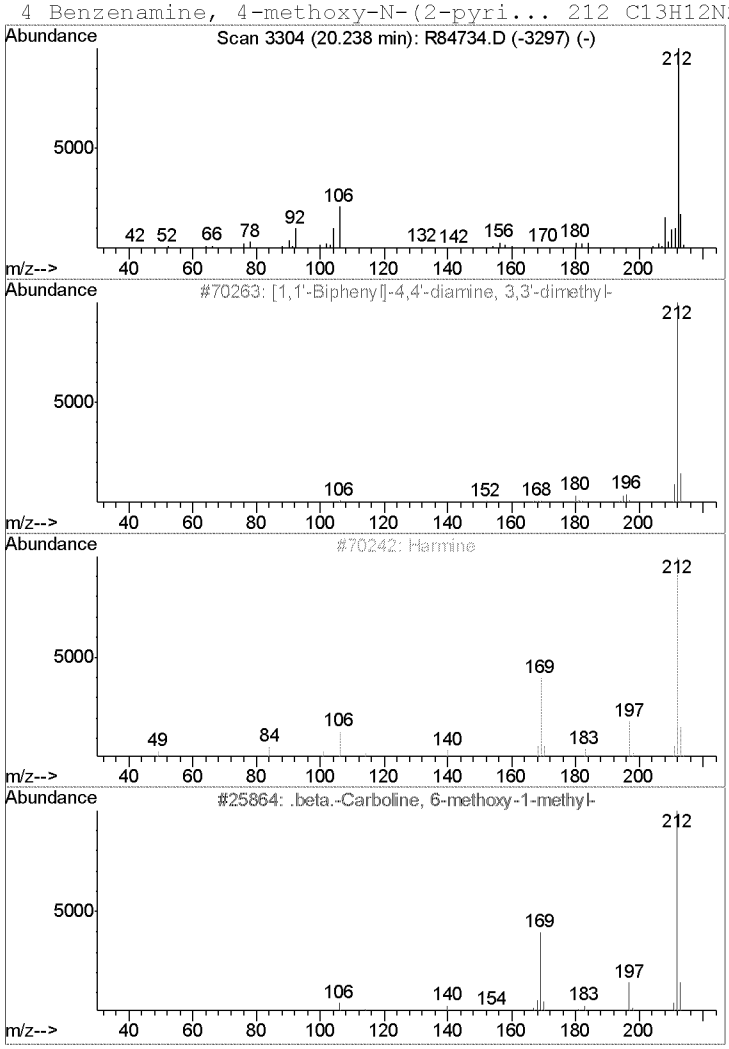
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

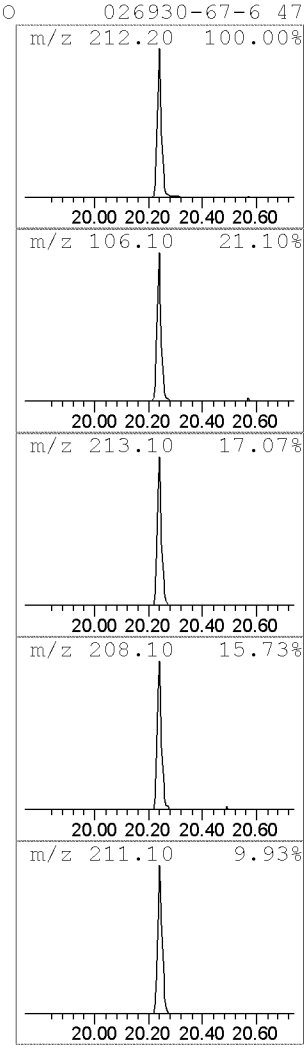
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.24	4.04 ppb	433023	Chrysene-d12	22.17

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	Harmine	212	C13H12N2O	000442-51-3	50
3	.beta.-Carboline, 6-methoxy-1-me...	212	C13H12N2O	000000-00-0	50
4	Benzenamine, 4-methoxy-N-(2-pyri...	212	C13H12N2O	026930-67-6	47





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 12:17 pm
Data File: C:\MSDCHEM\1\DATA\ER3201\R84734.D
Name: ja64438-5
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.5	ppb	376184	3	10.27	3350000	40.0
Internal standard...	20.24	4.0	ppb	433023	7	22.17	4283520	40.0

8.1.10
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:34 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

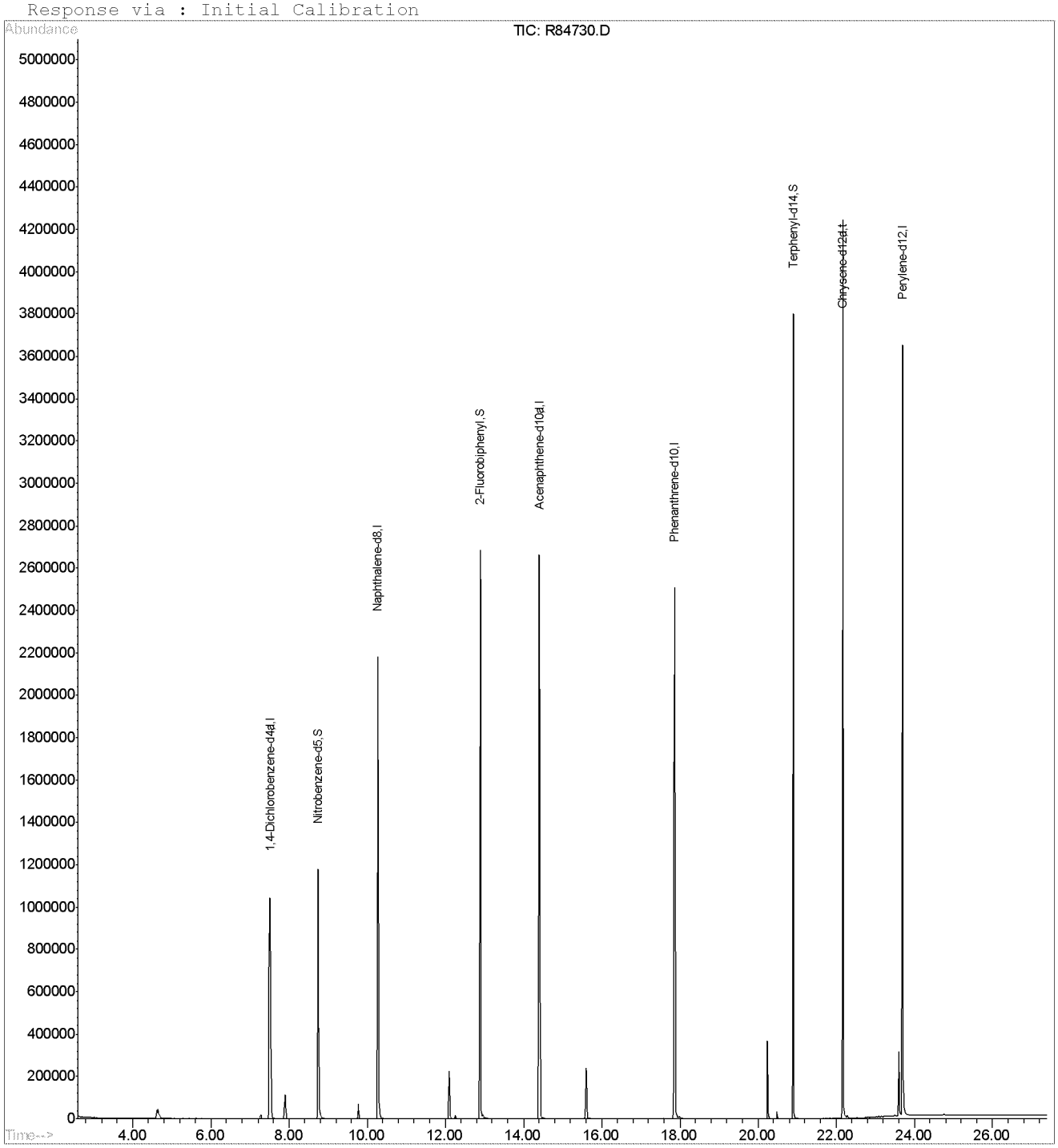
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	543682	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1820450	40.00	ppb	-0.11
47) Acenaphthene-d10	14.40	164	1024472	40.00	ppb	-0.12
69) Phenanthrene-d10	17.86	188	1633288	40.00	ppb	-0.13
83) Chrysene-d12	22.17	240	1703995	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1706758	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	543682	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.40	164	1024472	40.00	ppb	-0.11
107) Chrysene-d12a	22.17	240	1703995	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.74	82	772397	46.69	ppb	-0.12
Spiked Amount 50.000			Recovery =	93.38%		
51) 2-Fluorobiphenyl	12.89	172	1432468	39.72	ppb	-0.12
Spiked Amount 50.000			Recovery =	79.44%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1218605	37.94	ppb	-0.08
Spiked Amount 50.000			Recovery =	75.88%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84730.D MR3151.M Mon Jan 03 13:34:40 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 3 13:34 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA64438

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.756	28	31	35	rBB	1354	1546	0.03%	0.004%
2	2.809	35	41	44	rBB4	1217	1574	0.03%	0.004%
3	3.397	145	151	158	rBB5	1724	1994	0.04%	0.005%
4	3.514	171	173	184	rBB4	641	1929	0.04%	0.005%
5	3.749	212	217	220	rBB3	1135	1537	0.03%	0.004%
6	3.856	234	237	244	rBB4	1232	1923	0.04%	0.005%
7	4.545	361	366	370	rBB2	956	1434	0.03%	0.004%
8	4.609	375	378	380	rBB	21498	23405	0.45%	0.061%
9	4.641	380	384	399	rBB2	20151	40537	0.78%	0.106%
10	5.154	476	480	485	rBB3	895	1709	0.03%	0.004%
11	5.218	485	492	493	rBB2	1163	1649	0.03%	0.004%
12	7.275	868	877	889	rBB2	20774	45892	0.88%	0.120%
13	7.510	908	921	945	rBB	1045768	3009555	57.99%	7.847%
14	7.895	982	993	1011	rBB	112487	292137	5.63%	0.762%
15	8.744	1145	1152	1187	rBB	1178522	2174746	41.90%	5.670%
16	9.770	1337	1344	1353	rBB	73406	103706	2.00%	0.270%
17	10.277	1430	1439	1465	rBB	2182277	3761701	72.48%	9.808%
18	11.939	1745	1750	1757	rBB	4652	6736	0.13%	0.018%
19	12.094	1772	1779	1790	rBB2	227692	392502	7.56%	1.023%
20	12.249	1803	1808	1814	rBB2	15416	22079	0.43%	0.058%
21	12.622	1873	1878	1882	rBB	697	1536	0.03%	0.004%
22	12.772	1899	1906	1910	rBB	655	1804	0.03%	0.005%
23	12.890	1920	1928	1938	rBB	2679626	4097653	78.96%	10.684%
24	12.959	1938	1941	1946	rBB	8784	10567	0.20%	0.028%
25	13.028	1949	1954	1961	rBB4	4038	6012	0.12%	0.016%
26	13.077	1961	1963	1968	rBB2	2810	2999	0.06%	0.008%
27	13.237	1988	1993	1997	rBB5	3323	3417	0.07%	0.009%
28	13.434	2025	2030	2040	rBB3	2395	4612	0.09%	0.012%
29	13.632	2061	2067	2072	rBB3	2810	4618	0.09%	0.012%
30	13.675	2072	2075	2080	rBB2	1539	1659	0.03%	0.004%
31	14.401	2202	2211	2226	rBB	2661160	4242395	81.75%	11.061%
32	15.598	2429	2435	2450	rBB	237754	407132	7.84%	1.062%
33	15.694	2450	2453	2461	rBB3	2036	4623	0.09%	0.012%
34	16.827	2660	2665	2670	rBB2	2351	2827	0.05%	0.007%
35	16.896	2675	2678	2686	rBB3	2594	4045	0.08%	0.011%
36	17.580	2800	2806	2815	rBB	4465	7341	0.14%	0.019%
37	17.863	2850	2859	2875	rBB2	2503623	4368949	84.18%	11.391%
38	17.975	2875	2880	2890	rBB6	5733	13239	0.26%	0.035%

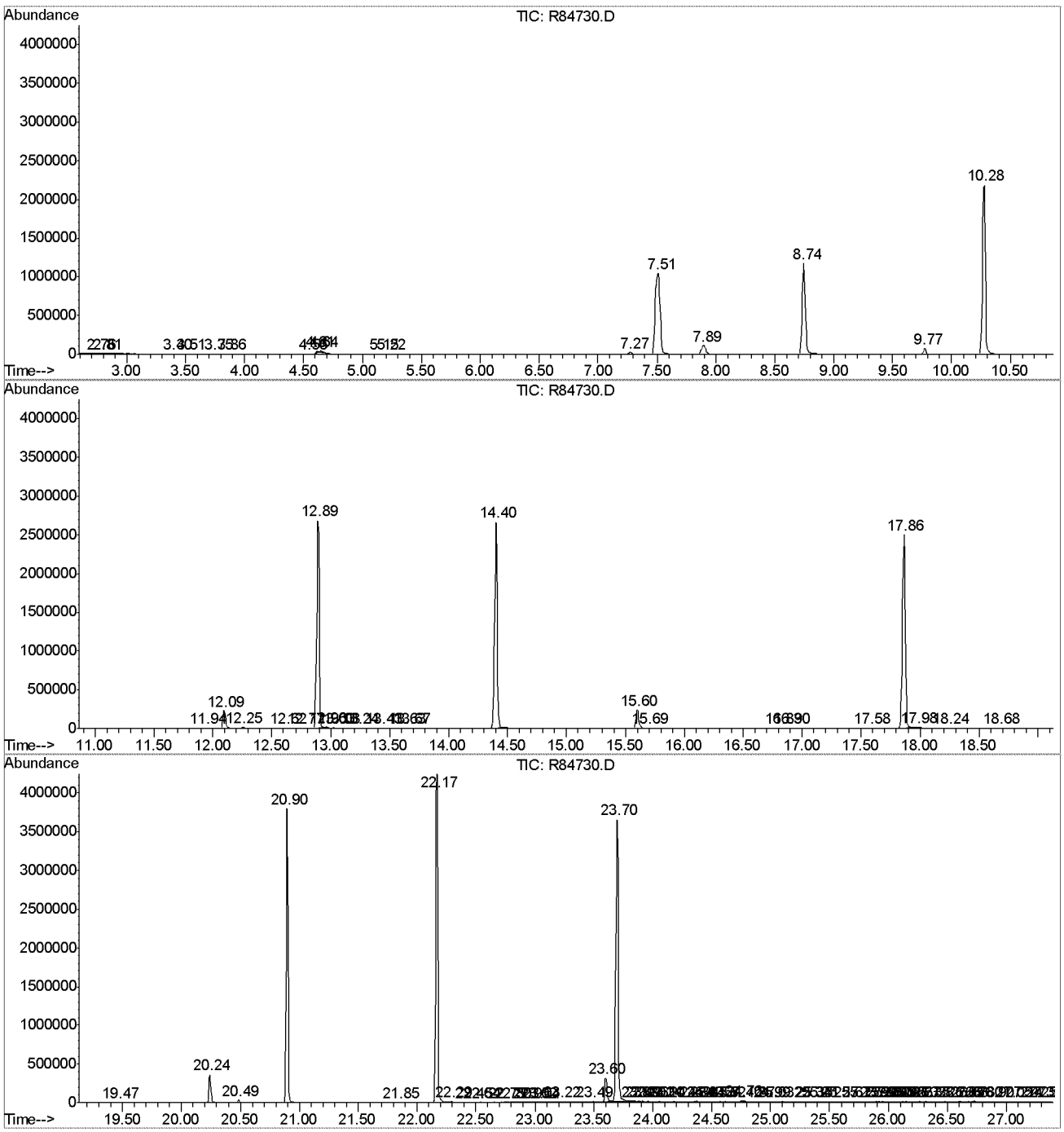
39	18.242	2927	2930	2937	rBB2	2732	3584	0.07%	0.009%
40	18.675	3004	3011	3014	rBB	3200	4010	0.08%	0.010%
41	19.466	3152	3159	3165	rBB	3596	4760	0.09%	0.012%
42	20.240	3299	3304	3325	rBB	366293	460250	8.87%	1.200%
43	20.486	3344	3350	3356	rBB2	32759	35875	0.69%	0.094%
44	20.897	3421	3427	3450	rBB	3798131	4138163	79.74%	10.790%
45	21.854	3600	3606	3612	rBB2	2486	2869	0.06%	0.007%
46	22.169	3658	3665	3685	rBB	4244643	4897761	94.37%	12.770%
47	22.292	3685	3688	3693	rBB	11830	9928	0.19%	0.026%
48	22.463	3714	3720	3721	rBB3	1257	2101	0.04%	0.005%
49	22.537	3731	3734	3738	rBB2	4331	3294	0.06%	0.009%
50	22.751	3770	3774	3778	rBB4	2585	3367	0.06%	0.009%
51	22.805	3780	3784	3786	rBB2	1684	1525	0.03%	0.004%
52	22.954	3809	3812	3815	rBB3	1493	1520	0.03%	0.004%
53	23.018	3820	3824	3826	rBB4	1495	2049	0.04%	0.005%
54	23.040	3826	3828	3832	rBB2	1874	1965	0.04%	0.005%
55	23.216	3856	3861	3864	rBB3	2485	2613	0.05%	0.007%
56	23.494	3910	3913	3915	rBB3	4603	3446	0.07%	0.009%
57	23.601	3928	3933	3943	rBB	300133	406727	7.84%	1.060%
58	23.697	3943	3951	3982	rBB2	3633708	5189723	100.00%	13.532%
59	23.878	3984	3985	3989	rBB4	2028	1643	0.03%	0.004%
60	23.916	3990	3992	3993	rBB2	2628	1511	0.03%	0.004%
61	23.958	3998	4000	4005	rBB4	1940	1944	0.04%	0.005%
62	24.007	4007	4009	4011	rBB3	1920	1809	0.03%	0.005%
63	24.097	4020	4026	4034	rBB5	1958	5661	0.11%	0.015%
64	24.258	4055	4056	4060	rBB3	2079	1623	0.03%	0.004%
65	24.284	4060	4061	4064	rBB3	1946	1492	0.03%	0.004%
66	24.375	4075	4078	4084	rBB8	2058	2348	0.05%	0.006%
67	24.429	4084	4088	4090	rBB4	1524	2010	0.04%	0.005%
68	24.530	4106	4107	4111	rBB3	2366	2172	0.04%	0.006%
69	24.567	4113	4114	4119	rBB3	2643	1783	0.03%	0.005%
70	24.616	4119	4123	4127	rBB6	2068	1996	0.04%	0.005%
71	24.760	4142	4150	4159	rBB5	7732	17477	0.34%	0.046%
72	24.867	4169	4170	4175	rBB3	1720	1723	0.03%	0.004%
73	24.995	4188	4194	4196	rBB6	1783	2046	0.04%	0.005%
74	25.027	4196	4200	4203	rBB4	1768	1712	0.03%	0.004%
75	25.337	4253	4258	4260	rBB4	1597	2391	0.05%	0.006%
76	25.353	4260	4261	4265	rBB5	1973	1943	0.04%	0.005%
77	25.406	4269	4271	4273	rBB2	1788	1602	0.03%	0.004%
78	25.566	4297	4301	4304	rBB5	1772	1720	0.03%	0.004%
79	25.673	4316	4321	4323	rBB4	1857	2537	0.05%	0.007%
80	25.748	4329	4335	4338	rBB7	1529	2024	0.04%	0.005%
81	25.898	4358	4363	4366	rBB6	1595	2650	0.05%	0.007%
82	25.951	4371	4373	4377	rBB2	2106	1744	0.03%	0.005%
83	26.004	4381	4383	4386	rBB2	1771	1620	0.03%	0.004%
84	26.053	4386	4392	4395	rBB5	2282	3990	0.08%	0.010%
85	26.090	4395	4399	4402	rBB5	1821	2647	0.05%	0.007%
86	26.149	4408	4410	4413	rBB4	2428	1961	0.04%	0.005%
87	26.266	4428	4432	4435	rBB5	1457	1433	0.03%	0.004%
88	26.320	4440	4442	4446	rBB5	1816	1585	0.03%	0.004%
89	26.352	4446	4448	4451	rBB4	1972	1738	0.03%	0.005%
90	26.384	4451	4454	4458	rBB5	1584	1810	0.03%	0.005%
91	26.646	4502	4503	4507	rBB4	2185	1715	0.03%	0.004%
92	26.678	4507	4509	4511	rBB3	2128	1552	0.03%	0.004%
93	26.726	4516	4518	4523	rBB5	1603	2282	0.04%	0.006%
94	26.795	4527	4531	4536	rBB6	1585	2473	0.05%	0.006%
95	26.897	4545	4550	4551	rBB4	1331	1754	0.03%	0.005%

96	27.046	4574	4578	4580	rBB4	1245	1717	0.03%	0.004%
97	27.137	4594	4595	4604	rBB6	1864	3175	0.06%	0.008%
98	27.255	4611	4617	4620	rBB4	1571	2349	0.05%	0.006%
99	27.303	4620	4626	4627	rBB4	1371	2049	0.04%	0.005%
100	27.340	4631	4633	4637	rBB3	2090	2213	0.04%	0.006%

Sum of corrected areas: 38352873

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3201\R84730.D
Operator : larisap
Acquired : 30 Dec 2010 9:56 am using AcqMethod MR3151
Instrument : MSR
Sample Name: ja64438-6
Misc Info : op47365,er3201,1000
Vial Number: 5
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3201\R84730.D Vial: 5
Acq On : 30 Dec 2010 9:56 am Operator: larisap
Sample : ja64438-6 Inst : MSR
Misc : op47365,er3201,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

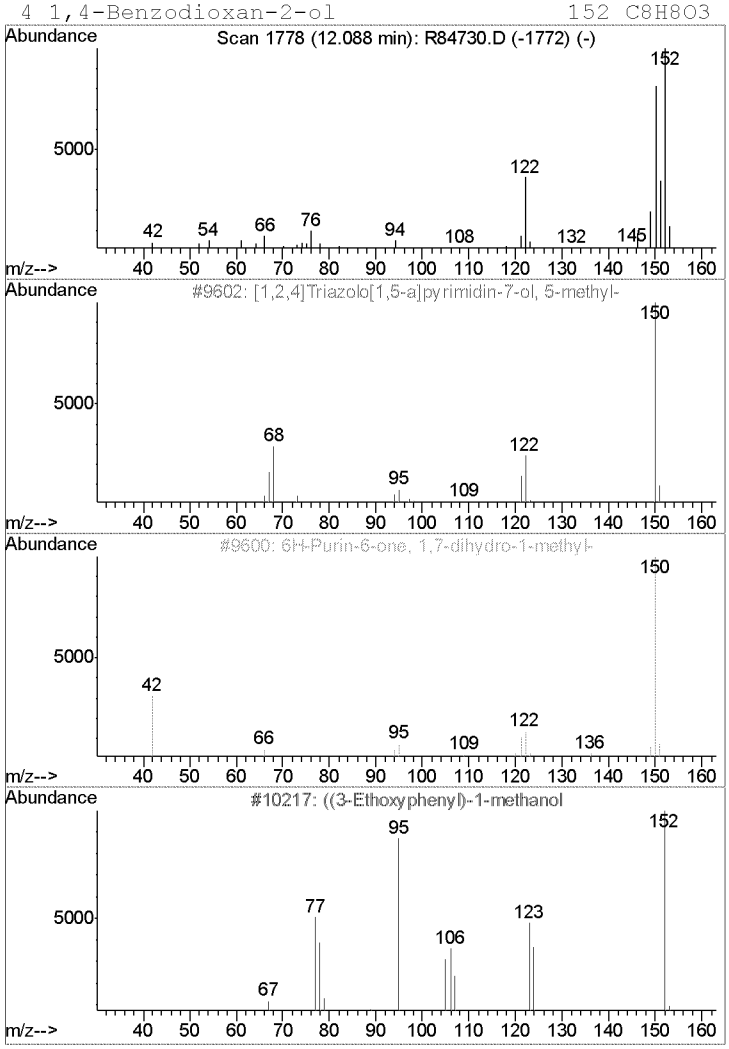
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

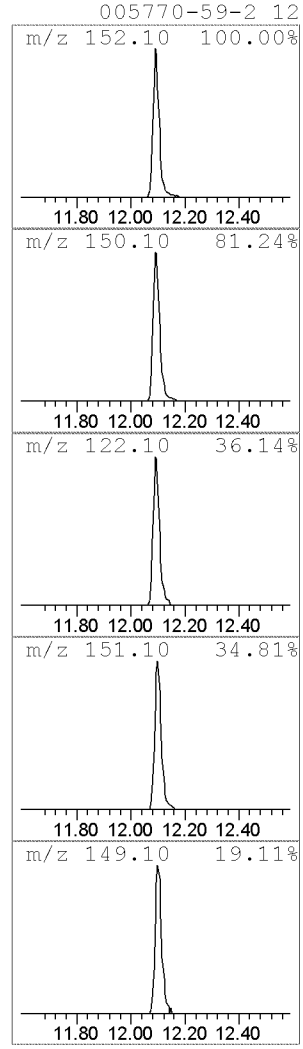
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.09	4.17 ppb	392502	Naphthalene-d8	10.28

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
2	6H-Purin-6-one, 1,7-dihydro-1-me...	150	C6H6N4O	001125-39-9	27
3	((3-Ethoxyphenyl)-1-methanol	152	C9H12O2	000000-00-0	14
4	1,4-Benzodioxan-2-ol	152	C8H8O3	005770-59-2	12





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 30 Dec 2010 9:56 am
Data File: C:\MSDCHEM\1\DATA\ER3201\R84730.D
Name: ja64438-6
Misc: op47365,er3201,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	12.09	4.2	ppb	392502	3	10.28	3761700	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22982.D
Acq On : 23 Dec 2010 5:56 pm
Operator : ninap
Sample : ja64438-1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 28 08:35:21 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

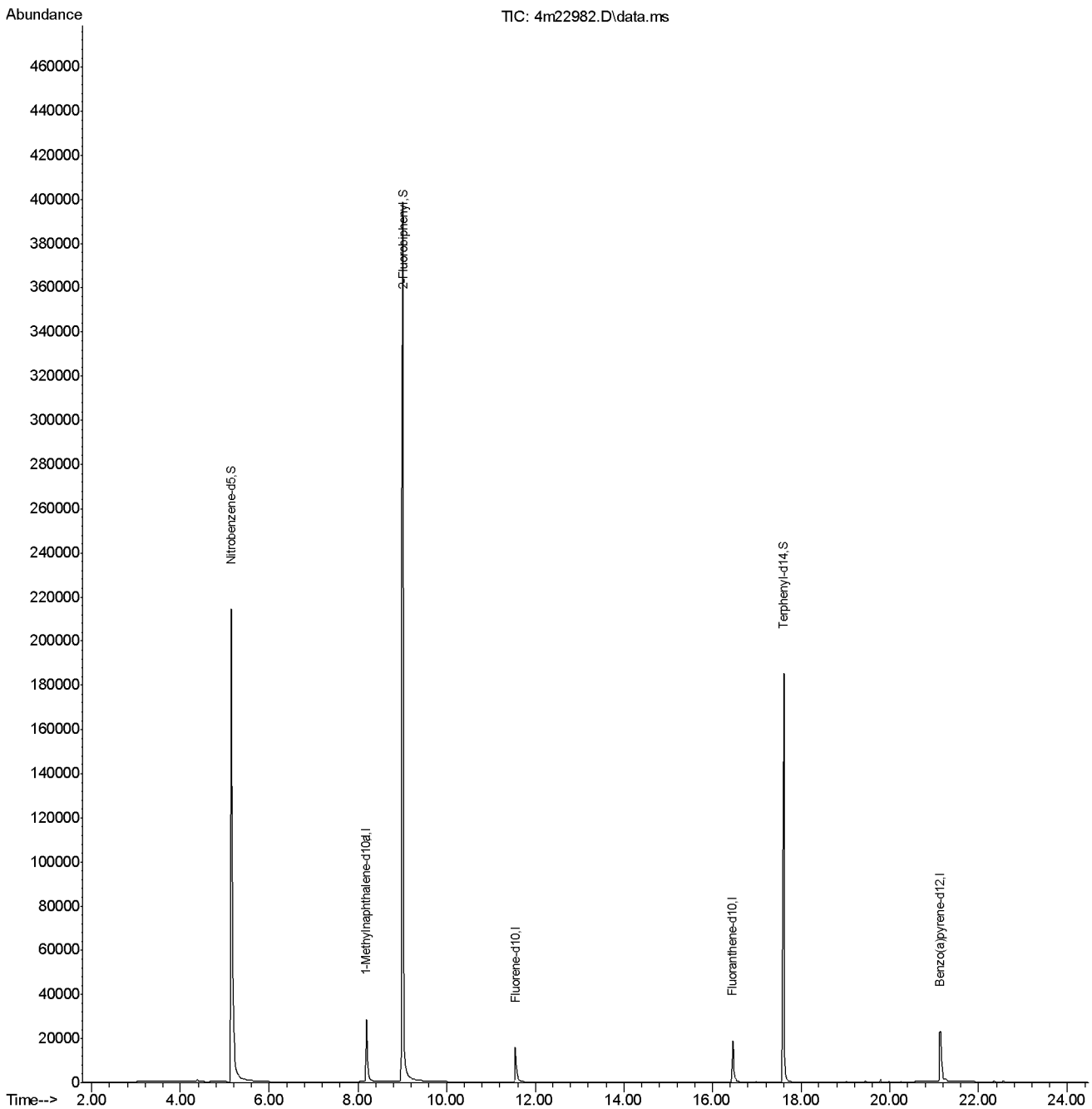
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	25759	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	20859	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38210	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.123	264	39644	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	25759	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	250985	55.27	ppb	0.00
Spiked Amount 50.000			Recovery =	110.54%		
10) 2-Fluorobiphenyl	9.011	172	494241	49.55	ppb	0.00
Spiked Amount 50.000			Recovery =	99.10%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	224731	49.03	ppb	0.00
Spiked Amount 50.000			Recovery =	98.06%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22982.D
Acq On : 23 Dec 2010 5:56 pm
Operator : ninap
Sample : ja64438-1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Dec 28 08:35:21 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22983.D
Acq On : 23 Dec 2010 6:27 pm
Operator : ninap
Sample : ja64438-2
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 28 08:35:59 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

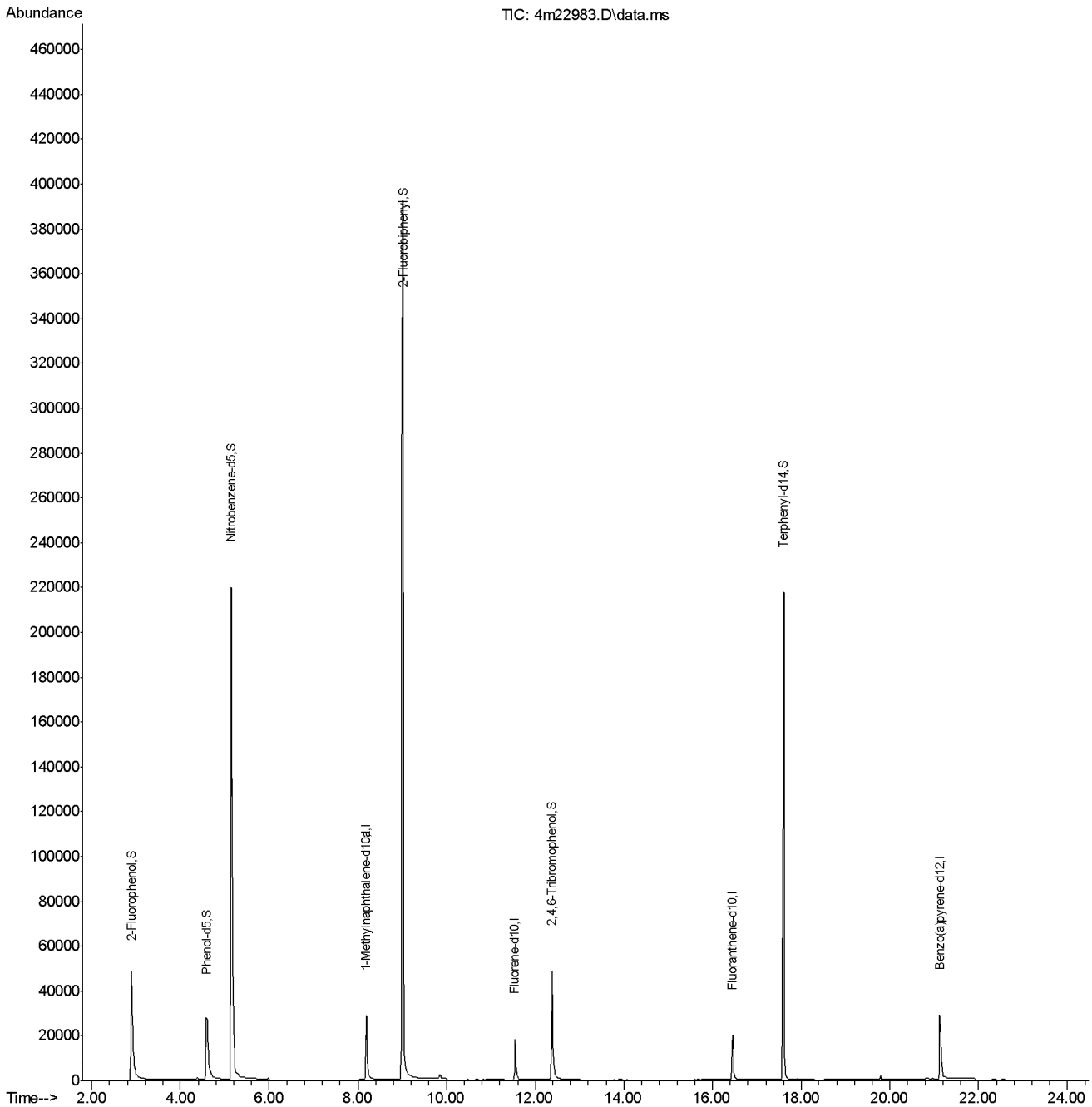
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26164	4.00	ppb	0.00
11) Fluorene-d10	11.537	174	22111	4.00	ppb	-0.02
22) Fluoranthene-d10	16.455	212	39645	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.124	264	40854	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	26164	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	2.900	112	96688	28.37	ppb	0.06
Spiked Amount 50.000			Recovery = 56.74%			
3) Phenol-d5	4.594	99	76460	19.32	ppb	0.09
Spiked Amount 50.000			Recovery = 38.64%			
6) Nitrobenzene-d5	5.142	82	244652	53.04	ppb	0.00
Spiked Amount 50.000			Recovery = 106.08%			
10) 2-Fluorobiphenyl	9.011	172	495404	48.89	ppb	0.00
Spiked Amount 50.000			Recovery = 97.78%			
16) 2,4,6-Tribromophenol	12.373	330	50182	50.42	ppb	-0.02
Spiked Amount 50.000			Recovery = 100.84%			
25) Terphenyl-d14	17.598	244	249352	52.43	ppb	0.00
Spiked Amount 50.000			Recovery = 104.86%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22983.D
Acq On : 23 Dec 2010 6:27 pm
Operator : ninap
Sample : ja64438-2
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Dec 28 08:35:59 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22984.D
Acq On : 23 Dec 2010 6:57 pm
Operator : ninap
Sample : ja64438-3
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 28 08:36:36 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

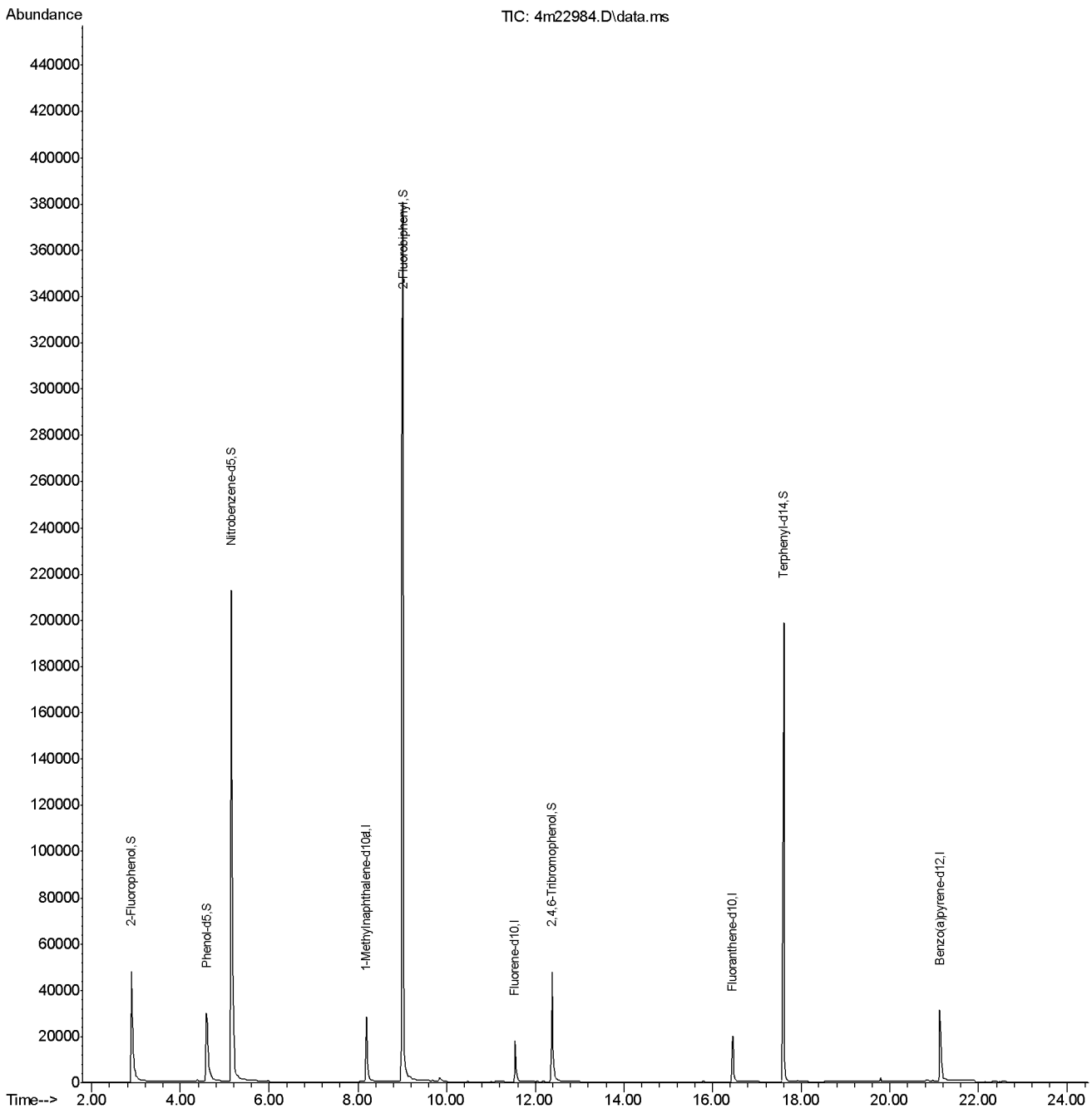
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26324	4.00	ppb	0.00
11) Fluorene-d10	11.537	174	22061	4.00	ppb	-0.02
22) Fluoranthene-d10	16.455	212	40330	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.124	264	42604	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	26324	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	2.887	112	93049	27.14	ppb	0.05
Spiked Amount 50.000			Recovery = 54.28%			
3) Phenol-d5	4.577	99	76317	19.17	ppb	0.07
Spiked Amount 50.000			Recovery = 38.34%			
6) Nitrobenzene-d5	5.142	82	240281	51.78	ppb	0.00
Spiked Amount 50.000			Recovery = 103.56%			
10) 2-Fluorobiphenyl	9.011	172	479974	47.08	ppb	0.00
Spiked Amount 50.000			Recovery = 94.16%			
16) 2,4,6-Tribromophenol	12.373	330	49534	49.88	ppb	-0.02
Spiked Amount 50.000			Recovery = 99.76%			
25) Terphenyl-d14	17.598	244	233194	48.20	ppb	0.00
Spiked Amount 50.000			Recovery = 96.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22984.D
Acq On : 23 Dec 2010 6:57 pm
Operator : ninap
Sample : ja64438-3
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Dec 28 08:36:36 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22985.D
Acq On : 23 Dec 2010 7:28 pm
Operator : ninap
Sample : ja64438-4
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 28 08:37:07 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

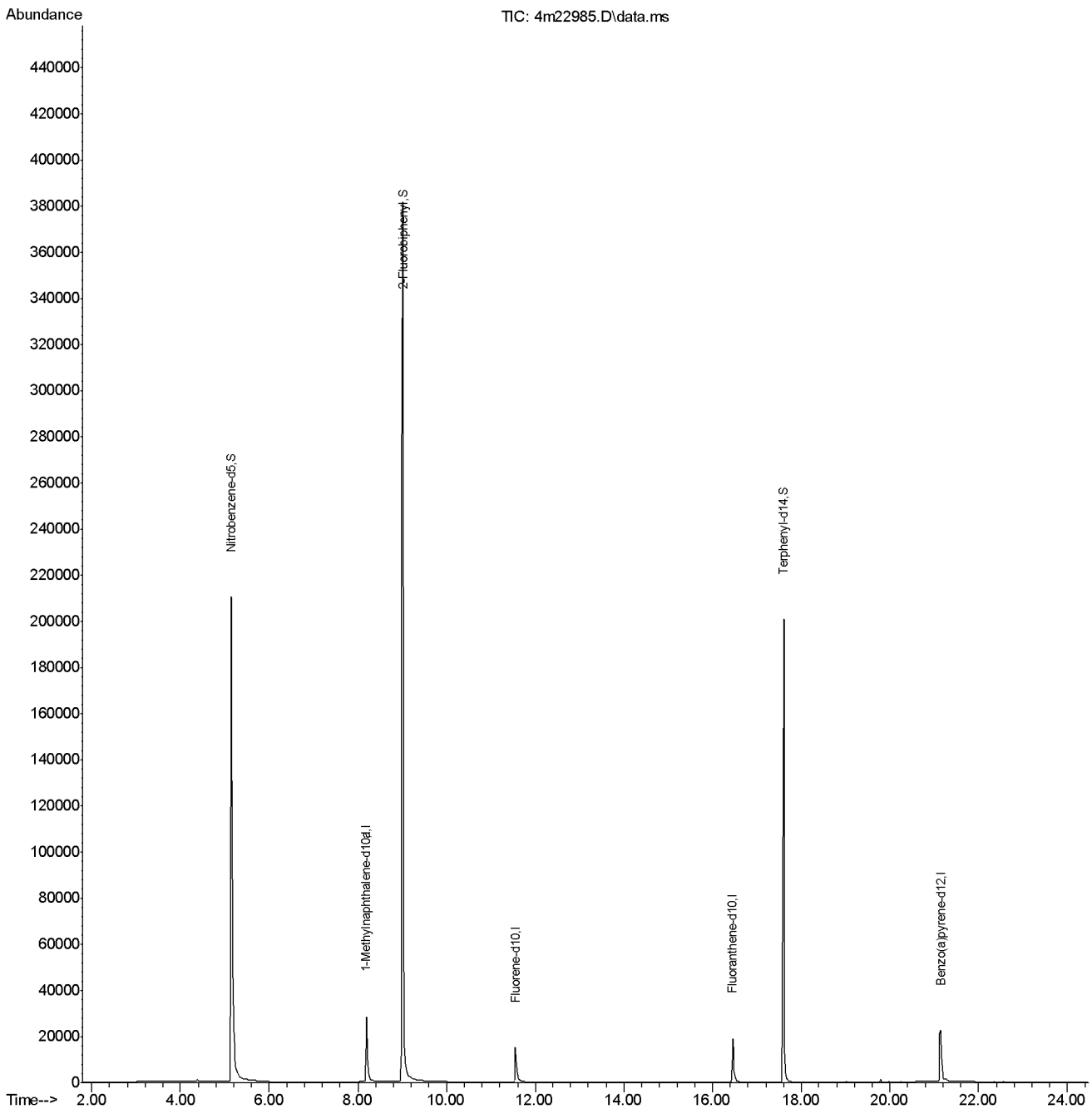
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	25790	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	22192	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38308	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.141	264	38618	4.00	ppb	0.00
36) 1-Methylnaphthalene-d10a	8.191	152	25790	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	246455	54.21	ppb	0.00
Spiked Amount 50.000			Recovery =	108.42%		
10) 2-Fluorobiphenyl	9.011	172	489102	48.97	ppb	0.00
Spiked Amount 50.000			Recovery =	97.94%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	241076	52.46	ppb	0.00
Spiked Amount 50.000			Recovery =	104.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22985.D
Acq On : 23 Dec 2010 7:28 pm
Operator : ninap
Sample : ja64438-4
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 28 08:37:07 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22986.D
Acq On : 23 Dec 2010 7:59 pm
Operator : ninap
Sample : ja64438-5
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 28 08:37:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26482	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	21816	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	39090	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.124	264	41542	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	26482	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	251361	53.84	ppb	0.00
Spiked Amount 50.000			Recovery =	107.68%		
10) 2-Fluorobiphenyl	9.011	172	505238	49.27	ppb	0.00
Spiked Amount 50.000			Recovery =	98.54%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	268186	57.19	ppb	0.00
Spiked Amount 50.000			Recovery =	114.38%		
Target Compounds						Qvalue

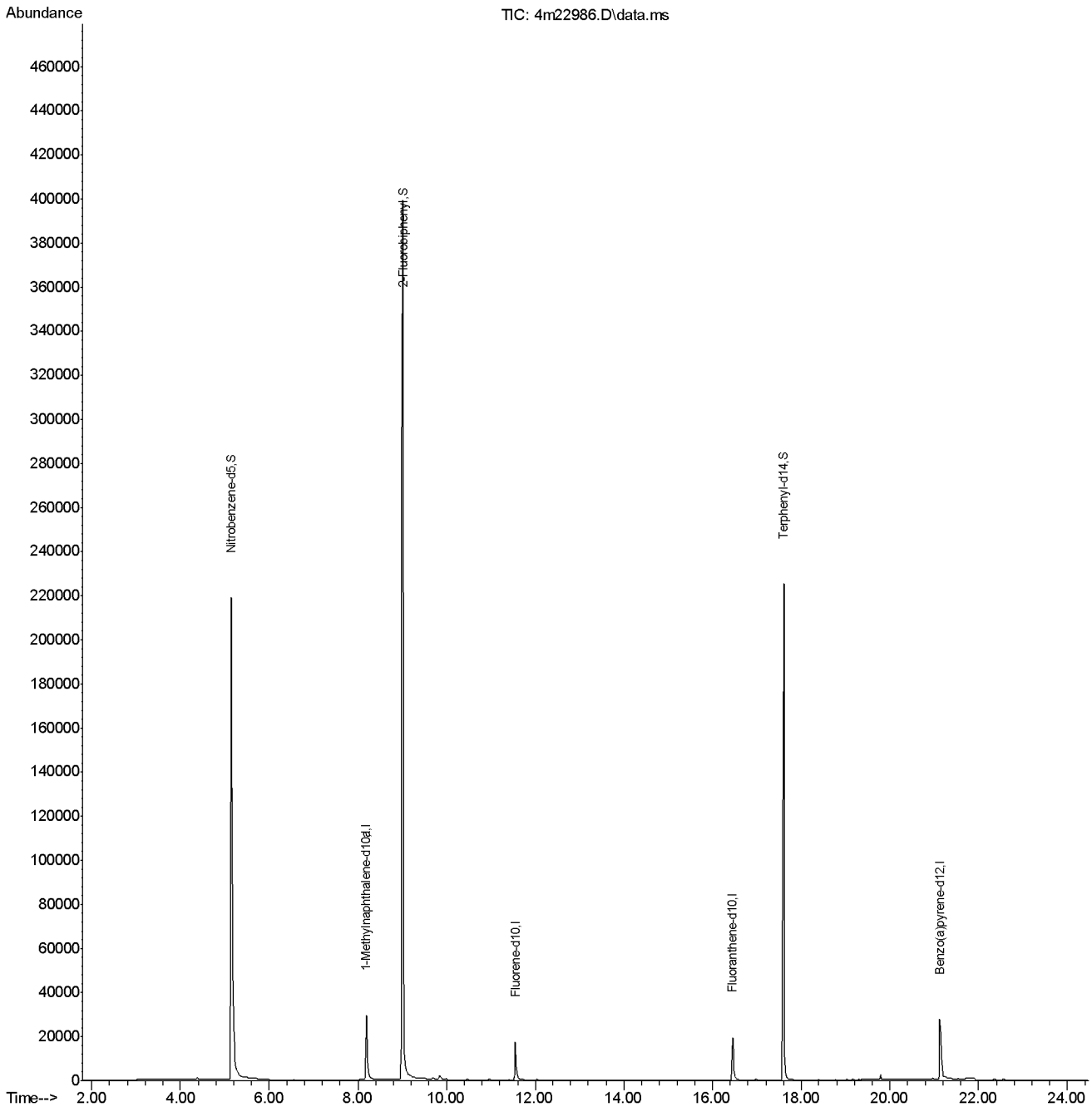
(#) = qualifier out of range (m) = manual integration (+) = signals summed

8.1.17 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22986.D
Acq On : 23 Dec 2010 7:59 pm
Operator : ninap
Sample : ja64438-5
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 28 08:37:43 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22987.D
Acq On : 23 Dec 2010 8:29 pm
Operator : ninap
Sample : ja64438-6
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 28 08:38:25 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

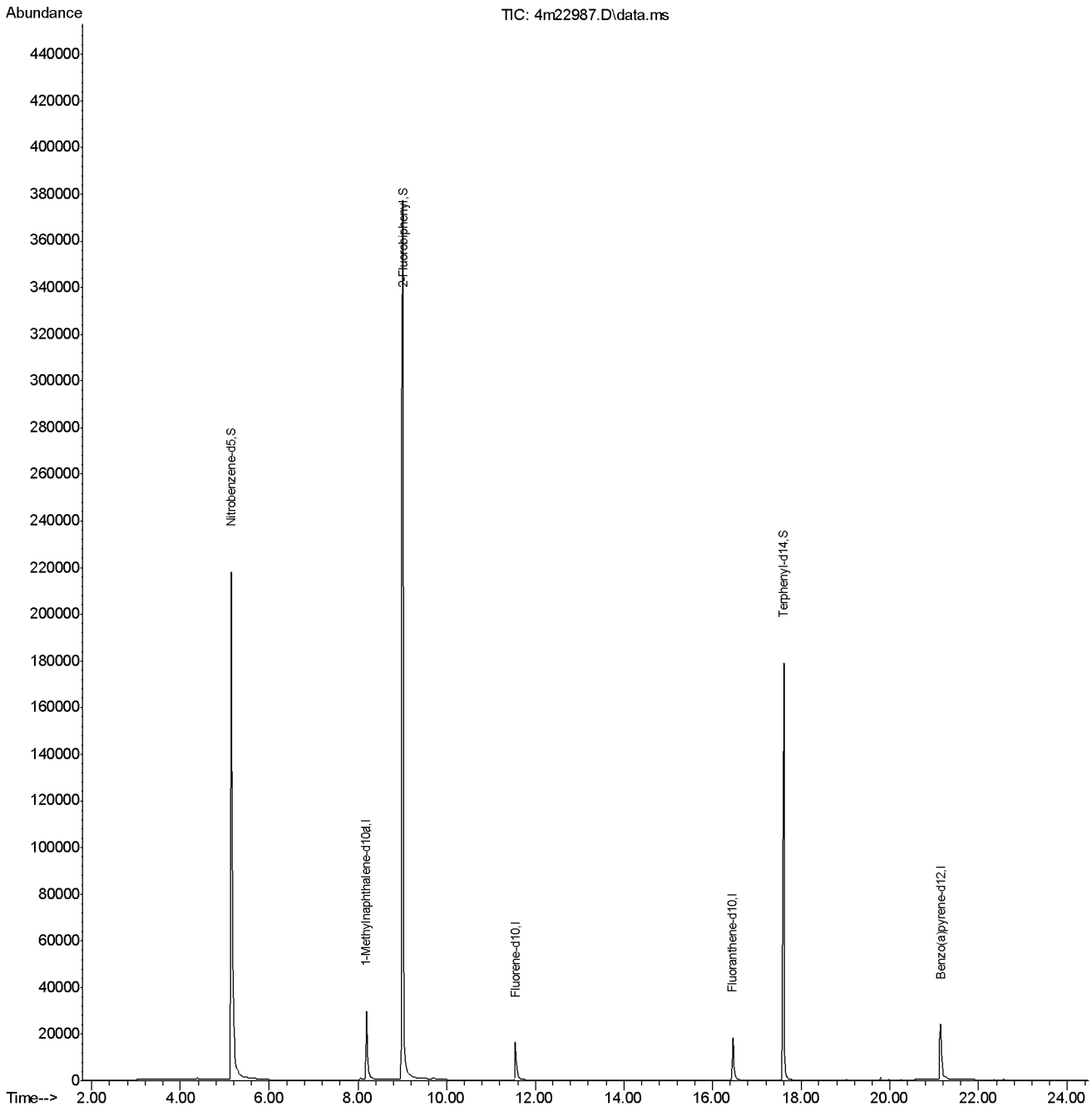
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	26626	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	21473	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38491	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.141	264	38444	4.00	ppb	0.00
36) 1-Methylnaphthalene-d10a	8.191	152	26626	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	255261	54.38	ppb	0.00
Spiked Amount 50.000			Recovery =	108.76%		
10) 2-Fluorobiphenyl	9.011	172	494130	47.92	ppb	0.00
Spiked Amount 50.000			Recovery =	95.84%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	215575	46.69	ppb	0.00
Spiked Amount 50.000			Recovery =	93.38%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22987.D
Acq On : 23 Dec 2010 8:29 pm
Operator : ninap
Sample : ja64438-6
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Dec 28 08:38:25 2010
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22977.D
Acq On : 23 Dec 2010 3:25 pm
Operator : ninap
Sample : op47365a-mb1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 04 12:33:05 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration

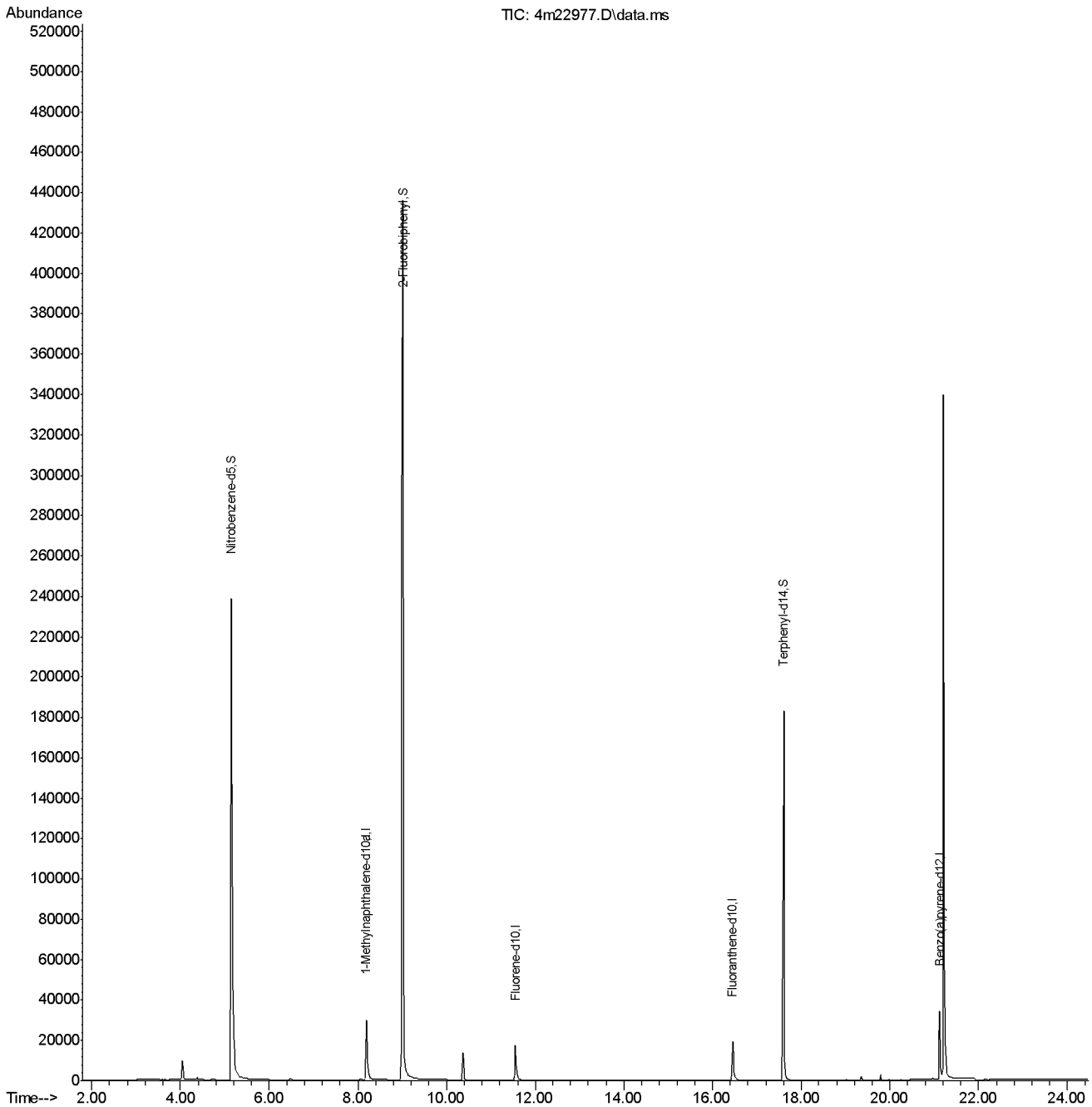
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	8.191	152	27494	4.00	ppb	0.00
11) Fluorene-d10	11.553	174	23543	4.00	ppb	0.00
22) Fluoranthene-d10	16.455	212	38749	4.00	ppb	0.00
29) Benzo(a)pyrene-d12	21.123	264	42677	4.00	ppb	-0.02
36) 1-Methylnaphthalene-d10a	8.191	152	27494	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	5.142	82	265597	54.80	ppb	0.00
Spiked Amount 50.000			Recovery =	109.60%		
10) 2-Fluorobiphenyl	9.011	172	527834	49.57	ppb	0.00
Spiked Amount 50.000			Recovery =	99.14%		
16) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Terphenyl-d14	17.598	244	209672	45.11	ppb	0.00
Spiked Amount 50.000			Recovery =	90.22%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m999\
Data File : 4m22977.D
Acq On : 23 Dec 2010 3:25 pm
Operator : ninap
Sample : op47365a-mb1
Misc : op47365a,e4m999,1000,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 04 12:33:05 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M911SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Dec 20 08:52:38 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3195\R84606.D Vial: 4
Acq On : 22 Dec 2010 9:04 pm Operator: larisap
Sample : op47365-mb1 Inst : MSR
Misc : op47365,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 23 13:16 2010 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

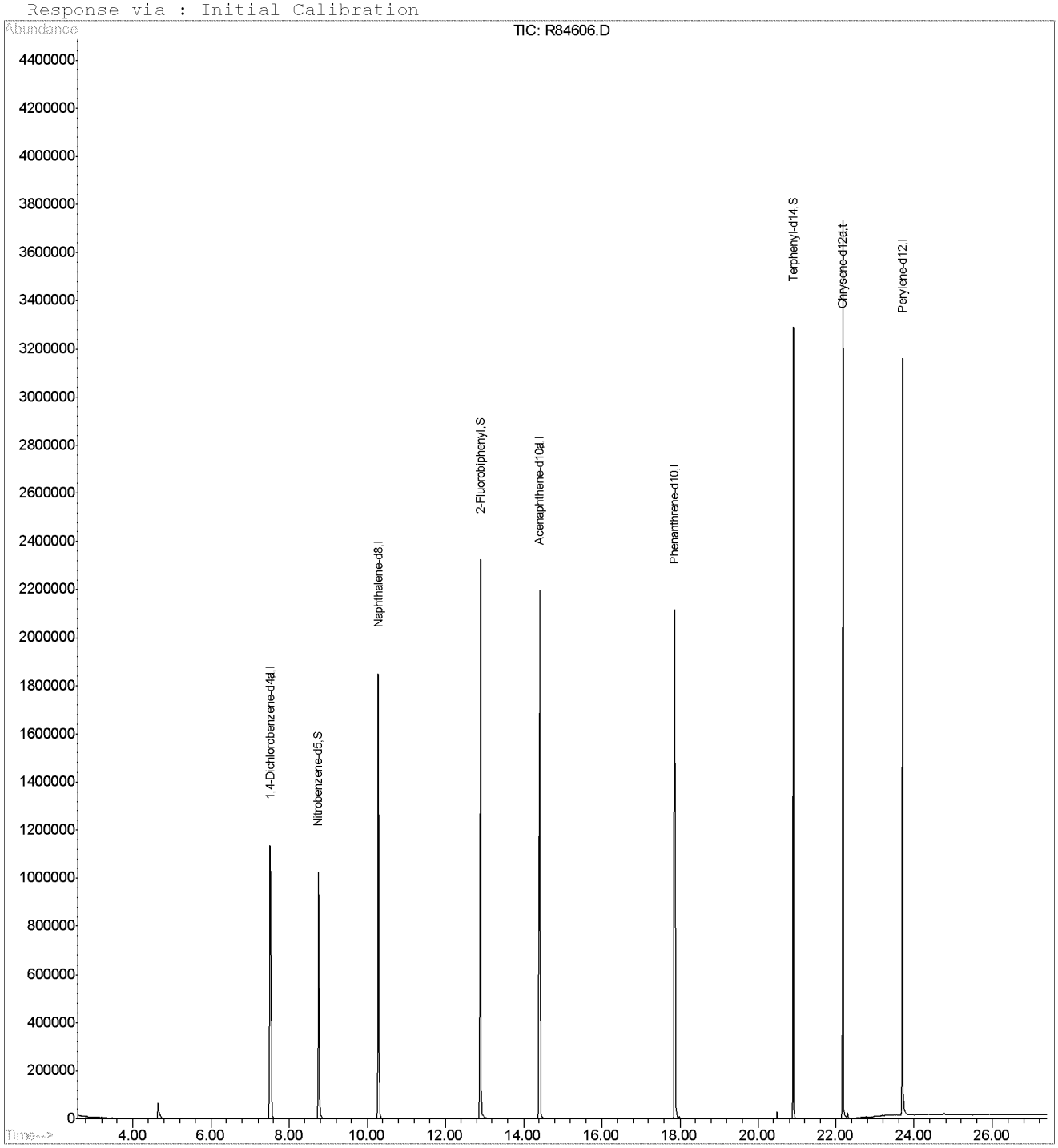
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.51	152	431531	40.00	ppb	-0.11
24) Naphthalene-d8	10.28	136	1515448	40.00	ppb	-0.11
47) Acenaphthene-d10	14.41	164	889251	40.00	ppb	-0.11
69) Phenanthrene-d10	17.87	188	1416817	40.00	ppb	-0.12
83) Chrysene-d12	22.17	240	1518352	40.00	ppb	-0.08
92) Perylene-d12	23.70	264	1395085	40.00	ppb	-0.09
102) 1,4-Dichlorobenzene-d4a	7.51	152	431531	40.00	ppb	-0.10
104) Acenaphthene-d10a	14.41	164	889251	40.00	ppb	-0.10
107) Chrysene-d12a	22.17	240	1518352	40.00	ppb	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.75	82	598301	43.44	ppb	-0.11
Spiked Amount 50.000			Recovery =	86.88%		
51) 2-Fluorobiphenyl	12.90	172	1284682	41.04	ppb	-0.11
Spiked Amount 50.000			Recovery =	82.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.90	244	1086797	37.98	ppb	-0.07
Spiked Amount 50.000			Recovery =	75.96%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R84606.D MR3151.M Thu Dec 23 13:16:13 2010 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3195\R84606.D Vial: 4
Acq On : 22 Dec 2010 9:04 pm Operator: larisap
Sample : op47365-mb1 Inst : MSR
Misc : op47365,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 23 13:16 2010 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA64438

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3195\R84606.D Vial: 4
Acq On : 22 Dec 2010 9:04 pm Operator: larisap
Sample : op47365-mb1 Inst : MSR
Misc : op47365,er3195,1000,,,1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0.3 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

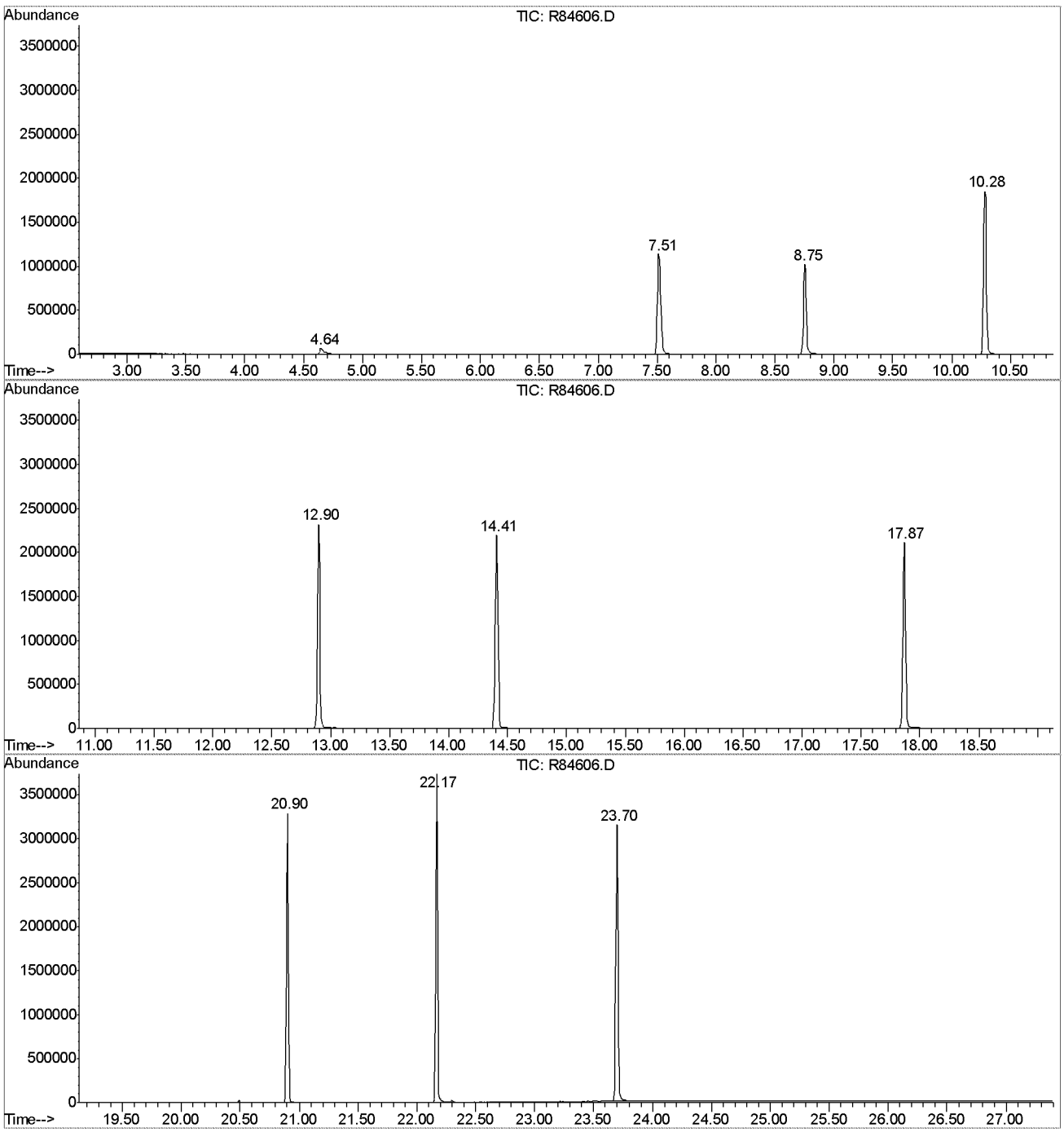
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.644	380	385	403	rBV	64712	157641	3.81%	0.531%
2	7.513	914	922	941	rBV	1137597	2331455	56.39%	7.852%
3	8.752	1147	1154	1169	rBV	1027116	1663005	40.22%	5.600%
4	10.280	1432	1440	1453	rBV	1852122	3014886	72.92%	10.153%
5	12.898	1922	1930	1940	rBV	2324821	3554764	85.98%	11.971%
6	14.410	2204	2213	2235	rBV	2196161	3599520	87.06%	12.122%
7	17.866	2851	2860	2877	rBV2	2115434	3683572	89.09%	12.405%
8	20.900	3422	3428	3441	rBV	3287966	3483805	84.26%	11.732%
9	22.166	3660	3665	3686	rBV	3734324	4134647	100.00%	13.924%
10	23.700	3945	3952	3973	rBV	3143092	4070672	98.45%	13.709%

Sum of corrected areas: 29693967

ACCUTEST LABORATORIES JA64438

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3195\R84606.D
Operator : larisap
Acquired : 22 Dec 2010 9:04 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: op47365-mb1
Misc Info : op47365,er3195,1000,,,1,1
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 22 Dec 2010 9:04 pm
Data File: C:\MSDCHEM\1\DATA\ER3195\R84606.D
Name: op47365-mb1
Misc: op47365,er3195,1000,,,1,1
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.2.3

8

SII-SSA-0014-005853

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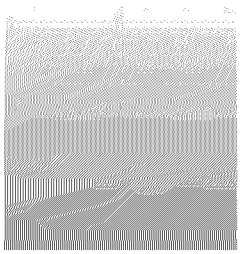
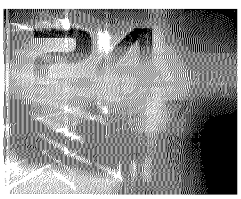
02/11/11





Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

Diesel Release Area, NP000603.0008.00001

Accutest Job Number: JA66701

Sampling Dates: 01/20/11 - 01/21/11

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **386**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA66701-1	01/20/11	14:30	RM	01/21/11	AQ	Ground Water	W-RM-012011-MWCD
JA66701-2	01/20/11	15:40	RM	01/21/11	AQ	Ground Water	W-RM-012011-MWCC
JA66701-3	01/20/11	15:50	RM	01/21/11	AQ	Field Blank Water	FB-012011
JA66701-4	01/21/11	10:00	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWCE
JA66701-5	01/21/11	11:15	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWBV
JA66701-6	01/21/11	12:45	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWX
JA66701-7	01/21/11	13:40	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWAY
JA66701-8	01/21/11	14:00	RM	01/21/11	AQ	Ground Water	W-RM-012111-MWCF
JA66701-9	01/21/11	14:00	RM	01/21/11	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Arcadis **Job No** JA66701

Site: PSEG-Diesel, Salem, NJ **Report Date** 2/11/2011 10:18:54 A

On 01/21/2011, 7 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at Accutest Laboratories at a temperature of 2 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA66701 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V3B3109

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66701-2MS, JA66701-2MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V3B3111

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66594-12MS, JA66594-12MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Methyl Tert Butyl Ether are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix: AQ **Batch ID:** V3B3115

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66951-1MS, JA66951-1MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP47853

- All samples were extracted within the recommended method holding time.
- Sample(s) JA66701-1MS, JA66701-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Hexachlorocyclopentadiene are outside control limits. Outside of in house control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP47853A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA66701-1MS, JA66701-1MSD were used as the QC samples indicated.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66645.D	1	01/28/11	TLR	n/a	n/a	V3B3111
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	17.1	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	0.90	2.0	0.57	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	0.86	5.0	0.35	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
496-11-7	Indane	17.72	7.5	ug/l	JN
	C4 alkyl benzene	18.10	7.6	ug/l	J
	1H-indene-dihydro-methyl	18.31	6.2	ug/l	J
	C4 alkyl benzene	18.54	5.4	ug/l	J
	C4 alkyl benzene	19.10	11	ug/l	J
	1H-indene-dihydro-methyl	19.15	10	ug/l	J
	Naphthalene tetrahydro	19.37	13	ug/l	J
	1H-Indene-dihydro-dimethyl	19.64	6.5	ug/l	J
91-20-3	Naphthalene	19.94	16	ug/l	JN
	1H-Indene-dihydro-dimethyl	20.08	6.1	ug/l	J
	Naphthalene tetrahydro	20.94	6.6	ug/l	J
	Naphthalene methyl	21.25	7.7	ug/l	J

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene methyl	21.52	18	ug/l	J
	Total TIC, Volatile		121.6	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		25-112%
321-60-8	2-Fluorobiphenyl	73%		31-106%
1718-51-0	Terphenyl-d14	66%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	9.73	4.3	ug/l	J
	unknown	11.63	4.5	ug/l	J
	Phenol, tert-butyl-	11.77	4.4	ug/l	J
90-12-0	Naphthalene, 1-methyl-	12.08	5.9	ug/l	JN
	unknown	13.81	5.8	ug/l	J
	unknown	15.14	4.2	ug/l	J
	unknown	16.32	4.4	ug/l	J
	unknown	17.09	5.7	ug/l	J
	unknown	19.04	7.3	ug/l	J
	Total TIC, Semi-Volatile		46.5	ug/l	J

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Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCD		
Lab Sample ID:	JA66701-1	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23447.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.362	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	0.687	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	1.54	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		32-135%
321-60-8	2-Fluorobiphenyl	83%		31-121%
1718-51-0	Terphenyl-d14	60%		10-130%

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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66732.D	1	01/31/11	TLR	n/a	n/a	V3B3115
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	3.1	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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J = Indicates an estimated value
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		76-120%
17060-07-0	1,2-Dichloroethane-D4	87%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85127.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	82%		25-112%
321-60-8	2-Fluorobiphenyl	78%		31-106%
1718-51-0	Terphenyl-d14	78%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012011-MWCC		
Lab Sample ID:	JA66701-2	**Date Sampled:**	01/20/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23448.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.844	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.131	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	0.111	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		32-135%
321-60-8	2-Fluorobiphenyl	94%		31-121%
1718-51-0	Terphenyl-d14	78%		10-130%

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66592.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	99%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85140.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	945 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.1	0.42	ug/l	
1912-24-9	Atrazine	ND	5.3	0.41	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.43	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.37	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.27	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.45	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.44	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.27	ug/l	
86-74-8	Carbazole	ND	1.1	0.17	ug/l	
105-60-2	Caprolactam	ND	2.1	0.21	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.26	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.33	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.1	0.23	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.1	0.34	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	0.31	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.32	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.20	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.42	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	0.35	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	21	0.26	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.22	ug/l	
78-59-1	Isophorone	ND	2.1	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.70	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.25	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	0.30	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.19	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.27	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.46	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.23	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.51	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		25-112%
321-60-8	2-Fluorobiphenyl	85%		31-106%
1718-51-0	Terphenyl-d14	81%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-012011		
Lab Sample ID:	JA66701-3	**Date Sampled:**	01/20/11
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23449.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	945 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.11	0.012	ug/l	
208-96-8	Acenaphthylene	ND	0.11	0.012	ug/l	
120-12-7	Anthracene	ND	0.11	0.0089	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.11	0.010	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.11	0.017	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.11	0.010	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.11	0.011	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.014	ug/l	
218-01-9	Chrysene	ND	0.11	0.012	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.020	ug/l	
206-44-0	Fluoranthene	ND	0.11	0.0086	ug/l	
86-73-7	Fluorene	ND	0.11	0.0095	ug/l	
118-74-1	Hexachlorobenzene	ND	0.021	0.011	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.017	ug/l	
91-20-3	Naphthalene	ND	0.11	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.11	0.0099	ug/l	
129-00-0	Pyrene	ND	0.11	0.013	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	94%		32-135%
321-60-8	2-Fluorobiphenyl	94%		31-121%
1718-51-0	Terphenyl-d14	81%		10-130%

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66595.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	1.1	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	2.4	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	0.79	2.0	0.57	ug/l	J
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
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N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.77	1.0	0.23	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	1.3	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	1.3	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85141.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	0.84	1.0	0.66	ug/l	J
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		25-112%
321-60-8	2-Fluorobiphenyl	68%		31-106%
1718-51-0	Terphenyl-d14	51%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCE		
Lab Sample ID:	JA66701-4	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23450.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.330	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	0.203	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	2.13	0.10	0.012	ug/l	
85-01-8	Phenanthrene	0.110	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		32-135%
321-60-8	2-Fluorobiphenyl	75%		31-121%
1718-51-0	Terphenyl-d14	49%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66596.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	101%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	104%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85142.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	71%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWBV		
Lab Sample ID:	JA66701-5	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23451.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		32-135%
321-60-8	2-Fluorobiphenyl	91%		31-121%
1718-51-0	Terphenyl-d14	75%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66643.D	1	01/28/11	TLR	n/a	n/a	V3B3111
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	95%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-indene-dihydro-trimethyl	20.53	9	ug/l	J
	Total TIC, Volatile		9	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85143.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	76%		31-106%
1718-51-0	Terphenyl-d14	77%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	11.43	9.3	ug/l	J
	alkane	12.06	5	ug/l	J
	unknown	12.18	4.5	ug/l	J
	unknown	12.91	4.7	ug/l	J
	unknown	13.60	5.3	ug/l	J
	cycloalkane	13.80	4.7	ug/l	J
	alkane	13.95	18	ug/l	J
	unknown	14.18	6.6	ug/l	J
	unknown	15.08	5.4	ug/l	J
	unknown	15.52	4.9	ug/l	J
	alkane	16.17	15	ug/l	J
	alkane	16.82	26	ug/l	J
	alkane	17.23	5.1	ug/l	J
	alkane	17.92	18	ug/l	J
	alkane	18.77	5.9	ug/l	J
	Total TIC, Semi-Volatile		138.4	ug/l	J

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWX		
Lab Sample ID:	JA66701-6	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23452.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		32-135%
321-60-8	2-Fluorobiphenyl	88%		31-121%
1718-51-0	Terphenyl-d14	75%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66604.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	103%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85144.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	1.5	2.0	0.19	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	8.7	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		25-112%
321-60-8	2-Fluorobiphenyl	67%		31-106%
1718-51-0	Terphenyl-d14	61%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWAY		
Lab Sample ID:	JA66701-7	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23453.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%		32-135%
321-60-8	2-Fluorobiphenyl	80%		31-121%
1718-51-0	Terphenyl-d14	65%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66605.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	104%		76-117%
460-00-4	4-Bromofluorobenzene	103%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R85145.D	1	01/28/11	LP	01/26/11	OP47853	ER3224
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	70%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	16.80	5.4	ug/l	J
	alkane	17.92	5.3	ug/l	J
	Total TIC, Semi-Volatile		10.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	W-RM-012111-MWCF		
Lab Sample ID:	JA66701-8	**Date Sampled:**	01/21/11
Matrix:	AQ - Ground Water	**Date Received:**	01/21/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23458.D	1	02/01/11	NAP	01/26/11	OP47853A	E4M1023
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	98%		32-135%
321-60-8	2-Fluorobiphenyl	91%		31-121%
1718-51-0	Terphenyl-d14	70%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA66701-9	**Date Sampled:**	01/21/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3B66593.D	1	01/27/11	TLR	n/a	n/a	V3B3109
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA66701-9	**Date Sampled:**	01/21/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	01/21/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		76-120%
17060-07-0	1,2-Dichloroethane-D4	99%		64-135%
2037-26-5	Toluene-D8	105%		76-117%
460-00-4	4-Bromofluorobenzene	106%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey
ACCUTEST
LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: JA66701

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 Friends Ln.
City: Newtown State: PA Zip: 18940
Project Contact: Jon Shafer E-mail: jshafer@arcadis-us.com
Phone #: 2676851800 Fax #:
Sampler(s) Name(s): Robert Miller Phone #: 2012734552

Project Information

Project Name: PSEG Diesel Release Area
Street:
City: State:
Project #: NP000603.0008.00001
Client Purchase Order #:
Project Manager: Brad Pierce

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs 8260B	SVOCs 8270C	LAB USE ONLY
1	W-RM-012011-MWCD		1/20/11	1430	RM	GW	5	3								X	X	EX18
2	W-RM-012011-MWCC		1/20/11	1540	RM	GW	5	3								X	X	311
3	FB-012011		1/20/11	1550	RM	GW	4	2								X	X	
4	W-RM-012111-MWCE		1/21/11	1000	RM	GW	5	3								X	X	
5	W-RM-012111-MWBV		1/21/11	1115	RM	GW	5	3								X	X	
6	W-RM-012111-MWX		1/21/11	1245	RM	GW	5	3								X	X	
7	W-RM-012111-MWAY		1/21/11	1340	RM	GW	5	3								X	X	
8	W-RM-012111-MWCF		1/21/11	1400	RM	GW	5	3								X	X	
9	Trip Blank		1/19/11	0900			2	2								X		

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Rec'd at Exton Service Center 1/21/11 @1610
see attached special handling note from Customer

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 1/21/11 1610	Received By: 1	Relinquished By: 2	Date Time: 01/21/11 1815	Received By: 2 W. Nunez		
Relinquished by Sampler: 3 W. Nunez	Date Time: 1/21/11 2315	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4		
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp. 2°C

4.1.4

JA66701: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA66701 Client: Immediate Client Services Action Required: No

Date / Time Received: 1/21/2011 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA66701: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA66701-1	Collected: 20-JAN-11 14:30 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012011-MWCD						
JA66701-1	SW846 8270C	27-JAN-11 16:10	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-1	SW846 8260B	28-JAN-11 16:57	TLR			V8260NJPTCL11+
JA66701-1	SW846 8270C BY SIM	31-JAN-11 17:24	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-2	Collected: 20-JAN-11 15:40 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012011-MWCC						
JA66701-2	SW846 8270C	27-JAN-11 17:56	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-2	SW846 8260B	31-JAN-11 16:24	TLR			V8260NJPTCL11+
JA66701-2	SW846 8270C BY SIM	31-JAN-11 17:47	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-3	Collected: 20-JAN-11 15:50 By: RM		Received: 21-JAN-11		By:	MPC
FB-012011						
JA66701-3	SW846 8260B	27-JAN-11 01:34	TLR			V8260NJPTCL11+
JA66701-3	SW846 8270C	28-JAN-11 17:11	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-3	SW846 8270C BY SIM	31-JAN-11 18:12	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-4	Collected: 21-JAN-11 10:00 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWCE						
JA66701-4	SW846 8260B	27-JAN-11 03:10	TLR			V8260NJPTCL11+
JA66701-4	SW846 8270C	28-JAN-11 17:47	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-4	SW846 8270C BY SIM	31-JAN-11 18:36	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-5	Collected: 21-JAN-11 11:15 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWBV						
JA66701-5	SW846 8260B	27-JAN-11 03:42	TLR			V8260NJPTCL11+
JA66701-5	SW846 8270C	28-JAN-11 18:23	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-5	SW846 8270C BY SIM	31-JAN-11 18:59	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-6	Collected: 21-JAN-11 12:45 By: RM		Received: 21-JAN-11		By:	MPC
W-RM-012111-MWX						
JA66701-6	SW846 8260B	28-JAN-11 16:25	TLR			V8260NJPTCL11+
JA66701-6	SW846 8270C	28-JAN-11 18:52	LP	26-JAN-11	RSJ	B8270NJTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA66701

PSEG-Diesel, Salem, NJ
Project No: Diesel Release Area, NP000603.0008.00001

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA66701-6	SW846 8270C BY SIM	31-JAN-11 19:24	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-7	Collected: 21-JAN-11 13:40 By: RM		Received: 21-JAN-11 By: MPC			
W-RM-012111-MWAY						
JA66701-7	SW846 8260B	27-JAN-11 07:57	TLR			V8260NJPTCL11+
JA66701-7	SW846 8270C	28-JAN-11 19:28	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-7	SW846 8270C BY SIM	31-JAN-11 19:47	OYA	26-JAN-11	RSJ	B8270SIMNJ
JA66701-8	Collected: 21-JAN-11 14:00 By: RM		Received: 21-JAN-11 By: MPC			
W-RM-012111-MWCF						
JA66701-8	SW846 8260B	27-JAN-11 08:28	TLR			V8260NJPTCL11+
JA66701-8	SW846 8270C	28-JAN-11 20:05	LP	26-JAN-11	RSJ	B8270NJTCL11+
JA66701-8	SW846 8270C BY SIM	01-FEB-11 09:28	NAP	26-JAN-11	RSJ	B8270SIMNJ
JA66701-9	Collected: 21-JAN-11 14:00 By: RM		Received: 21-JAN-11 By: MPC			
TRIP BLANK						
JA66701-9	SW846 8260B	27-JAN-11 02:06	TLR			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-1.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-1.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-1.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-1.1
JA66701-1.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-1.1
JA66701-1.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-1.1.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-1.1.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument
JA66701-1.1.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-1.1.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-1.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-1.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-1.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-1.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-1.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-1.2
JA66701-1.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-1.2
JA66701-1.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-1.2.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-1.2.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument
JA66701-1.2.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-1.2.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-1.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-1.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-1.3	Secured Storage	Tara Reddington	01/28/11 11:12	Retrieve from Storage
JA66701-1.3	Tara Reddington	GCMS3B	01/28/11 11:12	Load on Instrument
JA66701-1.3	GCMS3B	Tara Reddington	01/31/11 09:39	Unload from Instrument
JA66701-1.3	Tara Reddington	Secured Storage	01/31/11 09:39	Return to Storage
JA66701-1.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-1.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-1.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-1.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-2.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-2.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-2.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-2.2
JA66701-2.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-2.2
JA66701-2.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-2.2.1	Extract Storage	Nina Pandya	01/27/11 12:43	Retrieve from Storage
JA66701-2.2.1	Nina Pandya	GCMSR	01/27/11 12:43	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-2.2.1	GCMSR	Nina Pandya	01/31/11 09:00	Unload from Instrument
JA66701-2.2.1	Nina Pandya	GCMS4M	01/31/11 09:00	Load on Instrument
JA66701-2.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-2.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-2.3	Secured Storage	Tara Reddington	01/31/11 10:56	Retrieve from Storage
JA66701-2.3	Tara Reddington	GCMS3B	01/31/11 10:56	Load on Instrument
JA66701-2.3	GCMS3B	Tara Reddington	02/01/11 08:26	Unload from Instrument
JA66701-2.3	Tara Reddington	Secured Storage	02/01/11 08:26	Return to Storage
JA66701-2.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-2.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-2.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-2.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-3.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-3.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-3.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-3.2
JA66701-3.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-3.2
JA66701-3.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-3.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-3.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-3.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-3.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-3.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-3.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-3.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-3.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-4.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-4.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-4.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-4.2
JA66701-4.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-4.2
JA66701-4.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-4.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-4.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-4.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-4.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-4.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-4.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-4.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-4.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-5.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-5.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-5.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-5.1
JA66701-5.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-5.1
JA66701-5.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-5.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-5.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-5.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-5.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-5.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-5.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-5.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-5.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-6.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-6.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-6.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-6.1
JA66701-6.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-6.1
JA66701-6.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-6.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-6.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-6.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-6.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-6.3	Secured Storage	Tara Reddington	01/28/11 11:12	Retrieve from Storage
JA66701-6.3	Tara Reddington	GCMS3B	01/28/11 11:12	Load on Instrument
JA66701-6.3	GCMS3B	Tara Reddington	01/31/11 09:39	Unload from Instrument
JA66701-6.3	Tara Reddington	Secured Storage	01/31/11 09:39	Return to Storage
JA66701-6.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-6.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-6.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-6.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-7.1	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-7.1	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-7.1.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-7.1

Accutest Internal Chain of Custody

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 01/21/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA66701-7.1.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-7.1
JA66701-7.1.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-7.1.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-7.1.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-7.1.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-7.1.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-7.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-7.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-7.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-7.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-8.2	Secured Storage	Reginald Saint-Juste	01/26/11 09:03	Retrieve from Storage
JA66701-8.2	Reginald Saint-Juste		01/26/11 18:22	Depleted
JA66701-8.2.1	Reginald Saint-Juste	Organics Prep	01/26/11 09:03	Extract from JA66701-8.2
JA66701-8.2.1	Organics Prep	Reginald Saint-Juste	01/26/11 18:21	Extract from JA66701-8.2
JA66701-8.2.1	Reginald Saint-Juste	Extract Storage	01/26/11 18:21	Return to Storage
JA66701-8.2.1	Extract Storage	Nina Pandya	01/31/11 08:59	Retrieve from Storage
JA66701-8.2.1	Nina Pandya	GCMS4M	01/31/11 08:59	Load on Instrument
JA66701-8.2.1	GCMS4M	Nina Pandya	02/01/11 11:28	Unload from Instrument
JA66701-8.2.1	Nina Pandya	Extract Freezer	02/01/11 11:28	Return to Storage
JA66701-8.4	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-8.4	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-8.4	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-8.4	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage
JA66701-9.2	Secured Storage	Tara Reddington	01/26/11 15:23	Retrieve from Storage
JA66701-9.2	Tara Reddington	GCMS3B	01/26/11 15:23	Load on Instrument
JA66701-9.2	GCMS3B	Alexander Vincent Mazella	01/27/11 12:49	Unload from Instrument
JA66701-9.2	Alexander Vincent Mazella	Secured Storage	01/27/11 12:49	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-MB	3B66586.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-MB	3B66586.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	105%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-MB	3B66632.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-MB	3B66632.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	105%	76-117%
460-00-4	4-Bromofluorobenzene	104%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-MB	3B66721.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-MB	3B66721.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-BS	3B66587.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	42.8	86	51-151
71-43-2	Benzene	50	50.7	101	75-122
74-97-5	Bromochloromethane	50	55.4	111	78-124
75-27-4	Bromodichloromethane	50	52.3	105	77-128
75-25-2	Bromoform	50	51.4	103	67-141
74-83-9	Bromomethane	50	56.7	113	53-152
78-93-3	2-Butanone (MEK)	50	41.7	83	64-130
75-15-0	Carbon disulfide	50	54.2	108	59-140
56-23-5	Carbon tetrachloride	50	54.0	108	75-148
108-90-7	Chlorobenzene	50	52.6	105	76-124
75-00-3	Chloroethane	50	58.3	117	54-147
67-66-3	Chloroform	50	51.4	103	77-124
74-87-3	Chloromethane	50	50.4	101	46-144
110-82-7	Cyclohexane	50	54.2	108	62-127
124-48-1	Dibromochloromethane	50	50.1	100	76-132
95-50-1	1,2-Dichlorobenzene	50	52.1	104	74-125
541-73-1	1,3-Dichlorobenzene	50	52.2	104	73-124
106-46-7	1,4-Dichlorobenzene	50	52.3	105	71-123
75-71-8	Dichlorodifluoromethane	50	53.4	107	42-152
75-34-3	1,1-Dichloroethane	50	50.2	100	72-124
107-06-2	1,2-Dichloroethane	50	48.9	98	66-150
75-35-4	1,1-Dichloroethene	50	54.5	109	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.8	116	71-119
156-60-5	trans-1,2-Dichloroethene	50	45.9	92	71-123
78-87-5	1,2-Dichloropropane	50	50.8	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	50.3	101	77-124
10061-02-6	trans-1,3-Dichloropropene	50	48.8	98	75-132
100-41-4	Ethylbenzene	50	50.7	101	77-124
76-13-1	Freon 113	50	58.3	117	58-149
591-78-6	2-Hexanone	50	42.5	85	58-136
98-82-8	Isopropylbenzene	50	52.2	104	60-136
79-20-9	Methyl Acetate	50	49.8	100	57-139
108-87-2	Methylcyclohexane	50	55.3	111	73-130
1634-04-4	Methyl Tert Butyl Ether	100	93.0	93	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	49.9	100	63-135
75-09-2	Methylene chloride	50	52.3	105	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3109-BS	3B66587.D	1	01/26/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.6	101	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	48.4	97	66-125
127-18-4	Tetrachloroethene	50	57.1	114	70-136
108-88-3	Toluene	50	51.3	103	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.7	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.9	112	67-132
71-55-6	1,1,1-Trichloroethane	50	54.7	109	77-136
79-00-5	1,1,2-Trichloroethane	50	51.5	103	75-123
79-01-6	Trichloroethene	50	55.1	110	79-126
75-69-4	Trichlorofluoromethane	50	57.5	115	56-154
75-01-4	Vinyl chloride	50	54.5	109	56-146
	m,p-Xylene	100	104	104	77-125
95-47-6	o-Xylene	50	53.4	107	76-126
1330-20-7	Xylene (total)	150	157	105	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	104%	76-117%
460-00-4	4-Bromofluorobenzene	102%	72-122%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-BS	3B66633.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	31.3	63	51-151
71-43-2	Benzene	50	49.8	100	75-122
74-97-5	Bromochloromethane	50	55.8	112	78-124
75-27-4	Bromodichloromethane	50	52.2	104	77-128
75-25-2	Bromoform	50	53.1	106	67-141
74-83-9	Bromomethane	50	49.8	100	53-152
78-93-3	2-Butanone (MEK)	50	39.7	79	64-130
75-15-0	Carbon disulfide	50	53.7	107	59-140
56-23-5	Carbon tetrachloride	50	52.0	104	75-148
108-90-7	Chlorobenzene	50	52.2	104	76-124
75-00-3	Chloroethane	50	50.9	102	54-147
67-66-3	Chloroform	50	50.7	101	77-124
74-87-3	Chloromethane	50	44.0	88	46-144
110-82-7	Cyclohexane	50	52.3	105	62-127
124-48-1	Dibromochloromethane	50	50.8	102	76-132
95-50-1	1,2-Dichlorobenzene	50	52.3	105	74-125
541-73-1	1,3-Dichlorobenzene	50	52.2	104	73-124
106-46-7	1,4-Dichlorobenzene	50	52.3	105	71-123
75-71-8	Dichlorodifluoromethane	50	46.1	92	42-152
75-34-3	1,1-Dichloroethane	50	49.8	100	72-124
107-06-2	1,2-Dichloroethane	50	49.5	99	66-150
75-35-4	1,1-Dichloroethene	50	52.5	105	61-132
156-59-2	cis-1,2-Dichloroethene	50	57.3	115	71-119
156-60-5	trans-1,2-Dichloroethene	50	45.3	91	71-123
78-87-5	1,2-Dichloropropane	50	50.9	102	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	50.8	102	75-132
100-41-4	Ethylbenzene	50	49.6	99	77-124
76-13-1	Freon 113	50	56.2	112	58-149
591-78-6	2-Hexanone	50	42.1	84	58-136
98-82-8	Isopropylbenzene	50	50.6	101	60-136
79-20-9	Methyl Acetate	50	51.6	103	57-139
108-87-2	Methylcyclohexane	50	54.4	109	73-130
1634-04-4	Methyl Tert Butyl Ether	100	97.9	98	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	51.9	104	63-135
75-09-2	Methylene chloride	50	52.2	104	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3111-BS	3B66633.D	1	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.1	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	49.3	99	66-125
127-18-4	Tetrachloroethene	50	51.9	104	70-136
108-88-3	Toluene	50	50.7	101	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.7	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	55.7	111	67-132
71-55-6	1,1,1-Trichloroethane	50	52.7	105	77-136
79-00-5	1,1,2-Trichloroethane	50	51.9	104	75-123
79-01-6	Trichloroethene	50	53.6	107	79-126
75-69-4	Trichlorofluoromethane	50	51.6	103	56-154
75-01-4	Vinyl chloride	50	46.7	93	56-146
	m,p-Xylene	100	102	102	77-125
95-47-6	o-Xylene	50	52.6	105	76-126
1330-20-7	Xylene (total)	150	155	103	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	103%	72-122%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-BS	3B66722.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	25.9	52	51-151
71-43-2	Benzene	50	48.2	96	75-122
74-97-5	Bromochloromethane	50	53.7	107	78-124
75-27-4	Bromodichloromethane	50	49.4	99	77-128
75-25-2	Bromoform	50	52.5	105	67-141
74-83-9	Bromomethane	50	49.6	99	53-152
78-93-3	2-Butanone (MEK)	50	36.7	73	64-130
75-15-0	Carbon disulfide	50	50.3	101	59-140
56-23-5	Carbon tetrachloride	50	50.1	100	75-148
108-90-7	Chlorobenzene	50	51.6	103	76-124
75-00-3	Chloroethane	50	48.9	98	54-147
67-66-3	Chloroform	50	47.4	95	77-124
74-87-3	Chloromethane	50	40.9	82	46-144
110-82-7	Cyclohexane	50	49.8	100	62-127
124-48-1	Dibromochloromethane	50	49.2	98	76-132
95-50-1	1,2-Dichlorobenzene	50	51.7	103	74-125
541-73-1	1,3-Dichlorobenzene	50	51.5	103	73-124
106-46-7	1,4-Dichlorobenzene	50	51.7	103	71-123
75-71-8	Dichlorodifluoromethane	50	40.8	82	42-152
75-34-3	1,1-Dichloroethane	50	46.2	92	72-124
107-06-2	1,2-Dichloroethane	50	45.3	91	66-150
75-35-4	1,1-Dichloroethene	50	50.5	101	61-132
156-59-2	cis-1,2-Dichloroethene	50	54.8	110	71-119
156-60-5	trans-1,2-Dichloroethene	50	43.1	86	71-123
78-87-5	1,2-Dichloropropane	50	48.1	96	75-120
10061-01-5	cis-1,3-Dichloropropene	50	49.3	99	77-124
10061-02-6	trans-1,3-Dichloropropene	50	48.1	96	75-132
100-41-4	Ethylbenzene	50	48.6	97	77-124
76-13-1	Freon 113	50	57.3	115	58-149
591-78-6	2-Hexanone	50	39.3	79	58-136
98-82-8	Isopropylbenzene	50	49.8	100	60-136
79-20-9	Methyl Acetate	50	49.2	98	57-139
108-87-2	Methylcyclohexane	50	53.4	107	73-130
1634-04-4	Methyl Tert Butyl Ether	100	91.4	91	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	48.9	98	63-135
75-09-2	Methylene chloride	50	49.8	100	69-122

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3B3115-BS	3B66722.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	49.6	99	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	47.8	96	66-125
127-18-4	Tetrachloroethene	50	52.1	104	70-136
108-88-3	Toluene	50	49.1	98	76-126
87-61-6	1,2,3-Trichlorobenzene	50	54.6	109	62-132
120-82-1	1,2,4-Trichlorobenzene	50	56.1	112	67-132
71-55-6	1,1,1-Trichloroethane	50	49.5	99	77-136
79-00-5	1,1,2-Trichloroethane	50	49.5	99	75-123
79-01-6	Trichloroethene	50	51.5	103	79-126
75-69-4	Trichlorofluoromethane	50	48.2	96	56-154
75-01-4	Vinyl chloride	50	45.2	90	56-146
	m,p-Xylene	100	101	101	77-125
95-47-6	o-Xylene	50	51.9	104	76-126
1330-20-7	Xylene (total)	150	153	102	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	91%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	101%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66701-2MS	3B66588.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2MSD	3B66589.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2 [a]	3B66594.D	1	01/27/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	JA66701-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	3.9	J	50	44.2	81	47.0	86	6	44-157/20
71-43-2	Benzene	ND		50	39.8	80	39.9	80	0	38-139/13
74-97-5	Bromochloromethane	ND		50	50.0	100	50.3	101	1	70-129/11
75-27-4	Bromodichloromethane	ND		50	47.6	95	46.9	94	1	70-135/13
75-25-2	Bromoform	ND		50	53.2	106	52.8	106	1	53-139/13
74-83-9	Bromomethane	ND		50	41.8	84	42.8	86	2	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	37.6	75	37.1	74	1	58-140/14
75-15-0	Carbon disulfide	ND		50	27.9	56	28.0	56	0	34-136/21
56-23-5	Carbon tetrachloride	ND		50	32.1	64	31.7	63	1	50-161/18
108-90-7	Chlorobenzene	ND		50	45.7	91	46.2	92	1	65-128/12
75-00-3	Chloroethane	ND		50	38.4	77	39.0	78	2	41-151/18
67-66-3	Chloroform	ND		50	42.0	84	42.2	84	0	66-132/14
74-87-3	Chloromethane	ND		50	34.2	68	34.7	69	1	35-149/22
110-82-7	Cyclohexane	ND		50	26.8	54	25.7	51	4	29-158/18
124-48-1	Dibromochloromethane	ND		50	50.1	100	50.2	100	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.7	99	50.2	100	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.2	94	47.2	94	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	48.4	97	48.5	97	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	24.8	50	23.7	47	5	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	38.2	76	38.4	77	1	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	45.6	91	44.4	89	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	28.1	56	28.1	56	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	42.5	85	43.0	86	1	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	35.9	72	35.9	72	0	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.6	89	44.2	88	1	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.1	94	46.7	93	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.5	93	46.2	92	1	68-134/13
100-41-4	Ethylbenzene	ND		50	40.1	80	40.7	81	1	37-143/13
76-13-1	Freon 113	ND		50	29.3	59	28.7	57	2	33-159/19
591-78-6	2-Hexanone	ND		50	44.8	90	44.2	88	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	38.5	77	39.0	78	1	48-141/15
79-20-9	Methyl Acetate	ND		50	48.0	96	48.1	96	0	46-147/18
108-87-2	Methylcyclohexane	ND		50	29.1	58	28.2	56	3	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	45.7	91	45.6	91	0	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	53.8	108	53.4	107	1	57-141/14
75-09-2	Methylene chloride	ND		50	44.7	89	44.9	90	0	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66701-2MS	3B66588.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2MSD	3B66589.D	1	01/26/11	TLR	n/a	n/a	V3B3109
JA66701-2 [a]	3B66594.D	1	01/27/11	TLR	n/a	n/a	V3B3109

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-3, JA66701-4, JA66701-5, JA66701-7, JA66701-8, JA66701-9

CAS No.	Compound	JA66701-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	44.8	90	45.0	90	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.9	104	51.7	103	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	36.2	72	36.5	73	1	48-145/15
108-88-3	Toluene	ND		50	40.8	82	40.8	82	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	52.7	105	54.0	108	2	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	52.6	105	53.5	107	2	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	35.7	71	35.5	71	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	49.6	99	49.0	98	1	70-127/12
79-01-6	Trichloroethene	ND		50	39.1	78	39.5	79	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	29.5	59	28.7	57	3	35-169/23
75-01-4	Vinyl chloride	ND		50	30.9	62	30.6	61	1	34-151/20
	m,p-Xylene	ND		100	82.5	83	83.5	84	1	32-146/13
95-47-6	o-Xylene	ND		50	44.4	89	45.1	90	2	46-141/12
1330-20-7	Xylene (total)	ND		150	127	85	129	86	2	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-2	Limits
1868-53-7	Dibromofluoromethane	106%	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%	95%		64-135%
2037-26-5	Toluene-D8	103%	102%		76-117%
460-00-4	4-Bromofluorobenzene	105%	105%		72-122%

(a) Sample used for QC purposes only.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66594-12MS	3B66640.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12MSD	3B66641.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66635.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66637.D	10	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	JA66594-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	27.3	55	27.1	54	1	44-157/20
71-43-2	Benzene	ND		50	43.1	86	43.1	86	0	38-139/13
74-97-5	Bromochloromethane	ND		50	49.9	100	50.0	100	0	70-129/11
75-27-4	Bromodichloromethane	ND		50	47.0	94	47.0	94	0	70-135/13
75-25-2	Bromoform	ND		50	52.2	104	52.7	105	1	53-139/13
74-83-9	Bromomethane	ND		50	48.0	96	47.4	95	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	35.9	72	36.2	72	1	58-140/14
75-15-0	Carbon disulfide	ND		50	36.6	73	36.0	72	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	44.5	89	44.6	89	0	50-161/18
108-90-7	Chlorobenzene	ND		50	48.2	96	48.2	96	0	65-128/12
75-00-3	Chloroethane	ND		50	47.1	94	45.9	92	3	41-151/18
67-66-3	Chloroform	ND		50	43.9	88	43.5	87	1	66-132/14
74-87-3	Chloromethane	ND		50	39.2	78	39.3	79	0	35-149/22
110-82-7	Cyclohexane	ND		50	41.7	83	41.3	83	1	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.3	99	49.9	100	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	50.9	102	51.1	102	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	49.3	99	49.5	99	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.5	101	50.3	101	0	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	41.2	82	40.3	81	2	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	41.2	82	40.6	81	1	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	43.9	88	44.0	88	0	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	40.3	81	39.0	78	3	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	44.5	89	44.3	89	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	39.7	79	39.4	79	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.5	89	44.3	89	0	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.2	94	47.3	95	0	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.1	92	46.4	93	1	68-134/13
100-41-4	Ethylbenzene	ND		50	46.0	92	45.7	91	1	37-143/13
76-13-1	Freon 113	ND		50	47.7	95	47.3	95	1	33-159/19
591-78-6	2-Hexanone	ND		50	43.8	88	43.8	88	0	53-145/17
98-82-8	Isopropylbenzene	ND		50	46.6	93	46.4	93	0	48-141/15
79-20-9	Methyl Acetate	ND		50	49.8	100	49.5	99	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	46.3	93	46.4	93	0	36-156/18
1634-04-4	Methyl Tert Butyl Ether	364	b	50	332	-64*	a 328	-72*	a 1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	52.4	105	52.9	106	1	57-141/14
75-09-2	Methylene chloride	ND		50	45.3	91	44.6	89	2	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66594-12MS	3B66640.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12MSD	3B66641.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66635.D	1	01/28/11	TLR	n/a	n/a	V3B3111
JA66594-12	3B66637.D	10	01/28/11	TLR	n/a	n/a	V3B3111

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-1, JA66701-6

CAS No.	Compound	JA66594-12 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	48.1	96	48.2	96	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	51.1	102	51.4	103	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	47.4	95	47.6	95	0	48-145/15
108-88-3	Toluene	ND		50	45.0	90	45.0	90	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	53.5	107	55.4	111	3	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	54.3	109	56.0	112	3	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	44.7	89	43.8	88	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.2	96	48.7	97	1	70-127/12
79-01-6	Trichloroethene	ND		50	46.3	93	46.7	93	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	47.3	95	46.4	93	2	35-169/23
75-01-4	Vinyl chloride	ND		50	44.1	88	43.8	88	1	34-151/20
	m,p-Xylene	0.29		100	94.3	94	93.4	93	1	32-146/13
95-47-6	o-Xylene	ND		50	48.2	96	47.9	96	1	46-141/12
1330-20-7	Xylene (total)	0.29		150	143	95	141	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66594-12	JA66594-12	Limits
1868-53-7	Dibromofluoromethane	105%	104%	102%	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	94%	93%	99%	97%	64-135%
2037-26-5	Toluene-D8	102%	103%	105%	104%	76-117%
460-00-4	4-Bromofluorobenzene	104%	104%	104%	103%	72-122%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66951-1MS	3B66729.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1MSD	3B66730.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1	3B66724.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	JA66951-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	24.5	49	26.9	54	9	44-157/20
71-43-2	Benzene	ND		50	44.4	89	44.2	88	0	38-139/13
74-97-5	Bromochloromethane	ND		50	51.5	103	52.9	106	3	70-129/11
75-27-4	Bromodichloromethane	ND		50	46.4	93	47.1	94	1	70-135/13
75-25-2	Bromoform	ND		50	53.0	106	54.1	108	2	53-139/13
74-83-9	Bromomethane	ND		50	48.5	97	48.5	97	0	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	34.7	69	36.0	72	4	58-140/14
75-15-0	Carbon disulfide	ND		50	42.9	86	42.2	84	2	34-136/21
56-23-5	Carbon tetrachloride	ND		50	44.6	89	43.6	87	2	50-161/18
108-90-7	Chlorobenzene	ND		50	48.9	98	49.3	99	1	65-128/12
75-00-3	Chloroethane	ND		50	45.1	90	44.5	89	1	41-151/18
67-66-3	Chloroform	ND		50	42.5	85	42.7	85	0	66-132/14
74-87-3	Chloromethane	ND		50	37.7	75	36.8	74	2	35-149/22
110-82-7	Cyclohexane	ND		50	43.9	88	42.7	85	3	29-158/18
124-48-1	Dibromochloromethane	ND		50	49.9	100	51.2	102	3	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.6	99	50.3	101	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	48.2	96	48.7	97	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	49.3	99	50.1	100	2	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	37.4	75	36.1	72	4	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	40.8	82	40.7	81	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	42.6	85	43.1	86	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	45.2	90	44.3	89	2	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.5	91	45.7	91	0	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	44.1	88	43.7	87	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	44.9	90	45.6	91	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	47.1	94	47.7	95	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	45.7	91	46.2	92	1	68-134/13
100-41-4	Ethylbenzene	ND		50	45.1	90	44.7	89	1	37-143/13
76-13-1	Freon 113	ND		50	49.1	98	47.9	96	2	33-159/19
591-78-6	2-Hexanone	ND		50	41.5	83	42.1	84	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	44.7	89	44.4	89	1	48-141/15
79-20-9	Methyl Acetate	ND		50	47.8	96	48.2	96	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	44.5	89	42.6	85	4	36-156/18
1634-04-4	Methyl Tert Butyl Ether	13.4		50	56.2	86	56.9	87	1	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.9	102	51.8	104	2	57-141/14
75-09-2	Methylene chloride	ND		50	47.2	94	47.7	95	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA66951-1MS	3B66729.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1MSD	3B66730.D	1	01/31/11	TLR	n/a	n/a	V3B3115
JA66951-1	3B66724.D	1	01/31/11	TLR	n/a	n/a	V3B3115

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA66701-2

CAS No.	Compound	JA66951-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	48.0	96	48.4	97	1	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.4	97	49.1	98	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	48.9	98	48.2	96	1	48-145/15
108-88-3	Toluene	ND		50	45.2	90	45.4	91	0	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	50.8	102	52.3	105	3	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.9	104	53.3	107	3	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	43.6	87	42.9	86	2	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.5	97	49.3	99	2	70-127/12
79-01-6	Trichloroethene	ND		50	47.3	95	47.0	94	1	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	44.3	89	43.2	86	3	35-169/23
75-01-4	Vinyl chloride	ND		50	41.8	84	40.7	81	3	34-151/20
	m,p-Xylene	ND		100	93.7	94	93.1	93	1	32-146/13
95-47-6	o-Xylene	ND		50	48.0	96	48.1	96	0	46-141/12
1330-20-7	Xylene (total)	ND		150	142	95	141	94	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA66951-1	Limits
1868-53-7	Dibromofluoromethane	101%	101%	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	86%	85%	91%	64-135%
2037-26-5	Toluene-D8	101%	102%	104%	76-117%
460-00-4	4-Bromofluorobenzene	101%	101%	102%	72-122%

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3095-BFB	**Injection Date:**	01/18/11
Lab File ID:	3B66291.D	**Injection Time:**	12:00
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18276	20.7		Pass
75	30.0 - 60.0% of mass 95	42594	48.4		Pass
95	Base peak, 100% relative abundance	88082	100.0		Pass
96	5.0 - 9.0% of mass 95	6101	6.93		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	77690	88.2		Pass
175	5.0 - 9.0% of mass 174	6080	6.90	(7.83) [a]	Pass
176	95.0 - 101.0% of mass 174	76661	87.0	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5035	5.72	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3095-IC3095	3B66292.D	01/18/11	12:48	00:48	Initial cal 0.5
V3B3095-IC3095	3B66293.D	01/18/11	13:20	01:20	Initial cal 1
V3B3095-IC3095	3B66294.D	01/18/11	13:52	01:52	Initial cal 2
V3B3095-IC3095	3B66296.D	01/18/11	14:55	02:55	Initial cal 10
V3B3095-IC3095	3B66297.D	01/18/11	15:27	03:27	Initial cal 20
V3B3095-ICC3095	3B66298.D	01/18/11	15:58	03:58	Initial cal 50
V3B3095-IC3095	3B66300.D	01/18/11	17:03	05:03	Initial cal 100
V3B3095-IC3095	3B66301.D	01/18/11	17:35	05:35	Initial cal 200
V3B3095-IC3095	3B66304.D	01/18/11	19:11	07:11	Initial cal 5
V3B3095-ICV3095	3B66304A.D	01/18/11	19:42	07:42	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3109-BFB	**Injection Date:**	01/26/11
Lab File ID:	3B66583.D	**Injection Time:**	20:49
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	22898	18.5		Pass
75	30.0 - 60.0% of mass 95	58208	47.1		Pass
95	Base peak, 100% relative abundance	123581	100.0		Pass
96	5.0 - 9.0% of mass 95	8287	6.71		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	111512	90.2		Pass
175	5.0 - 9.0% of mass 174	8304	6.72	(7.45) [a]	Pass
176	95.0 - 101.0% of mass 174	109378	88.5	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	7227	5.85	(6.61) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3109-CC3095	3B66584.D	01/26/11	21:20	00:31	Continuing cal 50
V3B3109-MB	3B66586.D	01/26/11	22:24	01:35	Method Blank
V3B3109-BS	3B66587.D	01/26/11	22:55	02:06	Blank Spike
JA66701-2MS	3B66588.D	01/26/11	23:27	02:38	Matrix Spike
JA66701-2MSD	3B66589.D	01/26/11	23:59	03:10	Matrix Spike Duplicate
ZZZZZZ	3B66591.D	01/27/11	01:02	04:13	(unrelated sample)
JA66701-3	3B66592.D	01/27/11	01:34	04:45	FB-012011
JA66701-9	3B66593.D	01/27/11	02:06	05:17	TRIP BLANK
JA66701-2	3B66594.D	01/27/11	02:38	05:49	W-RM-012011-MWCC
JA66701-4	3B66595.D	01/27/11	03:10	06:21	W-RM-012111-MWCE
JA66701-5	3B66596.D	01/27/11	03:42	06:53	W-RM-012111-MWBV
ZZZZZZ	3B66597.D	01/27/11	04:14	07:25	(unrelated sample)
ZZZZZZ	3B66598.D	01/27/11	04:46	07:57	(unrelated sample)
ZZZZZZ	3B66599.D	01/27/11	05:18	08:29	(unrelated sample)
ZZZZZZ	3B66600.D	01/27/11	05:49	09:00	(unrelated sample)
ZZZZZZ	3B66601.D	01/27/11	06:21	09:32	(unrelated sample)
ZZZZZZ	3B66602.D	01/27/11	06:53	10:04	(unrelated sample)
JA66701-7	3B66604.D	01/27/11	07:57	11:08	W-RM-012111-MWAY
JA66701-8	3B66605.D	01/27/11	08:28	11:39	W-RM-012111-MWCF

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3111-BFB	**Injection Date:**	01/28/11
Lab File ID:	3B66629.D	**Injection Time:**	08:08
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	21029	20.8		Pass
75	30.0 - 60.0% of mass 95	49200	48.7		Pass
95	Base peak, 100% relative abundance	100968	100.0		Pass
96	5.0 - 9.0% of mass 95	6836	6.77		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	90992	90.1		Pass
175	5.0 - 9.0% of mass 174	6978	6.91	(7.67) [a]	Pass
176	95.0 - 101.0% of mass 174	88285	87.4	(97.0) [a]	Pass
177	5.0 - 9.0% of mass 176	6109	6.05	(6.92) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3111-CC3095	3B66631.D	01/28/11	09:28	01:20	Continuing cal 20
V3B3111-MB	3B66632.D	01/28/11	10:17	02:09	Method Blank
V3B3111-BS	3B66633.D	01/28/11	10:55	02:47	Blank Spike
JA66594-12	3B66635.D	01/28/11	12:10	04:02	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66636.D	01/28/11	12:42	04:34	(unrelated sample)
JA66594-12	3B66637.D	01/28/11	13:14	05:06	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66638.D	01/28/11	13:46	05:38	(unrelated sample)
JA66594-12MS	3B66640.D	01/28/11	14:51	06:43	Matrix Spike
JA66594-12MSD	3B66641.D	01/28/11	15:22	07:14	Matrix Spike Duplicate
JA66701-6	3B66643.D	01/28/11	16:25	08:17	W-RM-012111-MWX
JA66701-1	3B66645.D	01/28/11	16:57	08:49	W-RM-012011-MWCD
ZZZZZZ	3B66646.D	01/28/11	17:29	09:21	(unrelated sample)
ZZZZZZ	3B66647.D	01/28/11	18:01	09:53	(unrelated sample)
ZZZZZZ	3B66648.D	01/28/11	18:33	10:25	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V3B3115-BFB	**Injection Date:**	01/31/11
Lab File ID:	3B66718.D	**Injection Time:**	08:23
Instrument ID:	GCMS3B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20874	18.7		Pass
75	30.0 - 60.0% of mass 95	51306	46.0		Pass
95	Base peak, 100% relative abundance	111610	100.0		Pass
96	5.0 - 9.0% of mass 95	7435	6.66		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	105629	94.6		Pass
175	5.0 - 9.0% of mass 174	8284	7.42	(7.84) [a]	Pass
176	95.0 - 101.0% of mass 174	104181	93.3	(98.6) [a]	Pass
177	5.0 - 9.0% of mass 176	6928	6.21	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3B3115-CC3095	3B66720.D	01/31/11	09:36	01:13	Continuing cal 20
V3B3115-MB	3B66721.D	01/31/11	10:16	01:53	Method Blank
V3B3115-BS	3B66722.D	01/31/11	10:54	02:31	Blank Spike
JA66951-1	3B66724.D	01/31/11	12:08	03:45	(used for QC only; not part of job JA66701)
ZZZZZZ	3B66725.D	01/31/11	12:40	04:17	(unrelated sample)
ZZZZZZ	3B66726.D	01/31/11	13:12	04:49	(unrelated sample)
ZZZZZZ	3B66727.D	01/31/11	13:43	05:20	(unrelated sample)
ZZZZZZ	3B66728.D	01/31/11	14:15	05:52	(unrelated sample)
JA66951-1MS	3B66729.D	01/31/11	14:48	06:25	Matrix Spike
JA66951-1MSD	3B66730.D	01/31/11	15:20	06:57	Matrix Spike Duplicate
JA66701-2	3B66732.D	01/31/11	16:24	08:01	W-RM-012011-MWCC
ZZZZZZ	3B66735.D	01/31/11	16:56	08:33	(unrelated sample)
ZZZZZZ	3B66736.D	01/31/11	17:27	09:04	(unrelated sample)
ZZZZZZ	3B66737.D	01/31/11	17:59	09:36	(unrelated sample)
ZZZZZZ	3B66738.D	01/31/11	18:31	10:08	(unrelated sample)
ZZZZZZ	3B66739.D	01/31/11	19:02	10:39	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3109-CC3095	**Injection Date:**	01/26/11
Lab File ID:	3B66584.D	**Injection Time:**	21:20
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	146914	8.23	361642	10.67	515334	11.63	498634	14.96	261376	17.43
Upper Limit [a]	293828	8.73	723284	11.17	1030668	12.13	997268	15.46	522752	17.93
Lower Limit [b]	73457	7.73	180821	10.17	257667	11.13	249317	14.46	130688	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3109-MB	151529	8.24	394908	10.67	532853	11.63	506368	14.96	268779	17.43
V3B3109-BS	127107	8.23	345302	10.67	495687	11.63	483048	14.96	252912	17.43
JA66701-2MS	155669	8.23	364519	10.68	514539	11.63	495584	14.96	258861	17.44
JA66701-2MSD	157143	8.24	370907	10.67	524949	11.63	502316	14.96	262215	17.43
ZZZZZZ	147807	8.23	394142	10.67	531088	11.63	506407	14.96	269845	17.43
JA66701-3	146338	8.23	391374	10.68	529061	11.63	507250	14.96	270459	17.43
JA66701-9	143632	8.23	377791	10.67	511393	11.63	489410	14.96	259464	17.43
JA66701-2 [c]	148631	8.23	372820	10.68	509196	11.63	487645	14.96	260879	17.43
JA66701-4	145865	8.24	380302	10.68	512827	11.63	493434	14.96	265065	17.43
JA66701-5	144422	8.23	362875	10.67	495844	11.63	477919	14.96	253738	17.43
ZZZZZZ	157109	8.23	354351	10.68	485343	11.63	476180	14.96	256325	17.43
ZZZZZZ	153116	8.23	364140	10.68	495233	11.63	482656	14.96	256620	17.44
ZZZZZZ	147044	8.23	363901	10.68	499336	11.63	478187	14.96	255009	17.43
ZZZZZZ	146722	8.23	335213	10.68	471968	11.63	463413	14.96	253503	17.43
ZZZZZZ	163581	8.23	413201	10.67	553726	11.63	535303	14.96	285000	17.43
ZZZZZZ	162325	8.23	421610	10.67	566401	11.63	542997	14.96	288472	17.43
JA66701-7	143468	8.23	413764	10.68	552799	11.63	525165	14.96	283519	17.43
JA66701-8	155421	8.23	402654	10.67	541327	11.63	516673	14.96	276807	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Sample used for QC purposes only.

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3111-CC3095	**Injection Date:**	01/28/11
Lab File ID:	3B66631.D	**Injection Time:**	09:28
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	145948	8.23	336200	10.67	474902	11.63	460201	14.96	244857	17.43
Upper Limit [a]	291896	8.73	672400	11.17	949804	12.13	920402	15.46	489714	17.93
Lower Limit [b]	72974	7.73	168100	10.17	237451	11.13	230101	14.46	122429	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3111-MB	152359	8.23	372948	10.67	501706	11.63	481698	14.96	257846	17.43
V3B3111-BS	140019	8.24	338795	10.67	485588	11.63	472596	14.96	250577	17.43
JA66594-12	147077	8.23	366053	10.67	494697	11.63	480564	14.96	257053	17.43
ZZZZZZ	135328	8.22	357410	10.67	487121	11.63	467529	14.96	251854	17.43
JA66594-12	131351	8.23	384987	10.67	514978	11.63	492878	14.96	266672	17.43
ZZZZZZ	130822	8.23	373966	10.67	506042	11.63	499493	14.96	265524	17.43
JA66594-12MS	149193	8.23	368866	10.67	523752	11.63	501427	14.96	262274	17.43
JA66594-12MSD	156486	8.24	377809	10.68	527151	11.63	504798	14.96	264925	17.43
JA66701-6	140503	8.23	397385	10.67	532346	11.63	500495	14.96	269011	17.43
JA66701-1	189578	8.23	388490	10.67	520262	11.63	496524	14.96	268340	17.43
ZZZZZZ	150488	8.23	398495	10.68	528466	11.63	505310	14.96	273117	17.43
ZZZZZZ	158383	8.22	387275	10.67	535008	11.63	516483	14.96	275680	17.43
ZZZZZZ	149442	8.23	399262	10.67	537154	11.63	522192	14.96	279744	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V3B3115-CC3095	**Injection Date:**	01/31/11
Lab File ID:	3B66720.D	**Injection Time:**	09:36
Instrument ID:	GCMS3B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	147537	8.23	352174	10.67	485760	11.63	468034	14.95	248574	17.43
Upper Limit [a]	295074	8.73	704348	11.17	971520	12.13	936068	15.45	497148	17.93
Lower Limit [b]	73769	7.73	176087	10.17	242880	11.13	234017	14.45	124287	16.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V3B3115-MB	141802	8.23	381051	10.67	509120	11.63	479604	14.95	259275	17.43
V3B3115-BS	132451	8.23	350231	10.66	492433	11.63	473898	14.96	250563	17.43
JA66951-1	139728	8.23	379840	10.67	507034	11.63	489356	14.96	262955	17.43
ZZZZZZ	132386	8.23	372988	10.67	500598	11.63	489418	14.96	263360	17.43
ZZZZZZ	137245	8.23	363326	10.67	491531	11.63	474810	14.96	254410	17.43
ZZZZZZ	153089	8.23	344058	10.67	475796	11.63	462699	14.96	255600	17.43
ZZZZZZ	137568	8.23	404404	10.67	535693	11.63	517288	14.96	279704	17.43
JA66951-1MS	137705	8.23	390541	10.67	539206	11.63	518842	14.96	275936	17.43
JA66951-1MSD	140614	8.23	385782	10.67	533266	11.63	511731	14.96	272204	17.43
JA66701-2	142921	8.23	412037	10.67	545967	11.63	520095	14.96	282519	17.43
ZZZZZZ	234462	8.21	394710	10.67	536460	11.63	521393	14.96	283808	17.43
ZZZZZZ	139189	8.23	397324	10.67	524329	11.63	508594	14.96	279088	17.43
ZZZZZZ	129326	8.23	379835	10.67	505105	11.63	488464	14.96	267649	17.43
ZZZZZZ	147782	8.22	375984	10.67	507701	11.63	495842	14.96	276209	17.43
ZZZZZZ	131316	8.23	420062	10.67	546649	11.63	531099	14.95	289751	17.43

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA66701-1	3B66645.D	101.0	96.0	104.0	103.0
JA66701-2	3B66732.D	99.0	87.0	103.0	100.0
JA66701-2	3B66594.D				
JA66701-3	3B66592.D	104.0	99.0	104.0	103.0
JA66701-4	3B66595.D	103.0	100.0	105.0	104.0
JA66701-5	3B66596.D	103.0	101.0	104.0	104.0
JA66701-6	3B66643.D	102.0	95.0	102.0	103.0
JA66701-7	3B66604.D	101.0	94.0	103.0	103.0
JA66701-8	3B66605.D	102.0	96.0	104.0	103.0
JA66701-9	3B66593.D	103.0	99.0	105.0	106.0
JA66594-12MS	3B66640.D	105.0	94.0	102.0	104.0
JA66594-12MSD	3B66641.D	104.0	93.0	103.0	104.0
JA66701-2MS	3B66588.D	106.0	96.0	103.0	105.0
JA66701-2MSD	3B66589.D	105.0	95.0	102.0	105.0
JA66951-1MS	3B66729.D	101.0	86.0	101.0	101.0
JA66951-1MSD	3B66730.D	101.0	85.0	102.0	101.0
V3B3109-BS	3B66587.D	107.0	99.0	104.0	102.0
V3B3109-MB	3B66586.D	103.0	99.0	104.0	105.0
V3B3111-BS	3B66633.D	107.0	99.0	103.0	103.0
V3B3111-MB	3B66632.D	103.0	99.0	105.0	104.0
V3B3115-BS	3B66722.D	102.0	91.0	102.0	101.0
V3B3115-MB	3B66721.D	99.0	91.0	103.0	102.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

Response Factor Report MS3B

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Wed Jan 19 12:43:35 2011
Response via : Initial Calibration

Calibration Files
1 =3b66293.D 2 =3b66294.D 100 =3b66300.D 50 =3b66298.D
20 =3b66297.D 200 =3b66301.D 5 =3b66304.D 10 =3b66296.D
0.5 =3b66292.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) ethanol										0.000#	-1.00
3) tertiary butyl alcohol			1.065	1.003	0.896	1.122	0.968	0.999		1.009	7.74
4) 1,4-dioxane			0.087	0.087	0.080	0.087	0.069	0.082		0.082	8.39
5) I pentafluorobenzene ----------ISTD----------											
6) freon 115										0.000#	-1.00
7) freon 23										0.000#	-1.00
8) freon 143a										0.000#	-1.00
9) freon 152a				0.001						0.001#	0.00
10) chlorotrifluoroethene										0.000#	-1.00
11) chlorodifluoromethane	0.375	0.359	0.440	0.470	0.432	0.460	0.403	0.424	0.362	0.414	10.01
12) dichlorodifluoromethane	0.428	0.527	0.630	0.658	0.679	0.636	0.645	0.586		0.599	13.98
13) freon 114										0.000#	-1.00
14) freon 142b										0.000#	-1.00
15) chloromethane	0.709	0.789	0.835	0.891	0.912	0.821	0.913	0.823	1.034	0.859	10.76
16) vinyl chloride	0.510	0.626	0.689	0.716	0.727	0.688	0.746	0.661	0.633	0.666	10.70
17) acetaldehyde										0.000#	-1.00
18) bromomethane	0.314	0.362	0.349	0.350	0.377	0.354	0.422	0.348	0.438	0.368	10.54
19) chloroethane	0.225	0.298	0.339	0.342	0.355	0.338	0.370	0.330		0.325	13.89
20) vinyl bromide	0.283	0.348	0.366	0.371	0.378	0.375	0.360	0.373		0.357	8.80
21) trichlorofluoromethane	0.443	0.566	0.655	0.666	0.700	0.663	0.714	0.626		0.629	14.00
22) PENTANE	0.708	0.582	0.617	0.675	0.643	0.620	0.625	0.677	0.399	0.616	14.57
23) ethyl ether											

	0.254	0.230	0.256	0.266	0.271	0.263	0.251	0.227	0.181	0.244	11.52
24)	freon 123											
										0.000#	-1.00
25)	freon 141b											
										0.000#	-1.00
26)	freon 123a											
										0.000#	-1.00
27)	acrolein											
	0.114	0.109		0.119	0.121		0.106	0.108		0.113	5.38
28)	1,1-dichloroethene											
	0.450	0.389	0.384	0.403	0.426	0.397	0.409	0.342	0.355	0.395	8.41
29)	acetone											
			0.209	0.224	0.318	0.191	0.308	0.234		0.247	21.42

----- Linear regression ----- Coefficient = 0.9960
Response Ratio = 0.02886 + 0.18683 *A

30)	allyl chloride											
	0.296	0.240	0.277	0.276	0.282	0.285	0.276	0.239		0.271	7.64
31)	acetonitrile											
			0.047	0.048	0.041	0.048	0.035	0.036		0.042	13.78
32)	iodomethane											
	0.774	0.649	0.706	0.726	0.741	0.737	0.685	0.602	0.604	0.691	8.89
33)	iso-butyl alcohol											
	0.012	0.012	0.014	0.015	0.015	0.014	0.015	0.014		0.014	8.07
34)	carbon disulfide											
	1.670	1.444	1.367	1.479	1.532	1.388	1.437	1.253	1.399	1.441	8.04
35)	methylene chloride											
	0.504	0.430	0.460	0.482	0.497	0.480	0.470	0.418	0.390	0.459	8.37
36)	methyl acetate											
			0.075	0.079	0.073	0.079	0.060	0.072		0.073	9.67
37)	methyl tert butyl ether											
	1.560	1.315	1.346	1.438	1.464	1.360	1.395	1.268	1.423	1.397	6.24
38)	trans-1,2-dichloroethene											
	0.495	0.426	0.398	0.430	0.443	0.410	0.426	0.364	0.416	0.423	8.36
39)	di-isopropyl ether											
	1.481	1.379	1.618	1.736	1.684	1.642	1.653	1.766		1.620	8.01
40)	2-butanone											
			0.070	0.073	0.085	0.070	0.080	0.067		0.074	9.38
41)	1,1-dichloroethane											
	0.971	0.834	0.776	0.846	0.886	0.793	0.844	0.731	0.822	0.834	8.22
42)	chloroprene											
	0.600	0.526	0.667	0.708	0.664	0.697	0.638	0.682		0.648	9.23
43)	acrylonitrile											
	0.205	0.180	0.196	0.215	0.219	0.197	0.197	0.196		0.200	6.12
44)	vinyl acetate											
			0.078	0.083	0.076	0.083	0.058	0.071		0.075	12.65
45)	ethyl tert-butyl ether											
	1.381	1.257	1.534	1.616	1.552	1.591	1.514	1.624		1.509	8.45
46)	ethyl acetate											
		0.069	0.074	0.080	0.078	0.076	0.069	0.081		0.075	6.53
47)	2,2-dichloropropane											
	0.787	0.652	0.585	0.652	0.673	0.583	0.638	0.566	0.645	0.643	10.26
48)	cis-1,2-dichloroethene											
	0.571	0.467	0.459	0.488	0.509	0.469	0.482	0.421	0.444	0.479	8.98
49)	propionitrile											
	0.074	0.069	0.075	0.082	0.085	0.077	0.075	0.075	0.075	0.076	6.18
50)	methylacrylate											
	0.498	0.462	0.561	0.610	0.627	0.575	0.537	0.527		0.550	10.08
51)	bromochloromethane											
	0.230	0.208	0.225	0.235	0.238	0.231	0.227	0.204	0.177	0.219	9.01

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

52)	tetrahydrofuran											
		0.231	0.186	0.178	0.199	0.209	0.181	0.191	0.190	0.222	0.199	9.37
53)	chloroform											
		0.898	0.745	0.745	0.801	0.825	0.763	0.783	0.694	0.797	0.784	7.37
54)	t-butyl formate											
		0.404	0.397	0.483	0.516	0.501	0.498	0.470	0.517		0.473	10.03
55)	dibromofluoromethane (s)											
		0.344	0.406	0.384	0.395	0.409	0.414	0.384	0.397	0.426	0.395	6.03
56)	1,2-dichloroethane-d4 (s)											
		0.508	0.552	0.479	0.514	0.537	0.497	0.502	0.541	0.538	0.518	4.69
57)	freon 113											
			0.195	0.291	0.298	0.278	0.305	0.278	0.288		0.276	13.53
58)	methacrylonitrile											
		0.342	0.312	0.339	0.369	0.368	0.350	0.329	0.319	0.354	0.342	5.82
59)	1,1,1-trichloroethane											
		0.697	0.590	0.617	0.656	0.660	0.633	0.605	0.536	0.552	0.616	8.46
60)	Cyclohexane											
		0.755	0.642	0.617	0.665	0.680	0.635	0.626	0.550	0.487	0.629	12.17
61)	tert amyl alcohol											
			0.043	0.059	0.060	0.057	0.061	0.051	0.059		0.056	11.32
62)	iso-octane											
		1.555	1.308	1.554	1.694	1.533	1.590	1.556	1.587		1.547	7.01
63)	I 1,4-difluorobenzene	----------ISTD----------										
64)	tert-amyl ethyl ether											
		0.698	0.800	0.804	0.858	0.878	0.796	0.838	0.848	0.626	0.794	10.29
65)	epichlorohydrin											
		0.028	0.029	0.038	0.040	0.038	0.040	0.037	0.040		0.036	13.20
66)	n-butyl alcohol											
		0.008	0.007	0.009	0.010	0.009	0.010	0.009	0.009		0.009#	12.71
67)	carbon tetrachloride											
		0.455	0.387	0.374	0.398	0.408	0.380	0.389	0.338	0.354	0.387	8.64
68)	1,1-dichloropropene											
		0.491	0.412	0.396	0.426	0.439	0.404	0.418	0.355	0.367	0.412	9.71
69)	hexane											
		0.350	0.299	0.350	0.383	0.352	0.356	0.354	0.360		0.351	6.66
70)	benzene											
		1.483	1.246	1.124	1.210	1.270	1.133	1.245	1.065	1.260	1.226	9.77
71)	tert-amyl methyl ether											
		0.891	0.843	0.894	0.949	0.928	0.916	0.968	0.992	0.736	0.902	8.48
72)	heptane											
		0.212	0.178	0.211	0.230	0.207	0.214	0.214	0.215		0.210	6.92
73)	isopropyl acetate											
		0.533	0.544	0.685	0.719	0.684	0.687	0.653	0.696		0.650	10.97
74)	1,2-dichloroethane											
		0.477	0.417	0.383	0.422	0.442	0.385	0.422	0.392	0.420	0.418	7.12
75)	ethyl acrylate											
			0.388	0.454	0.475	0.475	0.455	0.429	0.458		0.448	6.86
76)	trichloroethene											
		0.348	0.306	0.301	0.319	0.324	0.307	0.313	0.266	0.281	0.307	7.75
77)	2-nitropropane											
				0.007	0.008	0.007	0.007		0.005		0.007#	13.69
78)	2-chloroethyl vinyl ether											
		0.189	0.183	0.220	0.236	0.228	0.222	0.228	0.243	0.172	0.214	11.93
79)	methyl methacrylate											
		0.222	0.201	0.229	0.242	0.249	0.237	0.223	0.217	0.210	0.226	6.87
80)	1,2-dichloropropane											
		0.391	0.330	0.318	0.345	0.359	0.323	0.341	0.302	0.351	0.340	7.69
81)	dibromomethane											
		0.217	0.191	0.197	0.209	0.215	0.202	0.199	0.183	0.206	0.202	5.51

82)	methylcyclohexane											
	0.461	0.387	0.459	0.493	0.459	0.470	0.470	0.475			0.459	6.80
83)	bromodichloromethane											
	0.482	0.405	0.425	0.454	0.455	0.434	0.433	0.383	0.464		0.437	6.98
84)	cis-1,3-dichloropropene											
	0.608	0.531	0.537	0.576	0.580	0.549	0.547	0.494	0.598		0.558	6.46
85)	toluene-d8 (s)											
	1.121	1.195	1.005	1.062	1.091	1.036	1.093	1.106	1.367		1.119	9.58
86)	4-methyl-2-pentanone											
	0.134	0.130	0.142	0.149	0.153	0.146	0.150	0.133	0.135		0.141	6.04
87)	toluene											
	0.887	0.756	0.720	0.771	0.777	0.730	0.781	0.659	0.813		0.766	8.27
88)	3-methyl-1-butanol											
	0.013	0.010	0.014	0.015	0.014	0.015	0.014	0.015	0.012		0.014	11.47
89)	trans-1,3-dichloropropene											
	0.563	0.506	0.491	0.527	0.531	0.494	0.520	0.471	0.581		0.520	6.69
90)	ethyl methacrylate											
	0.415	0.382	0.435	0.459	0.449	0.445	0.419	0.390			0.424	6.53
91)	1,1,2-trichloroethane											
	0.267	0.251	0.249	0.265	0.264	0.253	0.258	0.233	0.285		0.259	5.64
92)	2-hexanone											
	0.159	0.180	0.138	0.147	0.176	0.138	0.181	0.141	0.137		0.155	12.39
93)	I chlorobenzene-d5	----------ISTD----------										
94)	tetrachloroethene											
	0.325	0.276	0.263	0.278	0.296	0.269	0.317	0.236	0.253		0.279	10.39
95)	3,3-dimethyl-1-butanol											
	0.030	0.024	0.034	0.033	0.032	0.037	0.030	0.033	0.034		0.032	11.16
96)	1,3-dichloropropane											
	0.568	0.512	0.477	0.514	0.541	0.479	0.535	0.474	0.614		0.524	8.90
97)	butyl acetate											
	0.209	0.187	0.229	0.238	0.233	0.239	0.235	0.253			0.228	9.04
98)	dibromochloromethane											
	0.381	0.334	0.347	0.364	0.364	0.357	0.349	0.314	0.447		0.362	10.34
99)	1,2-dibromoethane											
	0.323	0.306	0.317	0.332	0.337	0.323	0.326	0.292	0.352		0.323	5.39
100)	n-butyl ether											
											0.000#	-1.00
101)	chlorobenzene											
	0.949	0.814	0.819	0.854	0.872	0.844	0.832	0.729	0.968		0.853	8.42
102)	1,1,1,2-tetrachloroethane											
	0.355	0.310	0.305	0.320	0.333	0.317	0.323	0.277	0.365		0.323	8.19
103)	ethylbenzene											
	1.752	1.501	1.388	1.491	1.554	1.393	1.514	1.292	1.665		1.505	9.41
104)	m,p-xylene											
	0.660	0.568	0.535	0.566	0.592	0.550	0.580	0.500	0.610		0.573	7.97
105)	o-xylene											
	0.672	0.576	0.567	0.603	0.620	0.582	0.596	0.513	0.656		0.598	8.01
106)	butyl acrylate											
											0.000#	-1.00
107)	styrene											
	1.052	0.907	0.943	0.999	1.026	0.951	0.980	0.869	1.151		0.986	8.51
108)	bromoform											
	0.276	0.246	0.273	0.282	0.281	0.283	0.268	0.239	0.337		0.276	10.06
109)	I 1,4-dichlorobenzene-d	----------ISTD----------										
110)	isopropylbenzene											
	3.417	2.923	2.794	2.991	3.070	2.815	2.992	2.572	3.378		2.995	9.05
111)	4-bromofluorobenzene (s)											
	0.904	0.987	0.779	0.818	0.846	0.834	0.861	0.887			0.865	7.29

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

112)	cyclohexanone										
		0.061	0.054	0.055	0.061	0.049	0.058	0.057		0.056	7.63
113)	bromobenzene										
		0.847	0.747	0.715	0.752	0.772	0.747	0.801	0.669	0.781	11.58
114)	1,1,2,2-tetrachloroethane										
		0.971	0.873	0.818	0.876	0.883	0.839	0.884	0.792	0.867	6.18
115)	trans-1,4-dichloro-2-butene										
		0.233	0.245	0.239	0.262	0.260	0.245	0.259	0.237	0.247	4.56
116)	1,2,3-trichloropropane										
		0.218	0.219	0.206	0.220	0.226	0.210	0.220	0.201	0.215	3.90
117)	n-propylbenzene										
		4.079	3.494	3.206	3.489	3.599	3.194	3.540	3.041	3.992	3.515	9.95
118)	4-ETHYLTOLUENE										
		2.434	2.846	2.768	2.914	2.988	2.763	2.934	2.892	2.225	2.752	9.29
119)	2-chlorotoluene										
		0.804	0.658	0.649	0.682	0.704	0.685	0.697	0.599	0.796	0.697	9.50
120)	4-chlorotoluene										
		2.568	2.166	2.087	2.216	2.244	2.147	2.223	1.889	2.707	2.250	10.96
121)	1,3,5-trimethylbenzene										
		2.774	2.424	2.269	2.407	2.467	2.356	2.429	2.078	2.703	2.434	8.60
122)	tert-butylbenzene										
		2.381	2.097	2.138	2.268	2.302	2.162	2.147	1.857	2.390	2.194	7.56
123)	pentachloroethane										
		0.503	0.448	0.490	0.512	0.500	0.507	0.426	0.426	0.607	0.491	11.30
124)	1,2,4-trimethylbenzene										
		2.819	2.470	2.407	2.570	2.633	2.432	2.570	2.208	2.824	2.548	7.76
125)	sec-butylbenzene										
		3.698	3.169	3.178	3.385	3.425	3.182	3.272	2.795	3.485	3.288	7.72
126)	1,3-dichlorobenzene										
		1.669	1.455	1.427	1.496	1.511	1.465	1.505	1.299	1.803	1.515	9.56
127)	p-isopropyltoluene										
		2.956	2.570	2.616	2.795	2.811	2.616	2.665	2.310	2.836	2.686	7.07
128)	1,4-dichlorobenzene										
		1.628	1.418	1.439	1.497	1.503	1.484	1.451	1.253	1.754	1.492	9.31
129)	benzyl chloride										
		1.825	1.462	1.753	1.854	1.752	1.783	1.750	1.821	1.941	1.771	7.42
130)	1,2-dichlorobenzene										
		1.588	1.419	1.438	1.507	1.536	1.461	1.498	1.285	1.886	1.513	10.83
131)	1,4-DIETHYLBENZENE										
		1.324	1.575	1.640	1.705	1.732	1.628	1.624	1.632	1.197	1.562	11.51
132)	n-butylbenzene										
		1.591	1.405	1.429	1.525	1.553	1.435	1.462	1.259	1.556	1.468	6.95
133)	1,2,4,5-TETRAMETHYLBENZENE										
		2.024	2.334	2.624	2.788	2.808	2.507	2.557	2.617		2.532	10.08
134)	1,2-dibromo-3-chloropropane										
		0.160	0.168	0.174	0.181	0.177	0.173	0.172	0.154		0.170	5.29
135)	1,3,5-trichlorobenzene										
		1.284	1.179	1.257	1.357	1.351	1.234	1.266	1.083	1.375	1.265	7.38
136)	1,2,4-trichlorobenzene										
		1.117	0.964	1.152	1.247	1.225	1.130	1.119	0.972	1.193	1.124	8.88
137)	hexachlorobutadiene										
		0.643	0.571	0.587	0.647	0.638	0.585	0.628	0.508	0.683	0.610	8.62
138)	naphthalene										
		2.288	2.025	2.558	2.741	2.686	2.486	2.463	2.200		2.431	10.07
139)	1,2,3-trichlorobenzene										
		0.982	0.841	1.016	1.112	1.090	1.013	1.008	0.885	1.180	1.014	10.49
140)	hexachloroethane										
		0.495	0.437	0.532	0.553	0.539	0.544	0.479	0.416	0.461	0.495	10.10

(#) = Out of Range ### Number of calibration levels exceeded format ###

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICC3095
Lab FileID: 3B66298.D

M3B3095.M Thu Jan 20 12:01:52 2011 MS3B

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\2095initial\3b66304a.D Vial: 15
Acq On : 18 Jan 2011 7:42 pm Operator: tarar1
Sample : icv3095-50 Inst : MS3B
Misc : ms5942,v3b3095,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Wed Jan 19 12:43:35 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	86	0.00	8.25
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.148	-13.8	98	0.00	8.37
4		1,4-dioxane	0.082	0.091	-11.0	89	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	10.68
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.408	1.4	91	0.00	4.30
12		dichlorodifluoromethane	0.599	0.650	-8.5	103	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.884	-2.9	104	0.00	4.69
16		vinyl chloride	0.666	0.722	-8.4	105	0.00	4.99
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.386	-4.9	115	0.00	5.74
19		chloroethane	0.325	0.357	-9.8	109	0.01	5.95
20		vinyl bromide	0.357	0.367	-2.8	104	0.00	6.36
21		trichlorofluoromethane	0.629	0.690	-9.7	108	0.00	6.51
22		PENTANE	0.616	0.513	16.7	80	0.00	6.57
23		ethyl ether	0.244	0.275	-12.7	108	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.119	-5.3	105	0.00	7.25
28		1,1-dichloroethene	0.395	0.406	-2.8	105	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	50.000	51.772	-3.5	104	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.284	-4.8	107	0.00	8.05
31		acetonitrile	0.042	0.041	2.4	91	0.00	8.04
32		iodomethane	0.691	0.744	-7.7	107	0.00	7.77
33		iso-butyl alcohol	0.014	0.015	-7.1	106	0.00	11.25
34		carbon disulfide	1.441	1.544	-7.1	109	-0.02	7.91
35		methylene chloride	0.459	0.478	-4.1	104	0.00	8.28
36		methyl acetate	0.073	0.080	-9.6	105	0.00	8.04
37		methyl tert butyl ether	1.397	1.391	0.5	101	0.00	8.64

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

38		trans-1,2-dichloroethene	0.423	0.378	10.6	92	0.00	8.69
39		di-isopropyl ether	1.620	1.739	-7.3	105	0.00	9.29
40		2-butanone	0.074	0.070	5.4	100	0.00	10.08
41		1,1-dichloroethane	0.834	0.861	-3.2	106	0.00	9.33
42		chloroprene	0.648	0.664	-2.5	98	0.00	9.44
43		acrylonitrile	0.200	0.211	-5.5	103	0.00	8.65
44		vinyl acetate	0.075	0.087	-16.0	110	0.00	9.31
45		ethyl tert-butyl ether	1.509	1.587	-5.2	103	0.00	9.80
46		ethyl acetate	0.075	0.077	-2.7	101	0.00	10.11
47		2,2-dichloropropane	0.643	0.641	0.3	103	0.00	10.13
48		cis-1,2-dichloroethene	0.479	0.549	-14.6	118	0.00	10.13
49		propionitrile	0.076	0.081	-6.6	103	0.00	10.20
50		methylacrylate	0.550	0.604	-9.8	103	0.00	10.19
51		bromochloromethane	0.219	0.240	-9.6	107	0.00	10.46
52		tetrahydrofuran	0.199	0.194	2.5	102	0.00	10.50
53		chloroform	0.784	0.817	-4.2	107	0.00	10.52
54		t-butyl formate	0.473	0.519	-9.7	105	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.407	-3.0	108	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.518	0.0	105	0.00	11.17
57		freon 113	0.276	0.290	-5.1	101	0.00	7.43
58		methacrylonitrile	0.342	0.368	-7.6	104	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.663	-7.6	106	0.00	10.78
60		Cyclohexane	0.629	0.659	-4.8	104	0.00	10.86
61		tert amyl alcohol	0.056	0.048	14.3	83	0.00	11.12
62		iso-octane	1.547	1.567	-1.3	97	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.821	-3.4	99	0.00	12.14
65		epichlorohydrin	0.036	0.038	-5.6	98	0.00	12.95
66		n-butyl alcohol	0.009	0.009#	0.0	94	0.00	11.77
67		carbon tetrachloride	0.387	0.398	-2.8	104	0.00	10.99
68		1,1-dichloropropene	0.412	0.428	-3.9	104	0.00	10.97
69		hexane	0.351	0.339	3.4	92	0.00	9.02
70		benzene	1.226	1.223	0.2	105	0.00	11.25
71		tert-amyl methyl ether	0.902	0.942	-4.4	103	0.00	11.27
72		heptane	0.210	0.218	-3.8	99	0.00	11.41
73		isopropyl acetate	0.650	0.756	-16.3	109	0.00	11.16
74		1,2-dichloroethane	0.418	0.427	-2.2	105	0.00	11.27
75		ethyl acrylate	0.448	0.460	-2.7	101	0.00	11.98
76		trichloroethene	0.307	0.325	-5.9	106	0.00	11.99
77		2-nitropropane	0.007	0.008#	-14.3	102	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.225	-5.1	99	0.00	12.81
79		methyl methacrylate	0.226	0.238	-5.3	102	0.00	12.26
80		1,2-dichloropropane	0.340	0.348	-2.4	105	0.00	12.27
81		dibromomethane	0.202	0.211	-4.5	104	0.00	12.43
82		methylcyclohexane	0.459	0.471	-2.6	99	0.00	12.21
83		bromodichloromethane	0.437	0.463	-5.9	106	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.569	-2.0	103	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.068	4.6	104	0.00	13.35
86		4-methyl-2-pentanone	0.141	0.154	-9.2	107	0.00	13.14
87		toluene	0.766	0.771	-0.7	104	0.00	13.43
88		3-methyl-1-butanol	0.014	0.014	0.0	99	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.517	0.6	102	0.00	13.64
90		ethyl methacrylate	0.424	0.460	-8.5	104	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.265	-2.3	104	0.00	13.87
92		2-hexanone	0.155	0.145	6.5	102	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.96
94		tetrachloroethene	0.279	0.287	-2.9	106	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.032	0.0	99	0.00	14.23

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3095-ICV3095
Lab FileID: 3B66304A.D

96	1,3-dichloropropane	0.524	0.516	1.5	103	0.00	14.06
97	butyl acetate	0.228	0.238	-4.4	103	0.00	14.11
98	dibromochloromethane	0.362	0.361	0.3	102	0.00	14.35
99	1,2-dibromoethane	0.323	0.335	-3.7	103	0.00	14.51
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.880	-3.2	106	0.00	15.00
102	1,1,1,2-tetrachloroethane	0.323	0.335	-3.7	107	0.00	15.06
103	ethylbenzene	1.505	1.502	0.2	103	0.00	15.04
104	m,p-xylene	0.573	0.579	-1.0	105	0.00	15.15
105	o-xylene	0.598	0.628	-5.0	107	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	0.983	0.3	101	0.00	15.61
108	bromoform	0.276	0.286	-3.6	104	0.00	15.92
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	17.44
110	isopropylbenzene	2.995	3.083	-2.9	106	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.831	3.9	104	0.00	16.19
112	cyclohexanone	0.056	0.045	19.6	84	0.00	16.16
113	bromobenzene	0.781	0.762	2.4	104	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.886	-2.2	104	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.271	-9.7	106	0.00	16.34
116	1,2,3-trichloropropane	0.215	0.224	-4.2	104	0.00	16.38
117	n-propylbenzene	3.515	3.395	3.4	100	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.908	-5.7	102	0.00	16.50
119	2-chlorotoluene	0.697	0.708	-1.6	106	0.00	16.56
120	4-chlorotoluene	2.250	2.188	2.8	101	0.00	16.67
121	1,3,5-trimethylbenzene	2.434	2.463	-1.2	105	0.00	16.55
122	tert-butylbenzene	2.194	2.306	-5.1	104	0.00	16.93
123	pentachloroethane	0.491	0.526	-7.1	105	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.591	-1.7	103	0.00	16.97
125	sec-butylbenzene	3.288	3.377	-2.7	102	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.554	-2.6	106	0.00	17.38
127	p-isopropyltoluene	2.686	2.889	-7.6	106	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.537	-3.0	105	0.00	17.46
129	benzyl chloride	1.771	1.791	-1.1	99	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.561	-3.2	106	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.708	-9.3	103	0.00	17.69
132	n-butylbenzene	1.468	1.545	-5.2	104	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.771	-9.4	102	0.00	18.55
134	1,2-dibromo-3-chloropropa	0.170	0.187	-10.0	106	0.00	18.74
135	1,3,5-trichlorobenzene	1.265	1.324	-4.7	100	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.228	-9.3	101	0.00	19.63
137	hexachlorobutadiene	0.610	0.616	-1.0	98	0.00	19.73
138	naphthalene	2.431	2.668	-9.7	100	0.00	19.94
139	1,2,3-trichlorobenzene	1.014	1.094	-7.9	101	0.00	20.21
140	hexachloroethane	0.495	0.578	-16.8	107	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66298.D M3B3095.M Wed Jan 19 12:55:48 2011 MS3B

5.7.2

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\3b66584.D Vial: 22
Acq On : 26 Jan 2011 9:20 pm Operator: tarar1
Sample : cc3095-50 Inst : MS3B
Misc : ms7552,v3b3109,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	105	-0.01	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.049	-4.0	110	0.00	8.37
4		1,4-dioxane	0.082	0.095	-15.9	114	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	121	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a	0.001	0.001#	0.0	144	-0.01	4.11
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.425	-2.7	110	0.02	4.32
12		dichlorodifluoromethane	0.599	0.569	5.0	105	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.770	10.4	105	0.00	4.69
16		vinyl chloride	0.666	0.654	1.8	111	0.00	5.00
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.377	-2.4	130	0.01	5.75
19		chloroethane	0.325	0.338	-4.0	120	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.649	-3.2	118	0.00	6.51
22		PENTANE	0.616	0.729	-18.3	131	0.00	6.57
23		ethyl ether	0.244	0.268	-9.8	122	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.096	15.0	98	0.00	7.25
28		1,1-dichloroethene	0.395	0.420	-6.3	126	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	50.000	60.664	-21.3#	138	0.00	7.51
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.273	-0.7	120	0.00	8.05
31		acetonitrile	0.042	0.040	4.8	101	-0.01	8.03
32		iodomethane	0.691	0.783	-13.3	131	0.00	7.77
33		iso-butyl alcohol	0.014	0.014	0.0	114	0.00	11.25
34		carbon disulfide	1.441	1.556	-8.0	127	-0.02	7.91
35		methylene chloride	0.459	0.490	-6.8	123	0.00	8.28
36		methyl acetate	0.073	0.072	1.4	110	0.00	8.04
37		methyl tert butyl ether	1.397	1.378	1.4	116	0.00	8.64

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

38		trans-1,2-dichloroethene	0.423	0.433	-2.4	122	0.00	8.69
39		di-isopropyl ether	1.620	1.508	6.9	105	0.00	9.29
40		2-butanone	0.074	0.080	-8.1	133	0.00	10.08
41		1,1-dichloroethane	0.834	0.822	1.4	118	0.00	9.32
42		chloroprene	0.648	0.633	2.3	108	0.00	9.44
43		acrylonitrile	0.200	0.192	4.0	109	0.00	8.65
44		vinyl acetate	0.075	0.071	5.3	104	0.00	9.30
45		ethyl tert-butyl ether	1.509	1.435	4.9	108	0.00	9.80
46		ethyl acetate	0.075	0.067	10.7	101	0.00	10.11
47		2,2-dichloropropane	0.643	0.597	7.2	111	0.00	10.13
48		cis-1,2-dichloroethene	0.479	0.494	-3.1	123	0.00	10.12
49		propionitrile	0.076	0.073	3.9	108	0.00	10.20
50		methylacrylate	0.550	0.549	0.2	109	0.00	10.19
51		bromochloromethane	0.219	0.243	-11.0	125	0.00	10.46
52		tetrahydrofuran	0.199	0.172	13.6	105	0.00	10.50
53		chloroform	0.784	0.780	0.5	118	0.00	10.52
54		t-butyl formate	0.473	0.431	8.9	101	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.419	-6.1	128	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.505	2.5	119	0.00	11.17
57		freon 113	0.276	0.296	-7.2	120	0.00	7.43
58		methacrylonitrile	0.342	0.324	5.3	107	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.652	-5.8	120	0.00	10.78
60		Cyclohexane	0.629	0.662	-5.2	121	0.00	10.85
61		tert amyl alcohol	0.056	0.053	5.4	106	0.00	11.12
62		iso-octane	1.547	1.472	4.8	105	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	117	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.794	0.0	109	0.00	12.15
65		epichlorohydrin	0.036	0.034	5.6	101	0.00	12.95
66		n-butyl alcohol	0.009	0.009#	0.0	110	0.00	11.77
67		carbon tetrachloride	0.387	0.408	-5.4	120	0.00	10.99
68		1,1-dichloropropene	0.412	0.428	-3.9	118	0.00	10.96
69		hexane	0.351	0.379	-8.0	116	0.00	9.02
70		benzene	1.226	1.223	0.2	119	0.00	11.24
71		tert-amyl methyl ether	0.902	0.870	3.5	108	0.00	11.27
72		heptane	0.210	0.206	1.9	106	0.00	11.41
73		isopropyl acetate	0.650	0.630	3.1	103	0.00	11.16
74		1,2-dichloroethane	0.418	0.403	3.6	112	0.00	11.27
75		ethyl acrylate	0.448	0.435	2.9	107	0.00	11.98
76		trichloroethene	0.307	0.328	-6.8	121	0.00	11.99
77		2-nitropropane	0.007	0.007#	0.0	100	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.211	1.4	105	0.00	12.81
79		methyl methacrylate	0.226	0.236	-4.4	115	0.00	12.26
80		1,2-dichloropropane	0.340	0.335	1.5	114	0.00	12.27
81		dibromomethane	0.202	0.208	-3.0	117	0.00	12.43
82		methylcyclohexane	0.459	0.469	-2.2	112	0.00	12.21
83		bromodichloromethane	0.437	0.446	-2.1	115	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.558	0.0	114	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.155	-3.2	128	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.140	0.7	110	0.00	13.14
87		toluene	0.766	0.777	-1.4	118	0.00	13.42
88		3-methyl-1-butanol	0.014	0.014	0.0	109	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.505	2.9	112	0.00	13.64
90		ethyl methacrylate	0.424	0.441	-4.0	113	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.262	-1.2	116	0.00	13.87
92		2-hexanone	0.155	0.157	-1.3	126	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	116	0.00	14.96
94		tetrachloroethene	0.279	0.309	-10.8	129	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.031	3.1	108	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3109-CC3095
Lab FileID: 3B66584.D

96	1,3-dichloropropane	0.524	0.510	2.7	115	0.00	14.06
97	butyl acetate	0.228	0.220	3.5	107	0.00	14.11
98	dibromochloromethane	0.362	0.376	-3.9	119	0.00	14.35
99	1,2-dibromoethane	0.323	0.337	-4.3	118	0.00	14.50
100	n-butyl ether		----------NA----------				
101	chlorobenzene	0.853	0.878	-2.9	119	0.00	14.99
102	1,1,1,2-tetrachloroethane	0.323	0.331	-2.5	120	0.00	15.05
103	ethylbenzene	1.505	1.506	-0.1	117	0.00	15.04
104	m,p-xylene	0.573	0.583	-1.7	119	0.00	15.15
105	o-xylene	0.598	0.614	-2.7	118	0.00	15.60
106	butyl acrylate		----------NA----------				
107	styrene	0.986	1.016	-3.0	118	0.00	15.61
108	bromoform	0.276	0.292	-5.8	120	0.00	15.91
109 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	117	0.00	17.43
110	isopropylbenzene	2.995	2.994	0.0	117	0.00	15.96
111 S	4-bromofluorobenzene (s)	0.865	0.869	-0.5	124	0.00	16.19
112	cyclohexanone	0.056	0.066	-17.9	138	0.00	16.16
113	bromobenzene	0.781	0.785	-0.5	122	0.00	16.40
114	1,1,2,2-tetrachloroethane	0.867	0.850	2.0	113	0.00	16.30
115	trans-1,4-dichloro-2-bute	0.247	0.212	14.2	95	0.00	16.34
116	1,2,3-trichloropropane	0.215	0.216	-0.5	114	0.00	16.38
117	n-propylbenzene	3.515	3.432	2.4	115	0.00	16.40
118	4-ETHYLTOLUENE	2.752	2.776	-0.9	111	0.00	16.50
119	2-chlorotoluene	0.697	0.691	0.9	118	0.00	16.56
120	4-chlorotoluene	2.250	2.194	2.5	115	0.00	16.66
121	1,3,5-trimethylbenzene	2.434	2.371	2.6	115	0.00	16.55
122	tert-butylbenzene	2.194	2.279	-3.9	117	0.00	16.93
123	pentachloroethane	0.491	0.503	-2.4	115	0.00	17.03
124	1,2,4-trimethylbenzene	2.548	2.562	-0.5	116	0.00	16.97
125	sec-butylbenzene	3.288	3.358	-2.1	116	0.00	17.16
126	1,3-dichlorobenzene	1.515	1.539	-1.6	120	0.00	17.38
127	p-isopropyltoluene	2.686	2.771	-3.2	116	0.00	17.28
128	1,4-dichlorobenzene	1.492	1.524	-2.1	119	0.00	17.46
129	benzyl chloride	1.771	1.614	8.9	101	0.00	17.58
130	1,2-dichlorobenzene	1.513	1.551	-2.5	120	0.00	17.89
131	1,4-DIETHYLBENZENE	1.562	1.609	-3.0	110	0.00	17.69
132	n-butylbenzene	1.468	1.484	-1.1	113	0.00	17.73
133	1,2,4,5-TETRAMETHYLBENZEN	2.532	2.605	-2.9	109	0.00	18.54
134	1,2-dibromo-3-chloropropa	0.170	0.165	2.9	106	0.00	18.74
135	1,3,5-trichlorobenzene	1.265	1.367	-8.1	117	0.00	18.93
136	1,2,4-trichlorobenzene	1.124	1.236	-10.0	115	0.00	19.62
137	hexachlorobutadiene	0.610	0.636	-4.3	115	0.00	19.73
138	naphthalene	2.431	2.582	-6.2	110	0.00	19.93
139	1,2,3-trichlorobenzene	1.014	1.079	-6.4	113	0.00	20.20
140	hexachloroethane	0.495	0.555	-12.1	117	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66298.D M3B3095.M Thu Jan 27 17:45:03 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\3b66631.D Vial: 3
Acq On : 28 Jan 2011 9:28 am Operator: tarar1
Sample : cc3095-20 Inst : MS3B
Misc : ms7528,v3b3111,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	-0.01	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	1.165	-15.5	129	-0.01	8.36
4		1,4-dioxane	0.082	0.096	-17.1	119	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	114	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.505	-22.0#	133	0.01	4.31
12		dichlorodifluoromethane	0.599	0.581	3.0	98	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.814	5.2	102	-0.01	4.68
16		vinyl chloride	0.666	0.681	-2.3	107	0.00	4.98
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.375	-1.9	113	0.00	5.74
19		chloroethane	0.325	0.339	-4.3	109	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.652	-3.7	106	0.00	6.51
22		PENTANE	0.616	0.868	-40.9#	154	0.01	6.57
23		ethyl ether	0.244	0.261	-7.0	110	0.00	6.96
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.107	5.3	101	0.00	7.25
28		1,1-dichloroethene	0.395	0.417	-5.6	112	-0.02	7.44
		----------	True	Calc.	% Drift	----------		
29		acetone	20.000	24.315	-21.6#	107	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.273	-0.7	110	0.00	8.05
31		acetonitrile	0.042	0.041	2.4	114	-0.02	8.02
32		iodomethane	0.691	0.745	-7.8	115	0.00	7.77
33		iso-butyl alcohol	0.014	0.014	0.0	110	0.00	11.25
34		carbon disulfide	1.441	1.541	-6.9	115	0.00	7.92
35		methylene chloride	0.459	0.467	-1.7	107	0.00	8.28
36		methyl acetate	0.073	0.075	-2.7	117	0.00	8.04
37		methyl tert butyl ether	1.397	1.378	1.4	107	0.00	8.63

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

38		trans-1,2-dichloroethene	0.423	0.421	0.5	109	0.00	8.69
39		di-isopropyl ether	1.620	1.718	-6.0	116	0.00	9.29
40		2-butanone	0.074	0.084	-13.5	112	0.00	10.08
41		1,1-dichloroethane	0.834	0.818	1.9	105	0.00	9.32
42		chloroprene	0.648	0.691	-6.6	119	0.00	9.44
43		acrylonitrile	0.200	0.194	3.0	101	0.00	8.65
44		vinyl acetate	0.075	0.073	2.7	110	0.00	9.32
45		ethyl tert-butyl ether	1.509	1.593	-5.6	117	0.00	9.80
46		ethyl acetate	0.075	0.075	0.0	109	0.00	10.11
47		2,2-dichloropropane	0.643	0.671	-4.4	114	0.00	10.12
48		cis-1,2-dichloroethene	0.479	0.476	0.6	107	0.00	10.12
49		propionitrile	0.076	0.073	3.9	97	0.00	10.19
50		methylacrylate	0.550	0.534	2.9	97	0.00	10.19
51		bromochloromethane	0.219	0.231	-5.5	111	0.00	10.46
52		tetrahydrofuran	0.199	0.182	8.5	99	0.00	10.50
53		chloroform	0.784	0.767	2.2	106	0.00	10.52
54		t-butyl formate	0.473	0.492	-4.0	112	0.00	10.55
55	S	dibromofluoromethane (s)	0.395	0.415	-5.1	116	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.520	-0.4	111	0.00	11.17
57		freon 113	0.276	0.326	-18.1	134	0.00	7.43
58		methacrylonitrile	0.342	0.315	7.9	98	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.622	-1.0	108	0.00	10.78
60		Cyclohexane	0.629	0.650	-3.3	109	0.00	10.85
61		tert amyl alcohol	0.056	0.056	0.0	110	0.00	11.11
62		iso-octane	1.547	1.710	-10.5	127	0.00	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	111	0.00	11.63
64		tert-amyl ethyl ether	0.794	0.804	-1.3	101	0.00	12.14
65		epichlorohydrin	0.036	0.038	-5.6	110	0.00	12.95
66		n-butyl alcohol	0.009	0.010#	-11.1	123	0.00	11.77
67		carbon tetrachloride	0.387	0.397	-2.6	108	0.00	10.99
68		1,1-dichloropropene	0.412	0.415	-0.7	105	0.00	10.96
69		hexane	0.351	0.444	-26.5#	140	0.00	9.02
70		benzene	1.226	1.208	1.5	105	0.00	11.24
71		tert-amyl methyl ether	0.902	0.984	-9.1	117	0.00	11.27
72		heptane	0.210	0.245	-16.7	131	0.00	11.41
73		isopropyl acetate	0.650	0.710	-9.2	115	0.00	11.16
74		1,2-dichloroethane	0.418	0.405	3.1	101	0.00	11.26
75		ethyl acrylate	0.448	0.427	4.7	99	0.00	11.98
76		trichloroethene	0.307	0.315	-2.6	108	0.00	11.98
77		2-nitropropane	0.007	0.007#	0.0	102	0.00	12.81
78		2-chloroethyl vinyl ether	0.214	0.237	-10.7	115	0.00	12.81
79		methyl methacrylate	0.226	0.228	-0.9	101	0.00	12.26
80		1,2-dichloropropane	0.340	0.335	1.5	103	0.00	12.26
81		dibromomethane	0.202	0.202	0.0	104	0.00	12.43
82		methylcyclohexane	0.459	0.530	-15.5	128	0.00	12.21
83		bromodichloromethane	0.437	0.428	2.1	104	0.00	12.57
84		cis-1,3-dichloropropene	0.558	0.552	1.1	105	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.170	-4.6	119	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.140	0.7	101	0.00	13.14
87		toluene	0.766	0.748	2.3	107	0.00	13.42
88		3-methyl-1-butanol	0.014	0.016	-14.3	124	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.508	2.3	106	0.00	13.64
90		ethyl methacrylate	0.424	0.418	1.4	103	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.254	1.9	106	0.00	13.87
92		2-hexanone	0.155	0.179	-15.5	112	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	112	0.00	14.96
94		tetrachloroethene	0.279	0.287	-2.9	109	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.034	-6.3	117	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3111-CC3095
Lab FileID: 3B66631.D

96		1,3-dichloropropane	0.524	0.504	3.8	104	0.00	14.06
97		butyl acetate	0.228	0.250	-9.6	120	0.00	14.11
98		dibromochloromethane	0.362	0.351	3.0	108	0.00	14.35
99		1,2-dibromoethane	0.323	0.322	0.3	107	0.00	14.50
100		n-butyl ether		----------NA----------				
101		chlorobenzene	0.853	0.846	0.8	108	0.00	14.99
102		1,1,1,2-tetrachloroethane	0.323	0.319	1.2	107	0.00	15.05
103		ethylbenzene	1.505	1.483	1.5	107	0.00	15.04
104		m,p-xylene	0.573	0.572	0.2	108	0.00	15.15
105		o-xylene	0.598	0.603	-0.8	109	0.00	15.60
106		butyl acrylate		----------NA----------				
107		styrene	0.986	0.980	0.6	107	0.00	15.61
108		bromoform	0.276	0.272	1.4	108	0.00	15.91
109	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	17.43
110		isopropylbenzene	2.995	2.927	2.3	108	0.00	15.96
111	S	4-bromofluorobenzene (s)	0.865	0.884	-2.2	118	0.00	16.19
112		cyclohexanone	0.056	0.067	-19.6	123	0.00	16.16
113		bromobenzene	0.781	0.757	3.1	111	0.00	16.40
114		1,1,2,2-tetrachloroethane	0.867	0.816	5.9	105	0.00	16.30
115		trans-1,4-dichloro-2-bute	0.247	0.219	11.3	96	0.00	16.33
116		1,2,3-trichloropropane	0.215	0.212	1.4	106	0.00	16.38
117		n-propylbenzene	3.515	3.412	2.9	107	0.00	16.40
118		4-ETHYLTOLUENE	2.752	2.773	-0.8	105	0.00	16.50
119		2-chlorotoluene	0.697	0.679	2.6	109	0.00	16.56
120		4-chlorotoluene	2.250	2.139	4.9	108	0.00	16.67
121		1,3,5-trimethylbenzene	2.434	2.284	6.2	105	0.00	16.55
122		tert-butylbenzene	2.194	2.183	0.5	107	0.00	16.93
123		pentachloroethane	0.491	0.505	-2.9	114	0.00	17.03
124		1,2,4-trimethylbenzene	2.548	2.492	2.2	107	0.00	16.97
125		sec-butylbenzene	3.288	3.244	1.3	107	0.00	17.16
126		1,3-dichlorobenzene	1.515	1.489	1.7	112	0.00	17.38
127		p-isopropyltoluene	2.686	2.682	0.1	108	0.00	17.28
128		1,4-dichlorobenzene	1.492	1.464	1.9	110	0.00	17.46
129		benzyl chloride	1.771	2.072	-17.0	134	0.00	17.58
130		1,2-dichlorobenzene	1.513	1.492	1.4	110	0.00	17.89
131		1,4-DIETHYLBENZENE	1.562	1.572	-0.6	103	0.00	17.68
132		n-butylbenzene	1.468	1.466	0.1	107	0.00	17.73
133		1,2,4,5-TETRAMETHYLBENZEN	2.532	2.567	-1.4	103	0.00	18.54
134		1,2-dibromo-3-chloropropa	0.170	0.157	7.6	101	0.00	18.73
135		1,3,5-trichlorobenzene	1.265	1.314	-3.9	110	0.00	18.93
136		1,2,4-trichlorobenzene	1.124	1.174	-4.4	108	0.00	19.62
137		hexachlorobutadiene	0.610	0.624	-2.3	111	0.00	19.73
138		naphthalene	2.431	2.455	-1.0	103	0.00	19.93
139		1,2,3-trichlorobenzene	1.014	1.027	-1.3	107	0.00	20.20
140		hexachloroethane	0.495	0.516	-4.2	108	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66297.D M3B3095.M Mon Jan 31 10:24:27 2011 MS3B

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

Evaluate Continuing Calibration Report

Data File : C:\MSDChem\1\DATA\v3b3115-v3b3116\3b66720.D Vial: 3
Acq On : 31 Jan 2011 9:36 am Operator: tarar1
Sample : cc3095-20 Inst : MS3B
Misc : ms7750,v3b3115,w,,,,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\M3B3095.M (RTE Integrator)
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
Last Update : Thu Jan 20 11:57:41 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	100	-0.02	8.23
2		ethanol		----------NA----------				
3		tertiary butyl alcohol	1.009	0.913	9.5	102	-0.01	8.36
4		1,4-dioxane	0.082	0.089	-8.5	111	0.00	12.38
5	I	pentafluorobenzene	1.000	1.000	0.0	120	0.00	10.67
6		freon 115		----------NA----------				
7		freon 23		----------NA----------				
8		freon 143a		----------NA----------				
9		freon 152a		----------NA----------				
10		chlorotrifluoroethene		----------NA----------				
11		chlorodifluoromethane	0.414	0.415	-0.2	115	0.01	4.31
12		dichlorodifluoromethane	0.599	0.514	14.2	91	0.00	4.28
13		freon 114		----------NA----------				
14		freon 142b		----------NA----------				
15		chloromethane	0.859	0.723	15.8	95	-0.01	4.68
16		vinyl chloride	0.666	0.619	7.1	102	-0.01	4.98
17		acetaldehyde		----------NA----------				
18		bromomethane	0.368	0.364	1.1	115	0.00	5.74
19		chloroethane	0.325	0.314	3.4	106	0.01	5.95
20		vinyl bromide		----------NA----------				
21		trichlorofluoromethane	0.629	0.609	3.2	104	0.00	6.50
22		PENTANE	0.616	0.733	-19.0	136	0.00	6.57
23		ethyl ether	0.244	0.259	-6.1	115	0.00	6.95
24		freon 123		----------NA----------				
25		freon 141b		----------NA----------				
26		freon 123a		----------NA----------				
27		acrolein	0.113	0.095	15.9	94	0.00	7.25
28		1,1-dichloroethene	0.395	0.412	-4.3	116	-0.01	7.45
		----------	True	Calc.	% Drift	----------		
29		acetone	20.000	19.461	2.7	95	0.00	7.52
		----------	AvgRF	CCRF	% Dev	----------		
30		allyl chloride	0.271	0.258	4.8	109	0.00	8.05
31		acetonitrile	0.042	0.033	21.4#	96	-0.01	8.03
32		iodomethane	0.691	0.763	-10.4	123	0.00	7.77
33		iso-butyl alcohol	0.014	0.013	7.1	108	0.00	11.25
34		carbon disulfide	1.441	1.516	-5.2	118	-0.02	7.91
35		methylene chloride	0.459	0.465	-1.3	112	0.00	8.27
36		methyl acetate	0.073	0.066	9.6	109	0.00	8.04
37		methyl tert butyl ether	1.397	1.323	5.3	108	0.00	8.63

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

38		trans-1,2-dichloroethene	0.423	0.428	-1.2	115	0.00	8.69
39		di-isopropyl ether	1.620	1.427	11.9	101	0.00	9.29
40		2-butanone	0.074	0.078	-5.4	109	0.00	10.09
41		1,1-dichloroethane	0.834	0.796	4.6	107	0.00	9.32
42		chloroprene	0.648	0.578	10.8	104	0.00	9.43
43		acrylonitrile	0.200	0.190	5.0	104	0.00	8.65
44		vinyl acetate	0.075	0.063	16.0	99	0.00	9.31
45		ethyl tert-butyl ether	1.509	1.348	10.7	104	0.00	9.80
46		ethyl acetate	0.075	0.063	16.0	97	0.00	10.10
47		2,2-dichloropropane	0.643	0.646	-0.5	115	0.00	10.12
48		cis-1,2-dichloroethene	0.479	0.479	0.0	113	0.00	10.12
49		propionitrile	0.076	0.070	7.9	99	0.00	10.19
50		methylacrylate	0.550	0.520	5.5	99	0.00	10.19
51		bromochloromethane	0.219	0.238	-8.7	119	0.00	10.46
52		tetrahydrofuran	0.199	0.172	13.6	99	0.00	10.50
53		chloroform	0.784	0.747	4.7	108	0.00	10.52
54		t-butyl formate	0.473	0.428	9.5	102	0.00	10.54
55	S	dibromofluoromethane (s)	0.395	0.402	-1.8	118	0.00	10.73
56	S	1,2-dichloroethane-d4 (s)	0.518	0.479	7.5	107	0.00	11.17
57		freon 113	0.276	0.296	-7.2	127	-0.01	7.42
58		methacrylonitrile	0.342	0.302	11.7	98	0.00	10.39
59		1,1,1-trichloroethane	0.616	0.600	2.6	109	0.00	10.77
60		Cyclohexane	0.629	0.650	-3.3	114	-0.01	10.85
61		tert amyl alcohol		----------NA----------				
62		iso-octane	1.547	1.474	4.7	115	-0.01	11.23
63	I	1,4-difluorobenzene	1.000	1.000	0.0	113	0.00	11.63
64		tert-amyl ethyl ether		----------NA----------				
65		epichlorohydrin	0.036	0.034	5.6	102	0.00	12.94
66		n-butyl alcohol	0.009	0.009#	0.0	109	0.00	11.77
67		carbon tetrachloride	0.387	0.397	-2.6	110	0.00	10.99
68		1,1-dichloropropene	0.412	0.417	-1.2	107	0.00	10.96
69		hexane	0.351	0.392	-11.7	126	0.00	9.02
70		benzene	1.226	1.226	0.0	109	0.00	11.24
71		tert-amyl methyl ether	0.902	0.873	3.2	106	0.00	11.27
72		heptane	0.210	0.217	-3.3	118	0.00	11.41
73		isopropyl acetate	0.650	0.566	12.9	94	0.00	11.16
74		1,2-dichloroethane	0.418	0.393	6.0	100	0.00	11.26
75		ethyl acrylate		----------NA----------				
76		trichloroethene	0.307	0.318	-3.6	111	0.00	11.98
77		2-nitropropane	0.007	0.006#	14.3	88	0.00	12.80
78		2-chloroethyl vinyl ether	0.214	0.207	3.3	103	0.00	12.80
79		methyl methacrylate	0.226	0.222	1.8	101	0.00	12.25
80		1,2-dichloropropane	0.340	0.339	0.3	107	0.00	12.26
81		dibromomethane	0.202	0.205	-1.5	108	0.00	12.43
82		methylcyclohexane	0.459	0.485	-5.7	119	0.00	12.20
83		bromodichloromethane	0.437	0.429	1.8	107	0.00	12.56
84		cis-1,3-dichloropropene	0.558	0.552	1.1	108	0.00	13.04
85	S	toluene-d8 (s)	1.119	1.160	-3.7	120	0.00	13.34
86		4-methyl-2-pentanone	0.141	0.135	4.3	100	0.00	13.13
87		toluene	0.766	0.753	1.7	110	0.00	13.42
88		3-methyl-1-butanol	0.014	0.014	0.0	108	0.00	13.16
89		trans-1,3-dichloropropene	0.520	0.499	4.0	106	0.00	13.64
90		ethyl methacrylate	0.424	0.412	2.8	104	0.00	13.61
91		1,1,2-trichloroethane	0.259	0.254	1.9	109	0.00	13.87
92		2-hexanone	0.155	0.165	-6.5	106	0.00	14.04
93	I	chlorobenzene-d5	1.000	1.000	0.0	114	0.00	14.95
94		tetrachloroethene	0.279	0.296	-6.1	114	0.00	14.04
95		3,3-dimethyl-1-butanol	0.032	0.028	12.5	100	0.00	14.23

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V3B3115-CC3095
Lab FileID: 3B66720.D

96		1,3-dichloropropane	0.524	0.505	3.6	106	0.00	14.05
97		butyl acetate	0.228	0.213	6.6	104	0.00	14.11
98		dibromochloromethane	0.362	0.359	0.8	112	0.00	14.34
99		1,2-dibromoethane	0.323	0.327	-1.2	111	0.00	14.50
100		n-butyl ether		----------NA----------				
101		chlorobenzene	0.853	0.873	-2.3	114	0.00	14.99
102		1,1,1,2-tetrachloroethane	0.323	0.327	-1.2	112	0.00	15.05
103		ethylbenzene	1.505	1.496	0.6	109	0.00	15.04
104		m,p-xylene	0.573	0.588	-2.6	113	0.00	15.15
105		o-xylene	0.598	0.611	-2.2	112	0.00	15.60
106		butyl acrylate		----------NA----------				
107		styrene	0.986	1.003	-1.7	111	0.00	15.61
108		bromoform	0.276	0.278	-0.7	113	0.00	15.91
109	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.00	17.43
110		isopropylbenzene	2.995	2.971	0.8	111	0.00	15.96
111	S	4-bromofluorobenzene (s)	0.865	0.873	-0.9	119	0.00	16.19
112		cyclohexanone	0.056	0.053	5.4	100	0.00	16.16
113		bromobenzene	0.781	0.785	-0.5	117	0.00	16.40
114		1,1,2,2-tetrachloroethane	0.867	0.819	5.5	107	0.00	16.30
115		trans-1,4-dichloro-2-bute	0.247	0.213	13.8	94	0.00	16.33
116		1,2,3-trichloropropane	0.215	0.211	1.9	107	0.00	16.38
117		n-propylbenzene	3.515	3.434	2.3	110	0.00	16.39
118		4-ETHYLTOLUENE		----------NA----------				
119		2-chlorotoluene	0.697	0.701	-0.6	114	0.00	16.56
120		4-chlorotoluene	2.250	2.156	4.2	110	0.00	16.66
121		1,3,5-trimethylbenzene	2.434	2.491	-2.3	116	0.00	16.55
122		tert-butylbenzene	2.194	2.191	0.1	109	0.00	16.93
123		pentachloroethane	0.491	0.512	-4.3	118	0.00	17.02
124		1,2,4-trimethylbenzene	2.548	2.515	1.3	110	0.00	16.97
125		sec-butylbenzene	3.288	3.283	0.2	110	0.00	17.15
126		1,3-dichlorobenzene	1.515	1.531	-1.1	116	0.00	17.37
127		p-isopropyltoluene	2.686	2.722	-1.3	111	0.00	17.28
128		1,4-dichlorobenzene	1.492	1.520	-1.9	116	0.00	17.46
129		benzyl chloride	1.771	1.840	-3.9	121	0.00	17.58
130		1,2-dichlorobenzene	1.513	1.531	-1.2	115	0.00	17.89
131		1,4-DIETHYLBENZENE		----------NA----------				
132		n-butylbenzene	1.468	1.455	0.9	108	0.00	17.72
133		1,2,4,5-TETRAMETHYLBENZEN		----------NA----------				
134		1,2-dibromo-3-chloropropa	0.170	0.153	10.0	99	-0.01	18.73
135		1,3,5-trichlorobenzene	1.265	1.373	-8.5	117	0.00	18.93
136		1,2,4-trichlorobenzene	1.124	1.226	-9.1	115	0.00	19.62
137		hexachlorobutadiene	0.610	0.647	-6.1	116	0.00	19.73
138		naphthalene	2.431	2.478	-1.9	106	0.00	19.93
139		1,2,3-trichlorobenzene	1.014	1.057	-4.2	111	0.00	20.20
140		hexachloroethane	0.495	0.530	-7.1	113	0.00	18.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3b66297.D M3B3095.M Tue Feb 01 12:17:07 2011 MS3B

SII-SSA-0014-005956

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-1
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 11:53:19 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

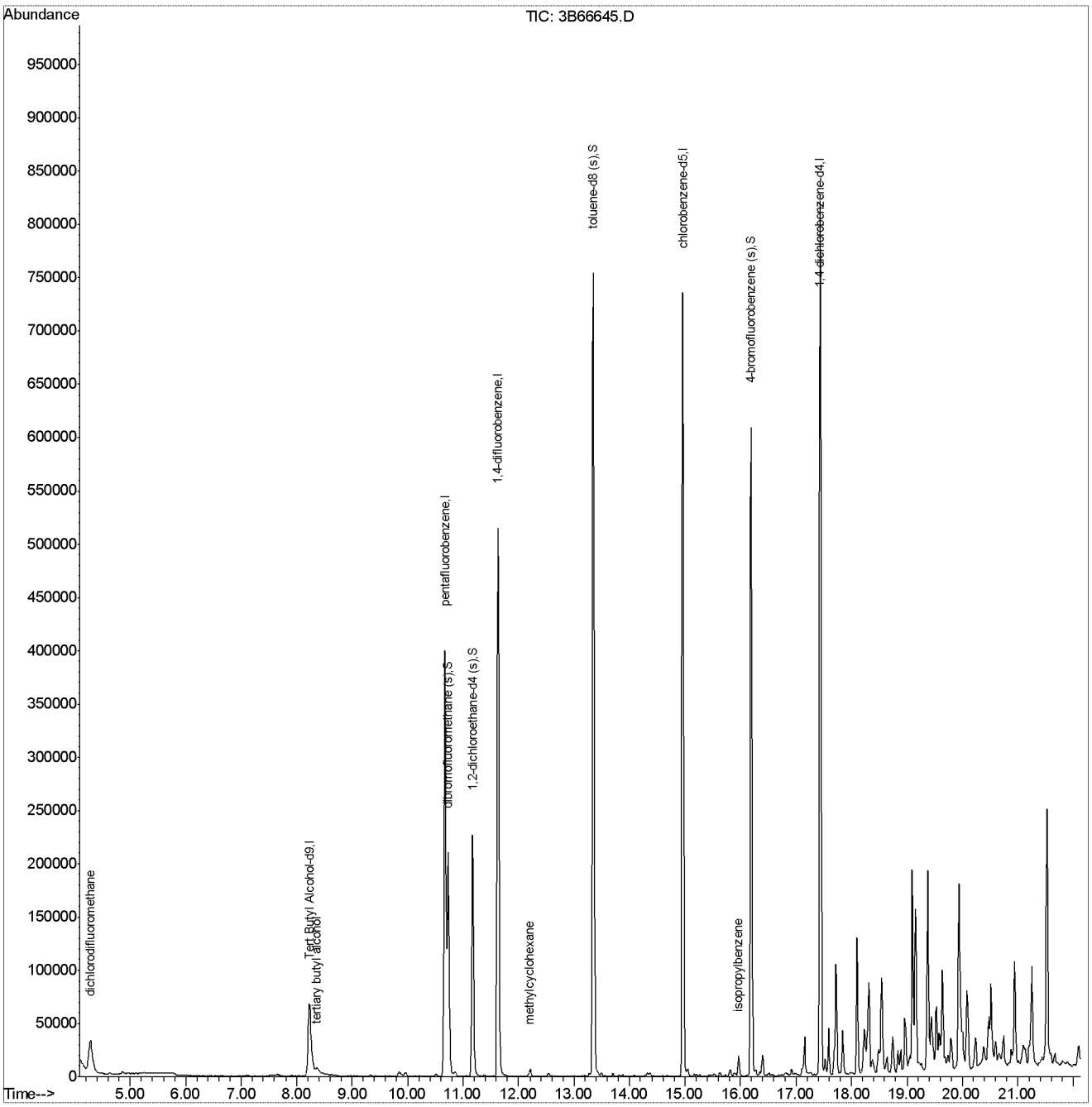
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	189578	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	388490	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	520262	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	496524	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	268340	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	154911	50.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.84%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	194118	48.20	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.40%			
85) toluene-d8 (s)	13.34	98	604281	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.76%			
111) 4-bromofluorobenzene (s)	16.19	95	239358	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.16%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	8.36	59	11215	29.32	ug/L	85
12) dichlorodifluoromethane	4.28	85	79709	17.14	ug/L	100
82) methylcyclohexane	12.21	83	4110	0.86	ug/L	90
110) isopropylbenzene	15.96	105	14510	0.90	ug/L	99

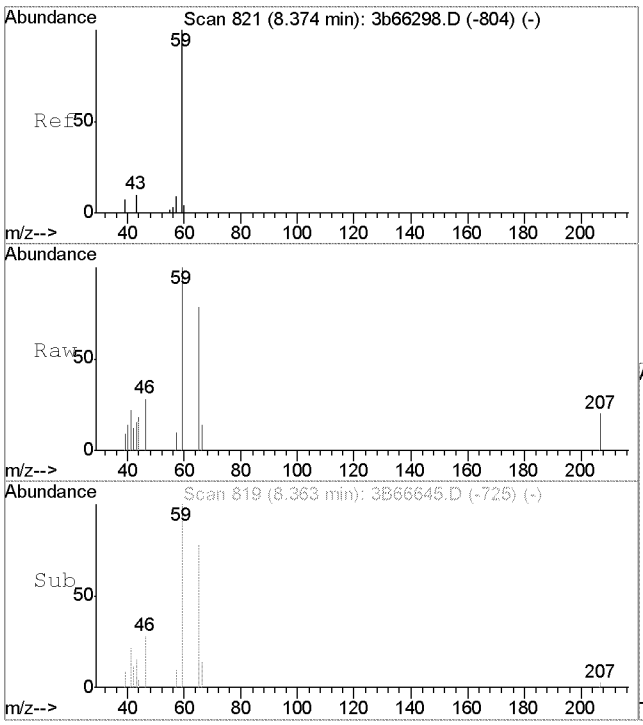
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-1
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 11:53:19 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

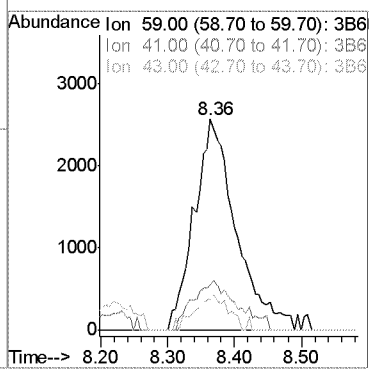


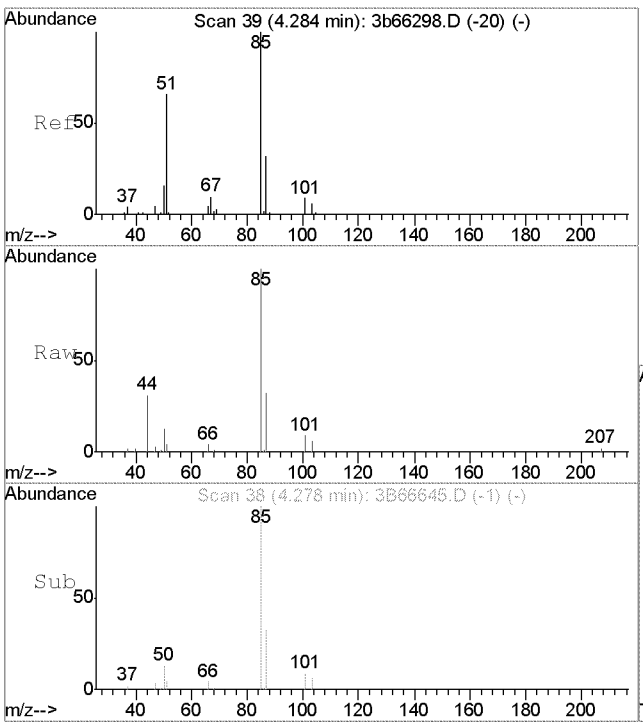


#3
tertiary butyl alcohol
Concen: 29.32 ug/L
RT: 8.36 min Scan# 819
Delta R.T. -0.01 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 59 Resp: 11215

Ion	Ratio	Lower	Upper
59	100		
41	21.6	2.9	62.9
43	14.8	0.0	43.4

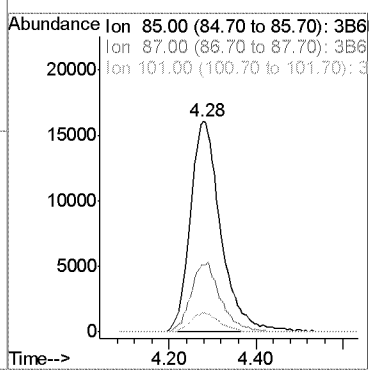


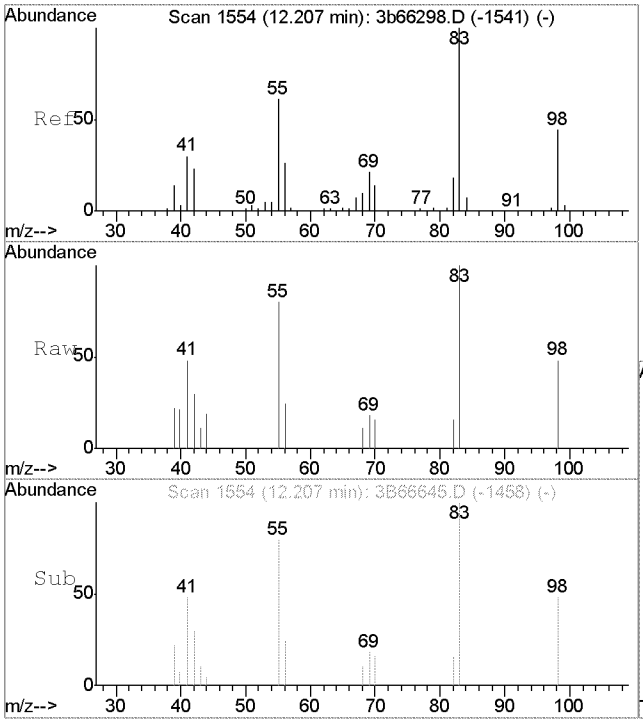


#12
dichlorodifluoromethane
Concen: 17.14 ug/L
RT: 4.28 min Scan# 38
Delta R.T. -0.01 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 85 Resp: 79709

Ion	Ratio	Lower	Upper
85	100		
87	31.8	1.9	61.9
101	9.2	0.0	38.9

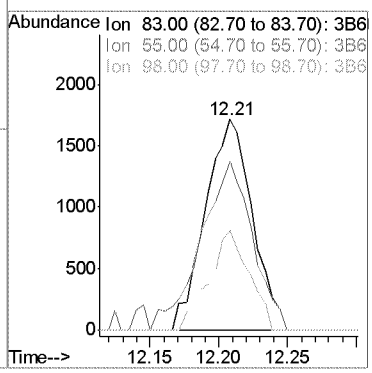


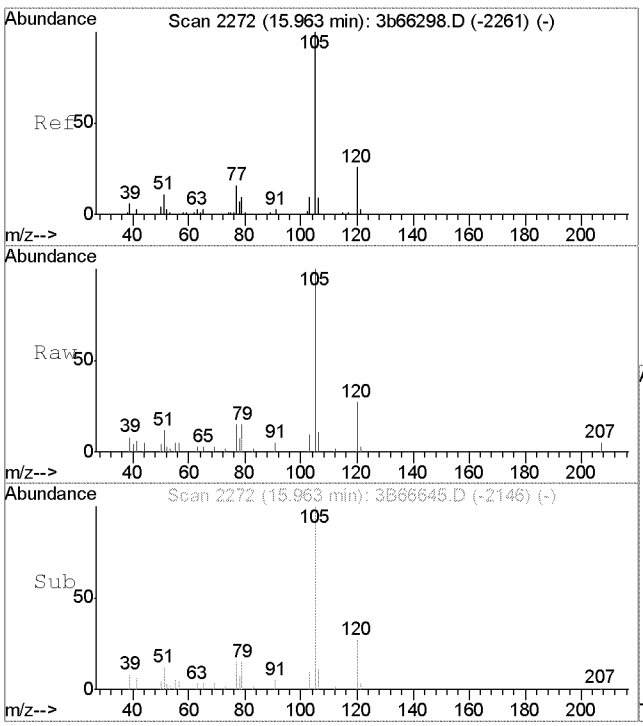


#82
methylcyclohexane
Concen: 0.86 ug/L
RT: 12.21 min Scan# 1554
Delta R.T. -0.00 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion: 83 Resp: 4110

Ion	Ratio	Lower	Upper
83	100		
55	80.3	61.4	121.4
98	47.6	13.9	73.9

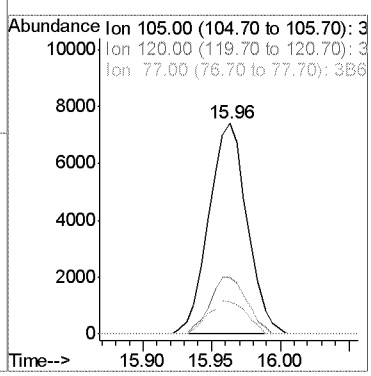




#110
isopropylbenzene
Concen: 0.90 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66645.D
Acq: 28 Jan 2011 4:57 pm

Tgt Ion:105 Resp: 14510

Ion	Ratio	Lower	Upper
105	100		
120	26.9	0.0	56.1
77	15.5	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.284	26	39	116	rVB2	32353	186666	11.86%	1.203%
2	4.848	142	147	259	rBV8	2431	23215	1.47%	0.150%
3	6.182	399	402	453	rVV3	258	1889	0.12%	0.012%
4	6.642	477	490	521	rVB3	245	1500	0.10%	0.010%
5	7.547	654	663	675	rVV4	1069	4772	0.30%	0.031%
6	7.647	675	682	717	rVB5	1914	7462	0.47%	0.048%
7	8.227	779	793	893	rVV	67583	351170	22.30%	2.264%
8	9.326	997	1003	1011	rVB2	839	1806	0.11%	0.012%
9	9.849	1092	1103	1116	rBV3	3936	13944	0.89%	0.090%
10	9.958	1116	1124	1140	rVB4	3625	9446	0.60%	0.061%
11	10.508	1224	1229	1247	rVV4	1797	4473	0.28%	0.029%
12	10.670	1247	1260	1267	rVV	399304	1027104	65.23%	6.620%
13	10.727	1267	1271	1288	rVV	209971	471118	29.92%	3.037%
14	10.848	1288	1294	1310	rVB5	4376	13650	0.87%	0.088%
15	11.052	1326	1333	1340	rVB4	1071	1596	0.10%	0.010%
16	11.167	1340	1355	1390	rBV	226765	538593	34.21%	3.472%
17	11.381	1390	1396	1406	rVB4	1188	2908	0.18%	0.019%
18	11.538	1417	1426	1432	rVB2	800	1986	0.13%	0.013%
19	11.627	1432	1443	1485	rBV	514523	1169635	74.28%	7.539%
20	12.207	1534	1554	1564	rBV4	7394	19837	1.26%	0.128%
21	12.542	1610	1618	1626	rVB	2982	7625	0.48%	0.049%
22	13.191	1738	1742	1749	rVB5	1441	2837	0.18%	0.018%
23	13.274	1752	1758	1760	rVV2	2532	3740	0.24%	0.024%
24	13.342	1760	1771	1796	rVV	753610	1573008	99.90%	10.139%
25	13.505	1796	1802	1807	rVV4	2726	6420	0.41%	0.041%
26	13.541	1807	1809	1826	rVV4	756	2497	0.16%	0.016%
27	13.703	1833	1840	1847	rVB4	2981	5334	0.34%	0.034%
28	13.813	1854	1861	1866	rVV3	1087	2122	0.13%	0.014%
29	13.871	1866	1872	1883	rVB3	1474	2933	0.19%	0.019%
30	14.080	1905	1912	1920	rBV3	834	2025	0.13%	0.013%
31	14.320	1948	1958	1963	rBV5	3276	7703	0.49%	0.050%
32	14.368	1963	1967	1975	rVB4	2916	5053	0.32%	0.033%
33	14.681	2020	2027	2032	rVV3	1150	2011	0.13%	0.013%
34	14.959	2068	2080	2092	rVV	735674	1459730	92.71%	9.409%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	15.047	2093	2097	2114	rVV4	6724	14759	0.94%	0.095%
36	15.157	2114	2118	2124	rVV6	2187	4024	0.26%	0.026%
37	15.210	2124	2128	2134	rVV4	1352	2767	0.18%	0.018%
38	15.262	2134	2138	2145	rVB4	1448	2494	0.16%	0.016%
39	15.434	2165	2171	2176	rBV3	1329	2190	0.14%	0.014%
40	15.523	2181	2188	2197	rVB4	1909	4779	0.30%	0.031%
41	15.628	2200	2208	2219	rVB8	3419	6895	0.44%	0.044%
42	15.727	2219	2227	2231	rBV4	1540	2288	0.15%	0.015%
43	15.811	2235	2243	2252	rVB4	6221	14199	0.90%	0.092%
44	15.895	2252	2259	2265	rBV7	2781	6754	0.43%	0.044%
45	15.963	2265	2272	2293	rVB	18878	38967	2.47%	0.251%
46	16.188	2300	2315	2328	rBV	608211	1158712	73.59%	7.469%
47	16.350	2340	2346	2349	rBV5	3817	6830	0.43%	0.044%
48	16.397	2349	2355	2367	rVB	19530	37142	2.36%	0.239%
49	16.507	2367	2376	2384	rBV8	2124	5304	0.34%	0.034%
50	16.559	2384	2386	2405	rVB7	1342	3572	0.23%	0.023%
51	16.695	2405	2412	2419	rBV6	1094	2708	0.17%	0.017%
52	16.815	2428	2435	2447	rBV5	2837	8416	0.53%	0.054%
53	16.915	2447	2454	2461	rBV6	5325	11115	0.71%	0.072%
54	16.977	2461	2466	2482	rVB8	2178	6749	0.43%	0.044%
55	17.155	2482	2500	2517	rBV	36120	92084	5.85%	0.594%
56	17.270	2517	2522	2530	rVB6	2397	4588	0.29%	0.030%
57	17.432	2540	2553	2565	rBV	820771	1574564	100.00%	10.149%
58	17.527	2565	2571	2576	rVB2	12249	21198	1.35%	0.137%
59	17.589	2576	2583	2592	rVB2	43593	82900	5.26%	0.534%
60	17.720	2594	2608	2623	rBV3	103739	236805	15.04%	1.526%
61	17.840	2623	2631	2653	rVB2	40625	78685	5.00%	0.507%
62	17.987	2653	2659	2672	rVB2	2100	6978	0.44%	0.045%
63	18.102	2672	2681	2694	rBV	128009	239177	15.19%	1.542%
64	18.233	2694	2706	2711	rBV3	41758	104483	6.64%	0.673%
65	18.311	2711	2721	2729	rVV2	80393	196179	12.46%	1.265%
66	18.374	2729	2733	2746	rVB8	12203	31124	1.98%	0.201%
67	18.489	2746	2755	2759	rBV	21655	54127	3.44%	0.349%
68	18.541	2759	2765	2777	rVB2	84880	170492	10.83%	1.099%
69	18.635	2777	2783	2795	rVB3	14467	29564	1.88%	0.191%
70	18.740	2795	2803	2815	rVB2	33273	69702	4.43%	0.449%
71	18.834	2815	2821	2826	rBV	20256	38821	2.47%	0.250%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	18.886	2826	2831	2838	rVB	18298	30082	1.91%	0.194%
73	18.965	2838	2846	2855	rBV5	47771	107801	6.85%	0.695%
74	19.049	2855	2862	2864	rVV5	10031	17268	1.10%	0.111%
75	19.096	2864	2871	2877	rVV	184284	359591	22.84%	2.318%
76	19.153	2877	2882	2913	rVB	150871	328587	20.87%	2.118%
77	19.373	2913	2924	2932	rBV2	186414	397193	25.23%	2.560%
78	19.436	2932	2936	2948	rVV4	44796	123418	7.84%	0.796%
79	19.530	2948	2954	2959	rVV2	54379	105046	6.67%	0.677%
80	19.577	2959	2963	2968	rVV4	29367	65638	4.17%	0.423%
81	19.640	2968	2975	2990	rVV	88470	203727	12.94%	1.313%
82	19.739	2990	2994	2999	rVV2	8352	12480	0.79%	0.080%
83	19.791	2999	3004	3022	rVB2	26202	53369	3.39%	0.344%
84	19.938	3022	3032	3052	rBV2	171804	513686	32.62%	3.311%
85	20.079	3052	3059	3079	rVB4	70987	190396	12.09%	1.227%
86	20.236	3079	3089	3111	rBV	27478	77600	4.93%	0.500%
87	20.382	3111	3117	3127	rVV9	13240	30526	1.94%	0.197%
88	20.471	3127	3134	3138	rVV2	41974	92396	5.87%	0.596%
89	20.513	3138	3142	3152	rVV2	72635	148363	9.42%	0.956%
90	20.597	3152	3158	3165	rVV	18394	33367	2.12%	0.215%
91	20.660	3165	3170	3178	rVV2	6977	16331	1.04%	0.105%
92	20.738	3178	3185	3207	rVB2	25595	54798	3.48%	0.353%
93	20.884	3207	3213	3217	rBV3	12471	25078	1.59%	0.162%
94	20.942	3217	3224	3243	rVB	95300	207464	13.18%	1.337%
95	21.099	3243	3254	3268	rVB6	17935	73733	4.68%	0.475%
96	21.251	3268	3283	3311	rBV2	91738	241042	15.31%	1.554%
97	21.434	3311	3318	3322	rBV7	6079	12868	0.82%	0.083%
98	21.522	3322	3335	3356	rVB	238534	582099	36.97%	3.752%
99	21.664	3356	3362	3436	rVB6	12085	59675	3.79%	0.385%
100	22.093	3436	3444	3448	rBV3	18693	42625	2.71%	0.275%

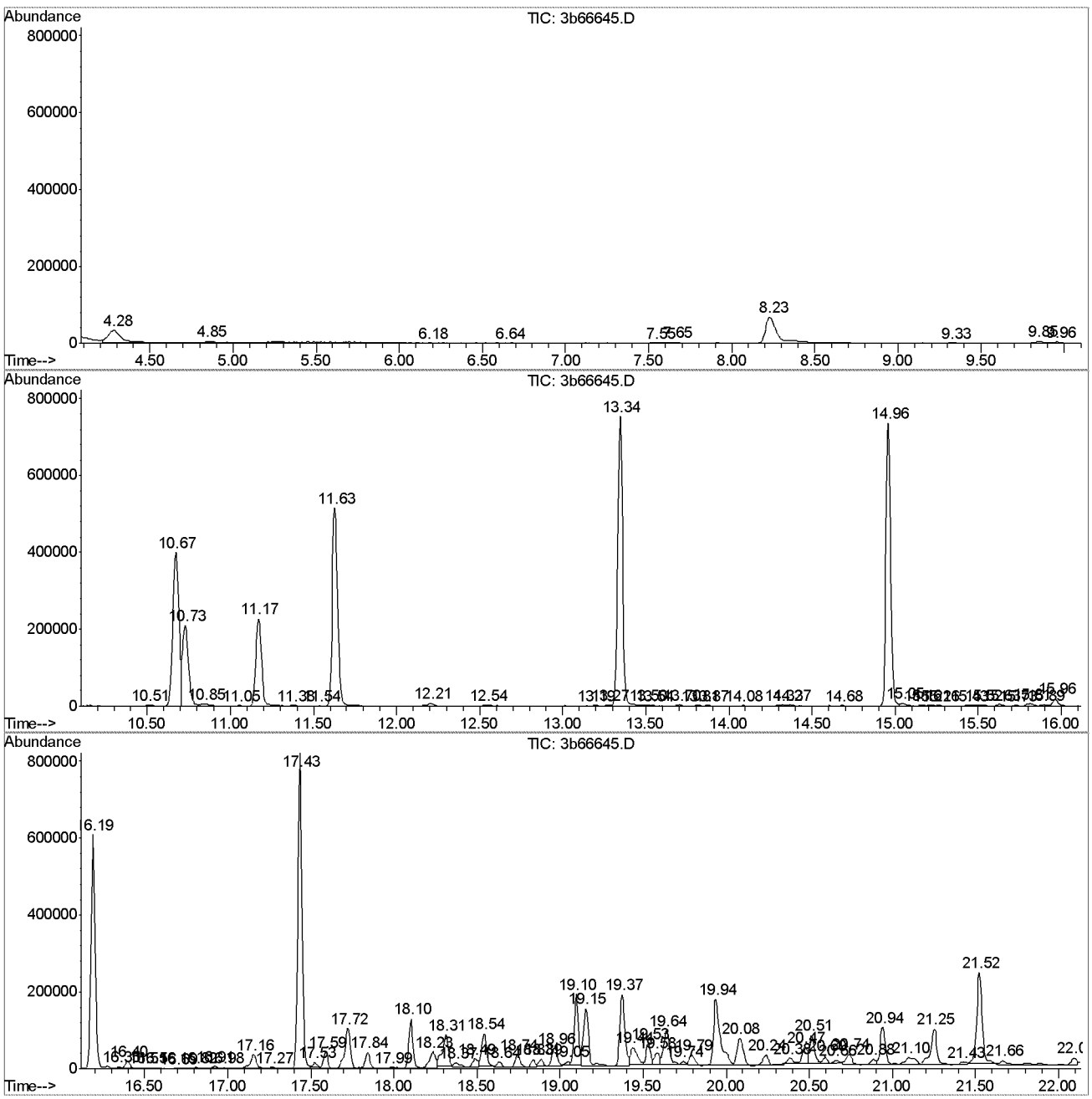
Sum of corrected areas: 15514190

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

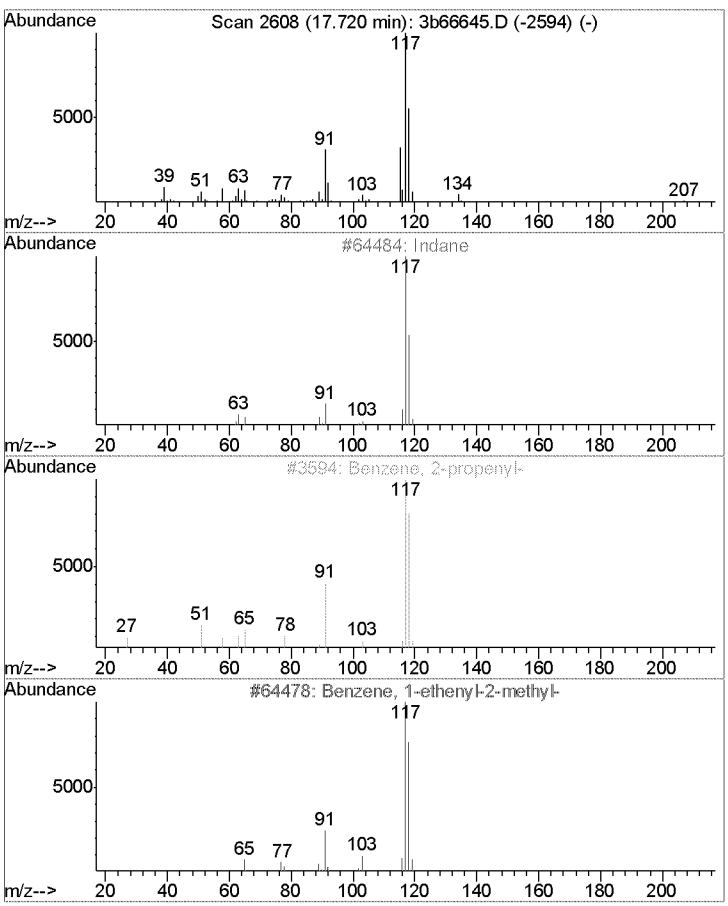
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

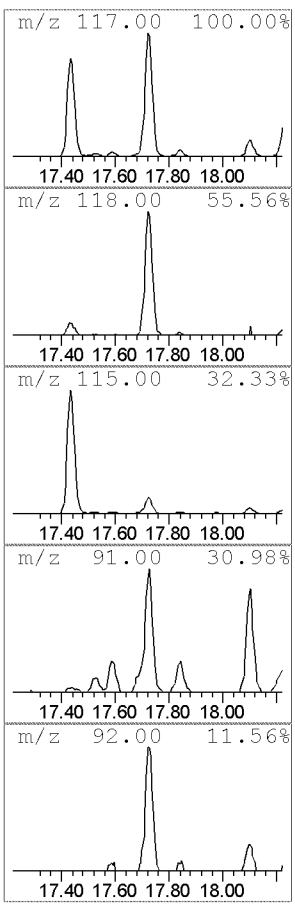
****

Peak Number 1 Indane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.72	7.52 ug/L	236805	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Indane	118	C9H10	000496-11-7	81
2	Benzene, 2-propenyl-	118	C9H10	000300-57-2	68
3	Benzene, 1-ethenyl-2-methyl-	118	C9H10	000611-15-4	68
4	Benzene, 1-ethenyl-4-methyl-	118	C9H10	000622-97-9	68
5	Indane	118	C9H10	000496-11-7	53





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

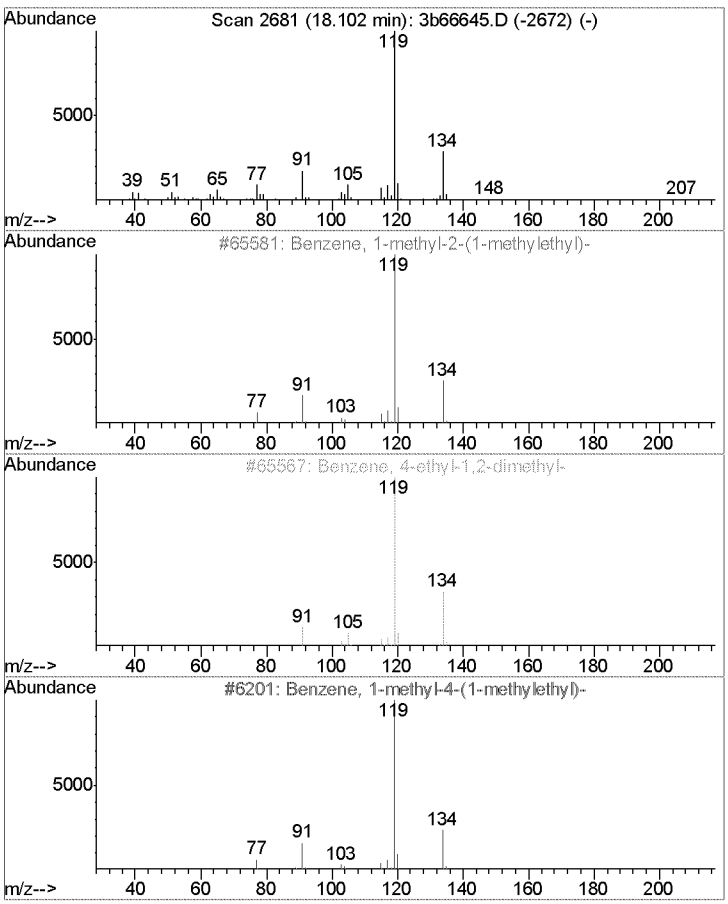
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

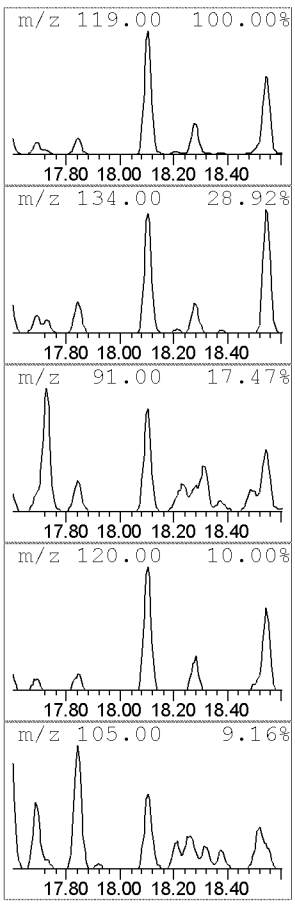
****

Peak Number 2 Benzene, 1-methyl-2-(1-meth... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.10	7.60 ug/L	239177	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	95
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
3	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-methyl-4-(1-methyleth...	134	C10H14	000099-87-6	93





Library Search Compound Report

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Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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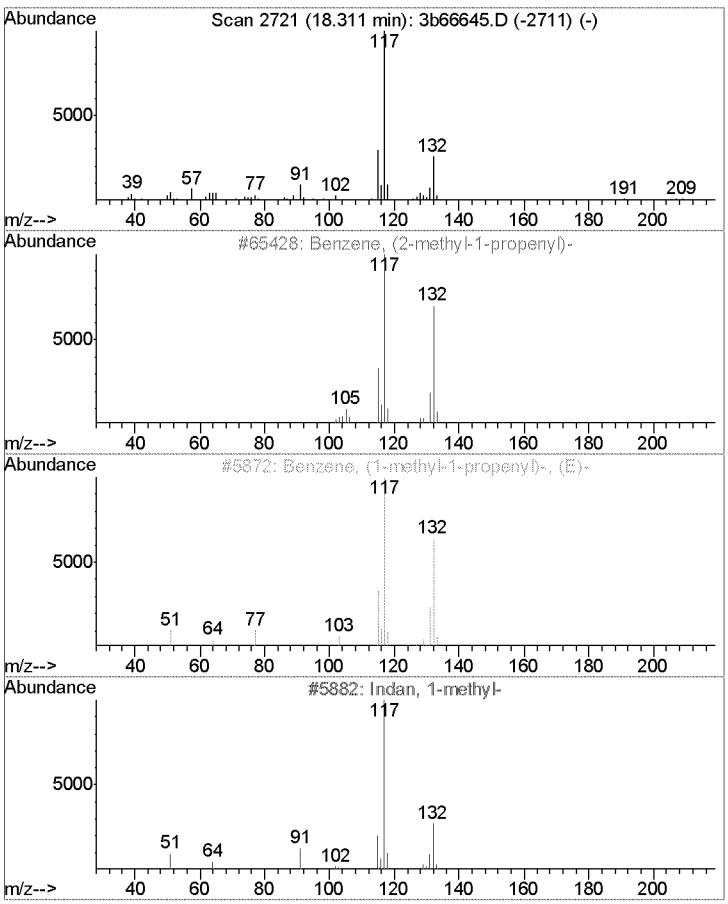
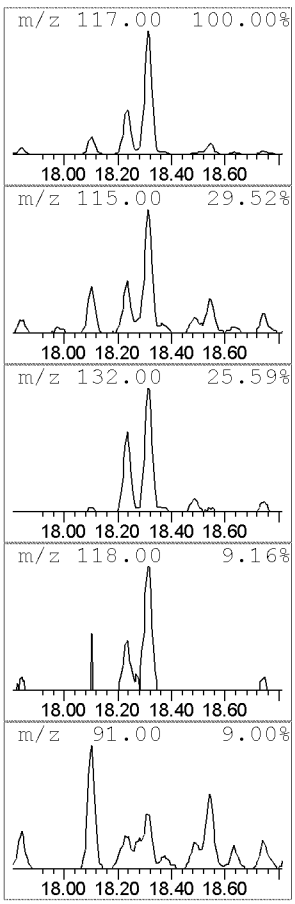
Peak Number 3 Benzene, (2-methyl-1-propen... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.31	6.23 ug/L	196179	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, (2-methyl-1-propenyl)-	132	C10H12	000768-49-0	91
2	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	91
3	Indan, 1-methyl-	132	C10H12	000767-58-8	87
4	Benzene, (2-methyl-2-propenyl)-	132	C10H12	003290-53-7	87
5	Benzene, 1-methyl-2-(2-propenyl)-	132	C10H12	001587-04-8	86





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

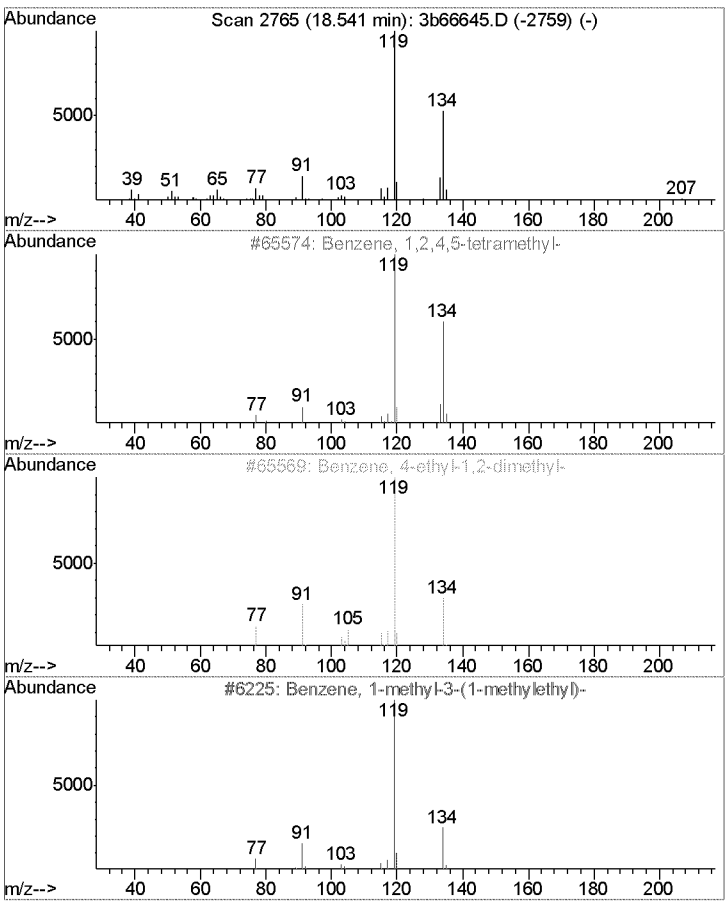
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

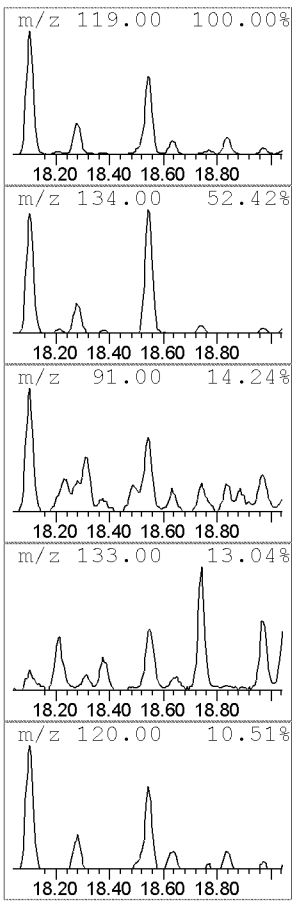
****

Peak Number 4 Benzene, 1,2,4,5-tetramethyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.54	5.41 ug/L	170492	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	94
2	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 2-ethyl-1,3-dimethyl-	134	C10H14	002870-04-4	91
5	Benzene, 1-ethyl-3,5-dimethyl-	134	C10H14	000934-74-7	91





Library Search Compound Report

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Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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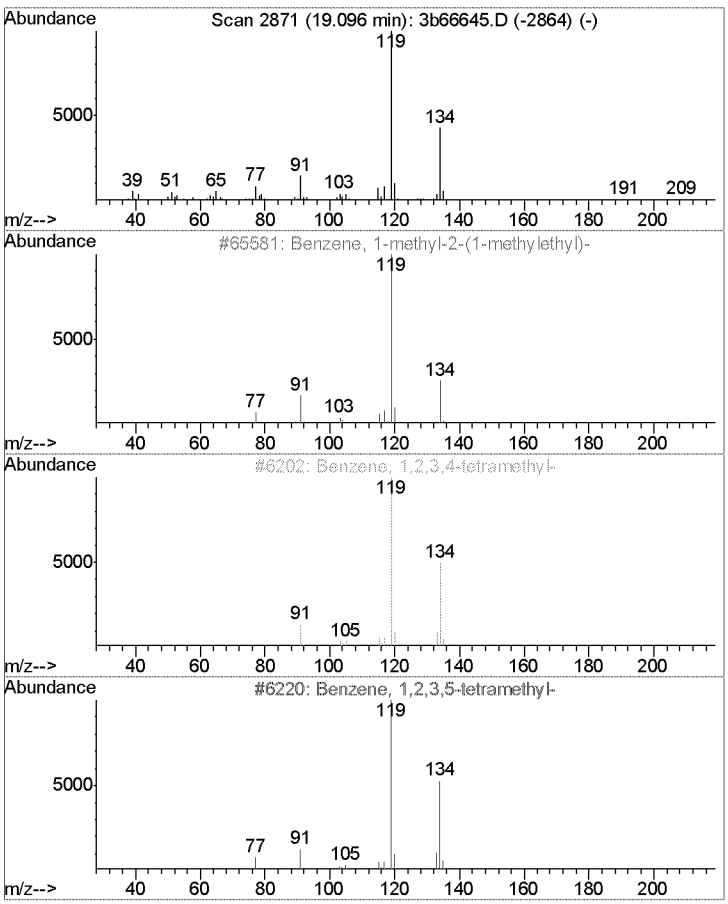
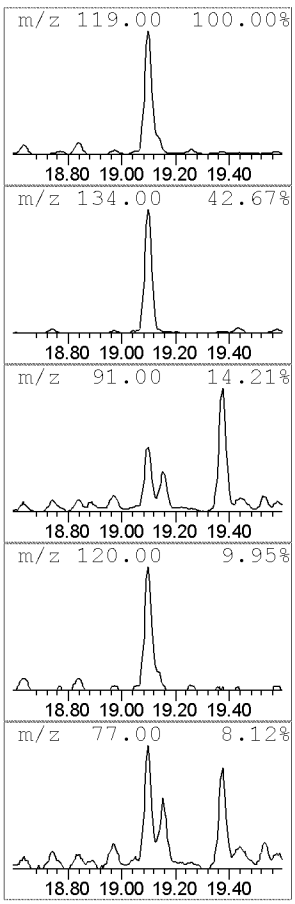
Peak Number 5 Benzene, 1-methyl-2-(1-meth... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.10	11.42 ug/L	359591	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-methyl-2-(1-methyleth...	134	C10H14	000527-84-4	94
2	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	94
3	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	94
4	Benzene, 4-ethyl-1,2-dimethyl-	134	C10H14	000934-80-5	94
5	Benzene, 1-ethyl-2,3-dimethyl-	134	C10H14	000933-98-2	94





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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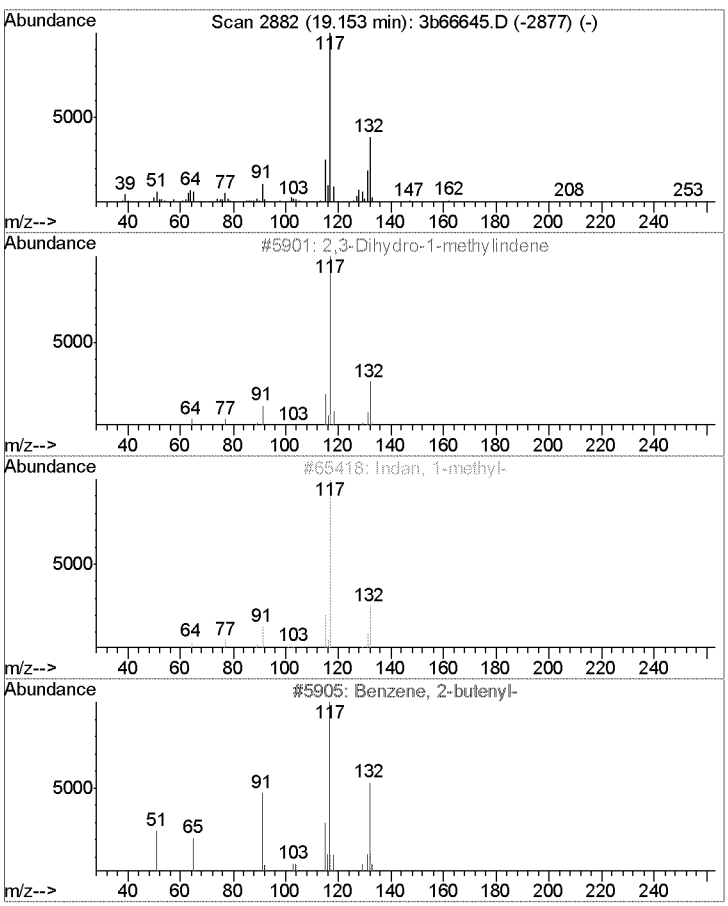
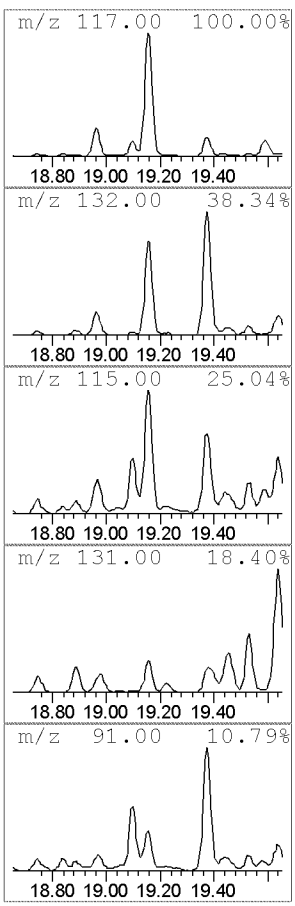
Peak Number 6 2,3-Dihydro-1-methylindene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.15	10.43 ug/L	328587	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-1-methylindene	132	C10H12	027133-93-3	91
2	Indan, 1-methyl-	132	C10H12	000767-58-8	90
3	Benzene, 2-butenyl-	132	C10H12	001560-06-1	86
4	1H-Indene, 2,3-dihydro-4-methyl-	132	C10H12	000824-22-6	86
5	Benzene, (1-methyl-1-propenyl)-,...	132	C10H12	000768-00-3	81





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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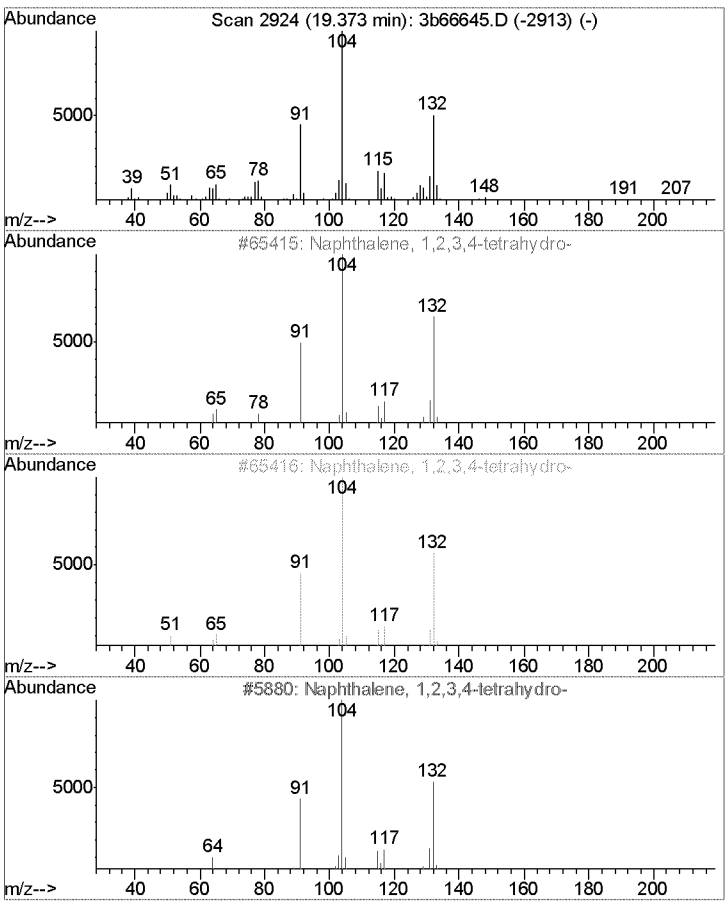
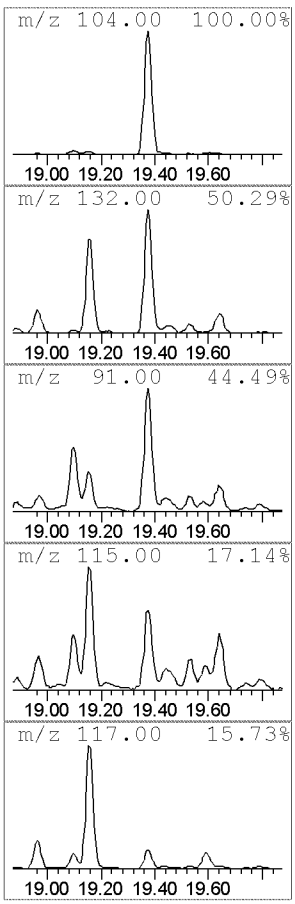
Peak Number 7 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.37	12.61 ug/L	397193	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
3	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	95
4	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	94
5	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	93





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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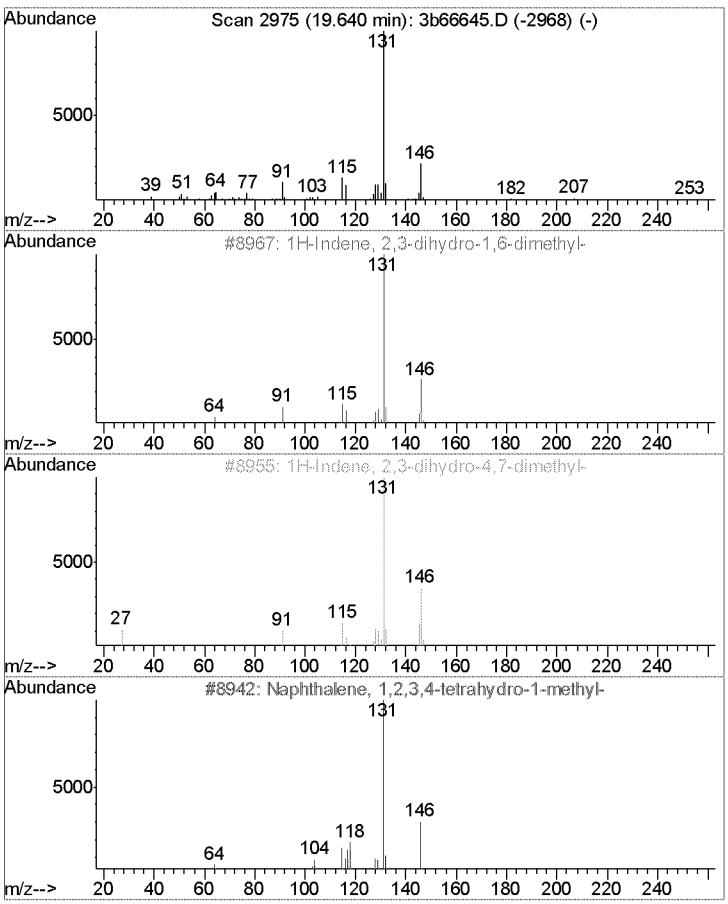
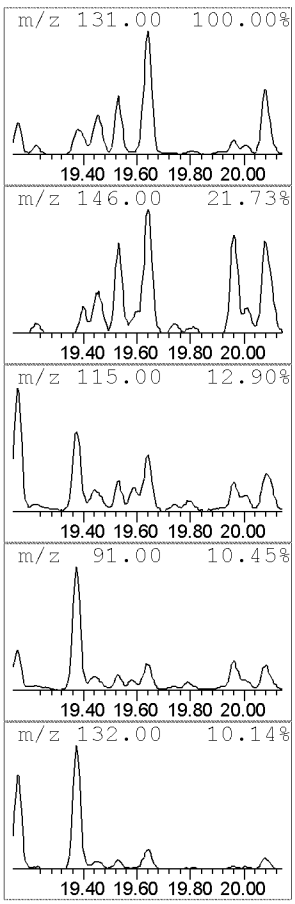
Peak Number 8 1H-Indene, 2,3-dihydro-1,6-... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.64	6.47 ug/L	203727	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-1,6-dimet...	146	C11H14	017059-48-2	91
2	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	87
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	87
4	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	86
5	1H-Indene, 2,3-dihydro-1,1-dimet...	146	C11H14	004912-92-9	83





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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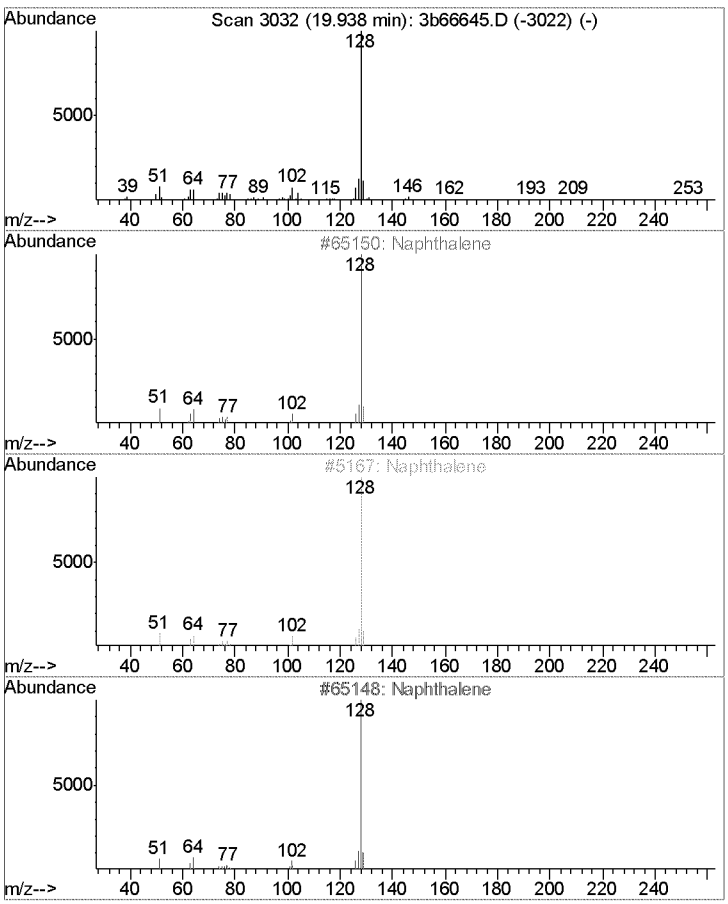
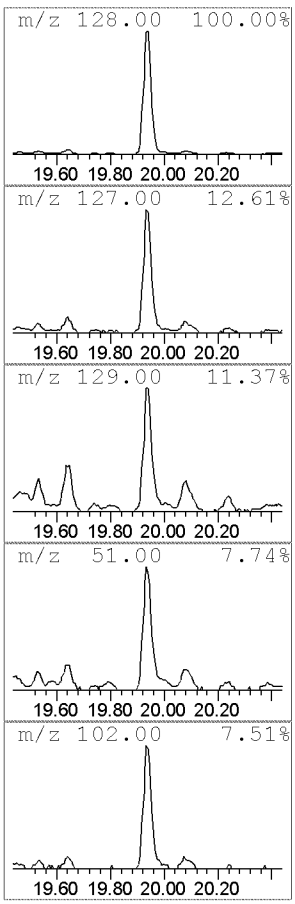
Peak Number 9 Naphthalene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.94	16.31 ug/L	513686	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	94
2	Naphthalene	128	C10H8	000091-20-3	94
3	Naphthalene	128	C10H8	000091-20-3	94
4	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	90
5	Azulene	128	C10H8	000275-51-4	90





Library Search Compound Report

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Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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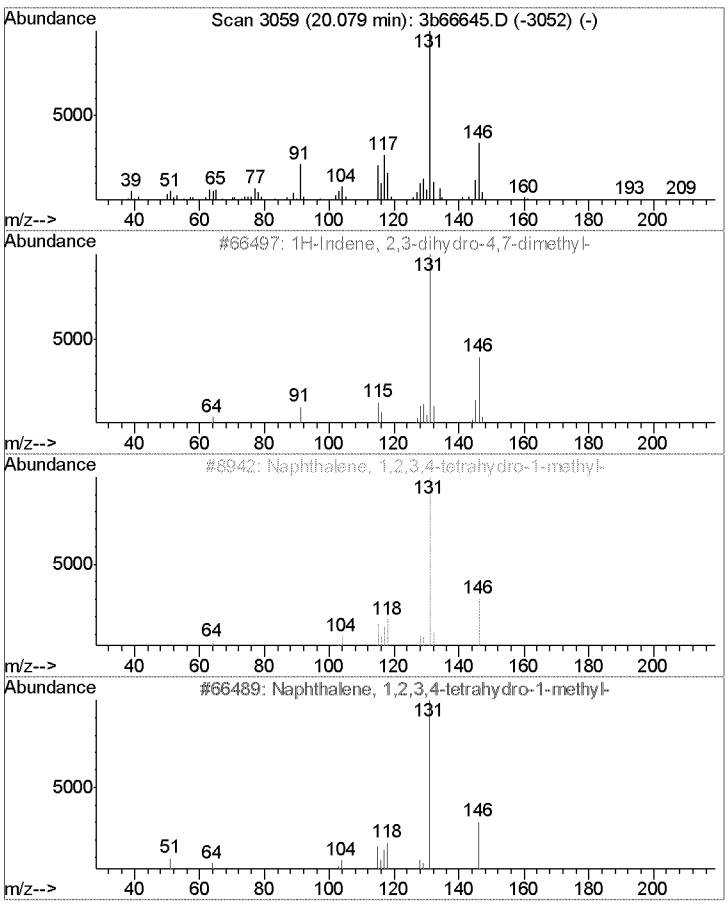
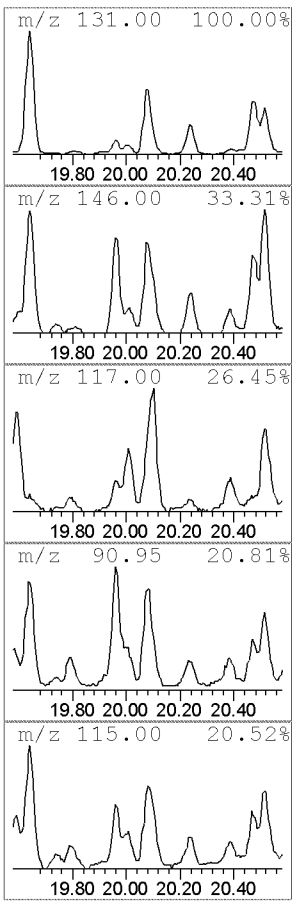
Peak Number 10 1H-Indene, 2,3-dihydro-4,7-... Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.08	6.05 ug/L	190396	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4,7-dimet...	146	C11H14	006682-71-9	94
2	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	93
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001559-81-5	91
4	1H-Indene, 2,3-dihydro-1,2-dimet...	146	C11H14	017057-82-8	91
5	Benzene, (2-methyl-1-butenyl)-	146	C11H14	056253-64-6	87





Library Search Compound Report

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Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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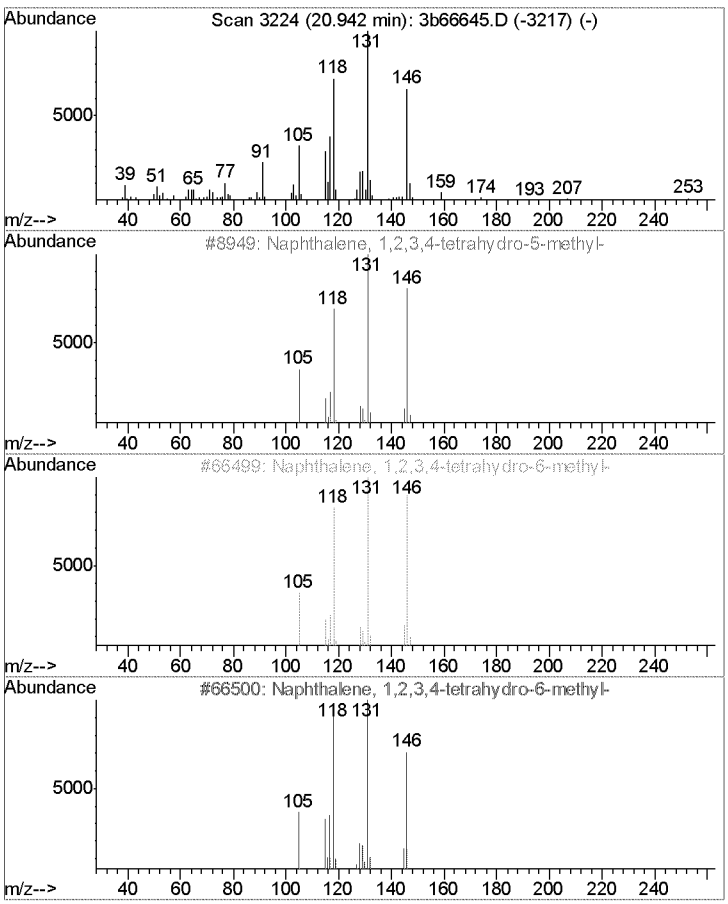
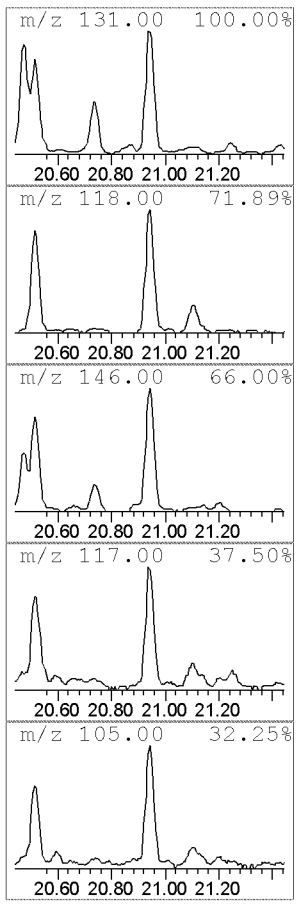
Peak Number 11 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.94	6.59 ug/L	207464	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	002809-64-5	94
2	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	94
3	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	91
4	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	002809-64-5	87
5	Naphthalene, 1,2,3,4-tetrahydro-...	146	C11H14	001680-51-9	87





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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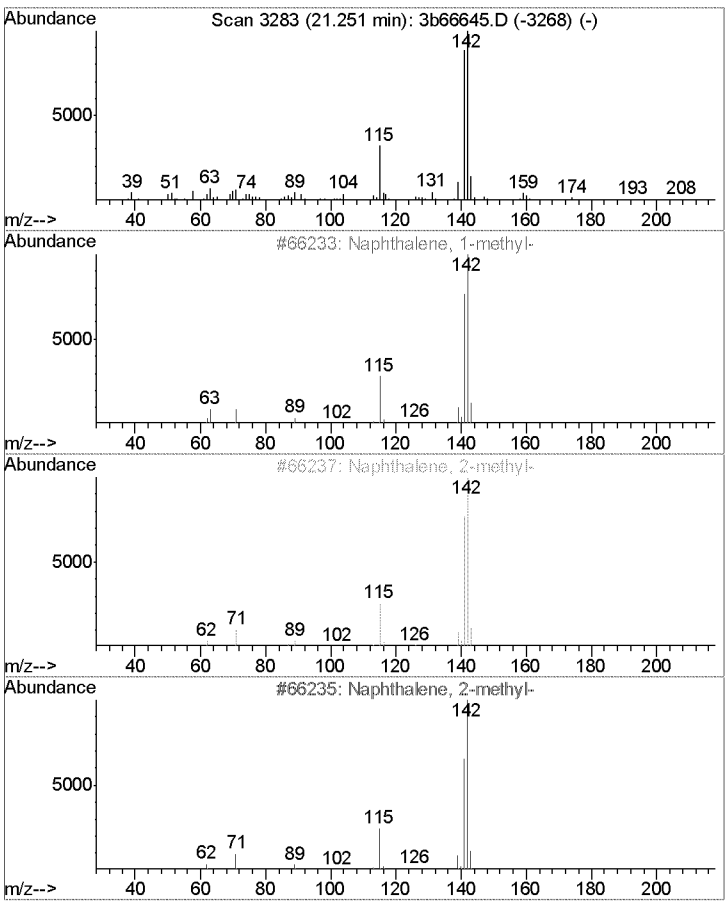
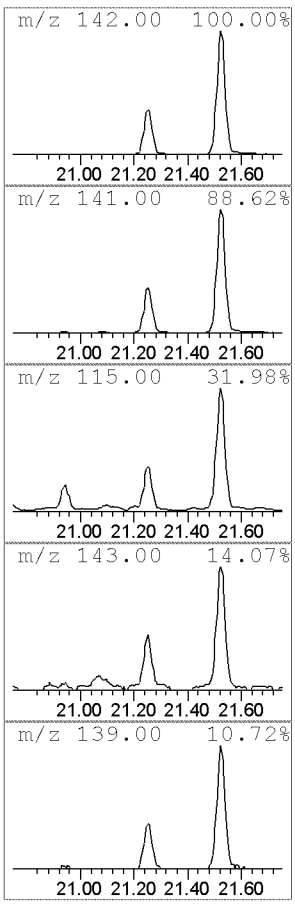
Peak Number 12 Naphthalene, 1-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.25	7.65 ug/L	241042	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	93
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	93
3	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	90
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	90
5	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	90





Library Search Compound Report

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Acq On : 28 Jan 2011 4:57 pm
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Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

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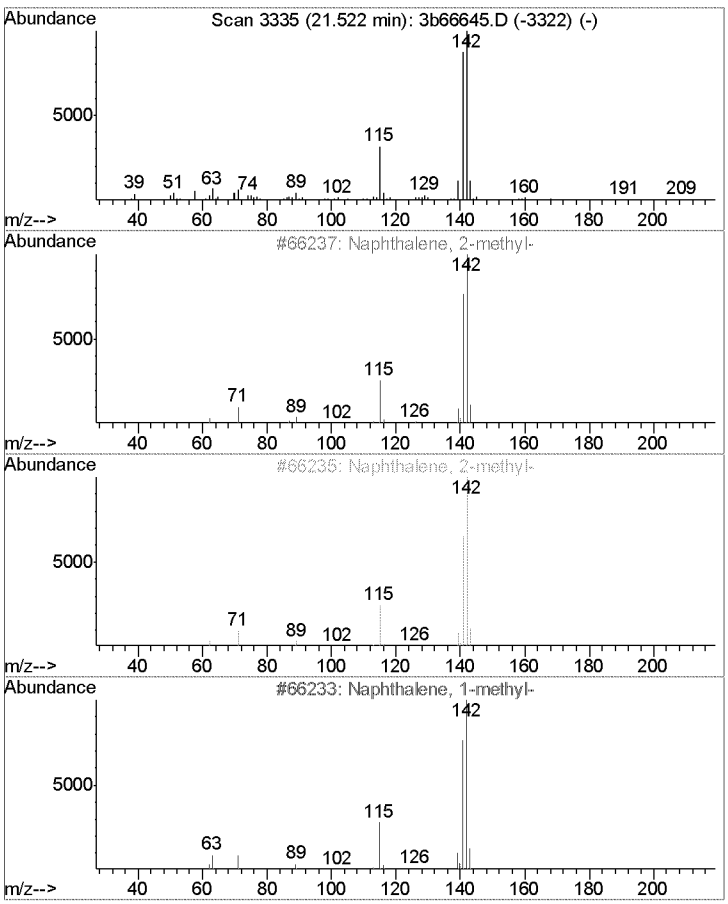
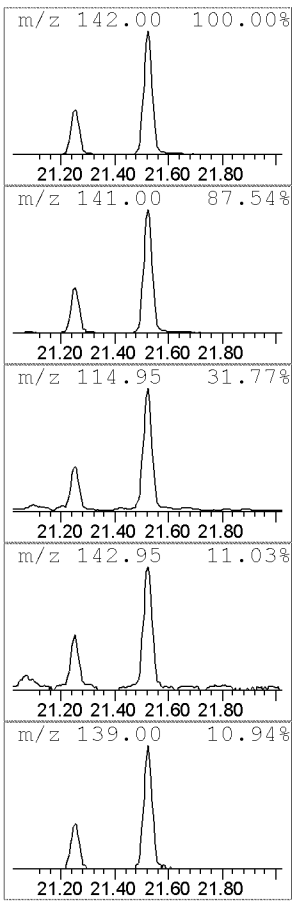
Peak Number 13 Naphthalene, 2-methyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.52	18.48 ug/L	582099	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
5	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66645.D
Acq On : 28 Jan 2011 4:57 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Indane	17.72	7.5	ug/L	236805	5	17.43	1574560	50.0
Benzene, 1-methyl...	18.10	7.6	ug/L	239177	5	17.43	1574560	50.0
Benzene, (2-methy...	18.31	6.2	ug/L	196179	5	17.43	1574560	50.0
Benzene, 1,2,4,5-...	18.54	5.4	ug/L	170492	5	17.43	1574560	50.0
Benzene, 1-methyl...	19.10	11.4	ug/L	359591	5	17.43	1574560	50.0
2,3-Dihydro-1-met...	19.15	10.4	ug/L	328587	5	17.43	1574560	50.0
Naphthalene, 1,2,...	19.37	12.6	ug/L	397193	5	17.43	1574560	50.0
1H-Indene, 2,3-di...	19.64	6.5	ug/L	203727	5	17.43	1574560	50.0
Naphthalene	19.94	16.3	ug/L	513686	5	17.43	1574560	50.0
1H-Indene, 2,3-di...	20.08	6.0	ug/L	190396	5	17.43	1574560	50.0
Naphthalene, 1,2,...	20.94	6.6	ug/L	207464	5	17.43	1574560	50.0
Naphthalene, 1-me...	21.25	7.7	ug/L	241042	5	17.43	1574560	50.0
Naphthalene, 2-me...	21.52	18.5	ug/L	582099	5	17.43	1574560	50.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 12:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

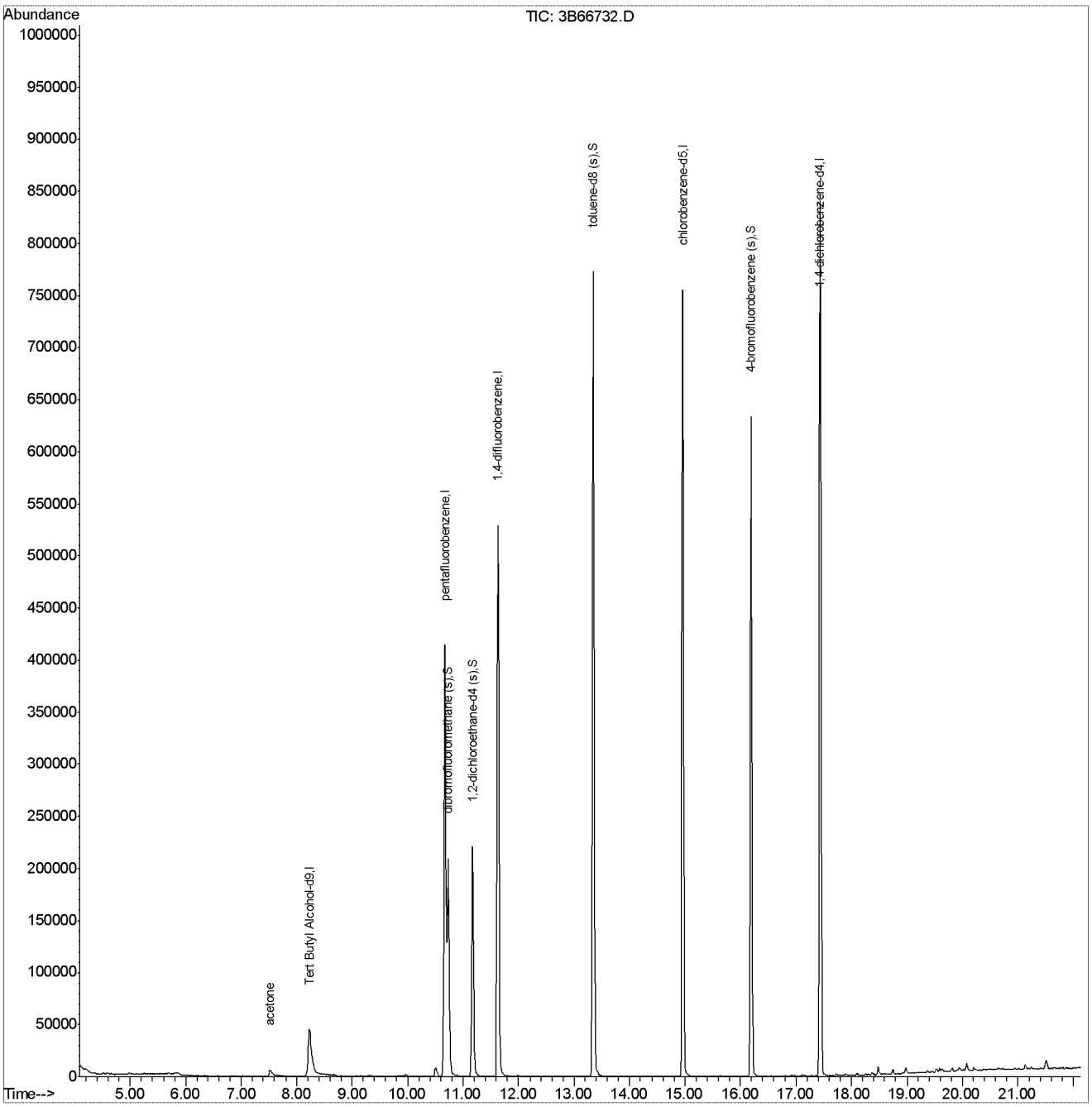
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	142921	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	412037	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	545967	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	520095	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	282519	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	160696	49.31	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.62%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	185136	43.34	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 86.68%			
85) toluene-d8 (s)	13.34	98	631439	51.66	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.32%			
111) 4-bromofluorobenzene (s)	16.19	95	244383	50.02	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.04%			
Target Compounds						Qvalue
29) acetone	7.52	43	16696	3.12	ug/L	98

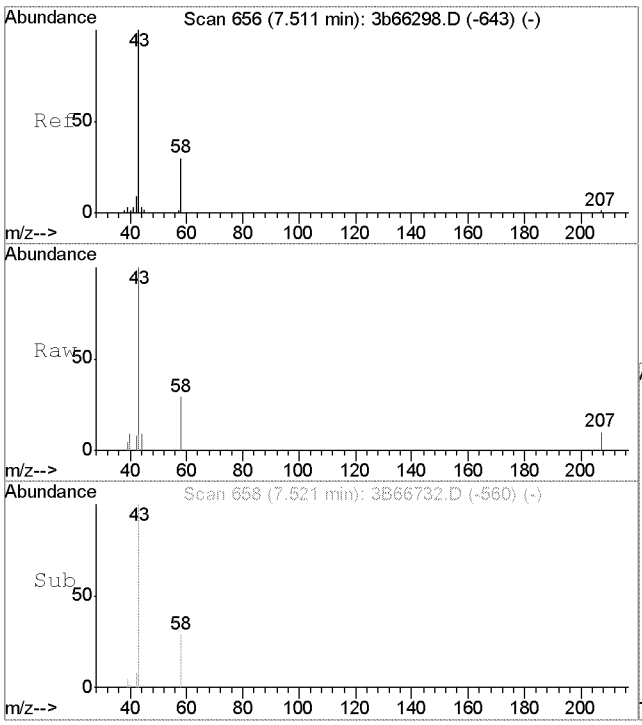
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 01 12:43:29 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

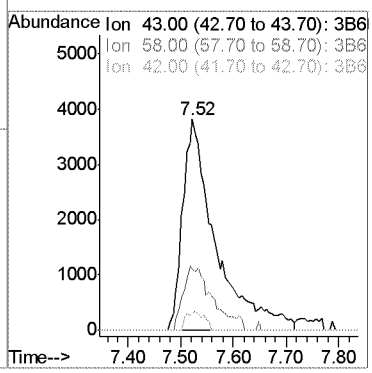




#29
acetone
Concen: 3.12 ug/L
RT: 7.52 min Scan# 658
Delta R.T. 0.01 min
Lab File: 3B66732.D
Acq: 31 Jan 2011 4:24 pm

Tgt Ion: 43 Resp: 16696

Ion	Ratio	Lower	Upper
43	100		
58	29.0	0.2	60.2
42	8.4	0.0	39.0



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.985	78	173	226	rVB7	1279	14830	0.92%	0.153%
2	6.324	427	429	442	rVV2	364	992	0.06%	0.010%
3	6.591	442	480	525	rVB3	418	6336	0.39%	0.065%
4	6.983	540	555	560	rBV3	280	908	0.06%	0.009%
5	7.025	560	563	569	rVV2	432	425	0.03%	0.004%
6	7.072	569	572	581	rVB3	232	455	0.03%	0.005%
7	7.349	622	625	635	rVB3	279	614	0.04%	0.006%
8	7.464	635	647	649	rBV3	239	583	0.04%	0.006%
9	7.521	649	658	681	rBV2	5380	22090	1.37%	0.227%
10	7.762	701	704	707	rVB3	425	429	0.03%	0.004%
11	7.867	718	724	727	rVB3	282	486	0.03%	0.005%
12	7.914	727	733	749	rBV3	294	1219	0.08%	0.013%
13	8.228	778	793	900	rVB2	44394	245192	15.18%	2.524%
14	8.798	900	902	930	rBV3	330	1175	0.07%	0.012%
15	9.315	994	1001	1014	rVB2	604	1847	0.11%	0.019%
16	9.394	1014	1016	1026	rBV2	209	378	0.02%	0.004%
17	9.525	1035	1041	1069	rBV3	320	1350	0.08%	0.014%
18	9.713	1076	1077	1091	rBV3	343	530	0.03%	0.005%
19	9.833	1096	1100	1102	rBV2	410	456	0.03%	0.005%
20	9.964	1118	1125	1134	rVB4	1539	4049	0.25%	0.042%
21	10.084	1146	1148	1154	rVB2	362	303	0.02%	0.003%
22	10.152	1154	1161	1170	rVB3	331	885	0.05%	0.009%
23	10.508	1220	1229	1247	rBV2	7553	20720	1.28%	0.213%
24	10.670	1247	1260	1267	rVV	414248	1065096	65.94%	10.964%
25	10.728	1267	1271	1313	rVB	209448	489604	30.31%	5.040%
26	10.958	1313	1315	1318	rBV2	359	316	0.02%	0.003%
27	11.005	1321	1324	1326	rBV	247	279	0.02%	0.003%
28	11.094	1334	1341	1344	rBV3	331	657	0.04%	0.007%
29	11.167	1344	1355	1392	rBV	220309	523085	32.38%	5.384%
30	11.392	1392	1398	1403	rVB3	291	613	0.04%	0.006%
31	11.538	1421	1426	1431	rVB2	488	519	0.03%	0.005%
32	11.627	1431	1443	1487	rBV	528588	1184354	73.32%	12.191%
33	11.925	1499	1500	1504	rVB2	445	367	0.02%	0.004%
34	11.978	1504	1510	1519	rBV2	1360	2982	0.18%	0.031%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	12.203	1550	1553	1555	rBV2	404	280	0.02%	0.003%
36	12.407	1590	1592	1597	rBV2	307	291	0.02%	0.003%
37	12.443	1597	1599	1604	rVB2	291	316	0.02%	0.003%
38	12.679	1639	1644	1646	rBV2	322	381	0.02%	0.004%
39	12.757	1653	1659	1662	rBV2	385	402	0.02%	0.004%
40	12.919	1684	1690	1691	rVV2	301	317	0.02%	0.003%
41	13.024	1707	1710	1713	rVB2	341	355	0.02%	0.004%
42	13.118	1725	1728	1731	rVV2	287	310	0.02%	0.003%
43	13.154	1731	1735	1739	rVV2	391	611	0.04%	0.006%
44	13.343	1759	1771	1810	rVV	772973	1613222	99.87%	16.606%
45	13.557	1810	1812	1821	rVV4	684	1652	0.10%	0.017%
46	13.620	1821	1824	1828	rVV2	400	524	0.03%	0.005%
47	13.693	1833	1838	1840	rVV2	210	346	0.02%	0.004%
48	13.730	1843	1845	1852	rVB3	243	410	0.03%	0.004%
49	13.881	1866	1874	1878	rVB4	361	982	0.06%	0.010%
50	13.939	1878	1885	1889	rBV2	257	581	0.04%	0.006%
51	14.007	1896	1898	1903	rVB3	283	393	0.02%	0.004%
52	14.101	1912	1916	1920	rBV2	259	423	0.03%	0.004%
53	14.164	1927	1928	1941	rVB3	401	1250	0.08%	0.013%
54	14.269	1944	1948	1958	rVB2	290	816	0.05%	0.008%
55	14.336	1958	1961	1966	rBV2	254	429	0.03%	0.004%
56	14.488	1987	1990	1996	rVB3	320	577	0.04%	0.006%
57	14.540	1996	2000	2001	rBV2	269	333	0.02%	0.003%
58	14.582	2005	2008	2011	rVB2	287	329	0.02%	0.003%
59	14.645	2011	2020	2022	rVB2	370	772	0.05%	0.008%
60	14.676	2022	2026	2028	rBV3	311	394	0.02%	0.004%
61	14.734	2033	2037	2041	rVB2	252	350	0.02%	0.004%
62	14.781	2041	2046	2054	rVB3	306	792	0.05%	0.008%
63	14.860	2054	2061	2067	rBV3	305	901	0.06%	0.009%
64	14.959	2069	2080	2106	rBV	755036	1488365	92.14%	15.320%
65	15.267	2136	2139	2144	rBV3	301	335	0.02%	0.003%
66	15.398	2159	2164	2168	rVB3	207	374	0.02%	0.004%
67	15.435	2168	2171	2175	rBV3	387	402	0.02%	0.004%
68	15.634	2206	2209	2222	rBV4	504	699	0.04%	0.007%
69	15.906	2254	2261	2264	rBV3	239	373	0.02%	0.004%
70	15.958	2269	2271	2278	rVV3	425	640	0.04%	0.007%
71	16.021	2278	2283	2303	rVV3	234	867	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	16.188	2305	2315	2344	rVB	633563	1187585	73.52%	12.224%
73	16.402	2352	2356	2362	rVB3	403	378	0.02%	0.004%
74	16.554	2380	2385	2394	rVB3	499	731	0.05%	0.008%
75	16.633	2398	2400	2407	rVV3	211	280	0.02%	0.003%
76	16.674	2407	2408	2431	rVB3	328	1178	0.07%	0.012%
77	16.810	2431	2434	2436	rBV3	430	297	0.02%	0.003%
78	16.931	2450	2457	2463	rBV5	906	2055	0.13%	0.021%
79	16.983	2463	2467	2475	rVB4	676	1361	0.08%	0.014%
80	17.156	2486	2500	2519	rVB4	1031	3834	0.24%	0.039%
81	17.276	2519	2523	2535	rBV4	568	1244	0.08%	0.013%
82	17.433	2543	2553	2582	rBV	840092	1615342	100.00%	16.627%
83	17.731	2604	2610	2619	rVB4	1464	2478	0.15%	0.026%
84	17.841	2628	2631	2635	rBV2	502	492	0.03%	0.005%
85	17.893	2637	2641	2653	rVB5	1059	1907	0.12%	0.020%
86	18.055	2653	2672	2674	rBV4	356	1300	0.08%	0.013%
87	18.097	2676	2680	2704	rVB6	1715	4560	0.28%	0.047%
88	18.301	2708	2719	2728	rVB7	744	2002	0.12%	0.021%
89	18.369	2728	2732	2747	rBV7	2056	5198	0.32%	0.054%
90	18.484	2747	2754	2774	rBV	7982	17404	1.08%	0.179%
91	18.599	2774	2776	2798	rVB6	922	3105	0.19%	0.032%
92	18.740	2798	2803	2827	rBV4	4476	11397	0.71%	0.117%
93	18.923	2836	2838	2843	rBV3	431	478	0.03%	0.005%
94	18.981	2843	2849	2867	rVV4	5271	11279	0.70%	0.116%
95	19.541	2950	2956	2960	rBV2	2458	3972	0.25%	0.041%
96	19.588	2960	2965	3002	rVV4	3405	11584	0.72%	0.119%
97	19.954	3002	3035	3053	rVV4	3228	14542	0.90%	0.150%
98	20.079	3053	3059	3079	rVB3	7187	13358	0.83%	0.138%
99	20.210	3079	3084	3257	rBV3	2814	59199	3.66%	0.609%
100	21.502	3325	3331	3448	rBV3	7505	21431	1.33%	0.221%

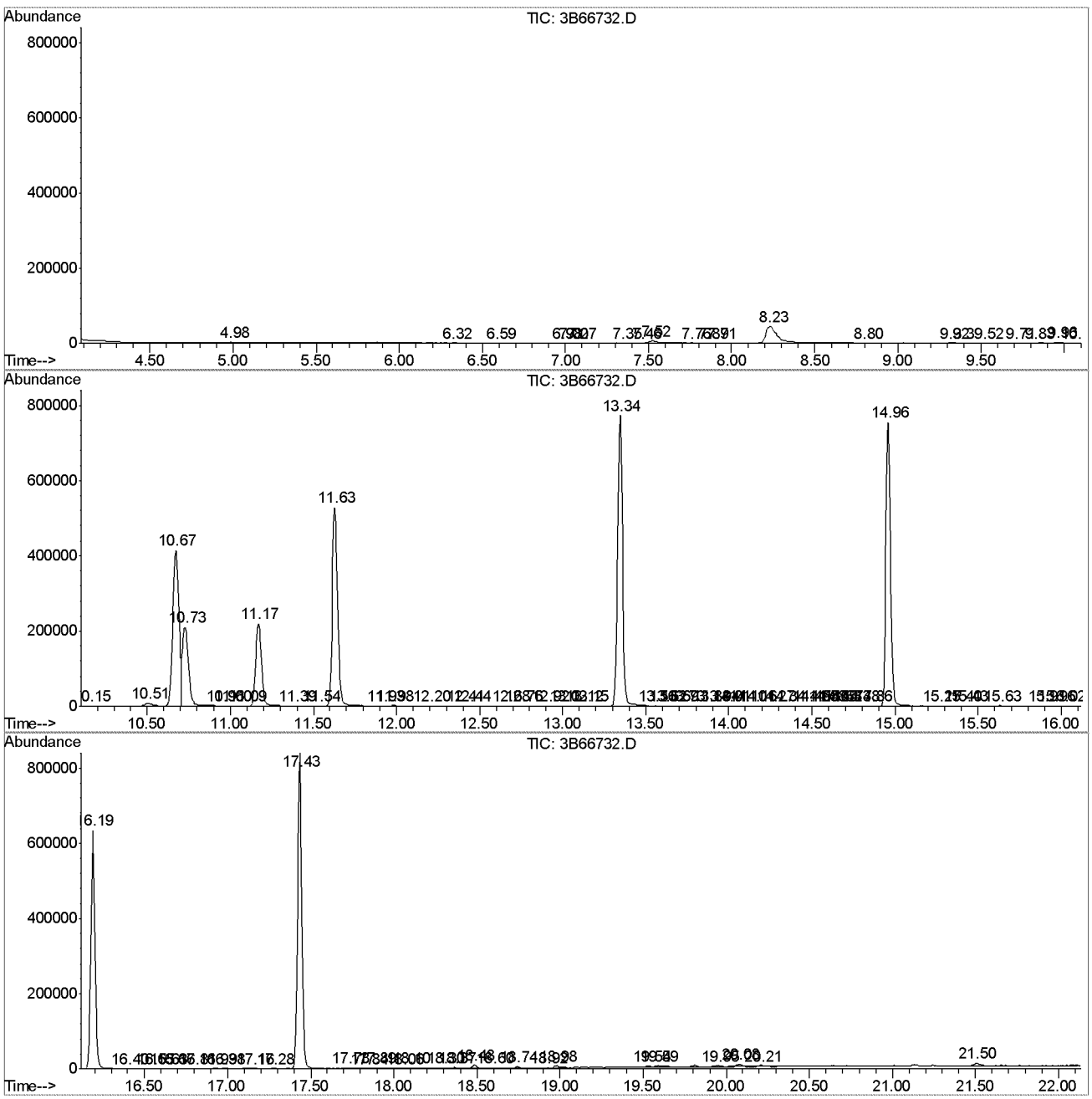
Sum of corrected areas: 9714889

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66732.D
Acq On : 31 Jan 2011 4:24 pm
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3115,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66594.D
Acq On : 27 Jan 2011 2:38 am
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 28 09:15:15 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Fri Jan 28 08:45:50 2011
Response via : Initial Calibration

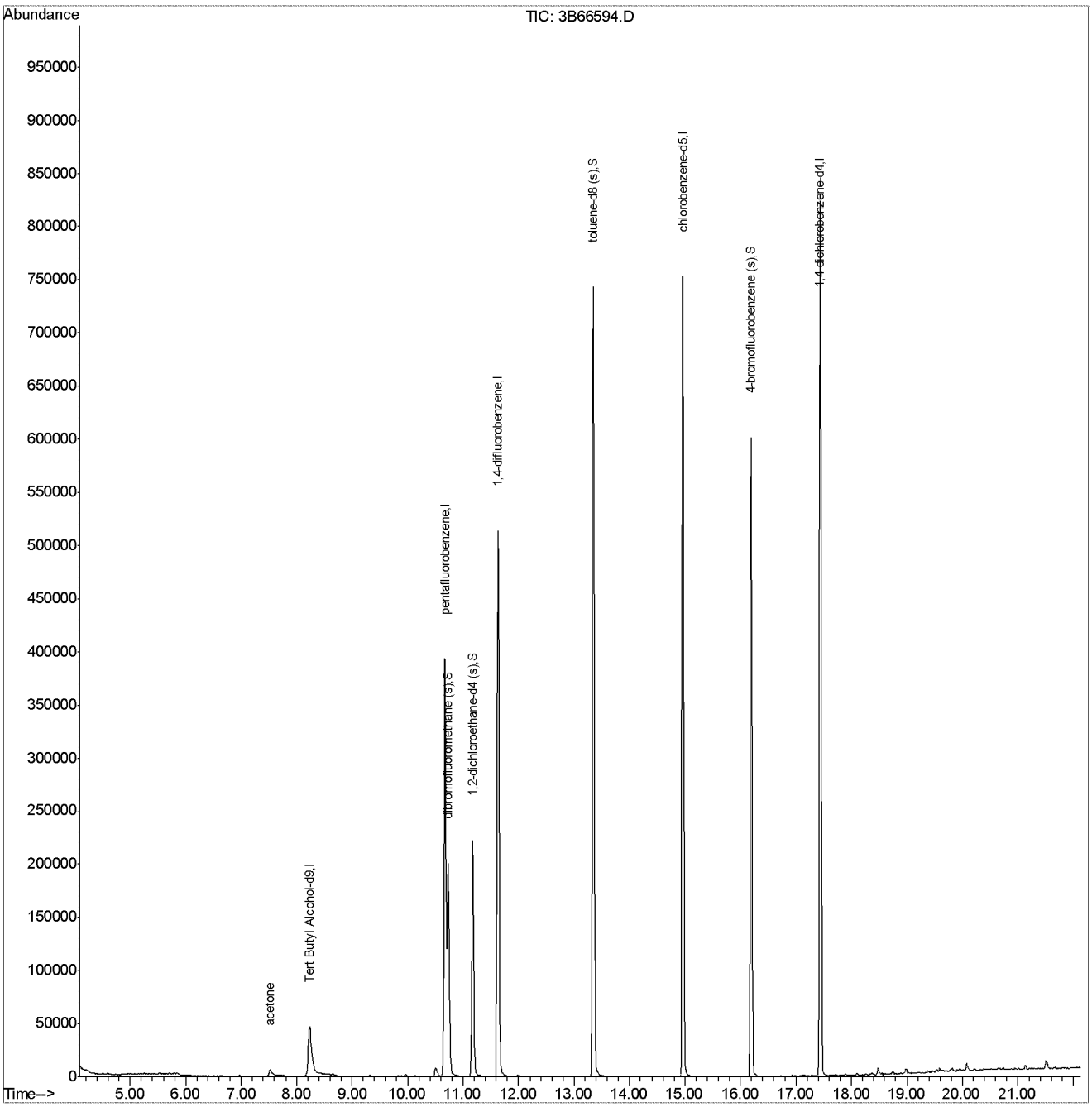
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	148631	500.00	ug/L	-0.01
5) pentafluorobenzene	10.68	168	372820	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	509196	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	487645	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	260879	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	151580	51.41	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.82%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	193889	50.16	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.32%			
85) toluene-d8 (s)	13.34	98	596673	52.34	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.68%			
111) 4-bromofluorobenzene (s)	16.19	95	235279	52.15	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.30%			
Target Compounds						Qvalue
29) acetone	7.52	43	16160	3.88	ug/L	99

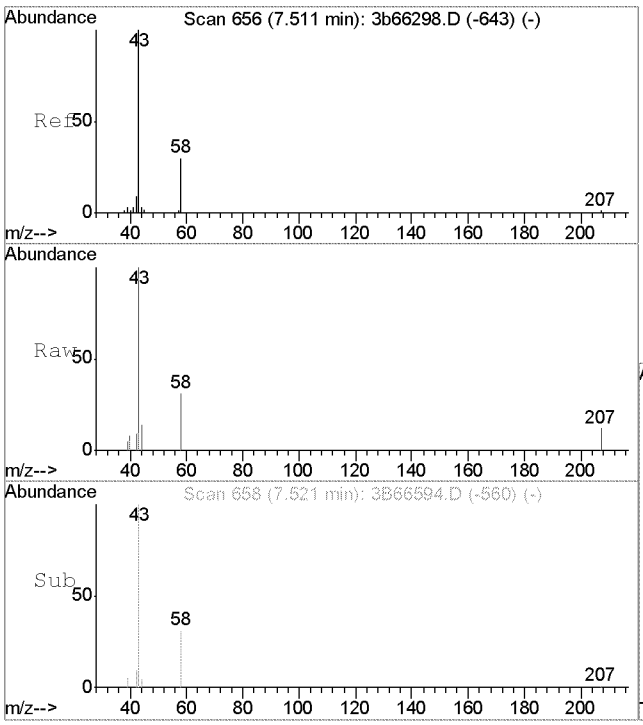
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66594.D
Acq On : 27 Jan 2011 2:38 am
Operator : tarar1
Sample : ja66701-2
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Jan 28 09:15:15 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Fri Jan 28 08:45:50 2011
Response via : Initial Calibration

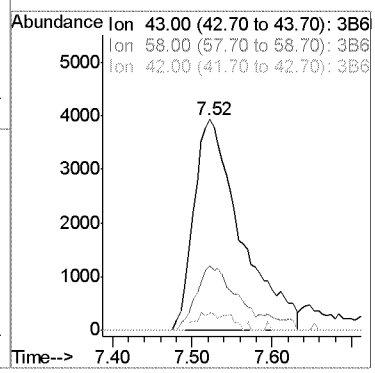




#29
acetone
Concen: 3.88 ug/L
RT: 7.52 min Scan# 658
Delta R.T. 0.01 min
Lab File: 3B66594.D
Acq: 27 Jan 2011 2:38 am

Tgt Ion: 43 Resp: 16160

Ion	Ratio	Lower	Upper
43	100		
58	30.9	0.2	60.2
42	8.5	0.0	39.0



6.1.3
6

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 28 08:27:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	146338	500.00	ug/L	-0.01
5) pentafluorobenzene	10.68	168	391374	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	529061	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	507250	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	270459	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	161249	52.10	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.20%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	201100	49.56	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.12%			
85) toluene-d8 (s)	13.34	98	614511	51.88	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.76%			
111) 4-bromofluorobenzene (s)	16.19	95	241225	51.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.16%			

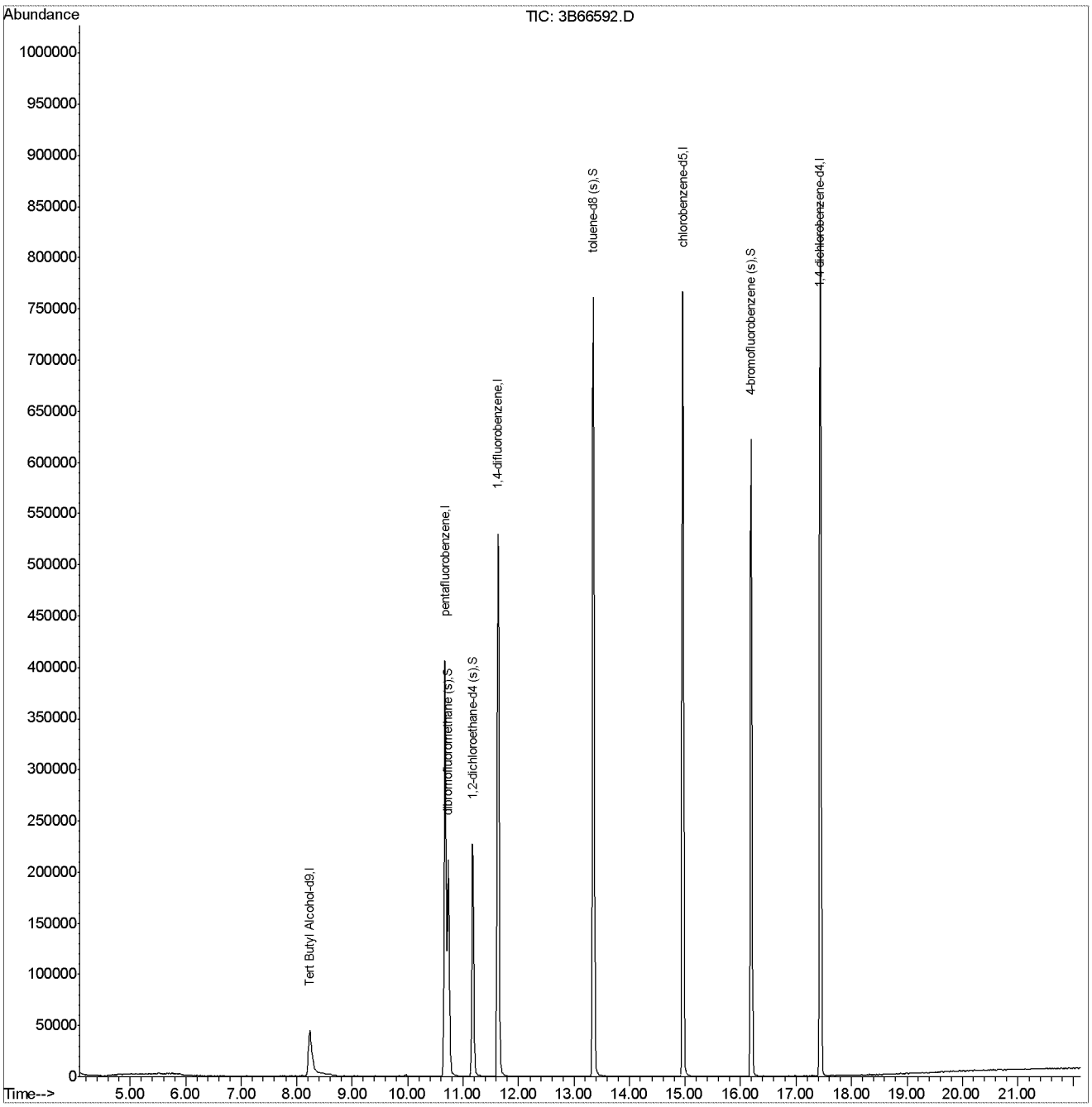
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jan 28 08:27:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.655	93	110	113	rBV4	1001	3863	0.24%	0.037%
2	4.687	113	116	125	rBV3	696	1897	0.12%	0.018%
3	5.173	192	209	241	rBV6	879	4687	0.29%	0.045%
4	5.414	252	255	263	rBV5	753	1509	0.09%	0.015%
5	6.470	448	457	474	rBV3	269	1024	0.06%	0.010%
6	6.569	474	476	497	rVV3	237	642	0.04%	0.006%
7	6.690	497	499	511	rVB3	251	296	0.02%	0.003%
8	6.773	511	515	518	rVB3	270	374	0.02%	0.004%
9	6.800	518	520	524	rBV2	193	286	0.02%	0.003%
10	6.857	530	531	540	rBV2	278	475	0.03%	0.005%
11	7.134	582	584	601	rVB3	315	1090	0.07%	0.011%
12	7.229	601	602	608	rBV3	269	448	0.03%	0.004%
13	7.621	675	677	680	rBV2	287	270	0.02%	0.003%
14	7.647	680	682	691	rVV3	232	370	0.02%	0.004%
15	7.704	691	693	700	rVB2	280	385	0.02%	0.004%
16	7.908	730	732	742	rVB3	304	439	0.03%	0.004%
17	7.976	742	745	757	rVB3	301	418	0.03%	0.004%
18	8.050	757	759	767	rBV2	285	341	0.02%	0.003%
19	8.233	779	794	914	rVV	44796	260565	16.17%	2.527%
20	8.871	914	916	929	rVV3	302	735	0.05%	0.007%
21	8.949	929	931	938	rVV3	305	445	0.03%	0.004%
22	9.033	938	947	960	rVV3	387	1375	0.09%	0.013%
23	9.111	960	962	974	rVV3	314	804	0.05%	0.008%
24	9.232	978	985	989	rVB3	281	493	0.03%	0.005%
25	9.404	993	1018	1086	rVV3	383	4607	0.29%	0.045%
26	9.765	1086	1087	1102	rVV3	330	854	0.05%	0.008%
27	9.849	1102	1103	1109	rVB2	393	595	0.04%	0.006%
28	9.974	1119	1127	1138	rVB3	1332	3410	0.21%	0.033%
29	10.288	1184	1187	1194	rVB3	257	423	0.03%	0.004%
30	10.388	1194	1206	1220	rVV3	270	1102	0.07%	0.011%
31	10.513	1220	1230	1238	rVB3	253	603	0.04%	0.006%
32	10.670	1248	1260	1267	rBV	405742	1027394	63.75%	9.963%
33	10.733	1267	1272	1313	rVV	211535	516459	32.05%	5.008%
34	10.979	1313	1319	1323	rVB	297	508	0.03%	0.005%

M3B3095.M Fri Jan 28 09:38:03 2011 MS3B

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.172	1342	1356	1392	rVV	227004	554056	34.38%	5.373%
36	11.371	1392	1394	1400	rVB3	442	419	0.03%	0.004%
37	11.465	1407	1412	1416	rBV	280	345	0.02%	0.003%
38	11.627	1429	1443	1484	rBV	530161	1197056	74.28%	11.608%
39	11.852	1484	1486	1490	rVV2	554	656	0.04%	0.006%
40	11.889	1490	1493	1496	rVV2	351	466	0.03%	0.005%
41	12.333	1577	1578	1585	rVV2	250	342	0.02%	0.003%
42	12.412	1592	1593	1597	rBV2	326	283	0.02%	0.003%
43	12.490	1604	1608	1611	rBV2	309	381	0.02%	0.004%
44	12.548	1616	1619	1624	rVB2	387	349	0.02%	0.003%
45	12.909	1685	1688	1690	rVB2	327	322	0.02%	0.003%
46	12.961	1693	1698	1703	rVB3	331	582	0.04%	0.006%
47	13.055	1713	1716	1725	rVB3	326	687	0.04%	0.007%
48	13.139	1729	1732	1738	rVB3	381	601	0.04%	0.006%
49	13.175	1738	1739	1746	rBV2	334	453	0.03%	0.004%
50	13.343	1755	1771	1826	rBV	761182	1611543	100.00%	15.627%
51	13.646	1826	1829	1835	rVV3	348	549	0.03%	0.005%
52	13.683	1835	1836	1846	rVV3	288	538	0.03%	0.005%
53	13.798	1846	1858	1859	rVB3	250	617	0.04%	0.006%
54	13.840	1863	1866	1868	rBV3	383	407	0.03%	0.004%
55	13.944	1871	1886	1888	rVB3	210	712	0.04%	0.007%
56	14.012	1888	1899	1900	rVB3	310	817	0.05%	0.008%
57	14.033	1900	1903	1905	rBV2	256	277	0.02%	0.003%
58	14.070	1905	1910	1913	rVB3	272	506	0.03%	0.005%
59	14.106	1913	1917	1923	rBV	267	588	0.04%	0.006%
60	14.153	1923	1926	1928	rVB2	307	319	0.02%	0.003%
61	14.174	1928	1930	1933	rBV2	320	365	0.02%	0.004%
62	14.200	1933	1935	1938	rBV2	223	269	0.02%	0.003%
63	14.242	1938	1943	1946	rVB3	335	499	0.03%	0.005%
64	14.347	1957	1963	1965	rBV	333	411	0.03%	0.004%
65	14.399	1970	1973	1980	rVB3	219	295	0.02%	0.003%
66	14.478	1985	1988	1996	rVB2	387	770	0.05%	0.007%
67	14.556	1996	2003	2006	rBV3	420	872	0.05%	0.008%
68	14.598	2006	2011	2013	rBV3	252	371	0.02%	0.004%
69	14.624	2013	2016	2023	rVB	366	549	0.03%	0.005%
70	14.697	2023	2030	2034	rBV3	336	723	0.04%	0.007%
71	14.729	2034	2036	2044	rVV2	240	419	0.03%	0.004%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.797	2044	2049	2052	rVV2	237	441	0.03%	0.004%
73	14.959	2068	2080	2115	rVB	766549	1508202	93.59%	14.625%
74	15.147	2115	2116	2122	rBV2	597	940	0.06%	0.009%
75	15.351	2151	2155	2163	rVB2	170	393	0.02%	0.004%
76	15.424	2163	2169	2184	rVB2	361	1530	0.09%	0.015%
77	15.524	2184	2188	2191	rBV2	268	473	0.03%	0.005%
78	15.566	2191	2196	2205	rBV3	215	556	0.03%	0.005%
79	15.628	2205	2208	2211	rBV2	263	265	0.02%	0.003%
80	15.790	2237	2239	2248	rVB2	203	301	0.02%	0.003%
81	15.848	2248	2250	2256	rVB2	321	355	0.02%	0.003%
82	15.953	2256	2270	2275	rVB3	279	1123	0.07%	0.011%
83	16.094	2275	2297	2300	rBV2	426	1620	0.10%	0.016%
84	16.188	2306	2315	2347	rVB	621942	1178156	73.11%	11.424%
85	16.402	2354	2356	2368	rBV2	389	436	0.03%	0.004%
86	16.580	2387	2390	2421	rVB3	271	803	0.05%	0.008%
87	16.868	2442	2445	2465	rBV3	368	1071	0.07%	0.010%
88	16.988	2465	2468	2470	rVB3	482	452	0.03%	0.004%
89	17.077	2470	2485	2489	rVB3	320	1175	0.07%	0.011%
90	17.156	2489	2500	2508	rBV3	357	1496	0.09%	0.015%
91	17.375	2537	2542	2543	rBV	531	506	0.03%	0.005%
92	17.433	2543	2553	2581	rVV	854727	1603575	99.51%	15.550%
93	17.731	2607	2610	2629	rBV4	551	2253	0.14%	0.022%
94	17.835	2629	2630	2640	rVV4	500	1131	0.07%	0.011%
95	17.940	2640	2650	2673	rVV5	627	3638	0.23%	0.035%
96	18.134	2674	2687	2690	rVB4	604	2119	0.13%	0.021%
97	18.306	2718	2720	2725	rVB3	417	442	0.03%	0.004%
98	18.510	2725	2759	2765	rBV4	755	4723	0.29%	0.046%
99	18.662	2775	2788	2795	rBV5	610	2144	0.13%	0.021%
100	22.103	2795	3446	3448	rVV7	6725	773649	48.01%	7.502%

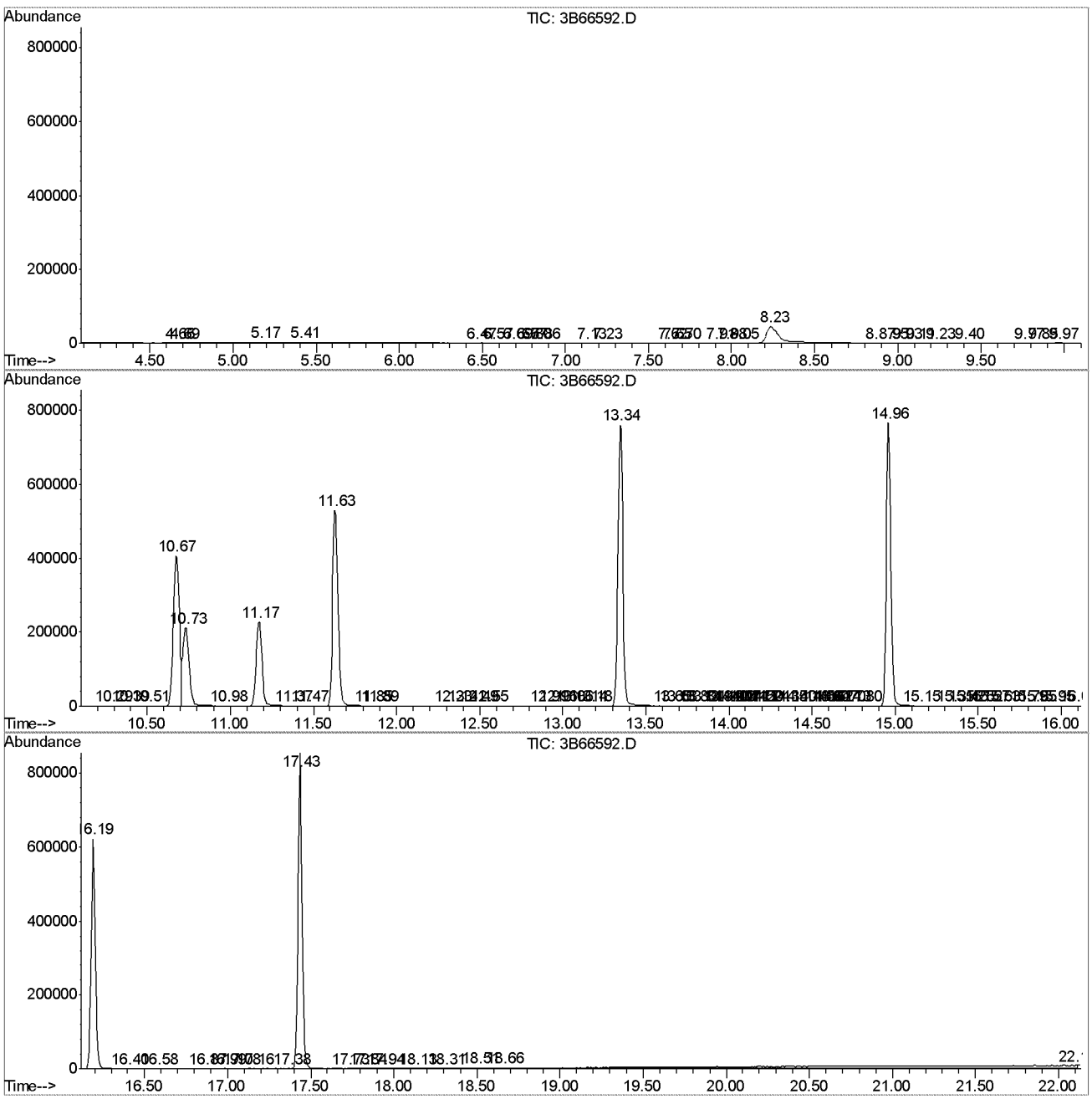
Sum of corrected areas: 10312568

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66592.D
Acq On : 27 Jan 2011 1:34 am
Operator : tarar1
Sample : ja66701-3
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 28 09:16:32 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

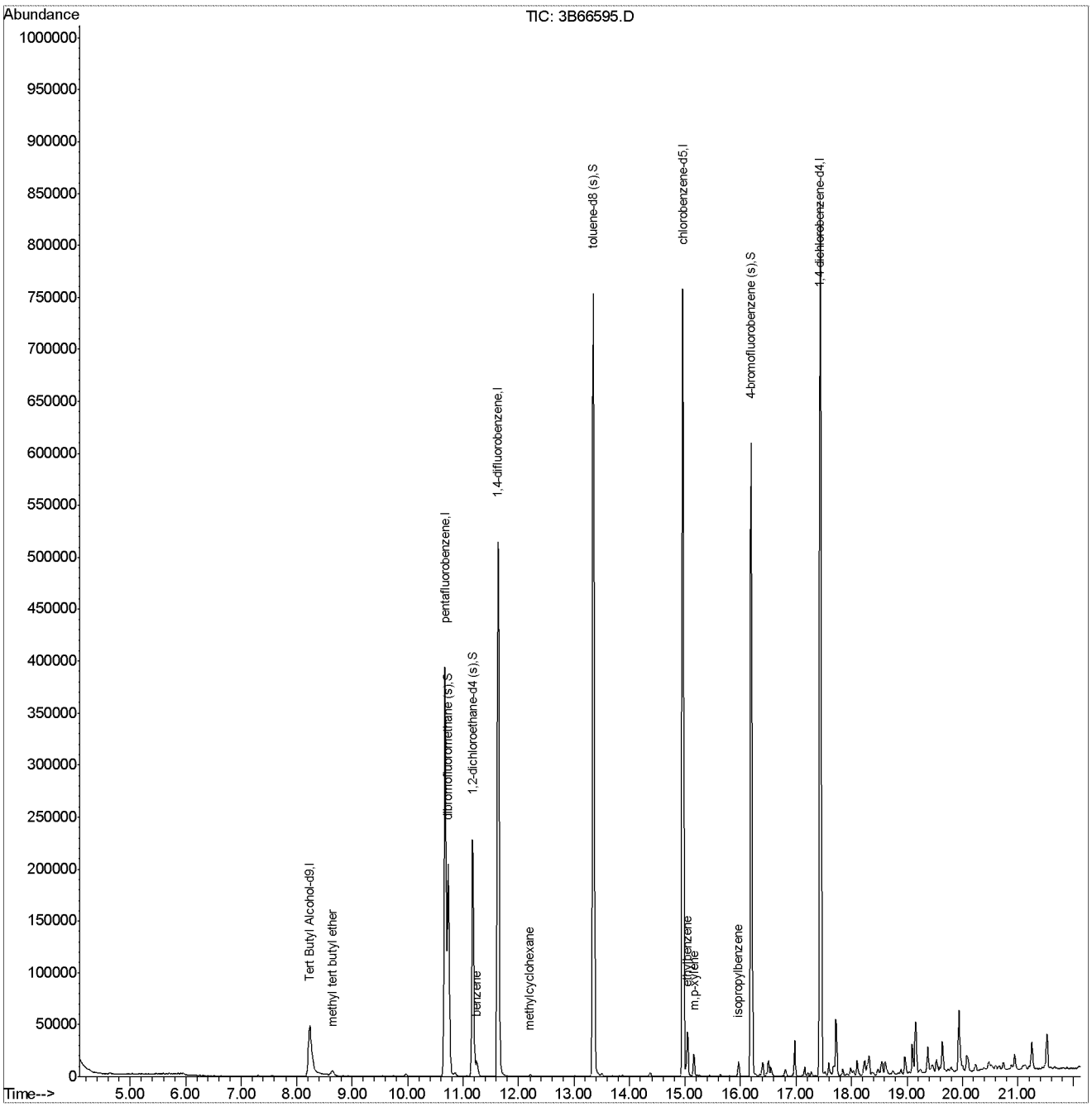
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	145865	500.00	ug/L	0.00
5) pentafluorobenzene	10.68	168	380302	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	512827	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	493434	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	265065	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	155095	51.57	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.14%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	198050	50.23	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.46%			
85) toluene-d8 (s)	13.35	98	604317	52.63	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 105.26%			
111) 4-bromofluorobenzene (s)	16.19	95	237929	51.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.82%			
Target Compounds						Qvalue
37) methyl tert butyl ether	8.64	73	8160	0.77	ug/L	98
70) benzene	11.24	78	14142	1.12	ug/L	98
82) methylcyclohexane	12.21	83	1242	0.26	ug/L	96
103) ethylbenzene	15.04	91	35567	2.39	ug/L	99
104) m,p-xylene	15.16	106	7524	1.33	ug/L	93
110) isopropylbenzene	15.96	105	12536	0.79	ug/L	97

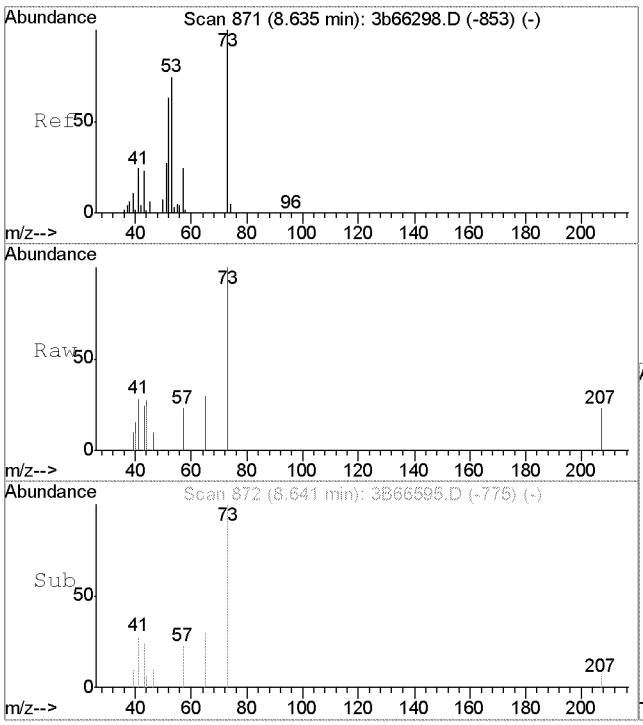
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jan 28 09:16:32 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

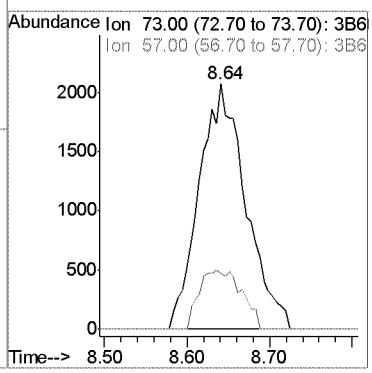


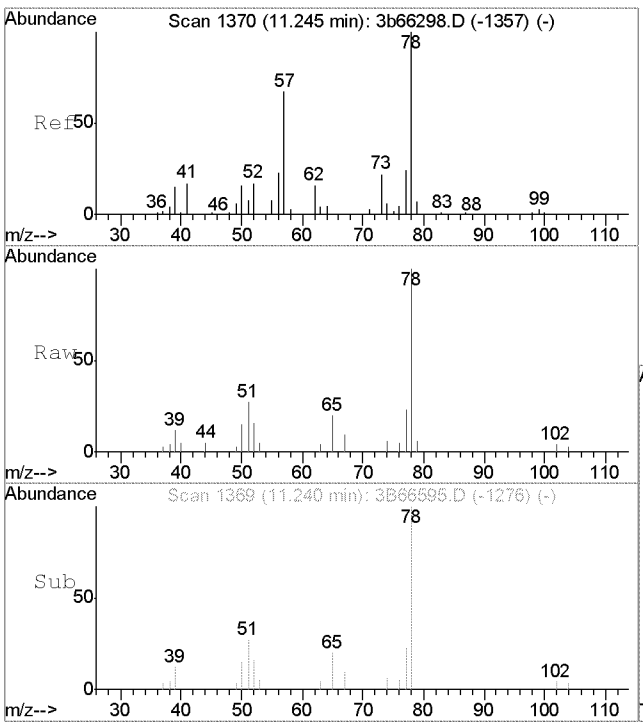


#37
methyl tert butyl ether
Concen: 0.77 ug/L
RT: 8.64 min Scan# 872
Delta R.T. 0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 73 Resp: 8160

Ion	Ratio	Lower	Upper
73	100		
57	22.6	0.0	53.8

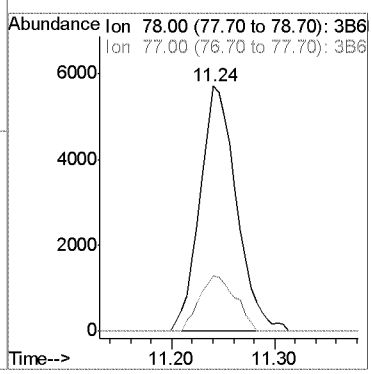


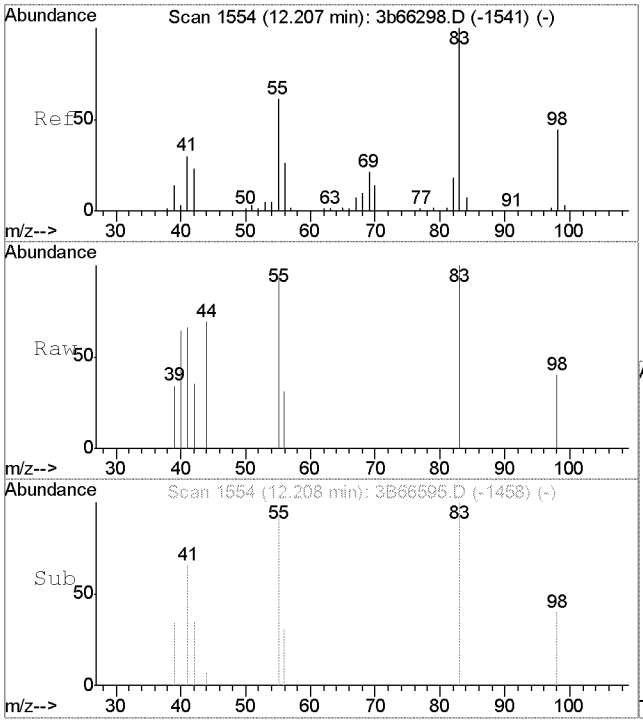


#70
benzene
Concen: 1.12 ug/L
RT: 11.24 min Scan# 1369
Delta R.T. -0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 78 Resp: 14142

Ion	Ratio	Lower	Upper
78	100		
77	22.7	0.0	53.9

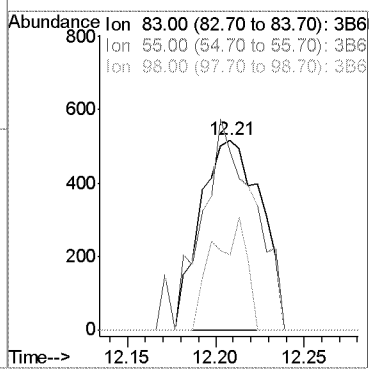


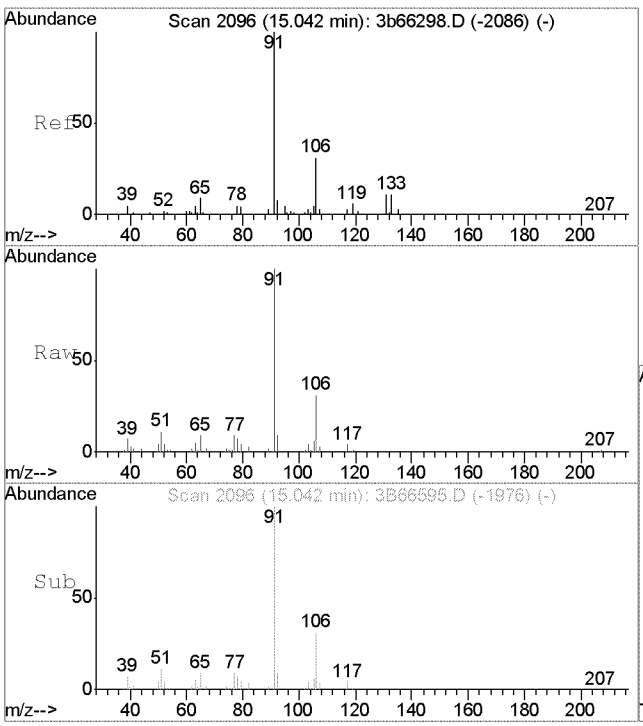


#82
methylcyclohexane
Concen: 0.26 ug/L
RT: 12.21 min Scan# 1554
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 83 Resp: 1242

Ion	Ratio	Lower	Upper
83	100		
55	93.8	61.4	121.4
98	39.8	13.9	73.9

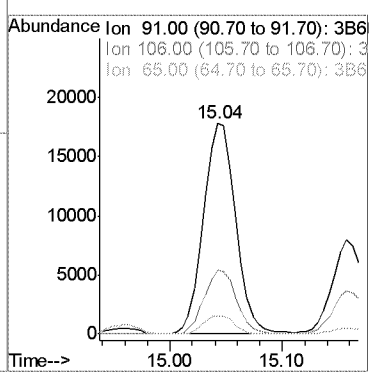


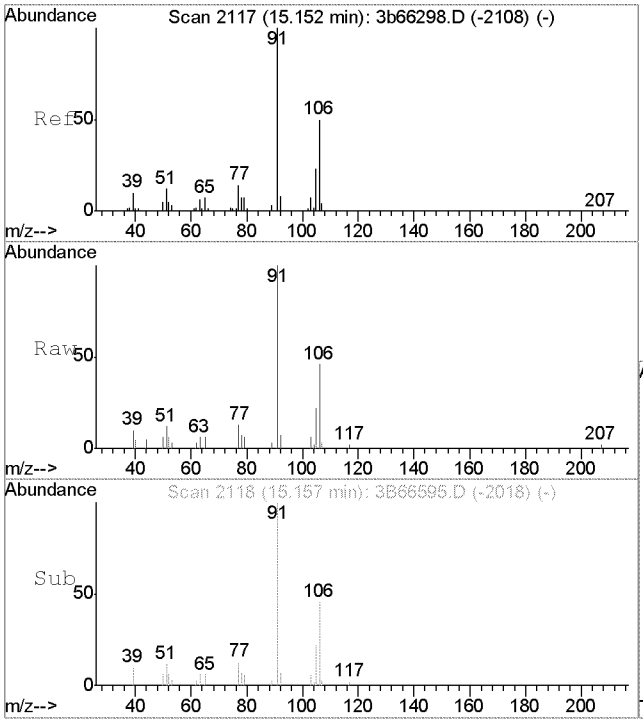


#103
ethylbenzene
Concen: 2.39 ug/L
RT: 15.04 min Scan# 2096
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion: 91 Resp: 35567

Ion	Ratio	Lower	Upper
91	100		
106	30.8	0.9	60.9
65	8.8	0.0	39.4

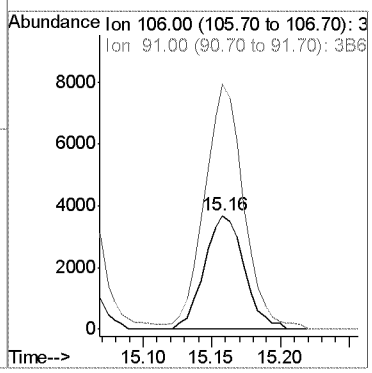


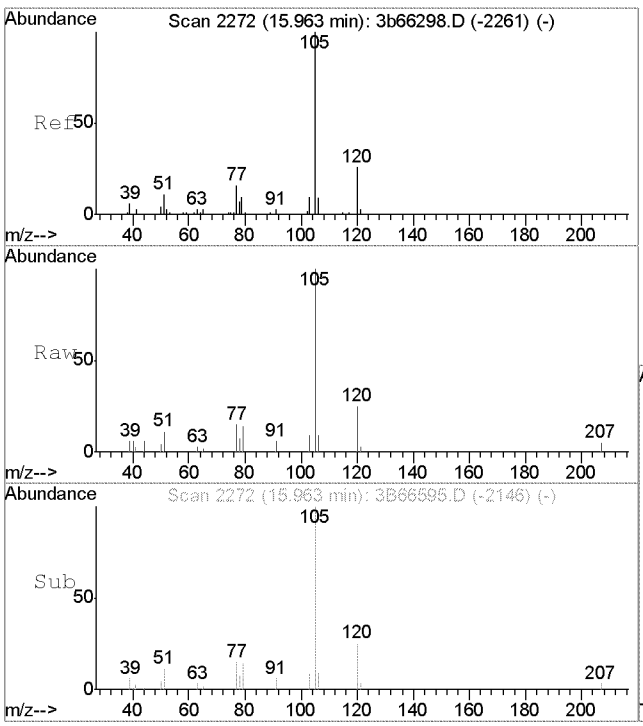


#104
m,p-xylene
Concen: 1.33 ug/L
RT: 15.16 min Scan# 2118
Delta R.T. 0.01 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion:106 Resp: 7524

Ion	Ratio	Lower	Upper
106	100		
91	211.1	171.1	231.1

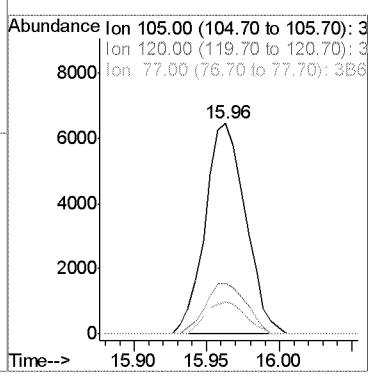




#110
isopropylbenzene
Concen: 0.79 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66595.D
Acq: 27 Jan 2011 3:10 am

Tgt Ion:105 Resp: 12536

Ion	Ratio	Lower	Upper
105	100		
120	24.5	0.0	56.1
77	15.2	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.215	139	217	242	rBV7	1220	19509	1.22%	0.178%
2	7.260	567	608	615	rBV3	320	2726	0.17%	0.025%
3	7.317	615	619	625	rVV2	369	636	0.04%	0.006%
4	7.537	660	661	696	rVB3	408	1591	0.10%	0.015%
5	7.856	719	722	731	rVB2	390	801	0.05%	0.007%
6	7.955	731	741	745	rBV2	390	805	0.05%	0.007%
7	8.233	779	794	861	rBV2	48431	260522	16.25%	2.377%
8	8.651	861	874	896	rVB4	4988	22804	1.42%	0.208%
9	8.777	896	898	909	rBV2	278	608	0.04%	0.006%
10	8.928	925	927	952	rBV3	257	544	0.03%	0.005%
11	9.075	952	955	979	rVV3	265	1284	0.08%	0.012%
12	9.341	1004	1006	1022	rBV3	260	731	0.05%	0.007%
13	9.430	1022	1023	1036	rBV3	237	567	0.04%	0.005%
14	9.551	1044	1046	1083	rBV3	396	1178	0.07%	0.011%
15	9.969	1117	1126	1138	rBV4	2114	5330	0.33%	0.049%
16	10.157	1160	1162	1179	rVV2	314	728	0.05%	0.007%
17	10.283	1183	1186	1203	rVB3	247	833	0.05%	0.008%
18	10.675	1247	1261	1267	rBV	394039	1005379	62.72%	9.174%
19	10.727	1267	1271	1292	rVB	201876	478564	29.85%	4.367%
20	11.046	1325	1332	1334	rBV	795	777	0.05%	0.007%
21	11.167	1342	1355	1366	rBV	227728	541979	33.81%	4.945%
22	11.240	1366	1369	1394	rVB2	15220	36521	2.28%	0.333%
23	11.627	1433	1443	1489	rVB	514450	1175771	73.35%	10.729%
24	12.208	1545	1554	1568	rVB5	2187	5032	0.31%	0.046%
25	12.961	1694	1698	1703	rBV3	522	662	0.04%	0.006%
26	13.013	1703	1708	1716	rVB2	1104	1627	0.10%	0.015%
27	13.102	1723	1725	1730	rBV2	370	614	0.04%	0.006%
28	13.212	1741	1746	1749	rVB2	350	548	0.03%	0.005%
29	13.342	1758	1771	1796	rBV	753970	1591686	99.29%	14.524%
30	13.499	1796	1801	1813	rVB5	2179	5416	0.34%	0.049%
31	13.693	1835	1838	1855	rBV4	748	1668	0.10%	0.015%
32	13.818	1855	1862	1866	rVV5	829	1480	0.09%	0.014%
33	13.866	1866	1871	1883	rVB3	1575	3707	0.23%	0.034%
34	14.368	1959	1967	1976	rBV3	3102	6879	0.43%	0.063%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	14.477	1985	1988	1997	rVB2	312	758	0.05%	0.007%
36	14.749	2034	2040	2043	rBV2	359	806	0.05%	0.007%
37	14.959	2070	2080	2090	rBV	758052	1472876	91.88%	13.440%
38	15.042	2090	2096	2111	rVV	42922	87748	5.47%	0.801%
39	15.157	2111	2118	2127	rVV	21460	41742	2.60%	0.381%
40	15.210	2127	2128	2134	rVV3	1173	1864	0.12%	0.017%
41	15.267	2134	2139	2146	rVV4	906	1506	0.09%	0.014%
42	15.445	2162	2173	2180	rVV4	750	1698	0.11%	0.015%
43	15.518	2184	2187	2194	rBV3	284	483	0.03%	0.004%
44	15.633	2200	2209	2221	rVB4	1578	2823	0.18%	0.026%
45	15.743	2227	2230	2240	rVB3	255	520	0.03%	0.005%
46	15.806	2240	2242	2251	rBV3	535	482	0.03%	0.004%
47	15.958	2264	2271	2287	rBV	14286	26727	1.67%	0.244%
48	16.188	2306	2315	2339	rVV	609063	1161911	72.48%	10.602%
49	16.355	2339	2347	2349	rVV6	1731	3449	0.22%	0.031%
50	16.397	2349	2355	2364	rVV	13583	24069	1.50%	0.220%
51	16.507	2364	2376	2380	rVV	15125	30423	1.90%	0.278%
52	16.549	2380	2384	2395	rVB2	9248	16790	1.05%	0.153%
53	16.753	2420	2423	2427	rBV4	477	482	0.03%	0.004%
54	16.810	2427	2434	2452	rVB	6199	11726	0.73%	0.107%
55	16.925	2452	2456	2458	rBV2	690	917	0.06%	0.008%
56	16.978	2458	2466	2487	rVB	34280	61395	3.83%	0.560%
57	17.155	2487	2500	2507	rBV	8245	16958	1.06%	0.155%
58	17.213	2507	2511	2517	rVB	2488	4341	0.27%	0.040%
59	17.276	2517	2523	2531	rBV3	4421	7472	0.47%	0.068%
60	17.344	2531	2536	2544	rVB2	337	591	0.04%	0.005%
61	17.433	2544	2553	2567	rBV	842167	1603050	100.00%	14.627%
62	17.527	2567	2571	2577	rVB3	3230	5226	0.33%	0.048%
63	17.589	2577	2583	2593	rBV2	11963	24564	1.53%	0.224%
64	17.720	2593	2608	2624	rVB3	53933	124262	7.75%	1.134%
65	17.840	2624	2631	2638	rBV2	6254	10676	0.67%	0.097%
66	17.924	2638	2647	2653	rVB4	1649	4184	0.26%	0.038%
67	17.987	2653	2659	2663	rBV3	7131	12910	0.81%	0.118%
68	18.034	2663	2668	2675	rVB5	4254	9498	0.59%	0.087%
69	18.102	2675	2681	2692	rVB	13932	25665	1.60%	0.234%
70	18.238	2696	2707	2711	rBV2	14627	31889	1.99%	0.291%
71	18.316	2711	2722	2730	rVB2	17281	44048	2.75%	0.402%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	18.369	2730	2732	2745	rVB7	2264	3891	0.24%	0.036%
73	18.479	2747	2753	2760	rBV4	5430	13153	0.82%	0.120%
74	18.547	2760	2766	2772	rVV2	10927	19899	1.24%	0.182%
75	18.604	2772	2777	2797	rVB2	12572	32281	2.01%	0.295%
76	18.740	2797	2803	2813	rBV4	3470	7853	0.49%	0.072%
77	18.839	2817	2822	2825	rVB5	1693	2094	0.13%	0.019%
78	18.892	2826	2832	2839	rVB4	4798	8379	0.52%	0.076%
79	18.965	2839	2846	2855	rBV3	16522	35576	2.22%	0.325%
80	19.038	2855	2860	2864	rBV5	1509	2664	0.17%	0.024%
81	19.096	2864	2871	2877	rBV	28225	51935	3.24%	0.474%
82	19.159	2877	2883	2894	rVV	48217	92352	5.76%	0.843%
83	19.237	2894	2898	2917	rVB	3552	5778	0.36%	0.053%
84	19.378	2917	2925	2933	rBV2	24361	53213	3.32%	0.486%
85	19.462	2933	2941	2948	rVB7	6557	18388	1.15%	0.168%
86	19.530	2948	2954	2961	rBV2	11266	21553	1.34%	0.197%
87	19.587	2961	2965	2968	rVV4	4169	6884	0.43%	0.063%
88	19.640	2968	2975	2990	rVB	29165	60816	3.79%	0.555%
89	19.739	2991	2994	3000	rVV3	2071	2852	0.18%	0.026%
90	19.797	3000	3005	3024	rVB6	3677	6470	0.40%	0.059%
91	19.938	3024	3032	3052	rBV	58435	143560	8.96%	1.310%
92	20.084	3052	3060	3083	rVV6	14402	40687	2.54%	0.371%
93	20.236	3083	3089	3130	rVV9	5478	22663	1.41%	0.207%
94	20.471	3130	3134	3154	rVV3	7986	30755	1.92%	0.281%
95	20.597	3154	3158	3179	rVV6	4236	18649	1.16%	0.170%
96	20.733	3179	3184	3211	rVV4	7185	15704	0.98%	0.143%
97	20.885	3211	3213	3218	rVV5	3704	6398	0.40%	0.058%
98	20.942	3218	3224	3276	rVV3	13783	48729	3.04%	0.445%
99	21.256	3276	3284	3326	rVV	25204	58406	3.64%	0.533%
100	21.523	3326	3335	3448	rVB	32624	71543	4.46%	0.653%

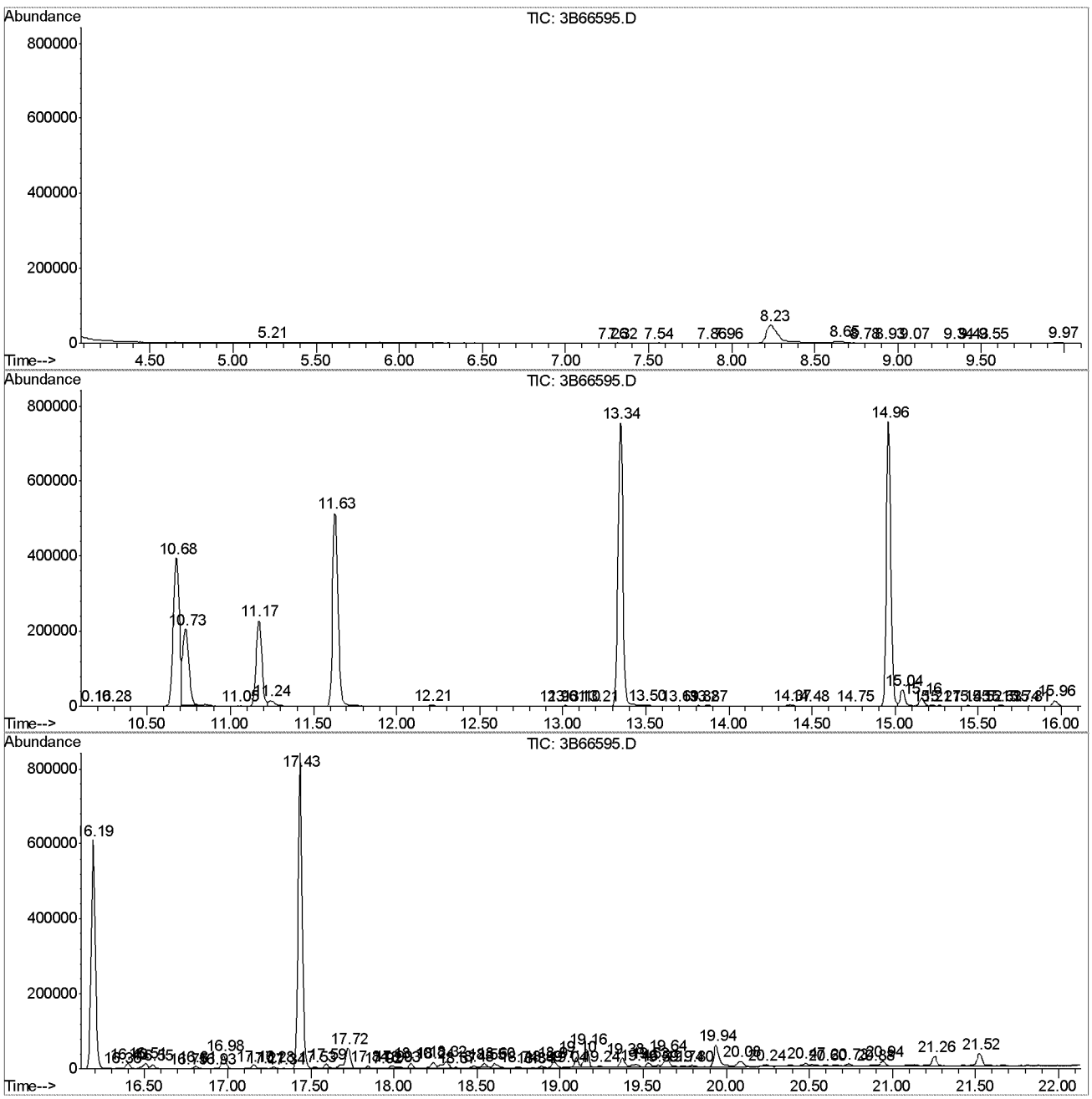
Sum of corrected areas: 10959161

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66595.D
Acq On : 27 Jan 2011 3:10 am
Operator : tarar1
Sample : ja66701-4
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 28 09:17:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	144422	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	362875	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	495844	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	477919	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	253738	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	147817	51.51	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.02%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	189861	50.47	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.94%			
85) toluene-d8 (s)	13.34	98	576506	51.93	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.86%			
111) 4-bromofluorobenzene (s)	16.19	95	228545	52.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.16%			

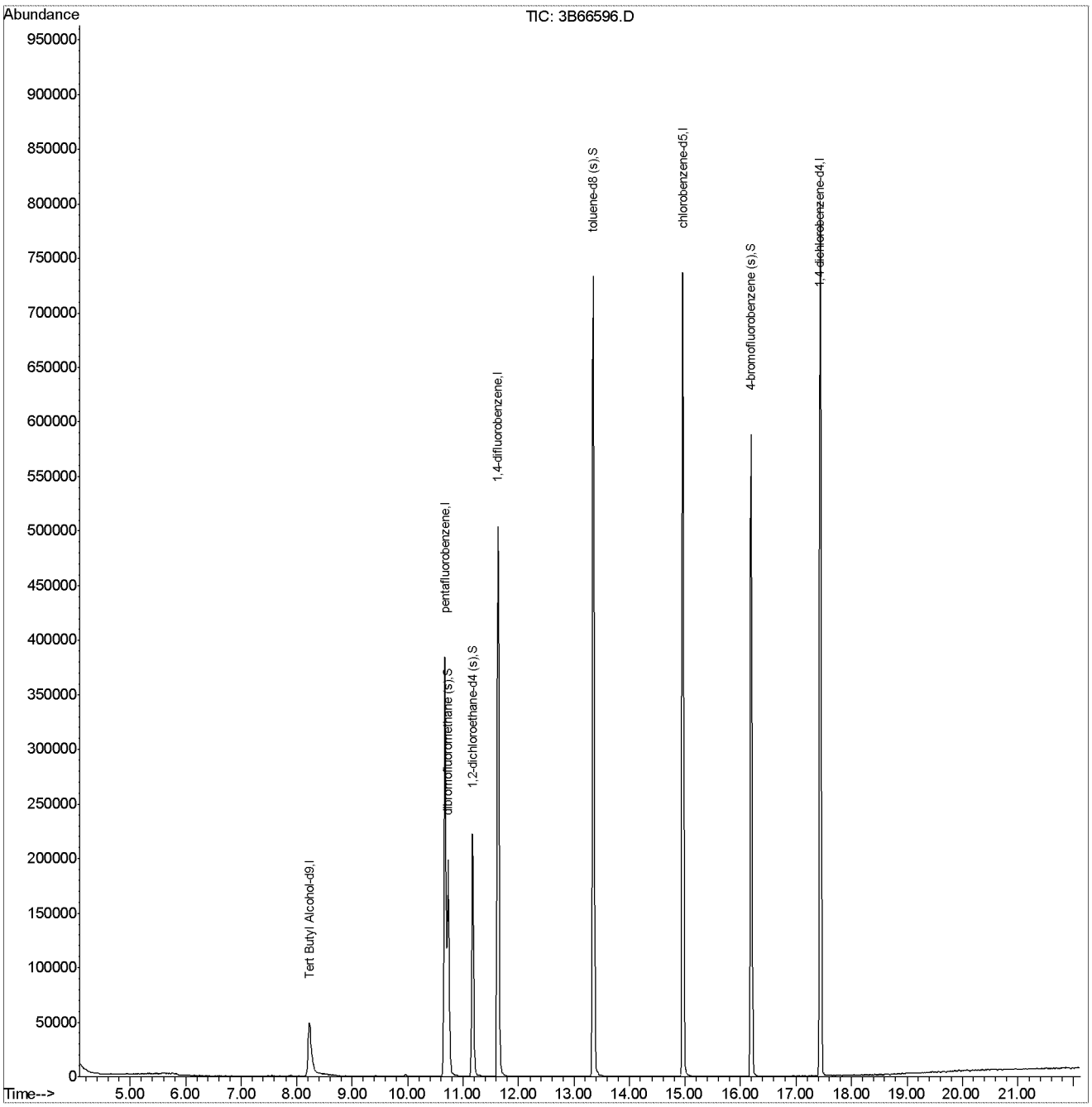
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jan 28 09:17:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.932	160	163	212	rBV6	707	6574	0.43%	0.073%
2	5.502	270	272	365	rVB5	2310	41212	2.70%	0.455%
3	6.208	405	407	410	rVB2	393	284	0.02%	0.003%
4	6.418	445	447	467	rVB3	188	345	0.02%	0.004%
5	6.596	474	481	485	rBV3	398	547	0.04%	0.006%
6	6.632	485	488	514	rVB3	280	1041	0.07%	0.012%
7	6.920	541	543	549	rBV3	285	364	0.02%	0.004%
8	6.972	549	553	565	rVB3	253	827	0.05%	0.009%
9	7.087	569	575	584	rVB3	196	433	0.03%	0.005%
10	7.479	649	650	658	rBV2	278	334	0.02%	0.004%
11	7.553	659	664	669	rVV2	328	452	0.03%	0.005%
12	7.589	669	671	691	rVB3	351	774	0.05%	0.009%
13	7.908	728	732	755	rVB3	423	1338	0.09%	0.015%
14	8.227	779	793	890	rVB2	48221	257933	16.93%	2.851%
15	8.960	931	933	938	rBB3	213	232	0.02%	0.003%
16	8.996	938	940	943	rBV2	269	244	0.02%	0.003%
17	9.022	943	945	956	rVV3	222	504	0.03%	0.006%
18	9.085	956	957	990	rVV2	227	897	0.06%	0.010%
19	9.320	990	1002	1019	rVV2	150	327	0.02%	0.004%
20	9.493	1033	1035	1077	rBV3	246	1372	0.09%	0.015%
21	9.744	1077	1083	1096	rVB3	412	1298	0.09%	0.014%
22	9.823	1096	1098	1102	rBV3	310	352	0.02%	0.004%
23	9.864	1102	1106	1118	rBV3	396	946	0.06%	0.010%
24	9.959	1118	1124	1137	rVB	1544	3425	0.22%	0.038%
25	10.330	1194	1195	1202	rVB2	275	320	0.02%	0.004%
26	10.403	1202	1209	1218	rBB3	189	561	0.04%	0.006%
27	10.508	1223	1229	1242	rBV2	257	539	0.04%	0.006%
28	10.670	1248	1260	1267	rBV	384343	978980	64.25%	10.820%
29	10.727	1267	1271	1306	rVV	198249	456238	29.94%	5.042%
30	10.926	1306	1309	1315	rVB3	477	610	0.04%	0.007%
31	10.984	1315	1320	1325	rVB	361	409	0.03%	0.005%
32	11.041	1325	1331	1333	rBV2	283	325	0.02%	0.004%
33	11.167	1341	1355	1388	rBV	222617	524725	34.44%	5.799%
34	11.350	1388	1390	1399	rVV2	587	1007	0.07%	0.011%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.434	1399	1406	1412	rVB2	260	510	0.03%	0.006%
36	11.627	1428	1443	1488	rBV	503728	1134989	74.49%	12.544%
37	11.868	1488	1489	1493	rVB2	383	392	0.03%	0.004%
38	11.909	1496	1497	1501	rBV2	266	260	0.02%	0.003%
39	12.009	1509	1516	1521	rVB2	204	374	0.02%	0.004%
40	12.098	1526	1533	1541	rVB2	200	340	0.02%	0.004%
41	12.370	1583	1585	1593	rVV3	321	478	0.03%	0.005%
42	12.432	1596	1597	1601	rVB2	281	218	0.01%	0.002%
43	12.579	1622	1625	1630	rBV2	195	217	0.01%	0.002%
44	12.856	1673	1678	1679	rBV2	268	325	0.02%	0.004%
45	12.940	1690	1694	1701	rBV2	314	489	0.03%	0.005%
46	13.044	1712	1714	1721	rVB3	343	598	0.04%	0.007%
47	13.092	1721	1723	1729	rBV2	361	523	0.03%	0.006%
48	13.180	1736	1740	1745	rVB3	317	628	0.04%	0.007%
49	13.248	1747	1753	1754	rVB	252	319	0.02%	0.004%
50	13.343	1756	1771	1804	rBV	733486	1523660	100.00%	16.839%
51	13.625	1823	1825	1830	rBV2	172	261	0.02%	0.003%
52	13.672	1833	1834	1847	rVB3	267	821	0.05%	0.009%
53	13.761	1847	1851	1858	rBV3	311	700	0.05%	0.008%
54	13.866	1865	1871	1877	rVB2	229	554	0.04%	0.006%
55	13.996	1894	1896	1899	rBV2	269	314	0.02%	0.003%
56	14.028	1899	1902	1903	rVB2	305	232	0.02%	0.003%
57	14.070	1908	1910	1914	rVB2	254	282	0.02%	0.003%
58	14.101	1914	1916	1919	rBV	233	226	0.01%	0.002%
59	14.158	1924	1927	1929	rVV	386	341	0.02%	0.004%
60	14.190	1930	1933	1937	rVB3	319	473	0.03%	0.005%
61	14.253	1942	1945	1950	rVV2	375	504	0.03%	0.006%
62	14.373	1964	1968	1970	rBV2	390	427	0.03%	0.005%
63	14.399	1971	1973	1980	rVB2	222	383	0.03%	0.004%
64	14.566	2002	2005	2008	rBV2	204	225	0.01%	0.002%
65	14.593	2008	2010	2013	rVB2	270	236	0.02%	0.003%
66	14.640	2014	2019	2022	rVB2	327	475	0.03%	0.005%
67	14.676	2022	2026	2029	rBV3	332	499	0.03%	0.006%
68	14.749	2033	2040	2042	rBV2	275	511	0.03%	0.006%
69	14.770	2042	2044	2049	rVB2	362	398	0.03%	0.004%
70	14.833	2049	2056	2064	rVB2	592	1463	0.10%	0.016%
71	14.901	2064	2069	2070	rBV2	384	476	0.03%	0.005%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.959	2070	2080	2105	rBV	736673	1433324	94.07%	15.841%
73	15.157	2114	2118	2130	rVV2	411	900	0.06%	0.010%
74	15.262	2130	2138	2140	rBV3	180	357	0.02%	0.004%
75	15.351	2153	2155	2160	rBV2	231	319	0.02%	0.004%
76	15.445	2160	2173	2180	rVV3	218	682	0.04%	0.008%
77	15.612	2183	2205	2216	rVB3	205	1226	0.08%	0.014%
78	15.696	2216	2221	2225	rBV3	165	308	0.02%	0.003%
79	15.743	2225	2230	2231	rBV2	249	225	0.01%	0.002%
80	15.827	2243	2246	2253	rVB3	240	390	0.03%	0.004%
81	15.916	2255	2263	2271	rBV3	235	675	0.04%	0.007%
82	15.968	2271	2273	2279	rVB2	356	484	0.03%	0.005%
83	16.031	2279	2285	2294	rBV3	286	924	0.06%	0.010%
84	16.109	2299	2300	2305	rBV2	257	308	0.02%	0.003%
85	16.188	2305	2315	2341	rVV	587872	1117074	73.32%	12.346%
86	16.653	2393	2404	2407	rBV3	228	487	0.03%	0.005%
87	16.946	2457	2460	2472	rBV4	324	749	0.05%	0.008%
88	17.056	2472	2481	2492	rVV3	308	961	0.06%	0.011%
89	17.119	2492	2493	2502	rVB2	429	637	0.04%	0.007%
90	17.349	2514	2537	2539	rVB3	288	1119	0.07%	0.012%
91	17.375	2539	2542	2544	rBV3	340	344	0.02%	0.004%
92	17.433	2544	2553	2610	rVV	801792	1515698	99.48%	16.751%
93	17.757	2610	2615	2618	rVB2	514	409	0.03%	0.005%
94	17.846	2629	2632	2634	rBV	411	390	0.03%	0.004%
95	18.050	2669	2671	2676	rBV2	718	665	0.04%	0.007%
96	18.092	2676	2679	2684	rVB4	561	768	0.05%	0.008%
97	18.181	2684	2696	2700	rBV4	671	1752	0.11%	0.019%
98	18.254	2703	2710	2715	rBV4	518	992	0.07%	0.011%
99	18.311	2718	2721	2762	rVV5	871	3786	0.25%	0.042%
100	18.866	2816	2827	2830	rBV4	790	2419	0.16%	0.027%

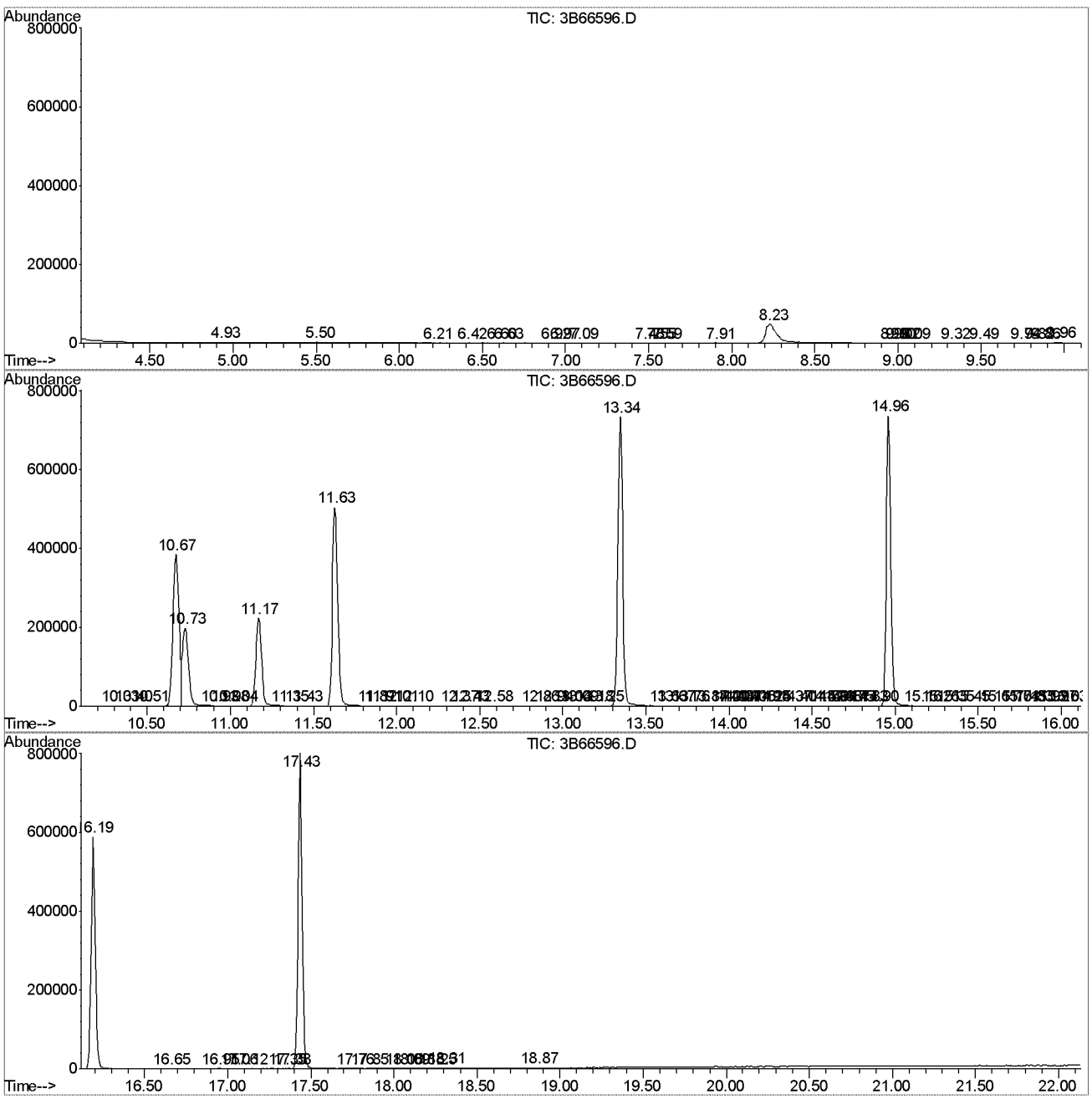
Sum of corrected areas: 9048262

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66596.D
Acq On : 27 Jan 2011 3:42 am
Operator : tarar1
Sample : ja66701-5
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 31 10:30:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

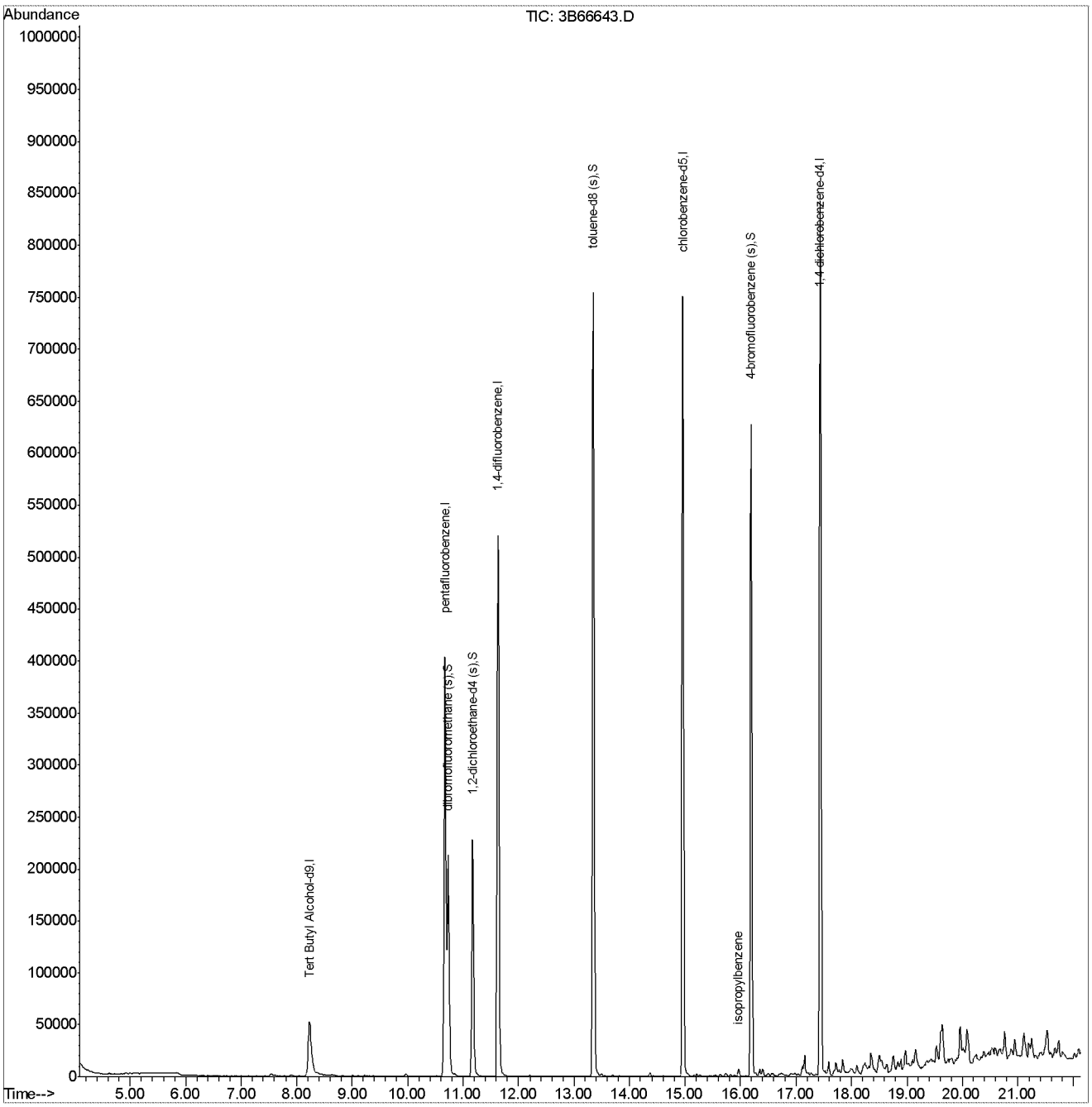
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	140503	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	397385	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	532346	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	500495	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	269011	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	159921	50.89	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.78%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	196046	47.58	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 95.16%			
85) toluene-d8 (s)	13.34	98	609884	51.17	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 102.34%			
111) 4-bromofluorobenzene (s)	16.19	95	240499	51.70	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.40%			
Target Compounds						Qvalue
110) isopropylbenzene	15.96	105	6481	0.40	ug/L	97

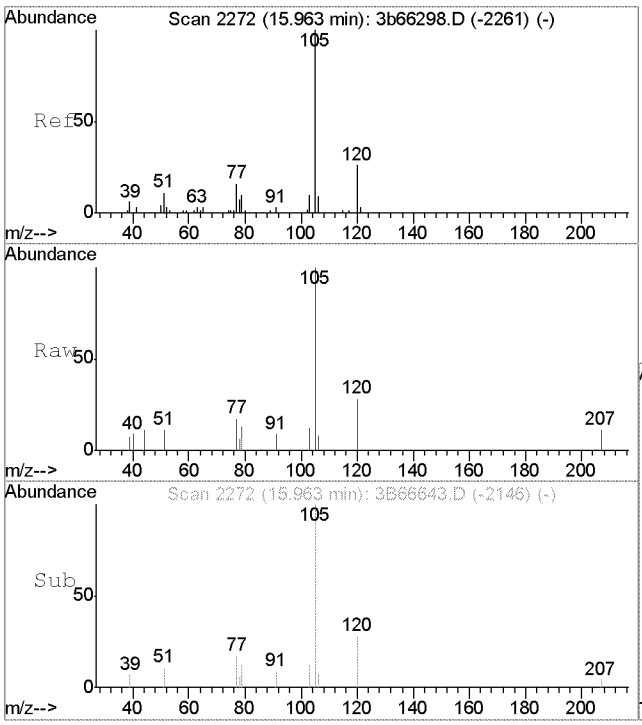
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jan 31 10:30:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

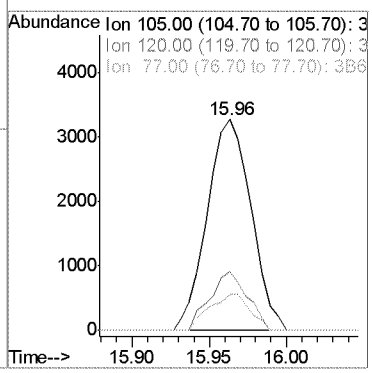




#110
isopropylbenzene
Concen: 0.40 ug/L
RT: 15.96 min Scan# 2272
Delta R.T. 0.00 min
Lab File: 3B66643.D
Acq: 28 Jan 2011 4:25 pm

Tgt Ion:105 Resp: 6481

Ion	Ratio	Lower	Upper
105	100		
120	27.9	0.0	56.1
77	17.1	0.0	45.8



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.093	382	385	441	rVB3	958	4677	0.29%	0.043%
2	6.527	467	468	497	rBV3	289	1023	0.06%	0.009%
3	6.690	497	499	519	rVV3	314	851	0.05%	0.008%
4	6.826	519	525	535	rVB3	276	640	0.04%	0.006%
5	7.124	578	582	606	rVB3	336	1351	0.09%	0.012%
6	7.542	653	662	692	rVB4	1398	6512	0.41%	0.059%
7	7.903	724	731	748	rVB3	626	2423	0.15%	0.022%
8	8.227	776	793	851	rBV	51655	251514	15.83%	2.296%
9	8.640	866	872	904	rVB4	1277	5645	0.36%	0.052%
10	8.834	908	909	936	rBV3	248	923	0.06%	0.008%
11	9.106	955	961	969	rVB2	318	722	0.05%	0.007%
12	9.833	1092	1100	1105	rBV3	283	695	0.04%	0.006%
13	9.875	1105	1108	1116	rVB2	380	625	0.04%	0.006%
14	9.959	1116	1124	1153	rVB4	2118	6696	0.42%	0.061%
15	10.523	1228	1232	1245	rVV3	589	1418	0.09%	0.013%
16	10.670	1248	1260	1267	rVV	403658	1042953	65.65%	9.523%
17	10.727	1267	1271	1305	rVV	212898	494618	31.13%	4.516%
18	11.167	1341	1355	1395	rBV	227890	545417	34.33%	4.980%
19	11.627	1432	1443	1474	rVV	520382	1190543	74.94%	10.870%
20	12.202	1546	1553	1560	rBV5	1263	2233	0.14%	0.020%
21	12.610	1626	1631	1637	rVB2	512	756	0.05%	0.007%
22	12.924	1688	1691	1699	rVB3	387	630	0.04%	0.006%
23	13.018	1702	1709	1716	rVB5	695	1530	0.10%	0.014%
24	13.154	1730	1735	1738	rBV3	589	899	0.06%	0.008%
25	13.280	1753	1759	1761	rVV3	683	1101	0.07%	0.010%
26	13.342	1761	1771	1796	rVV	753915	1587286	99.91%	14.493%
27	13.499	1796	1801	1809	rVV6	2214	5263	0.33%	0.048%
28	13.552	1809	1811	1825	rVV3	690	1929	0.12%	0.018%
29	13.703	1833	1840	1845	rVV4	944	1875	0.12%	0.017%
30	13.818	1854	1862	1869	rBV4	830	1972	0.12%	0.018%
31	13.996	1894	1896	1906	rVB3	527	998	0.06%	0.009%
32	14.085	1909	1913	1918	rVV3	520	887	0.06%	0.008%
33	14.127	1918	1921	1927	rVV2	281	666	0.04%	0.006%
34	14.200	1933	1935	1941	rVV2	476	675	0.04%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	14.268	1941	1948	1951	rVV2	307	715	0.05%	0.007%
36	14.315	1956	1957	1960	rVV2	680	753	0.05%	0.007%
37	14.368	1960	1967	1974	rVB5	3290	7345	0.46%	0.067%
38	14.430	1974	1979	1983	rBV4	798	1282	0.08%	0.012%
39	14.608	2009	2013	2018	rVB4	1093	1321	0.08%	0.012%
40	14.833	2052	2056	2064	rVV2	490	762	0.05%	0.007%
41	14.959	2068	2080	2114	rVV	750335	1472951	92.71%	13.449%
42	15.157	2114	2118	2124	rVV2	1189	1958	0.12%	0.018%
43	15.220	2124	2130	2134	rVV3	1730	3037	0.19%	0.028%
44	15.257	2134	2137	2144	rVV5	960	1681	0.11%	0.015%
45	15.435	2166	2171	2175	rVV2	817	1259	0.08%	0.011%
46	15.466	2175	2177	2181	rVV2	785	837	0.05%	0.008%
47	15.518	2181	2187	2189	rVV4	643	1232	0.08%	0.011%
48	15.539	2189	2191	2199	rVV4	1102	2177	0.14%	0.020%
49	15.639	2199	2210	2220	rVV5	1765	3365	0.21%	0.031%
50	15.733	2220	2228	2238	rVV5	2727	6282	0.40%	0.057%
51	15.811	2238	2243	2253	rVV5	1598	3088	0.19%	0.028%
52	15.890	2253	2258	2266	rVV4	1064	2314	0.15%	0.021%
53	15.963	2266	2272	2284	rVB2	6969	13703	0.86%	0.125%
54	16.104	2296	2299	2303	rVB3	838	686	0.04%	0.006%
55	16.188	2305	2315	2338	rBV	627145	1172145	73.78%	10.702%
56	16.345	2338	2345	2351	rVV4	6422	13102	0.82%	0.120%
57	16.397	2351	2355	2365	rVB	6684	12735	0.80%	0.116%
58	16.491	2365	2373	2381	rBV5	1996	4895	0.31%	0.045%
59	16.575	2381	2389	2405	rVB7	2624	7464	0.47%	0.068%
60	16.700	2405	2413	2415	rBV5	1525	2655	0.17%	0.024%
61	16.732	2415	2419	2443	rVB9	2355	10521	0.66%	0.096%
62	16.915	2443	2454	2462	rBV7	2367	8628	0.54%	0.079%
63	16.983	2462	2467	2471	rVB5	1571	2371	0.15%	0.022%
64	17.019	2471	2474	2484	rVB5	1025	2401	0.15%	0.022%
65	17.113	2484	2492	2495	rBV5	8956	16777	1.06%	0.153%
66	17.155	2495	2500	2509	rVB	17587	32866	2.07%	0.300%
67	17.270	2518	2522	2535	rVB5	2181	3300	0.21%	0.030%
68	17.365	2535	2540	2545	rBV6	1036	1855	0.12%	0.017%
69	17.433	2545	2553	2576	rBV	841076	1588730	100.00%	14.506%
70	17.589	2576	2583	2594	rVB3	13247	26877	1.69%	0.245%
71	17.725	2594	2609	2616	rBV4	12252	34149	2.15%	0.312%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	17.778	2616	2619	2625	rVB6	1859	2637	0.17%	0.024%
73	17.840	2625	2631	2649	rVB6	13043	27122	1.71%	0.248%
74	17.956	2650	2653	2655	rBV4	1055	1175	0.07%	0.011%
75	17.997	2655	2661	2673	rVB4	4290	14131	0.89%	0.129%
76	18.097	2673	2680	2694	rVB4	8807	20643	1.30%	0.188%
77	18.238	2694	2707	2718	rBV10	11057	48324	3.04%	0.441%
78	18.311	2718	2721	2724	rBV3	2786	2718	0.17%	0.025%
79	18.353	2724	2729	2748	rVB7	18663	47990	3.02%	0.438%
80	18.500	2748	2757	2778	rBV9	16076	78043	4.91%	0.713%
81	18.630	2778	2782	2798	rVB2	6820	9668	0.61%	0.088%
82	18.751	2798	2805	2815	rBV10	14795	36872	2.32%	0.337%
83	18.834	2815	2821	2826	rBV2	7847	16614	1.05%	0.152%
84	18.887	2827	2831	2837	rVB	9354	12945	0.81%	0.118%
85	18.970	2837	2847	2866	rBV7	17681	56460	3.55%	0.516%
86	19.101	2866	2872	2876	rBV2	5610	11231	0.71%	0.103%
87	19.159	2876	2883	2916	rVB2	15254	23811	1.50%	0.217%
88	19.430	2916	2935	2948	rBV2	5797	39098	2.46%	0.357%
89	19.535	2948	2955	2962	rBV3	15735	35058	2.21%	0.320%
90	19.640	2962	2975	3029	rBV3	33579	101809	6.41%	0.930%
91	19.959	3029	3036	3053	rBV4	29678	87719	5.52%	0.801%
92	20.079	3053	3059	3078	rVB4	32912	105153	6.62%	0.960%
93	20.534	3078	3146	3183	rBV4	14489	285855	17.99%	2.610%
94	20.759	3183	3189	3219	rVB4	21776	41694	2.62%	0.381%
95	20.942	3219	3224	3248	rVB8	14909	28791	1.81%	0.263%
96	21.104	3248	3255	3268	rVB4	23795	74192	4.67%	0.677%
97	21.198	3268	3273	3278	rBV2	14230	31174	1.96%	0.285%
98	21.664	3358	3362	3370	rBV4	7048	16770	1.06%	0.153%
99	21.732	3370	3375	3439	rVB4	16101	42736	2.69%	0.390%
100	22.093	3439	3444	3448	rBV5	7653	15775	0.99%	0.144%

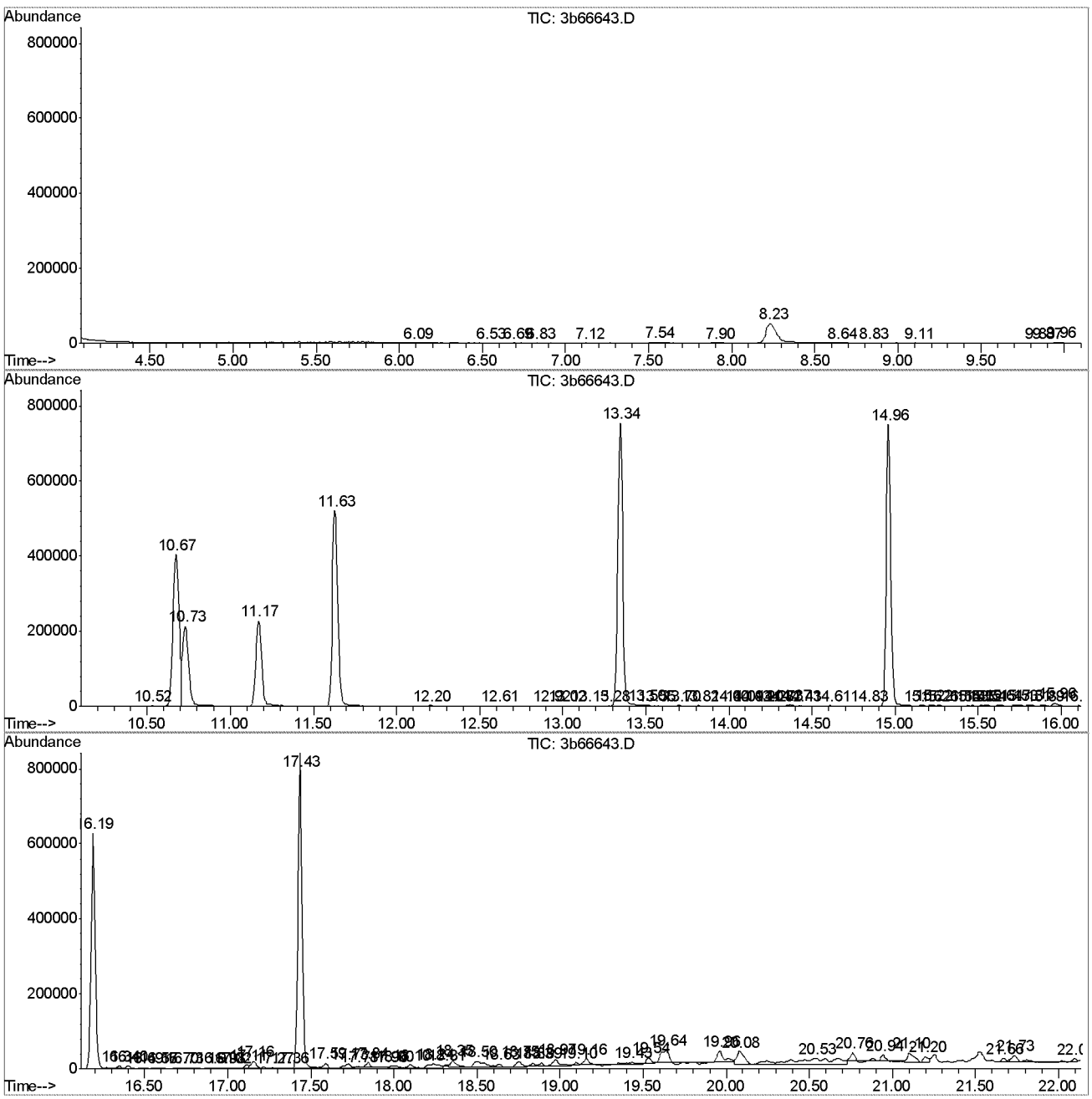
Sum of corrected areas: 10952373

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

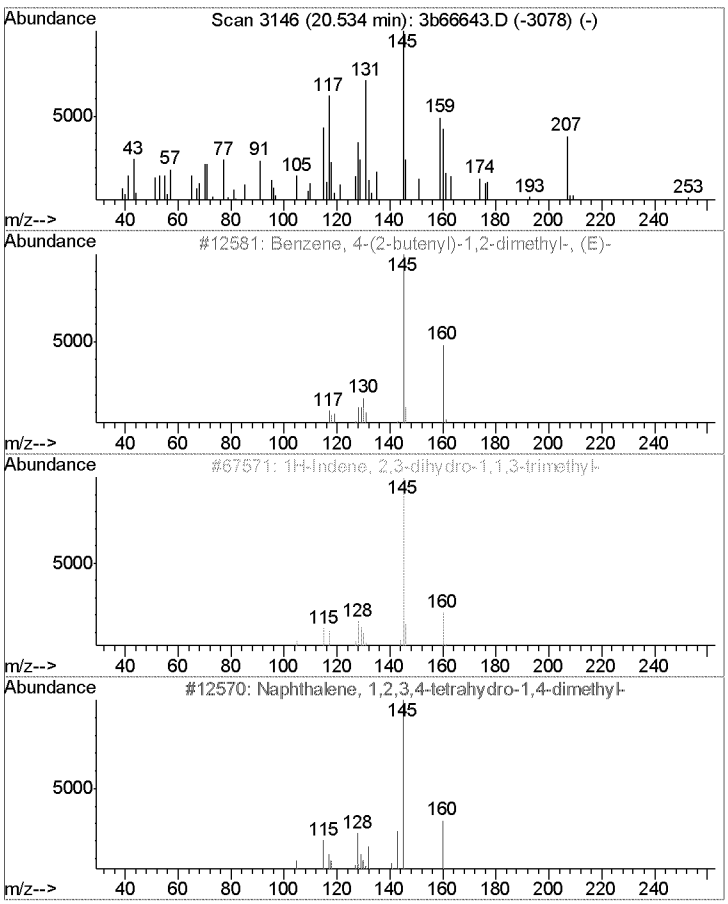
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

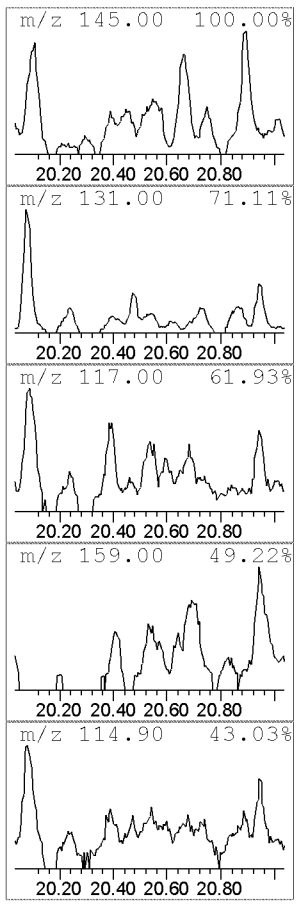
****

Peak Number 1 Benzene, 4-(2-butenyl)-1,2-... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.53	9.00 ug/L	285855	1,4-dichlorobenzene-d4	17.43

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 4-(2-butenyl)-1,2-dimet...	160	C12H16	054340-86-2	47
2	1H-Indene, 2,3-dihydro-1,1,3-tri...	160	C12H16	002613-76-5	46
3	Naphthalene, 1,2,3,4-tetrahydro-...	160	C12H16	004175-54-6	43
4	1H-Indene, 2,3-dihydro-1,5,7-tri...	160	C12H16	054340-88-4	35
5	1H-Inden-1-one, 2,3-dihydro-3,3-...	160	C11H12O	026465-81-6	35





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66643.D
Acq On : 28 Jan 2011 4:25 pm
Operator : tarar1
Sample : ja66701-6
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Benzene, 4-(2-but...	20.53	9.0	ug/L	285855	5	17.43	1588730	50.0

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 28 09:35:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	143468	500.00	ug/L	-0.02
5) pentafluorobenzene	10.68	168	413764	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	552799	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	525165	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	283519	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	165334	50.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.06%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	202658	47.24	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.48%			
85) toluene-d8 (s)	13.34	98	638678	51.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.20%			
111) 4-bromofluorobenzene (s)	16.19	95	253323	51.67	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.34%			

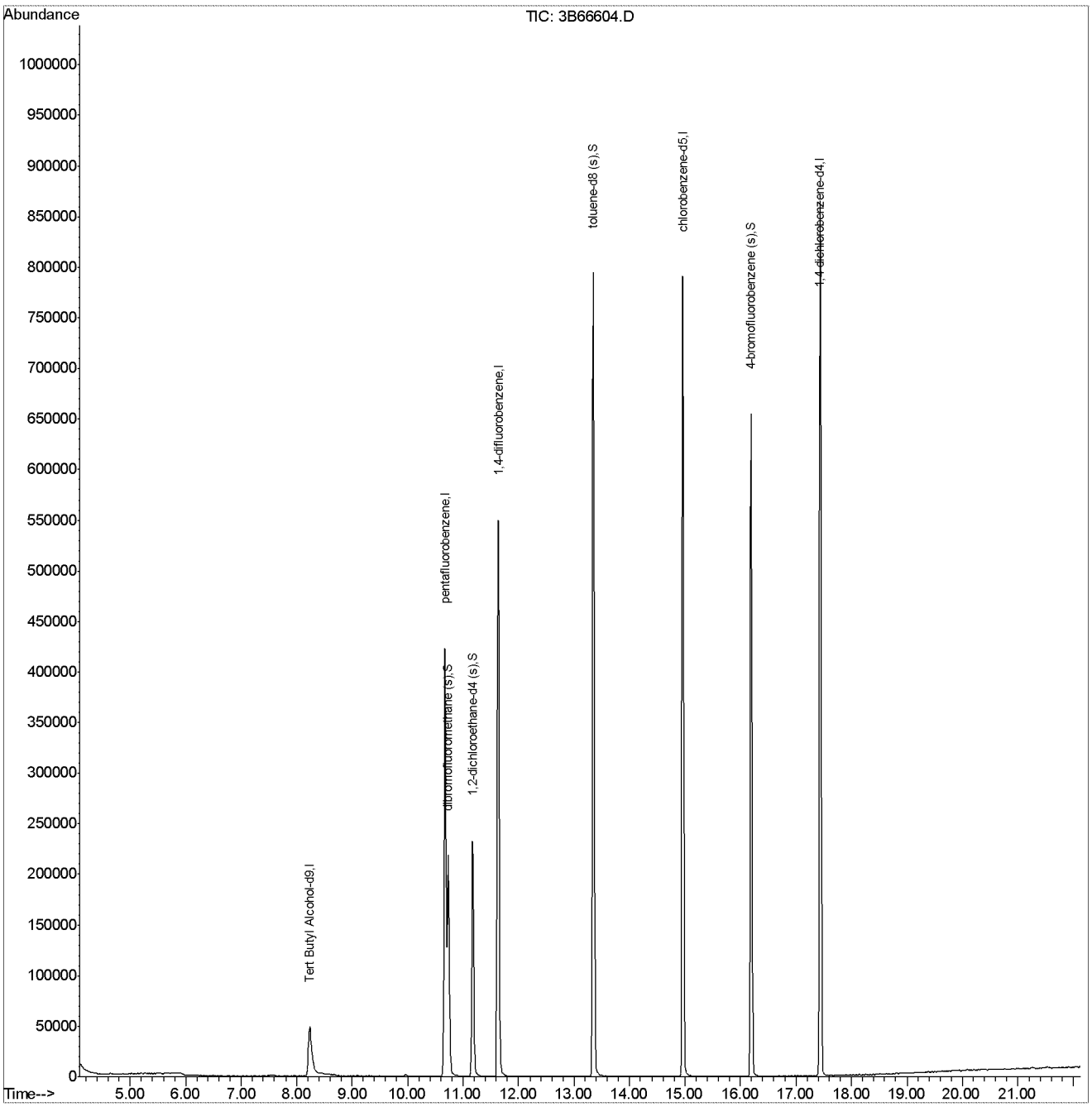
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jan 28 09:35:07 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.676	100	114	190	rBV7	1031	10002	0.60%	0.093%
2	7.286	609	613	620	rBV3	258	539	0.03%	0.005%
3	7.542	654	662	683	rVB3	796	3328	0.20%	0.031%
4	7.778	693	707	721	rBV2	434	1460	0.09%	0.014%
5	7.976	744	745	754	rBV2	337	288	0.02%	0.003%
6	8.118	769	772	775	rVB2	414	344	0.02%	0.003%
7	8.233	780	794	897	rVV2	48778	272759	16.45%	2.523%
8	8.792	897	901	913	rVV3	354	629	0.04%	0.006%
9	8.860	913	914	926	rVB3	221	432	0.03%	0.004%
10	9.169	971	973	977	rVB3	394	319	0.02%	0.003%
11	9.211	977	981	986	rVB2	309	544	0.03%	0.005%
12	9.253	986	989	997	rBV3	501	825	0.05%	0.008%
13	9.300	997	998	1006	rBV	363	379	0.02%	0.004%
14	9.488	1018	1034	1037	rBV3	325	977	0.06%	0.009%
15	9.509	1037	1038	1044	rVV2	246	296	0.02%	0.003%
16	9.582	1044	1052	1057	rVB3	188	304	0.02%	0.003%
17	9.807	1092	1095	1106	rBV3	337	702	0.04%	0.006%
18	9.906	1106	1114	1117	rVV3	300	614	0.04%	0.006%
19	9.959	1117	1124	1142	rVV4	1399	4346	0.26%	0.040%
20	10.063	1143	1144	1156	rVV3	304	833	0.05%	0.008%
21	10.157	1156	1162	1201	rVV4	433	2771	0.17%	0.026%
22	10.408	1204	1210	1215	rVV2	376	648	0.04%	0.006%
23	10.503	1215	1228	1248	rVV3	288	1703	0.10%	0.016%
24	10.670	1248	1260	1267	rVV	422886	1075767	64.88%	9.952%
25	10.728	1267	1271	1313	rVB	218820	528843	31.89%	4.892%
26	10.952	1313	1314	1324	rVB2	363	791	0.05%	0.007%
27	11.010	1324	1325	1334	rVB3	407	878	0.05%	0.008%
28	11.078	1334	1338	1340	rBV2	386	404	0.02%	0.004%
29	11.172	1340	1356	1391	rBV	232952	562203	33.91%	5.201%
30	11.360	1391	1392	1396	rVV	443	422	0.03%	0.004%
31	11.392	1396	1398	1402	rVB2	435	357	0.02%	0.003%
32	11.444	1405	1408	1411	rBV2	237	267	0.02%	0.002%
33	11.528	1419	1424	1430	rVB2	435	549	0.03%	0.005%
34	11.632	1430	1444	1484	rBV	549460	1241100	74.85%	11.482%

M3B3095.M Fri Jan 28 09:38:51 2011 MS3B

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.852	1484	1486	1503	rVB2	431	1204	0.07%	0.011%
36	12.035	1515	1521	1525	rVB2	210	294	0.02%	0.003%
37	12.082	1525	1530	1534	rBV2	269	445	0.03%	0.004%
38	12.182	1544	1549	1553	rVB	359	344	0.02%	0.003%
39	12.281	1562	1568	1570	rBV2	245	268	0.02%	0.002%
40	12.338	1578	1579	1588	rVB2	228	347	0.02%	0.003%
41	12.401	1588	1591	1599	rBV2	218	416	0.03%	0.004%
42	12.511	1610	1612	1615	rVB2	382	358	0.02%	0.003%
43	12.542	1615	1618	1620	rBV	438	456	0.03%	0.004%
44	12.589	1624	1627	1630	rBV	218	307	0.02%	0.003%
45	12.710	1645	1650	1652	rBV	317	396	0.02%	0.004%
46	12.820	1668	1671	1673	rVV2	276	300	0.02%	0.003%
47	12.893	1677	1685	1687	rBV2	279	465	0.03%	0.004%
48	12.945	1689	1695	1697	rVV2	246	423	0.03%	0.004%
49	12.977	1697	1701	1706	rVV2	413	559	0.03%	0.005%
50	13.045	1710	1714	1716	rBV2	381	491	0.03%	0.005%
51	13.065	1716	1718	1724	rVB2	292	446	0.03%	0.004%
52	13.128	1728	1730	1733	rBV2	349	334	0.02%	0.003%
53	13.165	1733	1737	1746	rBV2	309	793	0.05%	0.007%
54	13.238	1746	1751	1755	rVB3	300	495	0.03%	0.005%
55	13.269	1755	1757	1760	rBV2	311	399	0.02%	0.004%
56	13.343	1760	1771	1810	rVV	794708	1658090	100.00%	15.339%
57	13.573	1810	1815	1828	rVB4	702	1729	0.10%	0.016%
58	13.714	1833	1842	1847	rVV3	188	447	0.03%	0.004%
59	13.792	1855	1857	1864	rBV3	224	279	0.02%	0.003%
60	13.897	1874	1877	1884	rVB3	342	745	0.04%	0.007%
61	13.955	1884	1888	1889	rBV3	378	392	0.02%	0.004%
62	13.970	1889	1891	1898	rVV3	400	634	0.04%	0.006%
63	14.049	1898	1906	1907	rVB3	338	605	0.04%	0.006%
64	14.064	1907	1909	1914	rBV2	488	639	0.04%	0.006%
65	14.106	1914	1917	1921	rBV3	274	479	0.03%	0.004%
66	14.143	1921	1924	1928	rVB3	313	414	0.02%	0.004%
67	14.185	1928	1932	1943	rBV2	319	850	0.05%	0.008%
68	14.321	1956	1958	1961	rVB2	392	355	0.02%	0.003%
69	14.352	1961	1964	1967	rBV2	333	415	0.03%	0.004%
70	14.389	1967	1971	1973	rVB3	423	516	0.03%	0.005%
71	14.404	1973	1974	1986	rBV3	369	1247	0.08%	0.012%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.525	1990	1997	1999	rVB3	307	634	0.04%	0.006%
73	14.556	1999	2003	2012	rBV	330	887	0.05%	0.008%
74	14.661	2022	2023	2028	rVB2	334	375	0.02%	0.003%
75	14.713	2031	2033	2041	rBV2	353	692	0.04%	0.006%
76	14.776	2041	2045	2066	rVV3	347	1904	0.11%	0.018%
77	14.959	2066	2080	2114	rVV	790987	1546832	93.29%	14.310%
78	15.158	2114	2118	2121	rVB3	626	842	0.05%	0.008%
79	15.341	2151	2153	2162	rVB3	235	417	0.03%	0.004%
80	15.398	2162	2164	2172	rVB2	221	415	0.03%	0.004%
81	15.456	2172	2175	2178	rBV3	194	260	0.02%	0.002%
82	15.905	2238	2261	2263	rBV3	310	1166	0.07%	0.011%
83	16.188	2304	2315	2342	rVB	654661	1226646	73.98%	11.348%
84	16.366	2342	2349	2353	rBV2	308	810	0.05%	0.007%
85	16.397	2353	2355	2358	rVB3	269	255	0.02%	0.002%
86	16.418	2358	2359	2362	rBV	360	294	0.02%	0.003%
87	16.721	2413	2417	2426	rBV3	295	740	0.04%	0.007%
88	16.868	2441	2445	2453	rVB2	265	521	0.03%	0.005%
89	16.967	2461	2464	2488	rVB4	492	1779	0.11%	0.016%
90	17.223	2511	2513	2522	rBV3	387	571	0.03%	0.005%
91	17.276	2522	2523	2528	rVB2	428	400	0.02%	0.004%
92	17.339	2529	2535	2540	rVV3	346	585	0.04%	0.005%
93	17.433	2544	2553	2578	rVV	864791	1656237	99.89%	15.322%
94	17.569	2578	2579	2584	rVB3	609	775	0.05%	0.007%
95	17.851	2630	2633	2636	rBV3	498	553	0.03%	0.005%
96	17.898	2637	2642	2660	rVV4	821	3152	0.19%	0.029%
97	18.034	2660	2668	2675	rVB4	549	1350	0.08%	0.012%
98	18.154	2690	2691	2702	rBV4	402	743	0.04%	0.007%
99	18.348	2725	2728	2749	rBV5	962	2798	0.17%	0.026%
100	22.014	2749	3429	3447	rBV8	7856	962853	58.07%	8.907%

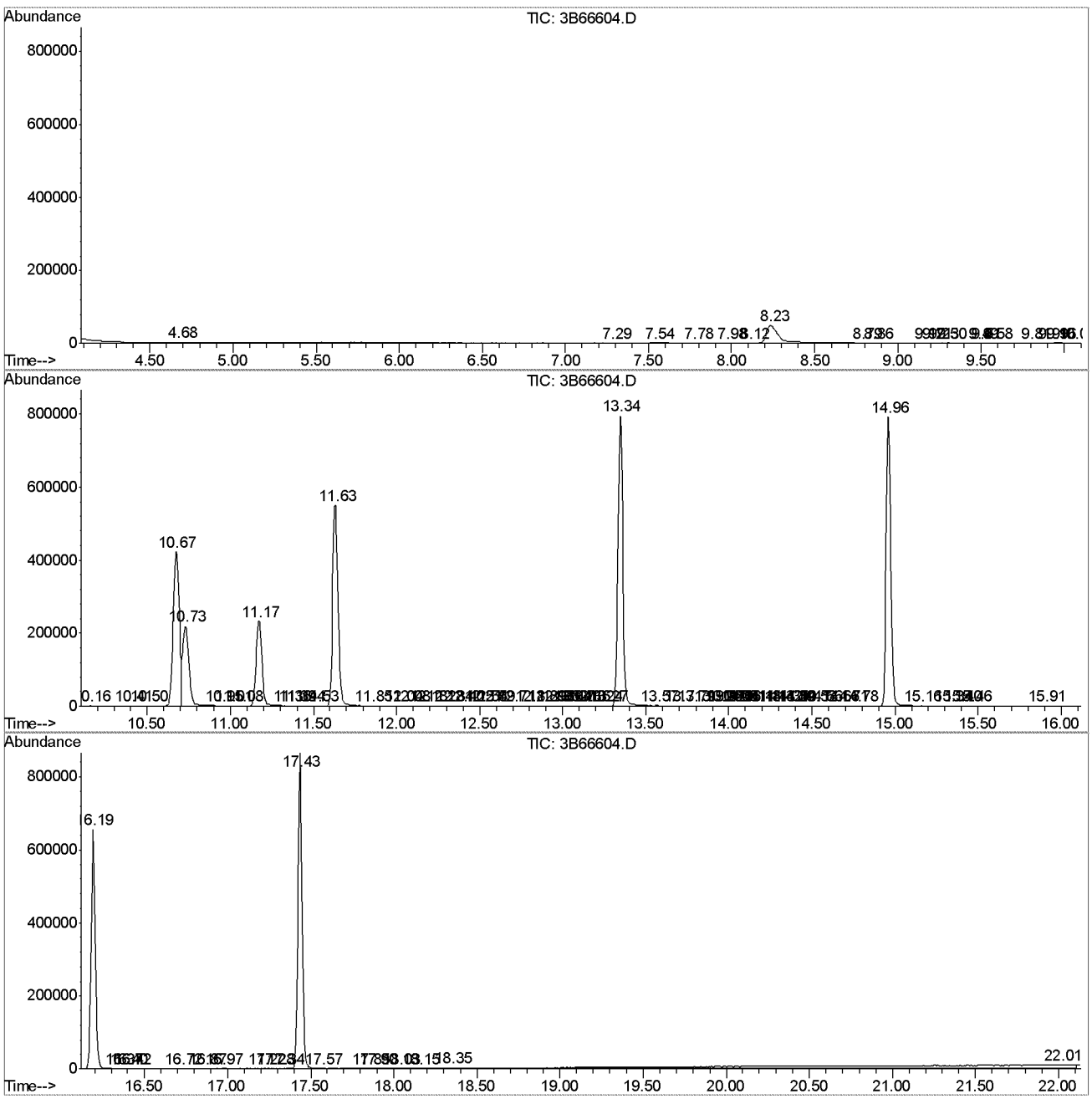
Sum of corrected areas: 10809485

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66604.D
Acq On : 27 Jan 2011 7:57 am
Operator : tarar1
Sample : ja66701-7
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 28 09:35:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Wed Jan 26 10:59:35 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	155421	500.00	ug/L	-0.01
5) pentafluorobenzene	10.67	168	402654	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	541327	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	516673	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	276807	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	163105	51.22	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.44%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	200404	48.01	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.02%			
85) toluene-d8 (s)	13.34	98	629918	51.97	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.94%			
111) 4-bromofluorobenzene (s)	16.19	95	246669	51.53	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.06%			

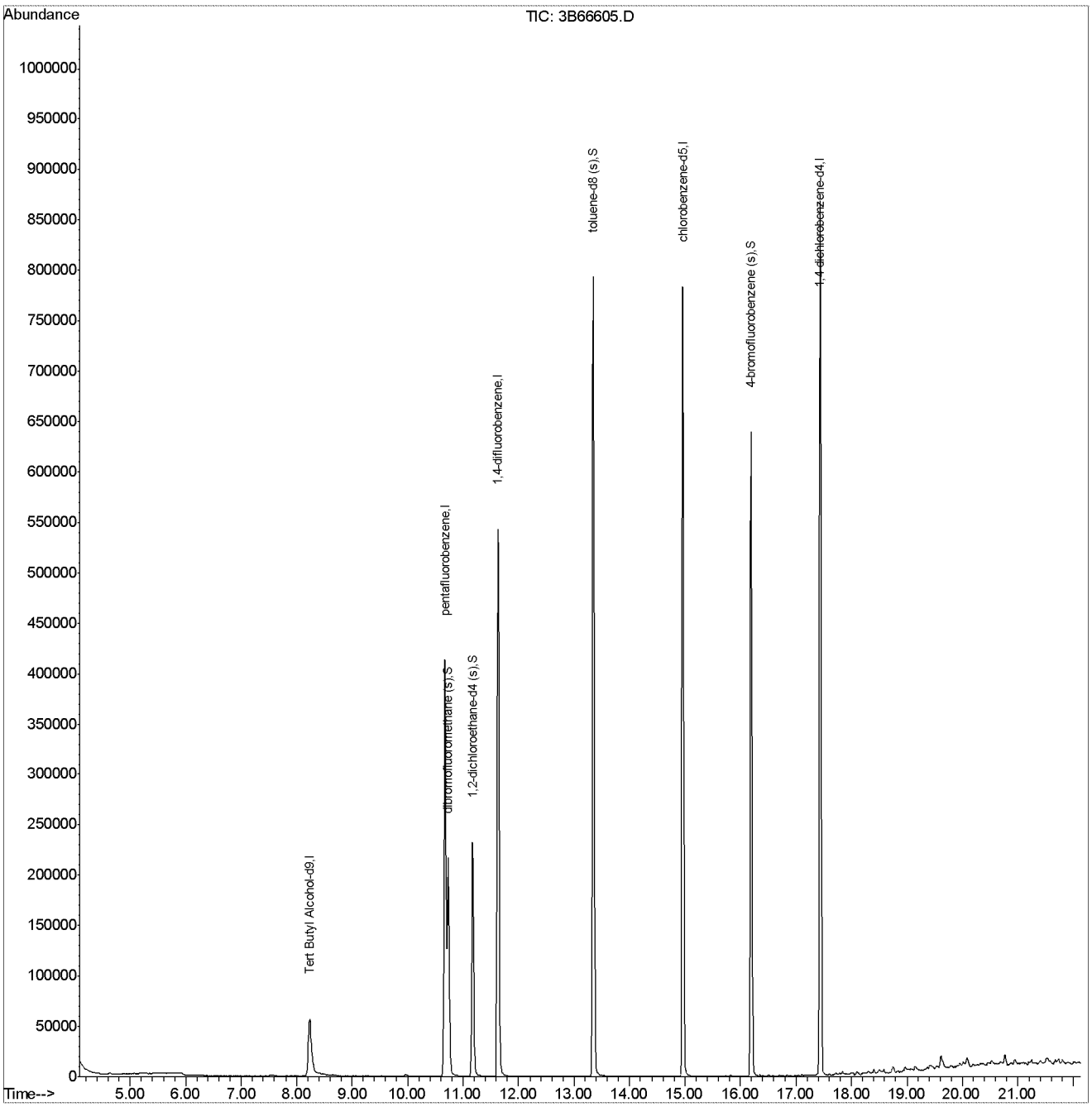
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jan 28 09:35:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Wed Jan 26 10:59:35 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.177	399	401	461	rVB3	617	5300	0.32%	0.053%
2	6.496	461	462	485	rBV2	466	1581	0.10%	0.016%
3	7.349	617	625	645	rVB3	277	1179	0.07%	0.012%
4	7.542	652	662	709	rBV4	795	3929	0.24%	0.040%
5	7.825	715	716	722	rVB2	389	419	0.03%	0.004%
6	8.018	722	753	766	rBV3	390	3054	0.19%	0.031%
7	8.112	766	771	774	rVV3	335	336	0.02%	0.003%
8	8.233	778	794	892	rVV2	56420	285813	17.47%	2.885%
9	8.756	892	894	901	rVV3	278	417	0.03%	0.004%
10	8.850	901	912	916	rVB3	242	546	0.03%	0.006%
11	8.923	925	926	938	rVB3	391	821	0.05%	0.008%
12	9.253	987	989	994	rVB3	468	404	0.02%	0.004%
13	9.284	994	995	1001	rBV3	348	457	0.03%	0.005%
14	9.457	1018	1028	1031	rBV2	308	732	0.04%	0.007%
15	9.525	1039	1041	1053	rVB3	427	1023	0.06%	0.010%
16	9.603	1053	1056	1064	rBV	341	621	0.04%	0.006%
17	9.749	1076	1084	1110	rVB3	316	1527	0.09%	0.015%
18	9.912	1110	1115	1118	rBV2	298	371	0.02%	0.004%
19	9.959	1118	1124	1137	rVB2	1454	3920	0.24%	0.040%
20	10.063	1137	1144	1154	rVB3	259	769	0.05%	0.008%
21	10.147	1158	1160	1164	rVB3	299	349	0.02%	0.004%
22	10.173	1164	1165	1173	rBV3	322	419	0.03%	0.004%
23	10.231	1173	1176	1183	rBV3	231	429	0.03%	0.004%
24	10.466	1218	1221	1230	rBV2	309	515	0.03%	0.005%
25	10.670	1245	1260	1267	rBV	412891	1056498	64.59%	10.663%
26	10.727	1267	1271	1307	rVB	216514	510484	31.21%	5.152%
27	11.167	1342	1355	1388	rBV	232428	555141	33.94%	5.603%
28	11.345	1388	1389	1393	rVB3	495	458	0.03%	0.005%
29	11.371	1393	1394	1403	rBV2	357	463	0.03%	0.005%
30	11.538	1418	1426	1431	rVB3	504	934	0.06%	0.009%
31	11.627	1431	1443	1475	rBV	542588	1224412	74.86%	12.357%
32	11.978	1506	1510	1514	rBV2	299	421	0.03%	0.004%
33	12.103	1530	1534	1538	rBV2	384	442	0.03%	0.004%
34	12.323	1572	1576	1583	rVB2	306	484	0.03%	0.005%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	12.453	1596	1601	1605	rBV2	313	570	0.03%	0.006%
36	12.532	1609	1616	1619	rBV	463	706	0.04%	0.007%
37	12.705	1644	1649	1657	rVB2	267	479	0.03%	0.005%
38	12.762	1657	1660	1664	rBV2	447	382	0.02%	0.004%
39	12.814	1667	1670	1673	rBV	278	394	0.02%	0.004%
40	12.982	1692	1702	1704	rVB2	306	693	0.04%	0.007%
41	13.029	1707	1711	1715	rBV3	350	467	0.03%	0.005%
42	13.118	1723	1728	1734	rBV3	297	674	0.04%	0.007%
43	13.222	1744	1748	1751	rBV2	223	346	0.02%	0.003%
44	13.343	1760	1771	1806	rVV	792870	1635696	100.00%	16.508%
45	13.531	1806	1807	1836	rVB4	612	2350	0.14%	0.024%
46	14.033	1899	1903	1912	rBV3	320	828	0.05%	0.008%
47	14.106	1916	1917	1926	rVV2	233	500	0.03%	0.005%
48	14.195	1931	1934	1939	rBV2	310	554	0.03%	0.006%
49	14.227	1939	1940	1949	rVB2	313	570	0.03%	0.006%
50	14.310	1949	1956	1958	rVB3	332	619	0.04%	0.006%
51	14.363	1962	1966	1972	rBV2	489	914	0.06%	0.009%
52	14.446	1972	1982	1986	rBV3	273	900	0.06%	0.009%
53	14.499	1986	1992	1998	rVB2	342	806	0.05%	0.008%
54	14.556	1998	2003	2005	rBV2	232	369	0.02%	0.004%
55	14.682	2020	2027	2035	rVB4	708	2265	0.14%	0.023%
56	14.760	2035	2042	2050	rBV3	448	1529	0.09%	0.015%
57	14.865	2055	2062	2063	rVB3	327	519	0.03%	0.005%
58	14.959	2069	2080	2126	rVB	783210	1521941	93.05%	15.360%
59	15.388	2159	2162	2177	rBV3	185	576	0.04%	0.006%
60	15.518	2186	2187	2194	rVB2	341	584	0.04%	0.006%
61	15.592	2194	2201	2203	rBV3	316	629	0.04%	0.006%
62	15.618	2203	2206	2212	rVV3	247	376	0.02%	0.004%
63	15.733	2223	2228	2235	rBV3	484	568	0.03%	0.006%
64	15.822	2239	2245	2253	rBV3	850	1779	0.11%	0.018%
65	15.900	2258	2260	2271	rVB2	401	457	0.03%	0.005%
66	15.963	2271	2272	2278	rBV2	370	518	0.03%	0.005%
67	16.188	2304	2315	2340	rBV	639240	1202549	73.52%	12.137%
68	16.350	2340	2346	2353	rVV4	1344	2932	0.18%	0.030%
69	16.413	2353	2358	2368	rVB2	656	1235	0.08%	0.012%
70	16.517	2372	2378	2384	rVB3	636	1257	0.08%	0.013%
71	16.591	2384	2392	2402	rBV3	532	1434	0.09%	0.014%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	16.685	2407	2410	2422	rBV3	490	1362	0.08%	0.014%
73	16.826	2434	2437	2445	rVV2	505	1024	0.06%	0.010%
74	16.884	2445	2448	2461	rVB3	412	721	0.04%	0.007%
75	16.983	2461	2467	2475	rVB3	949	1418	0.09%	0.014%
76	17.035	2475	2477	2487	rVB3	451	751	0.05%	0.008%
77	17.108	2487	2491	2496	rBV4	1249	1864	0.11%	0.019%
78	17.155	2496	2500	2509	rBV4	979	2658	0.16%	0.027%
79	17.213	2509	2511	2520	rVB4	830	1665	0.10%	0.017%
80	17.433	2537	2553	2579	rBV	867773	1633960	99.89%	16.491%
81	17.584	2579	2582	2592	rVB7	1481	3719	0.23%	0.038%
82	17.663	2594	2597	2599	rBV3	874	922	0.06%	0.009%
83	17.726	2604	2609	2618	rVV5	1523	2577	0.16%	0.026%
84	17.788	2618	2621	2625	rVV3	1117	1376	0.08%	0.014%
85	17.835	2625	2630	2640	rVV9	2899	5374	0.33%	0.054%
86	18.008	2657	2663	2675	rVB8	1791	5200	0.32%	0.052%
87	18.102	2675	2681	2693	rVB6	3041	6582	0.40%	0.066%
88	18.202	2693	2700	2711	rBV7	1998	6769	0.41%	0.068%
89	18.317	2711	2722	2727	rBV6	1877	5713	0.35%	0.058%
90	18.358	2727	2730	2733	rBV4	1309	1633	0.10%	0.016%
91	18.400	2733	2738	2748	rVB8	3941	8449	0.52%	0.085%
92	18.494	2748	2756	2769	rBV10	3618	14002	0.86%	0.141%
93	18.578	2769	2772	2798	rVB7	3027	1974	0.12%	0.020%
94	18.745	2798	2804	2815	rVB9	5539	13337	0.82%	0.135%
95	18.834	2815	2821	2836	rBV8	1994	7860	0.48%	0.079%
96	18.970	2836	2847	2877	rBV8	4941	26321	1.61%	0.266%
97	19.159	2877	2883	2929	rBV8	3036	11475	0.70%	0.116%
98	19.614	2964	2970	3055	rBV8	10446	47362	2.90%	0.478%
99	20.770	3185	3191	3220	rVB5	7969	10933	0.67%	0.110%
100	20.937	3220	3223	3330	rBV5	3999	26625	1.63%	0.269%

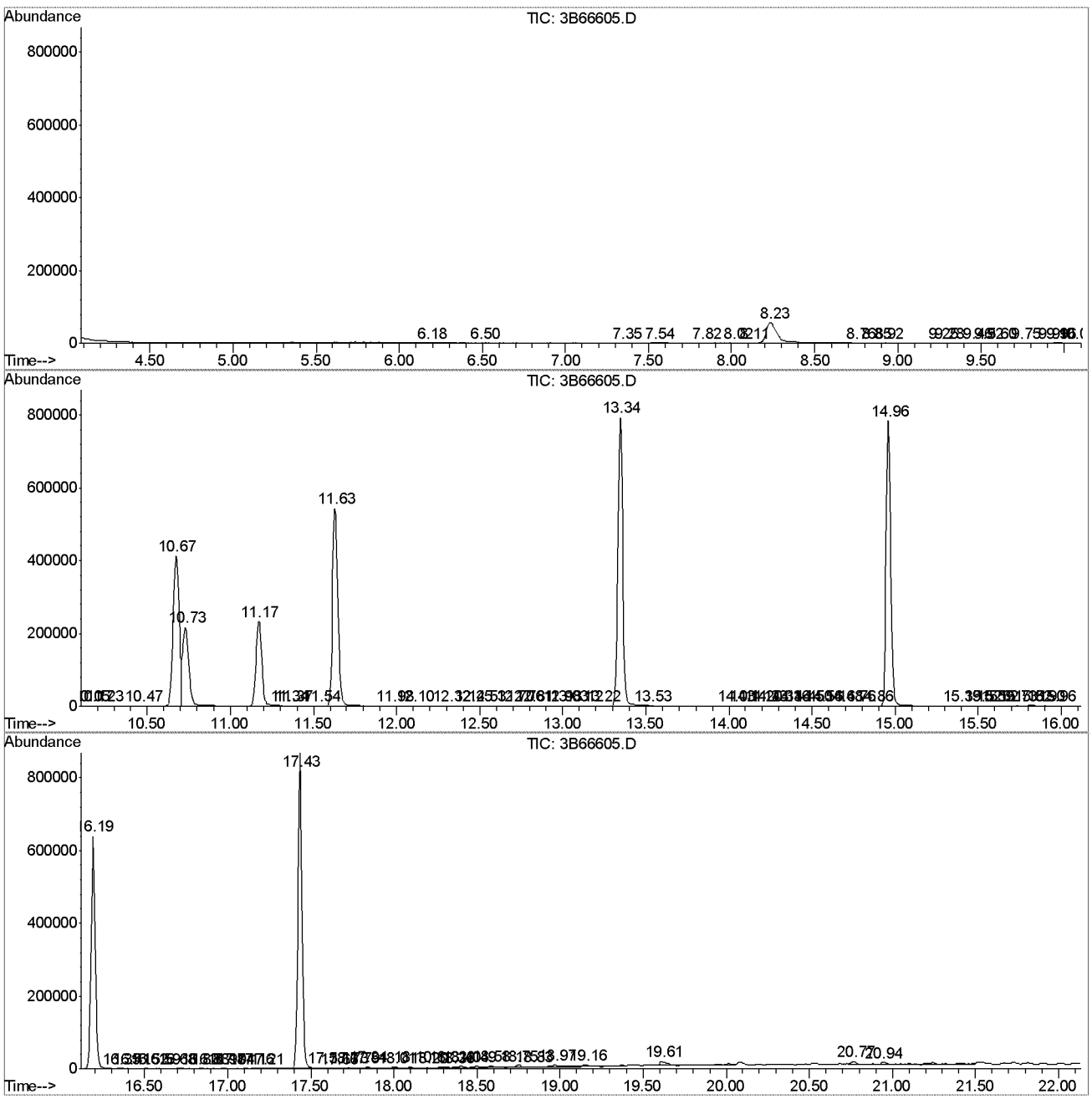
Sum of corrected areas: 9908259

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66605.D
Acq On : 27 Jan 2011 8:28 am
Operator : tarar1
Sample : ja66701-8
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 28 08:44:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	143632	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	377791	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	511393	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	489410	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	259464	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	154451	51.69	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.38%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	194265	49.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.20%			
85) toluene-d8 (s)	13.34	98	600747	52.47	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.94%			
111) 4-bromofluorobenzene (s)	16.19	95	236695	52.75	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 105.50%			

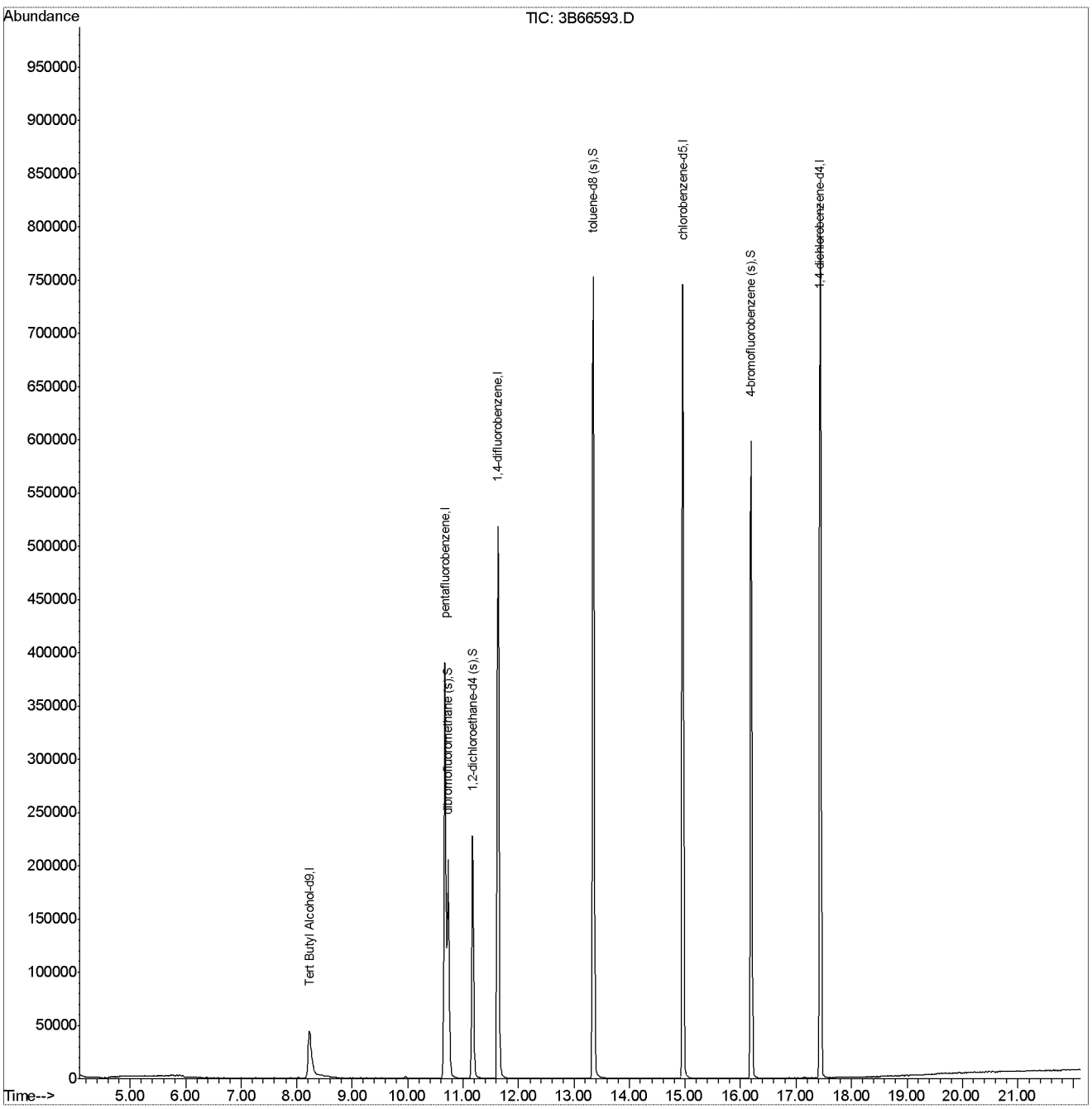
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Jan 28 08:44:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.624	95	104	105	rBV2	785	1268	0.08%	0.013%
2	5.105	105	196	221	rVV5	1379	35176	2.23%	0.353%
3	6.601	478	482	488	rVB3	249	478	0.03%	0.005%
4	6.690	497	499	516	rVB3	245	709	0.04%	0.007%
5	6.899	534	539	546	rBV3	298	608	0.04%	0.006%
6	7.365	627	628	637	rVB2	275	400	0.03%	0.004%
7	7.506	637	655	659	rBV3	309	1116	0.07%	0.011%
8	7.595	670	672	687	rVB2	356	717	0.05%	0.007%
9	7.804	709	712	723	rBV2	235	453	0.03%	0.005%
10	8.029	754	755	777	rBV3	352	1112	0.07%	0.011%
11	8.228	777	793	893	rVV2	44236	248863	15.79%	2.495%
12	8.766	893	896	904	rVV2	325	624	0.04%	0.006%
13	8.819	904	906	913	rVV3	322	489	0.03%	0.005%
14	8.871	913	916	925	rVV2	271	587	0.04%	0.006%
15	8.960	925	933	941	rVV3	313	674	0.04%	0.007%
16	9.012	941	943	947	rVV	362	259	0.02%	0.003%
17	9.049	947	950	968	rVV3	312	1174	0.07%	0.012%
18	9.153	968	970	985	rVV2	516	728	0.05%	0.007%
19	9.258	985	990	1010	rVV3	399	1255	0.08%	0.013%
20	9.425	1010	1022	1029	rVB3	378	1011	0.06%	0.010%
21	9.478	1029	1032	1036	rBV3	278	344	0.02%	0.003%
22	9.624	1048	1060	1062	rBV3	152	406	0.03%	0.004%
23	9.964	1118	1125	1141	rVB3	1431	4172	0.26%	0.042%
24	10.152	1153	1161	1171	rVV3	203	447	0.03%	0.004%
25	10.293	1171	1188	1191	rVV3	205	516	0.03%	0.005%
26	10.456	1214	1219	1223	rVV2	193	296	0.02%	0.003%
27	10.497	1223	1227	1233	rVV2	246	426	0.03%	0.004%
28	10.539	1233	1235	1240	rVV2	231	360	0.02%	0.004%
29	10.576	1240	1242	1248	rVV3	286	463	0.03%	0.005%
30	10.670	1248	1260	1267	rVV	390470	1015414	64.42%	10.182%
31	10.728	1267	1271	1313	rVB2	205603	474842	30.12%	4.761%
32	11.083	1333	1339	1343	rBV2	351	386	0.02%	0.004%
33	11.167	1343	1355	1395	rVB	227418	537968	34.13%	5.394%
34	11.627	1429	1443	1483	rBV	518414	1167506	74.06%	11.707%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.868	1487	1489	1495	rVV2	487	648	0.04%	0.006%
36	12.124	1536	1538	1542	rBV2	272	274	0.02%	0.003%
37	12.234	1554	1559	1563	rBV	304	369	0.02%	0.004%
38	12.480	1602	1606	1614	rBV2	300	558	0.04%	0.006%
39	12.542	1614	1618	1622	rVB2	330	290	0.02%	0.003%
40	12.699	1643	1648	1649	rVB2	242	294	0.02%	0.003%
41	12.767	1658	1661	1668	rVB3	236	435	0.03%	0.004%
42	12.841	1672	1675	1678	rVV2	300	339	0.02%	0.003%
43	12.898	1682	1686	1690	rVV3	364	515	0.03%	0.005%
44	12.935	1690	1693	1697	rVB2	397	335	0.02%	0.003%
45	13.034	1709	1712	1713	rVB2	330	263	0.02%	0.003%
46	13.076	1717	1720	1724	rVB2	296	306	0.02%	0.003%
47	13.191	1740	1742	1746	rVB2	315	339	0.02%	0.003%
48	13.243	1750	1752	1754	rBV2	394	364	0.02%	0.004%
49	13.343	1758	1771	1820	rBV	752708	1576360	100.00%	15.806%
50	13.609	1820	1822	1824	rVV	398	322	0.02%	0.003%
51	13.630	1824	1826	1829	rVB	286	281	0.02%	0.003%
52	13.735	1840	1846	1850	rBV2	311	584	0.04%	0.006%
53	13.777	1850	1854	1857	rVV3	182	299	0.02%	0.003%
54	13.902	1872	1878	1882	rVV	245	495	0.03%	0.005%
55	13.939	1882	1885	1887	rVB2	249	258	0.02%	0.003%
56	14.033	1897	1903	1905	rVB2	320	358	0.02%	0.004%
57	14.080	1905	1912	1916	rBV2	263	539	0.03%	0.005%
58	14.122	1916	1920	1925	rVV2	204	395	0.03%	0.004%
59	14.153	1925	1926	1933	rVB2	309	364	0.02%	0.004%
60	14.232	1940	1941	1945	rBV3	258	288	0.02%	0.003%
61	14.258	1945	1946	1954	rVB3	239	470	0.03%	0.005%
62	14.336	1954	1961	1963	rBV3	328	562	0.04%	0.006%
63	14.394	1965	1972	1976	rVB2	284	599	0.04%	0.006%
64	14.420	1976	1977	1983	rBV	308	453	0.03%	0.005%
65	14.499	1991	1992	2001	rVB3	337	626	0.04%	0.006%
66	14.567	2001	2005	2007	rBV2	289	345	0.02%	0.003%
67	14.603	2007	2012	2016	rVV2	249	472	0.03%	0.005%
68	14.666	2019	2024	2026	rVV2	250	382	0.02%	0.004%
69	14.708	2030	2032	2034	rVV	293	257	0.02%	0.003%
70	14.755	2034	2041	2043	rVV3	351	561	0.04%	0.006%
71	14.797	2047	2049	2058	rVB3	297	632	0.04%	0.006%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.880	2061	2065	2069	rBV2	401	724	0.05%	0.007%
73	14.959	2069	2080	2113	rBV	745393	1459215	92.57%	14.632%
74	15.257	2123	2137	2143	rBV3	162	611	0.04%	0.006%
75	15.372	2157	2159	2165	rVB3	295	489	0.03%	0.005%
76	15.430	2165	2170	2180	rBV3	316	985	0.06%	0.010%
77	15.492	2180	2182	2197	rVV3	305	859	0.05%	0.009%
78	15.602	2197	2203	2205	rVB3	250	300	0.02%	0.003%
79	15.675	2205	2217	2222	rBV3	236	715	0.05%	0.007%
80	15.743	2228	2230	2238	rVB3	297	394	0.02%	0.004%
81	15.811	2238	2243	2249	rVV2	214	309	0.02%	0.003%
82	15.858	2249	2252	2258	rVB2	190	373	0.02%	0.004%
83	16.188	2305	2315	2342	rVB	597832	1152055	73.08%	11.552%
84	16.376	2347	2351	2354	rBV2	270	353	0.02%	0.004%
85	16.549	2381	2384	2396	rBV2	227	533	0.03%	0.005%
86	16.643	2396	2402	2412	rVB3	283	713	0.05%	0.007%
87	16.721	2412	2417	2427	rBV3	259	618	0.04%	0.006%
88	17.041	2473	2478	2497	rBV3	421	1340	0.09%	0.013%
89	17.271	2497	2522	2531	rBV3	379	2081	0.13%	0.021%
90	17.433	2542	2553	2593	rBV	821772	1548078	98.21%	15.523%
91	17.652	2593	2595	2600	rVB3	326	291	0.02%	0.003%
92	17.747	2607	2613	2628	rBV4	408	1325	0.08%	0.013%
93	17.841	2628	2631	2634	rBV2	383	350	0.02%	0.004%
94	18.113	2656	2683	2685	rBV3	645	2340	0.15%	0.023%
95	18.301	2718	2719	2723	rBV3	434	371	0.02%	0.004%
96	18.379	2728	2734	2745	rBV3	491	1447	0.09%	0.015%
97	18.693	2791	2794	2796	rBV3	615	512	0.03%	0.005%
98	18.709	2796	2797	2811	rVV5	923	2046	0.13%	0.021%
99	18.923	2811	2838	2840	rVV4	1008	4218	0.27%	0.042%
100	22.103	2840	3446	3448	rVV8	6277	696749	44.20%	6.986%

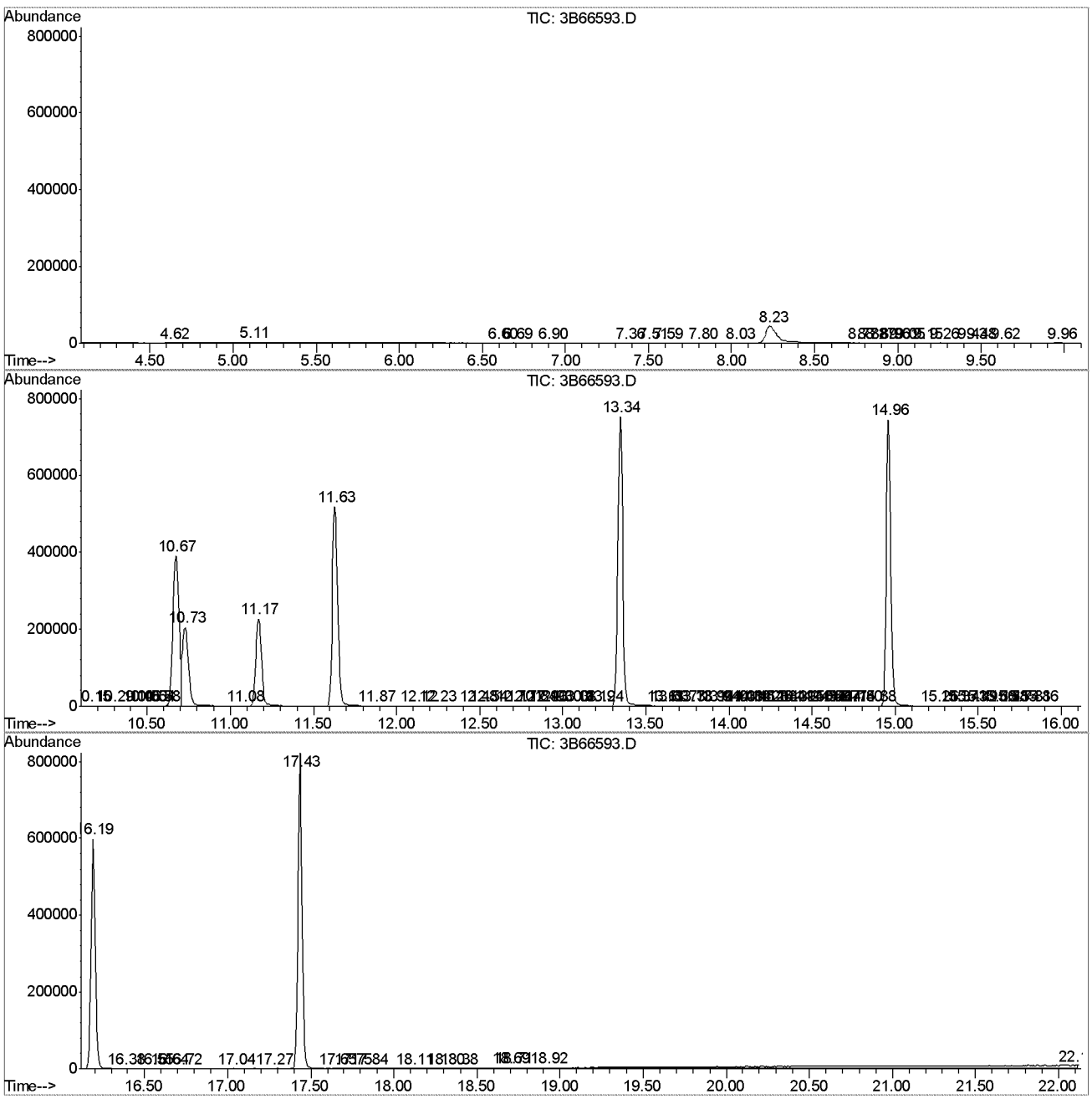
Sum of corrected areas: 9972872

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\v3b3108-v3b3109\
Data File : 3b66593.D
Acq On : 27 Jan 2011 2:06 am
Operator : tarar1
Sample : ja66701-9
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 17:46:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.24	65	151529	500.00	ug/L	0.00
5) pentafluorobenzene	10.67	168	394908	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	532853	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	506368	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	268779	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	161168	51.60	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.20%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	202165	49.38	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 98.76%			
85) toluene-d8 (s)	13.34	98	620774	52.03	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.06%			
111) 4-bromofluorobenzene (s)	16.19	95	243118	52.31	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.62%			

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.2.1 6

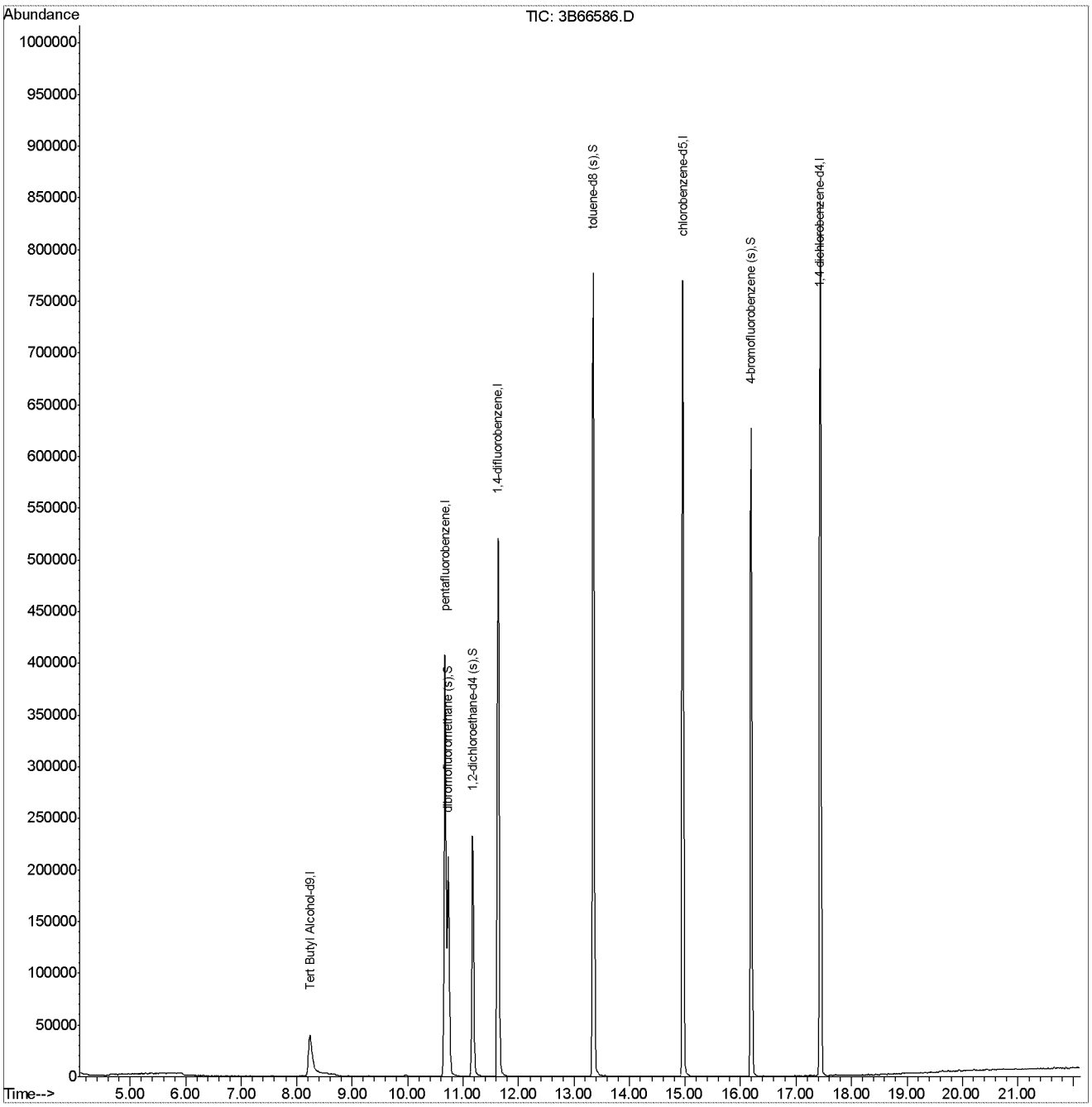
ACCUTEST LABORATORIES JA66701

SII-SSA-0014-006045

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jan 27 17:46:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.692	96	117	125	rBV5	1418	7620	0.47%	0.079%
2	5.529	273	277	335	rVV5	1080	16769	1.03%	0.175%
3	5.848	335	338	415	rVB4	2593	19592	1.21%	0.204%
4	6.402	442	444	465	rBV2	301	1008	0.06%	0.011%
5	6.517	465	466	476	rVB2	299	460	0.03%	0.005%
6	6.638	487	489	493	rVB3	241	239	0.01%	0.002%
7	6.716	493	504	521	rVB2	298	1367	0.08%	0.014%
8	7.223	599	601	613	rVB3	253	474	0.03%	0.005%
9	7.333	613	622	624	rBV3	182	362	0.02%	0.004%
10	8.055	757	760	762	rVB	365	277	0.02%	0.003%
11	8.112	762	771	775	rBV3	379	801	0.05%	0.008%
12	8.149	775	778	780	rVV	392	369	0.02%	0.004%
13	8.238	780	795	897	rVV2	40104	261068	16.06%	2.723%
14	8.787	897	900	906	rVB3	304	409	0.03%	0.004%
15	8.902	912	922	926	rVB3	148	353	0.02%	0.004%
16	8.939	926	929	934	rBV3	306	340	0.02%	0.004%
17	9.729	1078	1080	1084	rBV2	201	259	0.02%	0.003%
18	9.765	1084	1087	1116	rVV3	304	1484	0.09%	0.015%
19	9.964	1116	1125	1134	rVV5	1239	3550	0.22%	0.037%
20	10.016	1134	1135	1158	rVB2	225	818	0.05%	0.009%
21	10.215	1169	1173	1187	rVB2	356	807	0.05%	0.008%
22	10.320	1191	1193	1196	rVB2	261	259	0.02%	0.003%
23	10.341	1196	1197	1214	rBV3	236	868	0.05%	0.009%
24	10.545	1233	1236	1244	rVB2	311	580	0.04%	0.006%
25	10.592	1244	1245	1248	rVV2	259	250	0.02%	0.003%
26	10.670	1248	1260	1267	rVV	407269	1033536	63.59%	10.778%
27	10.733	1267	1272	1316	rVB	212597	516115	31.76%	5.382%
28	10.984	1316	1320	1322	rBV2	231	249	0.02%	0.003%
29	11.005	1322	1324	1329	rVB2	255	275	0.02%	0.003%
30	11.172	1345	1356	1398	rBV	232586	558014	34.33%	5.819%
31	11.408	1398	1401	1404	rVB2	269	250	0.02%	0.003%
32	11.476	1411	1414	1420	rVB2	322	293	0.02%	0.003%
33	11.538	1420	1426	1431	rBV2	245	389	0.02%	0.004%
34	11.627	1431	1443	1487	rVV	520603	1208464	74.35%	12.603%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	11.863	1487	1488	1495	rVV2	473	749	0.05%	0.008%
36	11.915	1495	1498	1501	rVB2	521	360	0.02%	0.004%
37	12.046	1520	1523	1530	rVB2	292	336	0.02%	0.004%
38	12.103	1530	1534	1537	rVB	315	298	0.02%	0.003%
39	12.135	1537	1540	1549	rBV2	155	277	0.02%	0.003%
40	12.271	1564	1566	1572	rVB2	372	391	0.02%	0.004%
41	12.328	1572	1577	1579	rBV2	197	265	0.02%	0.003%
42	12.401	1589	1591	1599	rVB2	214	266	0.02%	0.003%
43	12.574	1620	1624	1630	rVB2	333	272	0.02%	0.003%
44	12.684	1641	1645	1648	rBV	302	341	0.02%	0.004%
45	12.715	1648	1651	1655	rVB2	382	414	0.03%	0.004%
46	12.752	1655	1658	1664	rBV2	396	510	0.03%	0.005%
47	12.867	1675	1680	1682	rBV	414	323	0.02%	0.003%
48	12.909	1682	1688	1692	rVV3	343	685	0.04%	0.007%
49	12.987	1699	1703	1709	rBV	314	401	0.02%	0.004%
50	13.081	1719	1721	1725	rBV2	263	260	0.02%	0.003%
51	13.139	1727	1732	1736	rBV3	326	626	0.04%	0.007%
52	13.259	1751	1755	1757	rVB2	292	277	0.02%	0.003%
53	13.343	1759	1771	1808	rVV	776801	1625282	100.00%	16.949%
54	13.547	1808	1810	1825	rVB4	795	1922	0.12%	0.020%
55	13.803	1838	1859	1862	rBV3	282	1185	0.07%	0.012%
56	13.861	1866	1870	1871	rBV2	336	330	0.02%	0.003%
57	13.918	1877	1881	1885	rVB2	315	413	0.03%	0.004%
58	13.960	1888	1889	1893	rBV3	300	322	0.02%	0.003%
59	14.038	1902	1904	1908	rBV2	280	328	0.02%	0.003%
60	14.096	1908	1915	1916	rVV2	317	557	0.03%	0.006%
61	14.148	1916	1925	1927	rVB3	305	749	0.05%	0.008%
62	14.185	1931	1932	1936	rBV2	406	409	0.03%	0.004%
63	14.211	1936	1937	1941	rVB3	297	239	0.01%	0.002%
64	14.274	1947	1949	1957	rVB2	293	428	0.03%	0.004%
65	14.394	1971	1972	1976	rBV2	248	263	0.02%	0.003%
66	14.457	1982	1984	1991	rVB3	383	874	0.05%	0.009%
67	14.509	1991	1994	1997	rBV2	344	451	0.03%	0.005%
68	14.567	1997	2005	2007	rBV3	401	884	0.05%	0.009%
69	14.635	2013	2018	2021	rBV3	440	589	0.04%	0.006%
70	14.666	2022	2024	2028	rVV2	294	375	0.02%	0.004%
71	14.718	2031	2034	2037	rVB2	331	413	0.03%	0.004%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	14.760	2040	2042	2046	rBV	375	411	0.03%	0.004%
73	14.875	2057	2064	2065	rBV2	312	483	0.03%	0.005%
74	14.959	2070	2080	2117	rVV	769320	1505888	92.65%	15.704%
75	15.168	2117	2120	2123	rVB3	330	308	0.02%	0.003%
76	15.335	2150	2152	2164	rVB3	319	762	0.05%	0.008%
77	15.466	2170	2177	2180	rVB3	270	461	0.03%	0.005%
78	15.513	2182	2186	2193	rVB3	225	428	0.03%	0.004%
79	16.031	2282	2285	2298	rBV3	181	428	0.03%	0.004%
80	16.130	2298	2304	2305	rVV3	184	244	0.02%	0.003%
81	16.188	2305	2315	2352	rVB	626468	1184668	72.89%	12.354%
82	16.408	2352	2357	2368	rBV3	469	1043	0.06%	0.011%
83	16.633	2383	2400	2402	rVB2	197	788	0.05%	0.008%
84	16.795	2402	2431	2433	rBV3	257	1604	0.10%	0.017%
85	16.946	2452	2460	2461	rBV3	185	375	0.02%	0.004%
86	16.973	2461	2465	2478	rVB4	805	1582	0.10%	0.016%
87	17.061	2478	2482	2485	rBV3	338	529	0.03%	0.006%
88	17.281	2521	2524	2526	rVB3	555	432	0.03%	0.005%
89	17.323	2530	2532	2540	rVB4	462	661	0.04%	0.007%
90	17.375	2540	2542	2544	rBV2	477	420	0.03%	0.004%
91	17.433	2544	2553	2581	rVV	846336	1589875	97.82%	16.580%
92	17.590	2581	2583	2585	rVB2	539	397	0.02%	0.004%
93	17.689	2598	2602	2605	rBV2	632	613	0.04%	0.006%
94	17.726	2605	2609	2640	rVV4	973	4139	0.25%	0.043%
95	17.904	2640	2643	2655	rVB4	600	1774	0.11%	0.019%
96	18.071	2674	2675	2680	rVB	448	275	0.02%	0.003%
97	18.291	2715	2717	2727	rBV4	750	1616	0.10%	0.017%
98	18.468	2727	2751	2753	rVV3	612	2770	0.17%	0.029%
99	18.667	2786	2789	2794	rVB3	848	916	0.06%	0.010%
100	18.814	2794	2817	2820	rBV5	921	4152	0.26%	0.043%

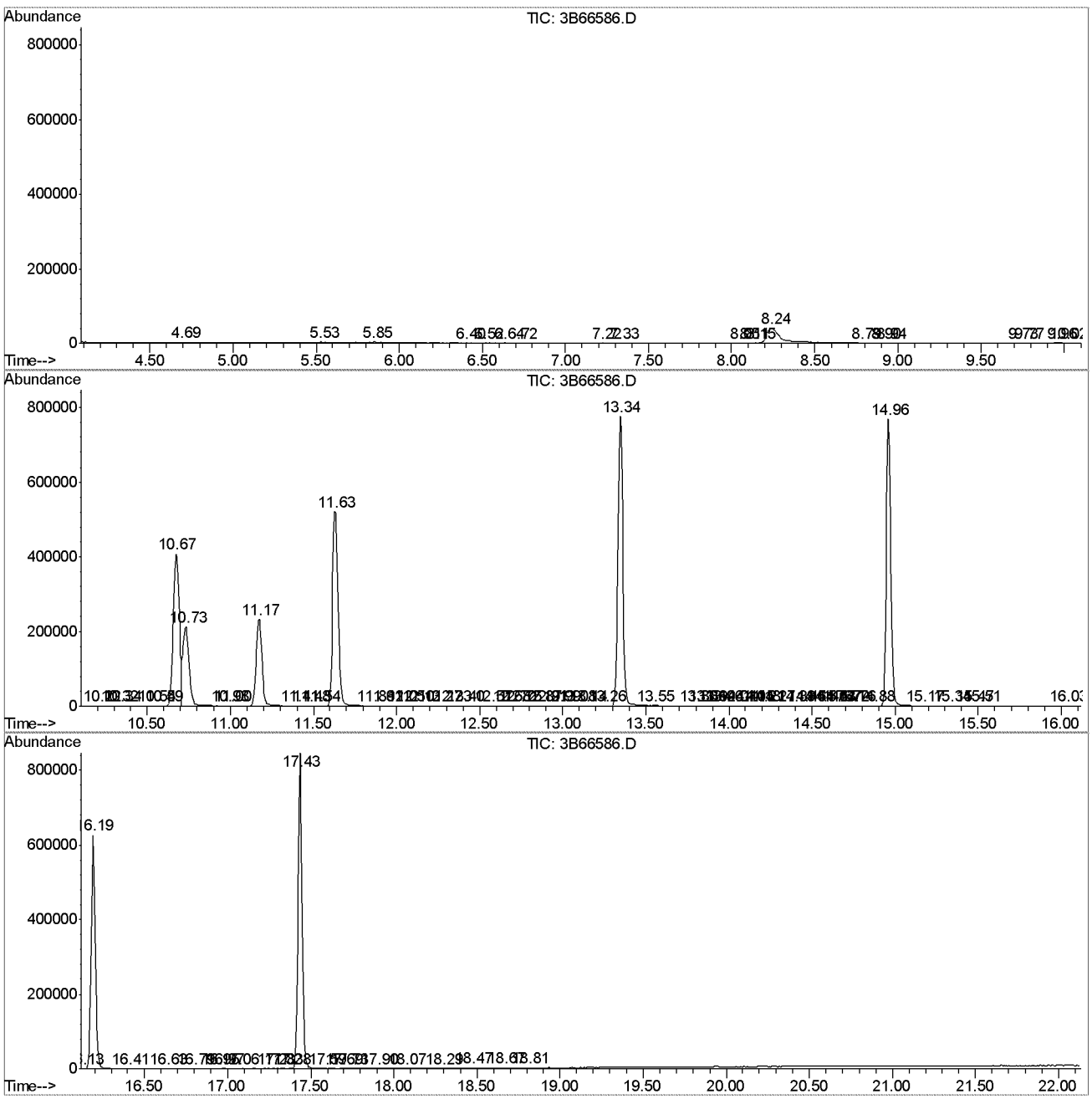
Sum of corrected areas: 9589074

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



ACCUTEST LABORATORIES
JA66701
SII-SSA-0014-006050

Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3108-V3B3109\
Data File : 3B66586.D
Acq On : 26 Jan 2011 10:24 pm
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3109,w,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 10:25:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	152359	500.00	ug/L	-0.02
5) pentafluorobenzene	10.67	168	372948	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	501706	50.00	ug/L	0.00
93) chlorobenzene-d5	14.96	117	481698	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	257846	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.73	113	151266	51.29	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.58%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	191317	49.48	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 98.96%			
85) toluene-d8 (s)	13.34	98	588918	52.43	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 104.86%			
111) 4-bromofluorobenzene (s)	16.19	95	231122	51.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.66%			

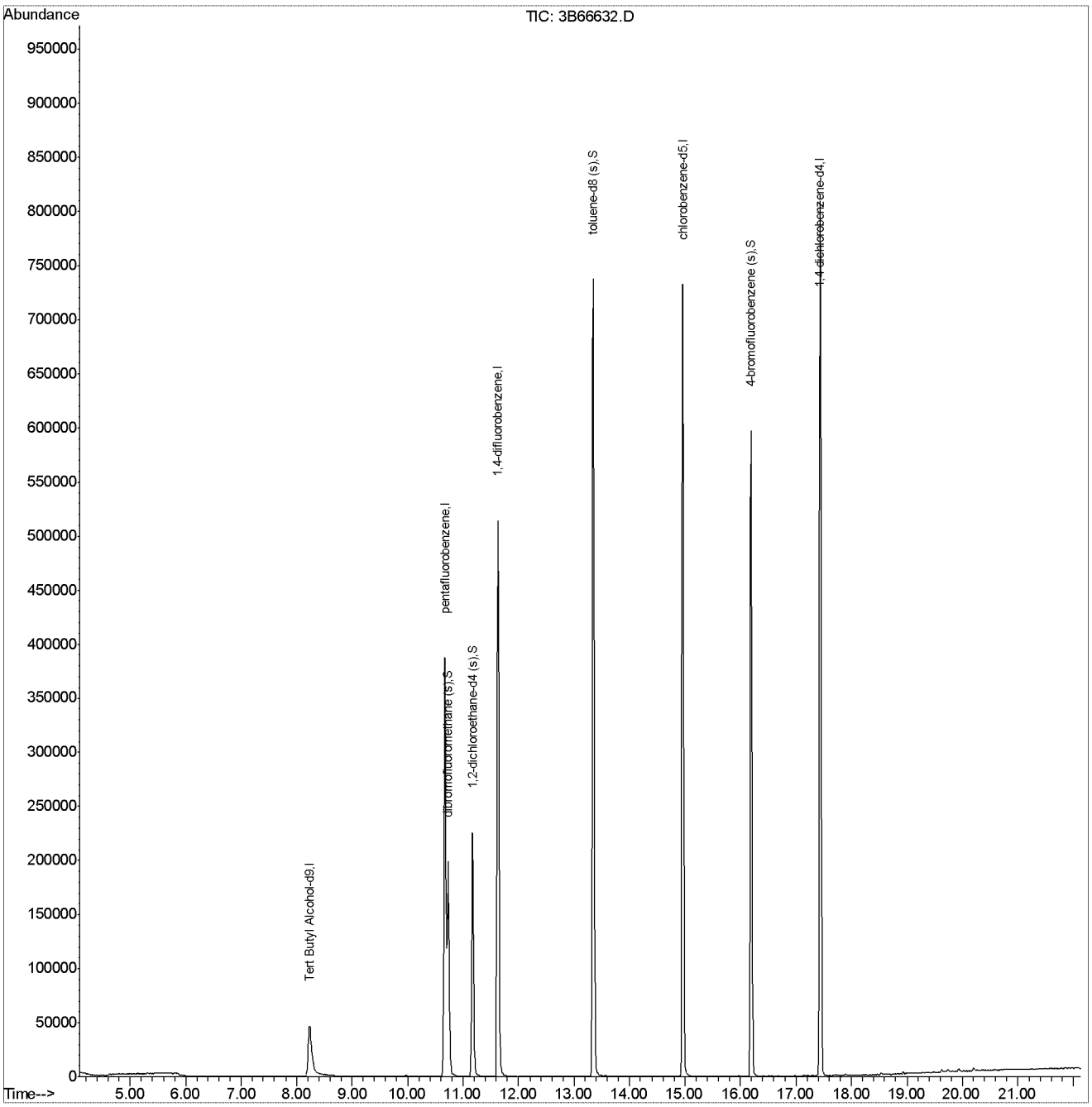
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3B66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 31 10:25:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration



ACCUTEST LABORATORIES
JA66701

SII-SSA-0014-006053

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.629	92	105	118	rBV4	1617	7821	0.51%	0.084%
2	4.864	148	150	173	rBV5	961	2987	0.19%	0.032%
3	5.769	321	323	394	rVB6	2822	23731	1.53%	0.255%
4	6.402	443	444	483	rBV3	351	2366	0.15%	0.025%
5	6.685	494	498	502	rBV2	341	520	0.03%	0.006%
6	6.716	502	504	514	rVV2	338	822	0.05%	0.009%
7	6.779	514	516	524	rVV	470	625	0.04%	0.007%
8	6.841	524	528	533	rVV2	309	527	0.03%	0.006%
9	6.899	533	539	544	rVV3	212	440	0.03%	0.005%
10	6.930	544	545	571	rVV3	251	915	0.06%	0.010%
11	7.119	579	581	586	rBV	357	317	0.02%	0.003%
12	7.150	586	587	593	rVV3	246	357	0.02%	0.004%
13	7.218	593	600	608	rVV3	223	691	0.04%	0.007%
14	7.276	608	611	627	rVB3	354	1153	0.07%	0.012%
15	7.370	627	629	637	rBV2	306	640	0.04%	0.007%
16	7.417	637	638	648	rBV2	271	399	0.03%	0.004%
17	7.600	665	673	680	rVB3	240	683	0.04%	0.007%
18	7.987	745	747	755	rBV2	276	481	0.03%	0.005%
19	8.227	778	793	892	rVB2	46357	260294	16.82%	2.796%
20	8.751	892	893	911	rVB3	218	693	0.04%	0.007%
21	8.860	911	914	930	rVB3	393	1634	0.11%	0.018%
22	8.954	930	932	943	rBV3	456	1274	0.08%	0.014%
23	9.336	997	1005	1007	rVB3	338	784	0.05%	0.008%
24	9.352	1007	1008	1012	rBV	320	375	0.02%	0.004%
25	9.478	1029	1032	1037	rVB2	208	323	0.02%	0.003%
26	9.556	1045	1047	1057	rVB3	342	662	0.04%	0.007%
27	9.645	1062	1064	1068	rVB2	310	341	0.02%	0.004%
28	9.734	1078	1081	1084	rBV	275	362	0.02%	0.004%
29	9.791	1089	1092	1100	rBV2	311	583	0.04%	0.006%
30	9.844	1100	1102	1108	rVB2	492	474	0.03%	0.005%
31	9.912	1109	1115	1116	rVB2	339	331	0.02%	0.004%
32	9.969	1116	1126	1134	rBV4	1210	3534	0.23%	0.038%
33	10.377	1201	1204	1213	rBV2	324	533	0.03%	0.006%
34	10.670	1244	1260	1267	rBV	387021	1001996	64.74%	10.764%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	10.728	1267	1271	1309	rVV	198464	460354	29.74%	4.945%
36	10.937	1309	1311	1314	rVB2	316	329	0.02%	0.004%
37	10.963	1314	1316	1326	rBV	234	308	0.02%	0.003%
38	11.094	1335	1341	1344	rBV2	219	355	0.02%	0.004%
39	11.167	1344	1355	1396	rVV	225145	529351	34.20%	5.687%
40	11.423	1400	1404	1411	rBV2	242	472	0.03%	0.005%
41	11.627	1428	1443	1488	rBV	513255	1138184	73.54%	12.227%
42	12.176	1544	1548	1554	rBV2	336	386	0.02%	0.004%
43	12.694	1645	1647	1650	rVB	411	320	0.02%	0.003%
44	12.814	1667	1670	1673	rVB2	375	439	0.03%	0.005%
45	12.846	1673	1676	1678	rBV2	358	377	0.02%	0.004%
46	12.872	1678	1681	1686	rVB3	331	436	0.03%	0.005%
47	12.945	1692	1695	1699	rBV2	351	545	0.04%	0.006%
48	13.081	1717	1721	1723	rVB2	331	471	0.03%	0.005%
49	13.102	1723	1725	1729	rBV	302	366	0.02%	0.004%
50	13.191	1739	1742	1746	rVB2	327	348	0.02%	0.004%
51	13.233	1749	1750	1753	rVB2	350	312	0.02%	0.003%
52	13.343	1759	1771	1808	rBV	737580	1547704	100.00%	16.626%
53	13.552	1808	1811	1825	rVB3	1123	2717	0.18%	0.029%
54	13.834	1860	1865	1868	rVB3	278	459	0.03%	0.005%
55	13.871	1868	1872	1876	rVB2	297	490	0.03%	0.005%
56	14.200	1928	1935	1937	rVB2	261	499	0.03%	0.005%
57	14.268	1946	1948	1955	rVB2	258	323	0.02%	0.003%
58	14.347	1959	1963	1970	rBV3	309	683	0.04%	0.007%
59	14.394	1970	1972	1975	rBV2	292	308	0.02%	0.003%
60	14.436	1979	1980	1986	rVV2	262	389	0.03%	0.004%
61	14.478	1986	1988	1991	rVV	388	354	0.02%	0.004%
62	14.640	2012	2019	2021	rBB2	245	408	0.03%	0.004%
63	14.666	2021	2024	2026	rBV3	313	353	0.02%	0.004%
64	14.828	2050	2055	2057	rVB3	302	470	0.03%	0.005%
65	14.865	2057	2062	2069	rBV3	313	748	0.05%	0.008%
66	14.959	2069	2080	2103	rBV	732265	1433547	92.62%	15.400%
67	15.158	2115	2118	2131	rVB3	349	618	0.04%	0.007%
68	15.388	2160	2162	2177	rVB3	211	563	0.04%	0.006%
69	15.513	2177	2186	2189	rVV2	182	400	0.03%	0.004%
70	15.566	2190	2196	2208	rVB2	208	681	0.04%	0.007%
71	15.848	2230	2250	2251	rVB3	198	753	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	15.963	2270	2272	2286	rVV2	652	967	0.06%	0.010%
73	16.041	2286	2287	2293	rVB2	259	321	0.02%	0.003%
74	16.078	2293	2294	2306	rBV3	214	555	0.04%	0.006%
75	16.188	2306	2315	2341	rVB	596534	1128626	72.92%	12.124%
76	16.402	2353	2356	2369	rBV3	505	1106	0.07%	0.012%
77	16.512	2372	2377	2381	rVV4	413	754	0.05%	0.008%
78	16.559	2381	2386	2404	rVV3	594	1534	0.10%	0.016%
79	16.674	2404	2408	2426	rVV4	494	1164	0.08%	0.013%
80	16.847	2426	2441	2451	rVB3	208	983	0.06%	0.011%
81	17.114	2462	2492	2496	rBV3	420	1588	0.10%	0.017%
82	17.150	2496	2499	2508	rVB3	459	833	0.05%	0.009%
83	17.213	2508	2511	2518	rBV2	407	424	0.03%	0.005%
84	17.276	2518	2523	2538	rVB4	752	1882	0.12%	0.020%
85	17.433	2540	2553	2580	rVB	809084	1528986	98.79%	16.425%
86	17.584	2580	2582	2599	rBV4	660	1746	0.11%	0.019%
87	17.689	2599	2602	2605	rBV3	817	1066	0.07%	0.011%
88	17.726	2605	2609	2624	rVB5	1415	3266	0.21%	0.035%
89	17.835	2624	2630	2631	rBV3	472	717	0.05%	0.008%
90	17.856	2632	2634	2639	rBV3	461	705	0.05%	0.008%
91	17.898	2639	2642	2656	rVV5	1034	2555	0.17%	0.027%
92	17.982	2656	2658	2662	rVB3	385	383	0.02%	0.004%
93	18.249	2692	2709	2711	rBV2	746	2724	0.18%	0.029%
94	18.463	2748	2750	2758	rBV4	813	1280	0.08%	0.014%
95	18.547	2758	2766	2777	rVV4	1354	4192	0.27%	0.045%
96	18.845	2799	2823	2832	rBV5	958	5225	0.34%	0.056%
97	18.923	2835	2838	2846	rBV7	2084	3890	0.25%	0.042%
98	19.624	2968	2972	2989	rBV7	2232	4121	0.27%	0.044%
99	19.734	2989	2993	3028	rBV8	1460	5424	0.35%	0.058%
100	22.072	3078	3440	3447	rBV9	2912	156249	10.10%	1.679%

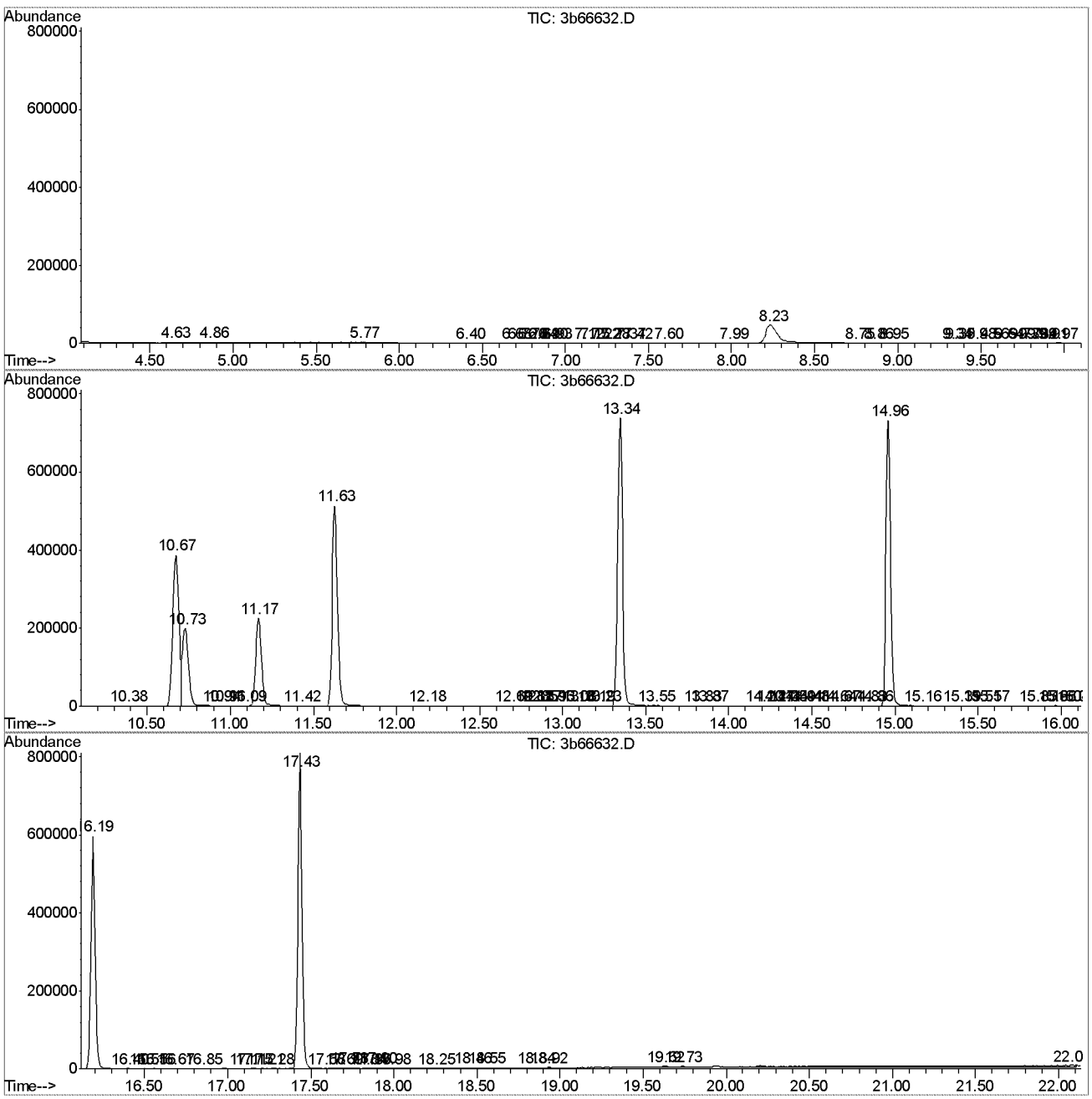
Sum of corrected areas: 9308754

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3111-V3B3112\
Data File : 3b66632.D
Acq On : 28 Jan 2011 10:17 am
Operator : tarar1
Sample : mb
Misc : ms7581,v3b3111,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 12:17:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.23	65	141802	500.00	ug/L	-0.01
5) pentafluorobenzene	10.67	168	381051	50.00	ug/L	0.00
63) 1,4-difluorobenzene	11.63	114	509120	50.00	ug/L	0.00
93) chlorobenzene-d5	14.95	117	479604	50.00	ug/L	0.00
109) 1,4-dichlorobenzene-d4	17.43	152	259275	50.00	ug/L	0.00
System Monitoring Compounds						
55) dibromofluoromethane (s)	10.72	113	149122	49.48	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.96%			
56) 1,2-dichloroethane-d4 (s)	11.17	65	180390	45.66	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 91.32%			
85) toluene-d8 (s)	13.34	98	587347	51.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 103.06%			
111) 4-bromofluorobenzene (s)	16.19	95	227669	50.78	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 101.56%			

Target Compounds	Qvalue

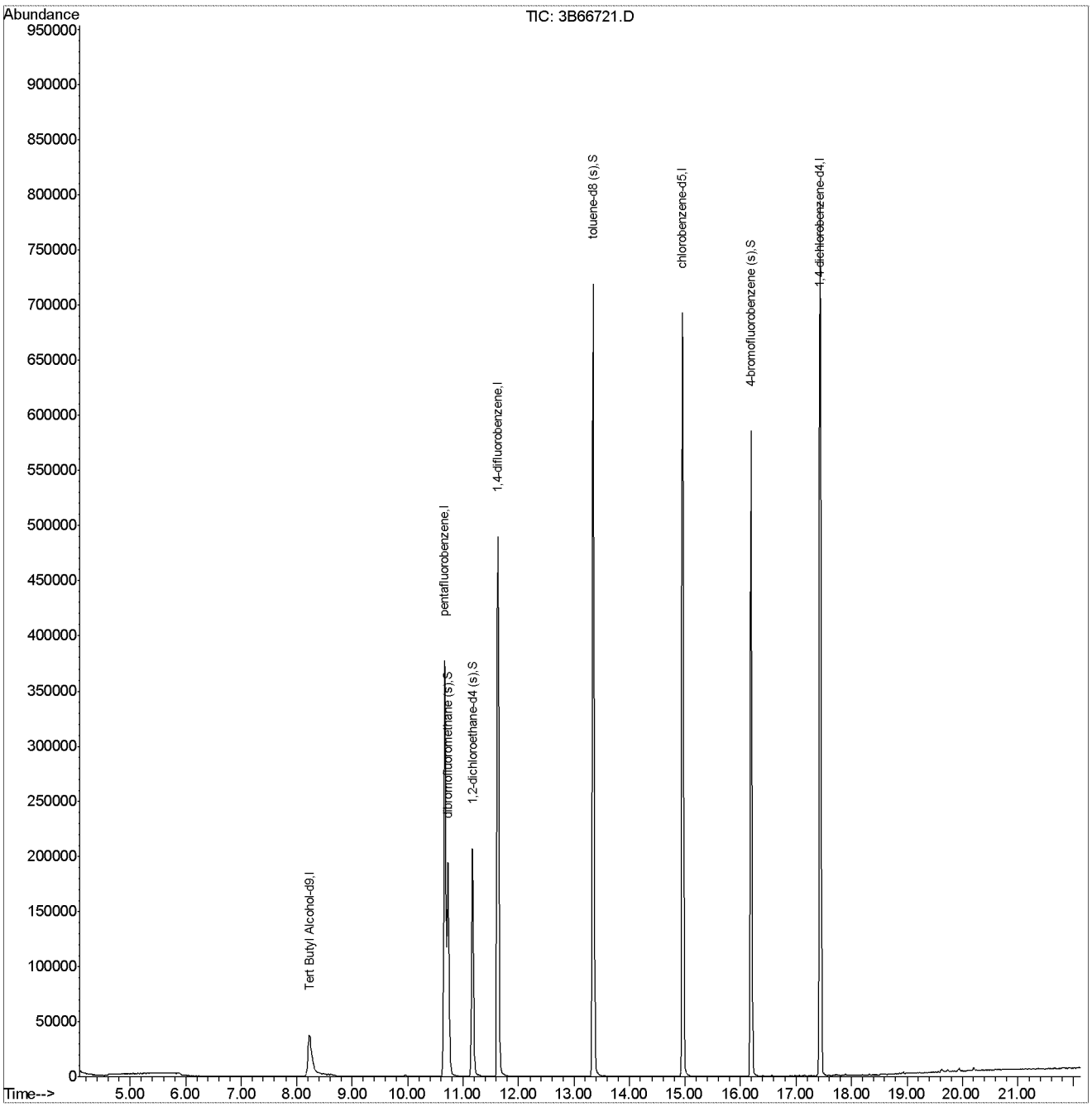
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (LSC Reviewed)

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3B66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 01 12:17:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um
QLast Update : Thu Jan 20 11:57:41 2011
Response via : Initial Calibration

6.2.5 6



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.603	94	100	104	rBV3	813	1890	0.12%	0.021%
2	4.634	104	106	115	rVV4	842	2001	0.13%	0.022%
3	5.126	157	200	230	rBV8	970	13189	0.87%	0.144%
4	6.407	443	445	458	rBV2	302	815	0.05%	0.009%
5	6.528	466	468	482	rBV3	302	598	0.04%	0.007%
6	6.909	540	541	549	rBV2	246	557	0.04%	0.006%
7	7.014	554	561	584	rVV3	318	1766	0.12%	0.019%
8	7.145	584	586	600	rVV	277	726	0.05%	0.008%
9	7.229	600	602	609	rVV3	260	364	0.02%	0.004%
10	7.286	609	613	622	rVV2	143	360	0.02%	0.004%
11	7.406	633	636	652	rBV3	433	1892	0.12%	0.021%
12	7.720	694	696	700	rVB2	346	416	0.03%	0.005%
13	7.752	700	702	709	rBV2	333	618	0.04%	0.007%
14	7.799	709	711	721	rVV2	328	770	0.05%	0.008%
15	7.882	721	727	728	rVV2	307	450	0.03%	0.005%
16	7.914	728	733	749	rVB4	487	1698	0.11%	0.019%
17	8.024	749	754	756	rBV	341	448	0.03%	0.005%
18	8.065	759	762	776	rVV3	301	1001	0.07%	0.011%
19	8.227	776	793	871	rVV2	37597	237368	15.60%	2.593%
20	8.641	871	872	890	rVB4	1439	4718	0.31%	0.052%
21	8.928	920	927	928	rBV2	293	575	0.04%	0.006%
22	9.059	945	952	960	rVB3	244	826	0.05%	0.009%
23	9.226	982	984	1002	rVB3	173	543	0.04%	0.006%
24	9.362	1002	1010	1013	rVB3	182	402	0.03%	0.004%
25	9.593	1051	1054	1063	rVB3	179	381	0.03%	0.004%
26	9.854	1097	1104	1109	rVV	451	527	0.03%	0.006%
27	9.953	1117	1123	1144	rVB4	1282	3346	0.22%	0.037%
28	10.126	1151	1156	1165	rVB3	207	414	0.03%	0.005%
29	10.267	1181	1183	1189	rVB3	305	582	0.04%	0.006%
30	10.346	1194	1198	1201	rVV2	359	513	0.03%	0.006%
31	10.414	1210	1211	1217	rVV	287	461	0.03%	0.005%
32	10.456	1217	1219	1225	rVV3	340	661	0.04%	0.007%
33	10.492	1225	1226	1232	rVV	427	570	0.04%	0.006%
34	10.586	1239	1244	1247	rVV3	327	506	0.03%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

35	10.665	1247	1259	1266	rVV	377152	973099	63.94%	10.630%
36	10.722	1266	1270	1301	rVV	193984	475593	31.25%	5.195%
37	10.895	1301	1303	1309	rVV4	868	1253	0.08%	0.014%
38	10.932	1309	1310	1319	rVB2	459	491	0.03%	0.005%
39	11.167	1342	1355	1389	rBV	206921	506772	33.30%	5.536%
40	11.350	1389	1390	1393	rVV	539	376	0.02%	0.004%
41	11.376	1393	1395	1400	rVB2	317	507	0.03%	0.006%
42	11.627	1432	1443	1474	rBV	489932	1121890	73.72%	12.255%
43	12.276	1564	1567	1572	rBV2	336	473	0.03%	0.005%
44	12.307	1572	1573	1581	rVB2	303	389	0.03%	0.004%
45	12.427	1591	1596	1599	rVV2	296	338	0.02%	0.004%
46	12.522	1609	1614	1615	rBV2	300	364	0.02%	0.004%
47	12.542	1615	1618	1621	rVB2	349	361	0.02%	0.004%
48	12.888	1680	1684	1687	rBV2	339	421	0.03%	0.005%
49	12.914	1687	1689	1692	rVB2	328	379	0.02%	0.004%
50	12.966	1692	1699	1702	rBV	355	951	0.06%	0.010%
51	13.055	1715	1716	1723	rVB2	315	589	0.04%	0.006%
52	13.154	1731	1735	1742	rBV3	323	834	0.05%	0.009%
53	13.343	1760	1771	1809	rBV	718972	1521929	100.00%	16.625%
54	13.829	1862	1864	1870	rVB3	333	594	0.04%	0.006%
55	13.876	1870	1873	1875	rBV2	375	420	0.03%	0.005%
56	13.991	1888	1895	1898	rBV	324	524	0.03%	0.006%
57	14.106	1911	1917	1922	rBV3	294	658	0.04%	0.007%
58	14.248	1937	1944	1947	rVB2	285	570	0.04%	0.006%
59	14.289	1947	1952	1955	rVB2	263	444	0.03%	0.005%
60	14.326	1955	1959	1961	rBV	301	410	0.03%	0.004%
61	14.399	1969	1973	1979	rVB2	244	601	0.04%	0.007%
62	14.462	1979	1985	1986	rBV2	276	388	0.03%	0.004%
63	14.525	1989	1997	1998	rBV2	354	528	0.03%	0.006%
64	14.561	2003	2004	2009	rBV2	280	413	0.03%	0.005%
65	14.812	2046	2052	2055	rVB2	346	663	0.04%	0.007%
66	14.844	2055	2058	2062	rBV2	294	452	0.03%	0.005%
67	14.870	2062	2063	2068	rVB2	292	397	0.03%	0.004%
68	14.954	2068	2079	2111	rBV	692757	1392717	91.51%	15.214%
69	15.137	2111	2114	2130	rVB3	455	1735	0.11%	0.019%
70	15.252	2135	2136	2147	rBV3	375	990	0.07%	0.011%
71	15.372	2147	2159	2161	rBV3	201	526	0.03%	0.006%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

72	15.430	2161	2170	2175	rBV3	217	466	0.03%	0.005%
73	15.592	2187	2201	2202	rVB2	198	515	0.03%	0.006%
74	16.188	2304	2315	2344	rVB	584733	1109923	72.93%	12.124%
75	16.392	2351	2354	2361	rVB2	370	674	0.04%	0.007%
76	16.502	2374	2375	2381	rBV2	219	342	0.02%	0.004%
77	16.554	2381	2385	2396	rVB5	551	925	0.06%	0.010%
78	16.748	2418	2422	2440	rBV3	303	1095	0.07%	0.012%
79	16.920	2453	2455	2462	rVB4	500	505	0.03%	0.006%
80	16.988	2462	2468	2473	rBV3	424	795	0.05%	0.009%
81	17.051	2478	2480	2485	rVB2	422	468	0.03%	0.005%
82	17.150	2496	2499	2507	rVB2	501	930	0.06%	0.010%
83	17.265	2519	2521	2529	rBV4	677	1223	0.08%	0.013%
84	17.318	2529	2531	2538	rVV	252	376	0.02%	0.004%
85	17.365	2538	2540	2543	rVV2	535	698	0.05%	0.008%
86	17.433	2543	2553	2578	rVB	793684	1504093	98.83%	16.430%
87	17.574	2578	2580	2583	rBV2	491	408	0.03%	0.004%
88	17.652	2594	2595	2603	rVV3	509	795	0.05%	0.009%
89	17.731	2603	2610	2616	rVB3	1207	2435	0.16%	0.027%
90	17.820	2624	2627	2633	rBV2	476	791	0.05%	0.009%
91	17.893	2636	2641	2644	rVV4	1104	1324	0.09%	0.014%
92	17.977	2653	2657	2660	rBV2	580	1012	0.07%	0.011%
93	18.374	2730	2733	2755	rBV6	707	2698	0.18%	0.029%
94	18.604	2755	2777	2783	rBV4	804	4174	0.27%	0.046%
95	18.766	2784	2808	2810	rVV5	561	1904	0.13%	0.021%
96	18.934	2835	2840	2847	rVB4	2124	3623	0.24%	0.040%
97	19.588	2888	2965	2967	rBV10	1903	23864	1.57%	0.261%
98	19.629	2967	2973	3027	rVV10	3623	23919	1.57%	0.261%
99	19.943	3027	3033	3078	rVV9	3359	19326	1.27%	0.211%
100	22.093	3080	3444	3448	rVV9	1923	153109	10.06%	1.673%

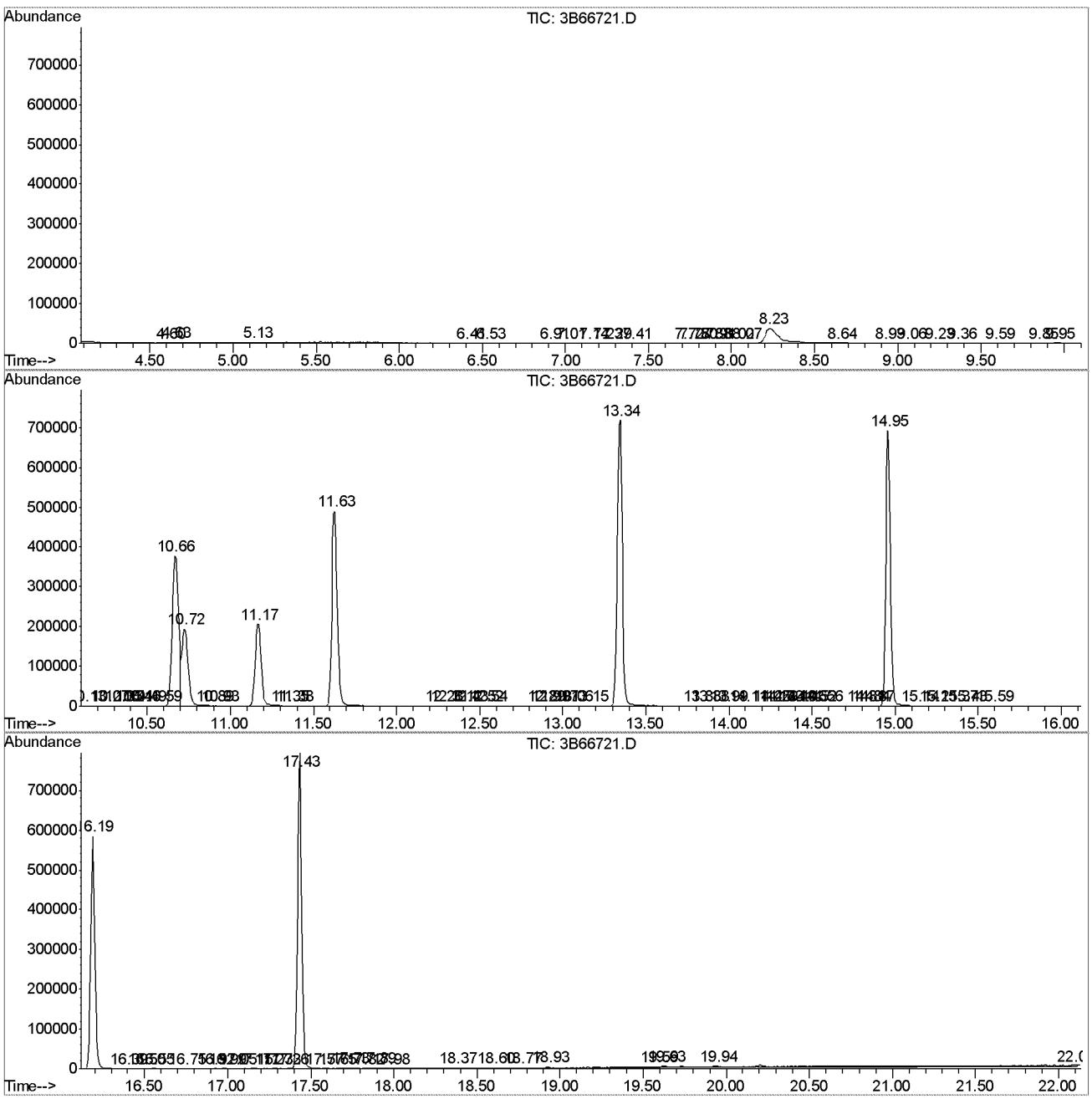
Sum of corrected areas: 9154401

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\V3B3115-V3B3116\
Data File : 3b66721.D
Acq On : 31 Jan 2011 10:16 am
Operator : tarar1
Sample : mb
Misc : ms7738,v3b3115,w,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M3B3095.M
Quant Title : SW-846 Method 8260B, zb624 60mx0.25mmx1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MB1	R85118.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MB1	R85118.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	88%	25-112%
321-60-8	2-Fluorobiphenyl	82%	31-106%
1718-51-0	Terphenyl-d14	92%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-MB1	4M23430.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	102%	32-135%
321-60-8	2-Fluorobiphenyl	96%	31-121%
1718-51-0	Terphenyl-d14	109%	10-130%

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-BS1	R85119.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	46.8	94	46-113
1912-24-9	Atrazine	50	56.9	114	55-127
100-52-7	Benzaldehyde	50	56.3	113	31-130
101-55-3	4-Bromophenyl phenyl ether	50	47.3	95	55-121
85-68-7	Butyl benzyl phthalate	50	42.2	84	55-132
92-52-4	1,1'-Biphenyl	50	44.9	90	43-107
91-58-7	2-Chloronaphthalene	50	41.0	82	39-108
106-47-8	4-Chloroaniline	50	35.9	72	34-103
86-74-8	Carbazole	50	45.4	91	63-122
105-60-2	Caprolactam	50	3.8	8	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	42.5	85	43-119
111-44-4	bis(2-Chloroethyl)ether	50	39.3	79	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	42.1	84	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	46.1	92	50-117
121-14-2	2,4-Dinitrotoluene	50	46.3	93	56-124
606-20-2	2,6-Dinitrotoluene	50	48.3	97	55-128
91-94-1	3,3'-Dichlorobenzidine	50	39.1	78	42-116
132-64-9	Dibenzofuran	50	43.5	87	53-109
84-74-2	Di-n-butyl phthalate	50	45.2	90	58-130
117-84-0	Di-n-octyl phthalate	50	46.4	93	55-133
84-66-2	Diethyl phthalate	50	42.5	85	52-123
131-11-3	Dimethyl phthalate	50	39.4	79	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.6	89	57-134
87-68-3	Hexachlorobutadiene	50	42.4	85	11-100
77-47-4	Hexachlorocyclopentadiene	100	126	126* [a]	5-120
67-72-1	Hexachloroethane	50	39.7	79	13-88
78-59-1	Isophorone	50	46.1	92	43-120
91-57-6	2-Methylnaphthalene	50	39.7	79	33-103
88-74-4	2-Nitroaniline	50	48.5	97	48-132
99-09-2	3-Nitroaniline	50	39.5	79	48-115
100-01-6	4-Nitroaniline	50	37.1	74	51-125
98-95-3	Nitrobenzene	50	40.6	81	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	48.7	97	41-121
86-30-6	N-Nitrosodiphenylamine	50	42.7	85	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	43.8	88	18-130

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-BS1	R85119.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	87%	25-112%
321-60-8	2-Fluorobiphenyl	81%	31-106%
1718-51-0	Terphenyl-d14	87%	14-122%

(a) Outside of in house control limits.

Blank Spike Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-BS12	4M23431.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.976	98	53-125
208-96-8	Acenaphthylene	1	1.04	104	51-111
120-12-7	Anthracene	1	1.12	112	62-134
56-55-3	Benzo(a)anthracene	1	1.03	103	46-142
50-32-8	Benzo(a)pyrene	1	0.842	84	49-132
205-99-2	Benzo(b)fluoranthene	1	1.01	101	36-167
191-24-2	Benzo(g,h,i)perylene	1	1.02	102	43-149
207-08-9	Benzo(k)fluoranthene	1	0.936	94	27-173
218-01-9	Chrysene	1	1.14	114	59-137
53-70-3	Dibenzo(a,h)anthracene	1	0.845	85	47-149
206-44-0	Fluoranthene	1	1.02	102	57-126
86-73-7	Fluorene	1	1.00	100	58-126
118-74-1	Hexachlorobenzene	1	0.954	95	36-140
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.888	89	51-151
91-20-3	Naphthalene	1	0.944	94	40-130
85-01-8	Phenanthrene	1	1.00	100	52-130
129-00-0	Pyrene	1	1.07	107	60-134

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	100%	32-135%
321-60-8	2-Fluorobiphenyl	98%	31-121%
1718-51-0	Terphenyl-d14	110%	10-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
OP47853-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
JA66701-1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	JA66701-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		100	94.5	95	92.5	93	2	25-127/35
1912-24-9	Atrazine	ND		100	128	128	123	123	4	40-133/27
100-52-7	Benzaldehyde	ND		100	108	108	109	109	1	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		100	92.0	92	95.9	96	4	47-123/28
85-68-7	Butyl benzyl phthalate	ND		100	89.3	89	86.5	87	3	47-137/27
92-52-4	1,1'-Biphenyl	ND		100	87.2	87	90.9	91	4	36-113/32
91-58-7	2-Chloronaphthalene	ND		100	82.6	83	85.5	86	3	35-110/32
106-47-8	4-Chloroaniline	ND		100	75.0	75	72.9	73	3	22-98/36
86-74-8	Carbazole	ND		100	92.5	93	99.1	99	7	54-127/26
105-60-2	Caprolactam	ND		100	22.7	23	21.2	21	7	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		100	85.3	85	85.4	85	0	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		100	79.8	80	77.5	78	3	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	84.7	85	82.5	83	3	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	97.0	97	97.0	97	0	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		100	102	102	96.1	96	6	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		100	102	102	99.4	99	3	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		100	69.0	69	70.5	71	2	17-119/36
132-64-9	Dibenzofuran	ND		100	89.5	90	88.8	89	1	44-114/30
84-74-2	Di-n-butyl phthalate	ND		100	90.6	91	93.8	94	3	49-134/26
117-84-0	Di-n-octyl phthalate	ND		100	95.9	96	92.1	92	4	46-140/25
84-66-2	Diethyl phthalate	ND		100	90.0	90	86.3	86	4	46-123/27
131-11-3	Dimethyl phthalate	ND		100	74.9	75	71.7	72	4	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	89.4	89	89.9	90	1	49-141/27
87-68-3	Hexachlorobutadiene	ND		100	89.3	89	90.4	90	1	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		200	227	114	239	120	5	4-124/39
67-72-1	Hexachloroethane	ND		100	85.0	85	82.8	83	3	16-86/39
78-59-1	Isophorone	ND		100	92.7	93	93.4	93	1	33-117/36
91-57-6	2-Methylnaphthalene	ND		100	85.6	86	85.1	85	1	22-117/37
88-74-4	2-Nitroaniline	ND		100	104	104	102	102	2	37-135/29
99-09-2	3-Nitroaniline	ND		100	85.6	86	82.8	83	3	34-115/28
100-01-6	4-Nitroaniline	ND		100	85.4	85	86.2	86	1	36-128/30
98-95-3	Nitrobenzene	ND		100	80.1	80	81.0	81	1	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		100	101	101	96.9	97	4	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		100	87.2	87	88.6	89	2	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	86.4	86	92.1	92	6	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
OP47853-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853	ER3223
JA66701-1	R85124.D	1	01/27/11	LP	01/26/11	OP47853	ER3223

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-1	Limits
4165-60-0	Nitrobenzene-d5	86%	86%	81%	25-112%
321-60-8	2-Fluorobiphenyl	78%	83%	73%	31-106%
1718-51-0	Terphenyl-d14	67%	69%	66%	14-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP47853A-MS	R85125.D	1	01/27/11	LP	01/26/11	OP47853A	ER3223
OP47853A-MSD	R85126.D	1	01/27/11	LP	01/26/11	OP47853A	ER3223
JA66701-1	4M23447.D	1	01/31/11	OYA	01/26/11	OP47853A	E4M1022

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA66701-1, JA66701-2, JA66701-3, JA66701-4, JA66701-5, JA66701-6, JA66701-7, JA66701-8

CAS No.	Compound	JA66701-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	0.362		100	88.1	88	89.4	89	1	51-125/22
208-96-8	Acenaphthylene	ND		100	84.8	85	86.6	87	2	46-113/22
120-12-7	Anthracene	ND		100	89.7	90	93.0	93	4	59-131/23
56-55-3	Benzo(a)anthracene	ND		100	84.7	85	88.3	88	4	53-127/23
50-32-8	Benzo(a)pyrene	ND		100	92.1	92	92.7	93	1	49-135/23
205-99-2	Benzo(b)fluoranthene	ND		100	84.4	84	93.5	94	10	42-140/30
191-24-2	Benzo(g,h,i)perylene	ND		100	98.0	98	99.4	99	1	37-146/25
207-08-9	Benzo(k)fluoranthene	ND		100	94.1	94	72.0	72	27	41-141/34
218-01-9	Chrysene	ND		100	85.1	85	86.8	87	2	54-129/21
53-70-3	Dibenzo(a,h)anthracene	ND		100	97.9	98	98.3	98	0	38-146/25
206-44-0	Fluoranthene	ND		100	89.6	90	102	102	13	56-129/22
86-73-7	Fluorene	0.687		100	96.6	96	94.3	94	2	58-126/25
118-74-1	Hexachlorobenzene	ND		100	88.7	89	91.7	92	3	52-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	97.0	97	98.1	98	1	36-150/25
91-20-3	Naphthalene	1.54		100	87.7	86	87.0	85	1	38-121/25
85-01-8	Phenanthrene	ND		100	89.3	89	91.1	91	2	57-127/23
129-00-0	Pyrene	ND		100	93.6	94	85.6	86	9	51-128/23

CAS No.	Surrogate Recoveries	MS	MSD	JA66701-1	Limits
4165-60-0	Nitrobenzene-d5	86%	86%	80%	32-135%
321-60-8	2-Fluorobiphenyl	78%	83%	83%	31-121%
1718-51-0	Terphenyl-d14	67%	69%	60%	10-130%

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1016-DFTPP	**Injection Date:**	01/21/11
Lab File ID:	4M23284.D	**Injection Time:**	09:44
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33290	33.3		Pass
68	Less than 2.0% of mass 69	510	0.51	(1.63) [a]	Pass
69	Mass 69 relative abundance	31340	31.4		Pass
70	Less than 2.0% of mass 69	102	0.10	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47020	47.1		Pass
197	Less than 1.0% of mass 198	366	0.37		Pass
198	Base peak, 100% relative abundance	99900	100.0		Pass
199	5.0 - 9.0% of mass 198	6849	6.86		Pass
275	10.0 - 30.0% of mass 198	19792	19.8		Pass
365	1.0 - 100.0% of mass 198	2508	2.51		Pass
441	Present, but less than mass 443	11432	11.4	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	77293	77.4		Pass
443	17.0 - 23.0% of mass 442	15327	15.3	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1016-IC1016	4M23287.D	01/21/11	13:00	03:16	Initial cal 5
E4M1016-ICC1016	4M23288.D	01/21/11	13:27	03:43	Initial cal 1
E4M1016-IC1016	4M23289.D	01/21/11	13:51	04:07	Initial cal .01
E4M1016-IC1016	4M23290.D	01/21/11	14:15	04:31	Initial cal .02
E4M1016-IC1016	4M23291.D	01/21/11	14:39	04:55	Initial cal .05
E4M1016-IC1016	4M23293.D	01/21/11	15:58	06:14	Initial cal .2
E4M1016-IC1016	4M23294.D	01/21/11	16:22	06:38	Initial cal .5
E4M1016-IC1016	4M23295.D	01/21/11	16:46	07:02	Initial cal 2.5
E4M1016-IC1016	4M23292.D	01/21/11	17:10	07:26	Initial cal .1
E4M1016-ICV1016	4M23296.D	01/21/11	17:34	07:50	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1022-DFTPP	**Injection Date:**	01/31/11
Lab File ID:	4M23424.D	**Injection Time:**	07:54
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20231	56.9		Pass
68	Less than 2.0% of mass 69	258	0.73	(1.58) [a]	Pass
69	Mass 69 relative abundance	16315	45.9		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	18709	52.6		Pass
197	Less than 1.0% of mass 198	111	0.31		Pass
198	Base peak, 100% relative abundance	35568	100.0		Pass
199	5.0 - 9.0% of mass 198	2548	7.16		Pass
275	10.0 - 30.0% of mass 198	6478	18.2		Pass
365	1.0 - 100.0% of mass 198	787	2.21		Pass
441	Present, but less than mass 443	3512	9.87	(74.1) [b]	Pass
442	40.0 - 100.0% of mass 198	24128	67.8		Pass
443	17.0 - 23.0% of mass 442	4742	13.3	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1022-CC1016	4M23425.D	01/31/11	08:05	00:11	Continuing cal 1
OP47887A-MB1	4M23426.D	01/31/11	08:40	00:46	Method Blank
ZZZZZZ	4M23428.D	01/31/11	09:27	01:33	(unrelated sample)
ZZZZZZ	4M23429.D	01/31/11	09:51	01:57	(unrelated sample)
OP47853A-MB1	4M23430.D	01/31/11	10:15	02:21	Method Blank
OP47853A-BS12	4M23431.D	01/31/11	10:38	02:44	Blank Spike
OP47900A-MB1	4M23432.D	01/31/11	11:02	03:08	Method Blank
OP47900A-BS12	4M23433.D	01/31/11	11:26	03:32	Blank Spike
ZZZZZZ	4M23434.D	01/31/11	11:50	03:56	(unrelated sample)
ZZZZZZ	4M23435.D	01/31/11	12:13	04:19	(unrelated sample)
ZZZZZZ	4M23436.D	01/31/11	12:37	04:43	(unrelated sample)
ZZZZZZ	4M23437.D	01/31/11	13:01	05:07	(unrelated sample)
ZZZZZZ	4M23438.D	01/31/11	13:25	05:31	(unrelated sample)
JA66969-5A	4M23441.D	01/31/11	15:00	07:06	(used for QC only; not part of job JA66701)
ZZZZZZ	4M23442.D	01/31/11	15:24	07:30	(unrelated sample)
ZZZZZZ	4M23443.D	01/31/11	15:48	07:54	(unrelated sample)
ZZZZZZ	4M23444.D	01/31/11	16:12	08:18	(unrelated sample)
ZZZZZZ	4M23446.D	01/31/11	16:59	09:05	(unrelated sample)
JA66701-1	4M23447.D	01/31/11	17:24	09:30	W-RM-012011-MWCD

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1022-DFTPP	**Injection Date:**	01/31/11
Lab File ID:	4M23424.D	**Injection Time:**	07:54
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JA66701-2	4M23448.D	01/31/11	17:47	09:53	W-RM-012011-MWCC
JA66701-3	4M23449.D	01/31/11	18:12	10:18	FB-012011
JA66701-4	4M23450.D	01/31/11	18:36	10:42	W-RM-012111-MWCE
JA66701-5	4M23451.D	01/31/11	18:59	11:05	W-RM-012111-MWBV
JA66701-6	4M23452.D	01/31/11	19:24	11:30	W-RM-012111-MWX
JA66701-7	4M23453.D	01/31/11	19:47	11:53	W-RM-012111-MWAY

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1023-DFTPP	**Injection Date:**	02/01/11
Lab File ID:	4M23456.D	**Injection Time:**	08:51
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18173	50.9		Pass
68	Less than 2.0% of mass 69	242	0.68	(1.60) [a]	Pass
69	Mass 69 relative abundance	15102	42.3		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	18400	51.6		Pass
197	Less than 1.0% of mass 198	77	0.22		Pass
198	Base peak, 100% relative abundance	35669	100.0		Pass
199	5.0 - 9.0% of mass 198	2399	6.73		Pass
275	10.0 - 30.0% of mass 198	6596	18.5		Pass
365	1.0 - 100.0% of mass 198	857	2.40		Pass
441	Present, but less than mass 443	3621	10.2	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	24907	69.8		Pass
443	17.0 - 23.0% of mass 442	4876	13.7	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1023-CC1016	4M23457.D	02/01/11	09:03	00:12	Continuing cal .5
JA66701-8	4M23458.D	02/01/11	09:28	00:37	W-RM-012111-MWCF
ZZZZZZ	4M23459.D	02/01/11	09:59	01:08	(unrelated sample)
OP47923-MB1	4M23460.D	02/01/11	13:36	04:45	Method Blank
OP47923-BS1	4M23461.D	02/01/11	13:59	05:08	Blank Spike
OP47923-MS	4M23462.D	02/01/11	14:23	05:32	Matrix Spike
OP47923-MSD	4M23463.D	02/01/11	14:47	05:56	Matrix Spike Duplicate
JA67088-1	4M23464.D	02/01/11	15:11	06:20	(used for QC only; not part of job JA66701)
ZZZZZZ	4M23465.D	02/01/11	15:35	06:44	(unrelated sample)
ZZZZZZ	4M23466.D	02/01/11	16:00	07:09	(unrelated sample)
ZZZZZZ	4M23467.D	02/01/11	16:23	07:32	(unrelated sample)
ZZZZZZ	4M23468.D	02/01/11	16:47	07:56	(unrelated sample)
ZZZZZZ	4M23469.D	02/01/11	17:12	08:21	(unrelated sample)
ZZZZZZ	4M23470.D	02/01/11	17:36	08:45	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3151-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83633.D	**Injection Time:**	14:32
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28061	32.8		Pass
68	Less than 2.0% of mass 69	193	0.23	(0.58) [a]	Pass
69	Mass 69 relative abundance	33117	38.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	49981	58.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	85475	100.0		Pass
199	5.0 - 9.0% of mass 198	5967	6.98		Pass
275	10.0 - 30.0% of mass 198	20633	24.1		Pass
365	1.0 - 100.0% of mass 198	2654	3.11		Pass
441	Present, but less than mass 443	13020	15.2	(77.0) [b]	Pass
442	40.0 - 100.0% of mass 198	84667	99.1		Pass
443	17.0 - 23.0% of mass 442	16907	19.8	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3151-IC3151	R83635.D	11/15/10	14:42	00:10	Initial cal 1
ER3151-IC3151	R83634.D	11/15/10	15:23	00:51	Initial cal 100
ER3151-IC3151	R83636.D	11/15/10	16:01	01:29	Initial cal 80
ER3151-IC3151	R83637.D	11/15/10	16:37	02:05	Initial cal 2
ER3151-IC3151	R83639.D	11/15/10	17:09	02:37	Initial cal 5
ER3151-IC3151	R83640.D	11/15/10	17:48	03:16	Initial cal 10
ER3151-ICC3151	R83638.D	11/15/10	18:22	03:50	Initial cal 50
ER3151-IC3151	R83641.D	11/15/10	18:58	04:26	Initial cal 25

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3152-DFTPP	**Injection Date:**	11/15/10
Lab File ID:	R83642.D	**Injection Time:**	22:37
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22024	32.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	25432	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37435	55.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	67512	100.0		Pass
199	5.0 - 9.0% of mass 198	4664	6.91		Pass
275	10.0 - 30.0% of mass 198	16603	24.6		Pass
365	1.0 - 100.0% of mass 198	2164	3.21		Pass
441	Present, but less than mass 443	9844	14.6	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	67437	99.9		Pass
443	17.0 - 23.0% of mass 442	13161	19.5	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3152-IC3152	R83643.D	11/15/10	23:00	00:23	Initial cal 100
ER3152-IC3152	R83644.D	11/15/10	23:36	00:59	Initial cal 80
ER3152-ICC3152	R83645.D	11/16/10	00:12	01:35	Initial cal 50
ER3152-IC3152	R83646.D	11/16/10	00:48	02:11	Initial cal 25
ER3152-IC3152	R83647.D	11/16/10	01:24	02:47	Initial cal 10
ER3152-IC3152	R83648.D	11/16/10	01:53	03:16	Initial cal 5
ER3152-IC3152	R83649.D	11/16/10	02:29	03:52	Initial cal 2
ER3152-IC3152	R83650.D	11/16/10	03:06	04:29	Initial cal 1
ER3152-ICV3151	R83651.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3152	R83651A.D	11/16/10	03:42	05:05	Initial cal verification 50
ER3152-ICV3151	R83652.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3152	R83652A.D	11/16/10	04:18	05:41	Initial cal verification 50
ER3152-ICV3151	R83653.D	11/16/10	04:54	06:17	Initial cal verification 50
ER3152-ICV3151	R83655.D	11/16/10	06:07	07:30	Initial cal verification 50
ER3152-ICV3152	R83655A.D	11/16/10	06:07	07:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3223-DFTPP	**Injection Date:**	01/27/11
Lab File ID:	R85115.D	**Injection Time:**	11:13
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57144	37.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	63325	41.2		Pass
70	Less than 2.0% of mass 69	220	0.14	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	86253	56.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	153885	100.0		Pass
199	5.0 - 9.0% of mass 198	10498	6.82		Pass
275	10.0 - 30.0% of mass 198	42064	27.3		Pass
365	1.0 - 100.0% of mass 198	5479	3.56		Pass
441	Present, but less than mass 443	22618	14.7	(74.5) [b]	Pass
442	40.0 - 100.0% of mass 198	151213	98.3		Pass
443	17.0 - 23.0% of mass 442	30376	19.7	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3223-CC3151	R85116.D	01/27/11	11:32	00:19	Continuing cal 50
ER3223-CC3152	R85117.D	01/27/11	12:03	00:50	Continuing cal 25
OP47853-MB1	R85118.D	01/27/11	12:39	01:26	Method Blank
OP47853-BS1	R85119.D	01/27/11	13:15	02:02	Blank Spike
ZZZZZZ	R85120.D	01/27/11	13:51	02:38	(unrelated sample)
ZZZZZZ	R85121.D	01/27/11	14:27	03:14	(unrelated sample)
ZZZZZZ	R85122.D	01/27/11	15:03	03:50	(unrelated sample)
ZZZZZZ	R85123.D	01/27/11	15:33	04:20	(unrelated sample)
JA66701-1	R85124.D	01/27/11	16:10	04:57	W-RM-012011-MWCD
OP47853-MS	R85125.D	01/27/11	16:46	05:33	Matrix Spike
OP47853A-MS	R85125.D	01/27/11	16:46	05:33	Matrix Spike
OP47853-MSD	R85126.D	01/27/11	17:27	06:14	Matrix Spike Duplicate
OP47853A-MSD	R85126.D	01/27/11	17:27	06:14	Matrix Spike Duplicate
JA66701-2	R85127.D	01/27/11	17:56	06:43	W-RM-012011-MWCC
ZZZZZZ	R85128.D	01/27/11	18:32	07:19	(unrelated sample)
ZZZZZZ	R85129.D	01/27/11	19:09	07:56	(unrelated sample)
ZZZZZZ	R85130.D	01/27/11	19:45	08:32	(unrelated sample)
ZZZZZZ	R85131.D	01/27/11	20:21	09:08	(unrelated sample)
ZZZZZZ	R85132.D	01/27/11	20:57	09:44	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3223-DFTPP	**Injection Date:**	01/27/11
Lab File ID:	R85115.D	**Injection Time:**	11:13
Instrument ID:	GCMSR		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	R85133.D	01/27/11	21:35	10:22	(unrelated sample)
ZZZZZZ	R85134.D	01/27/11	22:11	10:58	(unrelated sample)
ZZZZZZ	R85135.D	01/27/11	22:47	11:34	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	ER3224-DFTPP	**Injection Date:**	01/28/11
Lab File ID:	R85137.D	**Injection Time:**	15:39
Instrument ID:	GCMSR		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	43475	42.6		Pass
68	Less than 2.0% of mass 69	624	0.61	(1.34) [a]	Pass
69	Mass 69 relative abundance	46719	45.8		Pass
70	Less than 2.0% of mass 69	142	0.14	(0.30) [a]	Pass
127	40.0 - 60.0% of mass 198	60779	59.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	101965	100.0		Pass
199	5.0 - 9.0% of mass 198	6986	6.85		Pass
275	10.0 - 30.0% of mass 198	26181	25.7		Pass
365	1.0 - 100.0% of mass 198	3051	2.99		Pass
441	Present, but less than mass 443	11365	11.1	(73.8) [b]	Pass
442	40.0 - 100.0% of mass 198	78883	77.4		Pass
443	17.0 - 23.0% of mass 442	15406	15.1	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ER3224-CC3151	R85138.D	01/28/11	15:59	00:20	Continuing cal 25
ER3224-CC3152	R85139.D	01/28/11	16:35	00:56	Continuing cal 25
JA66701-3	R85140.D	01/28/11	17:11	01:32	FB-012011
JA66701-4	R85141.D	01/28/11	17:47	02:08	W-RM-012111-MWCE
JA66701-5	R85142.D	01/28/11	18:23	02:44	W-RM-012111-MWBV
JA66701-6	R85143.D	01/28/11	18:52	03:13	W-RM-012111-MWX
JA66701-7	R85144.D	01/28/11	19:28	03:49	W-RM-012111-MWAY
JA66701-8	R85145.D	01/28/11	20:05	04:26	W-RM-012111-MWCF
ZZZZZZ	R85146.D	01/28/11	20:41	05:02	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1022-CC1016	**Injection Date:**	01/31/11
Lab File ID:	4M23425.D	**Injection Time:**	08:05
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	28088	6.79	20362	9.07	32939	12.38	31370	15.47
Upper Limit [a]	56176	7.29	40724	9.57	65878	12.88	62740	15.97
Lower Limit [b]	14044	6.29	10181	8.57	16470	11.88	15685	14.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP47887A-MB1	24593	6.77	17021	9.06	26576	12.37	25149	15.46
ZZZZZZ	34371	6.79	24104	9.07	38413	12.39	36728	15.48
ZZZZZZ	23767	6.79	16530	9.07	25751	12.39	23177	15.48
OP47853A-MB1	26558	6.79	18655	9.09	30014	12.40	28495	15.49
OP47853A-BS12	24689	6.79	17577	9.09	27883	12.40	27392	15.49
OP47900A-MB1	25983	6.79	17723	9.09	28645	12.39	26099	15.49
OP47900A-BS12	27138	6.79	18477	9.07	29843	12.39	29231	15.49
ZZZZZZ	25282	6.79	19687	9.09	31282	12.40	33849	15.48
ZZZZZZ	27327	6.79	20235	9.07	32705	12.38	33705	15.47
ZZZZZZ	24464	6.79	18485	9.07	28801	12.39	30040	15.48
ZZZZZZ	26664	6.79	19264	9.07	31114	12.39	32359	15.47
ZZZZZZ	25909	6.79	19479	9.07	30308	12.39	31060	15.48
JA66969-5A	23965	6.79	17255	9.07	28050	12.39	29658	15.48
ZZZZZZ	25154	6.79	19008	9.07	29751	12.38	32202	15.47
ZZZZZZ	26825	6.79	19175	9.07	30543	12.39	33542	15.47
ZZZZZZ	24085	6.79	18281	9.07	30124	12.38	31496	15.47
ZZZZZZ	29896	6.79	24766	9.07	36749	12.39	39493	15.48
JA66701-1	33724	6.79	26029	9.07	42614	12.39	45538	15.48
JA66701-2	28531	6.79	23017	9.07	36185	12.39	38525	15.48
JA66701-3	30951	6.79	23309	9.07	37487	12.39	38407	15.48
JA66701-4	28425	6.79	22466	9.07	35277	12.39	36614	15.48
JA66701-5	27548	6.79	20087	9.07	33237	12.40	33846	15.49
JA66701-6	31496	6.79	24176	9.07	40150	12.39	42477	15.48
JA66701-7	28797	6.79	20783	9.07	33919	12.39	35715	15.48

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1023-CC1016	**Injection Date:**	02/01/11
Lab File ID:	4M23457.D	**Injection Time:**	09:03
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	21899	6.79	16200	9.07	24938	12.38	24754	15.47
Upper Limit [a]	43798	7.29	32400	9.57	49876	12.88	49508	15.97
Lower Limit [b]	10950	6.29	8100	8.57	12469	11.88	12377	14.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
JA66701-8	28614	6.79	22516	9.07	35856	12.38	36758	15.46
ZZZZZZ	43174[c]	6.82	32168[c]	9.13	38744[c]	12.44	44781[c]	15.46
OP47923-MB1	21799	6.79	16188	9.07	23954	12.38	22192	15.46
OP47923-BS1	25881	6.79	17024	9.07	25526	12.38	24444	15.46
OP47923-MS	23107	6.79	16879	9.07	24610	12.37	25523	15.46
OP47923-MSD	22259	6.79	16031	9.07	24338	12.37	24263	15.46
JA67088-1	22093	6.79	16487	9.07	24651	12.37	24629	15.46
ZZZZZZ	22770	6.79	16487	9.06	24950	12.37	26399	15.46
ZZZZZZ	23470	6.79	16684	9.07	24872	12.37	25360	15.46
ZZZZZZ	21983	6.79	15811	9.07	24138	12.37	25732	15.46
ZZZZZZ	25367	6.79	18039	9.07	28238	12.37	30848	15.46
ZZZZZZ	24608	6.79	17269	9.05	26127	12.37	28802	15.46
ZZZZZZ	23032	6.79	16529	9.07	25872	12.38	30134	15.46

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) Internal standard added twice.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3223-CC3151	**Injection Date:**	01/27/11
Lab File ID:	R85116.D	**Injection Time:**	11:32
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	355326	7.43	1300377	10.20	775048	14.31	1315798	17.77	1638871	22.12	1340332	23.63
Upper Limit [a]	710652	7.93	2600754	10.70	1550096	14.81	2631596	18.27	3277742	22.62	2680664	24.13
Lower Limit [b]	177663	6.93	650189	9.70	387524	13.81	657899	17.27	819436	21.62	670166	23.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP47853-MB1	265301	7.43	949334	10.19	544343	14.31	888779	17.76	1004996	22.11	996067	23.62
OP47853-BS1	290982	7.43	1055993	10.19	639369	14.31	1055845	17.77	1217790	22.11	1111772	23.63
ZZZZZZ	260859	7.43	931492	10.19	536187	14.31	892324	17.76	973601	22.11	964965	23.63
ZZZZZZ	301552	7.42	1143205	10.19	708681	14.31	1167766	17.76	1044985	22.11	830411	23.62
ZZZZZZ	258072	7.43	944165	10.19	558530	14.30	912165	17.76	1083076	22.11	1017954	23.62
ZZZZZZ	314244	7.43	1146605	10.19	691506	14.31	1154896	17.77	1383048	22.11	1207995	23.63
JA66701-1	269928	7.42	956703	10.19	572271	14.31	1026273	17.77	1263634	22.11	1015205	23.63
OP47853-MS	284277	7.42	1071637	10.19	687755	14.31	1252288	17.77	1179882	22.12	993967	23.63
OP47853A-MS	284277	7.42	1071637	10.19	687755	14.31	1252288	17.77	1179882	22.12	993967	23.63
OP47853-MSD	275233	7.43	992342	10.19	595381	14.31	1011622	17.77	1202944	22.11	1064539	23.63
OP47853A-MSD	275233	7.43	992342	10.19	595381	14.31	1011622	17.77	1202944	22.11	1064539	23.63
JA66701-2	303533	7.43	1103967	10.19	642128	14.31	1057882	17.77	1132845	22.11	1084564	23.63
ZZZZZZ	355461	7.44	1266098	10.22	905760	14.43	1201902	17.92	1333248	22.13	1145803	23.64
ZZZZZZ	252595	7.43	912943	10.19	551195	14.31	906445	17.77	1024011	22.11	994582	23.63
ZZZZZZ	291320	7.43	1068952	10.19	628437	14.31	1001538	17.76	1077796	22.11	1016047	23.63
ZZZZZZ	266012	7.42	948798	10.19	548529	14.31	896229	17.77	1069507	22.11	1018394	23.63
ZZZZZZ	304380	7.43	1164455	10.19	714017	14.31	1213013	17.77	1097506	22.11	939875	23.63
ZZZZZZ	280047	7.43	1004608	10.19	585291	14.31	968009	17.76	1070829	22.11	1075871	23.63
ZZZZZZ	263786	7.43	949921	10.19	564281	14.31	972258	17.77	1115324	22.11	956544	23.63
ZZZZZZ	327297	7.43	1153866	10.19	685533	14.31	1151902	17.77	1233458	22.11	1195315	23.63

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	ER3224-CC3151	**Injection Date:**	01/28/11
Lab File ID:	R85138.D	**Injection Time:**	15:59
Instrument ID:	GCMSR	**Method:**	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	375445	7.43	1309344	10.20	783066	14.31	1272584	17.78	1415220	22.11	1200884	23.63
Upper Limit [a]	750890	7.93	2618688	10.70	1566132	14.81	2545168	18.28	2830440	22.61	2401768	24.13
Lower Limit [b]	187723	6.93	654672	9.70	391533	13.81	636292	17.28	707610	21.61	600442	23.13
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
JA66701-3	298758	7.43	1044118	10.19	584532	14.31	887909	17.76	861655	22.10	775629	23.62
JA66701-4	298967	7.42	1042679	10.19	576651	14.31	856818	17.76	897218	22.10	763285	23.62
JA66701-5	302488	7.42	1035374	10.19	578517	14.31	846574	17.76	881025	22.10	788822	23.62
JA66701-6	316195	7.42	1084094	10.19	668964	14.31	1086595	17.77	1160109	22.10	932103	23.62
JA66701-7	313571	7.42	1099645	10.18	627129	14.30	982814	17.76	987860	22.10	833059	23.62
JA66701-8	313837	7.42	1092112	10.19	641229	14.30	1063552	17.77	1104835	22.10	927406	23.62
ZZZZZZ	336657	7.42	1265829	10.20	836106	14.34	1324437	17.81	1227978	22.11	876879	23.62

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA66701-1	R85124.D	81.0	73.0	66.0
JA66701-2	R85127.D	82.0	78.0	78.0
JA66701-3	R85140.D	91.0	85.0	81.0
JA66701-4	R85141.D	74.0	68.0	51.0
JA66701-5	R85142.D	85.0	80.0	71.0
JA66701-6	R85143.D	83.0	76.0	77.0
JA66701-7	R85144.D	75.0	67.0	61.0
JA66701-8	R85145.D	90.0	80.0	70.0
OP47853-BS1	R85119.D	87.0	81.0	87.0
OP47853-MB1	R85118.D	88.0	82.0	92.0
OP47853-MS	R85125.D	86.0	78.0	67.0
OP47853-MSD	R85126.D	86.0	83.0	69.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA66701-1	4M23447.D	80.0	83.0	60.0
JA66701-2	4M23448.D	91.0	94.0	78.0
JA66701-3	4M23449.D	94.0	94.0	81.0
JA66701-4	4M23450.D	78.0	75.0	49.0
JA66701-5	4M23451.D	90.0	91.0	75.0
JA66701-6	4M23452.D	81.0	88.0	75.0
JA66701-7	4M23453.D	79.0	80.0	65.0
JA66701-8	4M23458.D	98.0	91.0	70.0
OP47853A-BS12	4M23431.D	100.0	98.0	110.0
OP47853A-MB1	4M23430.D	102.0	96.0	109.0
OP47853A-MS	R85125.D	86.0	78.0	67.0
OP47853A-MSD	R85126.D	86.0	83.0	69.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-135%
S2 = 2-Fluorobiphenyl	31-121%
S3 = Terphenyl-d14	10-130%

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Initial Calibration

Calibration Files
0.05=4m23291.D .2 =4m23293.D 2.5 =4m23295.D .02 =4m23290.D
.1 =4m23292.D 1 =4m23288.D .01 =4m23289.D .5 =4m23294.D
5 =4m23287.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.614	0.610	0.578	0.604	0.604	0.590		0.575	0.558	0.592	3.34
3) Phenol-d5	0.771	0.763	0.694	0.761	0.795	0.746		0.740	0.615	0.736	7.71
4) Phenol	0.761	0.825	0.795	0.721	0.793	0.840		0.759	0.929	0.803	7.92
5) bis(2-Chloroethyl)ether	0.822	0.802	0.779	0.912	0.783	0.757	1.004	0.744	0.758	0.818	10.56
6) Nitrobenzene-d5	0.590	0.611	0.600	0.551	0.589	0.596		0.590	0.570	0.587	3.17
7) Naphthalene	1.926	1.856	1.675	1.901	1.851	1.691		1.687	1.661	1.781	6.32
8) Hexachlorobutadiene	0.316	0.283		0.328	0.287			0.298	0.277	0.298	6.71
9) 2-Methylnaphthalene	1.520	1.346	1.397	1.509	1.343	1.372	1.868	1.322	1.352	1.448	11.97
10) 1-Methylnaphthalene	1.450	1.431	1.269	1.475	1.365	1.351		1.296	1.255	1.362	6.19
11) 2-Fluorobiphenyl	1.430	1.397	1.287	1.374	1.383	1.280		1.298	1.313	1.345	4.26
12) I Fluorene-d10	ISTD										
13) Acenaphthylene	2.355	2.183	2.225	2.585	2.243	2.203		1.993	2.333	2.265	7.49
14) Acenaphthene	1.777	1.681	1.594	2.043	1.698	1.624		1.517	1.598	1.691	9.60
15) Fluorene	1.377	1.277	1.184	1.569	1.326	1.191		1.139	1.190	1.282	11.03
16) 2,6-Dinitrotoluene	0.388	0.582		0.384	0.568			0.418	0.682	0.504	24.67
----- Linear regression ----- Coefficient = 0.9953											
Response Ratio = -0.02627 + 0.68713 *A											
17) 2,4,6-Tribromophenol	0.135	0.172		0.129	0.168			0.146	0.181	0.155	13.83
18) Hexachlorobenzene	0.536	0.461	0.413	0.587	0.499	0.416		0.423	0.420	0.469	13.91
19) Pentachlorophenol	0.155	0.140	0.220	0.282	0.155	0.214		0.151	0.262	0.197	27.88
----- Linear regression ----- Coefficient = 0.9936											
Response Ratio = -0.03525 + 0.25937 *A											
20) Phenanthrene											

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

```
      2.032 1.826 1.725 2.438 1.942 1.701       1.654 1.757        1.884   13.66
21)  Anthracene
      1.687 1.389 1.590 1.987 1.356 1.562       1.277 1.673        1.565   14.55
22)  2,4-Dinitrotoluene
            0.342 0.679       0.301 0.596       0.391 0.735        0.507   36.65
            ----- Linear regression -----  Coefficient =  0.9983
              Response Ratio = -0.03017 + 0.75147 *A


23) I   Fluoranthene-d10      ----------------ISTD---------------------
24)  Fluoranthene
      1.482 1.176 1.099       1.282 1.141       1.073 1.118        1.196   11.99
25)  Pyrene
      1.137 1.026 1.115 1.371 1.030 1.092       0.974 1.137        1.110   10.88
26)  Terphenyl-d14
      0.432 0.441 0.377 0.536 0.405 0.419       0.420 0.416        0.431   10.79
27)  Benzo[a]anthracene
      0.629 0.531 0.797       0.540 0.709       0.542 0.813        0.652   18.81
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.01678 + 0.82341 *A

28)  Chrysene
      0.888 0.774 0.772       0.742 0.884       0.710 0.881        0.807    9.32
29)  bis(2-Ethylhexyl)phthalate
      0.327 0.247 0.348       0.357 0.290       0.220 0.497        0.327   27.83
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = 0.00237 + 0.20009 *A + 0.23586 *A^2


30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
      0.319 0.258 0.327       0.280 0.306       0.271 0.329        0.298    9.62
32)  Benzo[k]fluoranthene
      0.302 0.207 0.255       0.271 0.281       0.231 0.286        0.262   12.66
33)  Benzo[a]pyrene
            1.506 1.258       1.889 1.394       1.293 1.289        1.438   16.62
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.01149 + 1.27359 *A

34)  Indeno[1,2,3-cd]pyrene
      1.027 0.746 1.097       0.762 1.036       0.778 1.252        0.957   20.56
            ----- Linear regression -----  Coefficient =  0.9961
              Response Ratio = -0.03593 + 1.25236 *A

35)  Dibenz[a,h]anthracene
      0.736 0.555 0.856       0.602 0.796       0.573 0.973        0.727   21.78
            ----- Linear regression -----  Coefficient =  0.9962
              Response Ratio = -0.02925 + 0.97470 *A

36)  Benzo[g,h,i]perylene
      1.308 0.968 1.096       1.019 1.091       0.962 1.160        1.086   11.20
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M1016SIM.M        Mon Jan 24 15:30:58 2011   RPT1
```

7.1.1

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICV1016
Lab FileID: 4M23296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1016\4m23296.D Vial: 11
Acq On : 21 Jan 2011 5:34 pm Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1016,acid Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 08:13:52 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	68	0.00	6.77
4	t	Phenol	0.803	0.921	-14.7	75	0.00	3.57
12	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	9.07
19	t	Pentachlorophenol	5.000	5.009	-0.2	73	0.00	10.40
23	I	Fluoranthene-d10	1.000	1.000	0.0	64	0.00	12.38
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 08:29:16 2011 RPT1

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1017\4m23300.D Vial: 3
Acq On : 24 Jan 2011 10:50 am Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1017 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.02	6.79
5	t	bis(2-Chloroethyl)ether	0.818	0.702	14.2	75	0.00	3.62
7	t	Naphthalene	1.781	1.785	-0.2	86	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.321	-7.7	91	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.236	14.6	73	0.00	6.67
12	I	Fluorene-d10	1.000	1.000	0.0	70	0.00	9.07
13	t	Acenaphthylene	2.265	2.256	0.4	71	0.00	8.03
14	t	Acenaphthene	1.691	1.774	-4.9	76	0.00	8.33
15	t	Fluorene	1.282	1.315	-2.6	77	0.01	9.12
18	t	Hexachlorobenzene	0.469	0.447	4.7	75	0.02	10.11
20	t	Phenanthrene	1.884	1.826	3.1	75	0.02	10.57
21	t	Anthracene	1.565	1.469	6.1	65	0.00	10.63
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	61	0.01	12.39
24	t	Fluoranthene	1.196	1.223	-2.3	65	0.01	12.41
25	t	Pyrene	1.110	1.137	-2.4	63	0.00	12.70
		----------	True	Calc.	% Drift		----------	
27	t	Benzo[a]anthracene	1.000	0.943	5.7	61	0.02	14.16
		----------	AvgRF	CCRF	% Dev		----------	
28	t	Chrysene	0.807	0.947	-17.3	65	0.00	14.19
		----------	True	Calc.	% Drift		----------	
29		bis(2-Ethylhexyl)phthalat	1.000	1.148	-14.8	66	0.00	14.43
		----------	AvgRF	CCRF	% Dev		----------	
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	61	0.01	15.48
31	t	Benzo[b]fluoranthene	0.298	0.280	6.0	56	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.256	2.3	56	0.01	15.24

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	1.000	0.934	6.6	54	0.00	15.49
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	56	0.01	16.38
35	t	Dibenz[a,h]anthracene	1.000	0.893	10.7	58	0.01	16.41

			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.066	1.8	59	0.01	16.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 15:33:12 2011 RPT1

7.7.3

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1022-CC1016
Lab FileID: 4M23425.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1022\4m23425.D Vial: 2
Acq On : 31 Jan 2011 8:05 am Operator: ninap
Sample : cc1016-1 Inst : MS4M
Misc : op47830a,e4m1022 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	107	0.02	6.79
2	S	2-Fluorophenol	0.592	0.576	2.7	105	0.00	2.47
3	S	Phenol-d5	0.736	0.716	2.7	103	0.02	3.57
4	t	Phenol	0.803	0.759	5.5	97	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.965	-18.0	137	0.00	3.62
6	S	Nitrobenzene-d5	0.587	0.586	0.2	105	0.01	4.63
7	t	Naphthalene	1.781	1.610	9.6	102	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.284	4.7	106	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.358	6.2	106	0.00	6.67
10	t	1-Methylnaphthalene	1.362	1.206	11.5	96	0.00	6.82
11	S	2-Fluorobiphenyl	1.345	1.308	2.8	109	0.02	7.34
12	I	Fluorene-d10	1.000	1.000	0.0	100	0.00	9.07
13	t	Acenaphthylene	2.265	2.553	-12.7	116	0.00	8.03
14	t	Acenaphthene	1.691	1.741	-3.0	107	0.00	8.33
15	t	Fluorene	1.282	1.258	1.9	106	0.01	9.12
		----------	True	Calc.	% Drift		----------	
16	t	2,6-Dinitrotoluene	1.000	1.089	-8.9	113	0.00	8.14
		----------	AvgRF	CCRF	% Dev		----------	
17	S	2,4,6-Tribromophenol	0.155	0.182	-17.4	108	0.00	9.52
18	t	Hexachlorobenzene	0.469	0.458	2.3	110	0.00	10.09
		----------	True	Calc.	% Drift		----------	
19	t	Pentachlorophenol	5.000	8.860	-77.2#	202	0.00	10.40
		----------	AvgRF	CCRF	% Dev		----------	
20	t	Phenanthrene	1.884	1.755	6.8	103	0.00	10.56
21	t	Anthracene	1.565	1.634	-4.4	104	0.00	10.63
		----------	True	Calc.	% Drift		----------	
22	t	2,4-Dinitrotoluene	1.000	0.987	1.3	104	0.02	8.73
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	102	0.00	12.38
24	t	Fluoranthene	1.196	1.135	5.1	102	0.00	12.40
25	t	Pyrene	1.110	1.084	2.3	102	0.00	12.69
26	S	Terphenyl-d14	0.431	0.394	8.6	96	0.00	13.03
		----------	True	Calc.	% Drift		----------	

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1022-CC1016
Lab FileID: 4M23425.D

27	t	Benzo[a]anthracene	1.000	1.191	-19.1	132	0.00	14.14
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.737	8.7	85	0.00	14.19
		----------	True	Calc.	% Drift	----------		
29		bis(2-Ethylhexyl)phthalat	1.000	1.680	-68.0#	180	-0.02	14.42
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	105	0.00	15.47
31	t	Benzo[b]fluoranthene	0.298	0.256	14.1	87	0.00	15.21
32	t	Benzo[k]fluoranthene	0.262	0.281	-7.3	105	0.00	15.23
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	1.000	0.916	8.4	91	0.00	15.48
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.952	4.8	106	0.00	16.37
35	t	Dibenz[a,h]anthracene	1.000	0.907	9.3	101	-0.01	16.39
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	1.094	-0.7	105	0.00	16.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 31 15:29:05 2011 RPT1

7.7.4

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1023-CC1016
Lab FileID: 4M23457.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1023\4m23457.D Vial: 2
Acq On : 1 Feb 2011 9:03 am Operator: ninap
Sample : cc1016-.5 Inst : MS4M
Misc : op47830a,e4m1023 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	93	0.02	6.79
2	S	2-Fluorophenol	0.592	0.634	-7.1	102	0.00	2.47
3	S	Phenol-d5	0.736	0.737	-0.1	92	0.02	3.57
4	t	Phenol	0.803	0.893	-11.2	109	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.798	2.4	100	0.00	3.62
6	S	Nitrobenzene-d5	0.587	0.614	-4.6	96	0.01	4.63
7	t	Naphthalene	1.781	1.774	0.4	98	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.309	-3.7	96	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.419	2.0	100	0.00	6.67
10	t	1-Methylnaphthalene	1.362	1.356	0.4	97	0.00	6.82
11	S	2-Fluorobiphenyl	1.345	1.406	-4.5	101	0.00	7.32
12	I	Fluorene-d10	1.000	1.000	0.0	88	0.00	9.07
13	t	Acenaphthylene	2.265	2.516	-11.1	110	0.00	8.03
14	t	Acenaphthene	1.691	1.798	-6.3	104	0.00	8.33
15	t	Fluorene	1.282	1.302	-1.6	100	0.00	9.10
		----------	True	Calc.	% Drift	----------		
16	t	2,6-Dinitrotoluene	0.500	0.523	-4.6	107	0.00	8.14
		----------	AvgRF	CCRF	% Dev	----------		
17	S	2,4,6-Tribromophenol	0.155	0.183	-18.1	110	0.00	9.52
18	t	Hexachlorobenzene	0.469	0.475	-1.3	98	0.00	10.09
		----------	True	Calc.	% Drift	----------		
19	t	Pentachlorophenol	2.500	4.878	-95.1#	261	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
20	t	Phenanthrene	1.884	1.848	1.9	98	0.00	10.56
21	t	Anthracene	1.565	1.616	-3.3	111	-0.02	10.62
		----------	True	Calc.	% Drift	----------		
22	t	2,4-Dinitrotoluene	0.500	0.525	-5.0	123	0.00	8.71
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	86	0.00	12.38
24	t	Fluoranthene	1.196	1.187	0.8	95	-0.01	12.39
25	t	Pyrene	1.110	1.182	-6.5	105	-0.01	12.68
26	S	Terphenyl-d14	0.431	0.415	3.7	85	0.00	13.03
		----------	True	Calc.	% Drift	----------		

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1023-CC1016
Lab FileID: 4M23457.D

27	t	Benzo[a]anthracene	0.500	0.566	-13.2	127	0.00	14.14
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.943	-16.9	115	-0.02	14.18
		----------	True	Calc.	% Drift	----------		
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	97	0.00	15.47
31	t	Benzo[b]fluoranthene	0.298	0.277	7.0	99	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.216	17.6	90	-0.01	15.22
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	0.500	0.445	11.0	92	0.00	15.48
34	t	Indeno[1,2,3-cd]pyrene	0.500	0.440	12.0	101	-0.01	16.36
35	t	Dibenz[a,h]anthracene	0.500	0.403	19.4	93	-0.01	16.39
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	0.948	12.7	95	0.00	16.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23294.D M4M1016SIM.M Tue Feb 01 10:30:22 2011 RPT1

7.7.5

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Feb 01 19:17:15 2011
Response via : Initial Calibration

Calibration Files
2 =R83637.D 5 =R83639.D 100 =R83634.D 50 =R83638.D
1 =R83635.D 10 =R83640.D 80 =R83636.D 25 =R83641.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.596	0.621	0.558	0.582	0.609	0.629	0.566	0.599	0.595	4.20
3) Pyridine	1.200	1.355	1.305	1.377	1.184	1.431	1.343	1.413	1.326	6.92
4) N-Nitrosodim	0.409	0.454	0.430	0.452	0.362	0.477	0.440	0.473	0.437	8.59
5) 2-Fluorophen	1.051	1.208	1.177	1.228	1.152	1.281	1.210	1.273	1.198	6.13
6) Indene	1.762	1.935	1.784	1.903	1.933	2.025	1.834	1.983	1.895	4.95
7) Cumene	2.610	2.815	2.485	2.648	2.889	2.905	2.544	2.797	2.712	5.93
8) Phenol-d5	1.320	1.507	1.316	1.420	1.403	1.558	1.375	1.511	1.426	6.35
9) Phenol	1.575	1.762	1.528	1.686	1.748	1.838	1.596	1.782	1.690	6.61
10) Aniline	1.895	2.053	1.667	2.001	2.063	2.093	1.697	2.107	1.947	9.06
11) bis(2-Chloro	1.139	1.288	1.119	1.208	1.251	1.333	1.159	1.286	1.223	6.42
12) 2-Chlorophen	1.295	1.442	1.337	1.417	1.394	1.498	1.385	1.472	1.405	4.79
13) Decane	1.085	1.181	0.963	1.076	1.163	1.203	1.005	1.142	1.102	7.78
14) 1,3-Dichloro	1.509	1.630	1.475	1.563	1.628	1.655	1.504	1.617	1.573	4.41
15) 1,4-Dichloro	1.507	1.663	1.481	1.586	1.704	1.697	1.515	1.623	1.597	5.54
16) Benzyl alcoh	0.723	0.859	0.814	0.888	0.712	0.927	0.847	0.926	0.837	9.93
17) 1,2-Dichloro	1.420	1.560	1.352	1.475	1.574	1.595	1.412	1.547	1.492	6.04
18) Acetophenone	1.600	1.780	1.613	1.733	1.755	1.858	1.659	1.809	1.726	5.41
19) 2-Methylphen	0.875	0.975	0.909	0.981	0.900	1.011	0.932	1.020	0.950	5.67
20) 2,2'-oxybis(	0.417	0.467	0.435	0.465	0.456	0.487	0.445	0.483	0.457	5.22
21) 3&4-Methylph	0.846	1.014	0.921	1.013	0.885	1.072	0.971	1.063	0.973	8.50
22) n-Nitroso-di	0.674	0.756	0.666	0.739	0.684	0.788	0.695	0.784	0.723	6.88
23) Hexachloroet	0.401	0.445	0.415	0.447	0.433	0.468	0.428	0.460	0.437	5.15
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.332	0.377	0.349	0.368	0.353	0.392	0.360	0.377	0.364	5.18
26) Nitrobenzene	0.183	0.206	0.192	0.202	0.197	0.216	0.197	0.208	0.200	5.13
27) Quinoline	0.604	0.700	0.666	0.698	0.658	0.733	0.682	0.714	0.682	5.84
28) Isophorone	0.591	0.654	0.585	0.627	0.625	0.684	0.601	0.653	0.628	5.55
29) 2-Nitropheno	0.172	0.206	0.201	0.213	0.184	0.222	0.208	0.220	0.203	8.61
30) 2,4-Dimethyl	0.293	0.331	0.321	0.349	0.314	0.334	0.326	0.360	0.329	6.27
31) Benzoic acid			0.215	0.195		0.115	0.216	0.167	0.182	23.33
----- Linear regression ----- Coefficient = 0.9989										
Response Ratio = -0.03508 + 0.22970 *A										
32) bis(2-Chloro	0.374	0.434	0.382	0.404	0.418	0.447	0.392	0.429	0.410	6.43
33) 2,4-Dichloro	0.245	0.293	0.287	0.299	0.260	0.313	0.293	0.311	0.288	8.28
34) 2,6-Dichloro	0.253	0.300	0.275	0.290	0.272	0.314	0.282	0.303	0.286	6.91
35) 1,3,5-Trichl	0.324	0.356	0.304	0.323	0.347	0.362	0.312	0.337	0.333	6.25
36) 1,2,4-Trichl	0.299	0.339	0.301	0.319	0.343	0.345	0.307	0.330	0.323	5.81
37) 1,2,3-Trichl	0.297	0.334	0.293	0.311	0.330	0.339	0.302	0.322	0.316	5.59
38) Naphthalene	1.107	1.222	0.949	1.068	1.265	1.242	0.996	1.150	1.125	10.32
39) 4-Chloroanil	0.437	0.512	0.424	0.481	0.492	0.537	0.442	0.518	0.481	8.74
40) 2,3-Dichloro	0.308	0.364	0.331	0.344	0.338	0.383	0.337	0.364	0.346	6.73
41) Caprolactam	0.116	0.142	0.149	0.153	0.112	0.153	0.152	0.153	0.141	12.25
42) Hexachlorobu	0.149	0.168	0.152	0.159	0.161	0.173	0.155	0.165	0.160	5.08

7.7.6

7

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

43)	4-Chloro-3-m	0.234	0.288	0.292	0.304	0.232	0.312	0.299	0.312	0.284	11.51
44)	2-Methylnaph	0.739	0.834	0.698	0.762	0.824	0.859	0.717	0.813	0.781	7.64
45)	1-Methylnaph	0.711	0.792	0.666	0.727	0.769	0.807	0.683	0.769	0.741	6.94
46)	Dimethylnaph	0.589	0.686	0.590	0.645	0.647	0.716	0.613	0.680	0.646	7.18
47)	I Acenaphthene-d10	ISTD									
48)	Hexachlorocy	0.187	0.138	0.218	0.216		0.176	0.212	0.200	0.192	14.91
49)	2,4,6-Trichl	0.270	0.330	0.337	0.346	0.279	0.358	0.342	0.353	0.327	10.25
50)	2,4,5-Trichl		0.262	0.297	0.308		0.305	0.305	0.303	0.297	5.86
51)	2-Fluorobiph	1.313	1.493	1.282	1.388	1.465	1.539	1.325	1.459	1.408	6.71
52)	2-Chloronaph	1.128	1.244	1.076	1.161	1.247	1.302	1.107	1.219	1.185	6.68
53)	Biphenyl	1.520	1.740	1.437	1.567	1.764	1.778	1.490	1.661	1.620	8.26
54)	2-Nitroanili	0.252	0.319	0.307	0.330	0.244	0.349	0.317	0.336	0.307	12.55
55)	Dimethylphth	1.201	1.383	1.175	1.272	1.319	1.438	1.221	1.349	1.295	7.19
56)	Acenaphthyle	1.782	2.051	1.696	1.890	1.894	2.158	1.780	2.016	1.908	8.21
57)	2,6-Dinitrot	0.244	0.294	0.302	0.315	0.240	0.320	0.310	0.322	0.294	11.25
58)	3-Nitroanili	0.263	0.354	0.388	0.402		0.398	0.397	0.403	0.372	13.69
59)	Acenaphthene	1.190	1.338	1.163	1.247	1.361	1.382	1.203	1.301	1.273	6.60
60)	2,4-Dinitrop		0.018	0.157	0.139		0.059	0.160	0.111	0.107	53.62
	----- Linear regression ----- Coefficient = 0.9975										
	Response Ratio = -0.05587 + 0.16902 *A										
61)	4-Nitropheno		0.082	0.157	0.155		0.119	0.158	0.144	0.136	22.22
	----- Linear regression ----- Coefficient = 0.9999										
	Response Ratio = -0.00999 + 0.16197 *A										
62)	Dibenzofuran	1.604	1.809	1.524	1.662	1.800	1.882	1.578	1.748	1.701	7.50
63)	2,4-Dinitrot	0.319	0.412	0.416	0.437	0.295	0.452	0.429	0.447	0.401	14.96
64)	2,3,4,6-Tetr	0.185	0.258	0.301	0.305		0.293	0.307	0.304	0.279	16.04
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00332 + 0.30506 *A										
65)	Diethylphtha	1.345	1.511	1.299	1.432	1.599	1.553	1.359	1.473	1.446	7.37
66)	Fluorene	1.253	1.406	1.249	1.351	1.352	1.485	1.284	1.412	1.349	6.21
67)	4-Chlorophen	0.551	0.625	0.557	0.581	0.590	0.638	0.563	0.602	0.588	5.42
68)	4-Nitroanili		0.356	0.395	0.408		0.400	0.403	0.412	0.396	5.09
69)	I Phenanthrene-d10	ISTD									
70)	4,6-Dinitro-			0.143	0.141		0.100	0.147	0.130	0.132	14.60
71)	n-Nitrosodip	0.548	0.642	0.581	0.616	0.624	0.663	0.591	0.643	0.613	6.22
72)	1,2-Diphenyl	0.716	0.802	0.774	0.769	0.770	0.832	0.796	0.799	0.782	4.36
73)	2,4,6-Tribro		0.097	0.121	0.116		0.110	0.120	0.114	0.113	7.86
74)	4-Bromopheny	0.187	0.220	0.223	0.226	0.187	0.234	0.223	0.231	0.216	8.61
75)	Hexachlorobe	0.218	0.250	0.249	0.247	0.250	0.256	0.248	0.255	0.246	4.86
76)	Pentachlorop	0.108	0.100	0.164	0.154		0.128	0.163	0.144	0.137	19.12
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.01762 + 0.16671 *A										
77)	Phenanthrene	1.178	1.273	1.041	1.107	1.342	1.285	1.066	1.191	1.185	9.22
78)	Anthracene	1.122	1.272	1.090	1.180	1.266	1.305	1.121	1.250	1.201	6.91
79)	Carbazole	1.006	1.172	1.039	1.116	1.081	1.221	1.066	1.168	1.109	6.66
80)	Di-n-butylph	1.270	1.539	1.252	1.399	1.434	1.606	1.293	1.539	1.416	9.64
81)	Fluoranthene	1.048	1.221	1.032	1.119	1.206	1.272	1.069	1.206	1.147	7.94
82)	Octadecane	0.442	0.518	0.379	0.432	0.476	0.541	0.399	0.495	0.460	12.43
83)	I Chrysene-d12	ISTD									
84)	Pyrene	1.203	1.321	1.026	1.142	1.313	1.345	1.064	1.270	1.210	10.10
85)	Butyl steara	0.313	0.385		0.292		0.386		0.350	0.345	12.24
86)	Terphenyl-d1	0.705	0.798	0.690	0.745	0.760	0.834	0.706	0.793	0.754	6.87
87)	Butylbenzylp	0.570	0.673	0.567	0.644	0.653	0.719	0.594	0.702	0.640	9.07

7.7.6

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3151-ICC3151
Lab FileID: R83638.D

88)	Benzo[a]anth	1.078	1.161	0.927	1.060	1.259	1.207	0.982	1.153	1.103	10.21
89)	3,3'-Dichlor	0.339	0.407	0.398	0.439		0.436	0.419	0.442	0.412	8.81
90)	Chrysene	1.067	1.179	0.927	1.032	1.232	1.217	0.975	1.117	1.093	10.28
91)	bis(2-Ethylh	0.807	0.986	0.782	0.902		1.039	0.812	1.006	0.905	11.79
92)	I Perylene-d12	----------ISTD----------									
93)	Di-n-octylph	1.178	1.594	1.427	1.596		1.799	1.472	1.737	1.543	13.51
94)	Benzo[b]fluo	1.037	1.137	1.635	1.264	1.124	1.253	1.723	1.252	1.303	18.88
	----- Quadratic regression ----- Coefficient = 0.9925										
	Response Ratio = -0.01149 + 1.14974 *A + 0.21778 *A^2										
95)	Benzo[k]fluo	1.143	1.401		1.260	1.381	1.403	0.814	1.323	1.246	17.02
	----- Quadratic regression ----- Coefficient = 0.9935										
	Response Ratio = -0.04948 + 1.85273 *A + -0.50029 *A^2										
96)	Benzo[a]pyre	0.925	1.103	1.161	1.166	1.048	1.244	1.162	1.207	1.127	8.96
97)	Indeno[1,2,3	0.953	1.197	1.188	1.390	1.046	1.329	1.346	1.354	1.226	12.99
98)	Dibenz(a,h)a	0.664	0.852	0.898	1.004	0.736	0.963	0.991	0.993	0.888	14.45
99)	Dibenz[a,h]a	0.774	0.981	0.990	1.130	0.845	1.093	1.113	1.115	1.005	13.39
100)	7,12-Dimethy		0.448	0.619	0.614		0.500	0.616	0.608	0.567	13.09
101)	Benzo[g,h,i]	0.800	0.986	0.825	1.085	0.892	1.087	0.979	1.091	0.968	12.21

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Thu Feb 03 12:41:02 2011 NJMSR

7.7.6

Initial Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICC3152
Lab FileID: R83645.D

Response Factor Report MSR

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Initial Calibration

Calibration Files
2 =R83649.D 5 =R83648.D 100 =R83643.D 50 =R83645.D
1 =R83650.D 10 =R83647.D 80 =R83644.D 25 =R83646.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	1.019	0.981	0.761	0.688	0.956	0.604	0.830	0.834		18.98

----- Quadratic regression ----- Coefficient = 0.9994
Response Ratio = -0.00237 + 0.98782 *A + -0.19011 *A^2

104) I Acenaphthene-d10a	ISTD									
105) 1,2,4,5-Tetr	0.558	0.537	0.435	0.500	0.409	0.512	0.477	0.523	0.494	10.35
106) Atrazine	0.156	0.166	0.157	0.178		0.172	0.172	0.181	0.169	5.81
107) t Chrysene-d12a	ISTD									
108) Benzidine	0.441	0.614	0.387	0.499		0.669	0.429	0.476	0.502	20.48

----- Quadratic regression ----- Coefficient = 0.9973
Response Ratio = 0.00117 + 0.58194 *A + -0.07755 *A^2

(#) = Out of Range ### Number of calibration levels exceeded format ###

MR3151.M Tue Nov 16 13:42:25 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83651.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.01	7.61
3	t	Pyridine	1.326	1.290	2.7	116	-0.05	3.22
4	t	N-Nitrosodimethylamine	0.437	0.436	0.2	120	-0.02	3.25
11	t	bis(2-Chloroethyl)ether	1.223	1.122	8.3	115	-0.02	7.20
14	t	1,3-Dichlorobenzene	1.573	1.409	10.4	112	-0.02	7.53
15	t	1,4-Dichlorobenzene	1.597	1.442	9.7	113	0.00	7.65
16	t	Benzyl alcohol	0.837	0.843	-0.7	118	0.00	8.00
17	t	1,2-Dichlorobenzene	1.492	1.352	9.4	114	-0.01	8.03
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.440	3.7	117	0.00	8.34
22	t	n-Nitroso-di-n-propylamin	0.723	0.719	0.6	121	-0.02	8.63
23	t	Hexachloroethane	0.437	0.414	5.3	115	0.00	8.67
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	10.39
26	t	Nitrobenzene	0.200	0.185	7.5	113	-0.01	8.89
28	t	Isophorone	0.628	0.582	7.3	115	-0.02	9.42
		----------	AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	118	0.00	10.00
36	t	1,2,4-Trichlorobenzene	0.323	0.294	9.0	114	0.00	10.32
38	t	Naphthalene	1.125	0.985	12.4	114	0.00	10.44
42	t	Hexachlorobutadiene	0.160	0.152	5.0	118	0.00	10.91
44	t	2-Methylnaphthalene	0.781	0.657	15.9	106	0.00	12.04
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	14.52
48	t	Hexachlorocyclopentadiene	0.192	0.192	0.0	112	0.00	12.60
52	t	2-Chloronaphthalene	1.185	1.042	12.1	113	0.00	13.16
54	t	2-Nitroaniline	0.307	0.296	3.6	113	0.00	13.54
55	t	Dimethylphthalate	1.295	1.131	12.7	112	0.00	14.13
56	t	Acenaphthylene	1.908	1.533	19.7	102	0.00	14.14
57	t	2,6-Dinitrotoluene	0.294	0.290	1.4	116	0.00	14.25
58	t	3-Nitroaniline	0.372	0.327	12.1	102	0.00	14.55
59	t	Acenaphthene	1.273	1.137	10.7	115	0.00	14.60
		----------	AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.525	10.3	115	0.00	14.98
63	t	2,4-Dinitrotoluene	0.401	0.382	4.7	110	0.00	15.16
		----------	AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.291	10.7	113	-0.01	15.83
66	t	Fluorene	1.349	1.244	7.8	116	0.00	15.79

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83651.D

67	t	4-Chlorophenyl-phenylethe	0.588	0.536	8.8	116	0.00	15.87
68	t	4-Nitroaniline	0.396	0.372	6.1	115	-0.01	16.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	17.98
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	114	0.00	16.19
72	t	1,2-Diphenylhydrazine	0.782	0.699	10.6	116	0.00	16.24
74	t	4-Bromophenyl-phenylether	0.216	0.207	4.2	117	0.00	17.01
75	t	Hexachlorobenzene	0.246	0.229	6.9	119	0.00	17.29
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.185	1.042	12.1	121	0.00	18.04
78	t	Anthracene	1.201	1.074	10.6	117	0.00	18.15
79	t	Carbazole	1.109	1.048	5.5	120	0.00	18.60
80	t	Di-n-butylphthalate	1.416	1.242	12.3	114	0.00	19.56
81	t	Fluoranthene	1.147	1.006	12.3	115	0.00	20.36
83	I	Chrysene-d12	1.000	1.000	0.0	127	0.00	22.25
84	t	Pyrene	1.210	1.044	13.7	116	0.00	20.68
87	t	Butylbenzylphthalate	0.640	0.571	10.8	112	0.00	21.67
88	t	Benzo[a]anthracene	1.103	0.958	13.1	114	0.00	22.23
90	t	Chrysene	1.093	0.938	14.2	115	0.00	22.28
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.799	11.7	112	0.00	22.37
92	I	Perylene-d12	1.000	1.000	0.0	131	0.00	23.79
93	t	Di-n-octylphthalate	1.543	1.370	11.2	113	0.00	22.98
		----------	True	Calc.	% Drift	----------		
94	t	Benzo[b]fluoranthene	50.000	40.294	19.4	114	0.00	23.37
95	t	Benzo[k]fluoranthene	50.000	40.077	19.8	109	0.00	23.40
		----------	AvgRF	CCRF	% Dev	----------		
96	t	Benzo[a]pyrene	1.127	1.030	8.6	116	0.00	23.73
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.285	-4.8	121	0.00	25.17
99	t	Dibenz[a,h]anthracene	1.005	1.041	-3.6	121	0.00	25.18
101	t	Benzo[g,h,i]perylene	0.968	1.037	-7.1	126	0.00	25.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0

R83645.D MR3151.M Tue Nov 16 13:46:13 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83651A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83651A.D Vial: 10
Acq On : 16 Nov 2010 3:42 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	137	0.01	14.52
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.446	9.7	122	0.00	12.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:52:58 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83652.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83652.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.01	7.61
2	t	1,4-Dioxane	0.595	0.546	8.2	111	-0.06	2.77
6	t	Indene	1.895	1.809	4.5	113	-0.01	8.19
7	t	Cumene	2.712	2.285	15.7	102	-0.02	6.13
13	t	Decane	1.102	0.975	11.5	107	-0.02	7.41
18	t	Acetophenone	1.726	1.825	-5.7	125	-0.02	8.54
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.01	10.38
27	t	Quinoline	0.682	0.724	-6.2	119	-0.03	11.21
40	t	2,3-Dichloroaniline	0.346	0.335	3.2	111	0.00	12.81
41	t	Caprolactam	0.141	0.143	-1.4	107	-0.09	11.39
45	t	1-Methylnaphthalene	0.741	0.698	5.8	110	0.00	12.29
46	t	Dimethylnaphthalene	0.646	0.655	-1.4	116	0.00	13.53
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	14.52
53	t	Biphenyl	1.620	1.527	5.7	113	0.00	13.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	17.98
82	t	Octadecane	0.460	0.455	1.1	122	0.00	18.03
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	22.24
92	I	Perylene-d12	1.000	1.000	0.0	100	0.00	23.78
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.379	33.2#	62	-0.02	23.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 13:50:51 2010 NJMSR

7.7.10

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83652A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83652A.D Vial: 11
Acq On : 16 Nov 2010 4:18 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	117	0.00	7.61
		True	Calc.	% Drift			
103	Benzaldehyde	50.000	59.481	-19.0	152	0.00	6.76
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	127	0.00	14.52
106	Atrazine	0.169	0.185	-9.5	132	0.01	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Nov 18 16:21:44 2010 NJMSR

7.7.11

7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83653.D Vial: 12
Acq On : 16 Nov 2010 4:54 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	137	0.00	7.62
9	t	Phenol	1.690	1.465	13.3	119	0.00	7.10
12	t	2-Chlorophenol	1.405	1.344	4.3	130	0.00	7.26
19	t	2-Methylphenol	0.950	1.098	-15.6	154	0.00	8.31
21	t	3&4-Methylphenol	0.973	1.156	-18.8	156	0.00	8.64
24	I	Naphthalene-d8	1.000	1.000	0.0	132	0.00	10.39
29	t	2-Nitrophenol	0.203	0.201	1.0	124	0.00	9.60
30	t	2,4-Dimethylphenol	0.329	0.323	1.8	122	0.00	9.80
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	48.929	2.1	133	0.04	10.22
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.288	0.277	3.8	122	0.00	10.14
34	t	2,6-Dichlorophenol	0.286	0.283	1.0	129	0.00	10.67
43	t	4-Chloro-3-methylphenol	0.284	0.281	1.1	122	-0.03	11.87
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	14.52
49	t	2,4,6-Trichlorophenol	0.327	0.329	-0.6	121	0.00	12.81
50	t	2,4,5-Trichlorophenol	0.312	0.370	-18.6	153	-0.02	12.88
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.410	3.6	108	-0.02	14.76
61	t	4-Nitrophenol	50.000	45.760	8.5	115	-0.01	15.04
		----------	True	Calc.	% Drift	----------		
64		2,3,4,6-Tetrachlorophenol	50.000	44.407	11.2	112	0.00	15.41
69	I	Phenanthrene-d10	1.000	1.000	0.0	129	0.00	17.99
70	t	4,6-Dinitro-2-methylpheno	0.132	0.125	5.3	115	-0.02	16.09
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	93.330	6.7	118	-0.01	17.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83653.D

R83645.D MR3151.M Wed Nov 17 15:34:26 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3151
Lab FileID: R83655.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3152\R83655.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	132	-0.01	22.24
89 t	3,3'-Dichlorobenzidine	0.412	0.409	0.7	123	0.00	22.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:01:54 2010 NJMSR

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3152-ICV3152
Lab FileID: R83655A.D

Evaluate Continuing Calibration Report

Data File : C:_RESTORE\R83655A.D Vial: 14
Acq On : 16 Nov 2010 6:07 am Operator: larisap
Sample : icv3152-50 Inst : MSR
Misc : op46506,er3152,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 t	Chrysene-d12a	1.000	1.000	0.0	148	0.00	22.24
		True	Calc.	% Drift			
108 t	Benzidine	50.000	101.157	-102.3#	232	0.00	20.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Tue Nov 16 14:26:56 2010 NJMSR

7.7.14 7

Initial Calibration Verification

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3153-ICV3151
Lab FileID: R83659.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3153\R83659.D Vial: 4
Acq On : 16 Nov 2010 5:43 pm Operator: larisap
Sample : icv3151-50 Inst : MSR
Misc : op46506,er3153,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Tue Nov 16 13:40:25 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	7.62
10	t	Aniline	1.947	1.742	10.5	131	0.00	7.07
24	I	Naphthalene-d8	1.000	1.000	0.0	135	0.00	10.40
39	t	4-Chloroaniline	0.481	0.472	1.9	133	0.00	10.68

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Wed Nov 17 13:22:13 2010 NJMSR

7.7.15

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85116.D Vial: 2
Acq On : 27 Jan 2011 11:32 am Operator: ninap
Sample : cc3151-50 Inst : MSR
Misc : op47575,er3223 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.19	7.43
2	t	1,4-Dioxane	0.595	0.498	16.3	78	-0.15	2.68
3	t	Pyridine	1.326	1.196	9.8	79	-0.16	3.11
4	t	N-Nitrosodimethylamine	0.437	0.528	-20.8#	107	-0.16	3.11
5	S	2-Fluorophenol	1.198	1.059	11.6	79	-0.13	5.16
6	t	Indene	1.895	1.745	7.9	84	-0.20	8.01
7	t	Cumene	2.712	2.478	8.6	85	-0.19	5.97
8	S	Phenol-d5	1.426	1.302	8.7	84	-0.13	6.94
9	t	Phenol	1.690	1.428	15.5	77	-0.14	6.96
10	t	Aniline	1.947	1.342	31.1#	61	-0.18	6.88
11	t	bis(2-Chloroethyl)ether	1.223	1.032	15.6	78	-0.18	7.03
12	t	2-Chlorophenol	1.405	1.287	8.4	83	-0.17	7.10
13	t	Decane	1.102	1.071	2.8	91	-0.19	7.23
14	t	1,3-Dichlorobenzene	1.573	1.430	9.1	84	-0.20	7.35
15	t	1,4-Dichlorobenzene	1.597	1.469	8.0	85	-0.19	7.46
16	t	Benzyl alcohol	0.837	0.811	3.1	83	-0.17	7.83
17	t	1,2-Dichlorobenzene	1.492	1.359	8.9	84	-0.20	7.84
18	t	Acetophenone	1.726	1.584	8.2	83	-0.19	8.36
19	t	2-Methylphenol	0.950	0.860	9.5	80	-0.15	8.17
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.408	10.7	80	-0.19	8.16
21	t	3&4-Methylphenol	0.973	0.944	3.0	85	-0.15	8.49
22	t	n-Nitroso-di-n-propylamin	0.723	0.728	-0.7	90	-0.19	8.46
23	t	Hexachloroethane	0.437	0.445	-1.8	91	-0.20	8.48
24	I	Naphthalene-d8	1.000	1.000	0.0	92	-0.20	10.20
25	S	Nitrobenzene-d5	0.364	0.342	6.0	86	-0.20	8.67
26	t	Nitrobenzene	0.200	0.176	12.0	80	-0.20	8.71
27	t	Quinoline	0.682	0.656	3.8	87	-0.20	11.04
28	t	Isophorone	0.628	0.563	10.4	83	-0.20	9.24
29	t	2-Nitrophenol	0.203	0.193	4.9	83	-0.20	9.42
30	t	2,4-Dimethylphenol	0.329	0.308	6.4	81	-0.16	9.64
			True	Calc.	% Drift			
31	t	Benzoic acid	50.000	38.100	23.8#	69	-0.11	10.07
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.347	15.4	79	-0.19	9.82
33	t	2,4-Dichlorophenol	0.288	0.280	2.8	86	-0.16	9.98
34	t	2,6-Dichlorophenol	0.286	0.273	4.5	87	-0.18	10.50
35	t	1,3,5-Trichlorobenzene	0.333	0.301	9.6	86	-0.20	9.42
36	t	1,2,4-Trichlorobenzene	0.323	0.295	8.7	85	-0.20	10.12
37	t	1,2,3-Trichlorobenzene	0.316	0.297	6.0	88	-0.20	10.67

7.7.16
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Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

38	t	Naphthalene	1.125	0.993	11.7	86	-0.20	10.24
39	t	4-Chloroaniline	0.481	0.410	14.8	79	-0.18	10.49
40	t	2,3-Dichloroaniline	0.346	0.337	2.6	90	-0.20	12.61
41	t	Caprolactam	0.141	0.136	3.5	82	-0.18	11.29
42	t	Hexachlorobutadiene	0.160	0.164	-2.5	95	-0.20	10.71
43	t	4-Chloro-3-methylphenol	0.284	0.296	-4.2	90	-0.14	11.76
44	t	2-Methylnaphthalene	0.781	0.714	8.6	86	-0.21	11.84
45	t	1-Methylnaphthalene	0.741	0.677	8.6	86	-0.20	12.09
46	t	Dimethylnaphthalene	0.646	0.632	2.2	90	-0.20	13.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	-0.21	14.31
48	t	Hexachlorocyclopentadiene	0.192	0.196	-2.1	88	-0.21	12.40
49	t	2,4,6-Trichlorophenol	0.327	0.330	-0.9	93	-0.18	12.64
50	t	2,4,5-Trichlorophenol	0.312	0.288	7.7	91	-0.16	12.75
51	S	2-Fluorobiphenyl	1.408	1.270	9.8	89	-0.20	12.81
52	t	2-Chloronaphthalene	1.185	1.060	10.5	89	-0.21	12.96
53	t	Biphenyl	1.620	1.454	10.2	91	-0.20	12.99
54	t	2-Nitroaniline	0.307	0.325	-5.9	96	-0.19	13.36
55	t	Dimethylphthalate	1.295	1.190	8.1	91	-0.20	13.93
56	t	Acenaphthylene	1.908	1.733	9.2	90	-0.21	13.94
57	t	2,6-Dinitrotoluene	0.294	0.292	0.7	90	-0.20	14.05
58	t	3-Nitroaniline	0.372	0.353	5.1	86	-0.19	14.36
59	t	Acenaphthene	1.273	1.120	12.0	88	-0.21	14.39
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	97.173	2.8	99	-0.18	14.60
61	t	4-Nitrophenol	50.000	49.885	0.2	96	-0.11	14.94
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.535	9.8	90	-0.21	14.78
63	t	2,4-Dinitrotoluene	0.401	0.414	-3.2	93	-0.20	14.96
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	50.000	46.819	6.4	91	-0.19	15.23
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.335	7.7	91	-0.21	15.64
66	t	Fluorene	1.349	1.248	7.5	90	-0.21	15.59
67	t	4-Chlorophenyl-phenylethe	0.588	0.572	2.7	96	-0.21	15.66
68	t	4-Nitroaniline	0.396	0.357	9.8	85	-0.19	15.84
69	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.22	17.77
70	t	4,6-Dinitro-2-methylpheno	0.132	0.133	-0.8	97	-0.19	15.92
71	t	n-Nitrosodiphenylamine	0.613	0.546	10.9	91	-0.20	15.99
72	t	1,2-Diphenylhydrazine	0.782	0.751	4.0	100	-0.21	16.03
73	S	2,4,6-Tribromophenol	0.113	0.114	-0.9	100	-0.21	16.21
74	t	4-Bromophenyl-phenylether	0.216	0.208	3.7	95	-0.21	16.79
75	t	Hexachlorobenzene	0.246	0.227	7.7	94	-0.22	17.08
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	88.323	11.7	93	-0.19	17.56
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.040	12.2	96	-0.22	17.83
78	t	Anthracene	1.201	1.057	12.0	92	-0.22	17.93
79	t	Carbazole	1.109	1.019	8.1	94	-0.20	18.40
80	t	Di-n-butylphthalate	1.416	1.281	9.5	94	-0.16	19.40
81	t	Fluoranthene	1.147	1.121	2.3	103	-0.15	20.21
82	t	Octadecane	0.460	0.393	14.6	93	-0.21	17.83

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3151
Lab FileID: R85116.D

83	I	Chrysene-d12	1.000	1.000	0.0	123	-0.13	22.12
84	t	Pyrene	1.210	0.968	20.0	104	-0.15	20.53
85		Butyl stearate	0.345	0.262	24.1#	110	-0.13	21.61
86	S	Terphenyl-d14	0.754	0.666	11.7	110	-0.14	20.84
87	t	Butylbenzylphthalate	0.640	0.554	13.4	106	-0.13	21.54
88	t	Benzo[a]anthracene	1.103	0.968	12.2	112	-0.13	22.09
89	t	3,3'-Dichlorobenzidine	0.412	0.397	3.6	111	-0.13	22.10
90	t	Chrysene	1.093	0.929	15.0	111	-0.13	22.15
91	t	bis(2-Ethylhexyl)phthalat	0.905	0.827	8.6	113	-0.12	22.24
92	I	Perylene-d12	1.000	1.000	0.0	108	-0.15	23.63
93	t	Di-n-octylphthalate	1.543	1.528	1.0	103	-0.12	22.86
		----------	True	Calc.	% Drift			----------
94	t	Benzo[b]fluoranthene	50.000	42.989	14.0	101	-0.14	23.23
95	t	Benzo[k]fluoranthene	50.000	46.254	7.5	97	-0.14	23.27
		----------	AvgRF	CCRF	% Dev			----------
96	t	Benzo[a]pyrene	1.127	1.041	7.6	96	-0.15	23.57
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.203	1.9	93	-0.21	24.96
98	t	Dibenz(a,h)acridine	0.888	0.853	3.9	92	-0.20	24.64
99	t	Dibenz[a,h]anthracene	1.005	0.982	2.3	94	-0.22	24.96
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.510	10.1	89	-0.15	23.25
101	t	Benzo[g,h,i]perylene	0.968	0.950	1.9	94	-0.24	25.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83645.D MR3151.M Thu Jan 27 19:45:51 2011 NJMSR

7.7.16

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Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3223-CC3152
Lab FileID: R85117.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85117.D Vial: 3
Acq On : 27 Jan 2011 12:03 pm Operator: ninap
Sample : cc3152-25 Inst : MSR
Misc : op47575,er3223 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	60	-0.18	7.43
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	20.690	17.2	53	-0.17	6.59
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	63	-0.21	14.30
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.517	-4.7	62	-0.20	12.33
106	Atrazine	0.169	0.185	-9.5	65	-0.21	17.40
107 t	Chrysene-d12a	1.000	1.000	0.0	71	-0.13	22.10
		True	Calc.	% Drift			
108 t	Benzidine	25.000	24.172	3.3	77	-0.14	20.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Thu Jan 27 19:46:44 2011 NJMSR

7.7.17

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85138.D Vial: 2
Acq On : 28 Jan 2011 3:59 pm Operator: larisap
Sample : cc3151-25 Inst : MSR
Misc : op47575,er3224 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	-0.19	7.43
2	t	1,4-Dioxane	0.595	0.570	4.2	92	-0.18	2.65
3	t	Pyridine	1.326	1.200	9.5	82	-0.18	3.10
4	t	N-Nitrosodimethylamine	0.437	0.600	-37.3#	122	-0.16	3.11
5	S	2-Fluorophenol	1.198	1.177	1.8	89	-0.12	5.17
6	t	Indene	1.895	1.915	-1.1	93	-0.19	8.01
7	t	Cumene	2.712	2.781	-2.5	96	-0.20	5.96
8	S	Phenol-d5	1.426	1.436	-0.7	91	-0.13	6.94
9	t	Phenol	1.690	1.572	7.0	85	-0.13	6.97
10	t	Aniline	1.947	1.484	23.8#	68	-0.18	6.88
11	t	bis(2-Chloroethyl)ether	1.223	1.171	4.3	88	-0.18	7.03
12	t	2-Chlorophenol	1.405	1.431	-1.9	93	-0.18	7.10
13	t	Decane	1.102	1.172	-6.4	99	-0.19	7.23
14	t	1,3-Dichlorobenzene	1.573	1.586	-0.8	94	-0.20	7.35
15	t	1,4-Dichlorobenzene	1.597	1.641	-2.8	97	-0.19	7.46
16	t	Benzyl alcohol	0.837	0.881	-5.3	91	-0.18	7.83
17	t	1,2-Dichlorobenzene	1.492	1.528	-2.4	95	-0.19	7.84
18	t	Acetophenone	1.726	1.717	0.5	91	-0.19	8.36
19	t	2-Methylphenol	0.950	0.932	1.9	88	-0.14	8.18
20	t	2,2'-oxybis(1-Chloropropa	0.457	0.448	2.0	89	-0.19	8.16
21	t	3&4-Methylphenol	0.973	0.996	-2.4	90	-0.14	8.50
22	t	n-Nitroso-di-n-propylamin	0.723	0.789	-9.1	97	-0.19	8.46
23	t	Hexachloroethane	0.437	0.490	-12.1	102	-0.20	8.48
24	I	Naphthalene-d8	1.000	1.000	0.0	94	-0.19	10.20
25	S	Nitrobenzene-d5	0.364	0.388	-6.6	96	-0.19	8.67
26	t	Nitrobenzene	0.200	0.197	1.5	89	-0.19	8.71
27	t	Quinoline	0.682	0.702	-2.9	92	-0.21	11.02
28	t	Isophorone	0.628	0.641	-2.1	92	-0.19	9.24
29	t	2-Nitrophenol	0.203	0.205	-1.0	87	-0.19	9.42
30	t	2,4-Dimethylphenol	0.329	0.326	0.9	85	-0.16	9.64
			True	Calc.	% Drift			
31	t	Benzoic acid	25.000	17.032	31.9#	56	-0.16	10.01
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)methan	0.410	0.388	5.4	85	-0.19	9.82
33	t	2,4-Dichlorophenol	0.288	0.309	-7.3	93	-0.16	9.99
34	t	2,6-Dichlorophenol	0.286	0.308	-7.7	95	-0.18	10.49
35	t	1,3,5-Trichlorobenzene	0.333	0.353	-6.0	98	-0.20	9.43
36	t	1,2,4-Trichlorobenzene	0.323	0.337	-4.3	95	-0.20	10.13
37	t	1,2,3-Trichlorobenzene	0.316	0.337	-6.6	98	-0.20	10.67

7.7.18
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Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

38	t	Naphthalene	1.125	1.158	-2.9	94	-0.20	10.24
39	t	4-Chloroaniline	0.481	0.461	4.2	83	-0.19	10.49
40	t	2,3-Dichloroaniline	0.346	0.373	-7.8	96	-0.19	12.62
41	t	Caprolactam	0.141	0.137	2.8	84	-0.23	11.24
42	t	Hexachlorobutadiene	0.160	0.189	-18.1	108	-0.20	10.71
43	t	4-Chloro-3-methylphenol	0.284	0.323	-13.7	97	-0.15	11.75
44	t	2-Methylnaphthalene	0.781	0.812	-4.0	93	-0.20	11.85
45	t	1-Methylnaphthalene	0.741	0.766	-3.4	93	-0.20	12.09
46	t	Dimethylnaphthalene	0.646	0.706	-9.3	97	-0.20	13.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	-0.21	14.31
48	t	Hexachlorocyclopentadiene	0.192	0.175	8.9	86	-0.21	12.40
49	t	2,4,6-Trichlorophenol	0.327	0.341	-4.3	95	-0.18	12.64
50	t	2,4,5-Trichlorophenol	0.312	0.286	8.3	93	-0.15	12.75
51	S	2-Fluorobiphenyl	1.408	1.439	-2.2	97	-0.20	12.81
52	t	2-Chloronaphthalene	1.185	1.194	-0.8	97	-0.21	12.96
53	t	Biphenyl	1.620	1.638	-1.1	97	-0.20	12.99
54	t	2-Nitroaniline	0.307	0.334	-8.8	98	-0.19	13.36
55	t	Dimethylphthalate	1.295	1.337	-3.2	98	-0.20	13.93
56	t	Acenaphthylene	1.908	1.962	-2.8	96	-0.21	13.93
57	t	2,6-Dinitrotoluene	0.294	0.317	-7.8	97	-0.20	14.05
58	t	3-Nitroaniline	0.372	0.339	8.9	83	-0.20	14.35
59	t	Acenaphthene	1.273	1.284	-0.9	97	-0.21	14.39
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	50.000	37.196	25.6#	72	-0.19	14.59
61	t	4-Nitrophenol	25.000	21.966	12.1	86	-0.10	14.95
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.701	1.716	-0.9	97	-0.22	14.77
63	t	2,4-Dinitrotoluene	0.401	0.432	-7.7	95	-0.20	14.96
			True	Calc.	% Drift			
64		2,3,4,6-Tetrachlorophenol	25.000	21.644	13.4	84	-0.19	15.23
			AvgRF	CCRF	% Dev			
65	t	Diethylphthalate	1.446	1.485	-2.7	99	-0.21	15.63
66	t	Fluorene	1.349	1.383	-2.5	97	-0.22	15.58
67	t	4-Chlorophenyl-phenylethe	0.588	0.624	-6.1	102	-0.21	15.66
68	t	4-Nitroaniline	0.396	0.289	27.0#	69	-0.21	15.82
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	-0.21	17.78
70	t	4,6-Dinitro-2-methylpheno	0.132	0.095	28.0#	72	-0.20	15.91
71	t	n-Nitrosodiphenylamine	0.613	0.619	-1.0	96	-0.21	15.98
72	t	1,2-Diphenylhydrazine	0.782	0.772	1.3	96	-0.21	16.02
73	S	2,4,6-Tribromophenol	0.113	0.112	0.9	98	-0.21	16.21
74	t	4-Bromophenyl-phenylether	0.216	0.233	-7.9	101	-0.21	16.79
75	t	Hexachlorobenzene	0.246	0.260	-5.7	102	-0.22	17.08
			True	Calc.	% Drift			
76	t	Pentachlorophenol	50.000	37.055	25.9#	75	-0.20	17.56
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.185	1.208	-1.9	101	-0.22	17.82
78	t	Anthracene	1.201	1.197	0.3	95	-0.22	17.93
79	t	Carbazole	1.109	1.048	5.5	89	-0.21	18.39
80	t	Di-n-butylphthalate	1.416	1.518	-7.2	98	-0.16	19.39
81	t	Fluoranthene	1.147	1.237	-7.8	102	-0.15	20.21
82	t	Octadecane	0.460	0.453	1.5	91	-0.21	17.82

7.7.18
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Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3151
Lab FileID: R85138.D

83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.13	22.11
84	t	Pyrene	1.210	1.167	3.6	100	-0.15	20.53
85		Butyl stearate	0.345	0.347	-0.6	108	-0.13	21.60
86	S	Terphenyl-d14	0.754	0.783	-3.8	108	-0.14	20.83
87	t	Butylbenzylphthalate	0.640	0.660	-3.1	103	-0.13	21.54
88	t	Benzo[a]anthracene	1.103	1.140	-3.4	108	-0.13	22.09
89	t	3,3'-Dichlorobenzidine	0.412	0.407	1.2	101	-0.13	22.10
90	t	Chrysene	1.093	1.084	0.8	106	-0.13	22.14
91	t	bis(2-Ethylhexyl)phthalat	0.905	1.012	-11.8	110	-0.13	22.24
92	I	Perylene-d12	1.000	1.000	0.0	97	-0.15	23.63
93	t	Di-n-octylphthalate	1.543	1.840	-19.2	102	-0.13	22.86
		----------	True	Calc.	% Drift	----------		
94	t	Benzo[b]fluoranthene	25.000	29.060	-16.2	116	-0.15	23.22
95	t	Benzo[k]fluoranthene	25.000	20.526	17.9	90	-0.15	23.26
		----------	AvgRF	CCRF	% Dev	----------		
96	t	Benzo[a]pyrene	1.127	1.161	-3.0	93	-0.16	23.56
97	t	Indeno[1,2,3-cd]pyrene	1.226	1.156	5.7	83	-0.23	24.93
98	t	Dibenz(a,h)acridine	0.888	0.864	2.7	84	-0.22	24.62
99	t	Dibenz[a,h]anthracene	1.005	0.956	4.9	83	-0.25	24.94
100	t	7,12-Dimethylbenz(a)anthr	0.567	0.531	6.3	84	-0.15	23.24
101	t	Benzo[g,h,i]perylene	0.968	0.883	8.8	78	-0.26	25.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Fri Jan 28 20:49:09 2011 NJMSR

7.7.18

7

Continuing Calibration Summary

Job Number: JA66701
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: ER3224-CC3152
Lab FileID: R85139.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85139.D Vial: 3
Acq On : 28 Jan 2011 4:35 pm Operator: larisap
Sample : cc3152-25 Inst : MSR
Misc : op47575,er3224 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	84	-0.19	7.42
		True	Calc.	% Drift			
103	Benzaldehyde	25.000	22.599	9.6	80	-0.18	6.58
		AvgRF	CCRF	% Dev			
104 I	Acenaphthene-d10a	1.000	1.000	0.0	82	-0.20	14.31
105 I	1,2,4,5-Tetrachlorobenzen	0.494	0.533	-7.9	83	-0.20	12.33
106	Atrazine	0.169	0.182	-7.7	82	-0.20	17.41
107 t	Chrysene-d12a	1.000	1.000	0.0	86	-0.13	22.11
		True	Calc.	% Drift			
108 t	Benzidine	25.000	17.362	30.6#	69	-0.14	20.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
R83646.D MR3151.M Fri Jan 28 20:50:02 2011 NJMSR

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:54 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

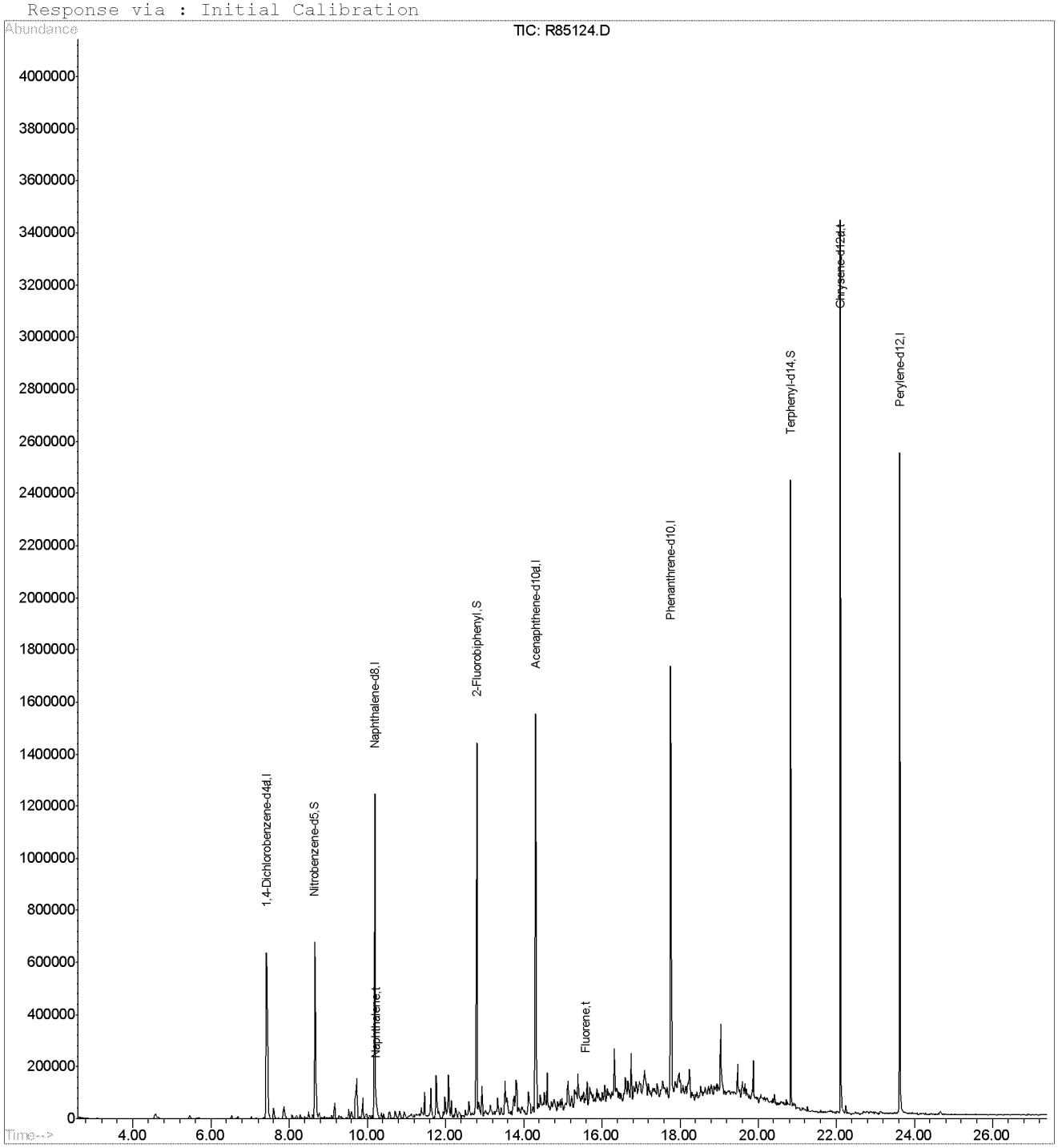
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	269928	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	956703	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	572271	40.00	ppb	-0.21
69) Phenanthrene-d10	17.77	188	1026273	40.00	ppb	-0.22
83) Chrysene-d12	22.11	240	1263634	40.00	ppb	-0.14
92) Perylene-d12	23.63	264	1015205	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	269928	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	572271	40.00	ppb	-0.20
107) Chrysene-d12a	22.11	240	1263634	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	353916	40.71	ppb	-0.20
Spiked Amount 50.000			Recovery =	81.42%		
51) 2-Fluorobiphenyl	12.80	172	734648	36.47	ppb	-0.21
Spiked Amount 50.000			Recovery =	72.94%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	783161	32.88	ppb	-0.14
Spiked Amount 50.000			Recovery =	65.76%		
Target Compounds						Qvalue
38) Naphthalene	10.23	128	43318	1.61	ppb	99
66) Fluorene	15.57	166	12451	0.65	ppb	98

(#) = qualifier out of range (m) = manual integration
R85124.D MR3151.M Thu Jan 27 19:54:27 2011 NJMSR Page 1

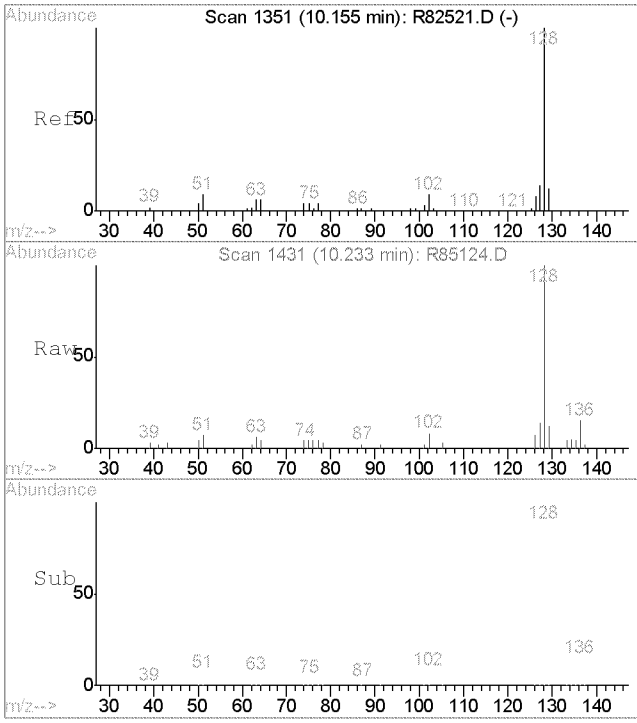
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:54 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



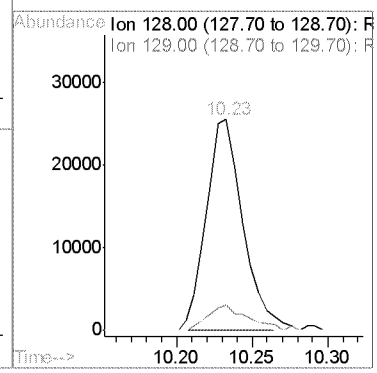
R85124.D MR3151.M Thu Jan 27 19:54:28 2011 NJMSR Page 2

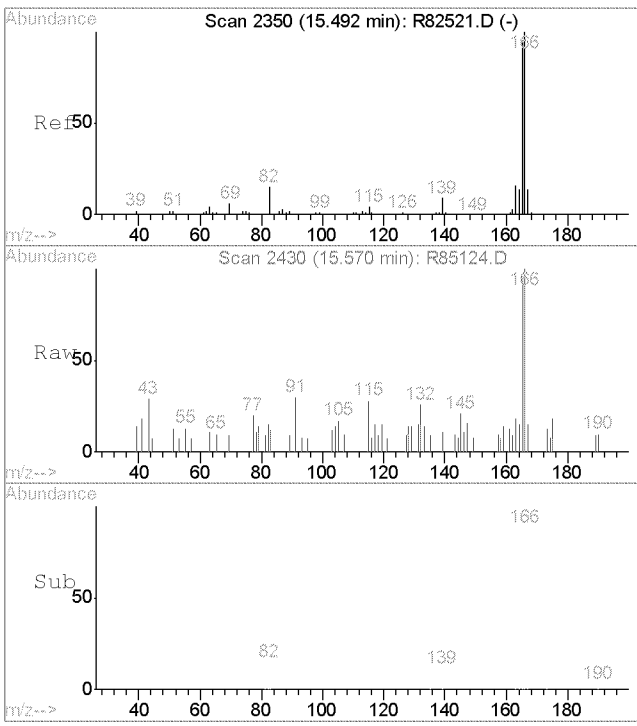


#38
Naphthalene
Concen: 1.61 ppb
RT: 10.23 min Scan# 1431
Delta R.T. -0.21 min
Lab File: R85124.D
Acq: 27 Jan 2011 4:10 pm

Tgt Ion:128 Resp: 43318

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	41.9
127	13.6	0.0	44.0

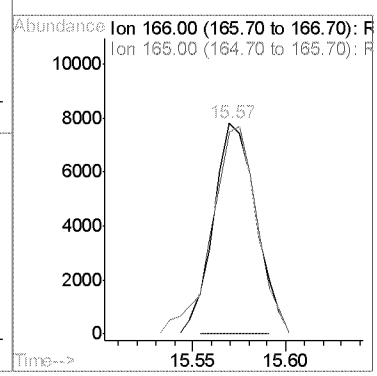




#66
Fluorene
Concen: 0.65 ppb
RT: 15.57 min Scan# 2430
Delta R.T. -0.23 min
Lab File: R85124.D
Acq: 27 Jan 2011 4:10 pm

Tgt Ion:166 Resp: 12451

Ion	Ratio	Lower	Upper
166	100		
165	92.5	64.6	124.6
167	15.4	0.0	43.7



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.570	361	371	381	rBV2	21133	73003	2.00%	0.218%
2	7.423	897	905	926	rBV	637095	1547847	42.40%	4.630%
3	7.599	930	938	952	rBV	40926	82438	2.26%	0.247%
4	7.861	976	987	994	rBV	48104	107310	2.94%	0.321%
5	8.662	1130	1137	1152	rBV	677984	1290996	35.36%	3.861%
6	9.154	1222	1229	1239	rVB	59751	104641	2.87%	0.313%
7	9.522	1291	1298	1304	rVV4	37032	63276	1.73%	0.189%
8	9.597	1304	1312	1324	rVB7	27282	76066	2.08%	0.228%
9	9.699	1324	1331	1333	rBV2	97402	159022	4.36%	0.476%
10	9.725	1333	1336	1345	rVB	154535	227057	6.22%	0.679%
11	9.880	1354	1365	1373	rVB2	81262	154854	4.24%	0.463%
12	10.190	1415	1423	1446	rVV	1245064	2129616	58.33%	6.370%
13	10.564	1482	1493	1504	rBV5	27154	71963	1.97%	0.215%
14	10.719	1509	1522	1532	rVV6	28821	66878	1.83%	0.200%
15	10.831	1532	1543	1555	rVB5	29082	69123	1.89%	0.207%
16	10.938	1555	1563	1575	rBV8	23418	75097	2.06%	0.225%
17	11.120	1580	1597	1600	rBV10	16630	58800	1.61%	0.176%
18	11.381	1639	1646	1650	rBV3	34748	67473	1.85%	0.202%
19	11.456	1655	1660	1668	rVV	94005	126072	3.45%	0.377%
20	11.627	1682	1692	1705	rVB2	114828	240389	6.58%	0.719%
21	11.766	1713	1718	1727	rVV	156224	232609	6.37%	0.696%
22	11.985	1754	1759	1767	rVV2	72088	129555	3.55%	0.387%
23	12.076	1767	1776	1783	rVB	160671	313665	8.59%	0.938%
24	12.145	1783	1789	1797	rVB	65893	106589	2.92%	0.319%
25	12.263	1804	1811	1820	rVB7	35255	75249	2.06%	0.225%
26	12.354	1820	1828	1836	rVB7	21811	61968	1.70%	0.185%
27	12.503	1851	1856	1862	rBV4	27946	53327	1.46%	0.159%
28	12.599	1869	1874	1884	rVB8	52996	90506	2.48%	0.271%
29	12.802	1902	1912	1918	rVV	1423790	2358854	64.61%	7.055%
30	12.850	1918	1921	1931	rVB6	47638	86545	2.37%	0.259%
31	12.936	1931	1937	1943	rVB	113155	167507	4.59%	0.501%
32	13.150	1973	1977	1990	rVV8	37033	88356	2.42%	0.264%
33	13.331	2000	2011	2022	rVB7	67328	170160	4.66%	0.509%
34	13.417	2022	2027	2036	rBV7	29708	59588	1.63%	0.178%
35	13.524	2040	2047	2052	rVV	129913	239796	6.57%	0.717%
36	13.572	2052	2056	2066	rVV3	64349	158006	4.33%	0.473%
37	13.748	2081	2089	2093	rBV5	74861	171277	4.69%	0.512%
38	13.812	2093	2101	2109	rVV4	132900	353490	9.68%	1.057%

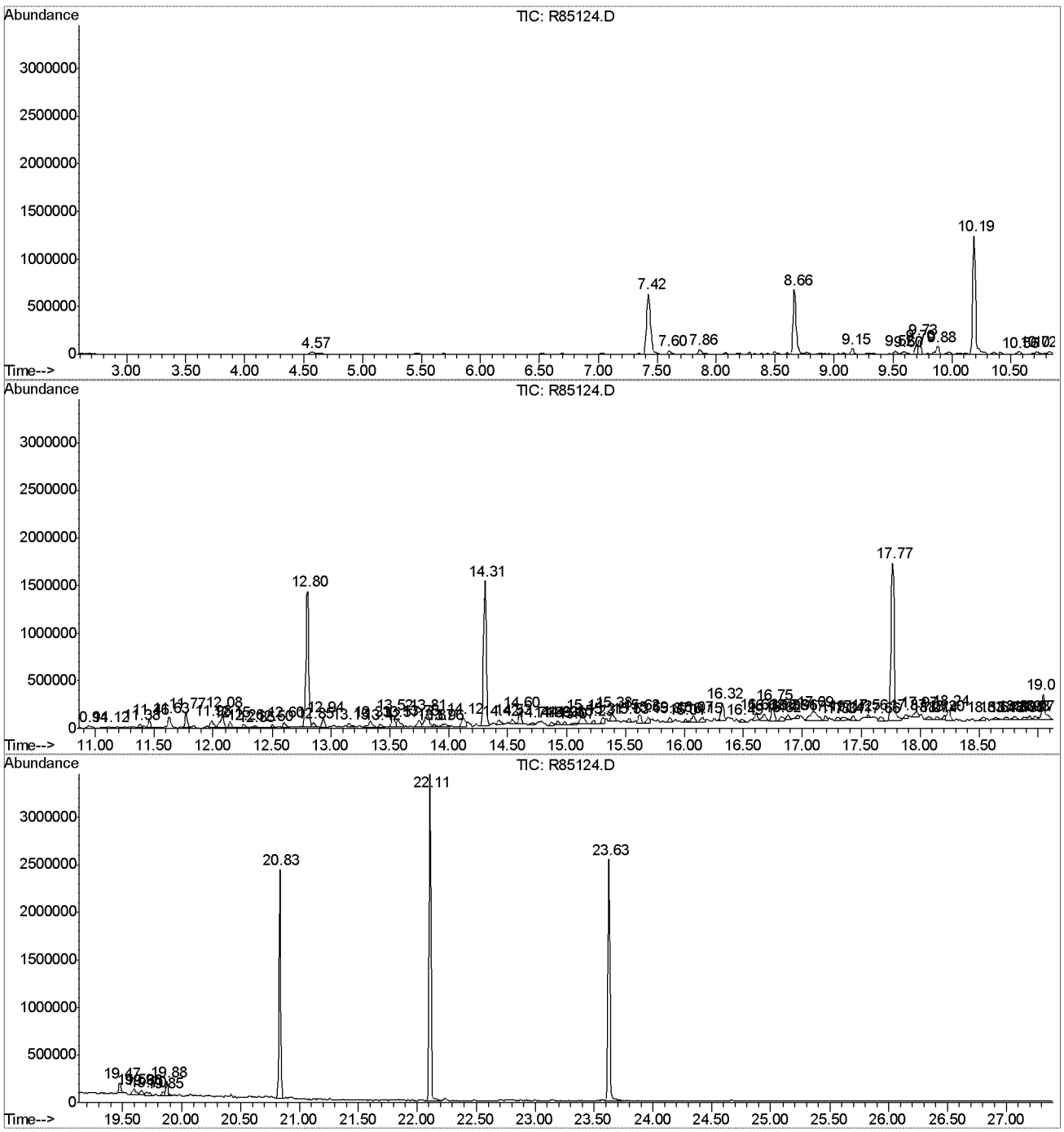
39	13.871	2109	2112	2121	rVV8	24527	53916	1.48%	0.161%
40	13.956	2121	2128	2138	rVV8	28121	94836	2.60%	0.284%
41	14.122	2151	2159	2164	rBV6	89816	205288	5.62%	0.614%
42	14.309	2185	2194	2201	rBV	1528379	2428714	66.53%	7.264%
43	14.421	2211	2215	2225	rVV7	50344	116434	3.19%	0.348%
44	14.533	2232	2236	2243	rVV6	52952	94317	2.58%	0.282%
45	14.603	2243	2249	2256	rVB2	133280	215433	5.90%	0.644%
46	14.715	2262	2270	2273	rBV7	32581	63267	1.73%	0.189%
47	14.864	2293	2298	2304	rBV5	36549	74701	2.05%	0.223%
48	14.928	2305	2310	2314	rVB5	36914	57819	1.58%	0.173%
49	14.982	2314	2320	2326	rVB10	42288	69764	1.91%	0.209%
50	15.067	2326	2336	2340	rBV10	24815	71540	1.96%	0.214%
51	15.137	2340	2349	2357	rVB7	99115	254163	6.96%	0.760%
52	15.233	2358	2367	2372	rBV8	41619	77854	2.13%	0.233%
53	15.308	2374	2381	2384	rBV6	67891	136997	3.75%	0.410%
54	15.383	2391	2395	2404	rBV5	98800	184655	5.06%	0.552%
55	15.527	2417	2422	2427	rVB8	42356	80250	2.20%	0.240%
56	15.618	2434	2439	2445	rVB5	87409	157928	4.33%	0.472%
57	15.687	2446	2452	2456	rBV3	64944	116023	3.18%	0.347%
58	15.869	2480	2486	2492	rBV5	52799	110267	3.02%	0.330%
59	16.008	2507	2512	2517	rBV6	37071	64054	1.75%	0.192%
60	16.072	2517	2524	2531	rVB10	62501	142428	3.90%	0.426%
61	16.152	2531	2539	2543	rBV7	49051	118237	3.24%	0.354%
62	16.323	2562	2571	2577	rVV3	182837	323517	8.86%	0.968%
63	16.494	2597	2603	2609	rVB3	29226	65456	1.79%	0.196%
64	16.606	2618	2624	2629	rVB6	69923	112706	3.09%	0.337%
65	16.675	2630	2637	2644	rVB3	65263	142050	3.89%	0.425%
66	16.750	2644	2651	2657	rVB3	174156	288135	7.89%	0.862%
67	16.820	2658	2664	2670	rBV3	48324	123531	3.38%	0.369%
68	16.878	2670	2675	2681	rVB8	47430	86065	2.36%	0.257%
69	16.958	2684	2690	2693	rBV7	40125	77191	2.11%	0.231%
70	17.092	2702	2715	2730	rVB7	98496	425265	11.65%	1.272%
71	17.194	2730	2734	2739	rBV4	48646	78276	2.14%	0.234%
72	17.295	2749	2753	2758	rBV7	35954	73599	2.02%	0.220%
73	17.343	2759	2762	2773	rVB10	29752	73461	2.01%	0.220%
74	17.423	2773	2777	2786	rVB10	51161	97232	2.66%	0.291%
75	17.557	2797	2802	2807	rVV6	37021	60759	1.66%	0.182%
76	17.664	2818	2822	2831	rVB9	42334	93413	2.56%	0.279%
77	17.765	2833	2841	2855	rBV2	1658515	2962739	81.15%	8.861%
78	17.872	2856	2861	2866	rBV7	39957	78878	2.16%	0.236%
79	17.974	2871	2880	2884	rBV7	57289	148642	4.07%	0.445%
80	18.070	2894	2898	2906	rVB9	35282	70199	1.92%	0.210%
81	18.144	2906	2912	2916	rVV8	33562	61748	1.69%	0.185%
82	18.203	2918	2923	2925	rVV5	49889	81740	2.24%	0.244%
83	18.241	2925	2930	2938	rVB4	107152	220219	6.03%	0.659%
84	18.534	2978	2985	2988	rBV4	34773	54649	1.50%	0.163%
85	18.641	3002	3005	3011	rVV7	33615	52268	1.43%	0.156%
86	18.727	3015	3021	3027	rVV10	33122	68665	1.88%	0.205%
87	18.802	3027	3035	3044	rVB10	41322	97538	2.67%	0.292%
88	18.882	3044	3050	3054	rBV8	34648	69125	1.89%	0.207%
89	18.930	3055	3059	3062	rVV5	42609	64742	1.77%	0.194%
90	18.967	3063	3066	3072	rVV8	39490	76219	2.09%	0.228%
91	19.042	3073	3080	3096	rVB3	267909	543798	14.90%	1.626%
92	19.475	3156	3161	3167	rBV3	112237	157704	4.32%	0.472%
93	19.592	3176	3183	3191	rBV10	61324	149528	4.10%	0.447%
94	19.662	3191	3196	3200	rVV5	52679	86312	2.36%	0.258%
95	19.699	3200	3203	3214	rVB10	38358	85580	2.34%	0.256%

96	19.849	3225	3231	3232	rBV4	38583	56721	1.55%	0.170%
97	19.875	3232	3236	3244	rVB	144916	176157	4.83%	0.527%
98	20.832	3409	3415	3422	rVB	2403618	2565047	70.26%	7.672%
99	22.108	3646	3654	3672	rVB	3433479	3650801	100.00%	10.919%
100	23.625	3931	3938	3959	rVB	2534869	3036397	83.17%	9.082%

Sum of corrected areas: 33433925

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85124.D
Operator : ninap
Acquired : 27 Jan 2011 4:10 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-1
Misc Info : op47853,er3223,1000
Vial Number: 10
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

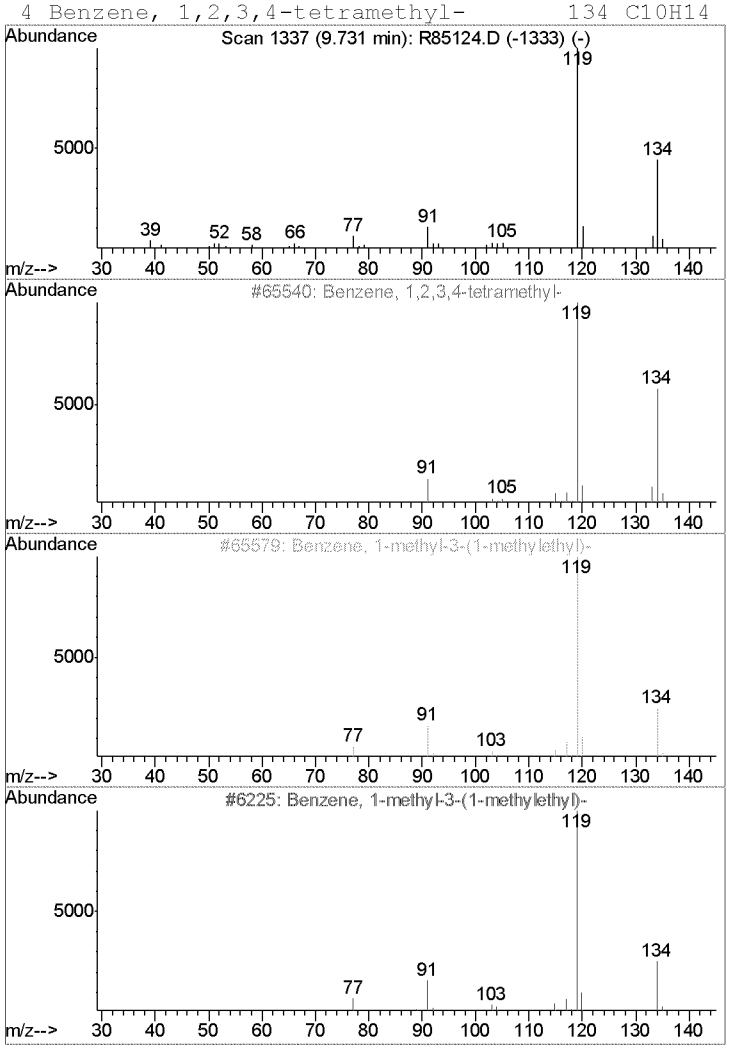
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

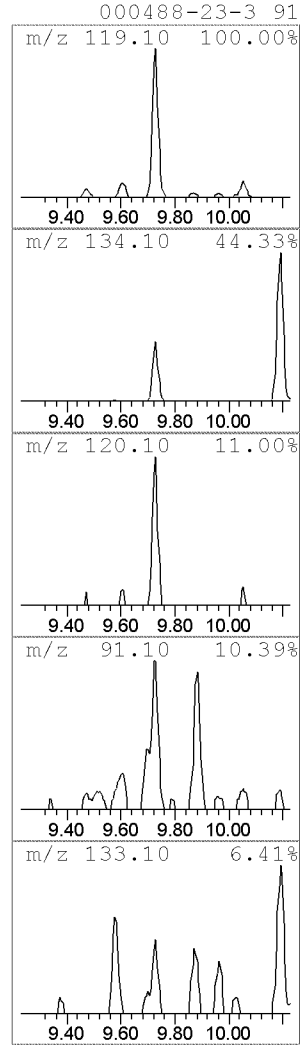
****

Peak Number 1 C4 alkyl benzene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.73	4.26 ppb	227057	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91
2	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
3	Benzene, 1-methyl-3-(1-methyleth...	134	C10H14	000535-77-3	91
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

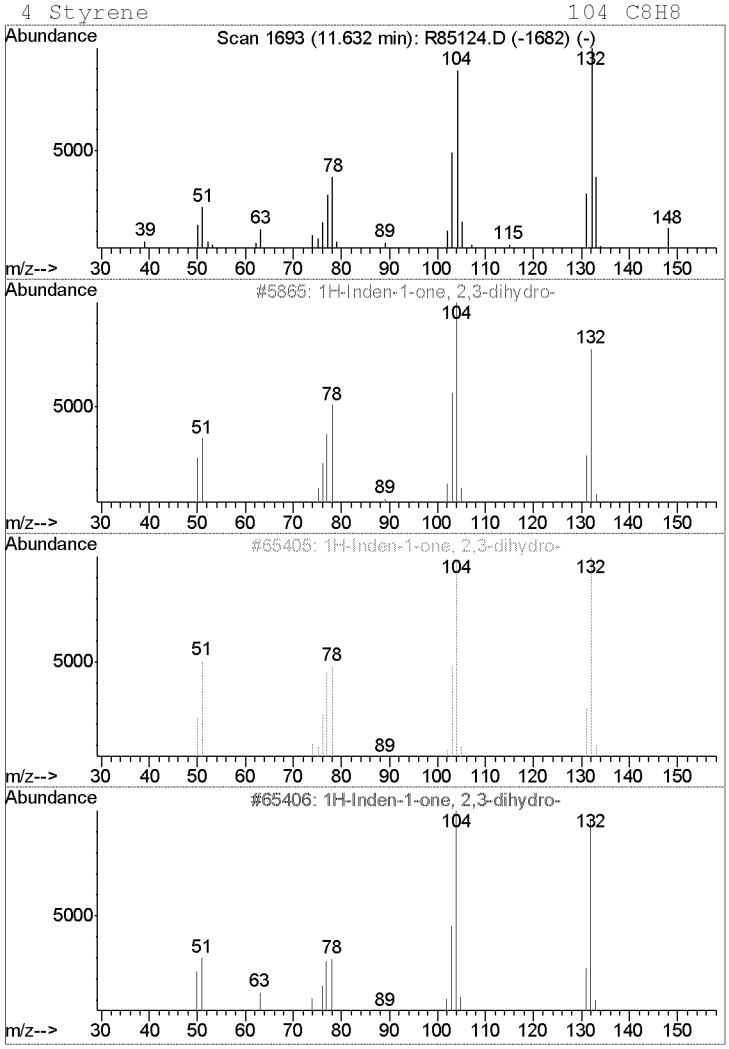
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

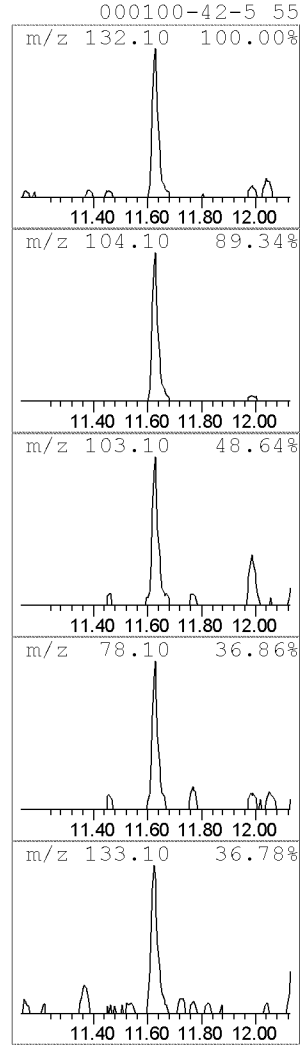
****

Peak Number 2 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.63	4.52 ppb	240389	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	95
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	93
4	Styrene	104	C8H8	000100-42-5	55





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

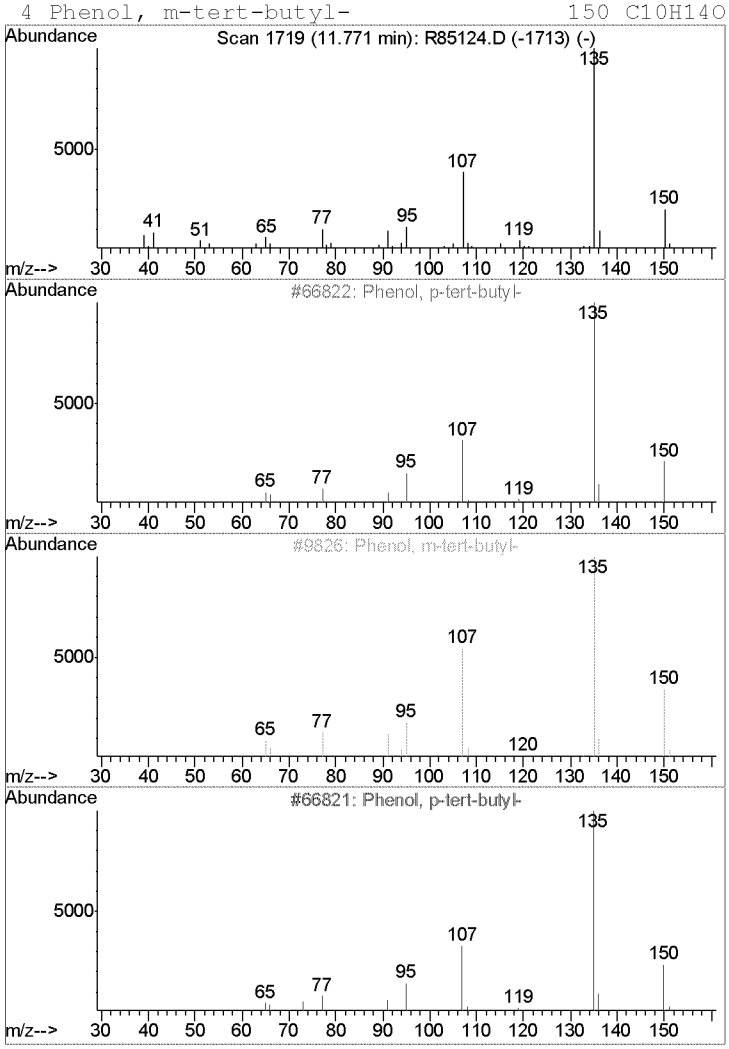
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

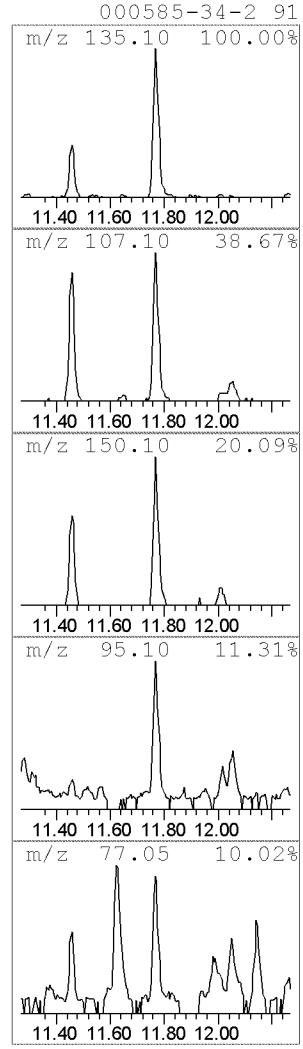
****

Peak Number 3 Phenol, tert-butyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.77	4.37 ppb	232609	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	93
2	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	92
3	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	91
4	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	91





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

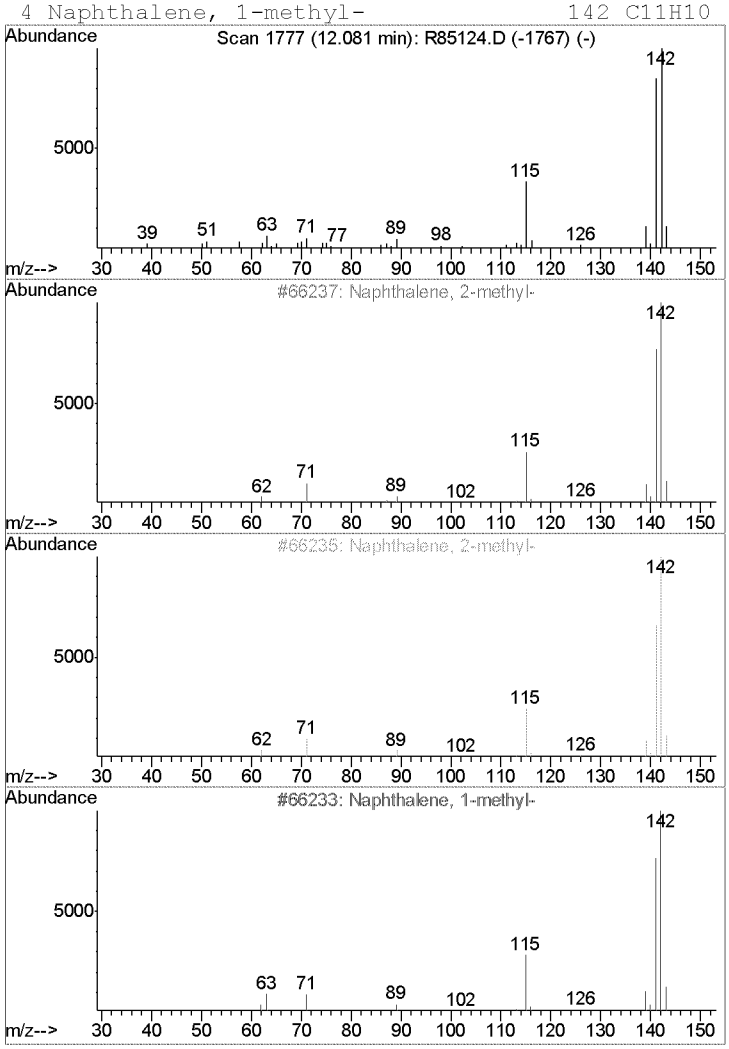
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

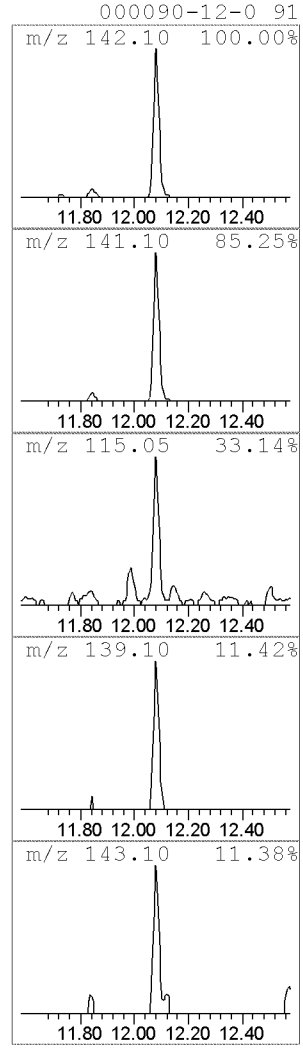
****

Peak Number 4 Naphthalene, 1-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.08	5.89 ppb	313665	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	91





8.1.2 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

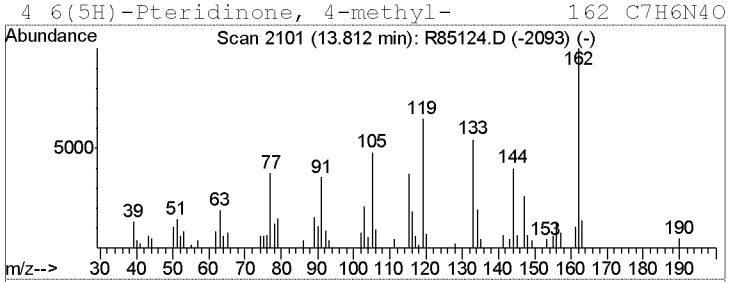
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

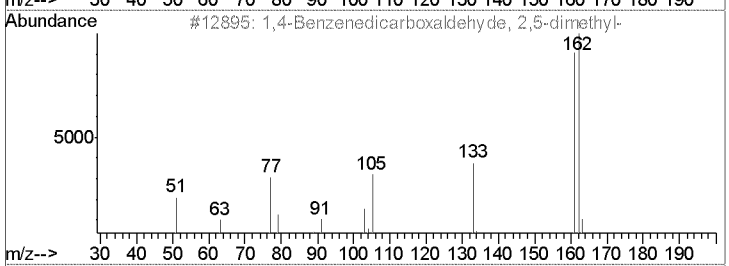
****

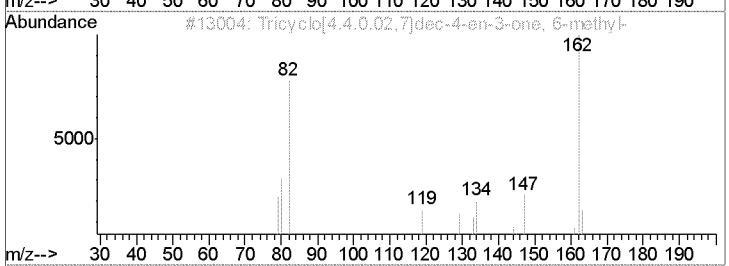
Peak Number 5 unknown Concentration Rank 3

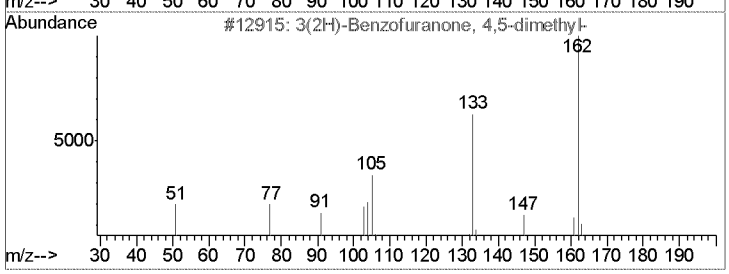
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.81	5.82 ppb	353490	Acenaphthene-d10	14.31

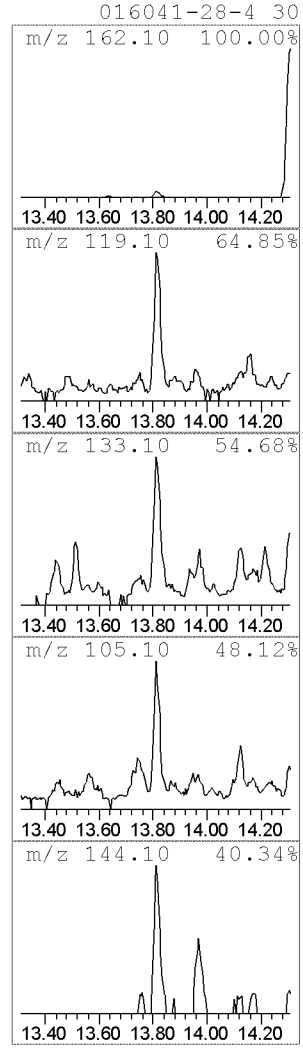
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Benzenedicarboxaldehyde, 2,5...	162	C10H10O2	007044-92-0	50
2	Tricyclo[4.4.0.02,7]dec-4-en-3-o...	162	C11H14O	006518-50-9	46
3	3(2H)-Benzofuranone, 4,5-dimethyl-	162	C10H10O2	020895-42-5	46
4	6(5H)-Pteridinone, 4-methyl-	162	C7H6N4O	016041-28-4	30











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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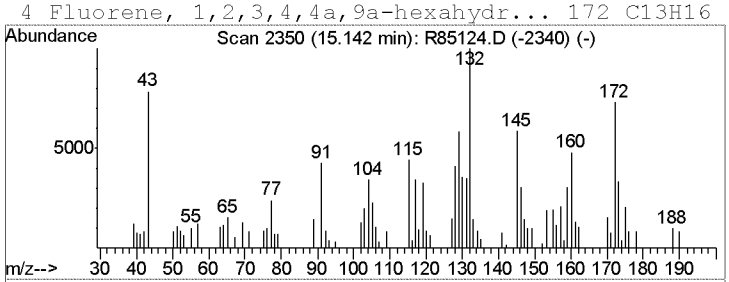
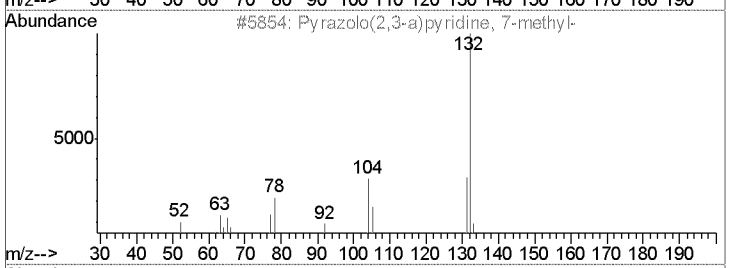
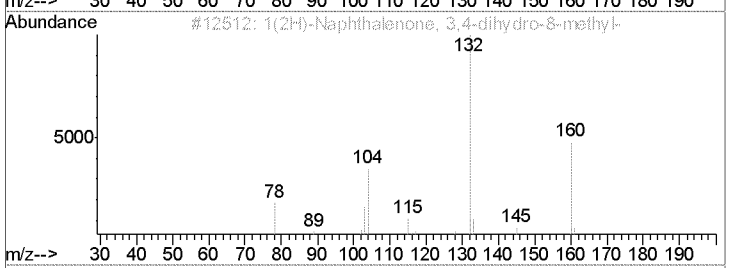
Peak Number 6 unknown Concentration Rank 9

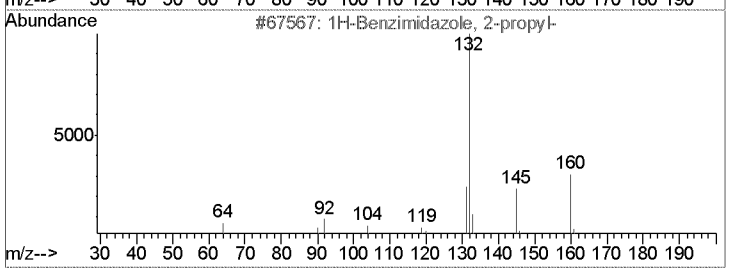
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.14	4.19 ppb	254163	Acenaphthene-d10a	14.31

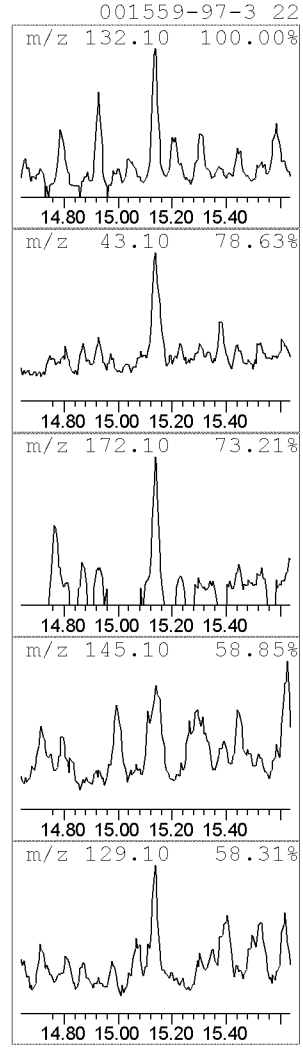
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	47
2	1(2H)-Naphthalenone, 3,4-dihydro...	160	C11H12O	051015-28-2	35
3	1H-Benzimidazole, 2-propyl-	160	C10H12N2	005465-29-2	30
4	Fluorene, 1,2,3,4,4a,9a-hexahydr...	172	C13H16	001559-97-3	22











8.1.2

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

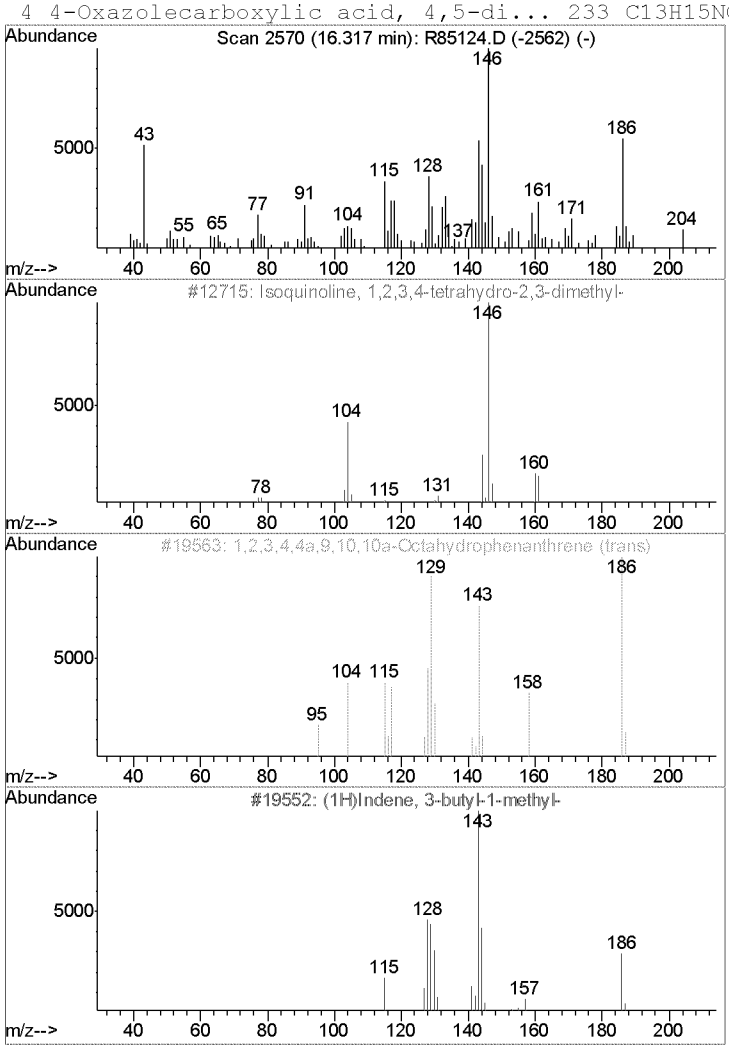
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

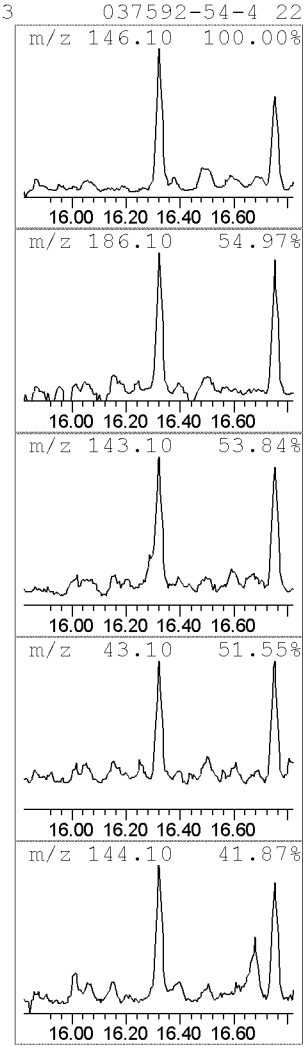
****

Peak Number 7 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.32	4.37 ppb	323517	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isoquinoline, 1,2,3,4-tetrahydro...	161	C11H15N	054365-72-9	35
2	1,2,3,4,4a,9,10,10a-Octahydrophe...	186	C14H18	020480-67-5	35
3	(1H)Indene, 3-butyl-1-methyl-	186	C14H18	000000-00-0	27
4	4-Oxazolecarboxylic acid, 4,5-di...	233	C13H15NO3	037592-54-4	22





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

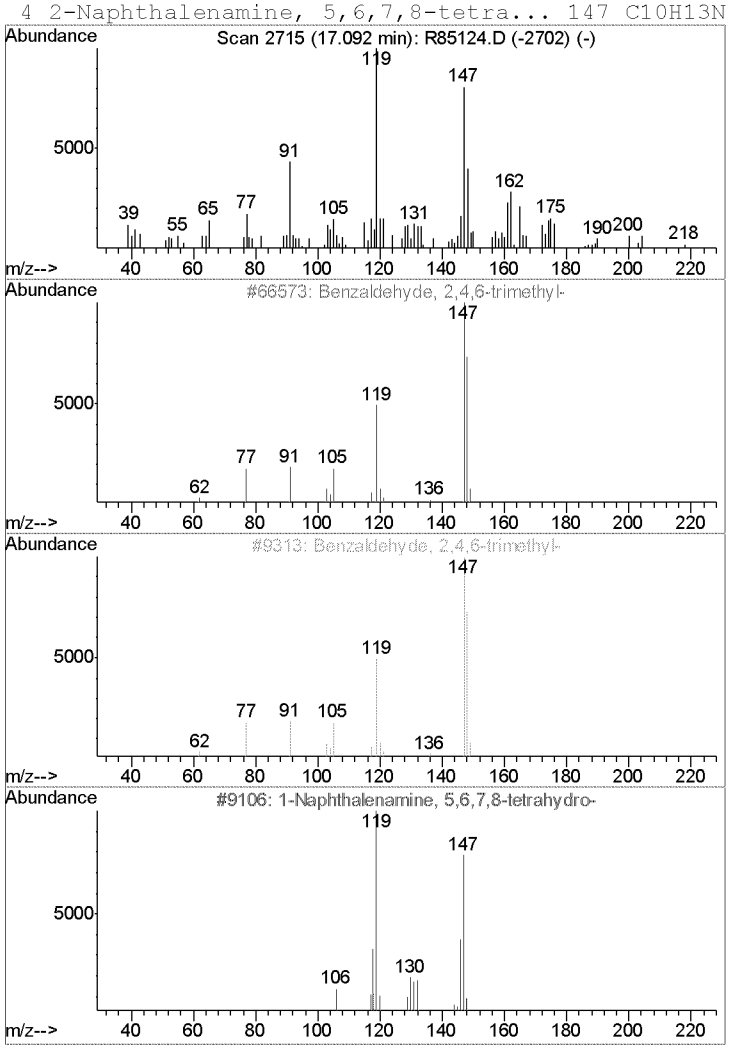
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

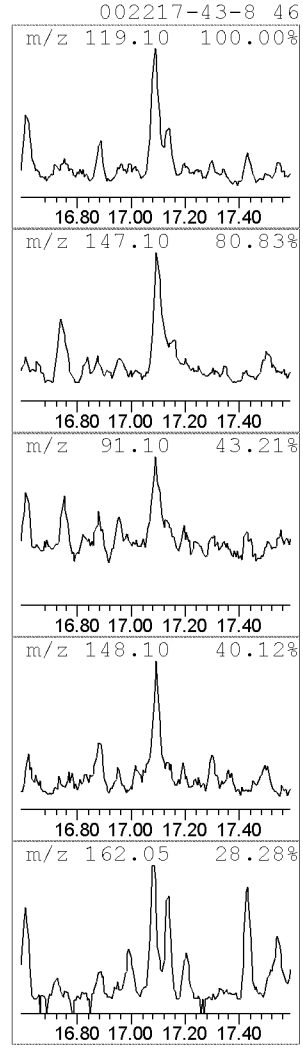
****

Peak Number 8 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.09	5.74 ppb	425265	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde, 2,4,6-trimethyl-	148	C10H12O	000487-68-3	58
2	Benzaldehyde, 2,4,6-trimethyl-	148	C10H12O	000487-68-3	58
3	1-Naphthalenamine, 5,6,7,8-tetra...	147	C10H13N	002217-41-6	55
4	2-Naphthalenamine, 5,6,7,8-tetra...	147	C10H13N	002217-43-8	46





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85124.D Vial: 10
Acq On : 27 Jan 2011 4:10 pm Operator: ninap
Sample : ja66701-1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

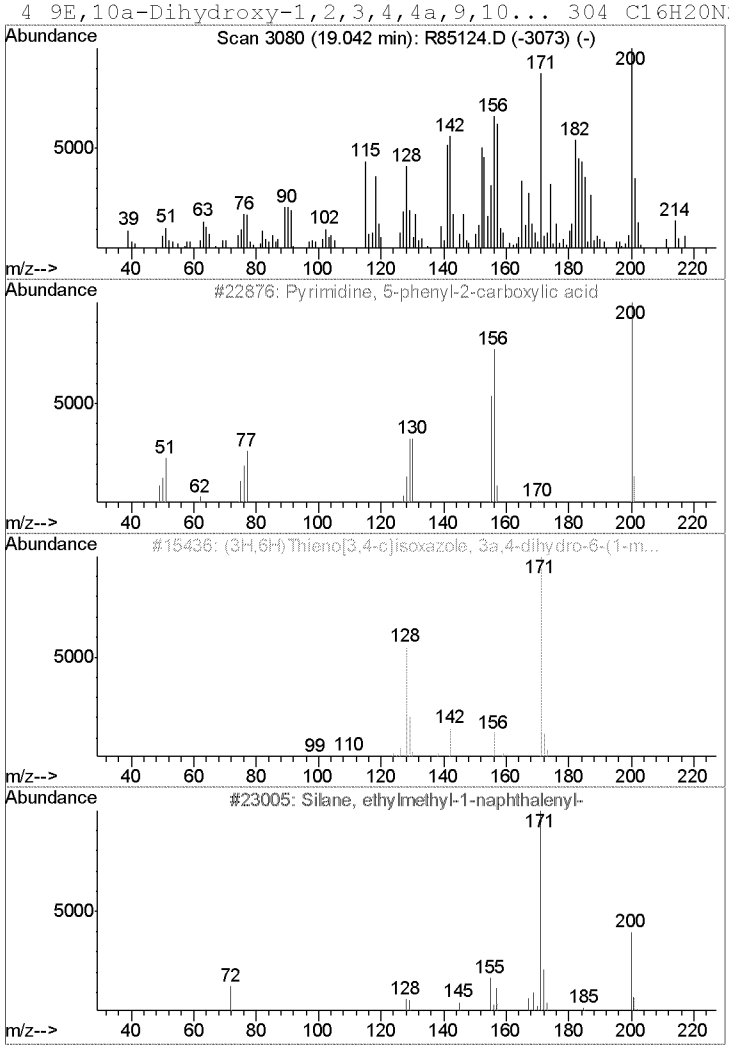
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

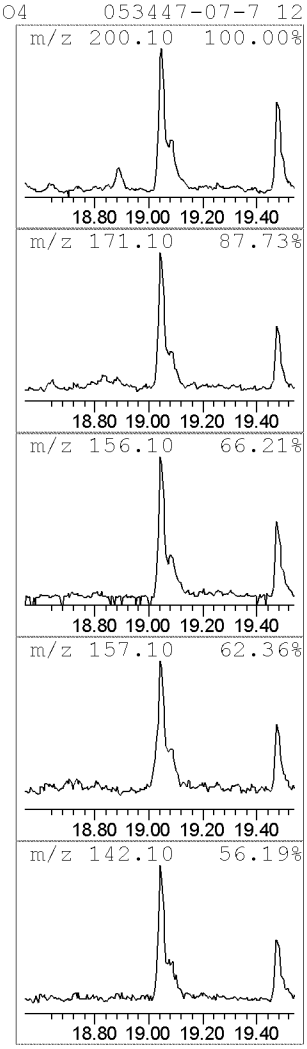
****

Peak Number 9 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.04	7.34 ppb	543798	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrimidine, 5-phenyl-2-carboxyli...	200	C11H8N2O2	085386-20-5	15
2	(3H,6H)Thieno[3,4-c]isoxazole, 3...	171	C8H13NOS	000000-00-0	14
3	Silane, ethylmethyl-1-naphthalenyl-	200	C13H16Si	074685-82-8	12
4	9E,10a-Dihydroxy-1,2,3,4,4a,9,10...	304	C16H20N2O4	053447-07-7	12





Tentatively Identified Compound (LSC) summary

Operator ID: ninap Date Acquired: 27 Jan 2011 4:10 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85124.D
Name: ja66701-1
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
C4 alkyl benzene	9.73	4.3	ppb	227057	3	10.19	2129620	40.0
unknown	11.63	4.5	ppb	240389	3	10.19	2129620	40.0
Phenol, tert-butyl-	11.77	4.4	ppb	232609	3	10.19	2129620	40.0
Naphthalene, 1-me...	12.08	5.9	ppb	313665	3	10.19	2129620	40.0
unknown	13.81	5.8	ppb	353490	4	14.31	2428710	40.0
unknown	15.14	4.2	ppb	254163	5	14.31	2428710	40.0
unknown	16.32	4.4	ppb	323517	6	17.77	2962740	40.0
unknown	17.09	5.7	ppb	425265	6	17.77	2962740	40.0
unknown	19.04	7.3	ppb	543798	6	17.77	2962740	40.0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:59 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

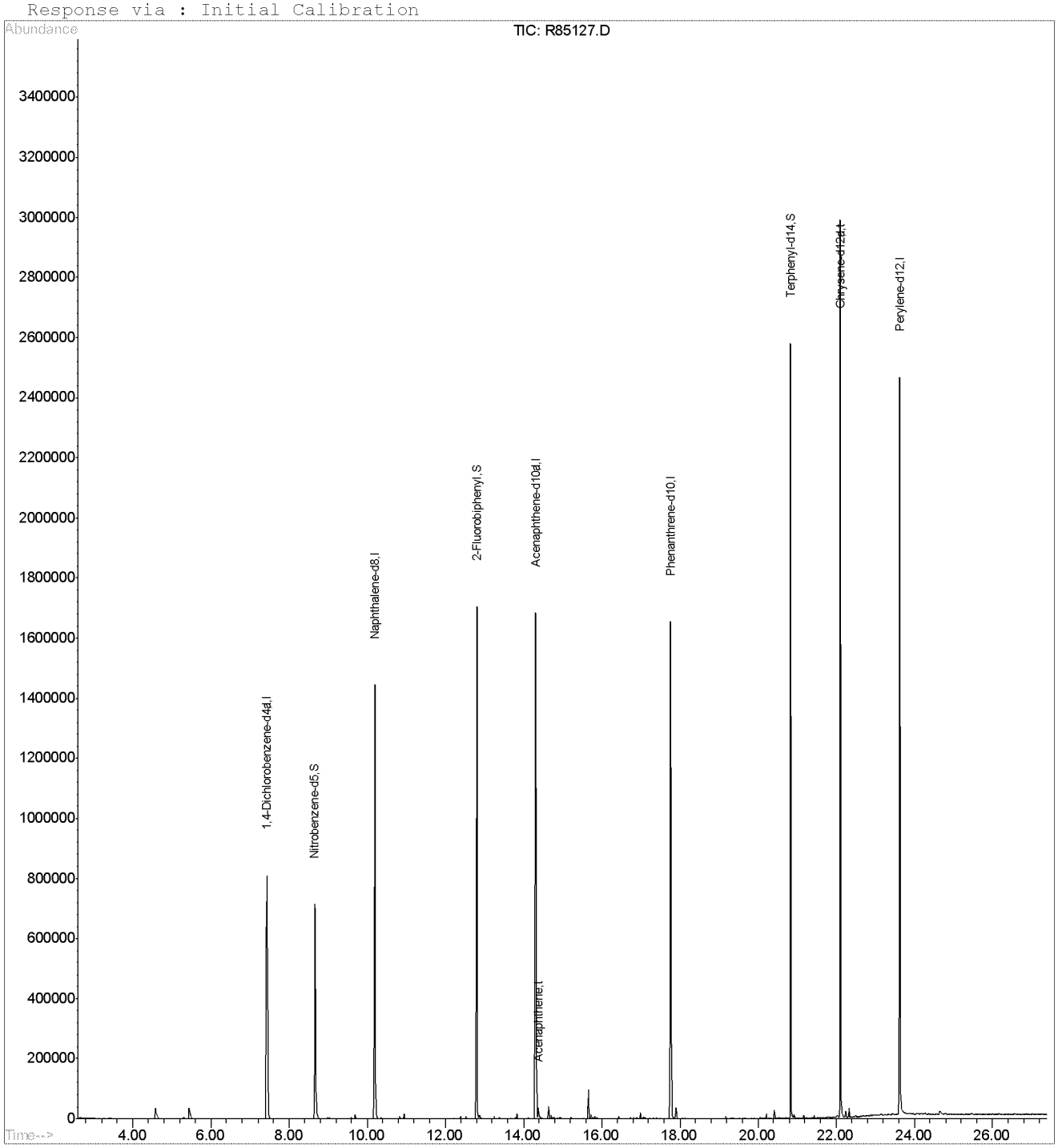
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	303533	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	1103967	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	642128	40.00	ppb	-0.22
69) Phenanthrene-d10	17.77	188	1057882	40.00	ppb	-0.22
83) Chrysene-d12	22.11	240	1132845	40.00	ppb	-0.14
92) Perylene-d12	23.63	264	1084564	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.43	152	303533	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	642128	40.00	ppb	-0.21
107) Chrysene-d12a	22.11	240	1132845	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	412600	41.12	ppb	-0.20
Spiked Amount 50.000			Recovery =	82.24%		
51) 2-Fluorobiphenyl	12.80	172	880407	38.95	ppb	-0.21
Spiked Amount 50.000			Recovery =	77.90%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	830878	38.91	ppb	-0.14
Spiked Amount 50.000			Recovery =	77.82%		
Target Compounds						Qvalue
59) Acenaphthene	14.38	153	15971	0.78	ppb	94

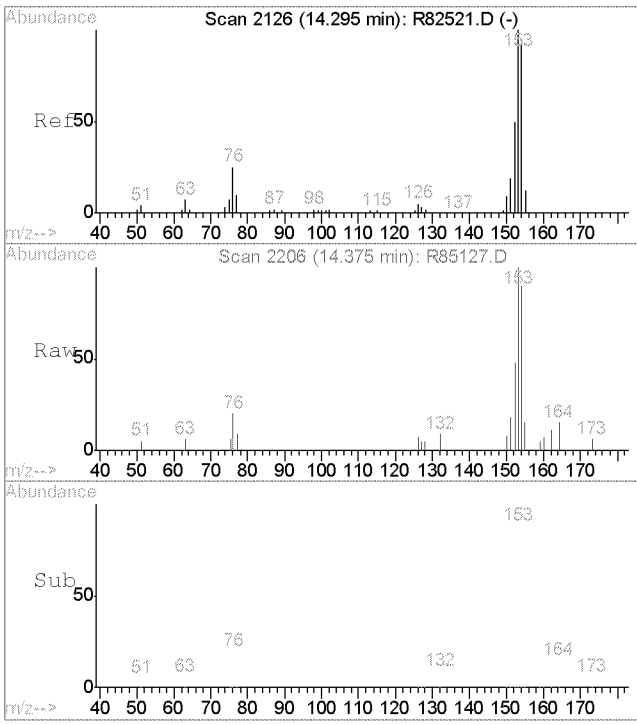
(#) = qualifier out of range (m) = manual integration
R85127.D MR3151.M Thu Jan 27 20:00:05 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:59 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration

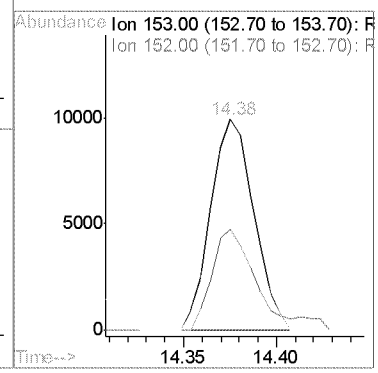




#59
Acenaphthene
Concen: 0.78 ppb
RT: 14.38 min Scan# 2206
Delta R.T. -0.22 min
Lab File: R85127.D
Acq: 27 Jan 2011 5:56 pm

Tgt Ion:153 Resp: 15971

Ion	Ratio	Lower	Upper
153	100		
152	44.9	19.9	79.9
154	90.2	65.1	125.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85127.D Vial: 13
Acq On : 27 Jan 2011 5:56 pm Operator: larisap
Sample : ja66701-2 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.578	363	372	400	rBB2	35090	102652	3.20%	0.434%
2	5.299	500	507	517	rBB	6366	15469	0.48%	0.065%
3	5.443	526	534	551	rBB2	35930	93233	2.91%	0.394%
4	7.430	897	906	928	rBV	810774	1704787	53.18%	7.202%
5	8.664	1130	1137	1163	rBV	715854	1214930	37.90%	5.132%
6	8.990	1192	1198	1202	rBV2	6952	9423	0.29%	0.040%
7	9.028	1202	1205	1212	rVB2	7424	9137	0.29%	0.039%
8	9.605	1307	1313	1315	rBV	4871	5474	0.17%	0.023%
9	9.695	1323	1330	1335	rBB	16105	21688	0.68%	0.092%
10	10.192	1414	1423	1439	rBV	1444874	2252736	70.27%	9.516%
11	10.352	1447	1453	1459	rVB3	4911	8894	0.28%	0.038%
12	10.401	1459	1462	1470	rBB	2080	3987	0.12%	0.017%
13	10.828	1536	1542	1549	rBB2	9295	13552	0.42%	0.057%
14	10.945	1556	1564	1569	rBB	18985	27870	0.87%	0.118%
15	12.217	1799	1802	1808	rVB3	4119	7046	0.22%	0.030%
16	12.382	1828	1833	1838	rVB	9846	13473	0.42%	0.057%
17	12.527	1853	1860	1870	rBB2	8420	12544	0.39%	0.053%
18	12.660	1879	1885	1889	rBB2	4433	5522	0.17%	0.023%
19	12.805	1903	1912	1921	rBV	1707026	2533953	79.04%	10.704%
20	12.874	1921	1925	1930	rVV3	10389	16334	0.51%	0.069%
21	12.943	1932	1938	1941	rVV2	2214	4480	0.14%	0.019%
22	13.162	1973	1979	1985	rBB	2722	4310	0.13%	0.018%
23	13.248	1990	1995	2000	rBB	7576	9153	0.29%	0.039%
24	13.371	2012	2018	2025	rBB	7323	13436	0.42%	0.057%
25	13.681	2072	2076	2084	rBB2	4027	6641	0.21%	0.028%
26	13.793	2092	2097	2100	rBV	6803	9583	0.30%	0.040%
27	13.830	2100	2104	2111	rVB3	17708	26711	0.83%	0.113%
28	14.113	2152	2157	2161	rBV2	4855	5419	0.17%	0.023%
29	14.306	2185	2193	2201	rBV	1683950	2627034	81.95%	11.097%
30	14.375	2201	2206	2212	rVV	38850	64521	2.01%	0.273%
31	14.412	2212	2213	2218	rVV	8903	8039	0.25%	0.034%
32	14.455	2218	2221	2232	rVB	5683	10956	0.34%	0.046%
33	14.605	2245	2249	2251	rBV2	4135	5378	0.17%	0.023%
34	14.642	2251	2256	2262	rVB	40554	55499	1.73%	0.234%
35	14.706	2262	2268	2272	rBV	11350	16762	0.52%	0.071%
36	14.754	2273	2277	2281	rVV2	5775	9459	0.30%	0.040%
37	14.792	2281	2284	2291	rVB2	4871	8023	0.25%	0.034%
38	14.867	2292	2298	2305	rBB3	4060	8727	0.27%	0.037%

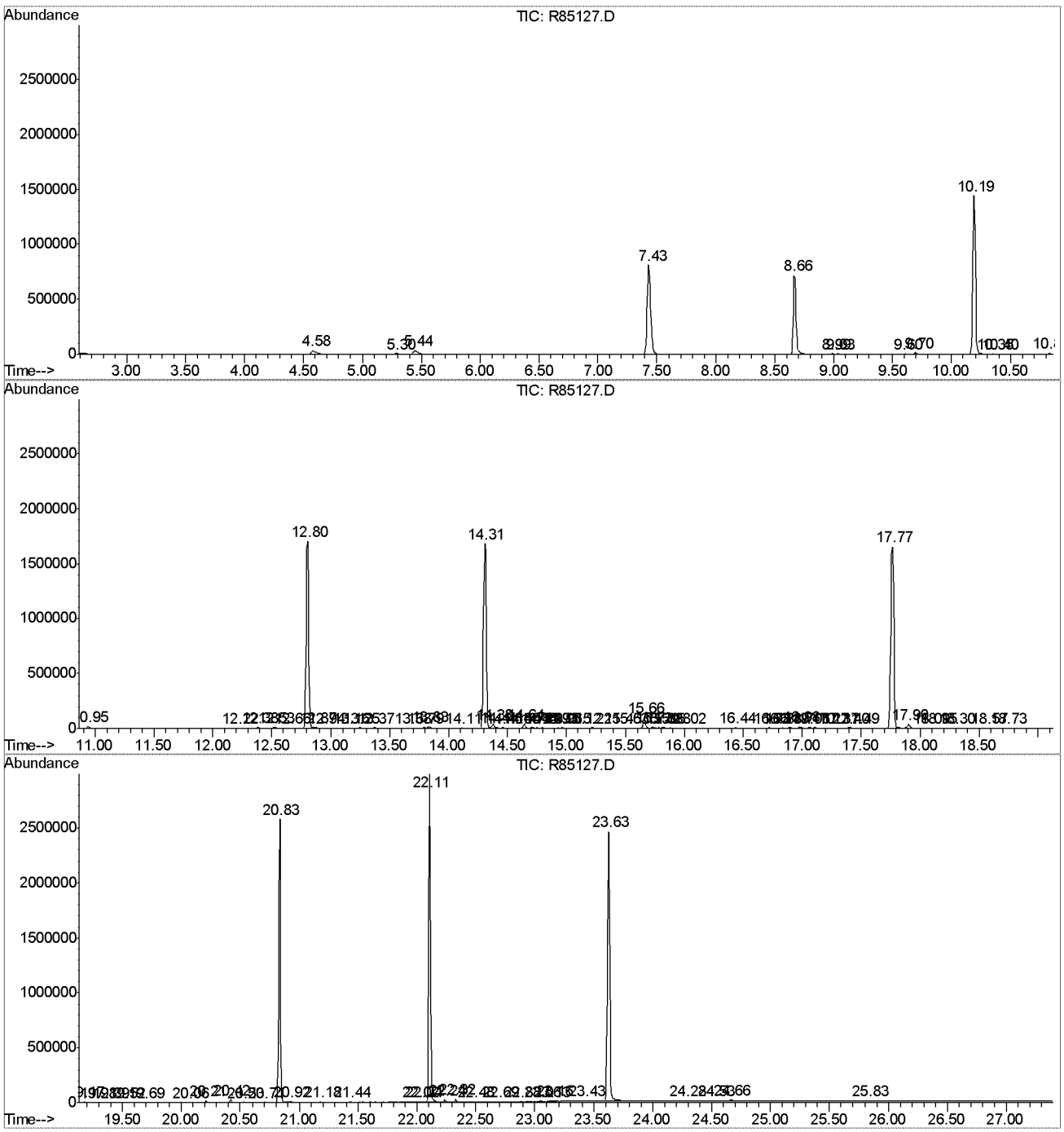
39	14.925	2305	2309	2313	rBV	6576	8318	0.26%	0.035%
40	14.963	2313	2316	2321	rVB	6149	7472	0.23%	0.032%
41	15.123	2342	2346	2350	rBV	3309	4525	0.14%	0.019%
42	15.219	2358	2364	2371	rBB2	7160	12179	0.38%	0.051%
43	15.465	2406	2410	2415	rBB	4208	5068	0.16%	0.021%
44	15.534	2420	2423	2429	rBB	3133	4578	0.14%	0.019%
45	15.657	2440	2446	2454	rVV	98816	150352	4.69%	0.635%
46	15.732	2454	2460	2464	rVV	14025	22637	0.71%	0.096%
47	15.785	2467	2470	2472	rVV2	5781	7228	0.23%	0.031%
48	15.817	2472	2476	2485	rVB2	8162	14938	0.47%	0.063%
49	15.882	2485	2488	2493	rBB2	5404	6231	0.19%	0.026%
50	16.015	2507	2513	2518	rBB2	3851	5004	0.16%	0.021%
51	16.437	2586	2592	2597	rVB2	9024	10827	0.34%	0.046%
52	16.726	2640	2646	2655	rBB2	5087	10236	0.32%	0.043%
53	16.806	2656	2661	2663	rBV3	4052	5839	0.18%	0.025%
54	16.827	2663	2665	2670	rVB	5018	5326	0.17%	0.022%
55	16.891	2670	2677	2687	rBV2	7126	17210	0.54%	0.073%
56	16.982	2687	2694	2702	rVV3	19681	29524	0.92%	0.125%
57	17.062	2702	2709	2714	rVV4	5581	13685	0.43%	0.058%
58	17.105	2714	2717	2724	rVB3	6788	9725	0.30%	0.041%
59	17.222	2731	2739	2744	rBV2	3815	6990	0.22%	0.030%
60	17.308	2750	2755	2760	rBV	3920	7537	0.24%	0.032%
61	17.399	2768	2772	2779	rBV	4997	8671	0.27%	0.037%
62	17.490	2782	2789	2799	rBV3	4034	10710	0.33%	0.045%
63	17.767	2832	2841	2856	rBV2	1656830	2764395	86.23%	11.678%
64	17.901	2856	2866	2875	rVV6	37092	66736	2.08%	0.282%
65	18.088	2896	2901	2906	rBV2	3769	4308	0.13%	0.018%
66	18.147	2907	2912	2917	rVB4	3318	5543	0.17%	0.023%
67	18.302	2935	2941	2947	rBB	2434	3850	0.12%	0.016%
68	18.574	2988	2992	3001	rVB3	3965	6694	0.21%	0.028%
69	18.734	3015	3022	3025	rBV	1774	3993	0.12%	0.017%
70	19.172	3098	3104	3110	rBV3	9057	14022	0.44%	0.059%
71	19.285	3121	3125	3129	rBV3	2798	4504	0.14%	0.019%
72	19.391	3137	3145	3150	rVB2	3152	4217	0.13%	0.018%
73	19.525	3165	3170	3173	rVB2	3955	4503	0.14%	0.019%
74	19.685	3193	3200	3203	rBV3	1652	3841	0.12%	0.016%
75	20.064	3264	3271	3276	rBV	5046	7500	0.23%	0.032%
76	20.209	3289	3298	3304	rVB2	15776	18655	0.58%	0.079%
77	20.417	3330	3337	3344	rBV3	29623	32551	1.02%	0.138%
78	20.529	3353	3358	3365	rBV3	3698	7160	0.22%	0.030%
79	20.706	3387	3391	3399	rVV3	3199	4611	0.14%	0.019%
80	20.834	3406	3415	3427	rBV	2579473	2771152	86.44%	11.706%
81	20.925	3427	3432	3446	rVB4	13753	22589	0.70%	0.095%
82	21.181	3474	3480	3485	rVB3	7610	7937	0.25%	0.034%
83	21.437	3524	3528	3532	rVB	8972	7499	0.23%	0.032%
84	22.020	3632	3637	3639	rVV5	4109	6579	0.21%	0.028%
85	22.041	3639	3641	3646	rVB4	6303	6349	0.20%	0.027%
86	22.105	3646	3653	3671	rBV	2989801	3192612	99.59%	13.487%
87	22.239	3673	3678	3687	rVB	23240	28815	0.90%	0.122%
88	22.324	3687	3694	3701	rBV	30235	33234	1.04%	0.140%
89	22.484	3720	3724	3728	rVB5	4803	4924	0.15%	0.021%
90	22.693	3758	3763	3770	rBV4	3533	6004	0.19%	0.025%
91	22.880	3794	3798	3804	rBV4	4123	6072	0.19%	0.026%
92	23.056	3828	3831	3836	rVB4	2402	4574	0.14%	0.019%
93	23.131	3842	3845	3847	rVV2	4047	4154	0.13%	0.018%
94	23.158	3847	3850	3856	rVB5	4210	5248	0.16%	0.022%
95	23.430	3897	3901	3904	rBV3	4340	6324	0.20%	0.027%

96	23.628	3929	3938	3959	rBV	2452433	3205820	100.00%	13.542%
97	24.279	4051	4060	4063	rBV6	4883	11132	0.35%	0.047%
98	24.525	4105	4106	4112	rBV6	2798	4009	0.13%	0.017%
99	24.659	4126	4131	4144	rVB2	12776	23676	0.74%	0.100%
100	25.829	4345	4350	4355	rBV6	2784	5028	0.16%	0.021%

Sum of corrected areas: 23672459

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85127.D
Operator : larisap
Acquired : 27 Jan 2011 5:56 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-2
Misc Info : op47853,er3223,1000
Vial Number: 13
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 27 Jan 2011 5:56 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85127.D
Name: ja66701-2
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.4
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:51 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

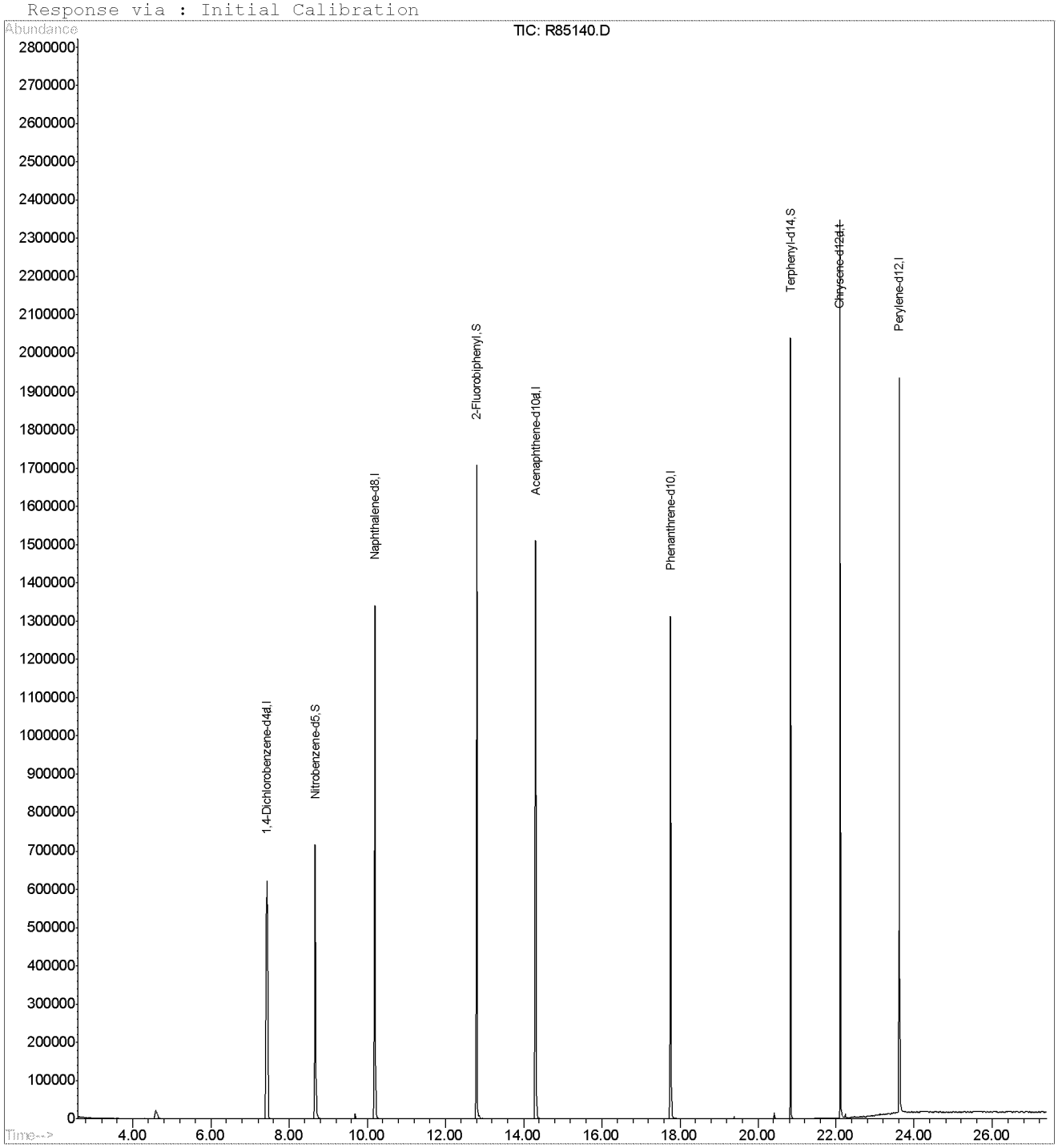
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	298758	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	1044118	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	584532	40.00	ppb	-0.21
69) Phenanthrene-d10	17.76	188	887909	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	861655	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	775629	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.43	152	298758	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	584532	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	861655	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.67	82	429722	45.29	ppb	-0.20
Spiked Amount 50.000			Recovery =	90.58%		
51) 2-Fluorobiphenyl	12.80	172	870819	42.32	ppb	-0.21
Spiked Amount 50.000			Recovery =	84.64%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	657105	40.46	ppb	-0.14
Spiked Amount 50.000			Recovery =	80.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85140.D MR3151.M Fri Jan 28 20:51:31 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:51 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85140.D Vial: 4
Acq On : 28 Jan 2011 5:11 pm Operator: larisap
Sample : ja66701-3 Inst : MSR
Misc : op47853,er3224,945 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.630	5	8	17	rVB3	1713	2648	0.11%	0.014%
2	3.026	80	82	86	rBV3	1024	1690	0.07%	0.009%
3	3.175	107	110	115	rVB3	974	1837	0.07%	0.009%
4	3.576	181	185	189	rBV	1348	1875	0.08%	0.010%
5	3.811	228	229	237	rBV	1240	2905	0.12%	0.015%
6	3.955	246	256	257	rBV2	745	1899	0.08%	0.010%
7	4.212	302	304	310	rVB2	1656	2483	0.10%	0.013%
8	4.297	316	320	322	rBV	1363	1600	0.06%	0.008%
9	4.468	349	352	356	rBV	1284	1885	0.08%	0.010%
10	4.586	365	374	400	rVB2	23735	100324	4.03%	0.516%
11	4.890	424	431	434	rBB	1166	1616	0.06%	0.008%
12	7.428	896	906	928	rBB2	623297	1672212	67.21%	8.593%
13	8.667	1130	1138	1167	rBV	716342	1259671	50.63%	6.473%
14	8.849	1171	1172	1181	rVB	1200	1490	0.06%	0.008%
15	9.693	1324	1330	1336	rBB	13854	19702	0.79%	0.101%
16	10.190	1414	1423	1446	rBV	1340880	2129789	85.61%	10.945%
17	12.802	1903	1912	1923	rBV	1708483	2487884	100.00%	12.785%
18	12.866	1923	1924	1932	rVV	8279	12163	0.49%	0.063%
19	12.930	1932	1936	1945	rVV2	1970	5606	0.23%	0.029%
20	13.144	1973	1976	1980	rBB	2806	2297	0.09%	0.012%
21	14.308	2185	2194	2224	rBB	1510364	2401887	96.54%	12.343%
22	17.482	2784	2788	2795	rBB	2421	4174	0.17%	0.021%
23	17.765	2828	2841	2858	rBV2	1314488	2302910	92.57%	11.834%
24	17.882	2858	2863	2873	rVV	3341	8669	0.35%	0.045%
25	17.957	2876	2877	2886	rVB2	1161	2145	0.09%	0.011%
26	18.577	2986	2993	2998	rBB	1418	2207	0.09%	0.011%
27	18.625	2999	3002	3009	rBB	652	1479	0.06%	0.008%
28	19.389	3138	3145	3151	rVB	6915	9724	0.39%	0.050%
29	20.014	3257	3262	3265	rBV	746	1699	0.07%	0.009%
30	20.420	3333	3338	3342	rVB	16028	15289	0.61%	0.079%
31	20.831	3406	3415	3435	rBV	2040195	2123890	85.37%	10.914%
32	22.102	3647	3653	3669	rBV	2348236	2380021	95.66%	12.230%
33	22.231	3673	3677	3684	rVB	10954	11097	0.45%	0.057%
34	22.311	3689	3692	3695	rBV2	1562	1872	0.08%	0.010%
35	22.599	3742	3746	3748	rBV3	1693	1989	0.08%	0.010%
36	22.754	3772	3775	3777	rBV3	1347	1740	0.07%	0.009%
37	22.776	3777	3779	3784	rBV3	1444	2299	0.09%	0.012%
38	22.936	3805	3809	3811	rVB3	2827	2851	0.11%	0.015%

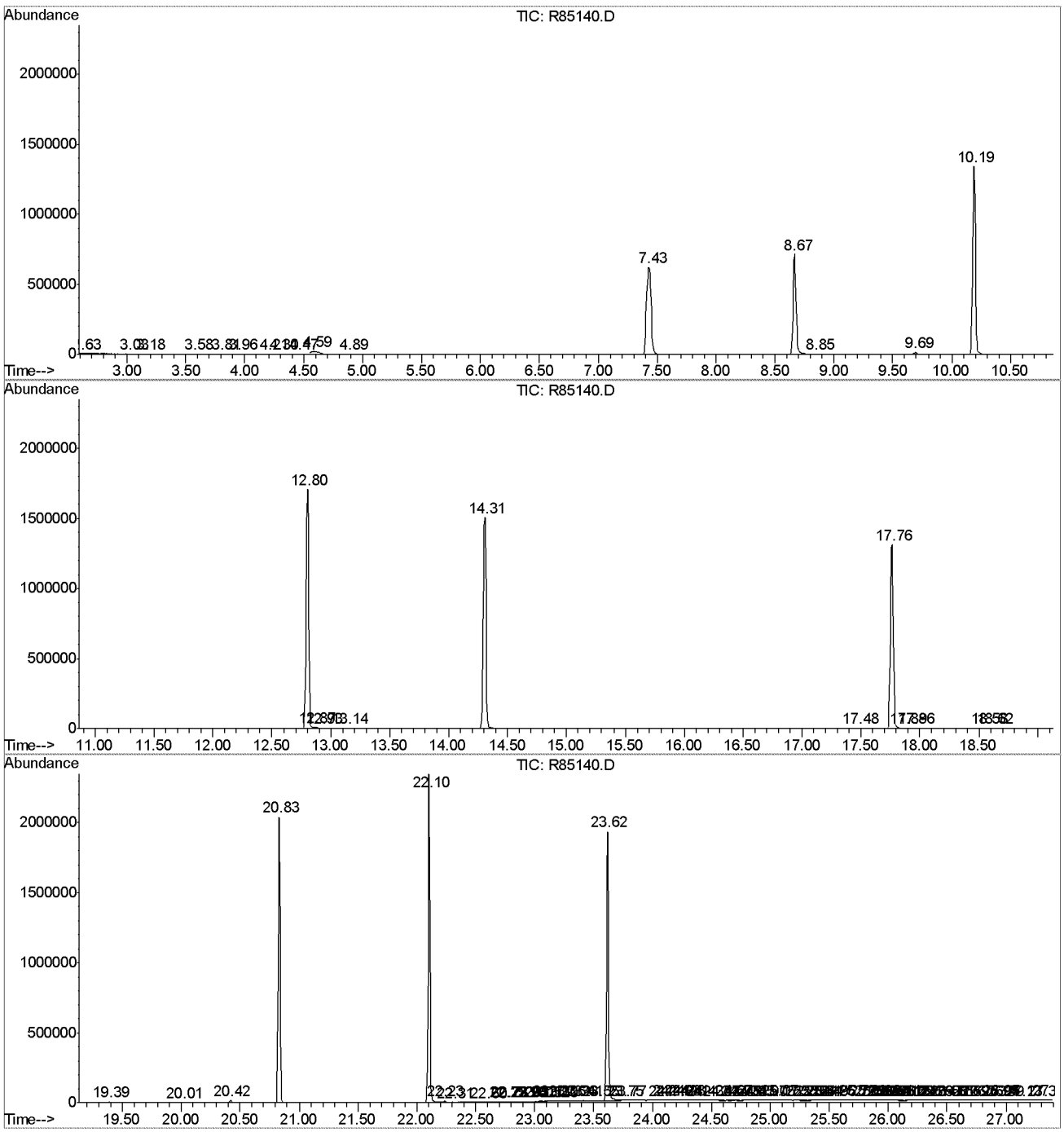
39	22.952	3811	3812	3814	rBV	1958	1549	0.06%	0.008%
40	23.005	3816	3822	3824	rBV4	2836	4468	0.18%	0.023%
41	23.053	3824	3831	3834	rBV4	1707	3649	0.15%	0.019%
42	23.101	3834	3840	3841	rBV3	2940	3702	0.15%	0.019%
43	23.128	3841	3845	3849	rBV2	4558	6526	0.26%	0.034%
44	23.198	3854	3858	3859	rVB3	1879	1620	0.07%	0.008%
45	23.262	3866	3870	3873	rVB3	2040	2064	0.08%	0.011%
46	23.358	3884	3888	3894	rVB6	2276	4375	0.18%	0.022%
47	23.411	3894	3898	3902	rBV3	4216	6960	0.28%	0.036%
48	23.550	3918	3924	3930	rVV7	1294	2488	0.10%	0.013%
49	23.620	3930	3937	3959	rBV	1921583	2286930	91.92%	11.752%
50	23.753	3959	3962	3965	rVB3	2619	3568	0.14%	0.018%
51	23.775	3965	3966	3968	rBV2	2174	1590	0.06%	0.008%
52	24.106	4027	4028	4033	rVV4	1801	2211	0.09%	0.011%
53	24.143	4033	4035	4040	rVV4	3326	4388	0.18%	0.023%
54	24.175	4040	4041	4045	rVV3	2083	2857	0.11%	0.015%
55	24.245	4046	4054	4057	rVV7	3599	8254	0.33%	0.042%
56	24.277	4057	4060	4063	rVV4	3790	5445	0.22%	0.028%
57	24.309	4063	4066	4071	rVV6	3816	5826	0.23%	0.030%
58	24.426	4081	4088	4092	rVB8	1728	3346	0.13%	0.017%
59	24.571	4114	4115	4124	rVB6	2797	4474	0.18%	0.023%
60	24.672	4128	4134	4140	rVV4	3781	7933	0.32%	0.041%
61	24.731	4143	4145	4148	rVB4	1605	1545	0.06%	0.008%
62	24.752	4148	4149	4153	rBV4	1572	1679	0.07%	0.009%
63	24.811	4159	4160	4163	rBV3	1959	1514	0.06%	0.008%
64	24.870	4168	4171	4174	rBV4	1805	2071	0.08%	0.011%
65	24.966	4186	4189	4191	rBV4	1536	1677	0.07%	0.009%
66	25.046	4201	4204	4205	rBV3	2089	1634	0.07%	0.008%
67	25.067	4207	4208	4211	rBV3	2792	1952	0.08%	0.010%
68	25.276	4243	4247	4255	rVB6	2846	8150	0.33%	0.042%
69	25.334	4255	4258	4260	rBV4	2530	3040	0.12%	0.016%
70	25.356	4260	4262	4266	rVV5	1729	2038	0.08%	0.010%
71	25.415	4271	4273	4275	rBV3	1935	1642	0.07%	0.008%
72	25.441	4275	4278	4280	rVB3	2138	1559	0.06%	0.008%
73	25.489	4285	4287	4291	rBV4	1824	2224	0.09%	0.011%
74	25.559	4296	4300	4303	rVV4	984	1712	0.07%	0.009%
75	25.724	4329	4331	4336	rVB5	2284	3009	0.12%	0.015%
76	25.815	4346	4348	4351	rVB4	2935	2772	0.11%	0.014%
77	25.853	4351	4355	4359	rBV5	2663	4529	0.18%	0.023%
78	25.906	4363	4365	4372	rVB6	2559	3870	0.16%	0.020%
79	25.954	4372	4374	4377	rBV4	2335	2704	0.11%	0.014%
80	25.976	4377	4378	4382	rVB4	2026	1570	0.06%	0.008%
81	26.018	4382	4386	4388	rBV4	1822	2004	0.08%	0.010%
82	26.045	4390	4391	4396	rVV4	2133	2737	0.11%	0.014%
83	26.109	4400	4403	4408	rVB4	3637	5319	0.21%	0.027%
84	26.147	4408	4410	4412	rBV3	1896	1770	0.07%	0.009%
85	26.184	4412	4417	4422	rBV5	1516	2600	0.10%	0.013%
86	26.227	4422	4425	4426	rBV3	2358	1574	0.06%	0.008%
87	26.243	4426	4428	4431	rBV3	1575	1822	0.07%	0.009%
88	26.387	4453	4455	4458	rBV3	1619	2138	0.09%	0.011%
89	26.467	4467	4470	4476	rVB5	2154	3667	0.15%	0.019%
90	26.504	4476	4477	4481	rVB4	1501	1610	0.06%	0.008%
91	26.552	4481	4486	4488	rBV4	2415	3945	0.16%	0.020%
92	26.686	4508	4511	4514	rBV4	2074	2495	0.10%	0.013%
93	26.766	4522	4526	4529	rBV6	1361	1919	0.08%	0.010%
94	26.830	4535	4538	4539	rBV3	1796	1803	0.07%	0.009%
95	26.937	4555	4558	4559	rBV3	1966	1752	0.07%	0.009%

96	26.948	4559	4560	4565	rVB4	2693	2758	0.11%	0.014%
97	26.985	4565	4567	4570	rBV4	2098	1473	0.06%	0.008%
98	27.135	4593	4595	4600	rVV4	1743	2145	0.09%	0.011%
99	27.322	4628	4630	4634	rBV4	2071	2180	0.09%	0.011%
100	27.370	4636	4639	4640	rBV2	2038	1531	0.06%	0.008%

Sum of corrected areas: 19459874

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85140.D
Operator : larisap
Acquired : 28 Jan 2011 5:11 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-3
Misc Info : op47853,er3224,945
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 5:11 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85140.D
Name: ja66701-3
Misc: op47853,er3224,945
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.6

8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:52 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

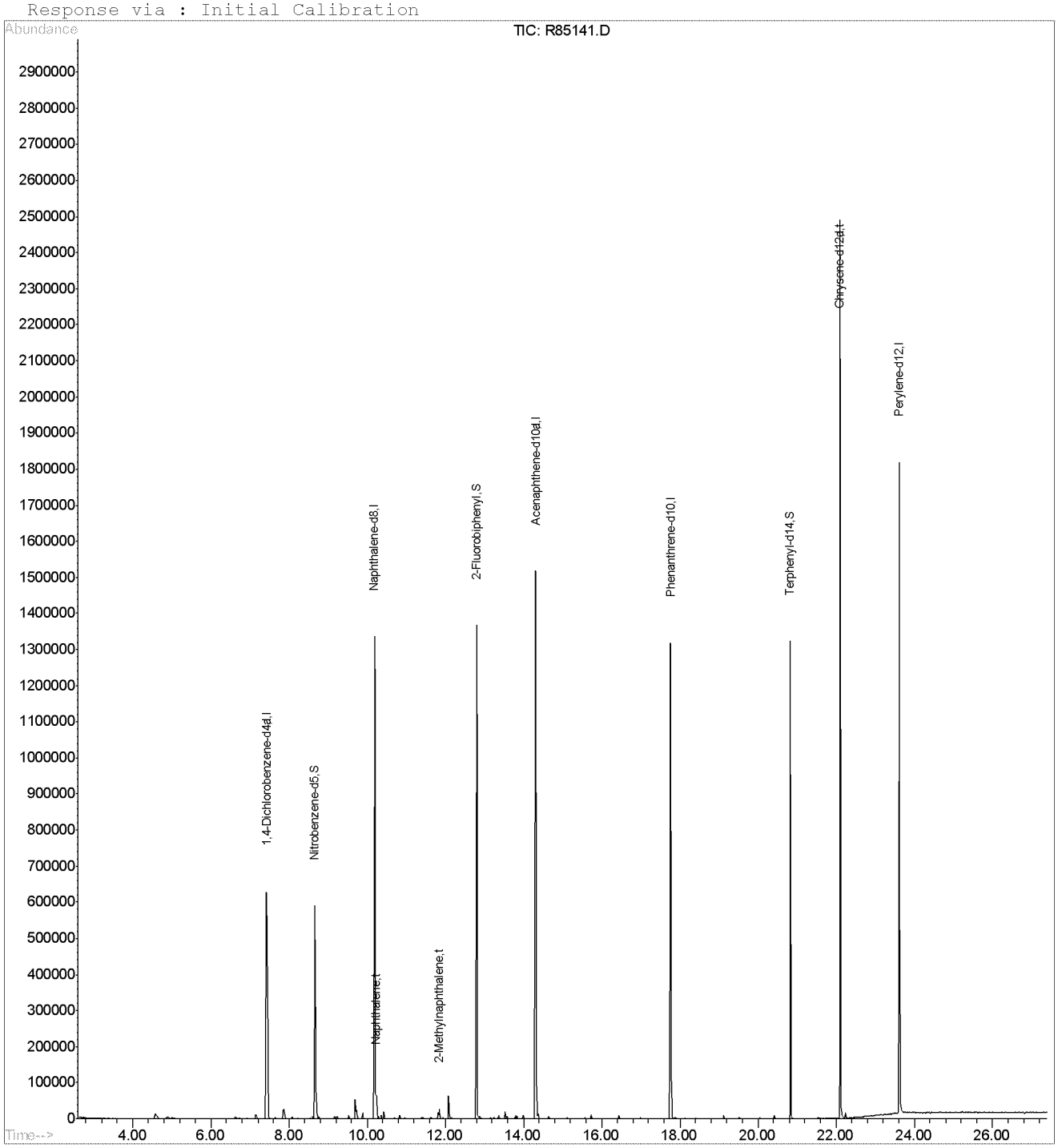
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	298967	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1042679	40.00	ppb	-0.21
47) Acenaphthene-d10	14.31	164	576651	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	856818	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	897218	40.00	ppb	-0.15
92) Perylene-d12	23.62	264	763285	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	298967	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	576651	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	897218	40.00	ppb	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	350440	36.98	ppb	-0.20
Spiked Amount 50.000			Recovery =	73.96%		
51) 2-Fluorobiphenyl	12.80	172	689909	33.99	ppb	-0.21
Spiked Amount 50.000			Recovery =	67.98%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	431455	25.51	ppb	-0.15
Spiked Amount 50.000			Recovery =	51.02%		
Target Compounds						Qvalue
38) Naphthalene	10.23	128	64432	2.20	ppb	96
44) 2-Methylnaphthalene	11.84	142	17063	0.84	ppb	96

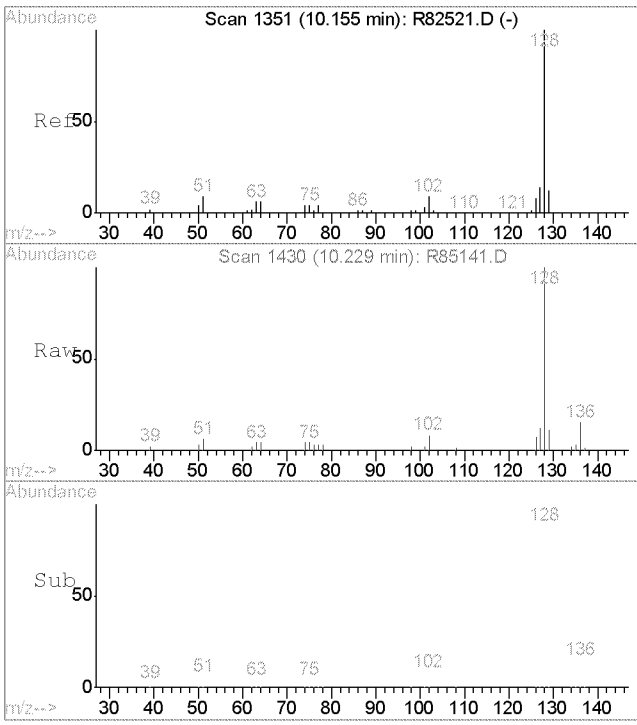
(#) = qualifier out of range (m) = manual integration
R85141.D MR3151.M Fri Jan 28 20:52:37 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:52 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration

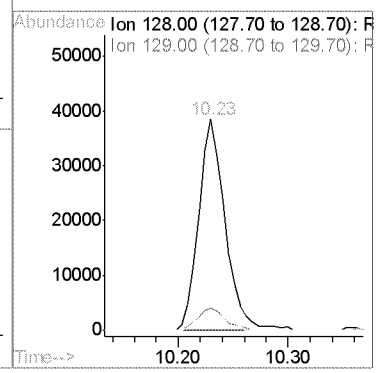


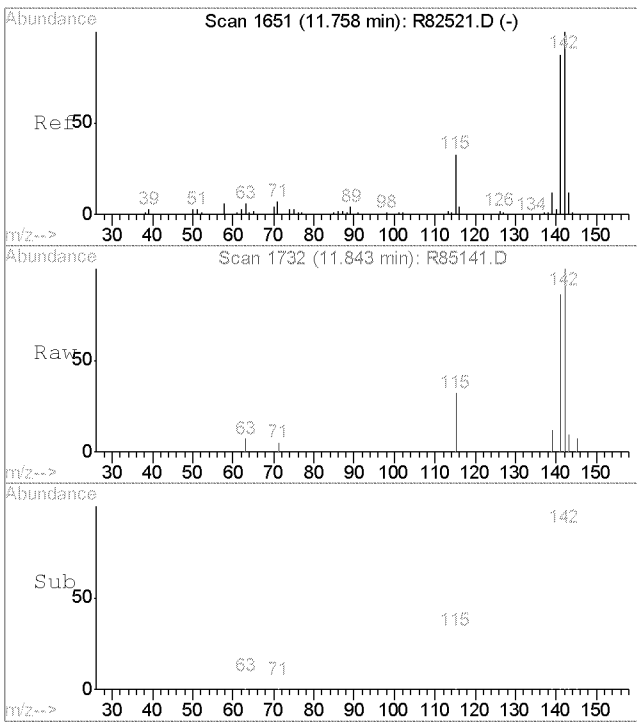


#38
Naphthalene
Concen: 2.20 ppb
RT: 10.23 min Scan# 1430
Delta R.T. -0.21 min
Lab File: R85141.D
Acq: 28 Jan 2011 5:47 pm

Tgt Ion:128 Resp: 64432

Ion	Ratio	Lower	Upper
128	100		
129	10.5	0.0	41.9
127	12.4	0.0	44.0

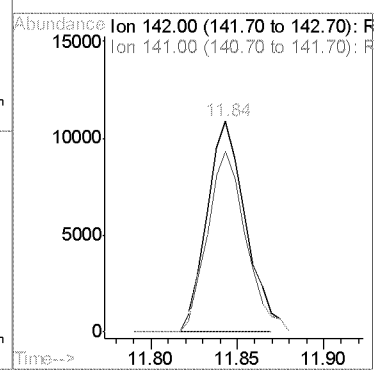




#44
2-Methylnaphthalene
Concen: 0.84 ppb
RT: 11.84 min Scan# 1732
Delta R.T. -0.21 min
Lab File: R85141.D
Acq: 28 Jan 2011 5:47 pm

Tgt Ion:142 Resp: 17063

Ion	Ratio	Lower	Upper
142	100		
141	85.6	57.0	117.0
115	26.6	3.1	63.1



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85141.D Vial: 5
Acq On : 28 Jan 2011 5:47 pm Operator: larisap
Sample : ja66701-4 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.572	364	371	396	rVB3	15538	66702	2.68%	0.354%
2	4.861	419	425	435	rBV2	5965	20953	0.84%	0.111%
3	5.005	446	452	460	rBV2	3257	9302	0.37%	0.049%
4	5.085	466	467	475	rVB2	2828	3626	0.15%	0.019%
5	5.961	625	631	643	rBB	1685	4431	0.18%	0.023%
6	6.458	721	724	735	rBB	1349	3344	0.13%	0.018%
7	6.634	748	757	767	rBB	5075	13844	0.56%	0.073%
8	6.720	768	773	783	rBB2	2844	7585	0.30%	0.040%
9	6.928	806	812	818	rBB	1440	3796	0.15%	0.020%
10	7.152	847	854	863	rBB2	13590	29219	1.17%	0.155%
11	7.419	896	904	922	rBV	629118	1694309	68.04%	8.982%
12	7.638	937	945	956	rBB2	5720	15878	0.64%	0.084%
13	7.863	980	987	1000	rBB	26999	62150	2.50%	0.329%
14	8.082	1022	1028	1037	rBB2	5930	11693	0.47%	0.062%
15	8.178	1040	1046	1051	rBV	2700	4719	0.19%	0.025%
16	8.226	1051	1055	1060	rVB	2846	4372	0.18%	0.023%
17	8.285	1061	1066	1070	rBB	2624	3244	0.13%	0.017%
18	8.531	1107	1112	1116	rBV2	3656	5465	0.22%	0.029%
19	8.605	1121	1126	1130	rBB2	7209	10159	0.41%	0.054%
20	8.664	1130	1137	1152	rBV	590302	1067604	42.87%	5.660%
21	8.766	1152	1156	1166	rVB2	5747	12202	0.49%	0.065%
22	8.995	1195	1199	1205	rVB2	2041	3411	0.14%	0.018%
23	9.156	1222	1229	1236	rBB2	8208	14348	0.58%	0.076%
24	9.225	1237	1242	1248	rBB2	7026	10970	0.44%	0.058%
25	9.524	1291	1298	1304	rBB2	9464	15111	0.61%	0.080%
26	9.599	1305	1312	1317	rBB3	2161	4225	0.17%	0.022%
27	9.695	1324	1330	1334	rBV2	54120	83347	3.35%	0.442%
28	9.727	1334	1336	1343	rVB	23887	27963	1.12%	0.148%
29	9.882	1360	1365	1373	rBB2	17259	23158	0.93%	0.123%
30	10.187	1414	1422	1439	rBV	1337661	2261209	90.80%	11.987%
31	10.288	1439	1441	1448	rVV3	7951	10072	0.40%	0.053%
32	10.358	1448	1454	1459	rVV2	10309	16292	0.65%	0.086%
33	10.422	1459	1466	1473	rVB2	18734	28370	1.14%	0.150%
34	10.694	1512	1517	1526	rBB2	5191	9106	0.37%	0.048%
35	10.833	1537	1543	1548	rBB2	9795	13716	0.55%	0.073%
36	10.967	1560	1568	1577	rBB3	5106	9506	0.38%	0.050%
37	11.186	1604	1609	1614	rBB	3561	4952	0.20%	0.026%
38	11.383	1641	1646	1650	rBV2	5289	7390	0.30%	0.039%

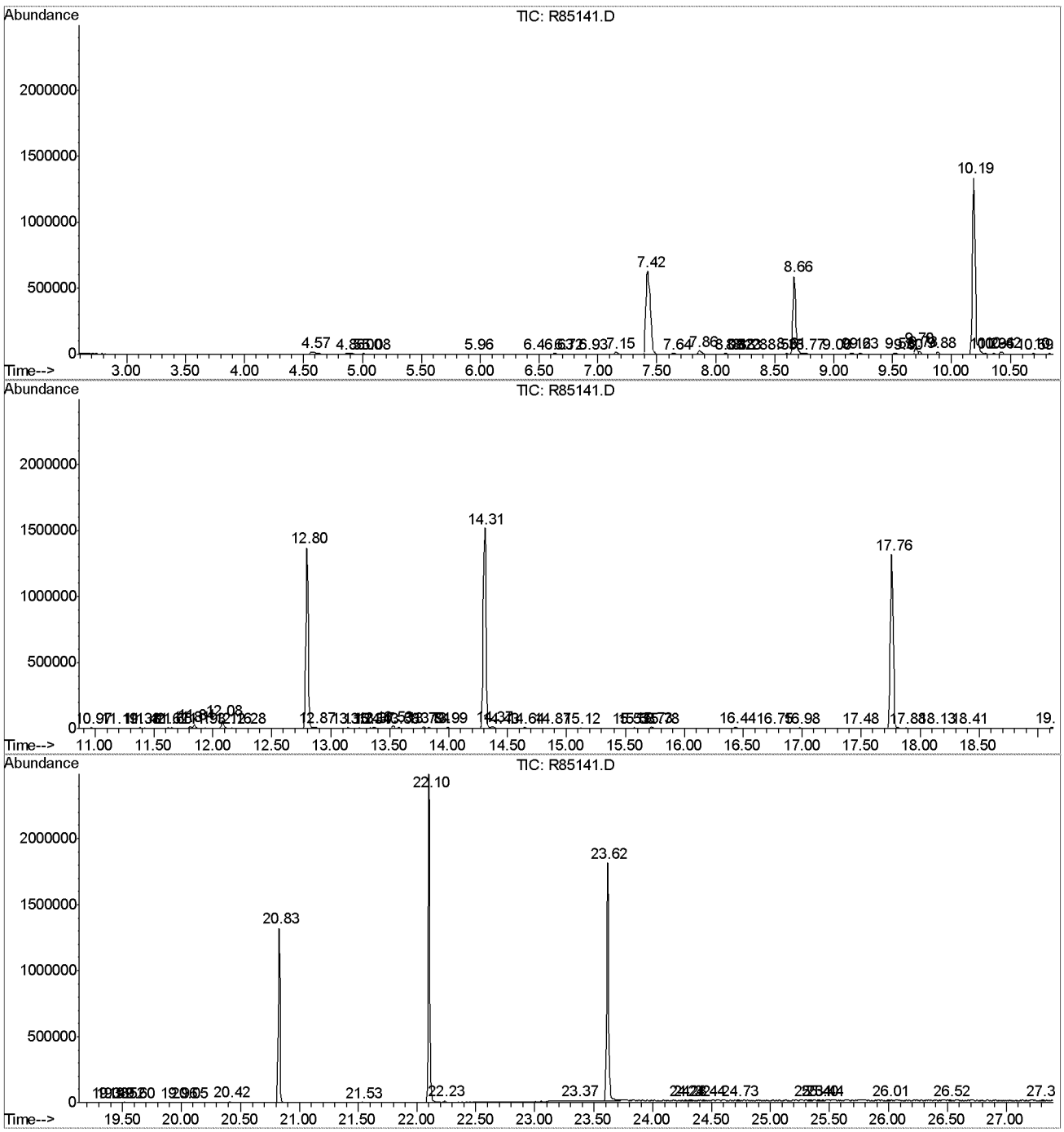
39	11.421	1650	1653	1659	rVB3	3848	5237	0.21%	0.028%
40	11.618	1681	1690	1693	rBV3	4948	9059	0.36%	0.048%
41	11.650	1693	1696	1702	rVB	6024	7814	0.31%	0.041%
42	11.805	1721	1725	1729	rBV3	17159	27472	1.10%	0.146%
43	11.843	1729	1732	1740	rVB	28080	40452	1.62%	0.214%
44	11.934	1744	1749	1754	rBB	4086	4570	0.18%	0.024%
45	12.078	1770	1776	1786	rBB	64442	99413	3.99%	0.527%
46	12.158	1787	1791	1798	rBV2	4229	6690	0.27%	0.035%
47	12.275	1809	1813	1819	rBB	2226	3494	0.14%	0.019%
48	12.799	1903	1911	1920	rBV	1369829	1970341	79.12%	10.445%
49	12.868	1921	1924	1931	rVB3	7512	10456	0.42%	0.055%
50	13.146	1971	1976	1982	rBV4	5399	9259	0.37%	0.049%
51	13.242	1989	1994	1999	rBB	4247	5895	0.24%	0.031%
52	13.339	2006	2012	2013	rBV	3952	5306	0.21%	0.028%
53	13.371	2013	2018	2025	rVB2	9412	15778	0.63%	0.084%
54	13.526	2042	2047	2053	rBV2	19004	28227	1.13%	0.150%
55	13.579	2053	2057	2062	rVB	6842	9073	0.36%	0.048%
56	13.793	2091	2097	2101	rBV	11095	16227	0.65%	0.086%
57	13.835	2101	2105	2110	rVB2	7307	10109	0.41%	0.054%
58	13.990	2129	2134	2140	rBB	8828	11483	0.46%	0.061%
59	14.305	2182	2193	2201	rBV	1519584	2367294	95.06%	12.550%
60	14.370	2201	2205	2212	rVV3	14287	27723	1.11%	0.147%
61	14.428	2212	2216	2223	rVB	3012	5452	0.22%	0.029%
62	14.642	2250	2256	2263	rBB2	6767	9946	0.40%	0.053%
63	14.866	2293	2298	2305	rVB2	1806	3620	0.15%	0.019%
64	15.118	2341	2345	2351	rBB	4637	7115	0.29%	0.038%
65	15.534	2419	2423	2427	rBV	2898	3784	0.15%	0.020%
66	15.577	2427	2431	2438	rVB	4224	6750	0.27%	0.036%
67	15.727	2452	2459	2465	rBB	13146	18974	0.76%	0.101%
68	15.780	2466	2469	2474	rBV	2461	3983	0.16%	0.021%
69	16.437	2584	2592	2596	rBB2	10466	13150	0.53%	0.070%
70	16.747	2645	2650	2656	rBB	2382	3315	0.13%	0.018%
71	16.977	2688	2693	2699	rBB2	6161	7748	0.31%	0.041%
72	17.479	2783	2787	2793	rBV	2177	3675	0.15%	0.019%
73	17.762	2829	2840	2857	rBV2	1320317	2227574	89.45%	11.809%
74	17.879	2857	2862	2870	rVV	3951	8665	0.35%	0.046%
75	18.130	2906	2909	2915	rBB2	3475	4157	0.17%	0.022%
76	18.408	2957	2961	2968	rBV	2576	5386	0.22%	0.029%
77	19.119	3090	3094	3102	rBB	9295	13975	0.56%	0.074%
78	19.381	3138	3143	3147	rBV3	3117	5230	0.21%	0.028%
79	19.418	3147	3150	3154	rVB	3200	4582	0.18%	0.024%
80	19.519	3165	3169	3174	rVB2	4602	6576	0.26%	0.035%
81	19.600	3177	3184	3190	rVV	3309	4222	0.17%	0.022%
82	19.963	3249	3252	3258	rVB	2860	3240	0.13%	0.017%
83	20.054	3258	3269	3274	rVB3	3798	8177	0.33%	0.043%
84	20.417	3333	3337	3342	rVB2	8798	8949	0.36%	0.047%
85	20.828	3408	3414	3431	rVB	1324308	1395184	56.02%	7.396%
86	21.533	3543	3546	3554	rVB	4444	4005	0.16%	0.021%
87	22.100	3646	3652	3668	rBV	2490593	2490307	100.00%	13.202%
88	22.233	3673	3677	3687	rVB2	14211	15057	0.60%	0.080%
89	23.371	3887	3890	3895	rBV5	2075	2934	0.12%	0.016%
90	23.617	3928	3936	3957	rBV	1804130	2242808	90.06%	11.890%
91	24.285	4056	4061	4063	rVB6	2352	3056	0.12%	0.016%
92	24.322	4063	4068	4072	rBV6	2868	5235	0.21%	0.028%
93	24.440	4085	4090	4092	rBV4	3185	4081	0.16%	0.022%
94	24.728	4140	4144	4147	rBV5	1755	3011	0.12%	0.016%
95	25.337	4254	4258	4261	rBV5	2807	4072	0.16%	0.022%

96	25.401	4268	4270	4275	rVB4	2776	2923	0.12%	0.015%
97	25.444	4275	4278	4281	rBV4	2914	3252	0.13%	0.017%
98	26.010	4379	4384	4386	rBV5	2786	3209	0.13%	0.017%
99	26.518	4478	4479	4484	rBV4	2386	2927	0.12%	0.016%
100	27.308	4624	4627	4631	rVB5	3853	3647	0.15%	0.019%

Sum of corrected areas: 18863068

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85141.D
Operator : larisap
Acquired : 28 Jan 2011 5:47 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-4
Misc Info : op47853,er3224,1000
Vial Number: 5
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 5:47 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85141.D
Name: ja66701-4
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.8
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:53 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

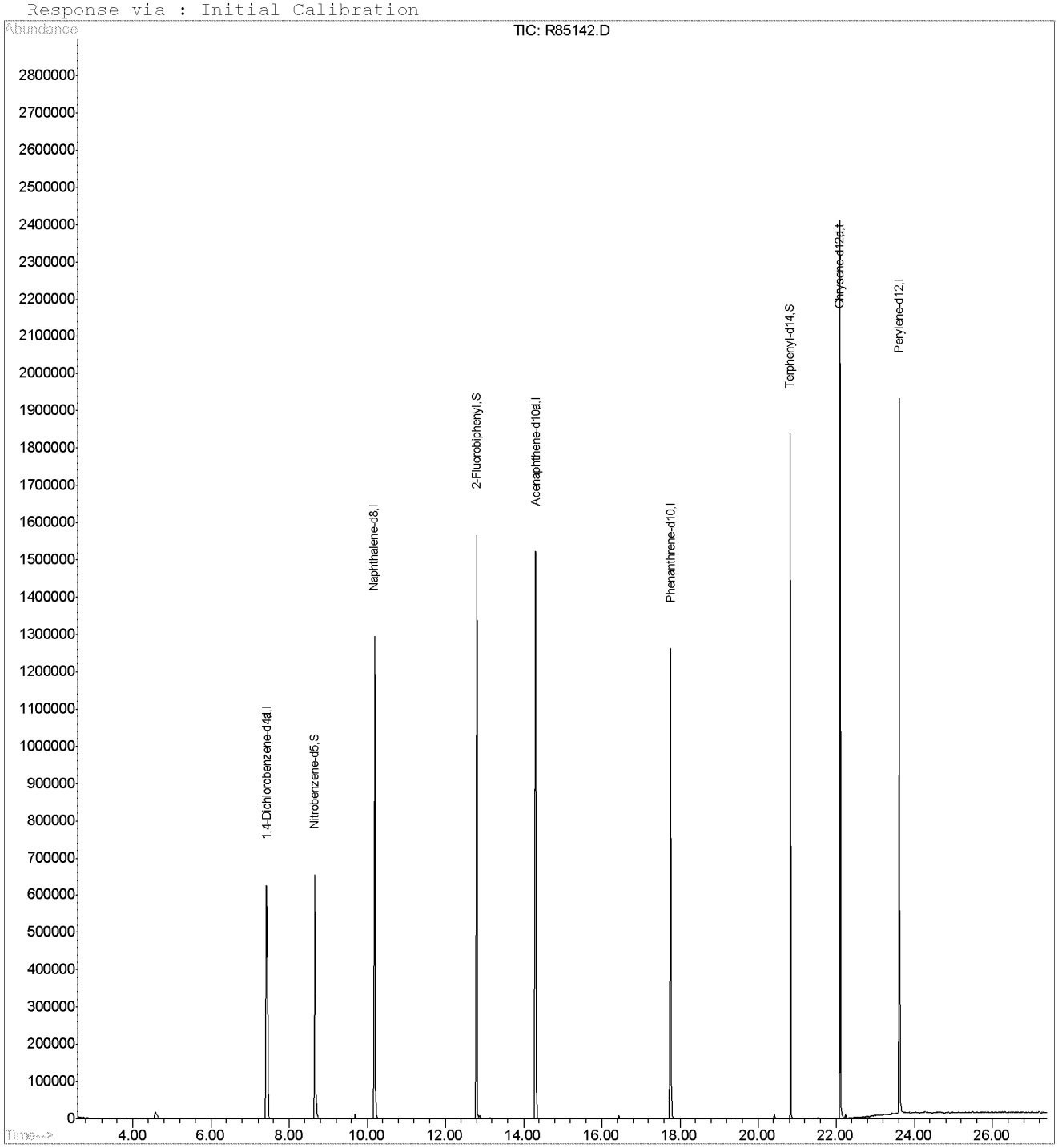
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	302488	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1035374	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	578517	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	846574	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	881025	40.00	ppb	-0.15
92) Perylene-d12	23.62	264	788822	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	302488	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	578517	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	881025	40.00	ppb	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	400619	42.58	ppb	-0.20
Spiked Amount 50.000			Recovery =	85.16%		
51) 2-Fluorobiphenyl	12.80	172	814721	40.01	ppb	-0.21
Spiked Amount 50.000			Recovery =	80.02%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	589909	35.52	ppb	-0.15
Spiked Amount 50.000			Recovery =	71.04%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85142.D MR3151.M Fri Jan 28 20:53:10 2011 NJMSR

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:53 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85142.D Vial: 6
Acq On : 28 Jan 2011 6:23 pm Operator: larisap
Sample : ja66701-5 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.730	25	26	34	rVB3	1241	1830	0.07%	0.010%
2	3.050	83	86	96	rBV3	1105	3057	0.13%	0.016%
3	3.574	180	184	190	rVB2	935	2090	0.09%	0.011%
4	3.953	253	255	261	rVB2	1453	2235	0.09%	0.012%
5	4.017	261	267	271	rBV2	1381	2818	0.12%	0.015%
6	4.215	298	304	309	rVB	1540	2979	0.12%	0.016%
7	4.300	316	320	325	rVB2	1802	3081	0.13%	0.016%
8	4.354	325	330	332	rBV	1092	1774	0.07%	0.009%
9	4.423	340	343	349	rVB	1170	1669	0.07%	0.009%
10	4.573	363	371	398	rBB3	19545	88915	3.64%	0.470%
11	7.420	896	904	931	rBB	628026	1691151	69.20%	8.931%
12	8.665	1129	1137	1169	rBB	655999	1174570	48.07%	6.203%
13	9.691	1323	1329	1335	rBB2	15135	21957	0.90%	0.116%
14	10.187	1414	1422	1459	rBB	1295431	2127703	87.07%	11.237%
15	12.800	1903	1911	1921	rBV	1567780	2318358	94.87%	12.244%
16	12.869	1921	1924	1933	rVV2	8642	16681	0.68%	0.088%
17	12.939	1933	1937	1943	rVV2	2545	6012	0.25%	0.032%
18	12.987	1944	1946	1952	rVB2	1759	2830	0.12%	0.015%
19	13.142	1972	1975	1980	rBB	3831	3642	0.15%	0.019%
20	14.306	2184	2193	2211	rBV	1523025	2355325	96.38%	12.439%
21	14.408	2211	2212	2226	rVB	2357	5266	0.22%	0.028%
22	16.438	2587	2592	2596	rBB3	8808	10089	0.41%	0.053%
23	16.731	2640	2647	2651	rBB	2477	2674	0.11%	0.014%
24	16.801	2658	2660	2663	rBB	2534	1780	0.07%	0.009%
25	17.485	2782	2788	2794	rBB2	2423	4173	0.17%	0.022%
26	17.762	2829	2840	2856	rBV2	1264818	2191443	89.68%	11.574%
27	17.885	2856	2863	2867	rVV	3320	8113	0.33%	0.043%
28	17.923	2867	2870	2875	rVV2	3342	5169	0.21%	0.027%
29	18.585	2990	2994	2998	rBB	1849	2838	0.12%	0.015%
30	18.900	3050	3053	3061	rVB	678	1809	0.07%	0.010%
31	19.386	3138	3144	3149	rVB2	2605	4284	0.18%	0.023%
32	20.418	3330	3337	3342	rBV	14278	13564	0.56%	0.072%
33	20.829	3407	3414	3437	rBV	1837978	1917687	78.47%	10.128%
34	21.534	3540	3546	3549	rBV3	2966	3633	0.15%	0.019%
35	21.662	3560	3570	3571	rBV2	943	2814	0.12%	0.015%
36	22.100	3644	3652	3670	rVV	2412533	2443701	100.00%	12.906%
37	22.234	3674	3677	3685	rVB2	12206	12028	0.49%	0.064%
38	22.480	3719	3723	3728	rVB3	2447	2908	0.12%	0.015%

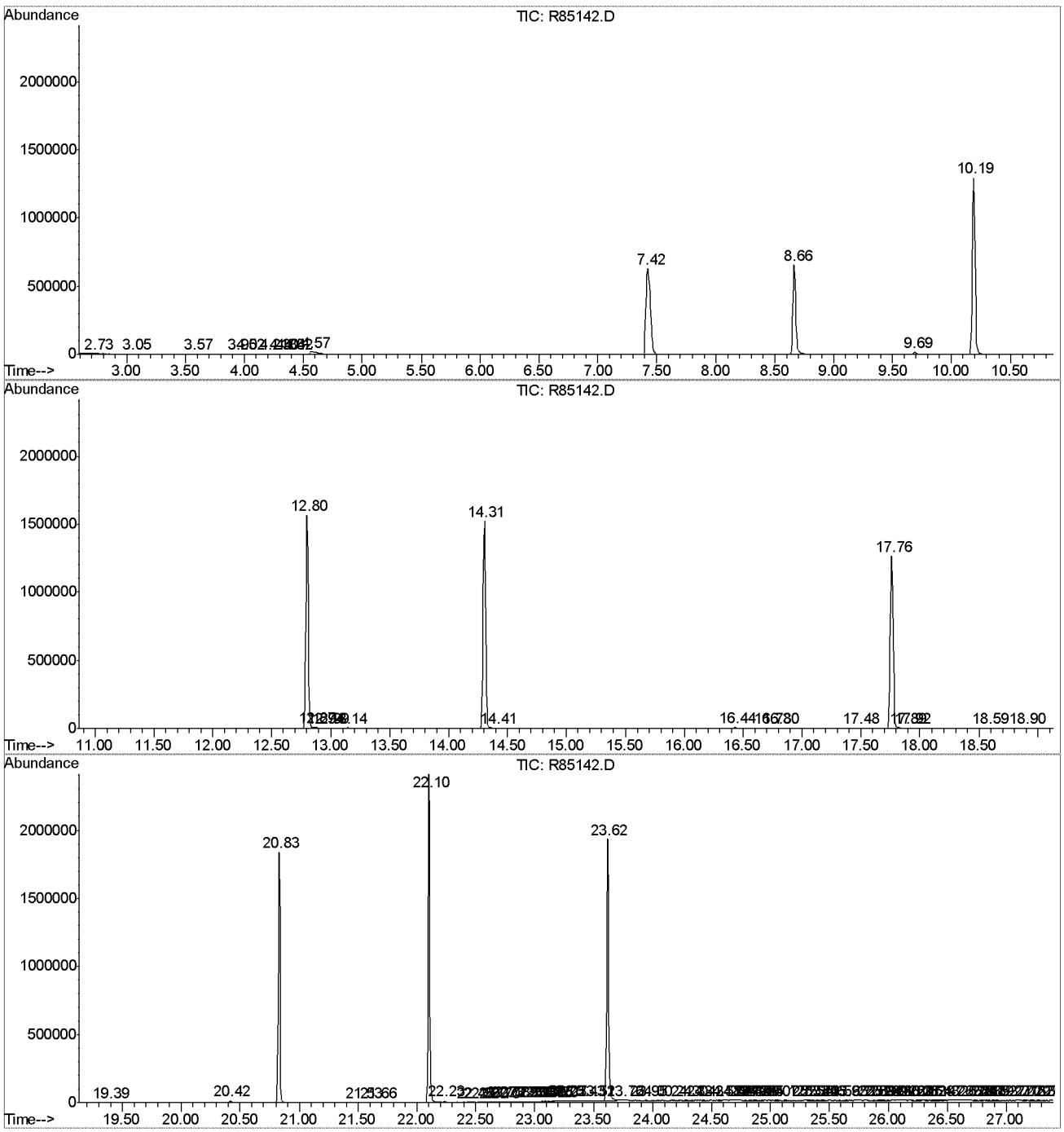
39	22.533	3728	3733	3738	rBV3	2276	4410	0.18%	0.023%
40	22.602	3743	3746	3749	rBV	1373	1865	0.08%	0.010%
41	22.704	3755	3765	3766	rBV3	1316	2923	0.12%	0.015%
42	22.731	3766	3770	3773	rVB3	1352	1662	0.07%	0.009%
43	22.773	3773	3778	3779	rBV4	1567	2124	0.09%	0.011%
44	22.854	3790	3793	3798	rBV3	2653	4836	0.20%	0.026%
45	22.928	3804	3807	3809	rBV2	2349	1882	0.08%	0.010%
46	23.003	3818	3821	3823	rVB4	2040	2034	0.08%	0.011%
47	23.067	3826	3833	3835	rVV5	2613	3797	0.16%	0.020%
48	23.094	3835	3838	3840	rVV3	2334	2334	0.10%	0.012%
49	23.121	3840	3843	3844	rVV3	2299	1897	0.08%	0.010%
50	23.153	3846	3849	3851	rBV2	3573	3824	0.16%	0.020%
51	23.195	3851	3857	3860	rVV5	2293	3902	0.16%	0.021%
52	23.249	3860	3867	3868	rVV5	2693	4247	0.17%	0.022%
53	23.270	3870	3871	3876	rVB4	2383	1829	0.07%	0.010%
54	23.334	3880	3883	3884	rBV3	2312	2019	0.08%	0.011%
55	23.425	3896	3900	3904	rBV4	2935	3669	0.15%	0.019%
56	23.505	3912	3915	3918	rBV3	1735	1690	0.07%	0.009%
57	23.617	3926	3936	3951	rBV	1919184	2306340	94.38%	12.180%
58	23.756	3960	3962	3966	rVB4	1323	1657	0.07%	0.009%
59	23.949	3996	3998	4002	rVB3	1784	1893	0.08%	0.010%
60	23.997	4002	4007	4011	rBV6	1729	2855	0.12%	0.015%
61	24.296	4056	4063	4067	rVV6	2290	4908	0.20%	0.026%
62	24.333	4067	4070	4072	rVB3	2089	1649	0.07%	0.009%
63	24.429	4086	4088	4092	rVB5	2472	3147	0.13%	0.017%
64	24.579	4111	4116	4119	rBV6	2193	2825	0.12%	0.015%
65	24.675	4132	4134	4139	rVB5	2692	2567	0.11%	0.014%
66	24.793	4152	4156	4159	rBV5	2118	3302	0.14%	0.017%
67	24.835	4159	4164	4166	rVV5	2604	3975	0.16%	0.021%
68	24.878	4166	4172	4174	rVB6	2671	4530	0.19%	0.024%
69	24.900	4174	4176	4179	rBV5	1568	1760	0.07%	0.009%
70	24.937	4179	4183	4184	rBV4	1929	2334	0.10%	0.012%
71	25.065	4201	4207	4208	rBV4	2130	3788	0.16%	0.020%
72	25.119	4214	4217	4223	rVB4	2482	3170	0.13%	0.017%
73	25.327	4254	4256	4260	rVB5	2513	2481	0.10%	0.013%
74	25.364	4260	4263	4265	rBV3	1661	1751	0.07%	0.009%
75	25.402	4267	4270	4274	rBV5	2282	3220	0.13%	0.017%
76	25.460	4274	4281	4283	rVV6	1588	2509	0.10%	0.013%
77	25.589	4302	4305	4308	rVV3	1954	1801	0.07%	0.010%
78	25.653	4313	4317	4319	rVB4	1787	1969	0.08%	0.010%
79	25.883	4357	4360	4361	rBV3	2074	1740	0.07%	0.009%
80	25.936	4365	4370	4371	rVV4	1476	2002	0.08%	0.011%
81	25.963	4371	4375	4379	rVB5	2925	3608	0.15%	0.019%
82	25.989	4379	4380	4384	rBV4	2234	2212	0.09%	0.012%
83	26.102	4400	4401	4406	rVB4	1318	1781	0.07%	0.009%
84	26.208	4418	4421	4424	rVB3	1961	1859	0.08%	0.010%
85	26.267	4424	4432	4434	rBV5	1821	2703	0.11%	0.014%
86	26.315	4440	4441	4445	rVB4	3514	2756	0.11%	0.015%
87	26.390	4449	4455	4459	rBV7	1913	3752	0.15%	0.020%
88	26.433	4459	4463	4465	rVV3	2295	2349	0.10%	0.012%
89	26.470	4466	4470	4474	rVV5	2154	2222	0.09%	0.012%
90	26.732	4516	4519	4521	rVB4	2800	3119	0.13%	0.016%
91	26.753	4521	4523	4524	rBV2	2508	1772	0.07%	0.009%
92	26.796	4528	4531	4533	rVV3	2262	1855	0.08%	0.010%
93	26.849	4538	4541	4544	rVB5	2476	2423	0.10%	0.013%
94	26.887	4544	4548	4551	rBV5	1792	2254	0.09%	0.012%
95	26.930	4551	4556	4561	rBV4	2099	3758	0.15%	0.020%

96	27.165	4596	4600	4602	rVB5	1708	2042	0.08%	0.011%
97	27.202	4605	4607	4610	rVV4	3232	2848	0.12%	0.015%
98	27.223	4610	4611	4616	rVB4	2506	3022	0.12%	0.016%
99	27.271	4616	4620	4624	rBV5	3346	4706	0.19%	0.025%
100	27.314	4627	4628	4631	rVV2	3106	2110	0.09%	0.011%

Sum of corrected areas: 18934918

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85142.D
Operator : larisap
Acquired : 28 Jan 2011 6:23 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-5
Misc Info : op47853,er3224,1000
Vial Number: 6
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 6:23 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85142.D
Name: ja66701-5
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.10
8

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:54 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

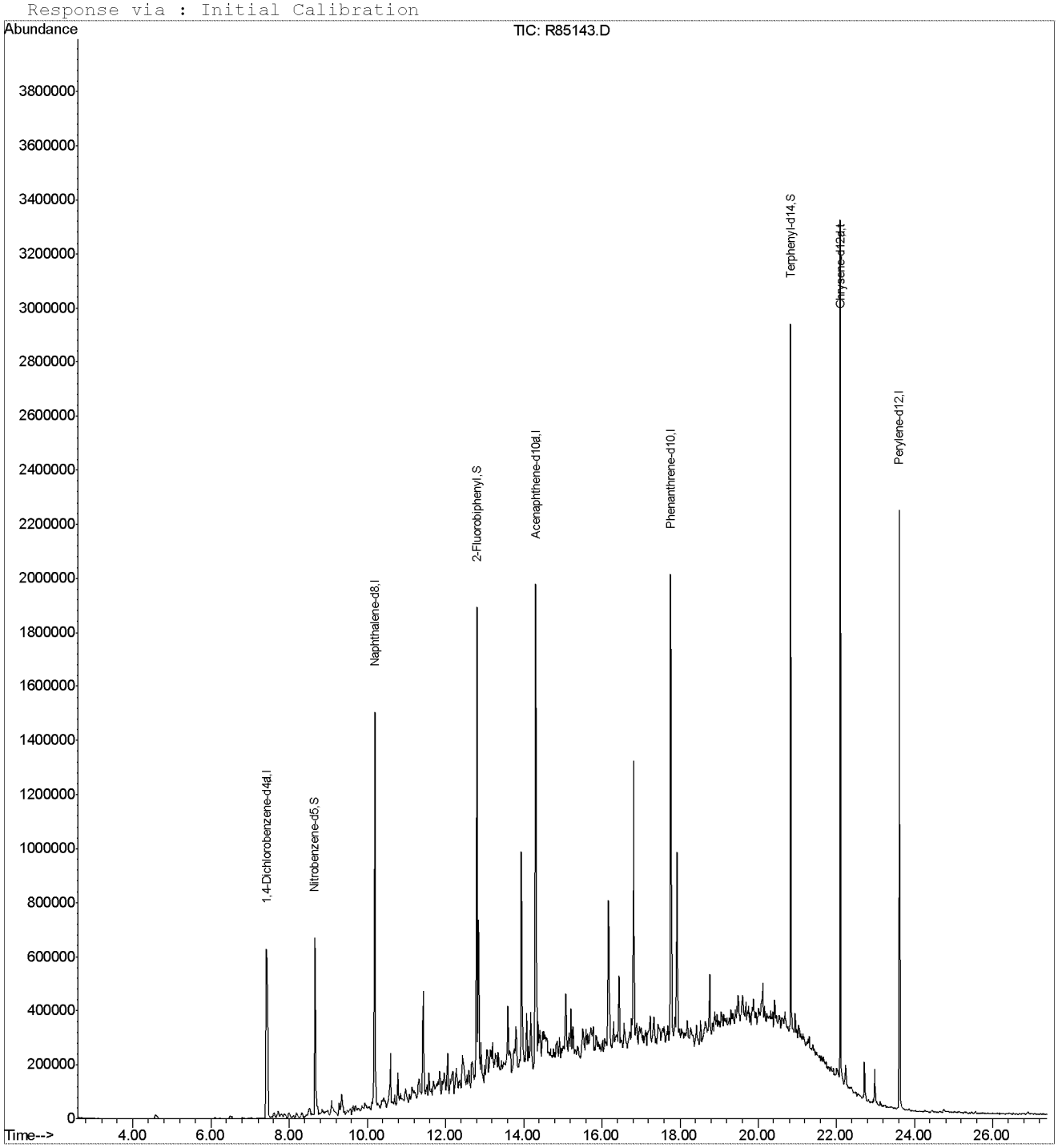
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	316195	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1084094	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	668964	40.00	ppb	-0.21
69) Phenanthrene-d10	17.77	188	1086595	40.00	ppb	-0.22
83) Chrysene-d12	22.10	240	1160109	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	932103	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	316195	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.31	164	668964	40.00	ppb	-0.20
107) Chrysene-d12a	22.10	240	1160109	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	408140	41.43	ppb	-0.20
Spiked Amount 50.000			Recovery =	82.86%		
51) 2-Fluorobiphenyl	12.80	172	891759	37.87	ppb	-0.21
Spiked Amount 50.000			Recovery =	75.74%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	839330	38.39	ppb	-0.14
Spiked Amount 50.000			Recovery =	76.78%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
R85143.D MR3151.M Tue Feb 08 15:17:08 2011 RPT1

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:54 2011 Quant Results File: MR3151.RES

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.560	363	369	391	rBV4	16516	73241	2.16%	0.160%
2	7.418	895	904	925	rBV	626290	1824230	53.75%	3.980%
3	7.718	950	960	969	rVV4	23130	61909	1.82%	0.135%
4	7.995	1003	1012	1023	rBV6	19474	63061	1.86%	0.138%
5	8.188	1041	1048	1061	rBV8	22250	69408	2.05%	0.151%
6	8.519	1099	1110	1119	rBV8	25573	80700	2.38%	0.176%
7	8.663	1129	1137	1156	rBV	655482	1253550	36.93%	2.735%
8	9.085	1206	1216	1237	rBV9	54977	207886	6.13%	0.454%
9	9.283	1246	1253	1257	rBV3	47161	90055	2.65%	0.196%
10	9.342	1257	1264	1275	rVV6	77700	242548	7.15%	0.529%
11	9.555	1298	1304	1312	rVB5	23366	72939	2.15%	0.159%
12	9.635	1312	1319	1326	rBV5	35724	87771	2.59%	0.191%
13	10.191	1412	1423	1435	rVB	1456177	2464397	72.61%	5.377%
14	10.586	1479	1497	1504	rBV	199004	445208	13.12%	0.971%
15	10.779	1526	1533	1541	rBV5	119823	261816	7.71%	0.571%
16	10.982	1562	1571	1585	rVB5	52254	159003	4.68%	0.347%
17	11.153	1594	1603	1608	rBV7	48104	141894	4.18%	0.310%
18	11.329	1625	1636	1647	rBV6	67429	234380	6.91%	0.511%
19	11.430	1647	1655	1660	rBV	385132	574403	16.92%	1.253%
20	11.527	1668	1673	1679	rVB4	42776	82586	2.43%	0.180%
21	11.580	1679	1683	1690	rBV5	84633	134183	3.95%	0.293%
22	11.692	1698	1704	1711	rBV5	57996	150490	4.43%	0.328%
23	11.852	1729	1734	1741	rVB3	90014	170915	5.04%	0.373%
24	11.922	1742	1747	1750	rBV7	50500	84076	2.48%	0.183%
25	11.970	1751	1756	1764	rVB7	66872	162611	4.79%	0.355%
26	12.055	1764	1772	1778	rVB2	149092	307669	9.07%	0.671%
27	12.114	1778	1783	1786	rBV6	56697	91610	2.70%	0.200%
28	12.178	1787	1795	1802	rVB9	84417	277892	8.19%	0.606%
29	12.269	1803	1812	1822	rBV7	91837	277234	8.17%	0.605%
30	12.365	1823	1830	1834	rVB5	32371	65661	1.93%	0.143%
31	12.435	1835	1843	1847	rBV4	123303	266223	7.84%	0.581%
32	12.542	1859	1863	1869	rBV8	40579	64860	1.91%	0.142%
33	12.600	1869	1874	1881	rVB7	67224	124987	3.68%	0.273%
34	12.680	1881	1889	1898	rBV7	98587	332024	9.78%	0.724%
35	12.803	1904	1912	1916	rVV	1751833	2711608	79.89%	5.916%
36	12.846	1916	1920	1927	rVV	591686	913642	26.92%	1.993%
37	12.910	1927	1932	1944	rVB6	149562	345514	10.18%	0.754%
38	12.996	1944	1948	1953	rBV4	66629	126473	3.73%	0.276%

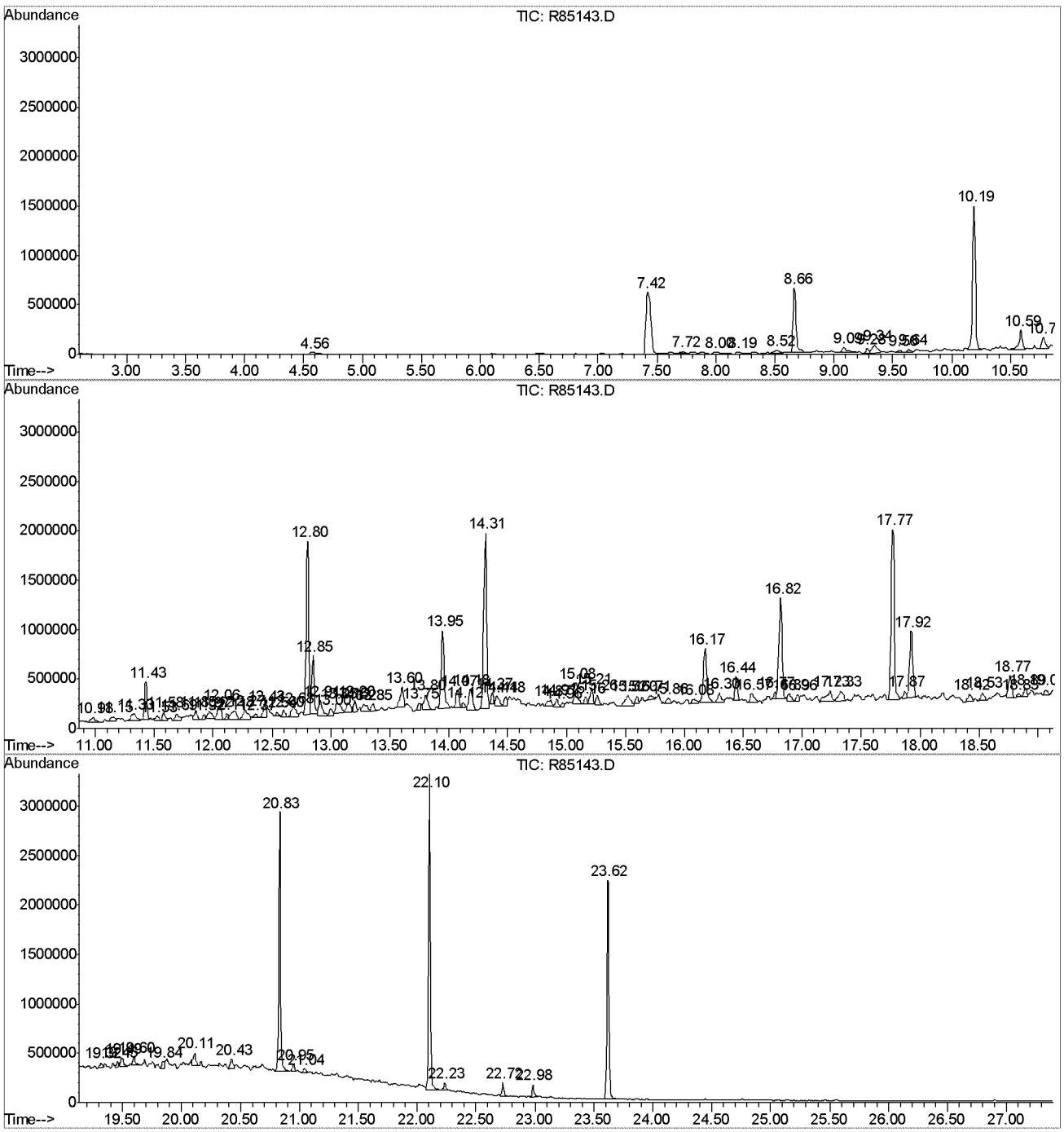
39	13.049	1953	1958	1969	rVV7	96680	299720	8.83%	0.654%
40	13.145	1970	1976	1982	rVV8	90522	253798	7.48%	0.554%
41	13.204	1983	1987	1991	rVV	114020	182477	5.38%	0.398%
42	13.279	1997	2001	2011	rVV9	68133	210413	6.20%	0.459%
43	13.354	2011	2015	2022	rVB2	65546	117226	3.45%	0.256%
44	13.605	2052	2062	2066	rBV4	202736	391649	11.54%	0.854%
45	13.749	2083	2089	2092	rBV7	77886	148197	4.37%	0.323%
46	13.802	2094	2099	2110	rVB4	151575	347326	10.23%	0.758%
47	13.947	2119	2126	2138	rVB	778831	1327903	39.13%	2.897%
48	14.075	2143	2150	2155	rBV3	181325	304404	8.97%	0.664%
49	14.123	2155	2159	2163	rBV5	54086	69832	2.06%	0.152%
50	14.182	2164	2170	2181	rVB5	209534	487265	14.36%	1.063%
51	14.310	2184	2194	2201	rBV	1779075	2971011	87.54%	6.482%
52	14.369	2201	2205	2208	rBV2	111800	149763	4.41%	0.327%
53	14.411	2209	2213	2221	rVB5	97622	202978	5.98%	0.443%
54	14.481	2221	2226	2229	rBV6	92860	157615	4.64%	0.344%
55	14.865	2288	2298	2302	rBV7	58193	151380	4.46%	0.330%
56	14.913	2303	2307	2312	rVB6	79221	125053	3.68%	0.273%
57	14.961	2313	2316	2320	rBV4	41274	67469	1.99%	0.147%
58	15.079	2332	2338	2348	rVB6	213114	400881	11.81%	0.875%
59	15.159	2349	2353	2357	rVV4	72710	113053	3.33%	0.247%
60	15.213	2357	2363	2367	rVV	164662	281744	8.30%	0.615%
61	15.261	2368	2372	2379	rVB4	100089	159293	4.69%	0.348%
62	15.517	2410	2420	2430	rBV5	107870	365037	10.76%	0.796%
63	15.597	2430	2435	2439	rBV3	78249	116557	3.43%	0.254%
64	15.715	2452	2457	2463	rVV9	38700	92268	2.72%	0.201%
65	15.859	2480	2484	2491	rBV7	55256	115642	3.41%	0.252%
66	16.083	2520	2526	2534	rBV7	40054	110694	3.26%	0.242%
67	16.174	2535	2543	2557	rVB	547645	1137664	33.52%	2.482%
68	16.297	2560	2566	2573	rBV5	94802	185607	5.47%	0.405%
69	16.436	2587	2592	2598	rVB	247358	336623	9.92%	0.734%
70	16.569	2612	2617	2627	rBV7	90406	215431	6.35%	0.470%
71	16.767	2649	2654	2655	rVV4	73453	85422	2.52%	0.186%
72	16.815	2655	2663	2671	rVV	1020930	1955293	57.61%	4.266%
73	16.890	2673	2677	2685	rVB8	76037	156588	4.61%	0.342%
74	16.959	2685	2690	2693	rBV3	62896	113579	3.35%	0.248%
75	17.232	2726	2741	2749	rBV9	111054	386557	11.39%	0.843%
76	17.328	2750	2759	2767	rVB5	98969	293997	8.66%	0.641%
77	17.766	2833	2841	2852	rBV2	1726199	3005977	88.57%	6.558%
78	17.868	2856	2860	2863	rVV5	70807	103161	3.04%	0.225%
79	17.921	2863	2870	2879	rVB	666072	1325121	39.04%	2.891%
80	18.418	2958	2963	2970	rBV8	77332	172318	5.08%	0.376%
81	18.530	2980	2984	2990	rVB2	78320	132685	3.91%	0.289%
82	18.765	3021	3028	3036	rVB2	223936	442089	13.03%	0.965%
83	18.835	3037	3041	3047	rBV9	36445	68767	2.03%	0.150%
84	18.893	3047	3052	3056	rBV5	76587	133818	3.94%	0.292%
85	19.064	3080	3084	3091	rBV7	55911	99447	2.93%	0.217%
86	19.315	3127	3131	3135	rBV7	49512	68907	2.03%	0.150%
87	19.454	3154	3157	3160	rVV3	55781	81099	2.39%	0.177%
88	19.492	3161	3164	3173	rVB3	93002	164352	4.84%	0.359%
89	19.598	3180	3184	3193	rVB5	78246	135693	4.00%	0.296%
90	19.839	3225	3229	3232	rBV5	70301	115326	3.40%	0.252%
91	20.111	3276	3280	3287	rVB2	127671	201851	5.95%	0.440%
92	20.427	3334	3339	3343	rBV7	95243	179187	5.28%	0.391%
93	20.833	3408	3415	3429	rVB	2623926	2941915	86.68%	6.419%
94	20.950	3433	3437	3441	rVB3	74910	96544	2.84%	0.211%
95	21.041	3450	3454	3459	rBV7	48992	84712	2.50%	0.185%

96	22.104	3647	3653	3671	rVB	3200299	3393965	100.00%	7.405%
97	22.232	3672	3677	3684	rVB	76016	100027	2.95%	0.218%
98	22.724	3765	3769	3778	rVB	142399	172085	5.07%	0.375%
99	22.980	3813	3817	3826	rVB	125217	154374	4.55%	0.337%
100	23.616	3929	3936	3956	rVB	2216161	2775373	81.77%	6.055%

Sum of corrected areas: 45834859

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85143.D
Operator : larisap
Acquired : 28 Jan 2011 6:52 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-6
Misc Info : op47853,er3224,1000
Vial Number: 7
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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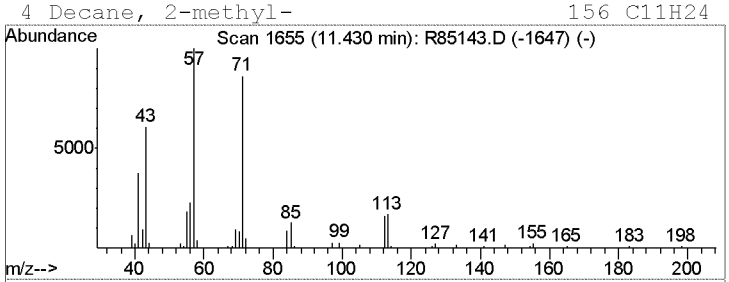
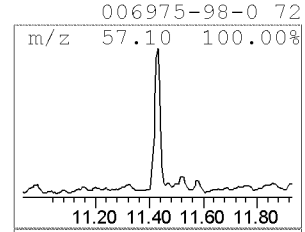
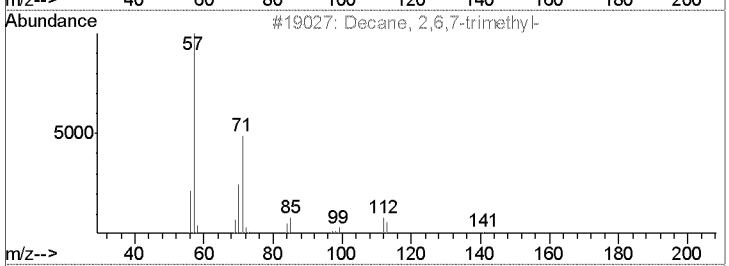
Peak Number 1 alkane Concentration Rank 5

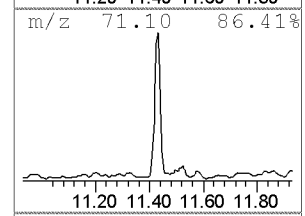
R.T.	EstConc	Area	Relative to ISTD	R.T.
11.43	9.32 ppb	574403	Naphthalene-d8	10.19

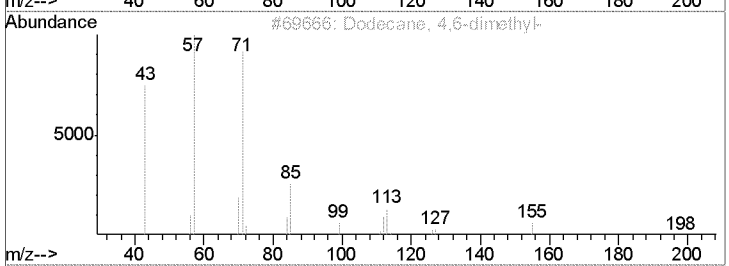
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,6,7-trimethyl-	184	C13H28	062108-25-2	83
2	Dodecane, 4,6-dimethyl-	198	C14H30	061141-72-8	72
3	Undecane, 5-methyl-	170	C12H26	001632-70-8	72
4	Decane, 2-methyl-	156	C11H24	006975-98-0	72

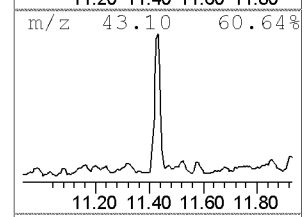


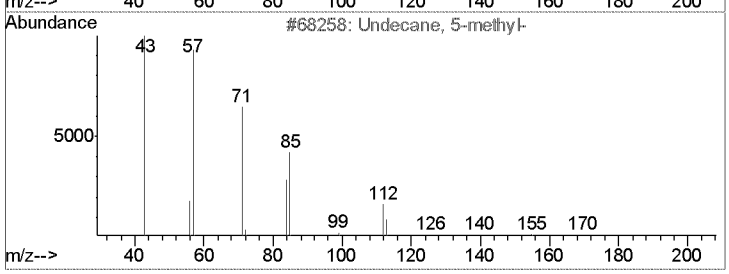


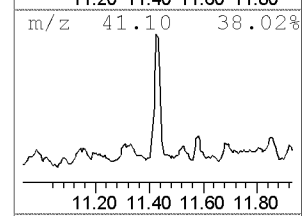


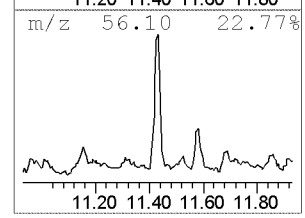












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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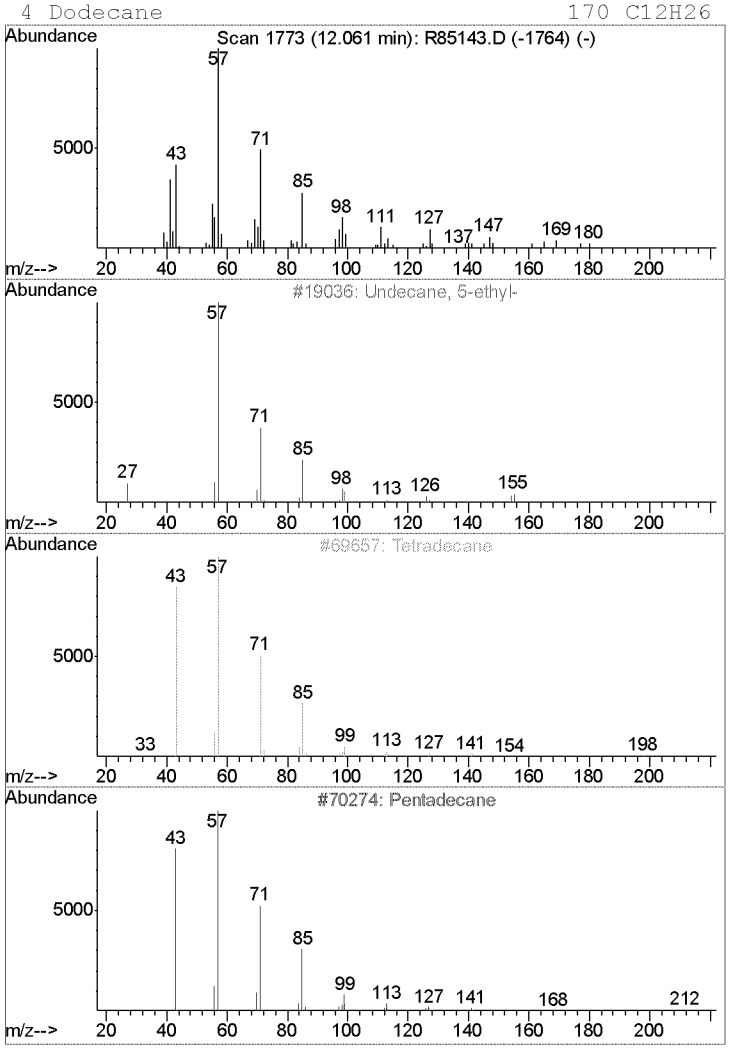
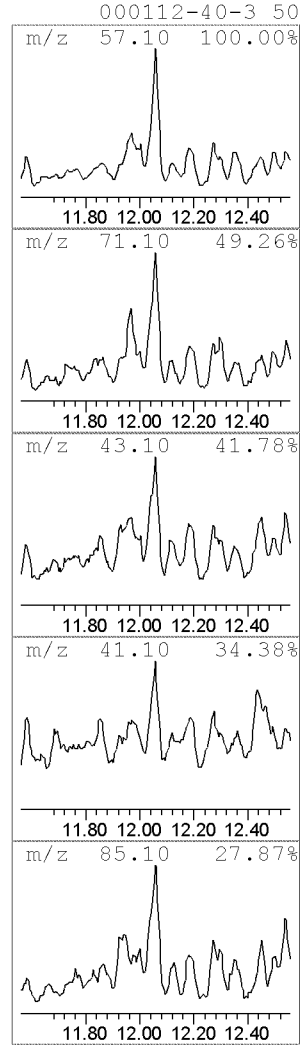
Peak Number 2 alkane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.06	4.99 ppb	307669	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 5-ethyl-	184	C13H28	017453-94-0	53
2	Tetradecane	198	C14H30	000629-59-4	50
3	Pentadecane	212	C15H32	000629-62-9	50
4	Dodecane	170	C12H26	000112-40-3	50





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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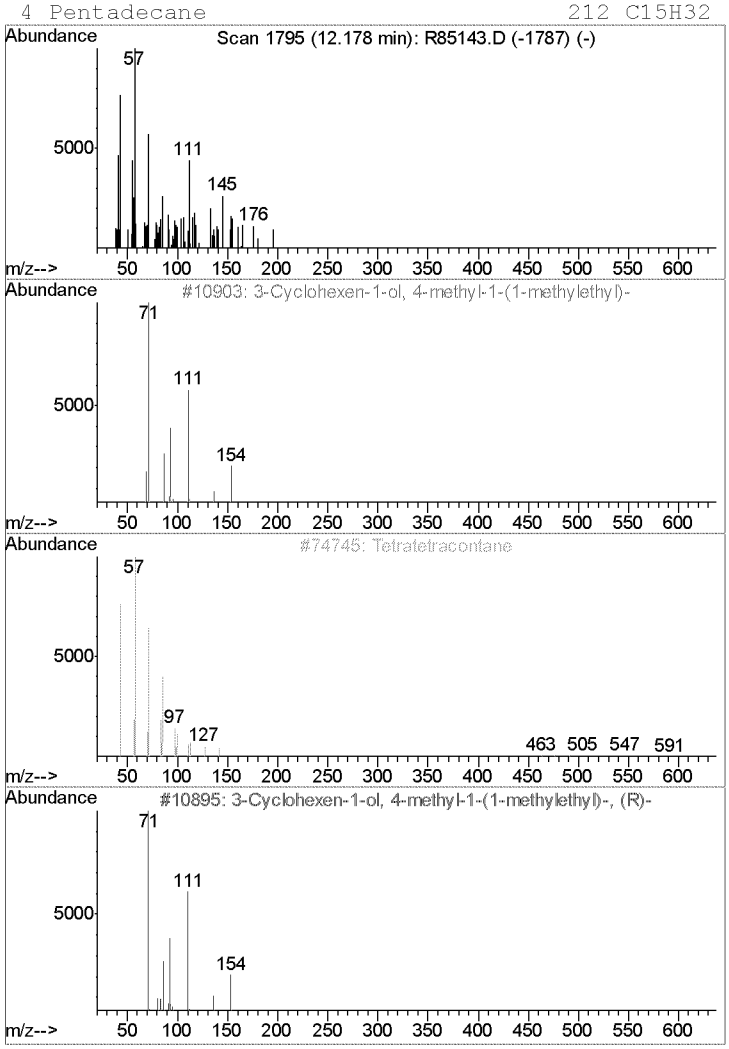
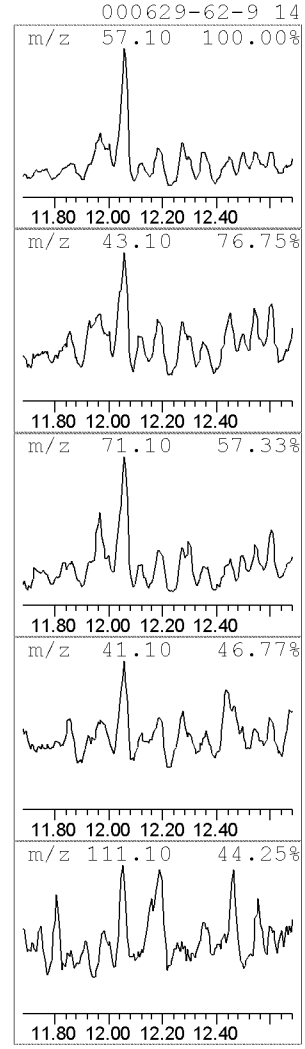
Peak Number 3 unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.18	4.51 ppb	277892	Naphthalene-d8	10.19

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyclohexen-1-ol, 4-methyl-1-(1...	154	C10H18O	000562-74-3	30
2	Tetratetracontane	619	C44H90	007098-22-8	22
3	3-Cyclohexen-1-ol, 4-methyl-1-(1...	154	C10H18O	020126-76-5	18
4	Pentadecane	212	C15H32	000629-62-9	14





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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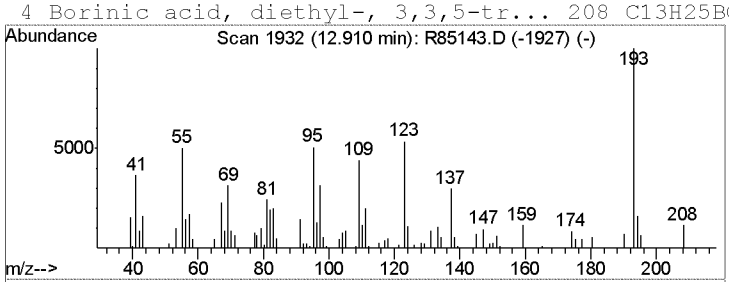
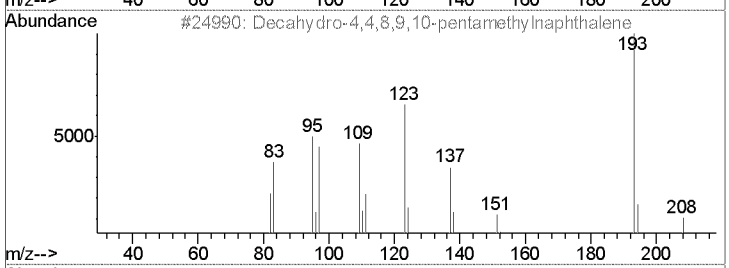
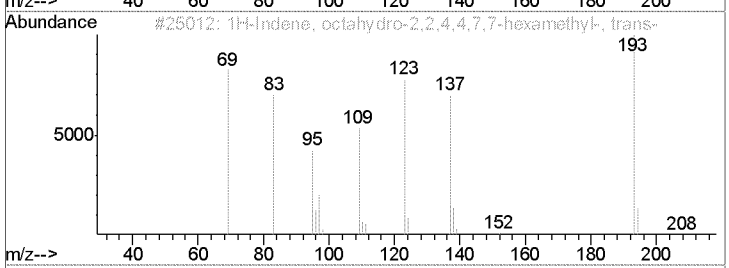
Peak Number 4 unknown Concentration Rank 15

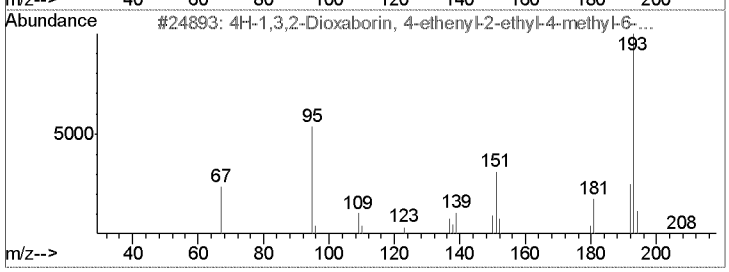
R.T.	EstConc	Area	Relative to ISTD	R.T.
12.91	4.65 ppb	345514	Acenaphthene-d10	14.31

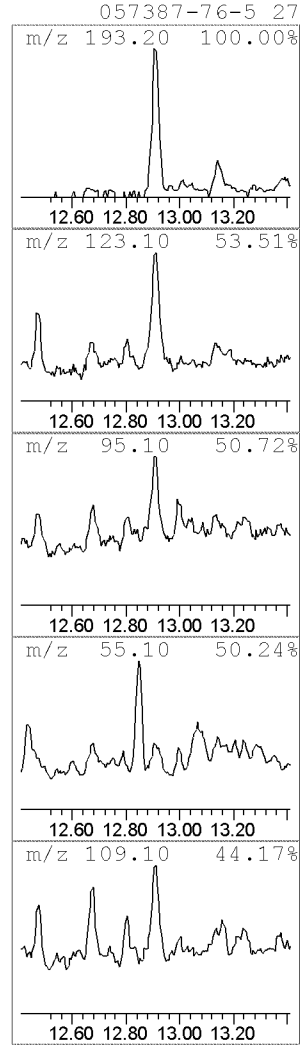
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	000000-00-0	90
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	42
3	4H-1,3,2-Dioxaborin, 4-ethenyl-2...	208	C12H21BO2	074630-04-9	38
4	Borinic acid, diethyl-, 3,3,5-tr...	208	C13H25BO	057387-76-5	27











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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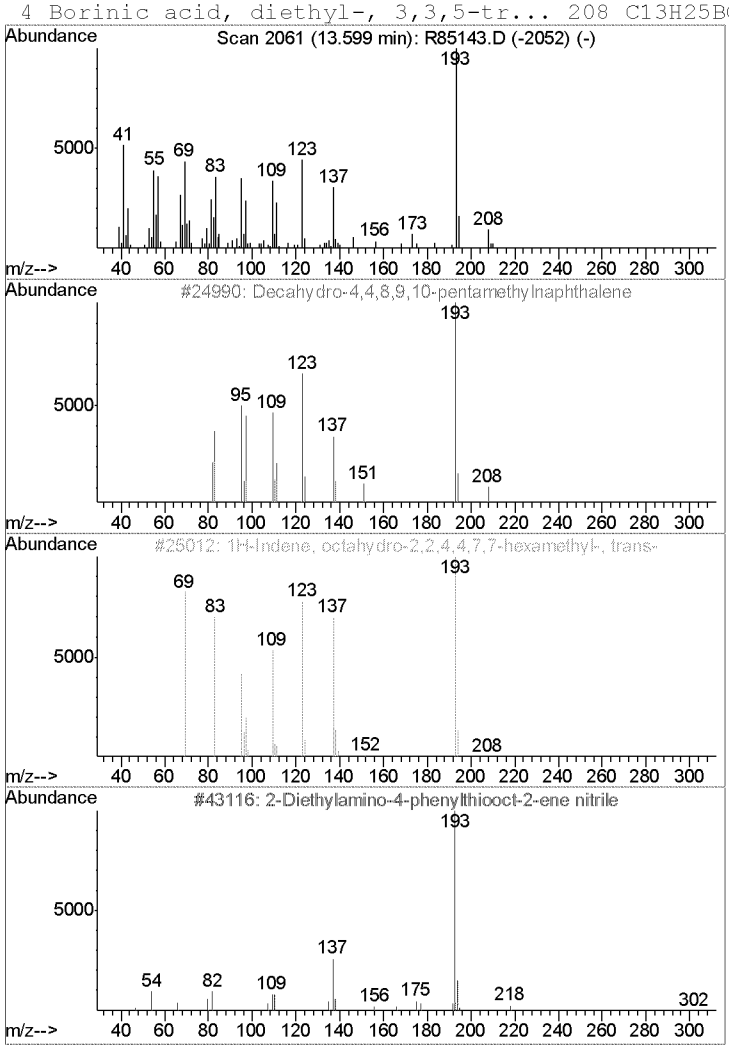
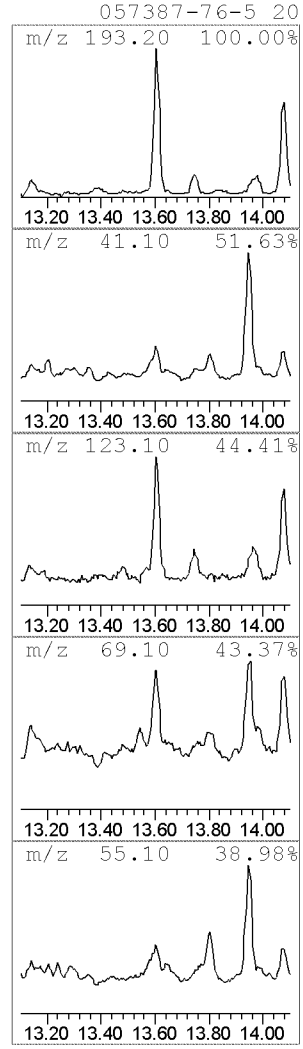
Peak Number 5 unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.60	5.27 ppb	391649	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decahydro-4,4,8,9,10-pentamethyl...	208	C15H28	000000-00-0	87
2	1H-Indene, octahydro-2,2,4,4,7,7...	208	C15H28	054832-83-6	38
3	2-Diethylamino-4-phenylthiooct-2...	302	C18H26N2S	000000-00-0	25
4	Borinic acid, diethyl-, 3,3,5-tr...	208	C13H25BO	057387-76-5	20





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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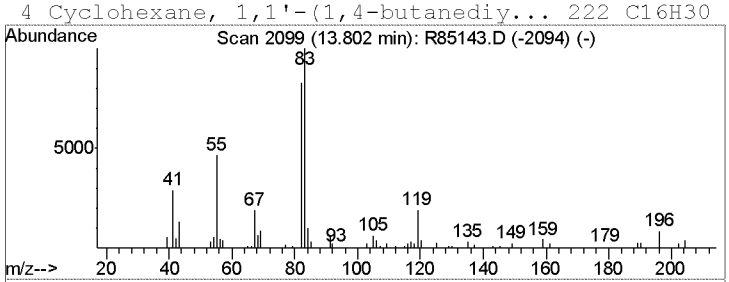
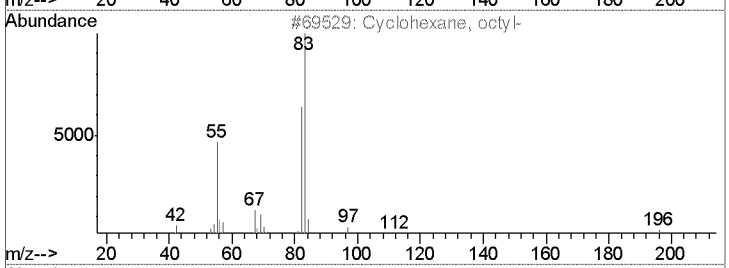
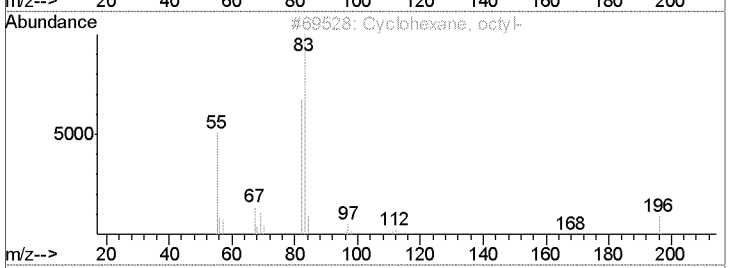
Peak Number 6 cycloalkane/alkene Concentration Rank 14

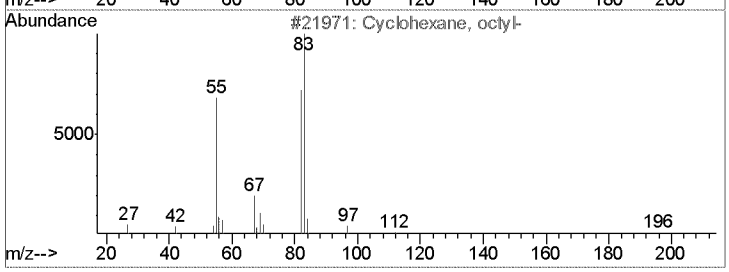
R.T.	EstConc	Area	Relative to ISTD	R.T.
13.80	4.68 ppb	347326	Acenaphthene-d10	14.31

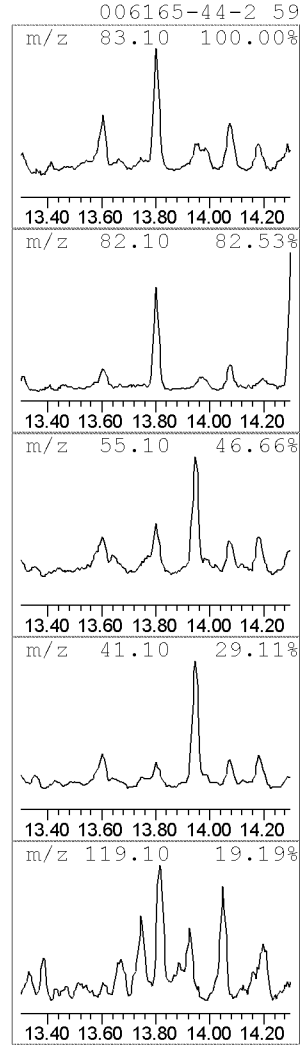
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
2	Cyclohexane, octyl-	196	C14H28	001795-15-9	72
3	Cyclohexane, octyl-	196	C14H28	001795-15-9	64
4	Cyclohexane, 1,1'-(1,4-butanediy...	222	C16H30	006165-44-2	59











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

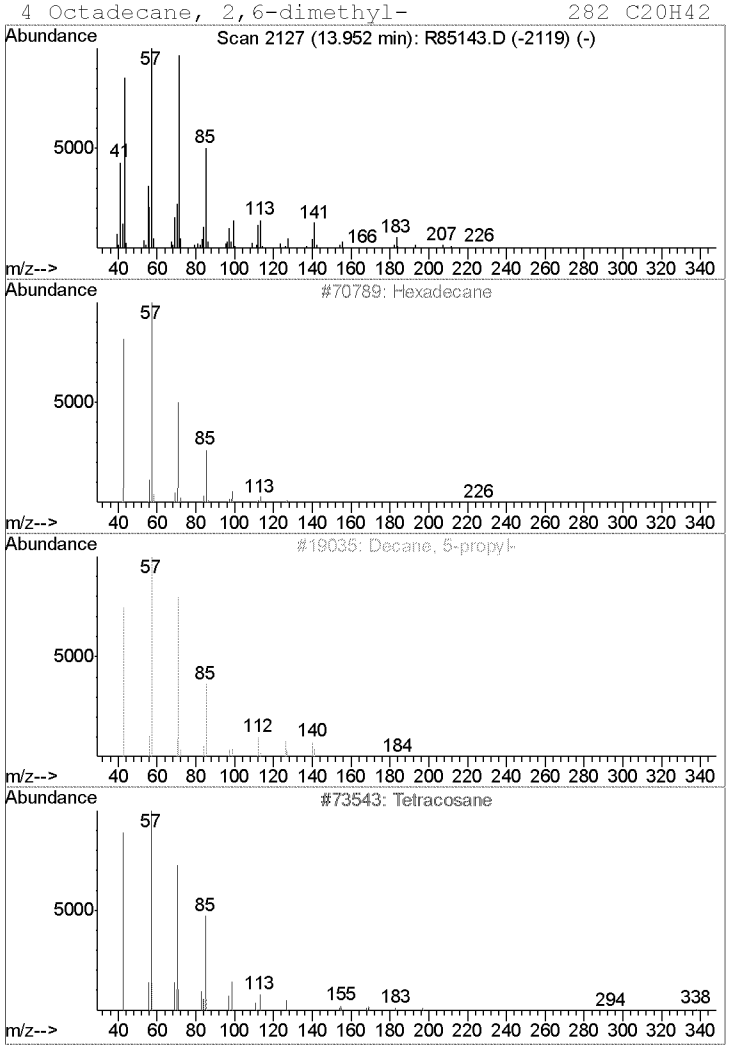
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

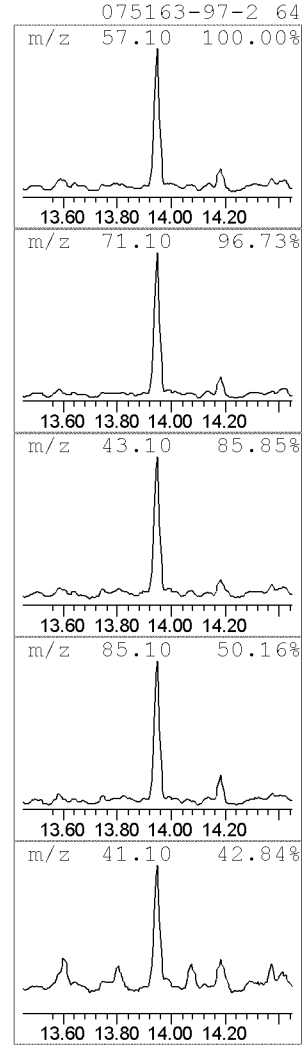
****

Peak Number 7 alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.95	17.88 ppb	1327900	Acenaphthene-d10	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	76
2	Decane, 5-propyl-	184	C13H28	017312-62-8	74
3	Tetracosane	338	C24H50	000646-31-1	72
4	Octadecane, 2,6-dimethyl-	282	C20H42	075163-97-2	64





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

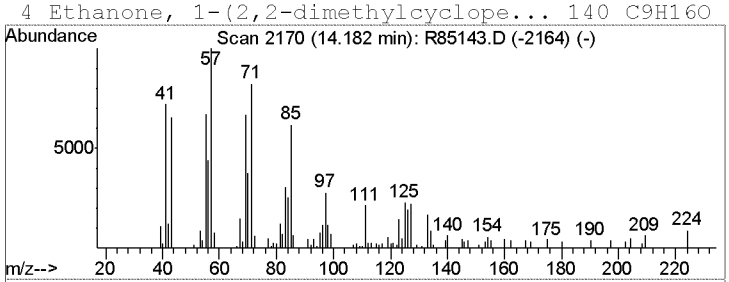
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

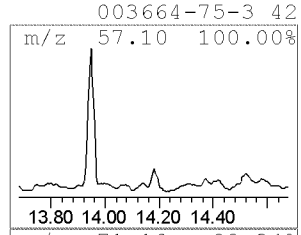
****

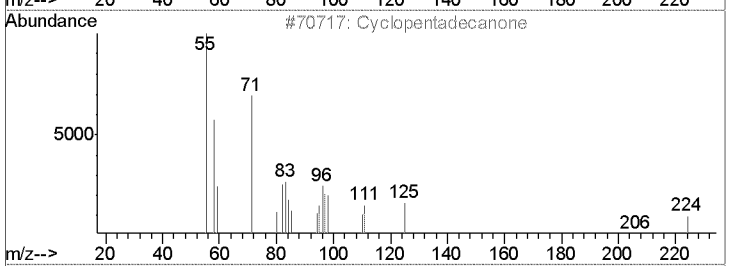
Peak Number 8 unknown Concentration Rank 7

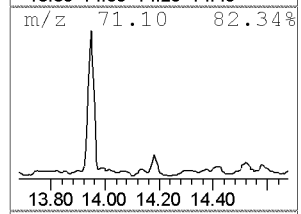
R.T.	EstConc	Area	Relative to ISTD	R.T.
14.18	6.56 ppb	487265	Acenaphthene-d10	14.31

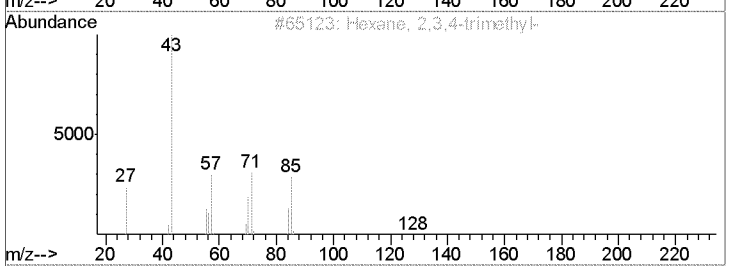
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentadecanone	224	C15H28O	000502-72-7	49
2	Hexane, 2,3,4-trimethyl-	128	C9H20	000921-47-1	46
3	Undecane, 2,7-dimethyl-	184	C13H28	017301-24-5	46
4	Ethanone, 1-(2,2-dimethylcyclope...	140	C9H16O	003664-75-3	42

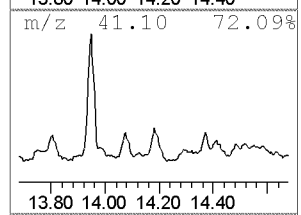


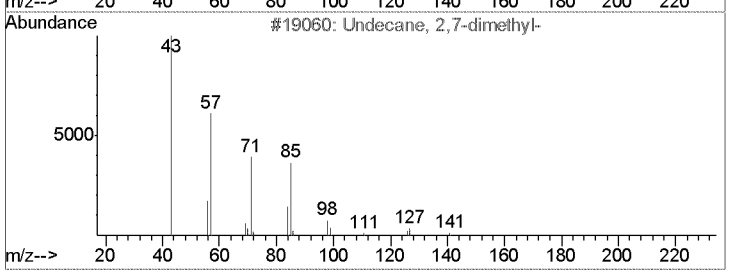


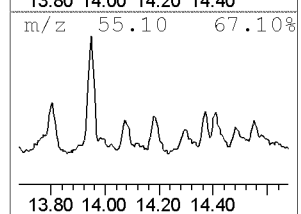


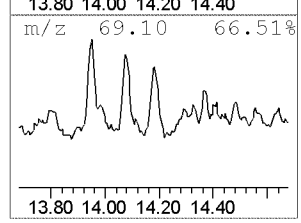












Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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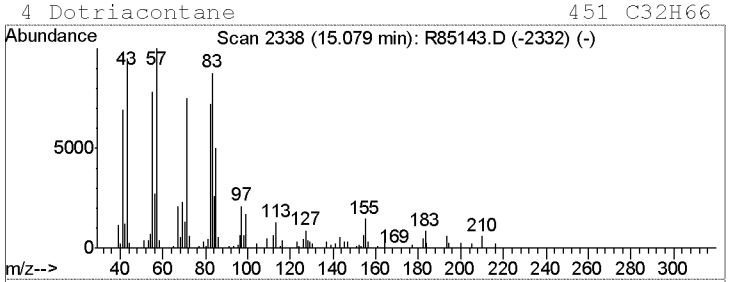
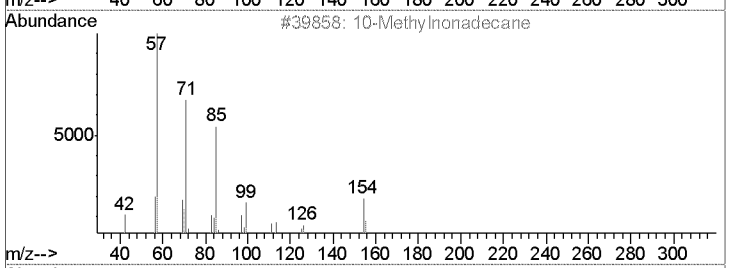
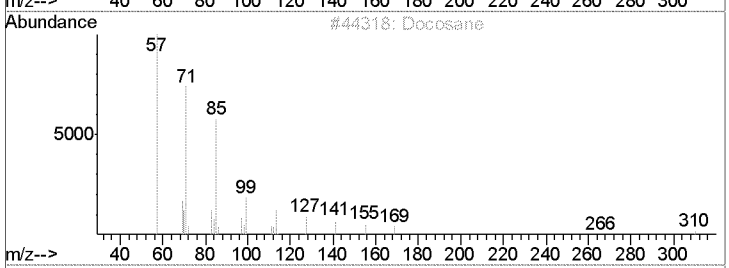
Peak Number 9 alkane Concentration Rank 9

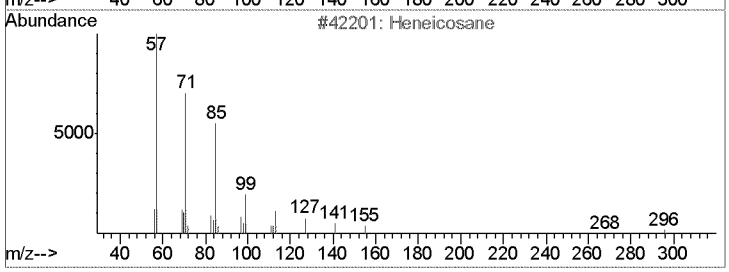
R.T.	EstConc	Area	Relative to ISTD	R.T.
15.08	5.40 ppb	400881	Acenaphthene-d10a	14.31

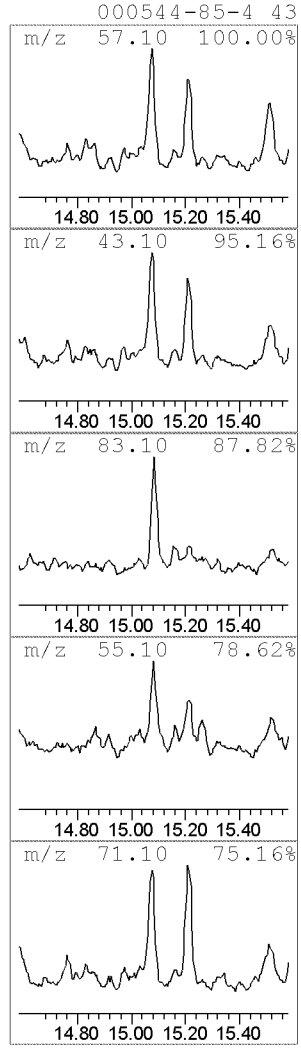
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10-Methylnonadecane	282	C20H42	000000-00-0	46
2	Docosane	310	C22H46	000629-97-0	43
3	Heneicosane	296	C21H44	000629-94-7	43
4	Dotriacontane	451	C32H66	000544-85-4	43











Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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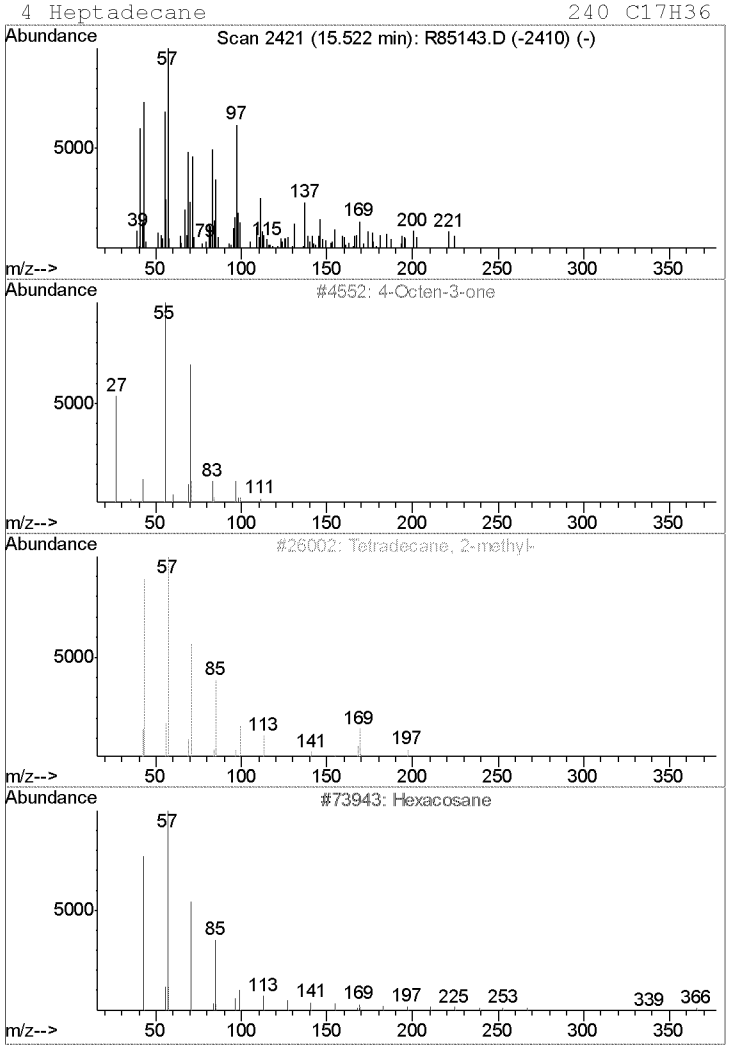
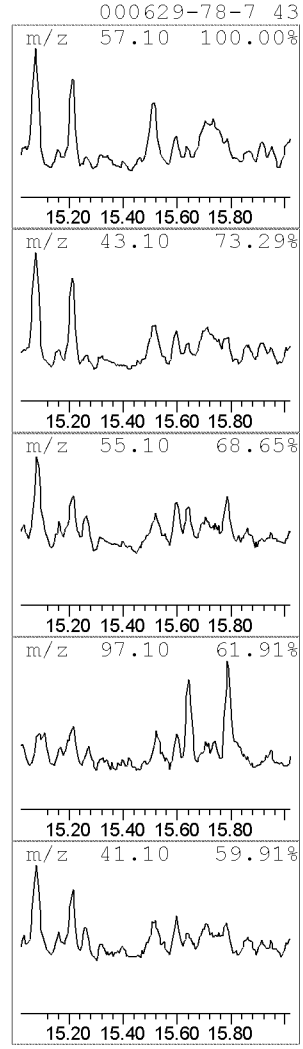
Peak Number 10 unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.52	4.91 ppb	365037	Acenaphthene-d10a	14.31

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Octen-3-one	126	C8H14O	014129-48-7	52
2	Tetradecane, 2-methyl-	212	C15H32	001560-95-8	43
3	Hexacosane	366	C26H54	000630-01-3	43
4	Heptadecane	240	C17H36	000629-78-7	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

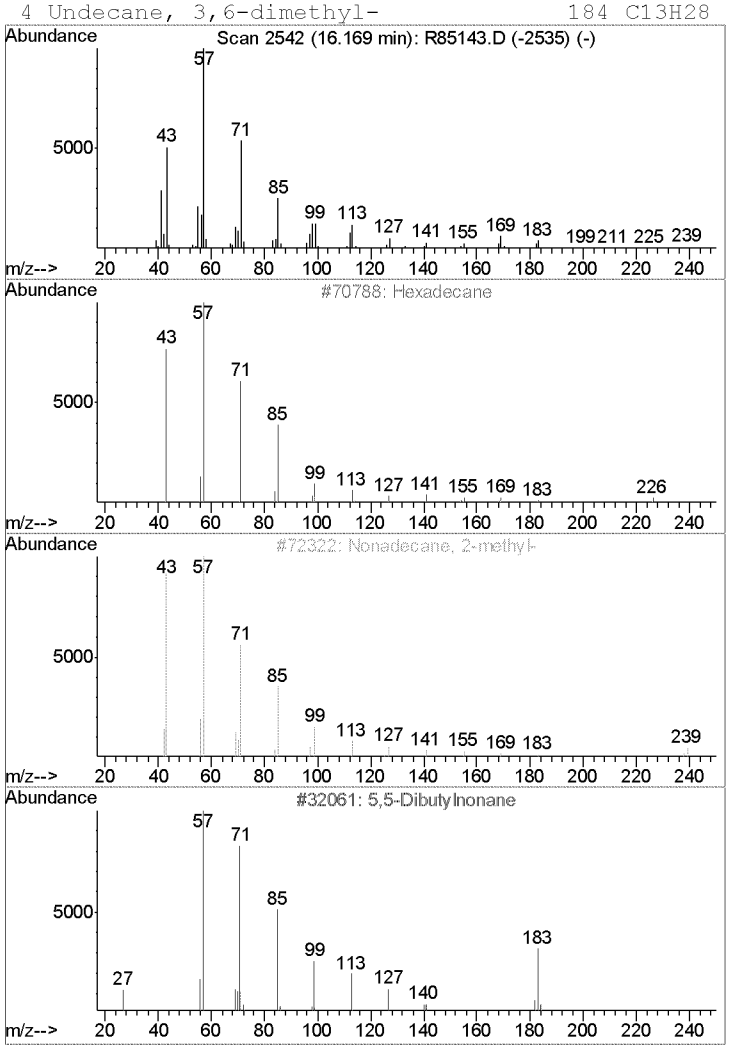
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

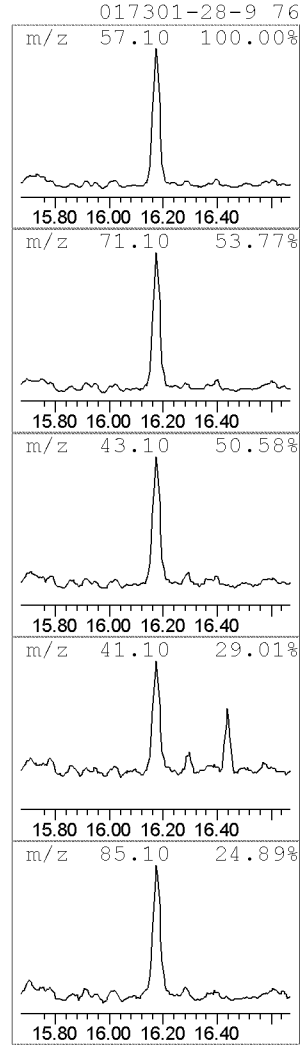
****

Peak Number 11 alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.17	15.14 ppb	1137660	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	80
2	Nonadecane, 2-methyl-	282	C20H42	001560-86-7	80
3	5,5-Dibutylnonane	240	C17H36	000000-00-0	78
4	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	76





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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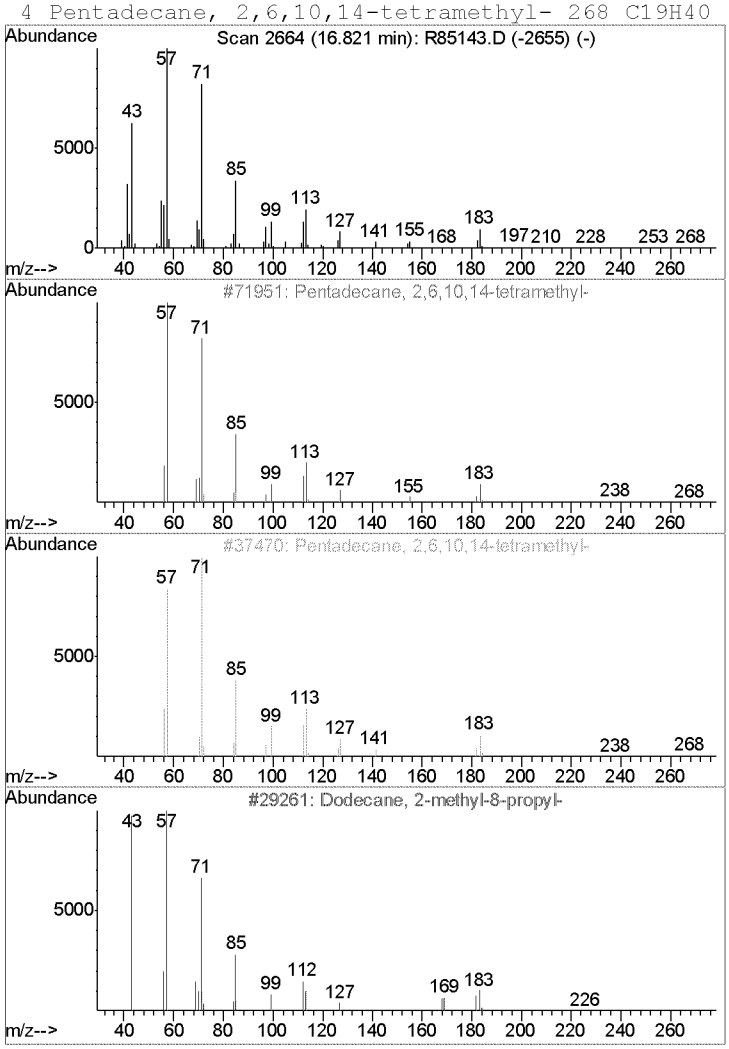
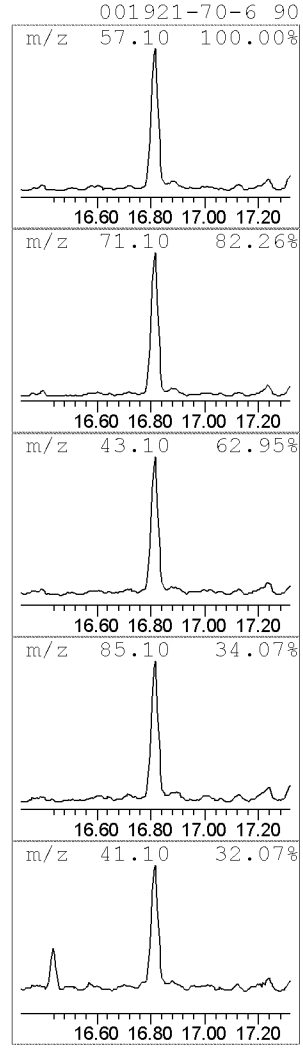
Peak Number 12 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.82	26.02 ppb	1955290	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90
3	Dodecane, 2-methyl-8-propyl-	226	C16H34	055045-07-3	90
4	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90





8.1.12 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

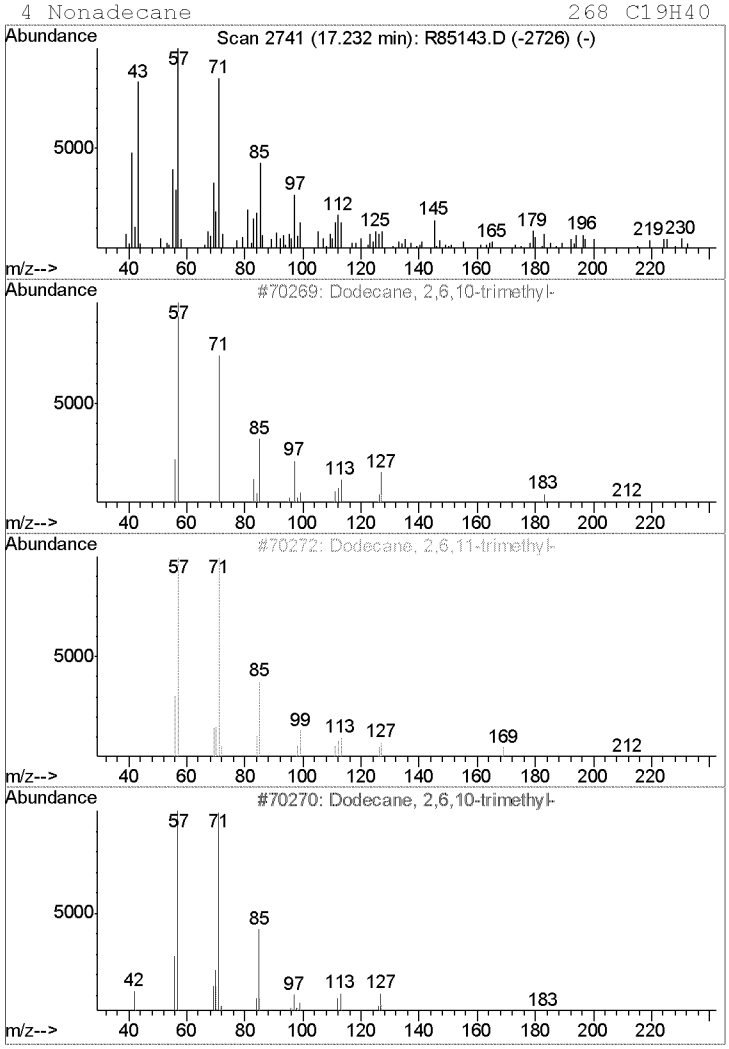
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

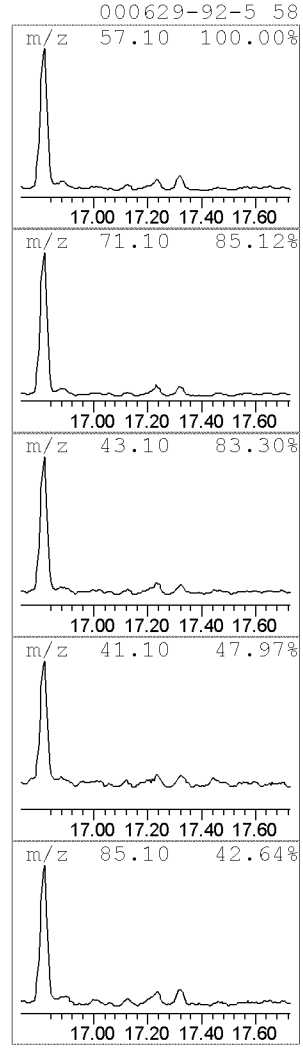
****

Peak Number 13 alkane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.23	5.14 ppb	386557	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	74
2	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	58
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	58
4	Nonadecane	268	C19H40	000629-92-5	58





8.1.12 8

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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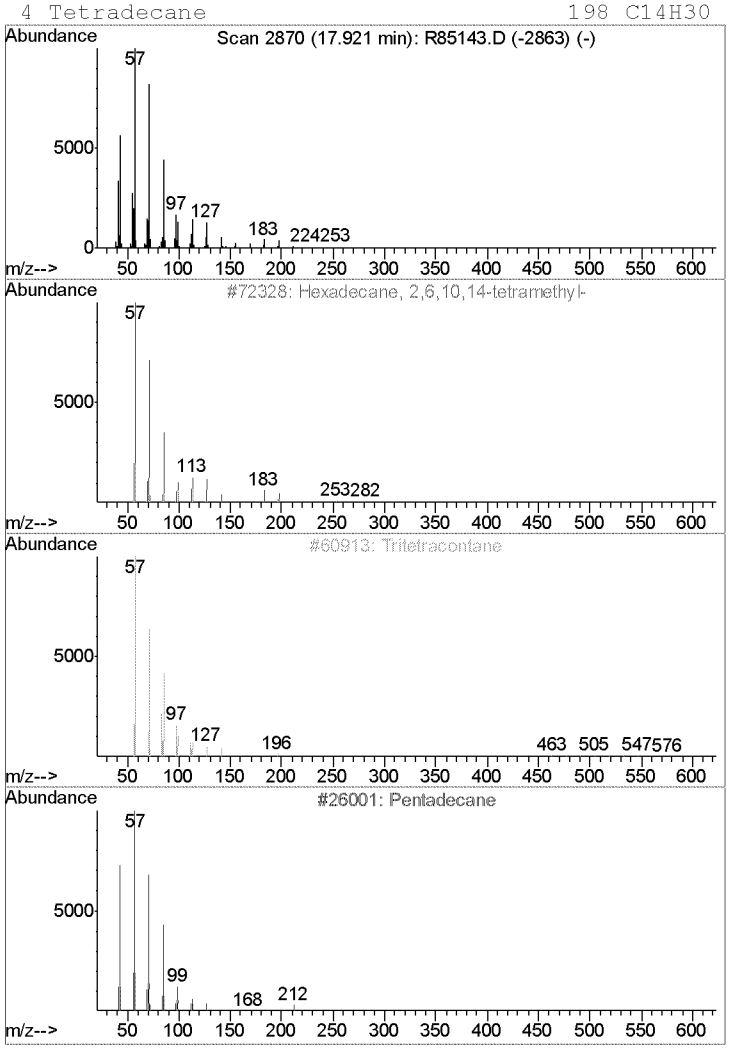
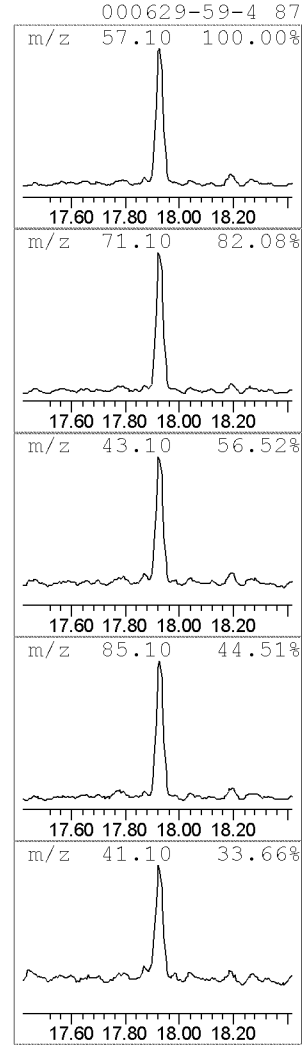
Peak Number 14 alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.92	17.63 ppb	1325120	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90
2	Tritetracontane	605	C43H88	007098-21-7	90
3	Pentadecane	212	C15H32	000629-62-9	87
4	Tetradecane	198	C14H30	000629-59-4	87





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85143.D Vial: 7
Acq On : 28 Jan 2011 6:52 pm Operator: larisap
Sample : ja66701-6 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

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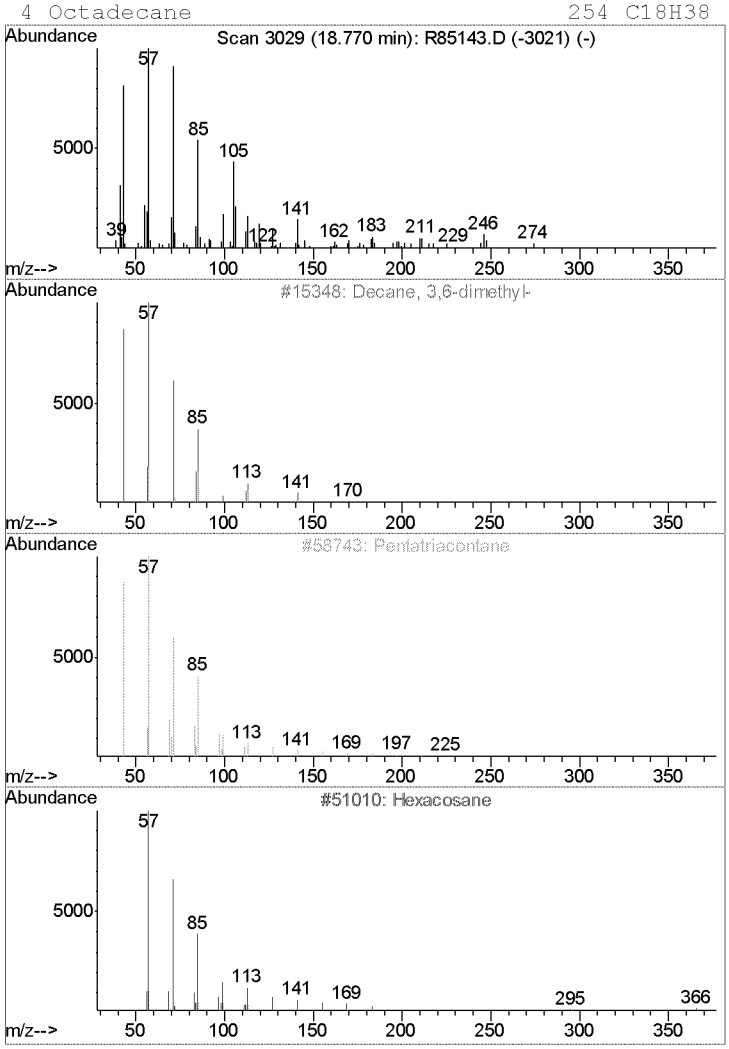
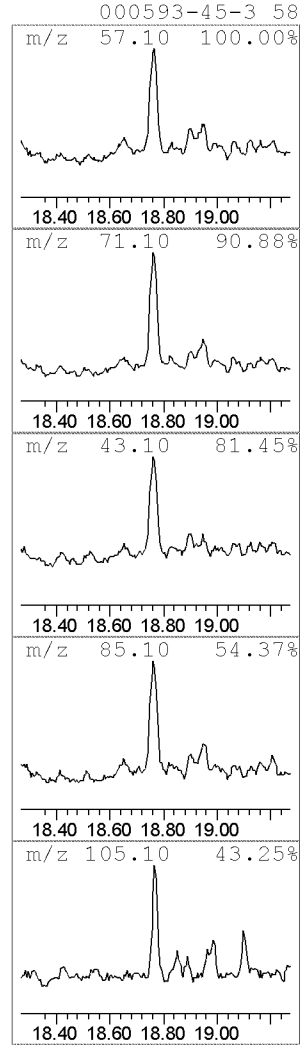
Peak Number 15 alkane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.77	5.88 ppb	442089	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 3,6-dimethyl-	170	C12H26	017312-53-7	62
2	Pentatriacontane	493	C35H72	000630-07-9	59
3	Hexacosane	366	C26H54	000630-01-3	59
4	Octadecane	254	C18H38	000593-45-3	58





Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 6:52 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85143.D
Name: ja66701-6
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
alkane	11.43	9.3	ppb	574403	3	10.19	2464400	40.0
alkane	12.06	5.0	ppb	307669	3	10.19	2464400	40.0
unknown	12.18	4.5	ppb	277892	3	10.19	2464400	40.0
unknown	12.91	4.7	ppb	345514	4	14.31	2971010	40.0
unknown	13.60	5.3	ppb	391649	4	14.31	2971010	40.0
cycloalkane/alkene	13.80	4.7	ppb	347326	4	14.31	2971010	40.0
alkane	13.95	17.9	ppb	1327900	4	14.31	2971010	40.0
unknown	14.18	6.6	ppb	487265	4	14.31	2971010	40.0
alkane	15.08	5.4	ppb	400881	5	14.31	2971010	40.0
unknown	15.52	4.9	ppb	365037	5	14.31	2971010	40.0
alkane	16.17	15.1	ppb	1137660	6	17.77	3005980	40.0
alkane	16.82	26.0	ppb	1955290	6	17.77	3005980	40.0
alkane	17.23	5.1	ppb	386557	6	17.77	3005980	40.0
alkane	17.92	17.6	ppb	1325120	6	17.77	3005980	40.0
alkane	18.77	5.9	ppb	442089	6	17.77	3005980	40.0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:55 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

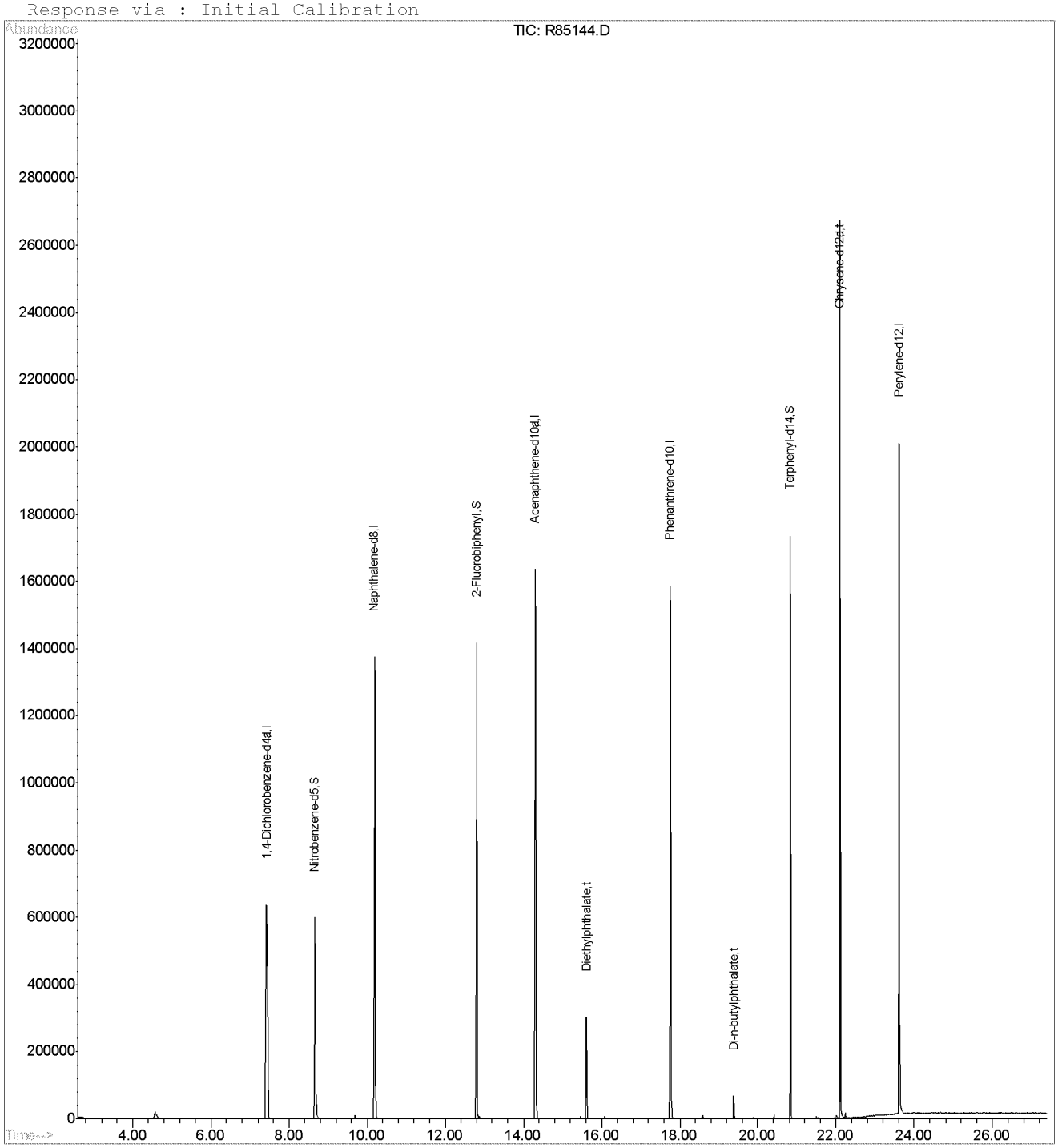
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	313571	40.00	ppb	-0.20
24) Naphthalene-d8	10.18	136	1099645	40.00	ppb	-0.21
47) Acenaphthene-d10	14.30	164	627129	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	982814	40.00	ppb	-0.23
83) Chrysene-d12	22.10	240	987860	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	833059	40.00	ppb	-0.17
102) 1,4-Dichlorobenzene-d4a	7.42	152	313571	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.30	164	627129	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	987860	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	374183	37.44	ppb	-0.20
Spiked Amount 50.000			Recovery =	74.88%		
51) 2-Fluorobiphenyl	12.80	172	744539	33.73	ppb	-0.21
Spiked Amount 50.000			Recovery =	67.46%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	571207	30.68	ppb	-0.15
Spiked Amount 50.000			Recovery =	61.36%		
Target Compounds						Qvalue
65) Diethylphthalate	15.61	149	196912	8.68	ppb	96
80) Di-n-butylphthalate	19.38	149	50729	1.46	ppb	98

(#) = qualifier out of range (m) = manual integration
R85144.D MR3151.M Fri Jan 28 20:55:19 2011 NJMSR

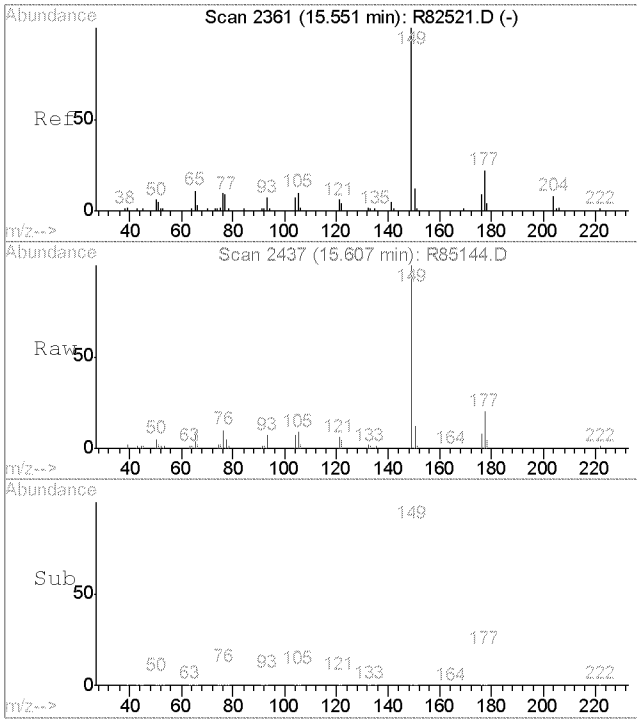
Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:55 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



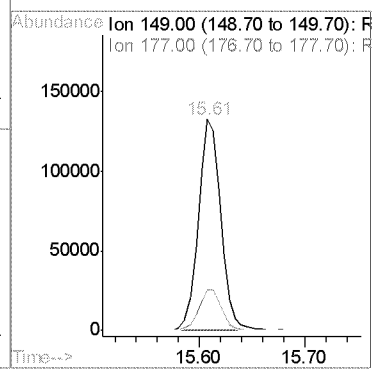
ACCUTEST LABORATORIES JA66701

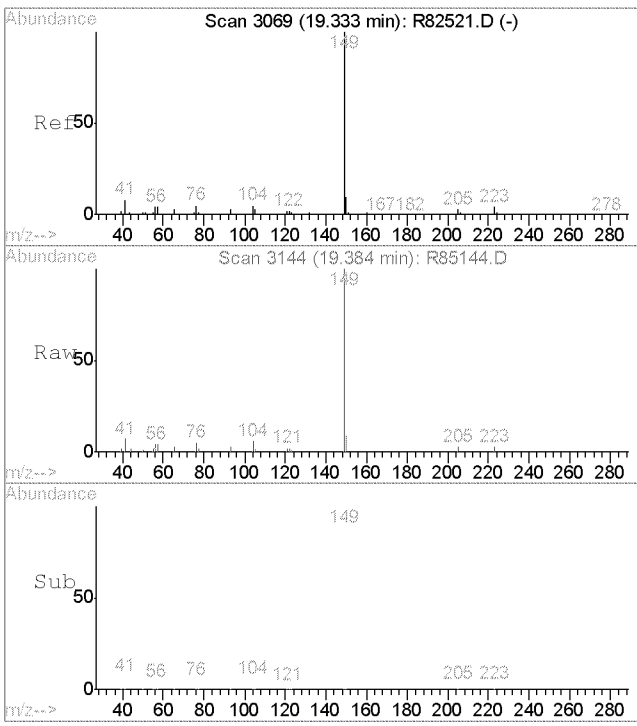


#65
Diethylphthalate
Concen: 8.68 ppb
RT: 15.61 min Scan# 2437
Delta R.T. -0.23 min
Lab File: R85144.D
Acq: 28 Jan 2011 7:28 pm

Tgt Ion:149 Resp: 196912

Ion	Ratio	Lower	Upper
149	100		
177	19.7	0.0	52.1
150	11.7	0.0	42.3

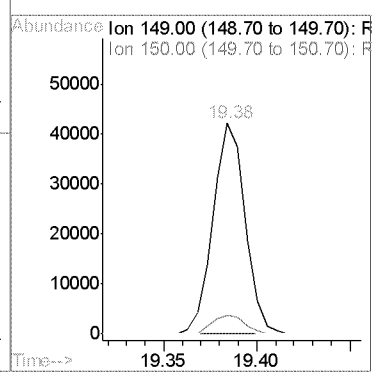




#80
Di-n-butylphthalate
Concen: 1.46 ppb
RT: 19.38 min Scan# 3144
Delta R.T. -0.18 min
Lab File: R85144.D
Acq: 28 Jan 2011 7:28 pm

Tgt Ion:149 Resp: 50729

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	39.7
104	5.5	0.0	35.0



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85144.D Vial: 8
Acq On : 28 Jan 2011 7:28 pm Operator: larisap
Sample : ja66701-7 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.722	23	25	33	rVB2	1540	2568	0.09%	0.013%
2	2.850	45	49	54	rVB2	1313	1969	0.07%	0.010%
3	4.191	294	300	305	rBV2	1374	2140	0.08%	0.011%
4	4.474	349	353	358	rBB	1170	2058	0.07%	0.010%
5	4.565	363	370	397	rBV2	20193	85082	3.06%	0.418%
6	7.418	896	904	932	rBB2	637015	1751317	62.99%	8.600%
7	7.738	958	964	968	rBB	1903	2786	0.10%	0.014%
8	8.662	1130	1137	1174	rBB	600039	1089735	39.20%	5.351%
9	9.688	1324	1329	1335	rBB	11660	14513	0.52%	0.071%
10	10.185	1414	1422	1453	rBV	1376027	2242415	80.65%	11.011%
11	12.797	1903	1911	1921	rBV	1418067	2104096	75.68%	10.332%
12	12.867	1921	1924	1933	rVV3	9287	17483	0.63%	0.086%
13	12.936	1933	1937	1941	rVV	2187	4258	0.15%	0.021%
14	14.058	2141	2147	2149	rBV	1893	2729	0.10%	0.013%
15	14.111	2153	2157	2162	rBB	2082	1962	0.07%	0.010%
16	14.304	2184	2193	2210	rBV	1636633	2575305	92.63%	12.646%
17	14.405	2210	2212	2230	rVB2	2322	7034	0.25%	0.035%
18	15.463	2405	2410	2416	rBB	8770	11899	0.43%	0.058%
19	15.607	2428	2437	2455	rBB	303362	444350	15.98%	2.182%
20	16.083	2519	2526	2533	rBB3	8414	12493	0.45%	0.061%
21	17.482	2781	2788	2795	rBB	2906	4878	0.18%	0.024%
22	17.760	2832	2840	2856	rBV2	1586558	2572274	92.52%	12.631%
23	17.899	2859	2866	2874	rVV2	3975	11157	0.40%	0.055%
24	18.577	2986	2993	2999	rBV	11684	16872	0.61%	0.083%
25	19.384	3134	3144	3150	rVB	68445	79456	2.86%	0.390%
26	19.865	3231	3234	3240	rVB	4532	4297	0.15%	0.021%
27	20.415	3332	3337	3342	rBV	11485	11219	0.40%	0.055%
28	20.826	3408	3414	3433	rBV	1735737	1844209	66.33%	9.056%
29	21.478	3530	3536	3540	rVB2	7065	6476	0.23%	0.032%
30	21.532	3540	3546	3551	rBV2	4548	5704	0.21%	0.028%
31	21.596	3551	3558	3565	rBV3	3100	4871	0.18%	0.024%
32	21.975	3621	3629	3633	rBV3	4603	6890	0.25%	0.034%
33	22.023	3633	3638	3645	rVB2	7704	12079	0.43%	0.059%
34	22.103	3647	3653	3671	rBV	2676043	2780273	100.00%	13.652%
35	22.231	3672	3677	3684	rVV	14239	16311	0.59%	0.080%
36	22.344	3694	3698	3704	rVB4	1523	2215	0.08%	0.011%
37	22.541	3729	3735	3736	rVV3	1500	1976	0.07%	0.010%
38	22.616	3747	3749	3751	rBV2	2662	2414	0.09%	0.012%

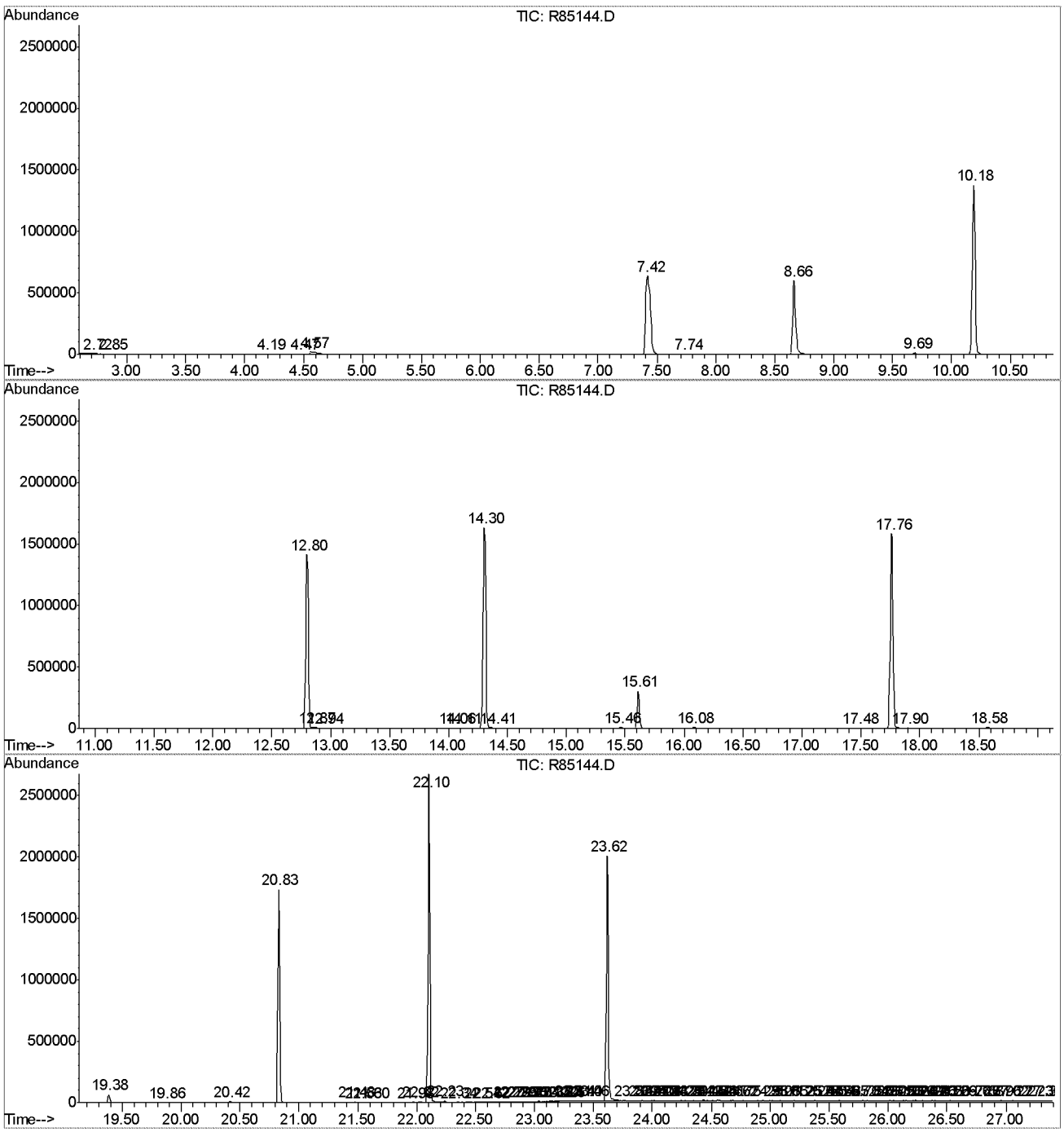
39	22.792	3774	3782	3783	rBV2	2603	3006	0.11%	0.015%
40	22.851	3789	3793	3797	rBV3	2439	2673	0.10%	0.013%
41	22.910	3800	3804	3807	rBV3	2552	2320	0.08%	0.011%
42	22.947	3807	3811	3813	rBV4	2275	3472	0.12%	0.017%
43	23.038	3823	3828	3831	rVV5	2594	2793	0.10%	0.014%
44	23.118	3842	3843	3847	rBV3	2964	3610	0.13%	0.018%
45	23.150	3847	3849	3852	rVB2	3418	3111	0.11%	0.015%
46	23.204	3852	3859	3860	rBV4	3189	5868	0.21%	0.029%
47	23.257	3866	3869	3871	rVB2	2734	2428	0.09%	0.012%
48	23.311	3876	3879	3882	rVV5	2689	2313	0.08%	0.011%
49	23.401	3890	3896	3897	rBV3	3072	4146	0.15%	0.020%
50	23.412	3897	3898	3902	rVV3	2042	2064	0.07%	0.010%
51	23.460	3906	3907	3911	rVV3	1923	2102	0.08%	0.010%
52	23.615	3928	3936	3956	rVV	1995880	2438932	87.72%	11.976%
53	23.818	3968	3974	3978	rVB5	1557	2820	0.10%	0.014%
54	23.936	3994	3996	3999	rVV3	1934	2136	0.08%	0.010%
55	23.973	3999	4003	4005	rVV4	2070	2655	0.10%	0.013%
56	24.010	4008	4010	4015	rVV5	2920	3662	0.13%	0.018%
57	24.080	4022	4023	4028	rVV5	2046	2740	0.10%	0.013%
58	24.133	4028	4033	4037	rVV4	1743	3847	0.14%	0.019%
59	24.245	4051	4054	4056	rVB4	3329	2007	0.07%	0.010%
60	24.277	4056	4060	4062	rBV3	2502	2963	0.11%	0.015%
61	24.299	4062	4064	4070	rVV5	1478	2743	0.10%	0.013%
62	24.432	4086	4089	4094	rBV5	2167	2899	0.10%	0.014%
63	24.464	4094	4095	4100	rVB4	2517	2132	0.08%	0.010%
64	24.513	4100	4104	4107	rVB5	3392	4109	0.15%	0.020%
65	24.539	4107	4109	4110	rBV	2540	2069	0.07%	0.010%
66	24.614	4120	4123	4127	rBV5	1947	3200	0.12%	0.016%
67	24.662	4129	4132	4134	rBV2	3127	2377	0.09%	0.012%
68	24.721	4140	4143	4145	rVB4	2063	2043	0.07%	0.010%
69	24.753	4145	4149	4150	rBV4	2104	2071	0.07%	0.010%
70	24.983	4188	4192	4193	rBV4	1920	1939	0.07%	0.010%
71	25.084	4210	4211	4214	rBV3	2898	2011	0.07%	0.010%
72	25.111	4214	4216	4220	rVV5	1920	1972	0.07%	0.010%
73	25.148	4220	4223	4228	rVB4	1595	2174	0.08%	0.011%
74	25.255	4241	4243	4247	rVV4	2036	2054	0.07%	0.010%
75	25.437	4274	4277	4278	rBV3	3011	2470	0.09%	0.012%
76	25.453	4278	4280	4282	rVV3	2241	2465	0.09%	0.012%
77	25.544	4292	4297	4301	rVB7	2350	4349	0.16%	0.021%
78	25.586	4301	4305	4307	rBV4	3013	3242	0.12%	0.016%
79	25.666	4319	4320	4326	rBV5	1240	2036	0.07%	0.010%
80	25.757	4334	4337	4339	rBV4	2087	2193	0.08%	0.011%
81	25.843	4351	4353	4358	rBV6	1982	2085	0.07%	0.010%
82	25.971	4373	4377	4379	rBV4	1495	2097	0.08%	0.010%
83	26.046	4387	4391	4393	rBV4	2650	2815	0.10%	0.014%
84	26.099	4396	4401	4403	rVB4	1721	2555	0.09%	0.013%
85	26.131	4403	4407	4408	rBV5	2560	2816	0.10%	0.014%
86	26.238	4425	4427	4432	rVB5	2036	2735	0.10%	0.013%
87	26.291	4434	4437	4439	rVB2	2153	2285	0.08%	0.011%
88	26.324	4439	4443	4444	rBV4	1949	2054	0.07%	0.010%
89	26.398	4454	4457	4460	rBV4	2538	2761	0.10%	0.014%
90	26.425	4460	4462	4466	rVB3	1853	2113	0.08%	0.010%
91	26.527	4478	4481	4484	rBV3	2858	2779	0.10%	0.014%
92	26.585	4489	4492	4495	rBV4	2377	2848	0.10%	0.014%
93	26.697	4512	4513	4517	rVB4	2217	2263	0.08%	0.011%
94	26.751	4517	4523	4525	rBV4	1818	3105	0.11%	0.015%
95	26.874	4544	4546	4555	rVB5	1897	3120	0.11%	0.015%

96	26.959	4561	4562	4567	rBV5	2612	2073	0.07%	0.010%
97	27.023	4572	4574	4578	rBV5	2081	3043	0.11%	0.015%
98	27.232	4609	4613	4621	rVB8	2010	4060	0.15%	0.020%
99	27.296	4621	4625	4626	rVB3	2052	2220	0.08%	0.011%
100	27.328	4626	4631	4632	rBV5	2233	2994	0.11%	0.015%

Sum of corrected areas: 20364800

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85144.D
Operator : larisap
Acquired : 28 Jan 2011 7:28 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-7
Misc Info : op47853,er3224,1000
Vial Number: 8
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 7:28 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85144.D
Name: ja66701-7
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

8.1.14
8

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:56 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

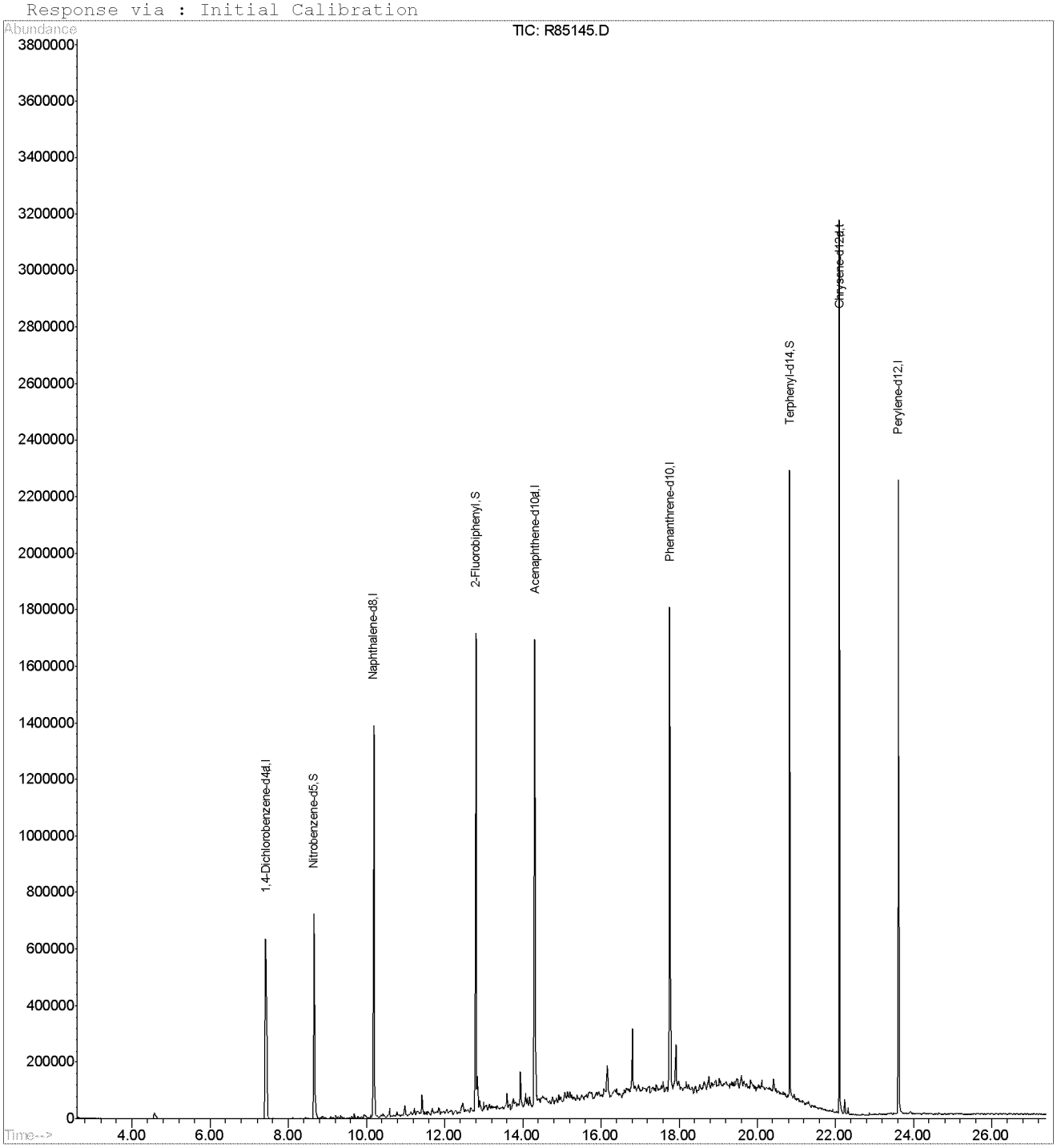
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.42	152	313837	40.00	ppb	-0.20
24) Naphthalene-d8	10.19	136	1092112	40.00	ppb	-0.21
47) Acenaphthene-d10	14.30	164	641229	40.00	ppb	-0.22
69) Phenanthrene-d10	17.77	188	1063552	40.00	ppb	-0.22
83) Chrysene-d12	22.10	240	1104835	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	927406	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.42	152	313837	40.00	ppb	-0.19
104) Acenaphthene-d10a	14.30	164	641229	40.00	ppb	-0.21
107) Chrysene-d12a	22.10	240	1104835	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	448389	45.18	ppb	-0.20
Spiked Amount 50.000			Recovery =	90.36%		
51) 2-Fluorobiphenyl	12.80	172	905254	40.10	ppb	-0.21
Spiked Amount 50.000			Recovery =	80.20%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	727434	34.93	ppb	-0.14
Spiked Amount 50.000			Recovery =	69.86%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85145.D MR3151.M Fri Jan 28 20:56:12 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 28 20:56 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Fri Jan 28 20:47:03 2011
Response via : Initial Calibration



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.560	362	369	396	rBV2	22372	84732	2.70%	0.307%
2	7.418	896	904	933	rBB	638110	1765862	56.30%	6.399%
3	8.663	1127	1137	1159	rBV	725320	1336650	42.61%	4.844%
4	9.341	1256	1264	1276	rVB6	10362	24805	0.79%	0.090%
5	9.694	1324	1330	1339	rVB4	14194	24576	0.78%	0.089%
6	9.945	1369	1377	1382	rBV4	11304	23094	0.74%	0.084%
7	10.185	1411	1422	1435	rVV	1385733	2308463	73.60%	8.366%
8	10.586	1479	1497	1503	rBV5	31641	72974	2.33%	0.264%
9	10.773	1527	1532	1541	rBV4	17159	38675	1.23%	0.140%
10	10.981	1562	1571	1585	rVB6	39009	81558	2.60%	0.296%
11	11.136	1592	1600	1607	rBV8	8505	22276	0.71%	0.081%
12	11.232	1613	1618	1622	rVB3	25606	37661	1.20%	0.136%
13	11.291	1622	1629	1630	rBV2	14116	26049	0.83%	0.094%
14	11.425	1649	1654	1660	rVB	68843	96421	3.07%	0.349%
15	11.574	1679	1682	1690	rBV7	12120	24240	0.77%	0.088%
16	11.681	1696	1702	1711	rBV6	22360	45972	1.47%	0.167%
17	11.857	1729	1735	1743	rVB5	25966	57763	1.84%	0.209%
18	11.964	1751	1755	1764	rVB7	8753	21855	0.70%	0.079%
19	12.055	1764	1772	1779	rVB4	17267	41816	1.33%	0.152%
20	12.172	1790	1794	1802	rVB7	16252	37110	1.18%	0.134%
21	12.269	1803	1812	1817	rBV7	15311	42997	1.37%	0.156%
22	12.461	1833	1848	1857	rBV7	37989	133972	4.27%	0.486%
23	12.536	1858	1862	1868	rVV9	11507	23029	0.73%	0.083%
24	12.595	1870	1873	1881	rVB8	12984	24362	0.78%	0.088%
25	12.680	1881	1889	1896	rBV8	16821	50120	1.60%	0.182%
26	12.797	1904	1911	1917	rBV	1692961	2655719	84.67%	9.624%
27	12.840	1917	1919	1926	rVV	122664	175457	5.59%	0.636%
28	12.899	1926	1930	1941	rVB7	39577	94354	3.01%	0.342%
29	12.995	1942	1948	1952	rBV7	31868	52711	1.68%	0.191%
30	13.065	1953	1961	1968	rVB9	16472	46848	1.49%	0.170%
31	13.139	1970	1975	1982	rBV9	20323	39557	1.26%	0.143%
32	13.358	2010	2016	2021	rVB10	12551	22423	0.71%	0.081%
33	13.599	2046	2061	2066	rBV6	57953	133475	4.26%	0.484%
34	13.668	2066	2074	2079	rVB9	20916	56521	1.80%	0.205%
35	13.754	2081	2090	2095	rBV7	38357	101203	3.23%	0.367%
36	13.941	2118	2125	2137	rVB	126557	248758	7.93%	0.901%
37	14.069	2143	2149	2153	rBV5	41365	63477	2.02%	0.230%
38	14.112	2153	2157	2163	rVB8	28527	47562	1.52%	0.172%

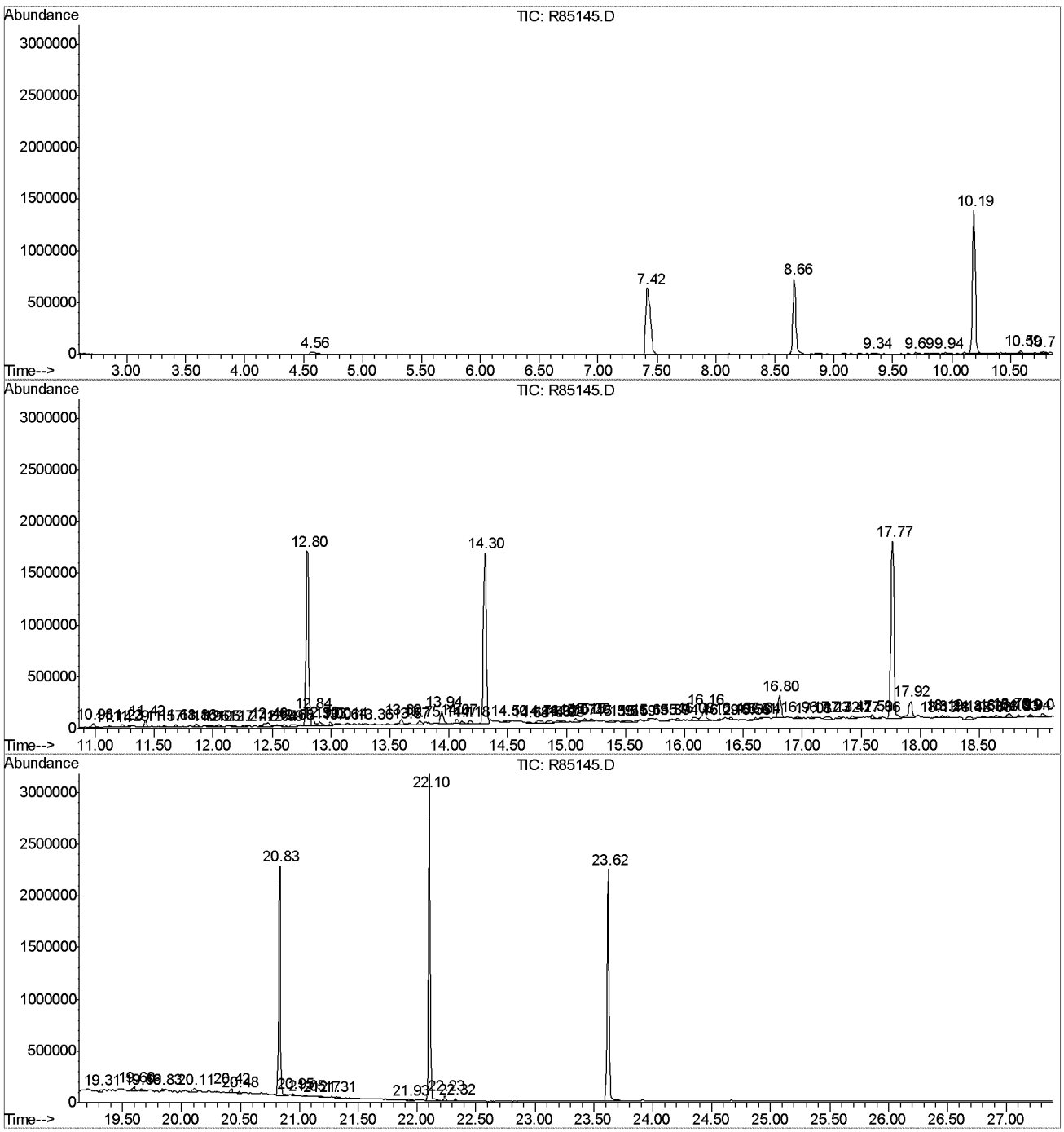
39	14.176	2164	2169	2179	rVB8	35372	76970	2.45%	0.279%
40	14.304	2183	2193	2201	rBV	1650295	2713583	86.51%	9.834%
41	14.496	2219	2229	2234	rBV	23095	76299	2.43%	0.277%
42	14.678	2260	2263	2272	rVB8	11092	20074	0.64%	0.073%
43	14.763	2272	2279	2287	rBV8	25570	68417	2.18%	0.248%
44	14.865	2288	2298	2304	rBV8	21332	58314	1.86%	0.211%
45	14.924	2304	2309	2313	rBV8	26228	44850	1.43%	0.163%
46	14.977	2314	2319	2326	rVB8	18427	36918	1.18%	0.134%
47	15.073	2333	2337	2345	rBV8	32880	69842	2.23%	0.253%
48	15.153	2346	2352	2357	rVB9	25559	41145	1.31%	0.149%
49	15.201	2357	2361	2369	rBV10	26098	51327	1.64%	0.186%
50	15.388	2389	2396	2401	rBV10	19926	45841	1.46%	0.166%
51	15.506	2409	2418	2429	rVB10	20727	64051	2.04%	0.232%
52	15.586	2430	2433	2436	rBV5	15533	24341	0.78%	0.088%
53	15.688	2447	2452	2454	rBV4	19456	27092	0.86%	0.098%
54	15.875	2480	2487	2488	rBV7	19248	33006	1.05%	0.120%
55	15.944	2495	2500	2506	rVB9	15861	33319	1.06%	0.121%
56	16.083	2520	2526	2534	rBV9	25899	75600	2.41%	0.274%
57	16.163	2534	2541	2554	rVB	114227	267733	8.54%	0.970%
58	16.291	2561	2565	2568	rBV5	13715	19749	0.63%	0.072%
59	16.398	2582	2585	2589	rVB6	18692	22501	0.72%	0.082%
60	16.558	2611	2615	2619	rBV6	14160	31148	0.99%	0.113%
61	16.606	2620	2624	2627	rVV6	14342	20492	0.65%	0.074%
62	16.639	2628	2630	2634	rBV4	16038	21250	0.68%	0.077%
63	16.804	2654	2661	2669	rBV	214022	399202	12.73%	1.447%
64	16.959	2686	2690	2697	rVB9	25546	47901	1.53%	0.174%
65	17.077	2709	2712	2717	rBV7	12401	20212	0.64%	0.073%
66	17.231	2731	2741	2747	rVB7	27169	84823	2.70%	0.307%
67	17.317	2752	2757	2761	rBV6	17863	36589	1.17%	0.133%
68	17.418	2772	2776	2785	rBV6	23085	53737	1.71%	0.195%
69	17.595	2806	2809	2816	rVB8	34668	51846	1.65%	0.188%
70	17.659	2818	2821	2824	rBV5	15770	20456	0.65%	0.074%
71	17.766	2831	2841	2855	rBV2	1713136	2934817	93.56%	10.636%
72	17.915	2855	2869	2877	rBV	160316	387277	12.35%	1.403%
73	18.134	2906	2910	2915	rBV7	12461	24802	0.79%	0.090%
74	18.188	2916	2920	2925	rVV7	28138	39964	1.27%	0.145%
75	18.236	2925	2929	2934	rVB8	18457	28856	0.92%	0.105%
76	18.423	2956	2964	2970	rBV8	25498	69044	2.20%	0.250%
77	18.530	2979	2984	2993	rBV8	19836	44051	1.40%	0.160%
78	18.604	2994	2998	3001	rBV5	10666	18390	0.59%	0.067%
79	18.642	3001	3005	3016	rVB5	30903	79648	2.54%	0.289%
80	18.759	3019	3027	3034	rVB2	42476	91578	2.92%	0.332%
81	18.834	3038	3041	3045	rVV5	17414	25274	0.81%	0.092%
82	18.936	3055	3060	3065	rVB8	25221	48354	1.54%	0.175%
83	19.037	3075	3079	3090	rVB8	28248	64545	2.06%	0.234%
84	19.310	3127	3130	3134	rBV5	20732	36019	1.15%	0.131%
85	19.598	3178	3184	3189	rVB10	39483	71132	2.27%	0.258%
86	19.657	3193	3195	3203	rVB9	19683	34555	1.10%	0.125%
87	19.833	3225	3228	3231	rBV4	27916	34140	1.09%	0.124%
88	20.111	3274	3280	3284	rBV7	31179	55626	1.77%	0.202%
89	20.415	3333	3337	3345	rBV8	45872	67860	2.16%	0.246%
90	20.485	3348	3350	3354	rVB5	20062	19701	0.63%	0.071%
91	20.832	3409	3415	3429	rVB	2222589	2470860	78.77%	8.954%
92	20.950	3433	3437	3441	rVB7	19036	23471	0.75%	0.085%
93	21.051	3451	3456	3462	rVB10	11577	25917	0.83%	0.094%
94	21.174	3477	3479	3487	rVB9	14903	26136	0.83%	0.095%
95	21.313	3502	3505	3513	rVB8	15483	23050	0.73%	0.084%

96	21.933	3616	3621	3629	rVB3	13301	25593	0.82%	0.093%
97	22.104	3646	3653	3671	rBV	3162984	3136692	100.00%	11.367%
98	22.232	3671	3677	3685	rVB	52267	56763	1.81%	0.206%
99	22.323	3690	3694	3700	rVB	25841	28640	0.91%	0.104%
100	23.621	3930	3937	3958	rBV	2242541	2757911	87.92%	9.994%

Sum of corrected areas: 27594391

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3224\R85145.D
Operator : larisap
Acquired : 28 Jan 2011 8:05 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: ja66701-8
Misc Info : op47853,er3224,1000
Vial Number: 9
Quant File :MR3151.RES (RTE Integrator)



Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

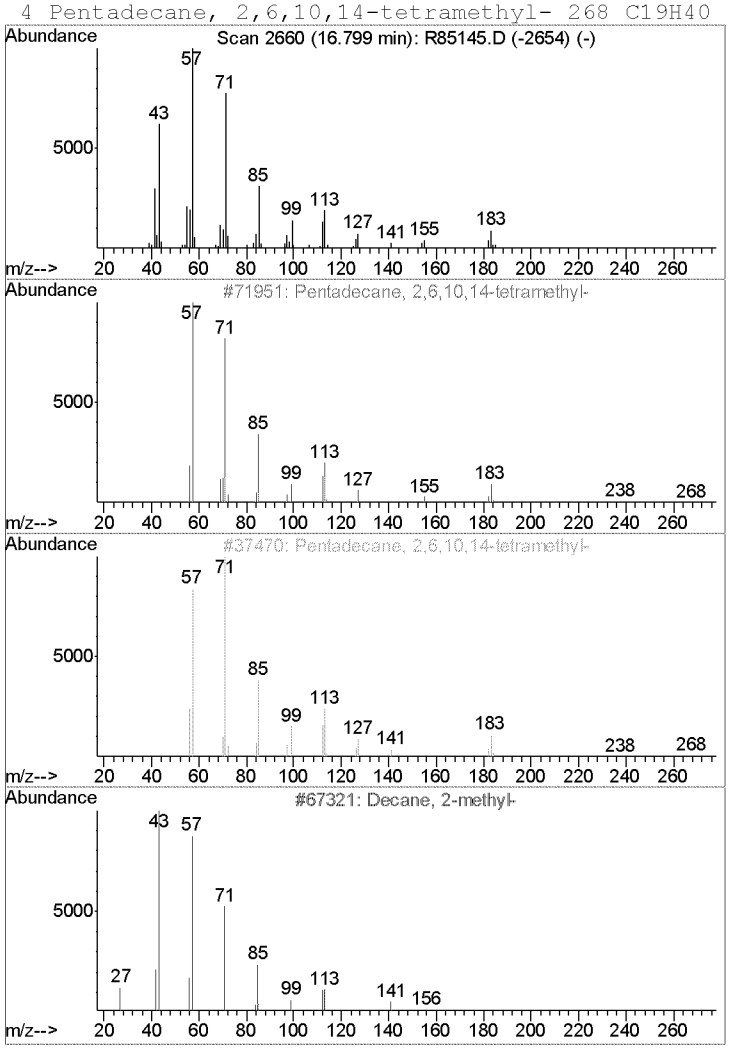
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

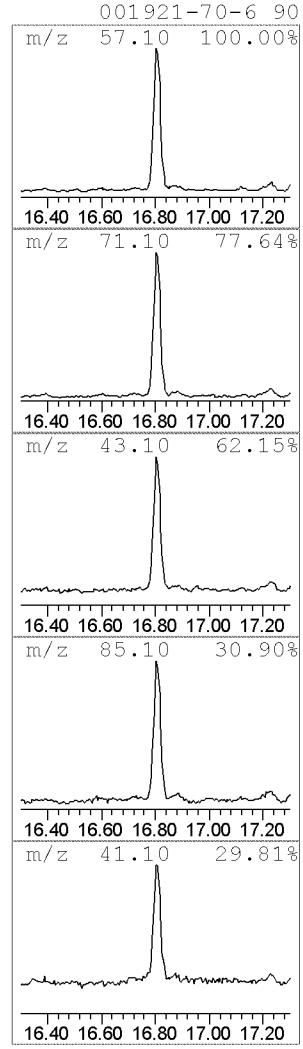
****

Peak Number 1 alkane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.80	5.44 ppb	399202	Phenanthrene-d10	17.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
2	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	91
3	Decane, 2-methyl-	156	C11H24	006975-98-0	90
4	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\ER3224\R85145.D Vial: 9
Acq On : 28 Jan 2011 8:05 pm Operator: larisap
Sample : ja66701-8 Inst : MSR
Misc : op47853,er3224,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

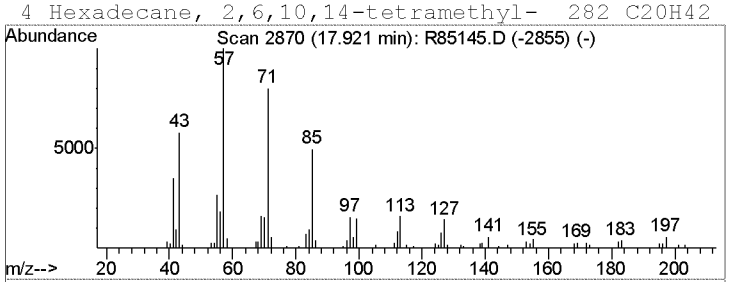
Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library : C:\DATABASE\NBS75K.L

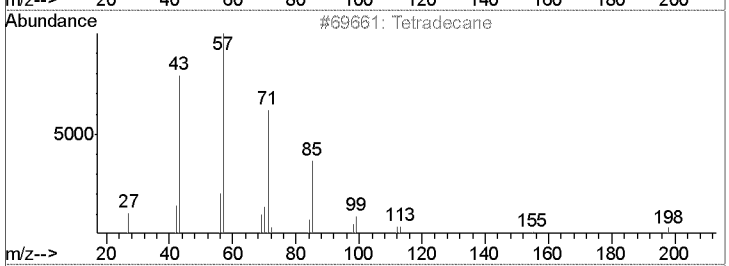
****

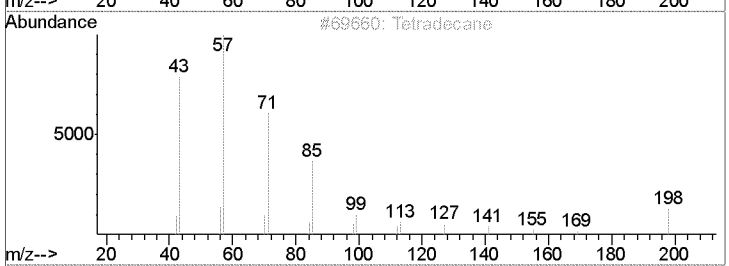
Peak Number 2 alkane Concentration Rank 2

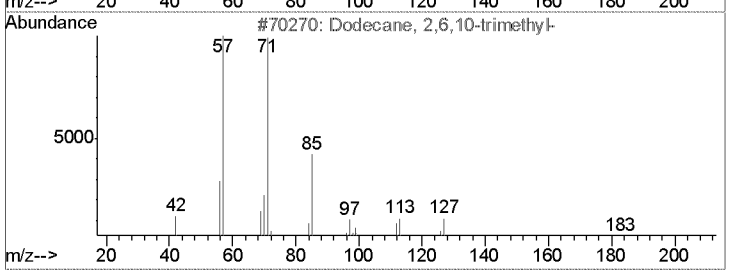
R.T.	EstConc	Area	Relative to ISTD	R.T.
17.92	5.28 ppb	387277	Phenanthrene-d10	17.77

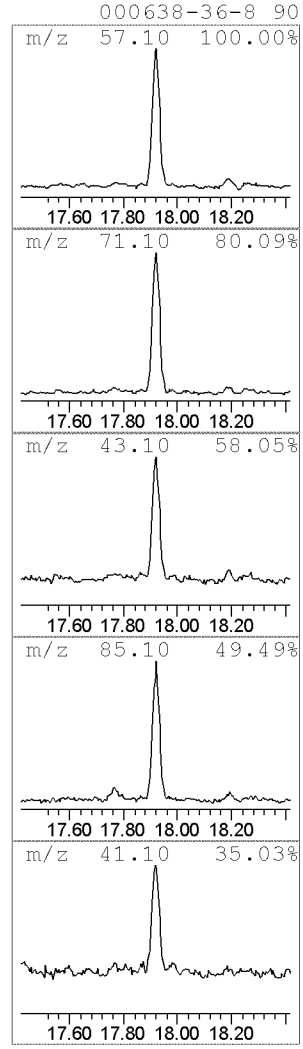
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	91
2	Tetradecane	198	C14H30	000629-59-4	91
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	90
4	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90











8.1.16 8

Tentatively Identified Compound (LSC) summary

Operator ID: larisap Date Acquired: 28 Jan 2011 8:05 pm
Data File: C:\MSDCHEM\1\DATA\ER3224\R85145.D
Name: ja66701-8
Misc: op47853,er3224,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
alkane	16.80	5.4	ppb	399202	6	17.77	2934820	40.0
alkane	17.92	5.3	ppb	387277	6	17.77	2934820	40.0

8.1.16
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23447.D
Acq On : 31 Jan 2011 5:24 pm
Operator : ninap
Sample : ja66701-1
Misc : op47853a,e4m1022,1000
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 11:30:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	33724	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	26029	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	42614	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	45538	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	198669	40.14	ppb	0.01
Spiked Amount 50.000			Recovery =	80.28%		
11) 2-Fluorobiphenyl	7.338	172	469000	41.35	ppb	0.02
Spiked Amount 50.000			Recovery =	82.70%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	136714	29.79	ppb	0.00
Spiked Amount 50.000			Recovery =	59.58%		
Target Compounds						Qvalue
7) Naphthalene	5.625	128	23142	1.54	ppb	99
14) Acenaphthene	8.328	153	3983	0.36	ppb	88
15) Fluorene	9.117	166	5732	0.69	ppb	72

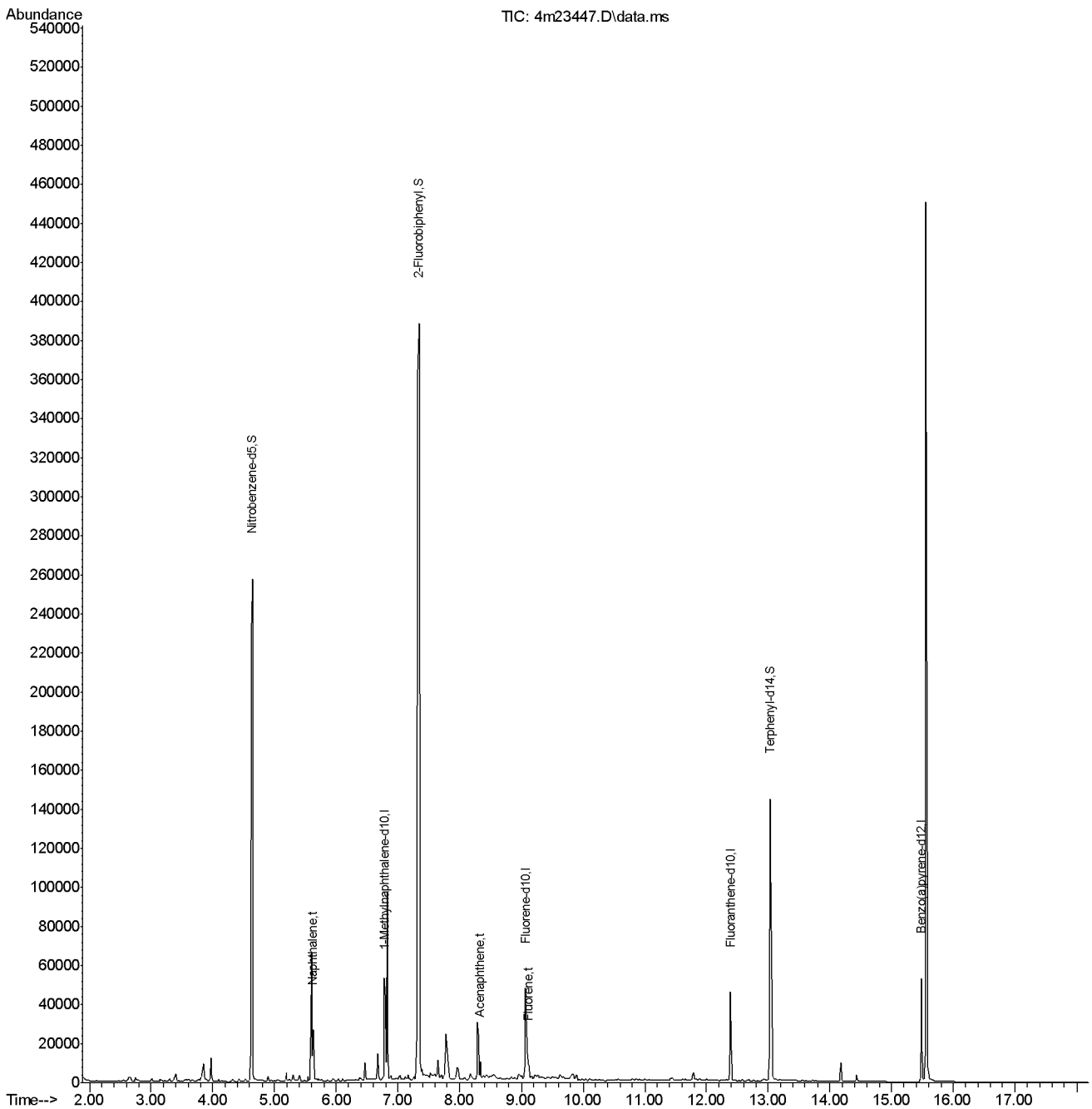
(#) = qualifier out of range (m) = manual integration (+) = signals summed

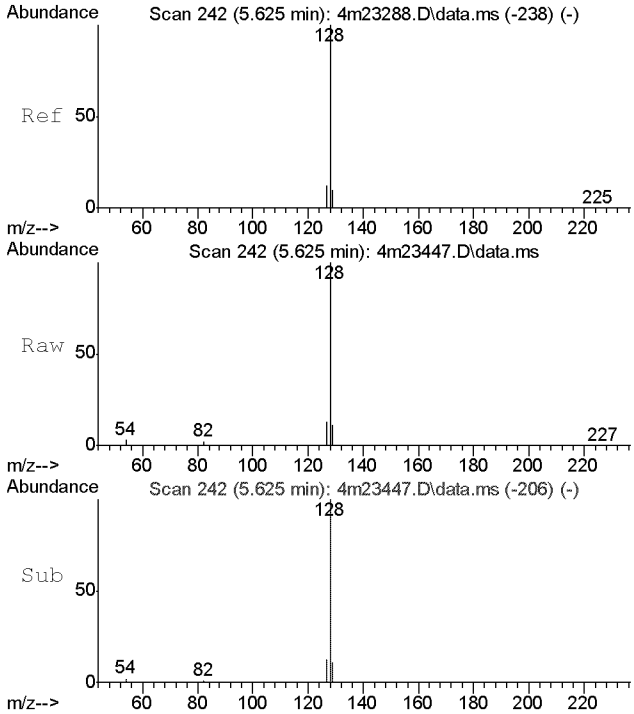
8.1.17 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23447.D
Acq On : 31 Jan 2011 5:24 pm
Operator : ninap
Sample : ja66701-1
Misc : op47853a,e4m1022,1000
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 01 11:30:23 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

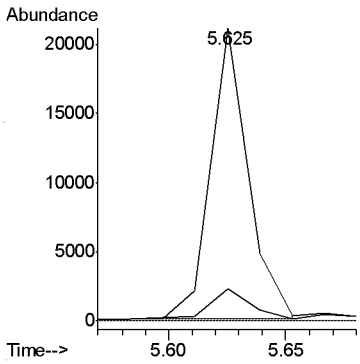


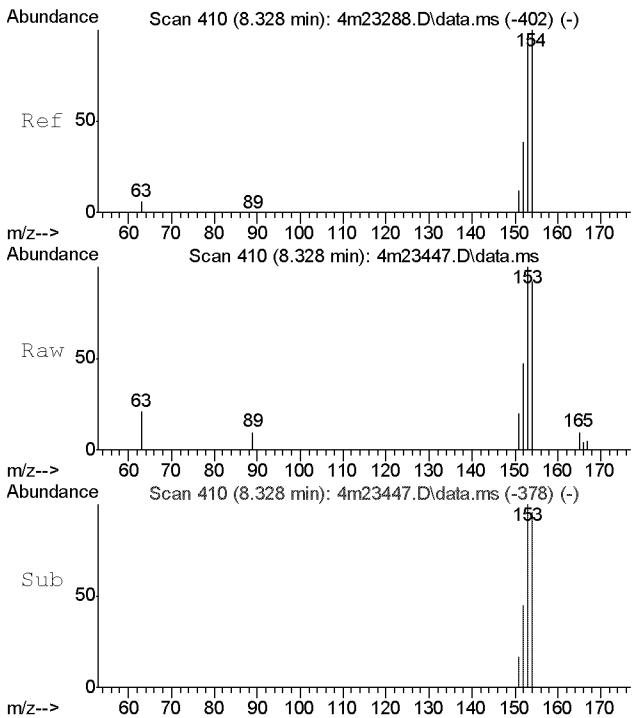


#7
Naphthalene
Concen: 1.54 ppb
RT: 5.625 min Scan# 242
Delta R.T. -0.000 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:128 Resp: 23142

Ion	Ratio	Lower	Upper
128	100		
129	10.0	0.0	40.4
122	0.0	0.0	30.0

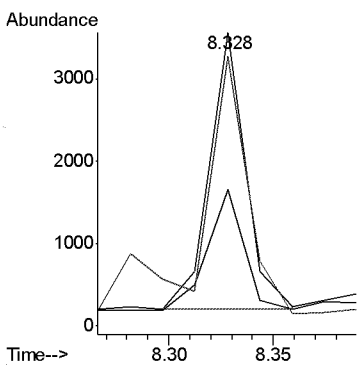


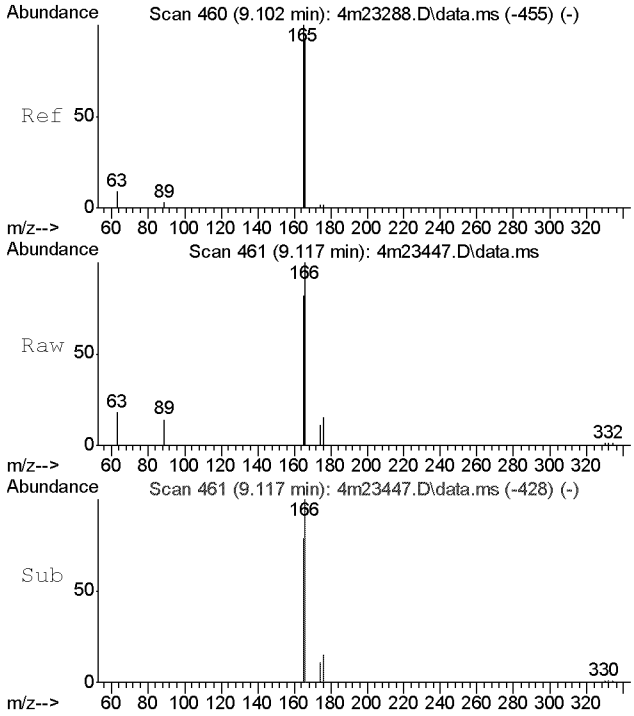


#14
Acenaphthene
Concen: 0.36 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:153 Resp: 3983

Ion	Ratio	Lower	Upper
153	100		
152	43.9	9.6	69.6
154	87.6	71.6	131.6

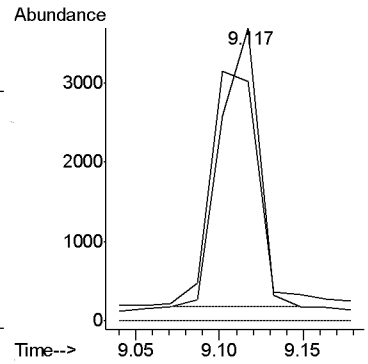




#15
Fluorene
Concen: 0.69 ppb
RT: 9.117 min Scan# 461
Delta R.T. 0.015 min
Lab File: 4m23447.D
Acq: 31 Jan 2011 5:24 pm

Tgt Ion:166 Resp: 5732

Ion	Ratio	Lower	Upper
166	100		
165	78.1	77.3	137.3
167	0.0	0.0	30.0



8.1.17
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23448.D
Acq On : 31 Jan 2011 5:47 pm
Operator : ninap
Sample : ja66701-2
Misc : op47853a,e4m1022,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 01 11:31:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

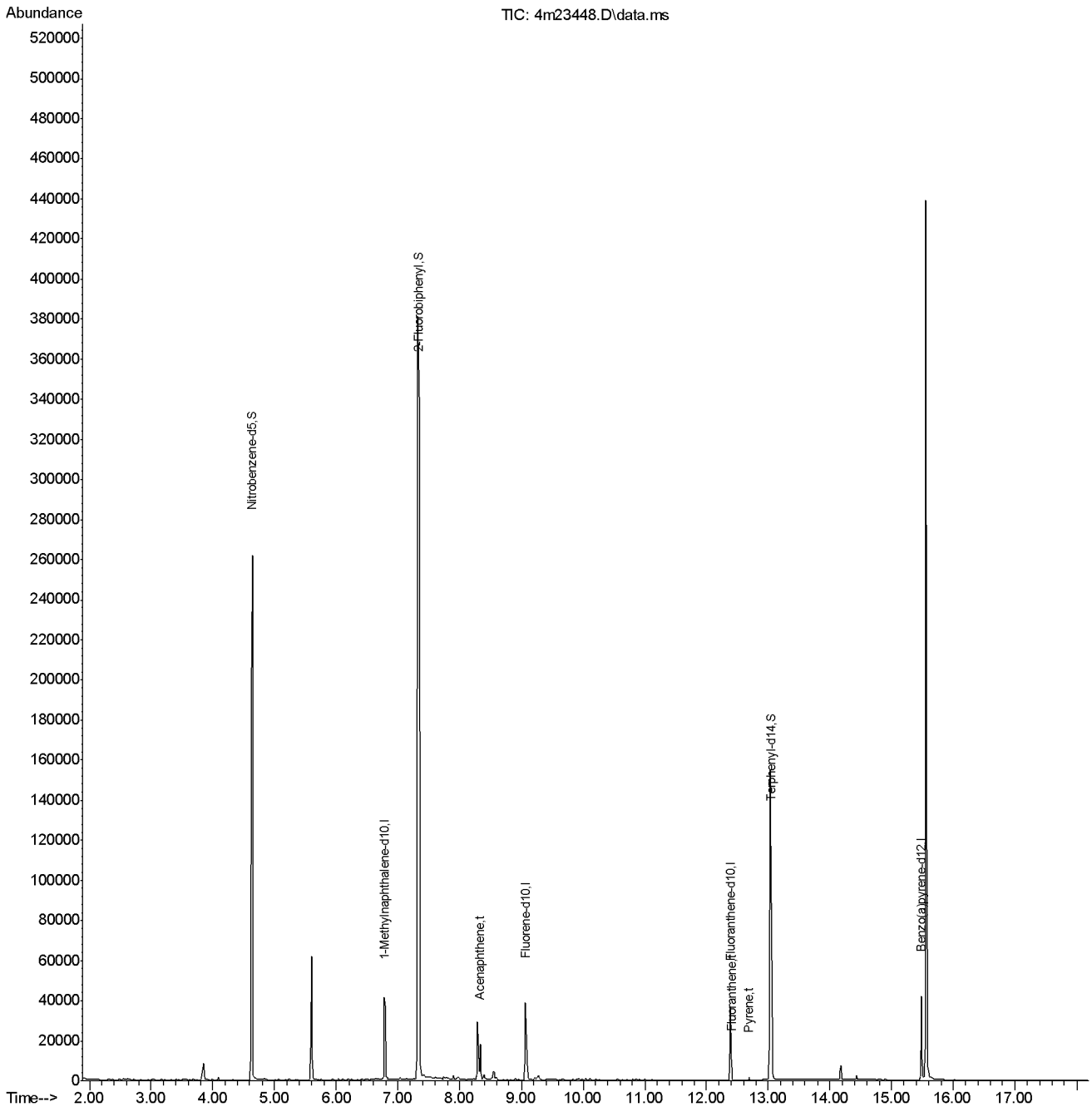
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28531	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	23017	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	36185	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	38525	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	189504	45.26	ppb	0.01
Spiked Amount 50.000			Recovery =	90.52%		
11) 2-Fluorobiphenyl	7.338	172	448991	46.79	ppb	0.02
Spiked Amount 50.000			Recovery =	93.58%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	152423	39.11	ppb	0.02
Spiked Amount 50.000			Recovery =	78.22%		
Target Compounds						Qvalue
14) Acenaphthene	8.328	153	8214	0.84	ppb	91
24) Fluoranthene	12.409	202	1413	0.13	ppb	95
25) Pyrene	12.690	202	1119	0.11	ppb	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

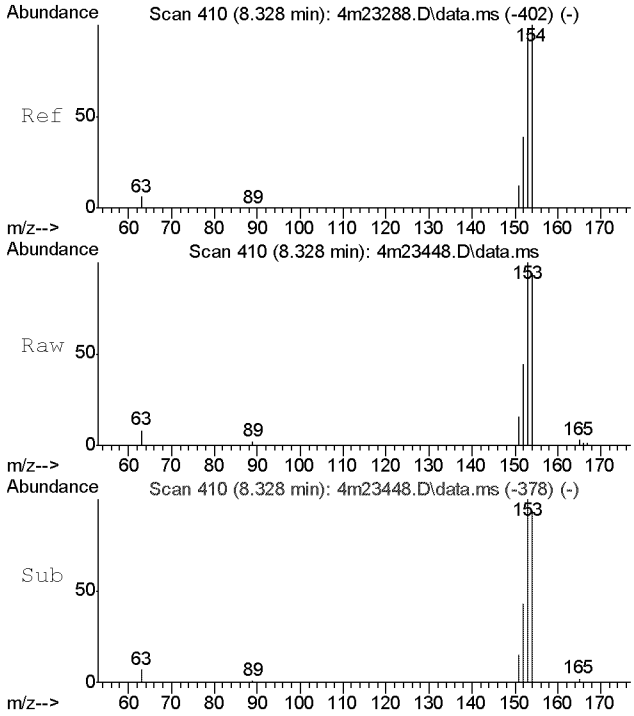
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23448.D
Acq On : 31 Jan 2011 5:47 pm
Operator : ninap
Sample : ja66701-2
Misc : op47853a,e4m1022,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 01 11:31:16 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



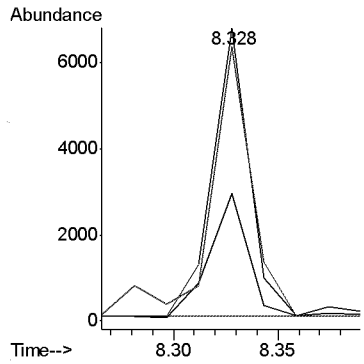
M4M1016SIM.M Tue Feb 01 11:31:33 2011 RPT1 Page: 2

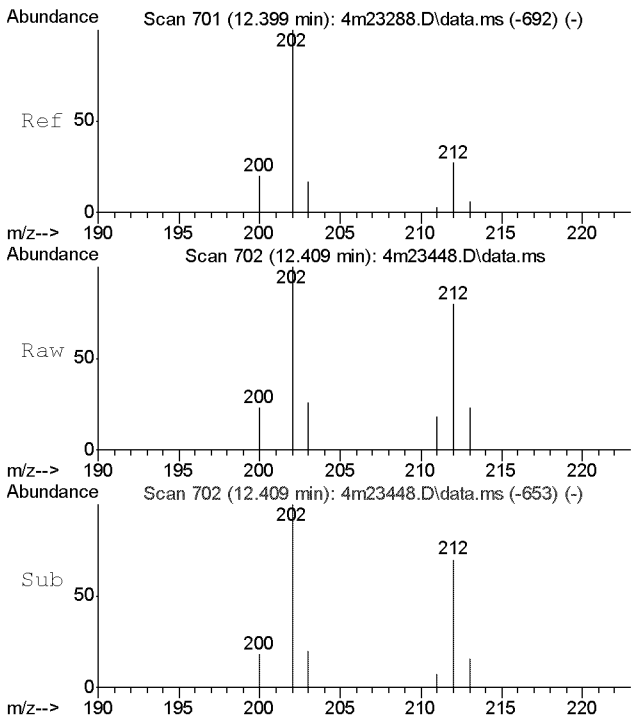


#14
Acenaphthene
Concen: 0.84 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:153 Resp: 8214

Ion	Ratio	Lower	Upper
153	100		
152	42.9	9.6	69.6
154	91.5	71.6	131.6

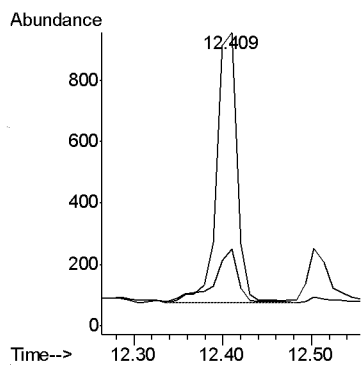


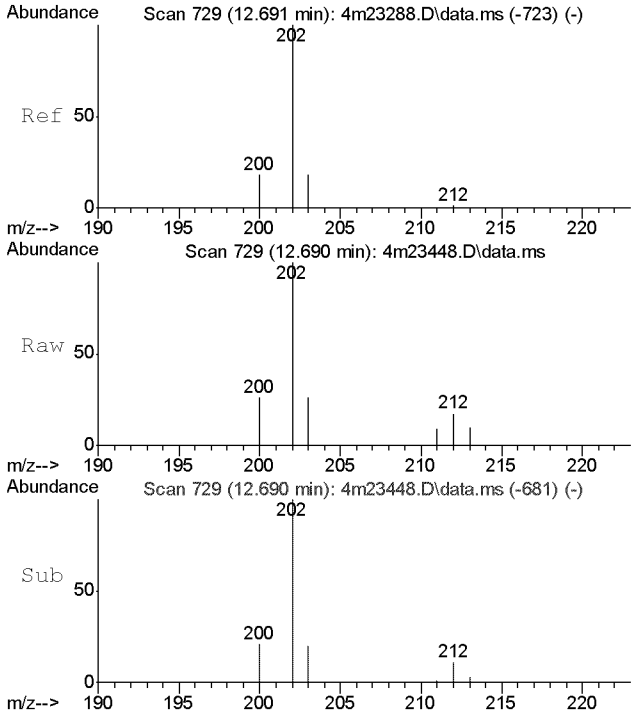


#24
Fluoranthene
Concen: 0.13 ppb
RT: 12.409 min Scan# 702
Delta R.T. 0.010 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:202 Resp: 1413

Ion	Ratio	Lower	Upper
202	100		
203	19.2	0.0	47.1

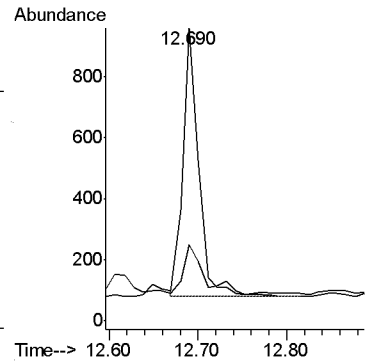




#25
Pyrene
Concen: 0.11 ppb
RT: 12.690 min Scan# 729
Delta R.T. -0.001 min
Lab File: 4m23448.D
Acq: 31 Jan 2011 5:47 pm

Tgt Ion:202 Resp: 1119

Ion	Ratio	Lower	Upper
202	100		
203	18.3	0.0	48.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23449.D
Acq On : 31 Jan 2011 6:12 pm
Operator : ninap
Sample : ja66701-3
Misc : op47853a,e4m1022,945
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 01 11:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	30951	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	23309	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	37487	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	38407	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	213888	47.09	ppb	0.01
Spiked Amount 50.000			Recovery =	94.18%		
11) 2-Fluorobiphenyl	7.338	172	491588	47.23	ppb	0.02
Spiked Amount 50.000			Recovery =	94.46%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	163921	40.60	ppb	0.02
Spiked Amount 50.000			Recovery =	81.20%		
Target Compounds						Qvalue

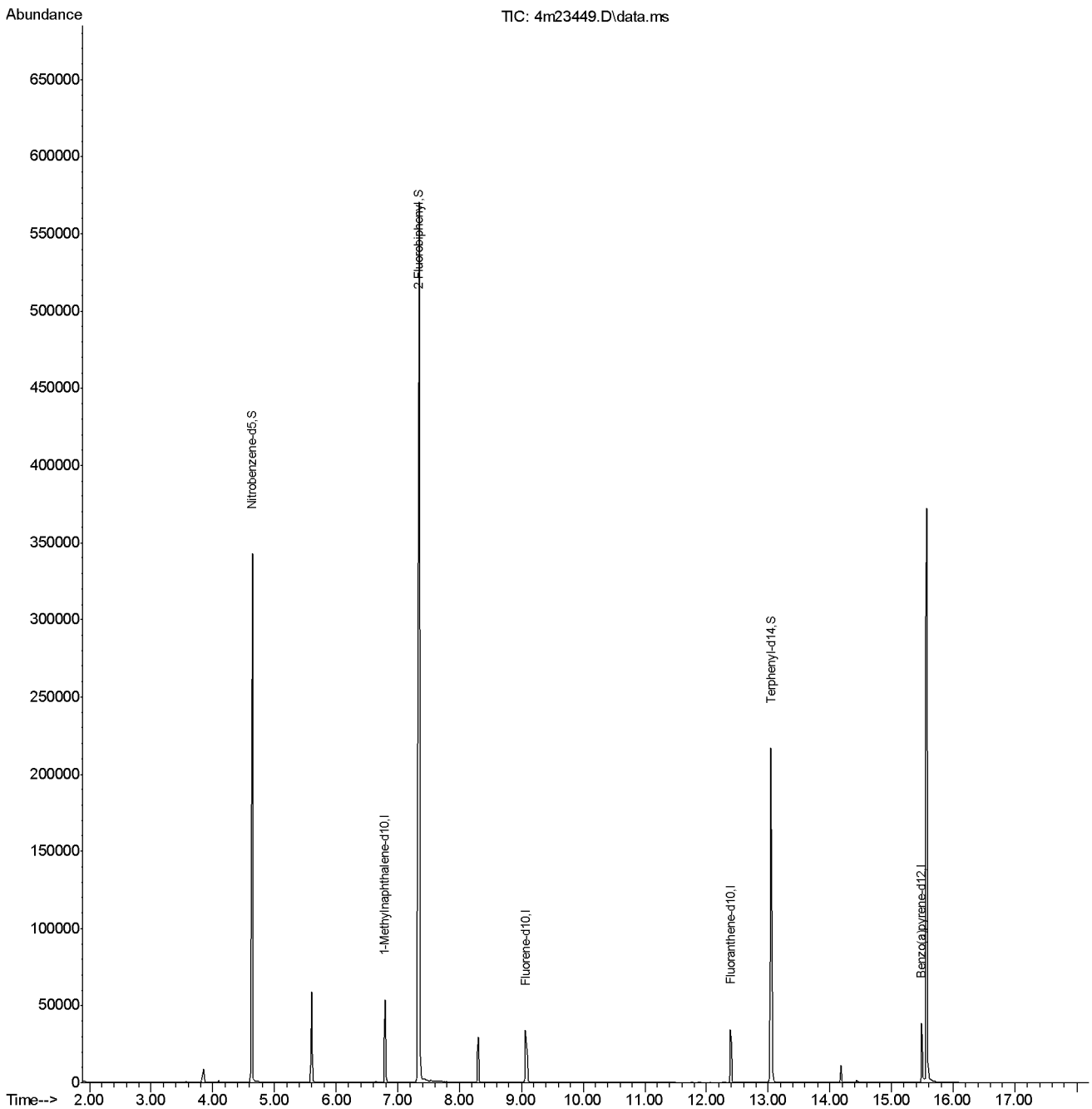
(#) = qualifier out of range (m) = manual integration (+) = signals summed

8.1.19 8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23449.D
Acq On : 31 Jan 2011 6:12 pm
Operator : ninap
Sample : ja66701-3
Misc : op47853a,e4m1022,945
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Feb 01 11:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23450.D
Acq On : 31 Jan 2011 6:36 pm
Operator : ninap
Sample : ja66701-4
Misc : op47853a,e4m1022,1000
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 01 11:32:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

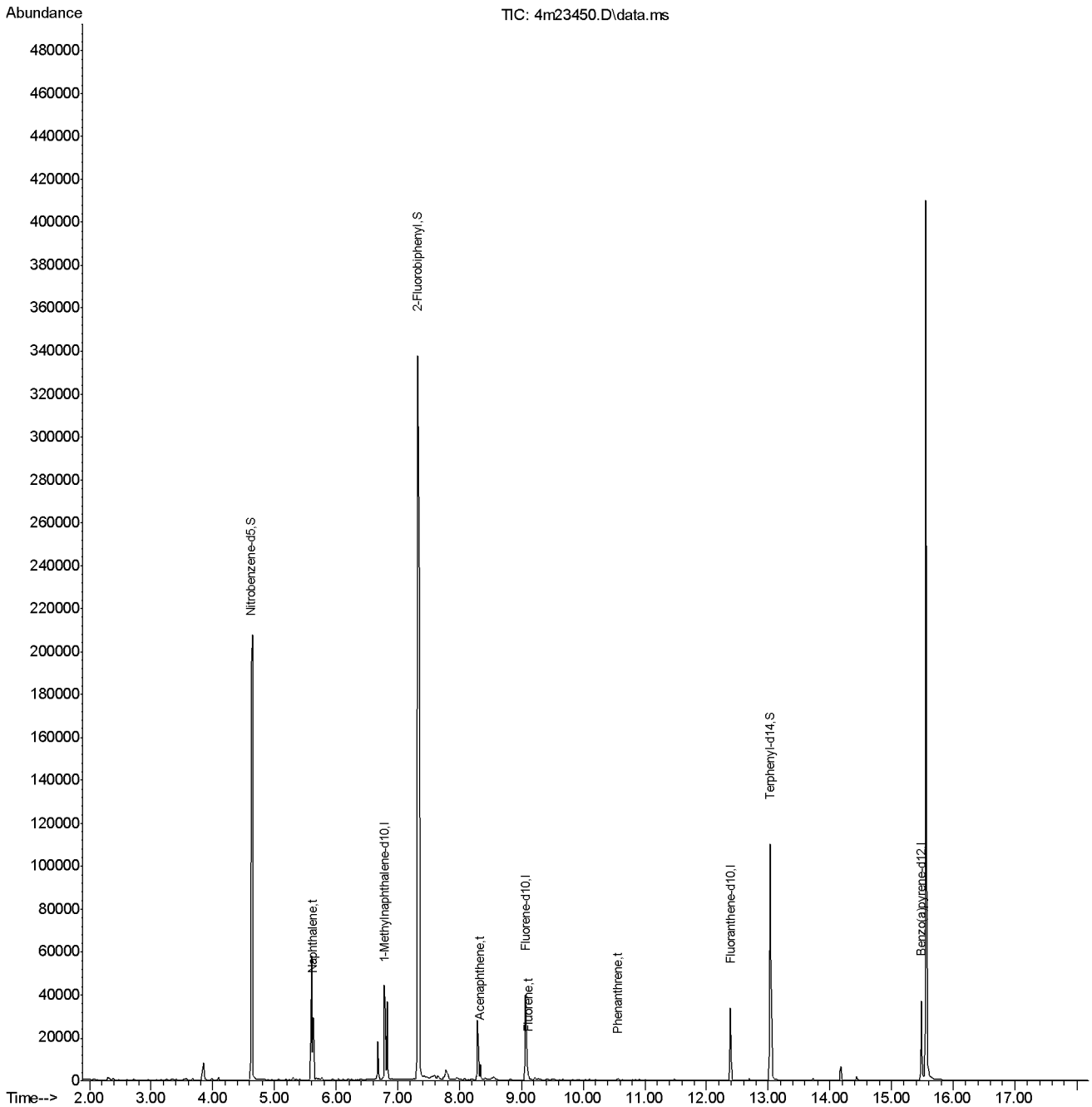
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	6.789	152	28425	4.00	ppb		0.02
12) Fluorene-d10	9.070	174	22466	4.00	ppb		0.00
23) Fluoranthene-d10	12.389	212	35277	4.00	ppb		0.01
30) Benzo(a)pyrene-d12	15.483	264	36614	4.00	ppb		0.01
System Monitoring Compounds							
2) 2-Fluorophenol	0.000	112	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
3) Phenol-d5	0.000	99	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
6) Nitrobenzene-d5	4.618	82	162295	38.91	ppb		0.00
Spiked Amount 50.000			Recovery =	77.82%			
11) 2-Fluorobiphenyl	7.321	172	358629	37.51	ppb		0.00
Spiked Amount 50.000			Recovery =	75.02%			
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb		
Spiked Amount 50.000			Recovery =	0.00%			
26) Terphenyl-d14	13.029	244	93842	24.70	ppb		0.00
Spiked Amount 50.000			Recovery =	49.40%			
Target Compounds							Qvalue
7) Naphthalene	5.625	128	26954	2.13	ppb		99
14) Acenaphthene	8.328	153	3135	0.33	ppb		91
15) Fluorene	9.117	166	1459	0.20	ppb	#	66
20) Phenanthrene	10.571	178	1167	0.11	ppb		91

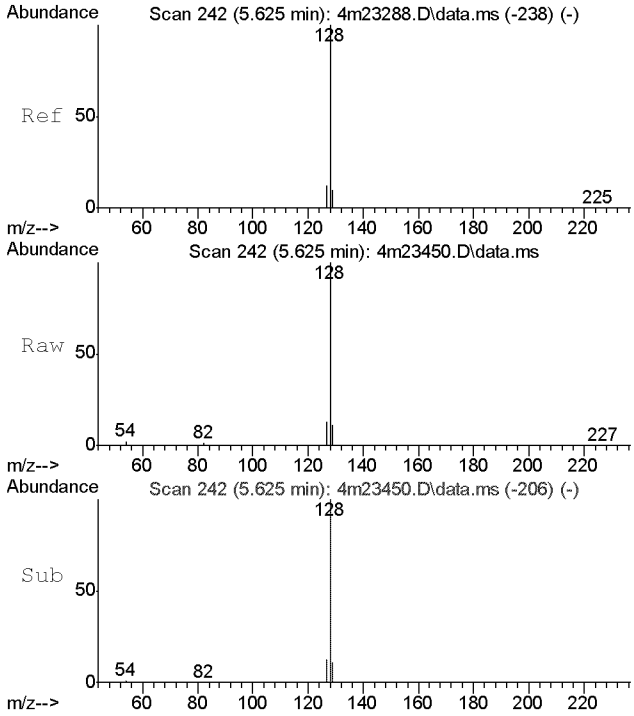
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23450.D
Acq On : 31 Jan 2011 6:36 pm
Operator : ninap
Sample : ja66701-4
Misc : op47853a,e4m1022,1000
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Feb 01 11:32:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

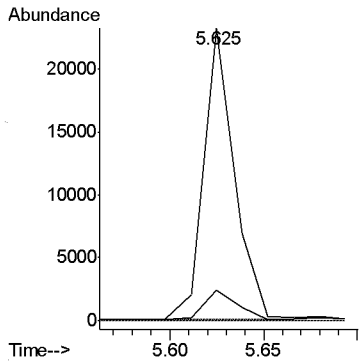


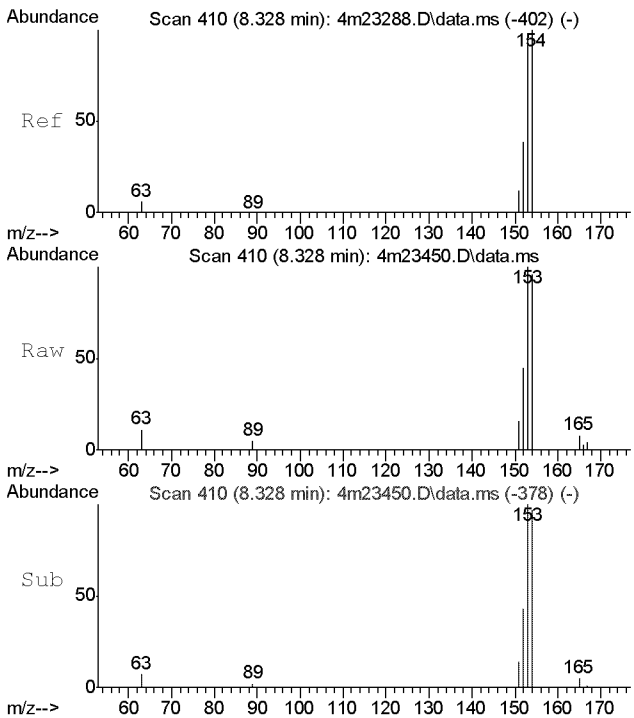


#7
Naphthalene
Concen: 2.13 ppb
RT: 5.625 min Scan# 242
Delta R.T. -0.000 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:128 Resp: 26954

Ion	Ratio	Lower	Upper
128	100		
129	10.1	0.0	40.4
122	0.0	0.0	30.0

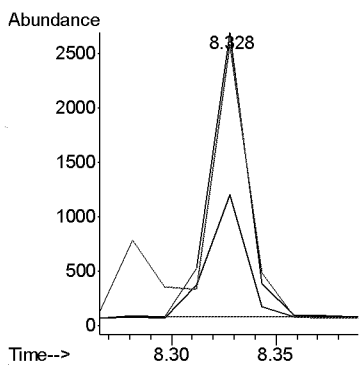


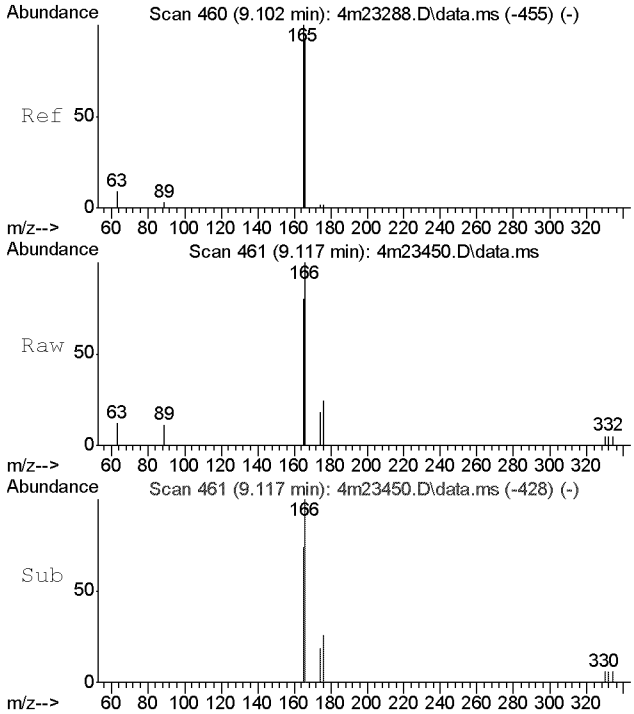


#14
Acenaphthene
Concen: 0.33 ppb
RT: 8.328 min Scan# 410
Delta R.T. -0.000 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:153 Resp: 3135

Ion	Ratio	Lower	Upper
153	100		
152	43.3	9.6	69.6
154	90.9	71.6	131.6

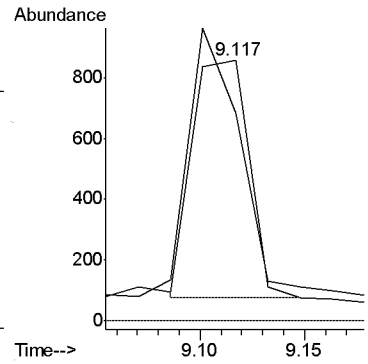


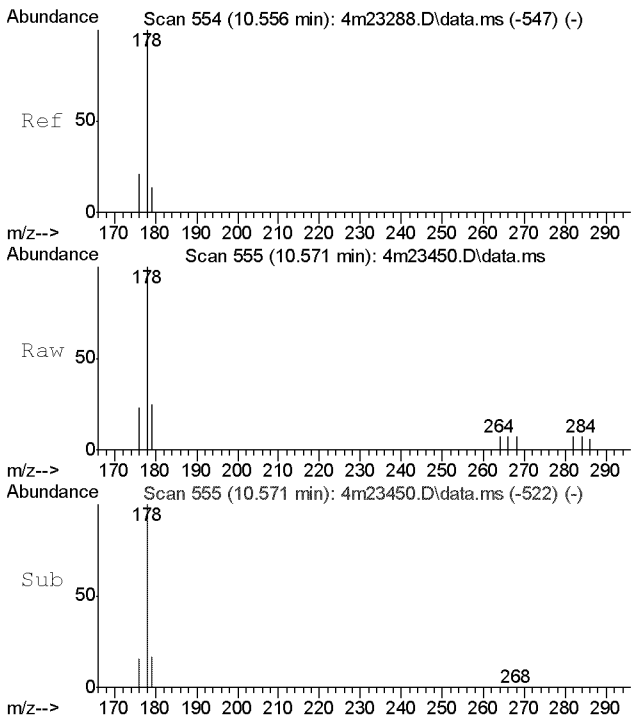


#15
Fluorene
Concen: 0.20 ppb
RT: 9.117 min Scan# 461
Delta R.T. 0.015 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:166 Resp: 1459

Ion	Ratio	Lower	Upper
166	100		
165	72.3	77.3	137.3#
167	0.0	0.0	30.0

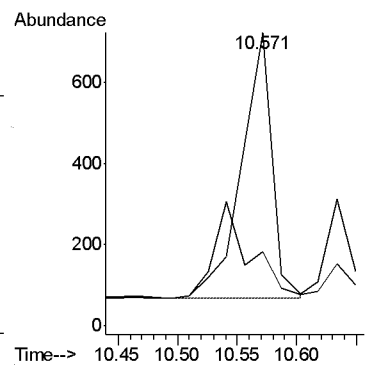




#20
Phenanthrene
Concen: 0.11 ppb
RT: 10.571 min Scan# 555
Delta R.T. 0.015 min
Lab File: 4m23450.D
Acq: 31 Jan 2011 6:36 pm

Tgt Ion:178 Resp: 1167

Ion	Ratio	Lower	Upper
178	100		
179	17.2	0.0	43.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23451.D
Acq On : 31 Jan 2011 6:59 pm
Operator : ninap
Sample : ja66701-5
Misc : op47853a,e4m1022,1000
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 11:33:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

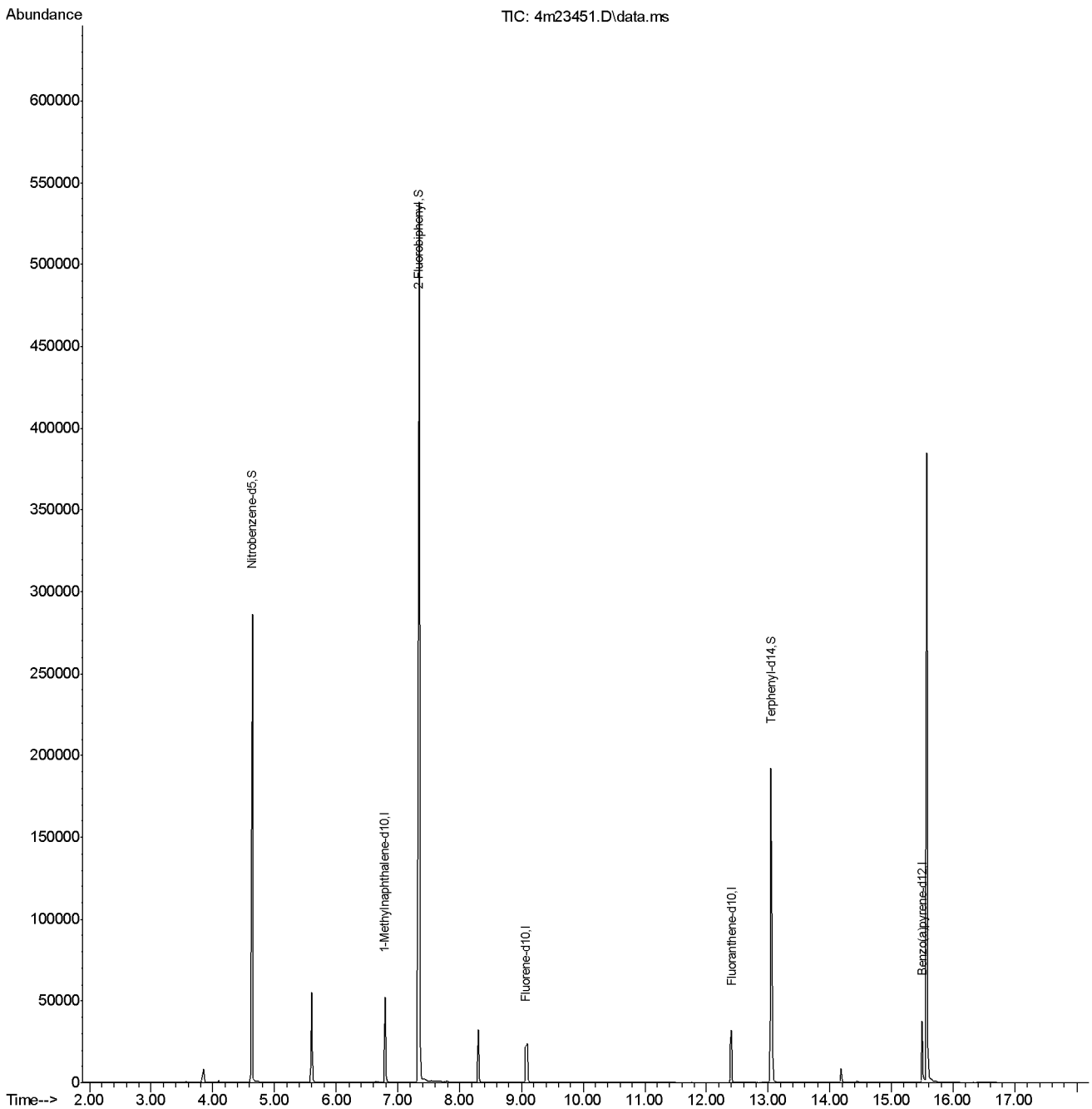
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	27548	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	20087	4.00	ppb	0.00
23) Fluoranthene-d10	12.399	212	33237	4.00	ppb	0.02
30) Benzo(a)pyrene-d12	15.494	264	33846	4.00	ppb	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	181743	44.96	ppb	0.01
Spiked Amount 50.000			Recovery =	89.92%		
11) 2-Fluorobiphenyl	7.338	172	423779	45.74	ppb	0.02
Spiked Amount 50.000			Recovery =	91.48%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	133394	37.27	ppb	0.02
Spiked Amount 50.000			Recovery =	74.54%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23451.D
Acq On : 31 Jan 2011 6:59 pm
Operator : ninap
Sample : ja66701-5
Misc : op47853a,e4m1022,1000
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Feb 01 11:33:13 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



8.1.21
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23452.D
Acq On : 31 Jan 2011 7:24 pm
Operator : ninap
Sample : ja66701-6
Misc : op47853a,e4m1022,1000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 14:59:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

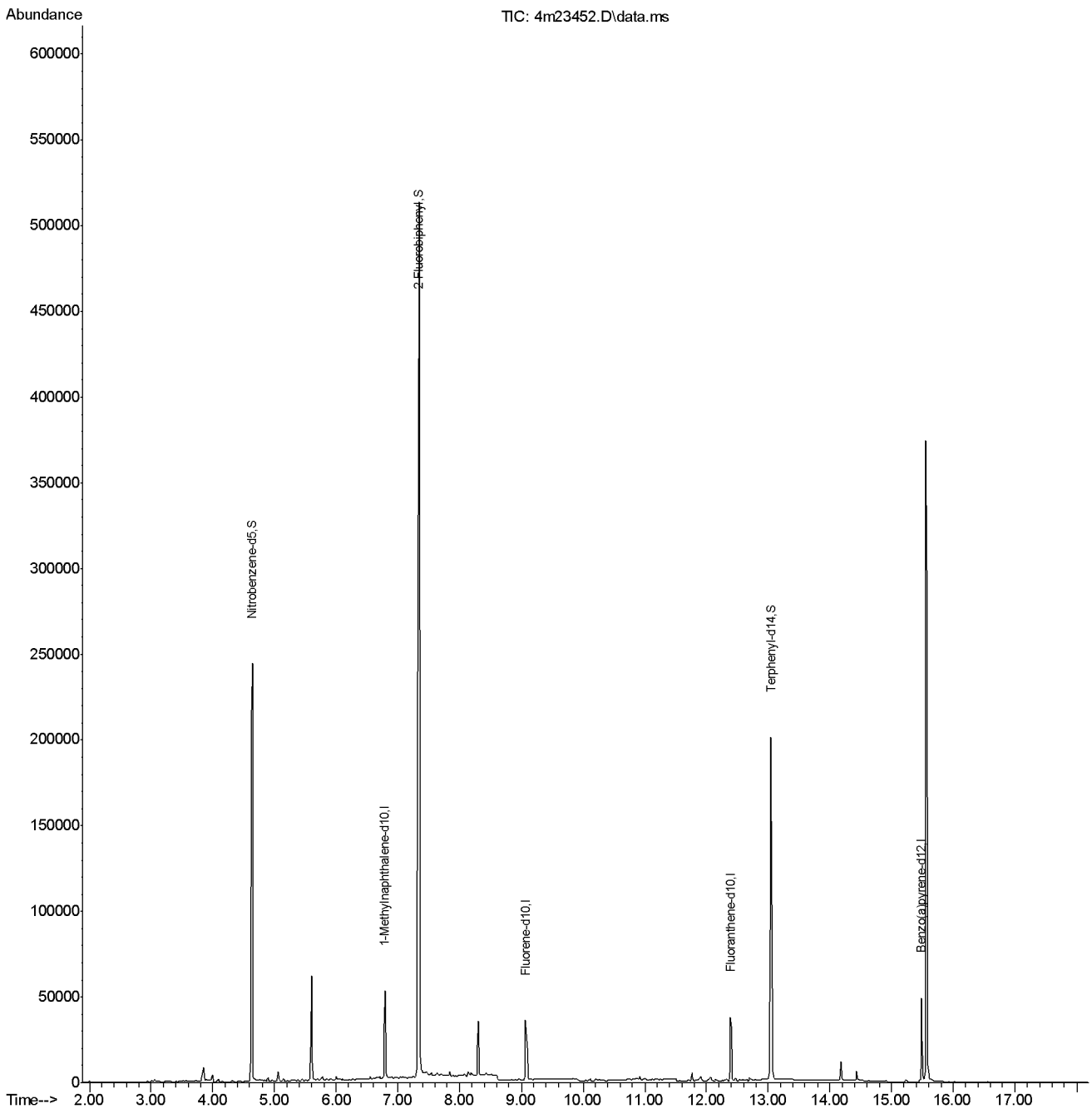
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	31496	4.00	ppb	0.02
12) Fluorene-d10	9.071	174	24176	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	40150	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.484	264	42477	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	186190	40.28	ppb	0.01
Spiked Amount 50.000			Recovery =	80.56%		
11) 2-Fluorobiphenyl	7.338	172	465132	43.91	ppb	0.02
Spiked Amount 50.000			Recovery =	87.82%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	161546	37.36	ppb	0.02
Spiked Amount 50.000			Recovery =	74.72%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23452.D
Acq On : 31 Jan 2011 7:24 pm
Operator : ninap
Sample : ja66701-6
Misc : op47853a,e4m1022,1000
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 08 14:59:59 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23453.D
Acq On : 31 Jan 2011 7:47 pm
Operator : ninap
Sample : ja66701-7
Misc : op47853a,e4m1022,1000
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 01 11:34:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

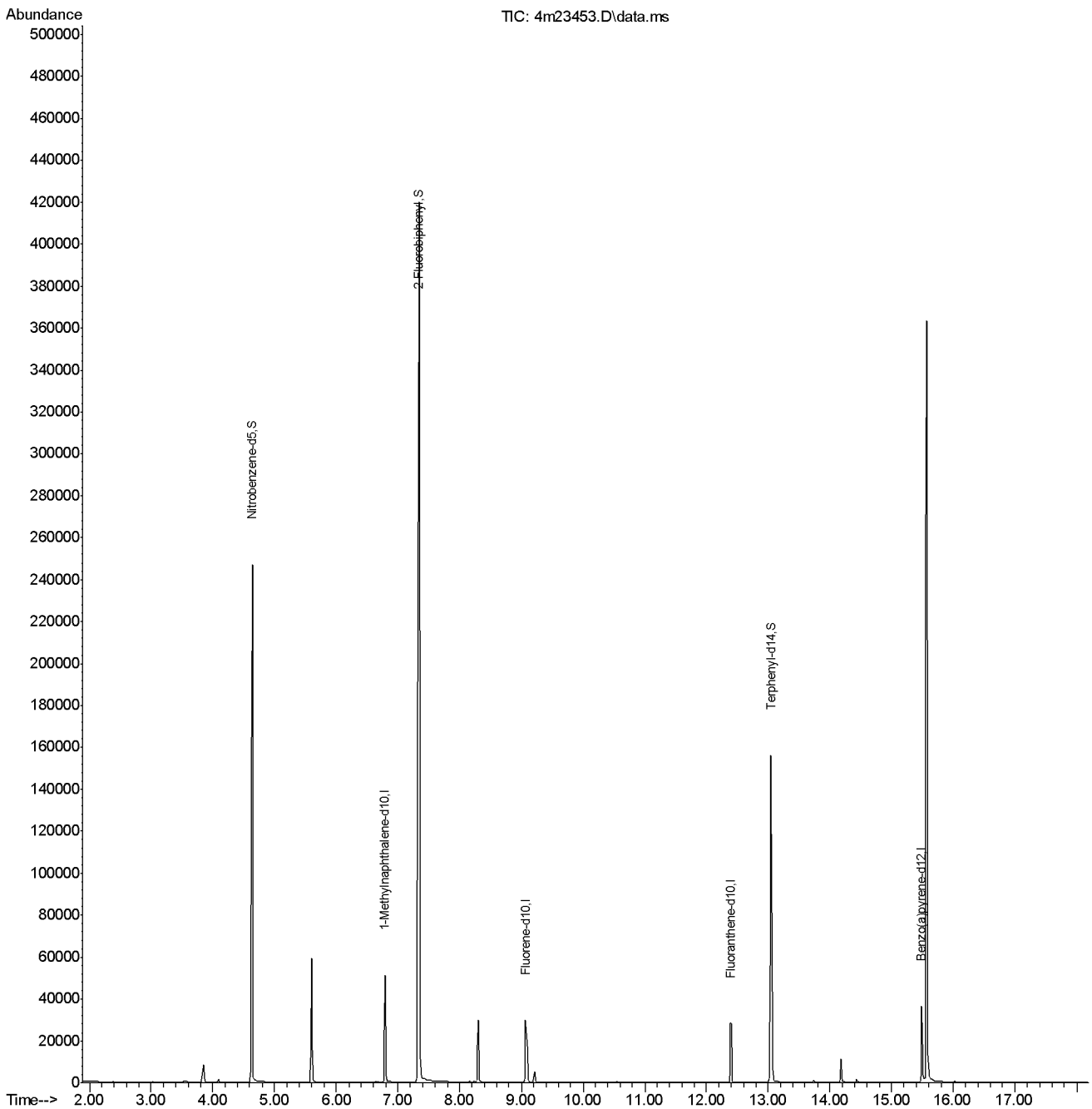
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28797	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	20783	4.00	ppb	0.00
23) Fluoranthene-d10	12.389	212	33919	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.483	264	35715	4.00	ppb	0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	167709	39.68	ppb	0.01
Spiked Amount 50.000			Recovery =	79.36%		
11) 2-Fluorobiphenyl	7.338	172	386355	39.89	ppb	0.02
Spiked Amount 50.000			Recovery =	79.78%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	119147	32.62	ppb	0.02
Spiked Amount 50.000			Recovery =	65.24%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23453.D
Acq On : 31 Jan 2011 7:47 pm
Operator : ninap
Sample : ja66701-7
Misc : op47853a,e4m1022,1000
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Feb 01 11:34:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1023\
Data File : 4m23458.D
Acq On : 1 Feb 2011 9:28 am
Operator : ninap
Sample : ja66701-8
Misc : op47853a,e4m1023,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 10:30:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

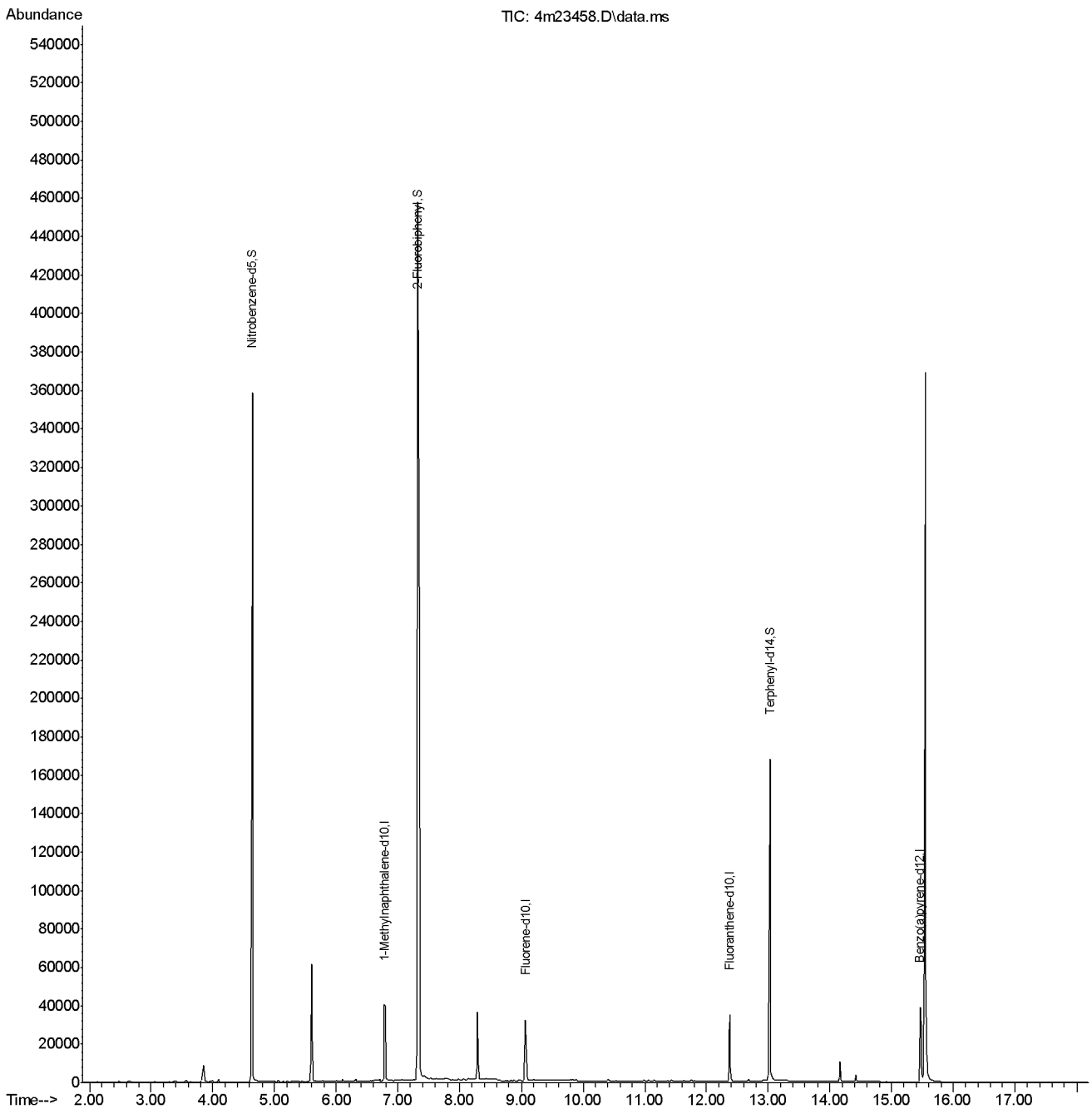
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.789	152	28614	4.00	ppb	0.02
12) Fluorene-d10	9.070	174	22516	4.00	ppb	0.00
23) Fluoranthene-d10	12.378	212	35856	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.463	264	36758	4.00	ppb	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	206379	49.15	ppb	0.01
Spiked Amount 50.000			Recovery =	98.30%		
11) 2-Fluorobiphenyl	7.321	172	439152	45.63	ppb	0.00
Spiked Amount 50.000			Recovery =	91.26%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.029	244	135534	35.10	ppb	0.00
Spiked Amount 50.000			Recovery =	70.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1023\
Data File : 4m23458.D
Acq On : 1 Feb 2011 9:28 am
Operator : ninap
Sample : ja66701-8
Misc : op47853a,e4m1023,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 01 10:30:56 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23430.D
Acq On : 31 Jan 2011 10:15 am
Operator : ninap
Sample : op47853a-mb1
Misc : op47853a,e4m1022,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 15:39:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

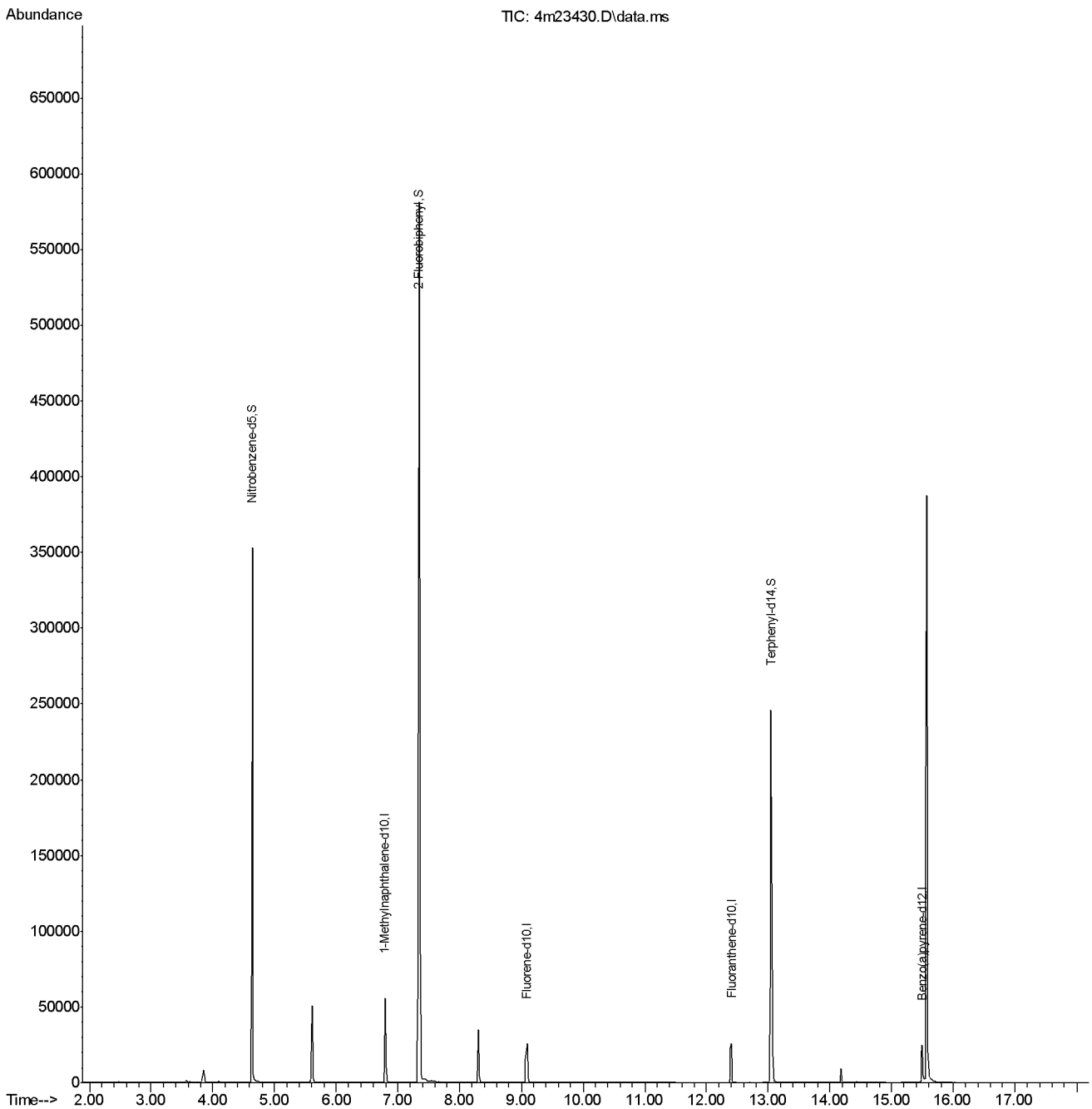
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.790	152	26558	4.00	ppb	0.02
12) Fluorene-d10	9.086	174	18655	4.00	ppb	0.02
23) Fluoranthene-d10	12.399	212	30014	4.00	ppb	0.02
30) Benzo(a)pyrene-d12	15.494	264	28495	4.00	ppb	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.632	82	198989	51.06	ppb	0.01
Spiked Amount 50.000			Recovery =	102.12%		
11) 2-Fluorobiphenyl	7.338	172	430030	48.15	ppb	0.02
Spiked Amount 50.000			Recovery =	96.30%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.046	244	175458	54.28	ppb	0.02
Spiked Amount 50.000			Recovery =	108.56%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1022\
Data File : 4m23430.D
Acq On : 31 Jan 2011 10:15 am
Operator : ninap
Sample : op47853a-mb1
Misc : op47853a,e4m1022,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 31 15:39:30 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:47 2011 Quant Results File: MR3151.RES

Quant Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration
DataAcq Meth : MR3151

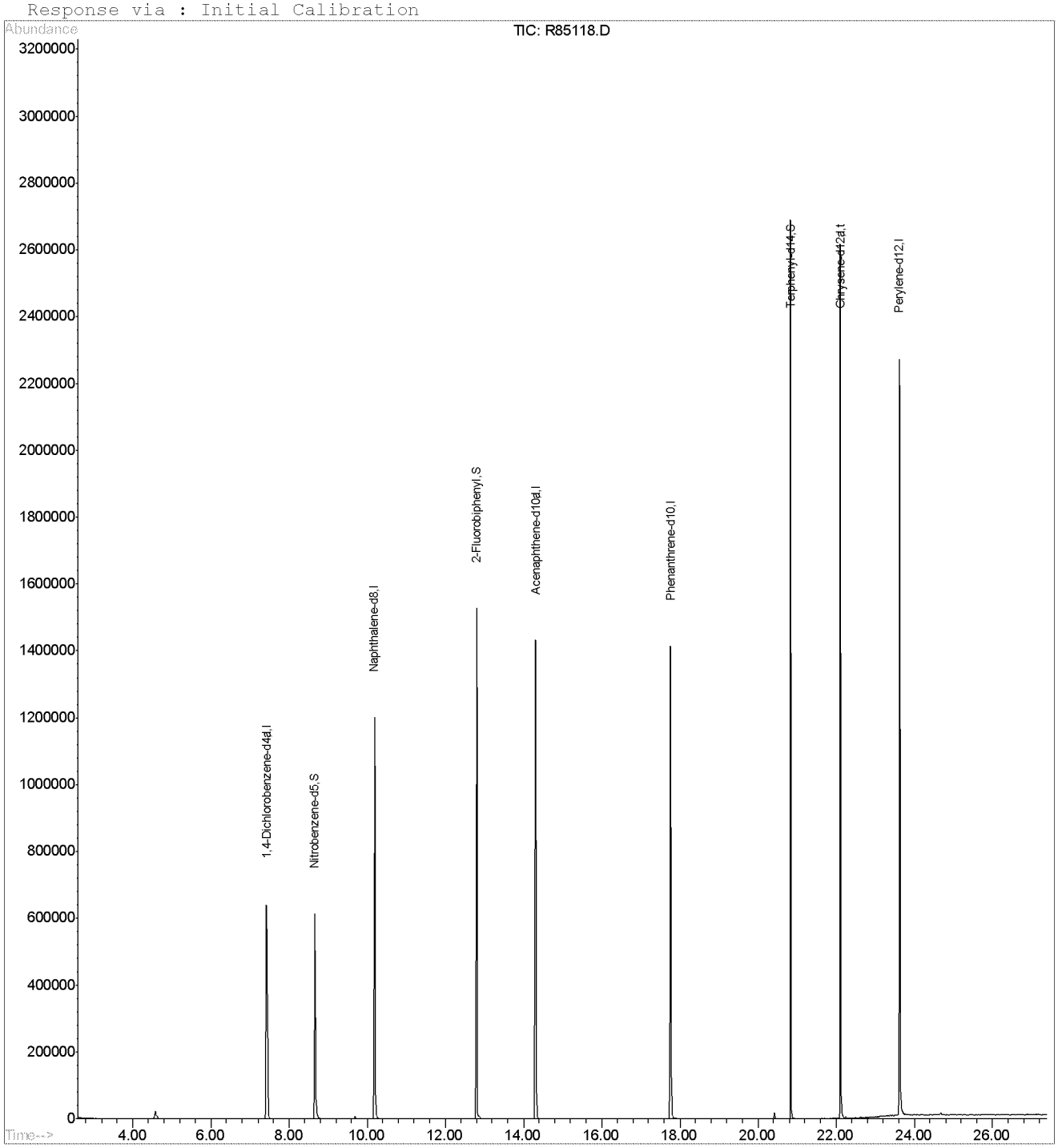
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.43	152	265301	40.00	ppb	-0.19
24) Naphthalene-d8	10.19	136	949334	40.00	ppb	-0.20
47) Acenaphthene-d10	14.31	164	544343	40.00	ppb	-0.22
69) Phenanthrene-d10	17.76	188	888779	40.00	ppb	-0.23
83) Chrysene-d12	22.11	240	1004996	40.00	ppb	-0.14
92) Perylene-d12	23.62	264	996067	40.00	ppb	-0.16
102) 1,4-Dichlorobenzene-d4a	7.43	152	265301	40.00	ppb	-0.18
104) Acenaphthene-d10a	14.31	164	544343	40.00	ppb	-0.20
107) Chrysene-d12a	22.11	240	1004996	40.00	ppb	-0.13
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	8.66	82	377850	43.80	ppb	-0.20
Spiked Amount 50.000			Recovery =	87.60%		
51) 2-Fluorobiphenyl	12.80	172	781761	40.80	ppb	-0.21
Spiked Amount 50.000			Recovery =	81.60%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	20.83	244	869768	45.92	ppb	-0.14
Spiked Amount 50.000			Recovery =	91.84%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
R85118.D MR3151.M Thu Jan 27 19:47:21 2011 NJMSR Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jan 27 19:47 2011 Quant Results File: MR3151.RES

Method : C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Last Update : Wed Nov 17 15:27:18 2010
Response via : Initial Calibration



ACCUTEST LABORATORIES JA66701

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\ER3223\R85118.D Vial: 4
Acq On : 27 Jan 2011 12:39 pm Operator: ninap
Sample : op47853-mb1 Inst : MSR
Misc : op47853,er3223,1000 Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\RMETOD\MR3151.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.02 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.671	11	15	18	rVB2	1056	1549	0.05%	0.008%
2	3.440	155	159	164	rBV2	1849	2421	0.08%	0.012%
3	4.081	272	279	283	rVB	1062	2066	0.07%	0.010%
4	4.573	362	371	394	rBV3	24993	87754	2.98%	0.435%
5	7.425	896	905	932	rBB	641796	1477715	50.20%	7.319%
6	8.665	1130	1137	1164	rBV	615063	1091106	37.07%	5.404%
7	8.836	1168	1169	1177	rVB	936	1646	0.06%	0.008%
8	9.690	1323	1329	1334	rBB2	8089	10751	0.37%	0.053%
9	10.187	1414	1422	1448	rBV	1202392	1930830	65.59%	9.563%
10	12.800	1903	1911	1921	rBV	1528660	2238501	76.04%	11.086%
11	12.869	1921	1924	1933	rVV3	8931	16506	0.56%	0.082%
12	12.938	1933	1937	1944	rVV2	1537	3959	0.13%	0.020%
13	12.986	1944	1946	1957	rVB2	1184	1985	0.07%	0.010%
14	14.306	2184	2193	2217	rBV	1433655	2219234	75.39%	10.991%
15	14.440	2217	2218	2226	rVB	1710	1890	0.06%	0.009%
16	17.485	2784	2788	2795	rBB	2084	3491	0.12%	0.017%
17	17.762	2831	2840	2858	rBV2	1413670	2293085	77.90%	11.357%
18	17.885	2858	2863	2873	rVV2	3232	9631	0.33%	0.048%
19	18.067	2894	2897	2901	rVB	1229	1647	0.06%	0.008%
20	19.039	3075	3079	3083	rBV	698	1574	0.05%	0.008%
21	20.423	3330	3338	3343	rVB2	17464	17723	0.60%	0.088%
22	20.834	3407	3415	3439	rBV	2691129	2835500	96.32%	14.043%
23	21.769	3584	3590	3591	rBV2	821	1572	0.05%	0.008%
24	22.106	3647	3653	3674	rBV	2617407	2783217	94.55%	13.784%
25	22.239	3674	3678	3682	rVB	5663	5208	0.18%	0.026%
26	22.485	3720	3724	3727	rBV	2224	2514	0.09%	0.012%
27	22.693	3759	3763	3768	rBV3	2883	3070	0.10%	0.015%
28	22.827	3786	3788	3792	rBV2	1587	1853	0.06%	0.009%
29	23.014	3820	3823	3827	rBV3	2044	2340	0.08%	0.012%
30	23.046	3827	3829	3833	rVV2	1185	1570	0.05%	0.008%
31	23.105	3838	3840	3844	rVV2	1878	2821	0.10%	0.014%
32	23.137	3844	3846	3851	rVV4	1831	2525	0.09%	0.013%
33	23.185	3851	3855	3857	rVV4	1796	2115	0.07%	0.010%
34	23.243	3860	3866	3869	rVV3	2189	3618	0.12%	0.018%
35	23.281	3869	3873	3876	rVV3	2435	3697	0.13%	0.018%
36	23.308	3876	3878	3880	rVV3	2310	2391	0.08%	0.012%
37	23.340	3880	3884	3888	rVV5	2346	4021	0.14%	0.020%
38	23.388	3888	3893	3897	rVV5	2542	4405	0.15%	0.022%

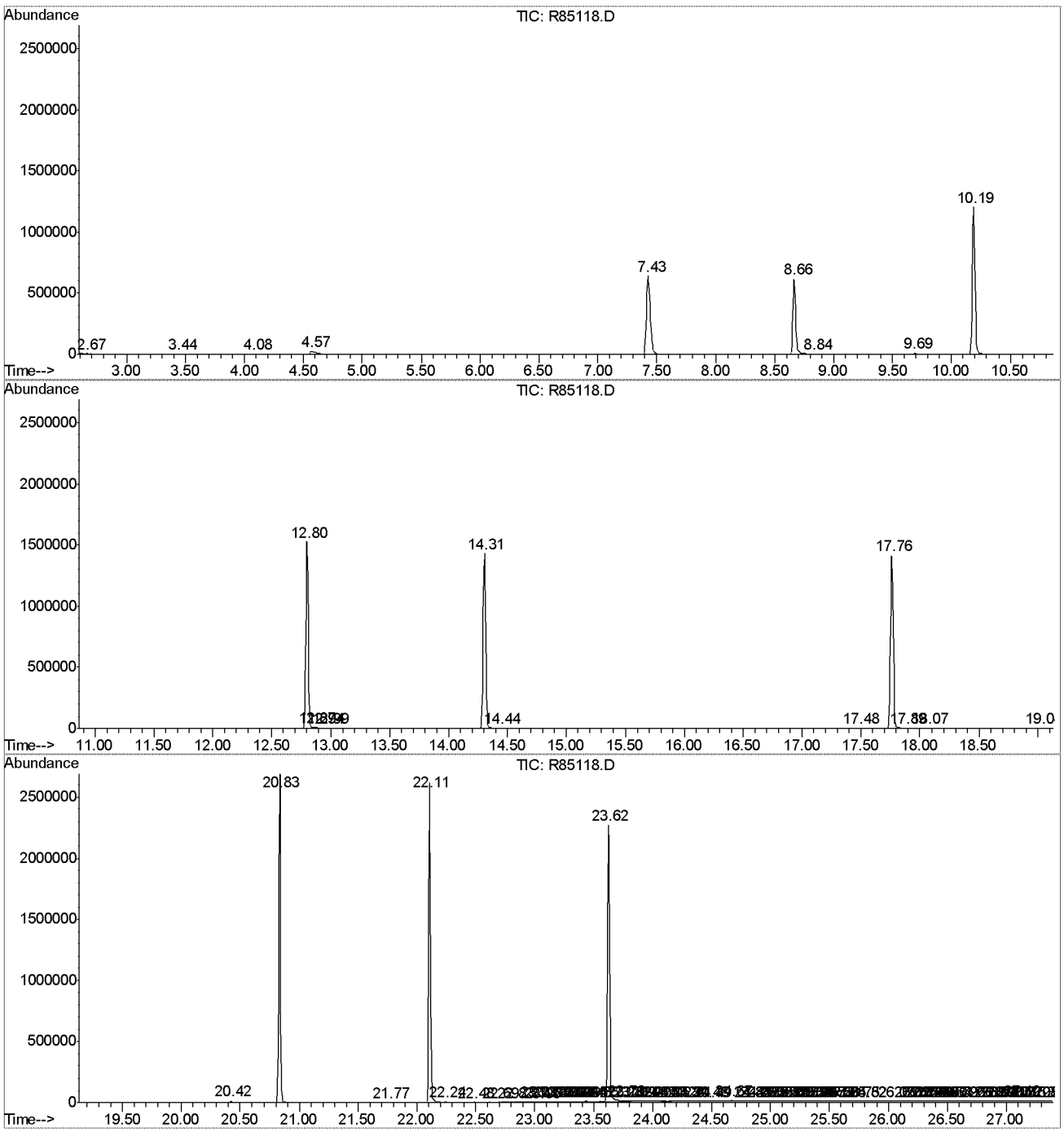
39	23.436	3897	3902	3906	rVV4	3664	6793	0.23%	0.034%
40	23.484	3910	3911	3915	rVV4	2014	2168	0.07%	0.011%
41	23.516	3915	3917	3920	rVV4	2002	2607	0.09%	0.013%
42	23.548	3920	3923	3926	rVV4	2840	3480	0.12%	0.017%
43	23.623	3929	3937	3960	rVV	2263739	2943716	100.00%	14.579%
44	23.762	3960	3963	3968	rVV4	4374	8540	0.29%	0.042%
45	23.810	3968	3972	3973	rVV4	3025	4076	0.14%	0.020%
46	23.820	3973	3974	3980	rVV4	2421	3846	0.13%	0.019%
47	23.922	3985	3993	3995	rBV5	1981	3730	0.13%	0.018%
48	23.959	3995	4000	4001	rBV4	1380	1595	0.05%	0.008%
49	24.050	4016	4017	4023	rBV4	1612	2075	0.07%	0.010%
50	24.103	4023	4027	4031	rVB3	2223	3655	0.12%	0.018%
51	24.146	4031	4035	4037	rBV3	2587	3056	0.10%	0.015%
52	24.226	4049	4050	4055	rVB5	1675	1824	0.06%	0.009%
53	24.264	4055	4057	4059	rBV3	2129	1894	0.06%	0.009%
54	24.301	4062	4064	4067	rVB2	2471	2086	0.07%	0.010%
55	24.477	4092	4097	4099	rBV4	1637	1852	0.06%	0.009%
56	24.493	4099	4100	4106	rBV5	1054	1555	0.05%	0.008%
57	24.670	4127	4133	4140	rBV4	6269	10958	0.37%	0.054%
58	24.835	4163	4164	4170	rBV3	2592	2923	0.10%	0.014%
59	24.889	4170	4174	4175	rBV2	1485	1591	0.05%	0.008%
60	24.953	4183	4186	4189	rBV4	2337	2229	0.08%	0.011%
61	25.017	4196	4198	4200	rBV2	2073	2055	0.07%	0.010%
62	25.049	4202	4204	4207	rVV3	2061	2347	0.08%	0.012%
63	25.081	4207	4210	4214	rVB3	2620	2482	0.08%	0.012%
64	25.145	4219	4222	4225	rVV3	2139	2714	0.09%	0.013%
65	25.193	4228	4231	4235	rVV5	2284	2610	0.09%	0.013%
66	25.305	4246	4252	4255	rVV6	2376	2993	0.10%	0.015%
67	25.338	4257	4258	4262	rVB4	2038	2281	0.08%	0.011%
68	25.370	4262	4264	4266	rBV3	1991	1791	0.06%	0.009%
69	25.386	4266	4267	4270	rVB3	2415	1563	0.05%	0.008%
70	25.407	4270	4271	4276	rBV3	1291	1596	0.05%	0.008%
71	25.466	4279	4282	4288	rVV5	1181	1747	0.06%	0.009%
72	25.530	4292	4294	4297	rVB3	1991	1919	0.07%	0.010%
73	25.573	4297	4302	4303	rBV3	1987	2741	0.09%	0.014%
74	25.583	4303	4304	4310	rVB2	2259	2582	0.09%	0.013%
75	25.637	4310	4314	4319	rBV5	1936	3911	0.13%	0.019%
76	25.754	4331	4336	4338	rVB4	1051	1668	0.06%	0.008%
77	25.818	4346	4348	4354	rVB4	2086	2091	0.07%	0.010%
78	26.053	4389	4392	4394	rVB3	1996	1626	0.06%	0.008%
79	26.192	4417	4418	4421	rBV3	1800	1670	0.06%	0.008%
80	26.256	4426	4430	4432	rVV3	1837	2257	0.08%	0.011%
81	26.294	4434	4437	4439	rVV4	2098	2640	0.09%	0.013%
82	26.342	4443	4446	4450	rVV4	2151	3306	0.11%	0.016%
83	26.385	4450	4454	4457	rVV5	2941	4274	0.15%	0.021%
84	26.422	4459	4461	4464	rVB3	2798	2238	0.08%	0.011%
85	26.465	4467	4469	4471	rVV3	1707	1731	0.06%	0.009%
86	26.497	4472	4475	4479	rVV4	1850	3326	0.11%	0.016%
87	26.540	4479	4483	4485	rVV4	2197	3085	0.10%	0.015%
88	26.588	4485	4492	4494	rVB6	2785	4278	0.15%	0.021%
89	26.828	4535	4537	4540	rBV3	2405	2115	0.07%	0.010%
90	26.871	4543	4545	4548	rBV3	1761	1692	0.06%	0.008%
91	26.897	4548	4550	4553	rVV3	2445	1811	0.06%	0.009%
92	26.924	4553	4555	4561	rVB4	1489	1924	0.07%	0.010%
93	26.978	4561	4565	4569	rBV3	2237	3063	0.10%	0.015%
94	27.047	4574	4578	4580	rVB4	1806	1917	0.07%	0.009%
95	27.079	4580	4584	4586	rVB5	2047	2434	0.08%	0.012%

96	27.122	4588	4592	4594	rBV4	3508	3369	0.11%	0.017%
97	27.165	4598	4600	4604	rVB2	3191	2828	0.10%	0.014%
98	27.202	4604	4607	4609	rBV3	2105	2351	0.08%	0.012%
99	27.277	4618	4621	4623	rVB3	2192	2241	0.08%	0.011%
100	27.309	4623	4627	4630	rBV6	2438	2477	0.08%	0.012%

Sum of corrected areas: 20191494

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\ER3223\R85118.D
Operator : ninap
Acquired : 27 Jan 2011 12:39 pm using AcqMethod MR3151
Instrument : MSR
Sample Name: op47853-mb1
Misc Info : op47853,er3223,1000
Vial Number: 4
Quant File :MR3151.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: ninap Date Acquired: 27 Jan 2011 12:39 pm
Data File: C:\MSDCHEM\1\DATA\ER3223\R85118.D
Name: op47853-mb1
Misc: op47853,er3223,1000
Method: C:\HPCHEM\1\METHODS\MR3151.M (RTE Integrator)
Title: Semi Volatile GC/MS, ZB-5MSI 30m x .25mm x .25um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

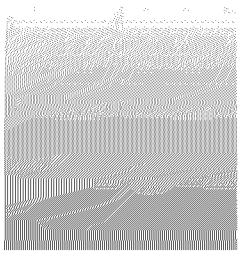
8.2.3

8

SII-SSA-0014-006239

New Jersey ACCUTEST LABORATORIES

03/04/11



Technical Report for

Arcadis

PSEG-Diesel, Salem, NJ

NP000603.0009

Accutest Job Number: JA68506

Sampling Dates: 02/17/11 - 02/18/11

Report to:

Arcadis
10 Friend Lane Suite 200
Newtown, PA 18940
Jonathan.Shafer@arcadis-us.com

ATTN: Jonathan Shafer

Total number of pages in report: **395**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

David N. Speis
VP, Laboratory Director

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JA68506-1	02/17/11	12:05	FSF	02/18/11	AQ	Ground Water	CG
JA68506-2	02/17/11	13:45	FSF	02/18/11	AQ	Ground Water	CD
JA68506-3	02/17/11	13:50	FSF	02/18/11	AQ	Ground Water	CD-DUP
JA68506-4	02/17/11	14:55	FSF	02/18/11	AQ	Ground Water	CE
JA68506-5	02/17/11	15:25	FSF	02/18/11	AQ	Field Blank Water	FB-02172011
JA68506-6	02/18/11	10:40	FSF	02/18/11	AQ	Ground Water	CC
JA68506-7	02/18/11	11:30	FSF	02/18/11	AQ	Ground Water	CF
JA68506-8	02/18/11	11:45	FSF	02/18/11	AQ	Field Blank Water	FB-02182011
JA68506-9	02/18/11	11:45	FSF	02/18/11	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No**	JA68506
Site:	PSEG-Diesel, Salem, NJ	**Report Date**	3/4/2011 5:34:33 PM

On 02/18/2011, 6 Sample(s), 1 Trip Blank(s) and 2 Field Blank(s) were received at Accutest Laboratories at a temperature of 4.6 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of JA68506 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ **Batch ID:** V2B3591

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68307-4MS, JA68307-4MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V2C3633

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68481-8MS, JA68481-8MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V2C3637

- All samples were analyzed within the recommended method holding time.
- Sample(s) JA68506-4MS, JA68506-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ **Batch ID:** OP48193

- All samples were extracted within the recommended method holding time.
- Sample(s) JA68506-1MS, JA68506-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 4-Bromophenyl phenyl ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Carbazole, Di-n-butyl phthalate, Dimethyl phthalate are outside control limits. Outside of in house control limits.
- RPD(s) for MS/MSD for 1,1'-Biphenyl, 1,2,4,5-Tetrachlorobenzene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Methylnaphthalene, 2-Nitroaniline, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4-Bromophenyl phenyl ether, 4-Chloroaniline, 4-Chlorophenyl phenyl ether, 4-Nitroaniline, Acetophenone, Atrazine, Benzaldehyde, bis(2-Chloroethoxy)methane, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Caprolactam, Carbazole, Di-n-butyl phthalate, Di-n-octyl phthalate, Dibenzofuran, Diethyl phthalate, Dimethyl phthalate, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Isophorone, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine, Nitrobenzene are outside control limits for sample OP48193-MSD. Analytical precision exceeds standard laboratory control limits.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix: AQ **Batch ID:** OP48193A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA68506-1MS, JA68506-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Fluoranthene, Fluorene, Hexachlorobenzene, Phenanthrene, Pyrene are outside control limits. Outside of in house control limits.
- RPD(s) for MS/MSD for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Hexachlorobenzene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits for sample OP48193A-MSD. Analytical precision exceeds standard laboratory control limits.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B80129.D	1	02/23/11	DR	n/a	n/a	V2B3591
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	0.34	1.0	0.23	ug/l	J
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		76-120%
17060-07-0	1,2-Dichloroethane-D4	102%		64-135%
2037-26-5	Toluene-D8	99%		76-117%
460-00-4	4-Bromofluorobenzene	100%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		25-112%
321-60-8	2-Fluorobiphenyl	69%		31-106%
1718-51-0	Terphenyl-d14	45%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4.1	ug/l	J
	Internal standard added for SIM test	5.03	4.9	ug/l	J
	Internal standard added for SIM test	10.14	4.7	ug/l	J
	unknown	11.15	4.7	ug/l	J
	Internal standard added for SIM test	13.22	4.8	ug/l	J
	Internal standard added for SIM test	16.24	4.5	ug/l	J
	Total TIC, Semi-Volatile		4.7	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CG		
Lab Sample ID:	JA68506-1	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23778.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	0.442	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		32-135%
321-60-8	2-Fluorobiphenyl	76%		31-121%
1718-51-0	Terphenyl-d14	69%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: CD
Lab Sample ID: JA68506-2
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: PSEG-Diesel, Salem, NJ

Date Sampled: 02/17/11
Date Received: 02/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2B80130.D	1	02/23/11	DR	n/a	n/a	V2B3591
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	2.2	5.0	0.92	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	100%		64-135%
2037-26-5	Toluene-D8	101%		76-117%
460-00-4	4-Bromofluorobenzene	98%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	cycloalkane/alkene	18.77	7.7	ug/l	J
	Naphthalene methyl	20.77	6.6	ug/l	J
	Total TIC, Volatile		14.3	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54992.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		25-112%
321-60-8	2-Fluorobiphenyl	72%		31-106%
1718-51-0	Terphenyl-d14	36%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.86	5	ug/l	J
	Internal standard added for SIM test	5.03	5	ug/l	J
	1H-Inden-1-one, -dihydro-	7.51	12	ug/l	J
	Phenol, -tert-butyl-	7.54	9.7	ug/l	J
	Internal standard added for SIM test	7.78	4.7	ug/l	J
	unknown	8.98	10	ug/l	J
	unknown	10.03	4.7	ug/l	J
	Internal standard added for SIM test	10.14	5.7	ug/l	J
	unknown	10.66	4	ug/l	J
	unknown	10.95	6.3	ug/l	J
	unknown	12.38	6.9	ug/l	J
	unknown	12.40	10	ug/l	J
	Internal standard added for SIM test	13.22	5.3	ug/l	J
	Internal standard added for SIM test	16.24	4.7	ug/l	J
	Total TIC, Semi-Volatile		68.6	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD		
Lab Sample ID:	JA68506-2	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23779.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.223	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	0.287	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		32-135%
321-60-8	2-Fluorobiphenyl	88%		31-121%
1718-51-0	Terphenyl-d14	58%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79682.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	5.6	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	4.1	5.0	0.92	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	18.43	5.4	ug/l	J
	Naphthalene, tetrahydro-	18.68	5.7	ug/l	J
91-20-3	Naphthalene	19.22	5.5	ug/l	JN
	Total TIC, Volatile		16.6	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54993.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	79%		31-106%
1718-51-0	Terphenyl-d14	38%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	4.86	5.4	ug/l	J
	Internal standard added for SIM test	5.03	4.7	ug/l	J
	unknown	5.43	4.2	ug/l	J
	1H-Inden-1-one, -dihydro-	7.51	13	ug/l	J
	Phenol, -tert-butyl-	7.55	9.8	ug/l	J
	unknown	8.98	13	ug/l	J
	unknown	10.03	4.3	ug/l	J
	Internal standard added for SIM test	10.14	5.8	ug/l	J
	unknown	10.66	6.9	ug/l	J
	unknown	10.96	7.7	ug/l	J
	unknown	12.38	6.7	ug/l	J
	unknown	12.40	9.6	ug/l	J
	unknown	12.68	4.2	ug/l	J
	Internal standard added for SIM test	13.22	4.5	ug/l	J
	Internal standard added for SIM test	16.24	4.2	ug/l	J
	Total TIC, Semi-Volatile		84.8	ug/l	J

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CD-DUP		
Lab Sample ID:	JA68506-3	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23780.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	0.229	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	0.258	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	102%		32-135%
321-60-8	2-Fluorobiphenyl	98%		31-121%
1718-51-0	Terphenyl-d14	60%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: CE
Lab Sample ID: JA68506-4
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: PSEG-Diesel, Salem, NJ

Date Sampled: 02/17/11
Date Received: 02/18/11
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.6	10	2.9	ug/l	J
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	103%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

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N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54994.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		25-112%
321-60-8	2-Fluorobiphenyl	80%		31-106%
1718-51-0	Terphenyl-d14	75%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	5.5	ug/l	J
	Internal standard added for SIM test	5.03	4.1	ug/l	J
	Internal standard added for SIM test	10.14	4.6	ug/l	J
	Internal standard added for SIM test	13.22	4.4	ug/l	J
	Internal standard added for SIM test	16.24	4.4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CE		
Lab Sample ID:	JA68506-4	**Date Sampled:**	02/17/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23781.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	103%		32-135%
321-60-8	2-Fluorobiphenyl	100%		31-121%
1718-51-0	Terphenyl-d14	105%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79594.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54984.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	64%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4	ug/l	J
	Internal standard added for SIM test	5.03	4.2	ug/l	J
	Internal standard added for SIM test	13.22	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02172011		
Lab Sample ID:	JA68506-5	**Date Sampled:**	02/17/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23782.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	105%		32-135%
321-60-8	2-Fluorobiphenyl	106%		31-121%
1718-51-0	Terphenyl-d14	105%		10-130%

ND = Not detected MDL - Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79681.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	25.0	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		76-120%
17060-07-0	1,2-Dichloroethane-D4	106%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54995.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	64%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	13.22	4.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CC		
Lab Sample ID:	JA68506-6	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23783.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	0.281	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		32-135%
321-60-8	2-Fluorobiphenyl	108%		31-121%
1718-51-0	Terphenyl-d14	99%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79680.D	1	02/28/11	DR	n/a	n/a	V2C3637
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
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E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	105%		64-135%
2037-26-5	Toluene-D8	112%		76-117%
460-00-4	4-Bromofluorobenzene	108%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54996.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		25-112%
321-60-8	2-Fluorobiphenyl	82%		31-106%
1718-51-0	Terphenyl-d14	66%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.03	4.1	ug/l	J
	Internal standard added for SIM test	10.14	4.5	ug/l	J
	Internal standard added for SIM test	13.22	4.7	ug/l	J
	Internal standard added for SIM test	16.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	CF		
Lab Sample ID:	JA68506-7	**Date Sampled:**	02/18/11
Matrix:	AQ - Ground Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23796.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	97%		32-135%
321-60-8	2-Fluorobiphenyl	107%		31-121%
1718-51-0	Terphenyl-d14	98%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79595.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	96%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P54985.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

BN TCL11 List

CAS No.	Compound	Result	RL	MDL	Units	Q
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	93%		25-112%
321-60-8	2-Fluorobiphenyl	86%		31-106%
1718-51-0	Terphenyl-d14	65%		14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.07	4.2	ug/l	J
	Internal standard added for SIM test	10.14	4.3	ug/l	J
	Internal standard added for SIM test	13.22	4.5	ug/l	J
	Internal standard added for SIM test	16.24	4.1	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	FB-02182011		
Lab Sample ID:	JA68506-8	**Date Sampled:**	02/18/11
Matrix:	AQ - Field Blank Water	**Date Received:**	02/18/11
Method:	SW846 8270C BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M23785.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	106%		32-135%
321-60-8	2-Fluorobiphenyl	114%		31-121%
1718-51-0	Terphenyl-d14	99%		10-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA68506-9	**Date Sampled:**	02/18/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2C79596.D	1	02/24/11	DR	n/a	n/a	V2C3633
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	JA68506-9	**Date Sampled:**	02/18/11
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/18/11
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	PSEG-Diesel, Salem, NJ		

VOA TCL List (SOM0 1.1)

CAS No.	Compound	Result	RL	MDL	Units	Q
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		76-120%
17060-07-0	1,2-Dichloroethane-D4	94%		64-135%
2037-26-5	Toluene-D8	107%		76-117%
460-00-4	4-Bromofluorobenzene	107%		72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New Jersey ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

ACCUTEST LABORATORIES

6" FB w TB

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www.acutest.com

PAGE ___ OF ___

FED-EX Tracking #: | Bottle Order Control #:
Acutest Quote #: | Acutest Job #: JA68506

Client / Reporting Information

Company Name: ARCADIS
Street Address: 10 FRIENDS LN
City: NEWTOWN State: PA Zip: 18940
Project Contact: Jon Shafer E-mail:
Phone #: 267-685-1800 Fax #: 267-685-1201
Sampler(s) Name(s): Frank Straker Phone #:

Project Information

Project Name: PSEG - DIESEL
Street:
City: SALEM State: NJ
Project #: NP000603.0009
Client Purchase Order #:
Project Manager: BRAD PIERCE

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

8260B (VOC) | 8270C (SVOC)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Acutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	CG		2-17-11	1205	FS	GW	5	3				2				EX 9, 2274
2	CD			1345												
3	CD-DUP			1350												
4	CE			1455												
5	FB-02172011			1525		AQ	4	2								
6	CC		2-18-11	1040			5	3				2				
7	CF			1130			5	3				2				
8	FB-02182011			1145		AQ	4	2				2				
9	TRIP BLANK		2-16-11	0800		AQ	2	2								

Turnaround Time (Business days)

- [X] Std. 15 Business Days
- [ ] Std. 10 Business Days (by Contract only)
- [ ] 10 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Leblink

Approved By (Acutest PM) / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		2-18-11 / 1525	1	2		2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [X] Cooler Temp: 4.6, 3.0C

1A

4.1.4

JA68506: Chain of Custody
Page 1 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: JA68506 Client: Immediate Client Services Action Required: No

Date / Time Received: 2/18/2011 Delivery Method: Client Service Action Required at Login: No

Project: No. Coolers: 1 Airbill #'s:

Cooler Security	Y or N		Y or N
1. Custody Seals Present:	☑ ☐	3. COC Present:	☑ ☐
2. Custody Seals Intact:	☑ ☐	4. Smpl Dates/Time OK	☑ ☐

Cooler Temperature	Y or N
1. Temp criteria achieved:	☑ ☐
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

Quality Control Preservatio	Y or N	N/A
1. Trip Blank present / cooler:	☑ ☐	☐
2. Trip Blank listed on COC:	☑ ☐	☐
3. Samples preserved properly:	☑ ☐	
4. VOCs headspace free:	☑ ☐	☐

Sample Integrity - Documentation	Y or N
1. Sample labels present on bottles:	☑ ☐
2. Container labeling complete:	☑ ☐
3. Sample container label / COC agree:	☑ ☐

Sample Integrity - Condition	Y or N
1. Sample recvd within HT:	☑ ☐
2. All containers accounted for:	☑ ☐
3. Condition of sample:	Intact

Sample Integrity - Instructions	Y or N	N/A
1. Analysis requested is clear:	☑ ☐	
2. Bottles received for unspecified tests	☐ ☑	
3. Sufficient volume recvd for analysis:	☑ ☐	
4. Compositing instructions clear:	☐ ☐	☑
5. Filtering instructions clear:	☐ ☐	☑

Comments

Accutest Laboratories
V:732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www/accutest.com

JA68506: Chain of Custody
Page 2 of 3

Job Change Order: JA68506_2/24/2011

Requested Date:	2/24/2011	**Received Date:**	2/18/2011
Account Name:	Arcadis	**Due Date:**	3/11/2011
Project Description:	PSEG-Diesel, Salem, NJ	**Deliverable:**	REDT2
CSR:	MM	**TAT (Days):**	13

Sample #:
JA68506-all

Change: Please change the TAT to 13 days; due 3/3/11.

Above Changes Per: Jonathan Shafer **Date:** 2/24/2011

To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service Representative.

Page 1 of 1

JA68506: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA68506-1 CG	Collected: 17-FEB-11 12:05 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-1	SW846 8270C BY SIM	22-FEB-11 10:05	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-1	SW846 8270C	22-FEB-11 12:26	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-1	SW846 8260B	23-FEB-11 12:40	DR			V8260NJPTCL11+
JA68506-2 CD	Collected: 17-FEB-11 13:45 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-2	SW846 8270C BY SIM	22-FEB-11 10:29	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-2	SW846 8270C	22-FEB-11 13:52	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-2	SW846 8260B	23-FEB-11 13:11	DR			V8260NJPTCL11+
JA68506-3 CD-DUP	Collected: 17-FEB-11 13:50 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-3	SW846 8270C BY SIM	22-FEB-11 10:53	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-3	SW846 8270C	22-FEB-11 14:21	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-3	SW846 8260B	28-FEB-11 14:42	DR			V8260NJPTCL11+
JA68506-4 CE	Collected: 17-FEB-11 14:55 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-4	SW846 8270C BY SIM	22-FEB-11 11:17	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-4	SW846 8270C	22-FEB-11 14:50	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-4	SW846 8260B	28-FEB-11 13:09	DR			V8260NJPTCL11+
JA68506-5 FB-02172011	Collected: 17-FEB-11 15:25 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-5	SW846 8270C	22-FEB-11 10:04	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-5	SW846 8270C BY SIM	22-FEB-11 11:40	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-5	SW846 8260B	24-FEB-11 19:32	DR			V8260NJPTCL11+
JA68506-6 CC	Collected: 18-FEB-11 10:40 By: FSF		Received: 18-FEB-11 By: MPC			
JA68506-6	SW846 8270C BY SIM	22-FEB-11 12:04	NAP	21-FEB-11		B8270SIMNJ
JA68506-6	SW846 8270C	22-FEB-11 15:19	NAP	21-FEB-11	HQ	B8270NJTCL11+

Internal Sample Tracking Chronicle

Arcadis

Job No: JA68506

PSEG-Diesel, Salem, NJ
Project No: NP000603.0009

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JA68506-6	SW846 8260B	28-FEB-11 14:11	DR			V8260NJPTCL11+
JA68506-7	Collected: 18-FEB-11 11:30 By: FSF		Received: 18-FEB-11 By: MPC			
CF						
JA68506-7	SW846 8270C	22-FEB-11 15:47	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-7	SW846 8270C BY SIM	22-FEB-11 17:18	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-7	SW846 8260B	28-FEB-11 13:40	DR			V8260NJPTCL11+
JA68506-8	Collected: 18-FEB-11 11:45 By: FSF		Received: 18-FEB-11 By: MPC			
FB-02182011						
JA68506-8	SW846 8270C	22-FEB-11 10:32	NAP	21-FEB-11	HQ	B8270NJTCL11+
JA68506-8	SW846 8270C BY SIM	22-FEB-11 12:52	NAP	21-FEB-11	HQ	B8270SIMNJ
JA68506-8	SW846 8260B	24-FEB-11 20:02	DR			V8260NJPTCL11+
JA68506-9	Collected: 18-FEB-11 11:45 By: FSF		Received: 18-FEB-11 By: MPC			
TRIP BLANK						
JA68506-9	SW846 8260B	24-FEB-11 20:33	DR			V8260NJPTCL11+

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-1.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-1.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-1.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-1.1
JA68506-1.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-1.1
JA68506-1.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-1.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-1.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-1.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-1.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-1.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-1.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-1.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-1.2
JA68506-1.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-1.2
JA68506-1.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-1.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-1.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-1.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-1.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-1.3	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-1.3	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-1.3	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-1.3	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-1.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-1.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-1.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-1.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-1.4	Secured Storage	Dezaree Reis	02/23/11 15:54	Retrieve from Storage
JA68506-1.4	Dezaree Reis	GCMS2B	02/23/11 15:54	Load on Instrument
JA68506-1.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-1.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-2.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-2.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-2.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-2.1
JA68506-2.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-2.1
JA68506-2.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-2.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-2.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-2.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-2.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-2.3	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-2.3	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-2.3	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-2.3	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-2.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-2.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-2.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-2.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-2.4	Secured Storage	Dezaree Reis	02/23/11 15:54	Retrieve from Storage
JA68506-2.4	Dezaree Reis	GCMS2B	02/23/11 15:54	Load on Instrument
JA68506-2.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-2.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-3.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-3.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-3.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-3.1
JA68506-3.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-3.1
JA68506-3.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-3.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-3.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-3.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-3.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-3.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-3.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-3.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-3.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-3.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-3.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-3.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-3.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-4.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-4.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-4.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-4.1
JA68506-4.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-4.1
JA68506-4.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-4.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-4.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-4.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-4.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-4.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-4.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-4.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-4.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-4.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-4.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-4.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-4.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-5.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-5.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-5.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-5.2
JA68506-5.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-5.2
JA68506-5.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-5.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-5.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-5.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-5.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-5.3	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-5.3	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-5.3	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-5.3	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage
JA68506-5.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-5.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-5.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-5.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-6.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-6.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-6.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-6.2
JA68506-6.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-6.2
JA68506-6.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-6.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-6.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-6.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-6.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-6.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-6.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-6.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-6.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-6.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-6.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-6.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-6.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-7.2	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-7.2	Husam Qasem		02/21/11 17:06	Depleted
JA68506-7.2.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-7.2
JA68506-7.2.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-7.2
JA68506-7.2.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage
JA68506-7.2.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-7.2.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-7.2.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-7.2.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-7.3	Secured Storage	Dezaree Reis	02/28/11 17:57	Retrieve from Storage
JA68506-7.3	Dezaree Reis	GCMS2C	02/28/11 17:57	Load on Instrument
JA68506-7.3	GCMS2C	Dezaree Reis	03/01/11 12:04	Unload from Instrument
JA68506-7.3	Dezaree Reis	Secured Storage	03/01/11 12:04	Return to Storage
JA68506-7.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-7.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-7.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-7.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-7.4	Secured Storage	Dezaree Reis	02/23/11 16:01	Retrieve from Storage
JA68506-7.4	Dezaree Reis	GCMS2B	02/23/11 16:04	Load on Instrument
JA68506-7.4	GCMS2B	Dezaree Reis	02/24/11 12:18	Unload from Instrument
JA68506-7.4	Dezaree Reis	Secured Storage	02/24/11 12:18	Return to Storage
JA68506-8.1	Secured Storage	Husam Qasem	02/21/11 07:54	Retrieve from Storage
JA68506-8.1	Husam Qasem		02/21/11 17:06	Depleted
JA68506-8.1.1	Husam Qasem	Organics Prep	02/21/11 07:57	Extract from JA68506-8.1
JA68506-8.1.1	Organics Prep	Husam Qasem	02/21/11 17:06	Extract from JA68506-8.1
JA68506-8.1.1	Husam Qasem	Extract Storage	02/21/11 17:06	Return to Storage

Accutest Internal Chain of Custody

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ
Received: 02/18/11

Sample. Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JA68506-8.1.1	Extract Storage	Nina Pandya	02/22/11 09:32	Retrieve from Storage
JA68506-8.1.1	Nina Pandya	GCMS4M	02/22/11 09:33	Load on Instrument
JA68506-8.1.1	GCMS4M	Nina Pandya	02/23/11 07:54	Unload from Instrument
JA68506-8.1.1	Nina Pandya	Extract Freezer	02/23/11 07:54	Return to Storage
JA68506-8.3	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-8.3	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-8.3	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-8.3	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage
JA68506-8.4	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-8.4	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-8.4	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-8.4	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-9.1	Secured Storage	Dezaree Reis	02/22/11 16:54	Retrieve from Storage
JA68506-9.1	Dezaree Reis	GCMS2B	02/22/11 16:55	Load on Instrument
JA68506-9.1	GCMS2B	Dezaree Reis	02/23/11 09:40	Unload from Instrument
JA68506-9.1	Dezaree Reis	Secured Storage	02/23/11 09:41	Return to Storage
JA68506-9.2	Secured Storage	Dezaree Reis	02/24/11 17:07	Retrieve from Storage
JA68506-9.2	Dezaree Reis	GCMS2C	02/24/11 17:07	Load on Instrument
JA68506-9.2	GCMS2C	Dezaree Reis	02/25/11 12:26	Unload from Instrument
JA68506-9.2	Dezaree Reis	Secured Storage	02/25/11 12:26	Return to Storage

New Jersey ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-MB	2B80126.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-MB	2B80126.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	64-135%
2037-26-5	Toluene-D8	100%	76-117%
460-00-4	4-Bromofluorobenzene	98%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-MB	2C79580.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-MB	2C79580.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	76-120%
17060-07-0	1,2-Dichloroethane-D4	89%	64-135%
2037-26-5	Toluene-D8	106%	76-117%
460-00-4	4-Bromofluorobenzene	108%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-MB	2C79674.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
74-97-5	Bromochloromethane	ND	5.0	0.33	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
110-82-7	Cyclohexane	ND	5.0	1.9	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.92	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
76-13-1	Freon 113	ND	5.0	0.38	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.57	ug/l	
79-20-9	Methyl Acetate	ND	5.0	1.5	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.35	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-MB	2C79674.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Result	RL	MDL	Units	Q
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.47	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.56	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	0.54	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
	m,p-Xylene	ND	1.0	0.25	ug/l	
95-47-6	o-Xylene	ND	1.0	0.25	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	76-120%
17060-07-0	1,2-Dichloroethane-D4	101%	64-135%
2037-26-5	Toluene-D8	112%	76-117%
460-00-4	4-Bromofluorobenzene	109%	72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-BS	2B80127.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	47.8	96	51-151
71-43-2	Benzene	50	45.9	92	75-122
74-97-5	Bromochloromethane	50	48.9	98	78-124
75-27-4	Bromodichloromethane	50	52.3	105	77-128
75-25-2	Bromoform	50	50.1	100	67-141
74-83-9	Bromomethane	50	42.2	84	53-152
78-93-3	2-Butanone (MEK)	50	45.7	91	64-130
75-15-0	Carbon disulfide	50	44.7	89	59-140
56-23-5	Carbon tetrachloride	50	52.4	105	75-148
108-90-7	Chlorobenzene	50	49.5	99	76-124
75-00-3	Chloroethane	50	38.9	78	54-147
67-66-3	Chloroform	50	50.4	101	77-124
74-87-3	Chloromethane	50	31.8	64	46-144
110-82-7	Cyclohexane	50	45.8	92	62-127
124-48-1	Dibromochloromethane	50	50.1	100	76-132
95-50-1	1,2-Dichlorobenzene	50	49.7	99	74-125
541-73-1	1,3-Dichlorobenzene	50	49.3	99	73-124
106-46-7	1,4-Dichlorobenzene	50	48.3	97	71-123
75-71-8	Dichlorodifluoromethane	50	29.9	60	42-152
75-34-3	1,1-Dichloroethane	50	47.5	95	72-124
107-06-2	1,2-Dichloroethane	50	55.5	111	66-150
75-35-4	1,1-Dichloroethene	50	46.6	93	61-132
156-59-2	cis-1,2-Dichloroethene	50	51.9	104	71-119
156-60-5	trans-1,2-Dichloroethene	50	41.1	82	71-123
78-87-5	1,2-Dichloropropane	50	46.2	92	75-120
10061-01-5	cis-1,3-Dichloropropene	50	51.4	103	77-124
10061-02-6	trans-1,3-Dichloropropene	50	52.8	106	75-132
100-41-4	Ethylbenzene	50	48.1	96	77-124
76-13-1	Freon 113	50	57.8	116	58-149
591-78-6	2-Hexanone	50	49.8	100	58-136
98-82-8	Isopropylbenzene	50	51.6	103	60-136
79-20-9	Methyl Acetate	50	41.2	82	57-139
108-87-2	Methylcyclohexane	50	54.8	110	73-130
1634-04-4	Methyl Tert Butyl Ether	100	97.6	98	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	46.6	93	63-135
75-09-2	Methylene chloride	50	45.2	90	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2B3591-BS	2B80127.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	48.3	97	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	46.6	93	66-125
127-18-4	Tetrachloroethene	50	48.4	97	70-136
108-88-3	Toluene	50	49.3	99	76-126
87-61-6	1,2,3-Trichlorobenzene	50	49.2	98	62-132
120-82-1	1,2,4-Trichlorobenzene	50	49.9	100	67-132
71-55-6	1,1,1-Trichloroethane	50	54.2	108	77-136
79-00-5	1,1,2-Trichloroethane	50	48.0	96	75-123
79-01-6	Trichloroethene	50	49.6	99	79-126
75-69-4	Trichlorofluoromethane	50	49.1	98	56-154
75-01-4	Vinyl chloride	50	36.0	72	56-146
	m,p-Xylene	100	97.4	97	77-125
95-47-6	o-Xylene	50	49.6	99	76-126
1330-20-7	Xylene (total)	150	147	98	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	102%	64-135%
2037-26-5	Toluene-D8	102%	76-117%
460-00-4	4-Bromofluorobenzene	100%	72-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-BS	2C79581.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	43.5	87	51-151
71-43-2	Benzene	50	49.9	100	75-122
74-97-5	Bromochloromethane	50	46.0	92	78-124
75-27-4	Bromodichloromethane	50	47.1	94	77-128
75-25-2	Bromoform	50	38.2	76	67-141
74-83-9	Bromomethane	50	54.5	109	53-152
78-93-3	2-Butanone (MEK)	50	43.6	87	64-130
75-15-0	Carbon disulfide	50	52.1	104	59-140
56-23-5	Carbon tetrachloride	50	49.6	99	75-148
108-90-7	Chlorobenzene	50	49.4	99	76-124
75-00-3	Chloroethane	50	54.7	109	54-147
67-66-3	Chloroform	50	50.0	100	77-124
74-87-3	Chloromethane	50	47.5	95	46-144
110-82-7	Cyclohexane	50	53.2	106	62-127
124-48-1	Dibromochloromethane	50	42.9	86	76-132
95-50-1	1,2-Dichlorobenzene	50	49.2	98	74-125
541-73-1	1,3-Dichlorobenzene	50	51.2	102	73-124
106-46-7	1,4-Dichlorobenzene	50	49.0	98	71-123
75-71-8	Dichlorodifluoromethane	50	41.2	82	42-152
75-34-3	1,1-Dichloroethane	50	52.8	106	72-124
107-06-2	1,2-Dichloroethane	50	44.1	88	66-150
75-35-4	1,1-Dichloroethene	50	49.4	99	61-132
156-59-2	cis-1,2-Dichloroethene	50	51.4	103	71-119
156-60-5	trans-1,2-Dichloroethene	50	42.7	85	71-123
78-87-5	1,2-Dichloropropane	50	51.5	103	75-120
10061-01-5	cis-1,3-Dichloropropene	50	48.0	96	77-124
10061-02-6	trans-1,3-Dichloropropene	50	44.8	90	75-132
100-41-4	Ethylbenzene	50	48.5	97	77-124
76-13-1	Freon 113	50	49.4	99	58-149
591-78-6	2-Hexanone	50	43.4	87	58-136
98-82-8	Isopropylbenzene	50	54.1	108	60-136
79-20-9	Methyl Acetate	50	41.8	84	57-139
108-87-2	Methylcyclohexane	50	53.9	108	73-130
1634-04-4	Methyl Tert Butyl Ether	100	90.4	90	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	42.9	86	63-135
75-09-2	Methylene chloride	50	48.8	98	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3633-BS	2C79581.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.0	100	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	40.9	82	66-125
127-18-4	Tetrachloroethene	50	49.4	99	70-136
108-88-3	Toluene	50	49.9	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	43.0	86	62-132
120-82-1	1,2,4-Trichlorobenzene	50	49.3	99	67-132
71-55-6	1,1,1-Trichloroethane	50	52.6	105	77-136
79-00-5	1,1,2-Trichloroethane	50	42.8	86	75-123
79-01-6	Trichloroethene	50	49.9	100	79-126
75-69-4	Trichlorofluoromethane	50	48.7	97	56-154
75-01-4	Vinyl chloride	50	51.2	102	56-146
	m,p-Xylene	100	99.5	100	77-125
95-47-6	o-Xylene	50	50.9	102	76-126
1330-20-7	Xylene (total)	150	150	100	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	76-120%
17060-07-0	1,2-Dichloroethane-D4	92%	64-135%
2037-26-5	Toluene-D8	107%	76-117%
460-00-4	4-Bromofluorobenzene	107%	72-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-BS	2C79675.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	54.1	108	51-151
71-43-2	Benzene	50	49.0	98	75-122
74-97-5	Bromochloromethane	50	49.9	100	78-124
75-27-4	Bromodichloromethane	50	50.4	101	77-128
75-25-2	Bromoform	50	54.5	109	67-141
74-83-9	Bromomethane	50	48.6	97	53-152
78-93-3	2-Butanone (MEK)	50	57.4	115	64-130
75-15-0	Carbon disulfide	50	48.8	98	59-140
56-23-5	Carbon tetrachloride	50	48.0	96	75-148
108-90-7	Chlorobenzene	50	50.2	100	76-124
75-00-3	Chloroethane	50	45.7	91	54-147
67-66-3	Chloroform	50	47.4	95	77-124
74-87-3	Chloromethane	50	39.2	78	46-144
110-82-7	Cyclohexane	50	49.1	98	62-127
124-48-1	Dibromochloromethane	50	51.6	103	76-132
95-50-1	1,2-Dichlorobenzene	50	52.6	105	74-125
541-73-1	1,3-Dichlorobenzene	50	51.4	103	73-124
106-46-7	1,4-Dichlorobenzene	50	49.9	100	71-123
75-71-8	Dichlorodifluoromethane	50	37.1	74	42-152
75-34-3	1,1-Dichloroethane	50	48.7	97	72-124
107-06-2	1,2-Dichloroethane	50	49.1	98	66-150
75-35-4	1,1-Dichloroethene	50	46.5	93	61-132
156-59-2	cis-1,2-Dichloroethene	50	49.1	98	71-119
156-60-5	trans-1,2-Dichloroethene	50	39.7	79	71-123
78-87-5	1,2-Dichloropropane	50	52.4	105	75-120
10061-01-5	cis-1,3-Dichloropropene	50	52.0	104	77-124
10061-02-6	trans-1,3-Dichloropropene	50	52.2	104	75-132
100-41-4	Ethylbenzene	50	46.9	94	77-124
76-13-1	Freon 113	50	46.2	92	58-149
591-78-6	2-Hexanone	50	60.0	120	58-136
98-82-8	Isopropylbenzene	50	50.2	100	60-136
79-20-9	Methyl Acetate	50	52.0	104	57-139
108-87-2	Methylcyclohexane	50	49.3	99	73-130
1634-04-4	Methyl Tert Butyl Ether	100	102	102	72-127
108-10-1	4-Methyl-2-pentanone(MIBK)	50	58.3	117	63-135
75-09-2	Methylene chloride	50	48.4	97	69-122

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2C3637-BS	2C79675.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-42-5	Styrene	50	50.8	102	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	51.4	103	66-125
127-18-4	Tetrachloroethene	50	49.4	99	70-136
108-88-3	Toluene	50	50.0	100	76-126
87-61-6	1,2,3-Trichlorobenzene	50	59.1	118	62-132
120-82-1	1,2,4-Trichlorobenzene	50	60.4	121	67-132
71-55-6	1,1,1-Trichloroethane	50	47.8	96	77-136
79-00-5	1,1,2-Trichloroethane	50	52.8	106	75-123
79-01-6	Trichloroethene	50	49.0	98	79-126
75-69-4	Trichlorofluoromethane	50	44.2	88	56-154
75-01-4	Vinyl chloride	50	43.9	88	56-146
	m,p-Xylene	100	98.1	98	77-125
95-47-6	o-Xylene	50	50.8	102	76-126
1330-20-7	Xylene (total)	150	149	99	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	103%	64-135%
2037-26-5	Toluene-D8	113%	76-117%
460-00-4	4-Bromofluorobenzene	108%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68307-4MS	2B80136.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4MSD	2B80137.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4	2B80131.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	JA68307-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	76.1	152	68.5	137	11	44-157/20
71-43-2	Benzene	0.66	J	50	44.6	88	44.1	87	1	38-139/13
74-97-5	Bromochloromethane	ND		50	50.2	100	50.1	100	0	70-129/11
75-27-4	Bromodichloromethane	ND		50	52.8	106	52.0	104	2	70-135/13
75-25-2	Bromoform	ND		50	50.5	101	50.1	100	1	53-139/13
74-83-9	Bromomethane	ND		50	41.3	83	41.6	83	1	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.7	91	43.1	86	6	58-140/14
75-15-0	Carbon disulfide	ND		50	40.4	81	39.8	80	1	34-136/21
56-23-5	Carbon tetrachloride	ND		50	47.3	95	46.4	93	2	50-161/18
108-90-7	Chlorobenzene	ND		50	47.0	94	46.8	94	0	65-128/12
75-00-3	Chloroethane	ND		50	37.0	74	37.2	74	1	41-151/18
67-66-3	Chloroform	ND		50	48.3	97	48.0	96	1	66-132/14
74-87-3	Chloromethane	ND		50	36.3	73	36.1	72	1	35-149/22
110-82-7	Cyclohexane	ND		50	38.8	78	38.1	76	2	29-158/18
124-48-1	Dibromochloromethane	ND		50	51.0	102	50.8	102	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.1	98	48.9	98	0	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	47.4	95	47.3	95	0	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	47.5	95	46.9	94	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	36.6	73	35.3	71	4	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	45.0	90	45.1	90	0	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	57.1	114	56.1	112	2	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	42.0	84	42.2	84	0	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	44.8	90	45.5	91	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	43.5	87	43.0	86	1	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	45.6	91	46.3	93	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	48.1	96	49.1	98	2	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	50.2	100	51.4	103	2	68-134/13
100-41-4	Ethylbenzene	ND		50	44.7	89	44.7	89	0	37-143/13
76-13-1	Freon 113	ND		50	47.2	94	46.1	92	2	33-159/19
591-78-6	2-Hexanone	ND		50	52.2	104	52.2	104	0	53-145/17
98-82-8	Isopropylbenzene	ND		50	46.1	92	43.8	88	5	48-141/15
79-20-9	Methyl Acetate	ND		50	43.6	87	41.2	82	6	46-147/18
108-87-2	Methylcyclohexane	ND		50	44.5	89	44.0	88	1	36-156/18
1634-04-4	Methyl Tert Butyl Ether	2.0		50	51.7	99	52.7	101	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.6	101	50.4	101	0	57-141/14
75-09-2	Methylene chloride	ND		50	44.9	90	45.4	91	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68307-4MS	2B80136.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4MSD	2B80137.D	1	02/23/11	DR	n/a	n/a	V2B3591
JA68307-4	2B80131.D	1	02/23/11	DR	n/a	n/a	V2B3591

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-1, JA68506-2

CAS No.	Compound	JA68307-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	47.1	94	47.1	94	0	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	48.0	96	46.6	93	3	62-126/13
127-18-4	Tetrachloroethene	ND		50	44.1	88	44.0	88	0	48-145/15
108-88-3	Toluene	ND		50	46.5	93	46.0	92	1	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.4	103	50.4	101	2	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.1	102	50.8	102	1	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.2	98	48.5	97	1	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.9	98	48.7	97	0	70-127/12
79-01-6	Trichloroethene	ND		50	47.4	95	45.2	90	5	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	46.3	93	44.5	89	4	35-169/23
75-01-4	Vinyl chloride	ND		50	35.9	72	36.1	72	1	34-151/20
	m,p-Xylene	0.73	J	100	91.6	91	90.5	90	1	32-146/13
95-47-6	o-Xylene	0.54	J	50	47.4	94	46.7	92	1	46-141/12
1330-20-7	Xylene (total)	1.3		150	139	92	137	90	1	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68307-4	Limits
1868-53-7	Dibromofluoromethane	99%	101%	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	101%	64-135%
2037-26-5	Toluene-D8	102%	102%	101%	76-117%
460-00-4	4-Bromofluorobenzene	99%	98%	99%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68481-8MS	2C79589.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8MSD	2C79590.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8	2C79584.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	JA68481-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	46.0	92	45.2	90	2	44-157/20
71-43-2	Benzene	ND		50	51.4	103	49.2	98	4	38-139/13
74-97-5	Bromochloromethane	ND		50	49.1	98	48.3	97	2	70-129/11
75-27-4	Bromodichloromethane	ND		50	49.2	98	48.4	97	2	70-135/13
75-25-2	Bromoform	ND		50	41.7	83	40.4	81	3	53-139/13
74-83-9	Bromomethane	ND		50	52.2	104	50.1	100	4	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	45.8	92	45.3	91	1	58-140/14
75-15-0	Carbon disulfide	ND		50	50.2	100	46.8	94	7	34-136/21
56-23-5	Carbon tetrachloride	ND		50	49.5	99	46.8	94	6	50-161/18
108-90-7	Chlorobenzene	ND		50	49.9	100	48.9	98	2	65-128/12
75-00-3	Chloroethane	ND		50	53.5	107	50.5	101	6	41-151/18
67-66-3	Chloroform	ND		50	51.3	103	49.9	100	3	66-132/14
74-87-3	Chloromethane	ND		50	51.8	104	49.5	99	5	35-149/22
110-82-7	Cyclohexane	ND		50	52.1	104	49.0	98	6	29-158/18
124-48-1	Dibromochloromethane	ND		50	46.5	93	46.2	92	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	49.9	100	49.6	99	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	51.3	103	50.3	101	2	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	49.2	98	2	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	48.1	96	45.4	91	6	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	54.0	108	52.7	105	2	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	46.5	93	46.4	93	0	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	49.5	99	46.6	93	6	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	47.5	95	46.5	93	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	49.1	98	47.0	94	4	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	53.3	107	52.6	105	1	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	50.2	100	49.9	100	1	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.4	95	46.8	94	1	68-134/13
100-41-4	Ethylbenzene	ND		50	49.5	99	47.2	94	5	37-143/13
76-13-1	Freon 113	ND		50	44.2	88	41.8	84	6	33-159/19
591-78-6	2-Hexanone	ND		50	44.4	89	44.1	88	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	52.1	104	50.5	101	3	48-141/15
79-20-9	Methyl Acetate	ND		50	44.8	90	45.2	90	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	48.5	97	45.5	91	6	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.7	97	48.9	98	0	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	45.6	91	44.9	90	2	57-141/14
75-09-2	Methylene chloride	ND		50	51.2	102	50.5	101	1	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68481-8MS	2C79589.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8MSD	2C79590.D	1	02/24/11	DR	n/a	n/a	V2C3633
JA68481-8	2C79584.D	1	02/24/11	DR	n/a	n/a	V2C3633

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-5, JA68506-8, JA68506-9

CAS No.	Compound	JA68481-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	51.8	104	50.0	100	4	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	44.2	88	44.8	90	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	50.3	101	47.7	95	5	48-145/15
108-88-3	Toluene	0.39	J	50	51.0	101	49.3	98	3	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	44.0	88	45.6	91	4	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	50.5	101	51.2	102	1	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	52.4	105	50.1	100	4	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	45.7	91	45.2	90	1	70-127/12
79-01-6	Trichloroethene	ND		50	50.4	101	48.3	97	4	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	48.3	97	45.3	91	6	35-169/23
75-01-4	Vinyl chloride	ND		50	52.4	105	49.0	98	7	34-151/20
	m,p-Xylene	ND		100	99.8	100	96.4	96	3	32-146/13
95-47-6	o-Xylene	ND		50	51.3	103	49.6	99	3	46-141/12
1330-20-7	Xylene (total)	ND		150	151	101	146	97	3	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68481-8	Limits
1868-53-7	Dibromofluoromethane	102%	101%	100%	76-120%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	95%	64-135%
2037-26-5	Toluene-D8	107%	107%	107%	76-117%
460-00-4	4-Bromofluorobenzene	106%	108%	107%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68506-4MS	2C79684.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4MSD	2C79685.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	JA68506-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	9.6	J	50	66.9	115	66.5	114	1	44-157/20
71-43-2	Benzene	ND		50	49.2	98	47.4	95	4	38-139/13
74-97-5	Bromochloromethane	ND		50	52.6	105	52.3	105	1	70-129/11
75-27-4	Bromodichloromethane	ND		50	51.2	102	50.1	100	2	70-135/13
75-25-2	Bromoform	ND		50	54.7	109	55.3	111	1	53-139/13
74-83-9	Bromomethane	ND		50	48.9	98	45.7	91	7	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	59.5	119	59.7	119	0	58-140/14
75-15-0	Carbon disulfide	ND		50	46.2	92	42.2	84	9	34-136/21
56-23-5	Carbon tetrachloride	ND		50	48.2	96	44.8	90	7	50-161/18
108-90-7	Chlorobenzene	ND		50	49.6	99	48.6	97	2	65-128/12
75-00-3	Chloroethane	ND		50	46.8	94	43.4	87	8	41-151/18
67-66-3	Chloroform	ND		50	48.5	97	47.3	95	3	66-132/14
74-87-3	Chloromethane	ND		50	44.4	89	40.7	81	9	35-149/22
110-82-7	Cyclohexane	ND		50	48.7	97	44.9	90	8	29-158/18
124-48-1	Dibromochloromethane	ND		50	52.7	105	53.0	106	1	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	53.1	106	52.1	104	2	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	50.8	102	50.3	101	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	50.2	100	49.9	100	1	63-126/13
75-71-8	Dichlorodifluoromethane	ND		50	44.3	89	41.0	82	8	24-170/24
75-34-3	1,1-Dichloroethane	ND		50	49.5	99	48.3	97	2	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	50.6	101	50.0	100	1	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	46.5	93	42.7	85	9	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	45.7	91	44.6	89	2	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	45.7	91	44.1	88	4	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	52.9	106	51.7	103	2	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	53.1	106	52.1	104	2	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	53.2	106	52.8	106	1	68-134/13
100-41-4	Ethylbenzene	ND		50	46.6	93	45.4	91	3	37-143/13
76-13-1	Freon 113	ND		50	46.8	94	43.6	87	7	33-159/19
591-78-6	2-Hexanone	ND		50	61.9	124	61.4	123	1	53-145/17
98-82-8	Isopropylbenzene	ND		50	49.0	98	47.0	94	4	48-141/15
79-20-9	Methyl Acetate	ND		50	57.4	115	57.1	114	1	46-147/18
108-87-2	Methylcyclohexane	ND		50	48.8	98	44.8	90	9	36-156/18
1634-04-4	Methyl Tert Butyl Ether	ND		50	54.2	108	53.0	106	2	53-139/14
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	62.1	124	61.0	122	2	57-141/14
75-09-2	Methylene chloride	ND		50	50.5	101	48.7	97	4	59-129/12

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA68506-4MS	2C79684.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4MSD	2C79685.D	1	02/28/11	DR	n/a	n/a	V2C3637
JA68506-4	2C79679.D	1	02/28/11	DR	n/a	n/a	V2C3637

The QC reported here applies to the following samples: **Method:** SW846 8260B

JA68506-3, JA68506-4, JA68506-6, JA68506-7

CAS No.	Compound	JA68506-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-42-5	Styrene	ND		50	51.5	103	50.7	101	2	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	54.8	110	54.9	110	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	48.0	96	46.5	93	3	48-145/15
108-88-3	Toluene	ND		50	50.2	100	48.8	98	3	44-141/14
87-61-6	1,2,3-Trichlorobenzene	ND		50	59.9	120	60.5	121	1	54-137/14
120-82-1	1,2,4-Trichlorobenzene	ND		50	60.9	122	61.2	122	0	59-135/13
71-55-6	1,1,1-Trichloroethane	ND		50	49.1	98	45.6	91	7	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	53.8	108	53.6	107	0	70-127/12
79-01-6	Trichloroethene	ND		50	48.8	98	46.9	94	4	53-141/15
75-69-4	Trichlorofluoromethane	ND		50	45.0	90	41.7	83	8	35-169/23
75-01-4	Vinyl chloride	ND		50	46.7	93	41.9	84	11	34-151/20
	m,p-Xylene	ND		100	96.8	97	93.3	93	4	32-146/13
95-47-6	o-Xylene	ND		50	49.9	100	48.1	96	4	46-141/12
1330-20-7	Xylene (total)	ND		150	147	98	141	94	4	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-4	Limits
1868-53-7	Dibromofluoromethane	108%	107%	104%	76-120%
17060-07-0	1,2-Dichloroethane-D4	105%	105%	103%	64-135%
2037-26-5	Toluene-D8	114%	113%	112%	76-117%
460-00-4	4-Bromofluorobenzene	109%	110%	108%	72-122%

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2B3558-BFB	**Injection Date:**	01/31/11
Lab File ID:	2B79401.D	**Injection Time:**	12:17
Instrument ID:	GCMS2B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16526	18.6		Pass
75	30.0 - 60.0% of mass 95	43672	49.1		Pass
95	Base peak, 100% relative abundance	88986	100.0		Pass
96	5.0 - 9.0% of mass 95	5941	6.68		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	89714	100.8		Pass
175	5.0 - 9.0% of mass 174	7137	8.02	(7.96) [a]	Pass
176	95.0 - 101.0% of mass 174	88274	99.2	(98.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5773	6.49	(6.54) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B3558-IC3558	2B79402.D	01/31/11	12:52	00:35	Initial cal 5
V2B3558-IC3558	2B79403.D	01/31/11	13:25	01:08	Initial cal 0.5
V2B3558-IC3558	2B79404.D	01/31/11	13:56	01:39	Initial cal 1
V2B3558-IC3558	2B79405.D	01/31/11	14:27	02:10	Initial cal 2
V2B3558-IC3558	2B79406.D	01/31/11	14:58	02:41	Initial cal 10
V2B3558-IC3558	2B79407.D	01/31/11	15:28	03:11	Initial cal 20
V2B3558-ICC3558	2B79408.D	01/31/11	15:59	03:42	Initial cal 50
V2B3558-IC3558	2B79409.D	01/31/11	16:45	04:28	Initial cal 100
V2B3558-IC3558	2B79410.D	01/31/11	17:16	04:59	Initial cal 200
V2B3558-ICV3558	2B79413.D	01/31/11	18:49	06:32	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2B3591-BFB	**Injection Date:**	02/23/11
Lab File ID:	2B80124.D	**Injection Time:**	09:28
Instrument ID:	GCMS2B		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12228	19.7		Pass
75	30.0 - 60.0% of mass 95	31626	50.8		Pass
95	Base peak, 100% relative abundance	62216	100.0		Pass
96	5.0 - 9.0% of mass 95	4134	6.64		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 150.0% of mass 95	67621	108.7		Pass
175	5.0 - 9.0% of mass 174	5489	8.82	(8.12) [a]	Pass
176	95.0 - 101.0% of mass 174	65720	105.6	(97.2) [a]	Pass
177	5.0 - 9.0% of mass 176	4182	6.72	(6.36) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2B3591-CC3558	2B80125.D	02/23/11	10:02	00:34	Continuing cal 20
V2B3591-MB	2B80126.D	02/23/11	10:45	01:17	Method Blank
V2B3591-BS	2B80127.D	02/23/11	11:25	01:57	Blank Spike
JA68506-1	2B80129.D	02/23/11	12:40	03:12	CG
JA68506-2	2B80130.D	02/23/11	13:11	03:43	CD
JA68307-4	2B80131.D	02/23/11	13:42	04:14	(used for QC only; not part of job JA68506)
ZZZZZZ	2B80132.D	02/23/11	14:14	04:46	(unrelated sample)
ZZZZZZ	2B80133.D	02/23/11	14:45	05:17	(unrelated sample)
ZZZZZZ	2B80134.D	02/23/11	15:16	05:48	(unrelated sample)
ZZZZZZ	2B80135.D	02/23/11	15:52	06:24	(unrelated sample)
JA68307-4MS	2B80136.D	02/23/11	16:24	06:56	Matrix Spike
JA68307-4MSD	2B80137.D	02/23/11	16:55	07:27	Matrix Spike Duplicate
ZZZZZZ	2B80139.D	02/23/11	17:57	08:29	(unrelated sample)
ZZZZZZ	2B80140.D	02/23/11	18:29	09:01	(unrelated sample)
ZZZZZZ	2B80141.D	02/23/11	19:00	09:32	(unrelated sample)
ZZZZZZ	2B80142.D	02/23/11	19:31	10:03	(unrelated sample)
ZZZZZZ	2B80144.D	02/23/11	20:33	11:05	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3580-BFB	**Injection Date:**	01/20/11
Lab File ID:	2C78505.D	**Injection Time:**	12:19
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	12371	16.0		Pass
75	30.0 - 60.0% of mass 95	34096	44.2		Pass
95	Base peak, 100% relative abundance	77173	100.0		Pass
96	5.0 - 9.0% of mass 95	5123	6.64		Pass
173	Less than 2.0% of mass 174	174	0.23	(0.26) [a]	Pass
174	50.0 - 120.0% of mass 95	68221	88.4		Pass
175	5.0 - 9.0% of mass 174	4956	6.42	(7.26) [a]	Pass
176	95.0 - 101.0% of mass 174	66754	86.5	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	4457	5.78	(6.68) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3580-IC3580	2C78506.D	01/20/11	13:09	00:50	Initial cal 0.5
V2C3580-IC3580	2C78507.D	01/20/11	13:39	01:20	Initial cal 1
V2C3580-IC3580	2C78508.D	01/20/11	14:10	01:51	Initial cal 2
V2C3580-IC3580	2C78509.D	01/20/11	14:41	02:22	Initial cal 5
V2C3580-IC3580	2C78510.D	01/20/11	15:13	02:54	Initial cal 10
V2C3580-IC3580	2C78511.D	01/20/11	15:44	03:25	Initial cal 20
V2C3580-ICC3580	2C78512.D	01/20/11	16:14	03:55	Initial cal 50
V2C3580-IC3580	2C78514.D	01/20/11	17:15	04:56	Initial cal 100
V2C3580-IC3580	2C78515.D	01/20/11	17:46	05:27	Initial cal 200
V2C3580-ICV3580	2C78517A.D	01/20/11	19:18	06:59	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3633-BFB	**Injection Date:**	02/24/11
Lab File ID:	2C79577.D	**Injection Time:**	10:25
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	11165	16.6		Pass
75	30.0 - 60.0% of mass 95	29424	43.6		Pass
95	Base peak, 100% relative abundance	67411	100.0		Pass
96	5.0 - 9.0% of mass 95	4432	6.57		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	61280	90.9		Pass
175	5.0 - 9.0% of mass 174	4735	7.02	(7.73) [a]	Pass
176	95.0 - 101.0% of mass 174	60125	89.2	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	4030	5.98	(6.70) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3633-CC3580	2C79578.D	02/24/11	11:04	00:39	Continuing cal 20
V2C3633-MB	2C79580.D	02/24/11	12:17	01:52	Method Blank
V2C3633-BS	2C79581.D	02/24/11	12:48	02:23	Blank Spike
ZZZZZZ	2C79583.D	02/24/11	13:53	03:28	(unrelated sample)
JA68481-8	2C79584.D	02/24/11	14:24	03:59	(used for QC only; not part of job JA68506)
ZZZZZZ	2C79585.D	02/24/11	14:55	04:30	(unrelated sample)
ZZZZZZ	2C79586.D	02/24/11	15:25	05:00	(unrelated sample)
ZZZZZZ	2C79587.D	02/24/11	15:56	05:31	(unrelated sample)
ZZZZZZ	2C79588.D	02/24/11	16:27	06:02	(unrelated sample)
JA68481-8MS	2C79589.D	02/24/11	16:57	06:32	Matrix Spike
JA68481-8MSD	2C79590.D	02/24/11	17:28	07:03	Matrix Spike Duplicate
ZZZZZZ	2C79592.D	02/24/11	18:30	08:05	(unrelated sample)
ZZZZZZ	2C79593.D	02/24/11	19:01	08:36	(unrelated sample)
JA68506-5	2C79594.D	02/24/11	19:32	09:07	FB-02172011
JA68506-8	2C79595.D	02/24/11	20:02	09:37	FB-02182011
JA68506-9	2C79596.D	02/24/11	20:33	10:08	TRIP BLANK
ZZZZZZ	2C79597.D	02/24/11	21:04	10:39	(unrelated sample)
ZZZZZZ	2C79598.D	02/24/11	21:34	11:09	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	V2C3637-BFB	**Injection Date:**	02/28/11
Lab File ID:	2C79671.D	**Injection Time:**	08:23
Instrument ID:	GCMS2C		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	27101	15.9		Pass
75	30.0 - 60.0% of mass 95	74643	43.9		Pass
95	Base peak, 100% relative abundance	170155	100.0		Pass
96	5.0 - 9.0% of mass 95	11174	6.57		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	164928	96.9		Pass
175	5.0 - 9.0% of mass 174	12173	7.15	(7.38) [a]	Pass
176	95.0 - 101.0% of mass 174	161067	94.7	(97.7) [a]	Pass
177	5.0 - 9.0% of mass 176	10376	6.10	(6.44) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2C3637-CC3580	2C79672.D	02/28/11	09:02	00:39	Continuing cal 20
V2C3637-MB	2C79674.D	02/28/11	10:20	01:57	Method Blank
V2C3637-BS	2C79675.D	02/28/11	10:51	02:28	Blank Spike
ZZZZZZ	2C79677.D	02/28/11	12:07	03:44	(unrelated sample)
ZZZZZZ	2C79678.D	02/28/11	12:38	04:15	(unrelated sample)
JA68506-4	2C79679.D	02/28/11	13:09	04:46	CE
JA68506-7	2C79680.D	02/28/11	13:40	05:17	CF
JA68506-6	2C79681.D	02/28/11	14:11	05:48	CC
JA68506-3	2C79682.D	02/28/11	14:42	06:19	CD-DUP
ZZZZZZ	2C79683.D	02/28/11	15:13	06:50	(unrelated sample)
JA68506-4MS	2C79684.D	02/28/11	15:44	07:21	Matrix Spike
JA68506-4MSD	2C79685.D	02/28/11	16:14	07:51	Matrix Spike Duplicate
ZZZZZZ	2C79687.D	02/28/11	17:16	08:53	(unrelated sample)
ZZZZZZ	2C79688.D	02/28/11	17:47	09:24	(unrelated sample)
ZZZZZZ	2C79689.D	02/28/11	18:18	09:55	(unrelated sample)
ZZZZZZ	2C79690.D	02/28/11	18:49	10:26	(unrelated sample)
ZZZZZZ	2C79691.D	02/28/11	19:19	10:56	(unrelated sample)
ZZZZZZ	2C79692.D	02/28/11	19:50	11:27	(unrelated sample)

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2B3591-CC3558	**Injection Date:**	02/23/11
Lab File ID:	2B80125.D	**Injection Time:**	10:02
Instrument ID:	GCMS2B	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	70223	8.62	180573	11.09	216789	11.99	191063	14.95	118437	17.09
Upper Limit [a]	140446	9.12	361146	11.59	433578	12.49	382126	15.45	236874	17.59
Lower Limit [b]	35112	8.12	90287	10.59	108395	11.49	95532	14.45	59219	16.59

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2B3591-MB	74874	8.62	189438	11.09	220750	11.99	192951	14.95	120540	17.10
V2B3591-BS	76146	8.62	184412	11.09	223978	11.99	199429	14.94	119180	17.10
JA68506-1	70823	8.62	184652	11.09	220753	11.99	192480	14.95	118628	17.10
JA68506-2	72038	8.62	179572	11.09	212434	11.99	189704	14.95	119957	17.10
JA68307-4	70215	8.62	187115	11.09	224122	11.99	199562	14.95	124311	17.10
ZZZZZZ	71798	8.62	185783	11.09	217610	11.99	194943	14.95	121736	17.10
ZZZZZZ	75379	8.61	186589	11.09	220960	11.99	196759	14.95	119499	17.10
ZZZZZZ	73332	8.61	189094	11.09	222186	11.99	196644	14.95	123572	17.10
ZZZZZZ	58585	8.61	184816	11.09	216686	11.99	193504	14.95	121949	17.10
JA68307-4MS	73951	8.62	184953	11.09	221833	11.99	198164	14.95	120018	17.10
JA68307-4MSD	77914	8.62	188246	11.09	226649	11.99	203575	14.95	125036	17.10
ZZZZZZ	74932	8.61	189977	11.09	225078	11.99	201210	14.95	128160	17.10
ZZZZZZ	71849	8.61	181528	11.09	214233	11.99	191333	14.95	120328	17.09
ZZZZZZ	71591	8.61	187587	11.09	215582	11.99	193054	14.95	122053	17.10
ZZZZZZ	68053	8.61	180822	11.09	214400	11.99	191294	14.95	120544	17.10
ZZZZZZ	70656	8.62	179508	11.09	211999	11.99	190689	14.95	118344	17.10

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2C3633-CC3580	**Injection Date:**	02/24/11
Lab File ID:	2C79578.D	**Injection Time:**	11:04
Instrument ID:	GCMS2C	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	54593	8.42	253281	10.85	331130	11.78	270067	14.75	136903	16.91
Upper Limit [a]	109186	8.92	506562	11.35	662260	12.28	540134	15.25	273806	17.41
Lower Limit [b]	27297	7.92	126641	10.35	165565	11.28	135034	14.25	68452	16.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C3633-MB	54499	8.43	252883	10.86	336423	11.78	277650	14.75	145044	16.91
V2C3633-BS	59002	8.42	249823	10.86	334053	11.78	277181	14.75	143561	16.91
ZZZZZZ	59195	8.43	258650	10.86	345542	11.78	285766	14.75	149271	16.91
JA68481-8	63586	8.42	257584	10.86	343730	11.78	284989	14.75	148640	16.91
ZZZZZZ	62490	8.42	252028	10.86	338066	11.78	279032	14.75	146864	16.91
ZZZZZZ	61649	8.43	257147	10.86	346924	11.78	284776	14.76	147527	16.91
ZZZZZZ	59161	8.42	254826	10.86	342790	11.78	281690	14.76	146507	16.91
ZZZZZZ	62483	8.42	253699	10.86	336043	11.78	278861	14.76	146178	16.91
JA68481-8MS	60539	8.42	257256	10.86	340025	11.78	278952	14.75	146754	16.91
JA68481-8MSD	58018	8.42	255957	10.86	343204	11.78	282527	14.76	144914	16.91
ZZZZZZ	63785	8.43	260526	10.86	345276	11.78	289277	14.75	148077	16.91
ZZZZZZ	65814	8.42	259722	10.86	347441	11.78	285818	14.75	147558	16.91
JA68506-5	62127	8.43	260684	10.86	346401	11.78	289461	14.75	149290	16.91
JA68506-8	66718	8.42	256258	10.86	342933	11.78	285353	14.75	150641	16.91
JA68506-9	64747	8.42	258452	10.86	345628	11.78	285608	14.75	149907	16.91
ZZZZZZ	67595	8.43	259355	10.86	348629	11.78	290566	14.75	153342	16.91
ZZZZZZ	65079	8.43	254604	10.86	342544	11.78	285990	14.75	150625	16.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	V2C3637-CC3580	**Injection Date:**	02/28/11
Lab File ID:	2C79672.D	**Injection Time:**	09:02
Instrument ID:	GCMS2C	**Method:**	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	92566	8.43	258059	10.85	325570	11.78	270921	14.75	144740	16.91
Upper Limit [a]	185132	8.93	516118	11.35	651140	12.28	541842	15.25	289480	17.41
Lower Limit [b]	46283	7.93	129030	10.35	162785	11.28	135461	14.25	72370	16.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2C3637-MB	80430	8.43	256064	10.86	326942	11.78	274721	14.75	148062	16.91
V2C3637-BS	77223	8.42	242081	10.86	311886	11.78	264757	14.75	142370	16.91
ZZZZZZ	74829	8.43	244123	10.86	315069	11.78	267325	14.75	147795	16.91
ZZZZZZ	79291	8.43	244279	10.86	318091	11.78	270846	14.75	148959	16.91
JA68506-4	77918	8.43	244930	10.86	319287	11.78	272317	14.75	148467	16.91
JA68506-7	79582	8.43	245737	10.86	321704	11.78	273091	14.75	148527	16.91
JA68506-6	80033	8.43	244107	10.86	321964	11.78	273537	14.75	150266	16.91
JA68506-3	91655	8.43	240241	10.86	315654	11.78	271381	14.75	151632	16.91
ZZZZZZ	79320	8.43	241661	10.86	315060	11.78	270781	14.75	148531	16.91
JA68506-4MS	83021	8.43	235202	10.86	306136	11.78	267035	14.75	142903	16.91
JA68506-4MSD	80936	8.43	239797	10.86	312580	11.78	268288	14.75	142118	16.91
ZZZZZZ	78173	8.43	242274	10.86	315028	11.78	268537	14.75	149397	16.91
ZZZZZZ	83429	8.43	241531	10.86	316908	11.78	272101	14.75	150537	16.92
ZZZZZZ	83517	8.43	241931	10.86	317443	11.78	274096	14.75	151384	16.91
ZZZZZZ	88549	8.42	240995	10.86	316453	11.78	271560	14.75	148588	16.91
ZZZZZZ	88156	8.43	243161	10.86	316669	11.78	273668	14.75	150814	16.91
ZZZZZZ	88000	8.42	239836	10.86	305076	11.78	263051	14.75	151543	16.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8260B **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JA68506-1	2B80129.D	98.0	102.0	99.0	100.0
JA68506-2	2B80130.D	101.0	100.0	101.0	98.0
JA68506-3	2C79682.D	106.0	106.0	112.0	107.0
JA68506-4	2C79679.D	104.0	103.0	112.0	108.0
JA68506-5	2C79594.D	100.0	94.0	107.0	107.0
JA68506-6	2C79681.D	106.0	106.0	112.0	108.0
JA68506-7	2C79680.D	105.0	105.0	112.0	108.0
JA68506-8	2C79595.D	101.0	96.0	107.0	107.0
JA68506-9	2C79596.D	101.0	94.0	107.0	107.0
JA68307-4MS	2B80136.D	99.0	99.0	102.0	99.0
JA68307-4MSD	2B80137.D	101.0	101.0	102.0	98.0
JA68481-8MS	2C79589.D	102.0	94.0	107.0	106.0
JA68481-8MSD	2C79590.D	101.0	95.0	107.0	108.0
JA68506-4MS	2C79684.D	108.0	105.0	114.0	109.0
JA68506-4MSD	2C79685.D	107.0	105.0	113.0	110.0
V2B3591-BS	2B80127.D	101.0	102.0	102.0	100.0
V2B3591-MB	2B80126.D	99.0	99.0	100.0	98.0
V2C3633-BS	2C79581.D	101.0	92.0	107.0	107.0
V2C3633-MB	2C79580.D	99.0	89.0	106.0	108.0
V2C3637-BS	2C79675.D	104.0	103.0	113.0	108.0
V2C3637-MB	2C79674.D	102.0	101.0	112.0	109.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

Response Factor Report MS2B

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 15:49:20 2011
Response via : Initial Calibration

Calibration Files
1 =2B79404.D 2 =2B79405.D 100 =2B79409.D 50 =2B79408.D
20 =2B79407.D 200 =2B79410.D 5 =2B79402.D 10 =2B79406.D
0.5 =2B79403.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9	ISTD										
2) tertiary butyl alcohol			1.067	0.991	1.204	0.985	0.817	0.988		1.009	12.51
3) 1,4-dioxane			0.065	0.065	0.066	0.065	0.048	0.052		0.060	13.40
4) I pentafluorobenzene	ISTD										
5) chlorodifluoromethane	0.334	0.354	0.390	0.378	0.392	0.375	0.379	0.393		0.374	5.52
6) dichlorodifluoromethane	0.412	0.487	0.599	0.570	0.585	0.550	0.529	0.595		0.541	11.88
7) chlorotrifluoroethene										0.000#	-1.00
8) chloromethane	0.431	0.462	0.524	0.486	0.480	0.509	0.476	0.495	0.439	0.478	6.41
9) vinyl chloride	0.435	0.455	0.514	0.484	0.472	0.494	0.458	0.486	0.502	0.478	5.29
10) bromomethane	0.282	0.297	0.332	0.322	0.329	0.312	0.316	0.334	0.269	0.310	7.43
11) chloroethane	0.172	0.242	0.255	0.252	0.259	0.240	0.246	0.263		0.241	12.08
12) vinyl bromide										0.000#	-1.00
13) trichlorofluoromethane	0.468	0.582	0.648	0.623	0.639	0.611	0.588	0.658		0.602	10.09
14) ethyl ether			0.194	0.186	0.192	0.195	0.158	0.174		0.183	8.00
15) acrolein			0.064	0.062	0.061	0.066	0.054	0.057		0.061	7.08
16) 1,2-dichloro-1,2,2-trifluoroet										0.000#	-1.00
17) 1,1-dichloroethene	0.258	0.316	0.325	0.323	0.334	0.319	0.289	0.334		0.312	8.31
18) acetone			0.105	0.102	0.092	0.105	0.059	0.066		0.088	23.27
----- Linear regression ----- Coefficient = 0.9999											
Response Ratio = -0.00536 + 0.10623 *A											
19) allyl chloride	0.174	0.206	0.202	0.205	0.207	0.191	0.201			0.198	6.09
20) acetonitrile			0.016	0.015	0.014	0.015	0.012	0.012		0.014	10.38
21) iodomethane	0.536	0.641	0.682	0.669	0.680	0.668	0.629	0.687		0.649	7.70

SII-SSA-0014-006327

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

22)	iso-butyl alcohol										0.003#	12.00
		0.003	0.003	0.004	0.003	0.003	0.004					
23)	carbon disulfide											
	0.993	1.170	1.179	1.172	1.202	1.168	1.135	1.222	0.986		1.136	7.61
24)	methylene chloride											
	0.320	0.344	0.370	0.360	0.374	0.368	0.351	0.374	0.298		0.351	7.56
25)	methyl acetate											
		0.058	0.053	0.050	0.059	0.021	0.034				0.046	33.47
	----- Linear regression ----- Coefficient = 0.9998											
	Response Ratio = -0.00503 + 0.06043 *A											
26)	methyl tert butyl ether											
	0.975	1.059	1.134	1.131	1.156	1.091	1.091	1.144	0.908		1.077	7.81
27)	trans-1,2-dichloroethene											
	0.282	0.331	0.335	0.335	0.357	0.323	0.316	0.357			0.330	7.37
28)	di-isopropyl ether											
	0.895	0.961	1.066	1.044	1.057	1.007	1.005	1.054	0.791		0.987	9.29
29)	2-butanone											
		0.042	0.038	0.036	0.044		0.028				0.038	17.08
	----- Linear regression ----- Coefficient = 0.9993											
	Response Ratio = -0.00505 + 0.04537 *A											
30)	1,1-dichloroethane											
	0.500	0.593	0.594	0.591	0.611	0.577	0.571	0.614	0.471		0.569	8.78
31)	chloroprene											
	0.373	0.418	0.479	0.475	0.485	0.456	0.435	0.489			0.451	8.94
32)	acrylonitrile											
		0.149	0.143	0.146	0.150	0.127	0.131				0.141	6.79
33)	vinyl acetate											
		0.057	0.051	0.048	0.054		0.039				0.050	13.45
34)	ethyl tert-butyl ether											
	1.019	0.982	1.151	1.123	1.145	1.102	1.050	1.113	0.855		1.060	9.09
35)	ethyl acetate											
		0.044	0.046	0.045	0.044	0.026	0.032				0.039	21.12
	----- Linear regression ----- Coefficient = 0.9996											
	Response Ratio = -0.00111 + 0.04474 *A											
36)	2,2-dichloropropane											
	0.462	0.563	0.542	0.547	0.581	0.505	0.531	0.570	0.429		0.526	9.76
37)	cis-1,2-dichloroethene											
	0.308	0.375	0.380	0.377	0.394	0.368	0.375	0.398	0.325		0.367	8.25
38)	propionitrile											
		0.053	0.052	0.052	0.053	0.047	0.047				0.051	5.69
39)	bromochloromethane											
	0.151	0.179	0.200	0.200	0.206	0.195	0.190	0.203			0.190	9.49
40)	tetrahydrofuran											
		0.098	0.093	0.097	0.101	0.086	0.092				0.095	5.90
41)	chloroform											
	0.545	0.621	0.605	0.610	0.631	0.586	0.595	0.626	0.492		0.590	7.66
42)	t-butyl formate											
		0.334	0.319	0.325	0.326	0.288	0.325				0.319	5.13
43)	dibromofluoromethane (s)											
		0.429	0.330	0.326	0.338	0.327	0.374	0.363			0.355	10.57
44)	1,2-dichloroethane-d4 (s)											
	0.500	0.487	0.381	0.375	0.397	0.380	0.463	0.417			0.425	11.98
45)	freon 113											
		0.253	0.294	0.294	0.304	0.273	0.263	0.309			0.284	7.51
46)	methacrylonitrile											
		0.215	0.209	0.208	0.222	0.182	0.199				0.206	6.73
47)	1,1,1-trichloroethane											

SII-SSA-0014-006328

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

		0.457	0.541	0.562	0.563	0.577	0.542	0.537	0.582	0.360	0.525	13.69
48)	Cyclohexane											
		0.517	0.512	0.508	0.535	0.486	0.483	0.542			0.512	4.36
49)	tert amyl alcohol											
											0.000#	-1.00
50)	I 1,4-difluorobenzene	----------ISTD----------										
51)	tert amyl ethyl ether											
											0.000#	-1.00
52)	Di-isobutylene											
											0.000#	-1.00
53)	epichlorohydrin											
		0.026	0.025	0.027	0.025	0.022	0.023				0.025	7.11
54)	n-butyl alcohol											
		0.006	0.006	0.006	0.006	0.005	0.005				0.006#	9.23
55)	carbon tetrachloride											
		0.355	0.443	0.400	0.410	0.440	0.369	0.406	0.451		0.409	8.47
56)	1,1-dichloropropene											
		0.289	0.360	0.352	0.359	0.377	0.329	0.355	0.391		0.351	8.85
57)	hexane											
		0.215	0.241	0.235	0.251	0.221	0.227	0.245			0.234	5.59
58)	benzene											
		0.929	1.065	1.022	1.043	1.098	0.963	1.044	1.110	0.932	1.023	6.61
59)	2,2,4-trimethylpentane											
		0.818	0.826	0.858	0.872	0.920	0.778	0.838	0.908		0.852	5.55
60)	tert-amyl methyl ether											
		0.792	0.808	0.823	0.823	0.879	0.756	0.830	0.884	0.777	0.819	5.22
61)	heptane											
		0.147	0.144	0.158	0.134	0.137	0.157				0.146	6.73
62)	isopropyl acetate											
		0.356	0.414	0.486	0.461	0.501	0.463	0.454	0.465		0.450	10.14
63)	1,2-dichloroethane											
		0.308	0.364	0.373	0.379	0.400	0.355	0.372	0.398	0.268	0.358	12.02
64)	trichloroethene											
		0.228	0.277	0.278	0.276	0.287	0.266	0.262	0.290	0.217	0.265	9.63
65)	2-nitropropane											
		0.010	0.009	0.009	0.010		0.004				0.009#	32.49
	----- Linear regression ----- Coefficient = 0.9993											
	Response Ratio = -0.00086 + 0.01049 *A											
66)	2-chloroethyl vinyl ether											
		0.098	0.100	0.126	0.119	0.129	0.120	0.121	0.121		0.117	9.91
67)	methyl methacrylate											
		0.208	0.252	0.244	0.256	0.239	0.226	0.241			0.238	6.90
68)	1,2-dichloropropane											
		0.231	0.251	0.255	0.252	0.260	0.240	0.251	0.255	0.175	0.241	10.90
69)	dibromomethane											
		0.147	0.165	0.176	0.177	0.185	0.169	0.170	0.176		0.171	6.66
70)	methylcyclohexane											
		0.378	0.391	0.392	0.394	0.413	0.349	0.377	0.416		0.389	5.51
71)	bromodichloromethane											
		0.315	0.341	0.370	0.367	0.379	0.356	0.349	0.364	0.268	0.345	10.05
72)	cis-1,3-dichloropropene											
		0.326	0.365	0.415	0.410	0.417	0.410	0.375	0.400	0.314	0.381	10.28
73)	toluene-d8 (s)											
		1.236	0.886	0.893	0.923	0.845	1.003	0.996			0.969	13.54
74)	4-methyl-2-pentanone											
		0.105	0.102	0.108	0.104	0.094	0.099				0.102	4.98
75)	toluene											
		0.532	0.608	0.604	0.605	0.634	0.575	0.582	0.635	0.497	0.586	7.84

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

76)	3-methyl-1-butanol											
		0.007	0.010	0.010	0.010	0.010	0.009	0.009			0.009#	12.46
77)	trans-1,3-dichloropropene											
		0.285	0.343	0.374	0.367	0.372	0.365	0.343	0.360		0.351	8.36
78)	ethyl methacrylate											
		0.230	0.306	0.299	0.309	0.298	0.266	0.293			0.286	9.92
79)	1,1,2-trichloroethane											
		0.148	0.184	0.196	0.194	0.198	0.191	0.186	0.196		0.187	8.85
80)	2-hexanone											
			0.084	0.080	0.083	0.085	0.072	0.077			0.080	6.41
81)	I chlorobenzene-d5	----------ISTD----------										
82)	butyl ether											
											0.000#	-1.00
83)	tetrachloroethene											
		0.245	0.301	0.285	0.295	0.311	0.263	0.283	0.320	0.219	0.280	11.67
84)	1,3-dichloropropane											
		0.349	0.402	0.412	0.409	0.421	0.393	0.392	0.414		0.399	5.64
85)	butyl acetate											
			0.163	0.157	0.170	0.159	0.153	0.165			0.161	3.89
86)	3,3-dimethyl-1-butanol											
		0.020	0.025	0.025	0.026	0.026	0.024	0.023			0.024	9.41
87)	dibromochloromethane											
		0.270	0.342	0.359	0.355	0.365	0.342	0.339	0.369	0.258	0.333	12.25
88)	1,2-dibromoethane											
		0.242	0.269	0.295	0.290	0.304	0.285	0.277	0.297		0.282	7.03
89)	chlorobenzene											
		0.726	0.825	0.790	0.794	0.825	0.749	0.758	0.825	0.702	0.777	5.86
90)	1,1,1,2-tetrachloroethane											
		0.293	0.345	0.337	0.342	0.366	0.308	0.327	0.367	0.317	0.334	7.51
91)	ethylbenzene											
		1.195	1.419	1.296	1.342	1.435	1.198	1.352	1.426	1.179	1.316	7.92
92)	m,p-xylene											
		0.432	0.524	0.510	0.524	0.562	0.476	0.504	0.559	0.427	0.502	9.69
93)	o-xylene											
		0.475	0.532	0.532	0.548	0.573	0.491	0.531	0.574	0.431	0.521	9.03
94)	styrene											
		0.806	0.874	0.886	0.924	0.818	0.806	0.915			0.861	5.91
95)	bromoform											
		0.231	0.252	0.301	0.300	0.307	0.289	0.284	0.299		0.283	9.58
96)	I 1,4-dichlorobenzene-d	----------ISTD----------										
97)	isopropylbenzene											
		1.993	2.431	2.547	2.542	2.592	2.382	2.310	2.575	1.918	2.366	10.63
98)	4-bromofluorobenzene (s)											
			0.670	0.660	0.674	0.650	0.776	0.753			0.697	7.62
99)	cyclohexanone											
			0.006	0.006	0.006	0.006	0.005	0.005			0.006#	7.35
100)	bromobenzene											
		0.565	0.680	0.702	0.693	0.708	0.671	0.663	0.716	0.596	0.666	7.83
101)	1,1,2,2-tetrachloroethane											
		0.597	0.652	0.707	0.692	0.717	0.674	0.682	0.700	0.541	0.662	8.75
102)	trans-1,4-dichloro-2-butene											
			0.186	0.172	0.175	0.181	0.152	0.159			0.171	7.67
103)	1,2,3-trichloropropane											
		0.164	0.182	0.179	0.192	0.172	0.175	0.179			0.178	4.92
104)	n-propylbenzene											
		2.266	2.761	2.793	2.818	2.932	2.604	2.620	2.927	2.231	2.661	9.78
105)	2-chlorotoluene											
		0.517	0.584	0.604	0.596	0.618	0.576	0.581	0.616	0.426	0.569	10.78

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICC3558
Lab FileID: 2B79408.D

106)	4-chlorotoluene										
	1.454	1.720	1.723	1.689	1.773	1.647	1.637	1.740	1.568	1.661	5.99
107)	1,3,5-trimethylbenzene										
	1.731	2.045	2.125	2.125	2.214	1.970	1.952	2.162	1.622	1.994	10.08
108)	tert-butylbenzene										
	1.489	1.897	1.986	1.962	1.967	1.918	1.703	1.928	1.447	1.811	11.69
109)	pentachloroethane										
	0.372	0.421	0.499	0.481	0.489	0.471	0.451	0.481		0.458	9.28
110)	1,2,4-trimethylbenzene										
	1.750	2.064	2.173	2.171	2.253	2.013	2.012	2.209	1.785	2.048	8.80
111)	sec-butylbenzene										
	2.286	2.740	2.882	2.849	2.944	2.680	2.567	2.873	2.019	2.649	11.76
112)	1,3-dichlorobenzene										
	1.181	1.375	1.341	1.324	1.390	1.275	1.301	1.398	1.246	1.315	5.48
113)	p-isopropyltoluene										
	1.982	2.304	2.463	2.444	2.532	2.282	2.217	2.466	1.835	2.281	10.40
114)	1,4-dichlorobenzene										
	1.294	1.438	1.396	1.360	1.421	1.339	1.341	1.410	1.282	1.364	4.08
115)	1,2-dichlorobenzene										
	1.213	1.359	1.415	1.392	1.440	1.328	1.325	1.423	1.305	1.356	5.29
116)	n-butylbenzene										
	0.969	1.116	1.268	1.244	1.280	1.172	1.106	1.233		1.173	9.03
117)	1,2-dibromo-3-chloropropane										
	0.124	0.163	0.158	0.161	0.152	0.138	0.147			0.149	9.44
118)	1,3,5-trichlorobenzene										
	1.065	1.273	1.348	1.363	1.393	1.158	1.225	1.366	1.220	1.268	8.73
119)	1,2,4-trichlorobenzene										
	0.965	1.105	1.215	1.227	1.252	1.041	1.078	1.203	1.042	1.125	9.05
120)	hexachlorobutadiene										
	0.565	0.668	0.665	0.694	0.732	0.573	0.637	0.705	0.594	0.648	9.20
121)	naphthalene										
	1.997	2.170	2.528	2.540	2.614	2.217	2.294	2.427	2.308	2.344	8.57
122)	1,2,3-trichlorobenzene										
	0.878	0.969	1.081	1.075	1.103	0.926	0.981	1.065	0.933	1.001	8.15
123)	hexachloroethane										
	0.452	0.565	0.554	0.538	0.527	0.458	0.523			0.517	8.64

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2B3558.M Tue Feb 01 16:16:00 2011 MS2B

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B79413.D Vial: 13
Acq On : 31 Jan 2011 6:49 pm Operator: DEZAREER
Sample : icv3558-50 Inst : MS2B
Misc : MS7574,V2B3558,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 15:49:20 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	99	0.00	8.62
2	M	tertiary butyl alcohol	1.009	1.033	-2.4	104	0.00	8.75
3	M	1,4-dioxane	0.060	0.066	-10.0	100	0.00	12.66
4	I	pentafluorobenzene	1.000	1.000	0.0	103	0.00	11.09
5	M	chlorodifluoromethane	0.374	0.313	16.3	85	0.00	4.65
6	M	dichlorodifluoromethane	0.541	0.455	15.9	82	0.01	4.65
7	m	chlorotrifluoroethene		----------NA----------				
8	M	chloromethane	0.478	0.474	0.8	101	0.00	5.05
9	M	vinyl chloride	0.478	0.477	0.2	102	0.00	5.36
10	M	bromomethane	0.310	0.325	-4.8	104	0.00	6.14
11	M	chloroethane	0.241	0.256	-6.2	105	0.00	6.36
12		vinyl bromide		----------NA----------				
13	M	trichlorofluoromethane	0.602	0.609	-1.2	101	0.00	6.95
14	M	ethyl ether	0.183	0.188	-2.7	105	0.00	7.43
15	M	acrolein	0.061	0.079	-29.5#	131	0.00	7.65
16		1,2-dichloro-1,2,2-triflu		----------NA----------				
17	M	1,1-dichloroethene	0.312	0.337	-8.0	108	0.00	7.90
		----------	True	Calc.	% Drift	----------		
18	M	acetone	50.000	51.470	-2.9	105	0.00	7.92
		----------	AvgRF	CCRF	% Dev	----------		
19	M	allyl chloride	0.198	0.211	-6.6	108	0.00	8.49
20	M	acetonitrile	0.014	0.015	-7.1	107	0.00	8.38
21	M	iodomethane	0.633	0.685	-8.2	106	0.00	8.19
22	M	iso-butyl alcohol	0.003	0.003#	0.0	104	0.00	11.38
23	M	carbon disulfide	1.136	1.241	-9.2	109	0.00	8.36
24	M	methylene chloride	0.351	0.368	-4.8	105	0.00	8.68
		----------	True	Calc.	% Drift	----------		
25	M	methyl acetate	50.000	48.936	2.1	105	0.00	8.47
		----------	AvgRF	CCRF	% Dev	----------		
26	M	methyl tert butyl ether	1.077	1.125	-4.4	103	0.00	9.10
27	M	trans-1,2-dichloroethene	0.330	0.301	8.8	93	0.00	9.12
28	M	di-isopropyl ether	0.987	1.108	-12.3	110	0.00	9.78
		----------	True	Calc.	% Drift	----------		
29	M	2-butanone	50.000	49.276	1.4	108	0.00	10.48
		----------	AvgRF	CCRF	% Dev	----------		

SII-SSA-0014-006332

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

30	M	1,1-dichloroethane	0.569	0.606	-6.5	106	0.00	9.73
31	M	chloroprene	0.451	0.493	-9.3	107	0.00	9.88
32	M	acrylonitrile	0.141	0.149	-5.7	108	0.00	9.01
33	M	vinyl acetate	0.050	0.060	-20.0	120	0.00	9.73
34	M	ethyl tert-butyl ether	1.060	1.157	-9.2	106	0.00	10.28
			True	Calc.	% Drift			
35	M	ethyl acetate	50.000	49.075	1.8	97	0.00	10.53
			AvgRF	CCRF	% Dev			
36	M	2,2-dichloropropane	0.526	0.542	-3.0	102	0.00	10.55
37	M	cis-1,2-dichloroethene	0.367	0.425	-15.8	116	0.00	10.52
38	M	propionitrile	0.051	0.054	-5.9	106	0.00	10.54
39	M	bromochloromethane	0.190	0.196	-3.2	101	0.00	10.84
40	M	tetrahydrofuran	0.095	0.095	0.0	106	0.00	10.90
41	M	chloroform	0.590	0.614	-4.1	104	0.00	10.90
42		t-butyl formate	0.319	0.352	-10.3	114	0.00	10.98
43	S	dibromofluoromethane (s)	0.355	0.327	7.9	104	0.00	11.10
44	S	1,2-dichloroethane-d4 (s)	0.425	0.364	14.4	100	0.00	11.53
45	M	freon 113	0.284	0.315	-10.9	111	0.00	7.90
46	M	methacrylonitrile	0.206	0.207	-0.5	102	0.00	10.76
47	M	1,1,1-trichloroethane	0.525	0.555	-5.7	102	0.00	11.20
48	M	Cyclohexane	0.512	0.544	-6.3	111	0.00	11.31
49		tert amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	11.99
51		tert amyl ethyl ether		----------NA----------				
52	M	Di-isobutylene		----------NA----------				
53	M	epichlorohydrin	0.025	0.025	0.0	104	0.00	13.15
54	M	n-butyl alcohol	0.006	0.006#	0.0	104	0.00	12.07
55	M	carbon tetrachloride	0.409	0.405	1.0	102	0.00	11.42
56	M	1,1-dichloropropene	0.351	0.359	-2.3	103	0.00	11.39
57	M	hexane	0.234	0.301	-28.6#	132	0.00	9.53
58	M	benzene	1.023	1.034	-1.1	102	0.00	11.64
59		2,2,4-trimethylpentane	0.852	0.936	-9.9	111	0.00	11.71
60	M	tert-amyl methyl ether	0.819	0.852	-4.0	107	0.00	11.70
61	M	heptane	0.146	0.174	-19.2	124	0.00	11.86
62	M	isopropyl acetate	0.450	0.462	-2.7	103	0.00	11.56
63	M	1,2-dichloroethane	0.358	0.364	-1.7	99	0.00	11.62
64	M	trichloroethene	0.265	0.273	-3.0	102	0.00	12.32
			True	Calc.	% Drift			
65	M	2-nitropropane	50.000	51.432	-2.9	108	0.00	13.35
			AvgRF	CCRF	% Dev			
66	M	2-chloroethyl vinyl ether	0.117	0.100	14.5	87	0.00	13.05
67	M	methyl methacrylate	0.238	0.252	-5.9	107	0.00	12.58
68	M	1,2-dichloropropane	0.241	0.252	-4.6	103	0.00	12.56
69	M	dibromomethane	0.171	0.172	-0.6	100	0.00	12.69
70	M	methylcyclohexane	0.389	0.444	-14.1	116	0.00	12.58
71	M	bromodichloromethane	0.345	0.364	-5.5	102	0.00	12.82
72	M	cis-1,3-dichloropropene	0.381	0.401	-5.2	101	0.00	13.26
73	S	toluene-d8 (s)	0.969	0.882	9.0	102	0.00	13.56
74	M	4-methyl-2-pentanone	0.102	0.107	-4.9	108	0.00	13.36
75	M	toluene	0.586	0.602	-2.7	103	0.00	13.63
76	M	3-methyl-1-butanol	0.009	0.010	-11.1	107	0.00	13.35
77	M	trans-1,3-dichloropropene	0.351	0.363	-3.4	102	0.00	13.77
78	M	ethyl methacrylate	0.286	0.301	-5.2	104	0.00	13.79
79	M	1,1,2-trichloroethane	0.187	0.192	-2.7	102	0.00	13.97
80	M	2-hexanone	0.080	0.085	-6.3	109	0.00	14.14

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3558-ICV3558
Lab FileID: 2B79413.D

81	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.95
82	m	butyl ether		----------NA----------				
83	M	tetrachloroethene	0.280	0.282	-0.7	98	0.00	14.18
84	M	1,3-dichloropropane	0.399	0.410	-2.8	103	0.00	14.14
85	M	butyl acetate	0.161	0.165	-2.5	108	0.00	14.22
86		3,3-dimethyl-1-butanol	0.024	0.026	-8.3	104	0.00	14.29
87	M	dibromochloromethane	0.333	0.345	-3.6	100	0.00	14.39
88	M	1,2-dibromoethane	0.282	0.288	-2.1	102	0.00	14.53
89	M	chlorobenzene	0.777	0.790	-1.7	102	0.00	14.98
90	M	1,1,1,2-tetrachloroethane	0.334	0.349	-4.5	105	0.00	15.03
91	M	ethylbenzene	1.316	1.313	0.2	101	0.00	15.04
92	M	m,p-xylene	0.502	0.517	-3.0	102	0.00	15.14
93	M	o-xylene	0.521	0.554	-6.3	104	0.00	15.52
94	M	styrene	0.861	0.861	0.0	100	0.00	15.52
95	M	bromoform	0.283	0.295	-4.2	101	0.00	15.74
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	17.10
97	M	isopropylbenzene	2.366	2.527	-6.8	103	0.00	15.84
98	S	4-bromofluorobenzene (s)	0.697	0.646	7.3	102	0.00	16.01
99	M	cyclohexanone	0.006	0.006#	0.0	105	0.00	15.96
100	M	bromobenzene	0.666	0.679	-2.0	102	0.00	16.19
101	M	1,1,2,2-tetrachloroethane	0.662	0.689	-4.1	103	0.00	16.07
102	M	trans-1,4-dichloro-2-bute	0.171	0.183	-7.0	111	0.00	16.12
103	M	1,2,3-trichloropropane	0.178	0.177	0.6	103	0.00	16.15
104	M	n-propylbenzene	2.661	2.668	-0.3	98	0.00	16.22
105	M	2-chlorotoluene	0.569	0.603	-6.0	105	0.00	16.34
106	M	4-chlorotoluene	1.661	1.648	0.8	101	0.00	16.43
107	M	1,3,5-trimethylbenzene	1.994	2.105	-5.6	103	0.00	16.35
108	M	tert-butylbenzene	1.811	1.921	-6.1	102	0.00	16.68
109	M	pentachloroethane	0.458	0.508	-10.9	110	0.00	16.73
110	M	1,2,4-trimethylbenzene	2.048	2.118	-3.4	101	0.00	16.72
111	M	sec-butylbenzene	2.649	2.797	-5.6	102	0.00	16.89
112	M	1,3-dichlorobenzene	1.315	1.342	-2.1	105	0.00	17.04
113	M	p-isopropyltoluene	2.281	2.476	-8.5	105	0.00	17.00
114	M	1,4-dichlorobenzene	1.364	1.371	-0.5	105	0.00	17.12
115	M	1,2-dichlorobenzene	1.356	1.395	-2.9	104	0.00	17.50
116	M	n-butylbenzene	1.173	1.241	-5.8	104	0.00	17.39
117	M	1,2-dibromo-3-chloropropa	0.149	0.159	-6.7	105	0.00	18.24
118		1,3,5-trichlorobenzene	1.268	1.339	-5.6	102	0.00	18.47
119	M	1,2,4-trichlorobenzene	1.125	1.193	-6.0	101	0.00	19.11
120	M	hexachlorobutadiene	0.648	0.648	0.0	97	0.00	19.25
121	M	naphthalene	2.344	2.522	-7.6	103	0.00	19.39
122	M	1,2,3-trichlorobenzene	1.001	1.088	-8.7	105	0.00	19.63
123	M	hexachloroethane	0.517	0.555	-7.4	104	0.00	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2B79408.D M2B3558.M Tue Feb 01 16:13:53 2011 MS2B

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2B80125.D Vial: 2
Acq On : 23 Feb 2011 10:02 am Operator: DEZAREER
Sample : cc3558-20 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	0.00	8.62
2	M	tertiary butyl alcohol	1.009	1.042	-3.3	78	0.00	8.75
3	M	1,4-dioxane	0.060	0.070	-16.7	96	0.00	12.66
4	I	pentafluorobenzene	1.000	1.000	0.0	77	0.00	11.09
5	M	chlorodifluoromethane	0.374	0.344	8.0	68	0.00	4.65
6	M	dichlorodifluoromethane	0.541	0.500	7.6	66	0.00	4.65
7	m	chlorotrifluoroethene		----------NA----------				
8	M	chloromethane	0.478	0.416	13.0	67	-0.01	5.04
9	M	vinyl chloride	0.478	0.437	8.6	71	0.00	5.35
10	M	bromomethane	0.310	0.309	0.3	72	0.00	6.14
11	M	chloroethane	0.241	0.222	7.9	66	0.00	6.35
12		vinyl bromide		----------NA----------				
13	M	trichlorofluoromethane	0.602	0.688	-14.3	83	0.00	6.95
14	M	ethyl ether	0.183	0.168	8.2	67	0.00	7.42
15	M	acrolein	0.061	0.063	-3.3	78	0.00	7.65
16		1,2-dichloro-1,2,2-triflu		----------NA----------				
17	M	1,1-dichloroethene	0.312	0.314	-0.6	72	0.00	7.89
		----------	True	Calc.	% Drift	----------		
18	M	acetone	20.000	16.582	17.1	62	0.01	7.93
		----------	AvgRF	CCRF	% Dev	----------		
19	M	allyl chloride	0.198	0.183	7.6	69	0.00	8.49
20	M	acetonitrile	0.014	0.017	-21.4#	91	0.01	8.38
21	M	iodomethane	0.649	0.671	-3.4	76	-0.01	8.18
22	M	iso-butyl alcohol	0.003	0.003#	0.0	75	0.00	11.38
23	M	carbon disulfide	1.136	1.112	2.1	71	0.00	8.35
24	M	methylene chloride	0.351	0.342	2.6	70	0.00	8.67
		----------	True	Calc.	% Drift	----------		
25	M	methyl acetate	20.000	16.951	15.2	60	0.00	8.47
		----------	AvgRF	CCRF	% Dev	----------		
26	M	methyl tert butyl ether	1.077	1.091	-1.3	72	0.00	9.10
27	M	trans-1,2-dichloroethene	0.330	0.321	2.7	69	0.00	9.12
28	M	di-isopropyl ether	0.987	0.964	2.3	70	0.00	9.78
		----------	True	Calc.	% Drift	----------		
29	M	2-butanone	20.000	19.840	0.8	69	0.00	10.49
		----------	AvgRF	CCRF	% Dev	----------		

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

30	M	1,1-dichloroethane	0.569	0.562	1.2	71	0.00	9.73
31	M	chloroprene	0.451	0.518	-14.9	82	0.00	9.87
32	M	acrylonitrile	0.141	0.118	16.3	62	0.00	9.01
33	M	vinyl acetate	0.050	0.045	10.0	72	0.00	9.74
34	M	ethyl tert-butyl ether	1.060	1.115	-5.2	75	-0.01	10.27
			True	Calc.	% Drift			
35	M	ethyl acetate	20.000	17.347	13.3	61	0.00	10.53
			AvgRF	CCRF	% Dev			
36	M	2,2-dichloropropane	0.526	0.588	-11.8	78	0.00	10.55
37	M	cis-1,2-dichloroethene	0.367	0.363	1.1	71	0.00	10.52
38	M	propionitrile	0.051	0.044	13.7	65	0.00	10.54
39	M	bromochloromethane	0.190	0.195	-2.6	73	-0.01	10.83
40	M	tetrahydrofuran	0.095	0.084	11.6	66	0.00	10.90
41	M	chloroform	0.590	0.611	-3.6	74	0.00	10.89
42		t-butyl formate	0.319	0.311	2.5	74	0.00	10.97
43	S	dibromofluoromethane (s)	0.355	0.359	-1.1	82	0.00	11.10
44	S	1,2-dichloroethane-d4 (s)	0.425	0.432	-1.6	83	0.00	11.52
45	M	freon 113	0.284	0.328	-15.5	83	0.00	7.89
46	M	methacrylonitrile	0.206	0.183	11.2	67	0.00	10.77
47	M	1,1,1-trichloroethane	0.525	0.593	-13.0	79	0.00	11.20
48	M	Cyclohexane	0.512	0.468	8.6	67	0.00	11.30
49		tert amyl alcohol		----------NA----------				
50	I	1,4-difluorobenzene	1.000	1.000	0.0	77	0.00	11.99
51		tert amyl ethyl ether		----------NA----------				
52	M	Di-isobutylene		----------NA----------				
53	M	epichlorohydrin	0.025	0.025	0.0	74	0.00	13.14
54	M	n-butyl alcohol	0.006	0.006#	0.0	76	0.00	12.07
55	M	carbon tetrachloride	0.409	0.462	-13.0	81	0.00	11.42
56	M	1,1-dichloropropene	0.351	0.348	0.9	71	0.00	11.38
57	M	hexane	0.234	0.282	-20.5#	87	0.00	9.53
58	M	benzene	1.023	0.977	4.5	69	0.00	11.63
59		2,2,4-trimethylpentane	0.852	0.887	-4.1	74	0.00	11.70
60	M	tert-amyl methyl ether	0.819	0.849	-3.7	74	0.00	11.70
61	M	heptane	0.146	0.157	-7.5	77	0.00	11.86
62	M	isopropyl acetate	0.450	0.455	-1.1	70	0.00	11.56
63	M	1,2-dichloroethane	0.358	0.424	-18.4	82	0.00	11.61
64	M	trichloroethene	0.265	0.269	-1.5	72	0.00	12.32
			True	Calc.	% Drift			
65	M	2-nitropropane	20.000	20.439	-2.2	71	0.00	13.34
			AvgRF	CCRF	% Dev			
66	M	2-chloroethyl vinyl ether	0.117	0.156	-33.3#	93	0.00	13.05
67	M	methyl methacrylate	0.238	0.237	0.4	71	0.00	12.58
68	M	1,2-dichloropropane	0.241	0.229	5.0	68	0.00	12.56
69	M	dibromomethane	0.171	0.177	-3.5	74	0.00	12.69
70	M	methylcyclohexane	0.389	0.432	-11.1	81	0.00	12.58
71	M	bromodichloromethane	0.345	0.373	-8.1	76	0.00	12.82
72	M	cis-1,3-dichloropropene	0.381	0.402	-5.5	75	0.00	13.26
73	S	toluene-d8 (s)	0.969	0.975	-0.6	81	0.00	13.55
74	M	4-methyl-2-pentanone	0.102	0.093	8.8	67	0.00	13.36
75	M	toluene	0.586	0.596	-1.7	72	0.00	13.62
76	M	3-methyl-1-butanol	0.009	0.011	-22.2#	81	0.00	13.35
77	M	trans-1,3-dichloropropene	0.351	0.381	-8.5	79	0.00	13.77
78	M	ethyl methacrylate	0.286	0.286	0.0	71	0.00	13.79
79	M	1,1,2-trichloroethane	0.187	0.181	3.2	70	0.00	13.97
80	M	2-hexanone	0.080	0.074	7.5	69	0.00	14.14

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2B3591-CC3558
Lab FileID: 2B80125.D

81	I	chlorobenzene-d5	1.000	1.000	0.0	80	0.00	14.95
82	m	butyl ether		----------NA----------				
83	M	tetrachloroethene	0.280	0.291	-3.9	75	0.00	14.18
84	M	1,3-dichloropropane	0.399	0.391	2.0	74	0.00	14.14
85	M	butyl acetate	0.161	0.147	8.7	69	0.00	14.22
86		3,3-dimethyl-1-butanol	0.024	0.027	-12.5	83	0.00	14.29
87	M	dibromochloromethane	0.333	0.357	-7.2	78	0.00	14.38
88	M	1,2-dibromoethane	0.282	0.282	0.0	74	0.00	14.53
89	M	chlorobenzene	0.777	0.780	-0.4	76	0.00	14.97
90	M	1,1,1,2-tetrachloroethane	0.334	0.355	-6.3	78	0.00	15.03
91	M	ethylbenzene	1.316	1.325	-0.7	74	0.00	15.04
92	M	m,p-xylene	0.502	0.511	-1.8	73	0.00	15.14
93	M	o-xylene	0.521	0.519	0.4	73	0.00	15.52
94	M	styrene	0.861	0.874	-1.5	76	0.00	15.52
95	M	bromoform	0.283	0.299	-5.7	78	0.00	15.74
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	17.09
97	M	isopropylbenzene	2.366	2.383	-0.7	74	0.00	15.84
98	S	4-bromofluorobenzene (s)	0.697	0.675	3.2	81	0.00	16.01
99	M	cyclohexanone	0.006	0.008#	-33.3#	121	0.00	15.96
100	M	bromobenzene	0.666	0.677	-1.7	77	0.00	16.19
101	M	1,1,2,2-tetrachloroethane	0.662	0.615	7.1	69	0.00	16.07
102	M	trans-1,4-dichloro-2-bute	0.171	0.118	31.0#	55	0.00	16.11
103	M	1,2,3-trichloropropane	0.178	0.172	3.4	73	0.00	16.15
104	M	n-propylbenzene	2.661	2.687	-1.0	74	0.00	16.22
105	M	2-chlorotoluene	0.569	0.569	0.0	75	0.00	16.34
106	M	4-chlorotoluene	1.661	1.667	-0.4	76	0.00	16.43
107	M	1,3,5-trimethylbenzene	1.994	2.058	-3.2	75	0.00	16.35
108	M	tert-butylbenzene	1.811	1.850	-2.2	76	0.00	16.68
109	M	pentachloroethane	0.458	0.498	-8.7	83	0.00	16.73
110	M	1,2,4-trimethylbenzene	2.048	2.146	-4.8	77	0.00	16.71
111	M	sec-butylbenzene	2.649	2.730	-3.1	75	0.00	16.88
112	M	1,3-dichlorobenzene	1.315	1.326	-0.8	77	0.00	17.04
113	M	p-isopropyltoluene	2.281	2.366	-3.7	76	0.00	16.99
114	M	1,4-dichlorobenzene	1.364	1.336	2.1	76	0.00	17.12
115	M	1,2-dichlorobenzene	1.356	1.353	0.2	76	0.00	17.49
116	M	n-butylbenzene	1.173	1.152	1.8	73	0.00	17.39
117	M	1,2-dibromo-3-chloropropa	0.149	0.155	-4.0	78	0.00	18.24
118		1,3,5-trichlorobenzene	1.268	1.311	-3.4	76	0.00	18.46
119	M	1,2,4-trichlorobenzene	1.125	1.114	1.0	72	0.00	19.11
120	M	hexachlorobutadiene	0.648	0.642	0.9	71	0.00	19.25
121	M	naphthalene	2.344	2.405	-2.6	74	0.00	19.39
122	M	1,2,3-trichlorobenzene	1.001	1.008	-0.7	74	0.00	19.63
123	M	hexachloroethane	0.517	0.501	3.1	75	0.00	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2B79407.D M2B3558.M Thu Feb 24 14:21:33 2011 MS2B

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

Response Factor Report MS2C

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

Calibration Files
1 =2c78507.D 2 =2c78508.D 100 =2c78514.D 50 =2C78512.D
20 =2c78511.D 200 =2c78515.D 5 =2c78509.D 10 =2c78510.D
0.5 =2C78506.D =

Compound	1	2	100	50	20	200	5	10	0.5	Avg	%RSD
1) I Tert Butyl Alcohol-d9 ----------ISTD----------											
2) tertiary butyl alcohol	1.187	1.182	1.149	1.145	0.992	1.093				1.125	6.54
3) 1,4-dioxane	0.093	0.090	0.091	0.091	0.089	0.093				0.091	1.86
4) I pentafluorobenzene ----------ISTD----------											
5) FREON 115										0.000#	-1.00
6) FREON 23										0.000#	-1.00
7) FREON 143A										0.000#	-1.00
8) FREON 152A										0.000#	-1.00
9) CHLOROTRIFLUOROETHENE										0.000#	-1.00
10) chlorodifluoromethane	0.393	0.396	0.491	0.481	0.468	0.487	0.460	0.481		0.457	8.75
11) dichlorodifluoromethane	0.477	0.611	0.606	0.577	0.596	0.577	0.585			0.576	7.88
12) FREON 114										0.000#	-1.00
13) FREON 142B										0.000#	-1.00
14) chloromethane	0.505	0.512	0.640	0.606	0.553	0.637	0.561	0.566	0.546	0.569	8.62
15) vinyl chloride	0.542	0.524	0.637	0.628	0.577	0.599	0.562	0.577		0.581	6.78
16) bromomethane	0.340	0.317	0.346	0.354	0.350	0.321	0.349	0.362	0.288	0.336	6.98
17) chloroethane	0.225	0.262	0.315	0.308	0.292	0.300	0.291	0.302		0.287	10.40
18) trichlorofluoromethane	0.589	0.595	0.732	0.719	0.686	0.714	0.684	0.696		0.677	8.09
19) ethyl ether	0.165	0.195	0.197	0.193	0.196	0.180	0.181			0.187	6.34
20) FREON 123										0.000#	-1.00
21) FREON 141B										0.000#	-1.00
22) FREON 123A										0.000#	-1.00
23) acrolein											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

		0.052	0.055		0.053	0.047		0.042	0.043		0.049	10.98
24)	1,1-dichloroethene											
		0.393	0.388	0.405	0.393	0.369	0.393	0.376	0.371		0.386	3.27
25)	acetone											
				0.087	0.093	0.072	0.085		0.084		0.084	9.15
26)	allyl chloride											
				0.245	0.244	0.230	0.240	0.213	0.227		0.233	5.29
27)	acetonitrile											
				0.026	0.025	0.025	0.026	0.025	0.025		0.025	2.36
28)	iodomethane											
		0.677	0.728	0.802	0.787	0.735	0.777	0.711	0.720	0.612	0.728	8.12
29)	iso-butyl alcohol											
											0.000#	-1.00
30)	carbon disulfide											
		1.351	1.331	1.455	1.426	1.306	1.410	1.285	1.286	1.264	1.346	5.14
31)	methylene chloride											
		0.328	0.391	0.433	0.426	0.409	0.424	0.384	0.400		0.399	8.40
32)	methyl acetate											
			0.204	0.203	0.206	0.200	0.198	0.181	0.190		0.197	4.46
33)	methyl tert butyl ether											
		0.953	0.980	1.087	1.091	1.058	1.053	0.981	1.007	0.913	1.014	6.12
34)	trans-1,2-dichloroethene											
		0.410	0.427	0.402	0.398	0.390	0.386	0.385	0.399		0.400	3.49
35)	di-isopropyl ether											
		1.046	1.055	1.220	1.208	1.164	1.193	1.111	1.170	1.009	1.131	6.89
36)	2-butanone											
				0.033	0.034	0.031	0.032		0.028		0.031	7.62
37)	1,1-dichloroethane											
		0.608	0.636	0.685	0.688	0.664	0.668	0.655	0.668	0.541	0.646	7.19
38)	chloroprene											
		0.430	0.485	0.562	0.545	0.525	0.548	0.521	0.548		0.520	8.41
39)	acrylonitrile											
				0.105	0.106	0.101	0.105	0.084	0.095		0.099	8.65
40)	vinyl acetate											
				0.059	0.058	0.053	0.056		0.050		0.055	6.24
41)	ethyl tert-butyl ether											
		1.036	1.043	1.227	1.221	1.174	1.190	1.115	1.155	0.974	1.126	7.99
42)	ethyl acetate											
				0.037	0.037	0.036	0.035	0.025	0.034		0.034	14.01
43)	2,2-dichloropropane											
		0.590	0.589	0.592	0.593	0.595	0.562	0.590	0.602		0.589	1.99
44)	cis-1,2-dichloroethene											
		0.436	0.446	0.413	0.414	0.413	0.404	0.436	0.407		0.421	3.75
45)	propionitrile											
				0.039	0.039	0.039	0.038	0.035	0.037		0.038	4.05
46)	bromochloromethane											
		0.156	0.184	0.210	0.213	0.211	0.208	0.198	0.207		0.199	9.91
47)	tetrahydrofuran											
				0.091	0.094	0.092	0.088	0.080	0.090		0.089	5.61
48)	chloroform											
		0.611	0.637	0.672	0.676	0.664	0.657	0.650	0.668	0.568	0.645	5.43
49)	t-butyl formate											
			0.247	0.313	0.308	0.298	0.302	0.265	0.293		0.290	8.39
50)	dibromofluoromethane (s)											
		0.400	0.366	0.376	0.382	0.370	0.366	0.375	0.440	0.388	0.385	6.09
51)	1,2-dichloroethane-d4 (s)											
		0.421	0.385	0.381	0.391	0.380	0.367	0.380	0.443	0.420	0.396	6.39
52)	freon 113											
			0.312	0.381	0.374	0.363	0.371	0.348	0.365		0.359	6.45
53)	methacrylonitrile											

		0.127	0.167	0.169	0.167	0.166	0.147	0.158		0.157	9.75
54)	1,1,1-trichloroethane											
		0.563	0.568	0.640	0.633	0.605	0.615	0.585	0.604	0.463	0.586	9.10
55)	Cyclohexane											
		0.579	0.618	0.668	0.660	0.629	0.643	0.603	0.618		0.627	4.68
56)	tert amyl alcohol											
											0.000#	-1.00
57)	I 1,4-difluorobenzene	----------ISTD----------										
58)	Di-isobutylene											
											0.000#	-1.00
59)	epichlorohydrin											
			0.016	0.017	0.017	0.015	0.015	0.017			0.016	6.03
60)	n-butyl alcohol											
		0.004	0.005	0.005	0.005	0.005	0.005	0.005			0.005#	8.19
61)	carbon tetrachloride											
		0.390	0.407	0.436	0.430	0.413	0.417	0.410	0.416		0.415	3.39
62)	1,1-dichloropropene											
		0.363	0.397	0.397	0.394	0.386	0.381	0.389	0.400	0.307	0.379	7.77
63)	hexane											
		0.294	0.329	0.349	0.342	0.345	0.336	0.345	0.361		0.338	5.91
64)	tert amyl ethyl ether											
											0.000#	-1.00
65)	iso-octane											
											0.000#	-1.00
66)	benzene											
		1.157	1.142	1.115	1.135	1.122	1.053	1.128	1.132	1.121	1.123	2.58
67)	tert-amyl methyl ether											
		0.766	0.766	0.818	0.834	0.815	0.764	0.808	0.806	0.761	0.793	3.60
68)	heptane											
		0.156	0.186	0.194	0.194	0.195	0.185	0.192	0.210		0.189	8.13
69)	isopropyl acetate											
			0.369	0.393	0.386	0.390	0.377	0.368	0.400		0.383	3.19
70)	1,2-dichloroethane											
		0.306	0.343	0.342	0.351	0.351	0.324	0.352	0.349	0.307	0.336	5.65
71)	trichloroethene											
		0.281	0.305	0.301	0.297	0.294	0.289	0.299	0.302	0.247	0.291	6.10
72)	2-nitropropane											
			0.010	0.010	0.026	0.009	0.015	0.012			0.014	45.18
	----- Linear regression ----- Coefficient = 0.9706											
	Response Ratio = 0.00237 + 0.00886 *A											
73)	2-chloroethyl vinyl ether											
			0.099	0.132	0.130	0.126	0.124	0.108	0.121		0.120	10.20
74)	methyl methacrylate											
		0.115	0.120	0.147	0.148	0.146	0.142	0.142	0.147		0.138	9.57
75)	1,2-dichloropropane											
		0.245	0.269	0.282	0.288	0.286	0.273	0.276	0.283	0.215	0.269	8.92
76)	dibromomethane											
		0.121	0.158	0.167	0.170	0.170	0.162	0.161	0.168		0.159	10.23
77)	methylcyclohexane											
		0.442	0.475	0.528	0.518	0.491	0.499	0.499	0.516		0.496	5.55
78)	bromodichloromethane											
		0.328	0.352	0.378	0.382	0.372	0.372	0.359	0.369	0.299	0.357	7.62
79)	cis-1,3-dichloropropene											
		0.409	0.427	0.465	0.473	0.461	0.453	0.442	0.459	0.395	0.443	6.06
80)	toluene-d8 (s)											
			1.083	0.980	1.006	0.985	0.913	1.021	1.203		1.027	9.03
81)	4-methyl-2-pentanone											
			0.066	0.079	0.082	0.081	0.075	0.078	0.080		0.077	6.96

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

```
 82)  toluene
            0.652 0.698 0.681 0.692 0.680 0.634 0.690 0.699 0.642   0.674     3.67
 83)  3-methyl-1-butanol
                  0.006 0.008 0.008 0.009 0.007 0.008 0.009         0.008#   11.54
 84)  trans-1,3-dichloropropene
            0.356 0.389 0.401 0.413 0.412 0.372 0.385 0.410 0.342   0.387     6.64
 85)  ethyl methacrylate
            0.212 0.230 0.284 0.288 0.278 0.264 0.260 0.280         0.262    10.46
 86)  1,1,2-trichloroethane
            0.176 0.185 0.191 0.196 0.197 0.184 0.193 0.199 0.165   0.187     5.94
 87)  2-hexanone
                  0.059 0.070 0.073 0.073 0.063 0.068 0.072         0.069     8.12

 88) I   chlorobenzene-d5      -----------------ISTD---------------------
 89)  tetrachloroethene
            0.317 0.342 0.318 0.313 0.311 0.302 0.309 0.322 0.250   0.309     8.05
 90)  1,3-dichloropropane
            0.428 0.424 0.453 0.462 0.466 0.419 0.439 0.449 0.400   0.438     4.97
 91)  butyl acetate
                  0.141 0.168 0.171 0.173 0.153 0.159 0.169         0.162     7.18
 92)  3,3-dimethyl-1-butanol
                  0.017 0.021 0.022 0.023 0.019 0.020 0.022         0.020    10.05
 93)  dibromochloromethane
            0.273 0.298 0.360 0.352 0.347 0.356 0.310 0.326         0.328     9.71
 94)  1,2-dibromoethane
            0.235 0.258 0.292 0.287 0.287 0.284 0.264 0.273 0.216   0.266     9.79
 95)  BUTYL ETHER
                                                                    0.000#   -1.00
 96)  chlorobenzene
            0.879 0.922 0.888 0.908 0.911 0.851 0.900 0.904 0.856   0.891     2.76
 97)  1,1,1,2-tetrachloroethane
            0.292 0.320 0.339 0.343 0.338 0.325 0.316 0.332         0.326     5.11
 98)  ethylbenzene
            1.547 1.559 1.497 1.563 1.554 1.408 1.511 1.552 1.535   1.525     3.24
 99)  m,p-xylene
            0.578 0.607 0.579 0.604 0.602 0.540 0.585 0.603 0.585   0.587     3.58
100)  o-xylene
            0.586 0.586 0.589 0.607 0.588 0.556 0.569 0.585 0.497   0.574     5.59
101)  styrene
            0.836 0.850 0.974 1.002 0.982 0.913 0.888 0.939 0.773   0.906     8.43
102)  bromoform
                  0.187 0.241 0.235 0.222 0.242 0.197 0.213         0.220     9.79

103) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
104)  isopropylbenzene
            2.918 2.965 2.782 2.903 2.877 2.639 2.851 2.941 2.710   2.843     3.89
105)  4-bromofluorobenzene (s)
                        0.803 0.863 0.864 0.756                     0.821     6.38
106)  cyclohexanone
                        0.023 0.033 0.035 0.023 0.031 0.043         0.031    24.08
               ----- Linear regression -----  Coefficient =  0.9904
                 Response Ratio = 0.04423 + 0.02231 *A

107)  bromobenzene
            0.741 0.740 0.712 0.751 0.759 0.679 0.768 0.770 0.670   0.732     5.06
108)  1,1,2,2-tetrachloroethane
            0.575 0.612 0.607 0.649 0.649 0.581 0.634 0.660 0.562   0.614     5.84
109)  trans-1,4-dichloro-2-butene
                        0.078 0.079 0.073 0.078 0.049 0.067         0.071    16.27
               ----- Linear regression -----  Coefficient =  0.9998
```

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICC3580
Lab FileID: 2C78512.D

Response Ratio = -0.00170 + 0.07858 *A

110)	1,2,3-trichloropropane										
		0.144	0.145	0.155	0.159	0.135	0.152	0.158		0.150	5.88
111)	n-propylbenzene										
			3.217	3.422	3.519	2.957	3.481	3.628		3.371	7.24
112)	2-chlorotoluene										
	0.728	0.722	0.650	0.685	0.692	0.615	0.702	0.721	0.644	0.684	5.82
113)	4-chlorotoluene										
	2.158	2.216	2.005	2.111	2.155	1.909	2.153	2.191	2.111	2.112	4.59
114)	1,3,5-trimethylbenzene										
	2.338	2.397	2.343	2.440	2.449	2.226	2.383	2.428	2.298	2.367	3.09
115)	tert-butylbenzene										
			2.094	2.135	2.067	2.067	2.012	2.086		2.077	1.94
116)	pentachloroethane										
	0.394	0.417	0.491	0.487	0.463	0.493	0.432	0.457		0.454	8.13
117)	1,2,4-trimethylbenzene										
	2.398	2.431	2.389	2.450	2.522	2.262	2.440	2.510	2.401	2.423	3.15
118)	sec-butylbenzene										
	3.109	3.253	3.176	3.268	3.263	3.010	3.170	3.285	2.960	3.166	3.73
119)	1,3-dichlorobenzene										
	1.429	1.422	1.460	1.483	1.493	1.394	1.452	1.480	1.361	1.442	3.07
120)	p-isopropyltoluene										
	2.604	2.620	2.647	2.703	2.696	2.485	2.631	2.720	2.487	2.622	3.29
121)	1,4-dichlorobenzene										
	1.446	1.466	1.477	1.500	1.509	1.408	1.459	1.508	1.567	1.482	3.08
122)	1,2-dichlorobenzene										
	1.332	1.391	1.429	1.468	1.452	1.339	1.399	1.424	1.318	1.395	3.90
123)	n-butylbenzene										
	1.369	1.443	1.466	1.516	1.508	1.340	1.414	1.485	1.310	1.428	5.22
124)	1,2-dibromo-3-chloropropane										
			0.106	0.117	0.114	0.100	0.100	0.107		0.107	6.48
125)	1,3,5-trichlorobenzene										
	1.116	1.148	1.324	1.389	1.333	1.197	1.208	1.267	1.161	1.238	7.64
126)	1,2,4-trichlorobenzene										
	0.780	0.835	1.083	1.139	1.072	1.005	0.913	0.999		0.978	12.87
127)	hexachlorobutadiene										
	0.650	0.662	0.703	0.718	0.696	0.640	0.656	0.689	0.628	0.671	4.64
128)	naphthalene										
			1.775	1.859	1.739	1.643	1.409	1.556		1.663	9.80
129)	1,2,3-trichlorobenzene										
	0.690	0.716	0.912	0.951	0.891	0.845	0.767	0.841		0.826	11.37
130)	hexachloroethane										
			0.520	0.473	0.426	0.526	0.371	0.397		0.452	14.28

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2C3580.M Fri Jan 21 15:41:05 2011 ACCUTEST

SII-SSA-0014-006342

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\2C78517A.D Vial: 14
Acq On : 20 Jan 2011 7:18 pm Operator: tarar1
Sample : icv3580-50 Inst : MS2C
Misc : MS7421,V2C3580,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	98	0.00	8.43
2		tertiary butyl alcohol	1.125	1.246	-10.8	104	0.00	8.57
3		1,4-dioxane	0.091	0.093	-2.2	102	0.00	12.48
4	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	10.86
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A		----------NA----------				
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.378	17.3	84	0.00	4.43
11		dichlorodifluoromethane	0.576	0.569	1.2	100	0.01	4.42
12		FREON 114		----------NA----------				
13		FREON 142B		----------NA----------				
14		chloromethane	0.569	0.590	-3.7	103	0.00	4.82
15		vinyl chloride	0.581	0.605	-4.1	102	0.00	5.13
16		bromomethane	0.336	0.347	-3.3	104	0.00	5.90
17		chloroethane	0.287	0.305	-6.3	105	0.00	6.12
18		trichlorofluoromethane	0.677	0.697	-3.0	103	0.01	6.69
19		ethyl ether	0.187	0.200	-7.0	108	0.00	7.14
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A		----------NA----------				
23		acrolein	0.049	0.051	-4.1	103	0.00	7.45
24		1,1-dichloroethene	0.386	0.398	-3.1	108	0.00	7.65
25		acetone	0.084	0.091	-8.3	105	0.00	7.71
26		allyl chloride	0.233	0.246	-5.6	107	0.00	8.25
27		acetonitrile	0.025	0.028	-12.0	116	0.01	8.25
28		iodomethane	0.728	0.798	-9.6	108	0.00	7.98
29		iso-butyl alcohol		----------NA----------				
30		carbon disulfide	1.346	1.443	-7.2	108	0.00	8.11
31		methylene chloride	0.399	0.432	-8.3	108	0.00	8.48
32		methyl acetate	0.197	0.205	-4.1	106	0.00	8.24
33		methyl tert butyl ether	1.014	1.108	-9.3	108	0.00	8.83
34		trans-1,2-dichloroethene	0.400	0.358	10.5	96	0.00	8.89
35		di-isopropyl ether	1.131	1.244	-10.0	109	0.00	9.49
36		2-butanone	0.031	0.035	-12.9	109	0.00	10.29
37		1,1-dichloroethane	0.646	0.697	-7.9	108	0.00	9.52
38		chloroprene	0.520	0.536	-3.1	105	0.00	9.63
39		acrylonitrile	0.099	0.106	-7.1	106	0.00	8.85
40		vinyl acetate	0.055	0.061	-10.9	113	0.00	9.51
41		ethyl tert-butyl ether	1.126	1.220	-8.3	106	0.00	9.99

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

42		ethyl acetate	0.034	0.038	-11.8	109	0.00	10.30
43		2,2-dichloropropane	0.589	0.597	-1.4	107	0.00	10.32
44		cis-1,2-dichloroethene	0.421	0.461	-9.5	118	0.00	10.32
45		propionitrile	0.038	0.039	-2.6	107	0.00	10.40
46		bromochloromethane	0.199	0.218	-9.5	109	0.00	10.66
47		tetrahydrofuran	0.089	0.097	-9.0	109	0.00	10.69
48		chloroform	0.645	0.695	-7.8	109	0.00	10.72
49		t-butyl formate	0.290	0.320	-10.3	111	0.00	10.74
50	S	dibromofluoromethane (s)	0.385	0.366	4.9	102	0.00	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.372	6.1	101	0.00	11.35
52		freon 113	0.359	0.373	-3.9	106	0.00	7.61
53		methacrylonitrile	0.157	0.170	-8.3	107	0.00	10.59
54		1,1,1-trichloroethane	0.586	0.633	-8.0	106	0.00	10.97
55		Cyclohexane	0.627	0.654	-4.3	105	0.00	11.04
56		tert amyl alcohol		----------NA----------				
57	I	1,4-difluorobenzene	1.000	1.000	0.0	106	0.00	11.79
58		Di-isobutylene		----------NA----------				
59		epichlorohydrin	0.016	0.017	-6.3	104	0.00	13.16
60		n-butyl alcohol	0.005	0.005#	0.0	104	0.00	11.91
61		carbon tetrachloride	0.415	0.425	-2.4	105	0.00	11.18
62		1,1-dichloropropene	0.379	0.403	-6.3	108	0.00	11.15
63		hexane	0.338	0.346	-2.4	107	0.00	9.21
64		tert amyl ethyl ether		----------NA----------				
65		iso-octane		----------NA----------				
66		benzene	1.123	1.142	-1.7	107	0.00	11.42
67		tert-amyl methyl ether	0.793	0.829	-4.5	105	0.00	11.44
68		heptane	0.189	0.206	-9.0	112	0.00	11.57
69		isopropyl acetate	0.383	0.433	-13.1	119	0.00	11.33
70		1,2-dichloroethane	0.336	0.355	-5.7	107	0.00	11.44
71		trichloroethene	0.291	0.300	-3.1	107	0.00	12.12
		----------	True	Calc.	% Drift	----------		
72		2-nitropropane	50.000	42.764	14.5	104	0.00	13.34
		----------	AvgRF	CCRF	% Dev	----------		
73		2-chloroethyl vinyl ether	0.120	0.106	11.7	87	0.00	12.86
74		methyl methacrylate	0.138	0.148	-7.2	106	0.00	12.36
75		1,2-dichloropropane	0.269	0.296	-10.0	109	0.00	12.37
76		dibromomethane	0.159	0.173	-8.8	108	0.00	12.53
77		methylcyclohexane	0.496	0.524	-5.6	107	0.00	12.32
78		bromodichloromethane	0.357	0.393	-10.1	109	0.00	12.65
79		cis-1,3-dichloropropene	0.443	0.486	-9.7	109	0.00	13.08
80	S	toluene-d8 (s)	1.027	0.966	5.9	102	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.085	-10.4	110	0.00	13.16
82		toluene	0.674	0.699	-3.7	107	0.00	13.41
83		3-methyl-1-butanol	0.008	0.008#	0.0	100	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.430	-11.1	110	0.00	13.60
85		ethyl methacrylate	0.262	0.301	-14.9	111	0.00	13.58
86		1,1,2-trichloroethane	0.187	0.203	-8.6	110	0.00	13.81
87		2-hexanone	0.069	0.076	-10.1	110	0.00	13.95
88	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	14.76
89		tetrachloroethene	0.309	0.316	-2.3	106	0.00	13.96
90		1,3-dichloropropane	0.438	0.478	-9.1	108	0.00	13.97
91		butyl acetate	0.162	0.174	-7.4	107	0.00	14.01
92		3,3-dimethyl-1-butanol	0.020	0.020	0.0	96	0.00	14.11
93		dibromochloromethane	0.328	0.361	-10.1	108	0.00	14.23
94		1,2-dibromoethane	0.266	0.300	-12.8	110	0.00	14.37
95		BUTYL ETHER		----------NA----------				

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3580-ICV3580
Lab FileID: 2C78517A.D

96	chlorobenzene	0.891	0.936	-5.1	108	0.00	14.79
97	1,1,1,2-tetrachloroethane	0.326	0.354	-8.6	108	0.00	14.84
98	ethylbenzene	1.525	1.545	-1.3	104	0.00	14.83
99	m,p-xylene	0.587	0.606	-3.2	105	0.00	14.92
100	o-xylene	0.574	0.614	-7.0	106	0.00	15.32
101	styrene	0.906	0.976	-7.7	102	0.00	15.33
102	bromoform	0.220	0.242	-10.0	108	0.00	15.59
103 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	16.92
104	isopropylbenzene	2.843	2.946	-3.6	106	0.00	15.63
105 S	4-bromofluorobenzene (s)	0.821	0.811	1.2	98	0.00	15.83
		True	Calc.	% Drift			
106	cyclohexanone	500.000	304.870	39.0#	58	0.00	15.80
		AvgRF	CCRF	% Dev			
107	bromobenzene	0.732	0.773	-5.6	108	0.00	16.02
108	1,1,2,2-tetrachloroethane	0.614	0.641	-4.4	103	0.00	15.92
		True	Calc.	% Drift			
109	trans-1,4-dichloro-2-bute	50.000	55.733	-11.5	113	0.00	15.96
		AvgRF	CCRF	% Dev			
110	1,2,3-trichloropropane	0.150	0.155	-3.3	104	0.00	15.99
111	n-propylbenzene	3.371	3.308	1.9	101	0.00	16.00
112	2-chlorotoluene	0.684	0.707	-3.4	108	0.00	16.15
113	4-chlorotoluene	2.112	2.087	1.2	103	0.00	16.24
114	1,3,5-trimethylbenzene	2.367	2.459	-3.9	105	0.00	16.14
115	tert-butylbenzene	2.077	2.110	-1.6	103	0.00	16.47
116	pentachloroethane	0.454	0.518	-14.1	111	0.00	16.56
117	1,2,4-trimethylbenzene	2.423	2.480	-2.4	106	0.00	16.51
118	sec-butylbenzene	3.166	3.219	-1.7	103	0.00	16.67
119	1,3-dichlorobenzene	1.442	1.550	-7.5	109	0.00	16.86
120	p-isopropyltoluene	2.622	2.771	-5.7	107	0.00	16.77
121	1,4-dichlorobenzene	1.482	1.546	-4.3	108	0.00	16.94
122	1,2-dichlorobenzene	1.395	1.501	-7.6	107	0.00	17.32
123	n-butylbenzene	1.428	1.499	-5.0	103	0.00	17.17
124	1,2-dibromo-3-chloropropa	0.107	0.113	-5.6	101	0.00	18.09
125	1,3,5-trichlorobenzene	1.238	1.369	-10.6	103	0.00	18.27
126	1,2,4-trichlorobenzene	0.978	1.141	-16.7	105	0.00	18.93
127	hexachlorobutadiene	0.671	0.703	-4.8	102	0.00	19.03
128	naphthalene	1.663	1.824	-9.7	102	0.00	19.22
129	1,2,3-trichlorobenzene	0.826	0.967	-17.1	106	0.00	19.47
130	hexachloroethane	0.452	0.496	-9.7	109	0.00	17.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2C78512.D M2C3580.M Fri Jan 21 15:41:05 2011 ACCUTEST

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2c...2c3633-3634\2c79578.D Vial: 2
Acq On : 24 Feb 2011 11:04 am Operator: dezareer
Sample : cc3580-20 Inst : MS2C
Misc : MS8531,V2C3633,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	90	0.00	8.42
2		tertiary butyl alcohol	1.125	1.198	-6.5	94	-0.01	8.55
3		1,4-dioxane	0.091	0.103	-13.2	102	0.00	12.47
4	I	pentafluorobenzene	1.000	1.000	0.0	115	-0.01	10.85
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A	0.000	0.000#	0.0	0#	-0.01	4.42
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.439	3.9	108	-0.01	4.42
11		dichlorodifluoromethane	0.576	0.556	3.5	110	0.00	4.40
12		FREON 114		----------NA----------				
13		FREON 142B	0.000	0.000#	0.0	0#	0.00	5.11
14		chloromethane	0.569	0.582	-2.3	121	0.00	4.81
15		vinyl chloride	0.581	0.592	-1.9	118	-0.02	5.11
16		bromomethane	0.336	0.356	-6.0	116	0.00	5.90
17		chloroethane	0.287	0.306	-6.6	120	0.00	6.11
18		trichlorofluoromethane	0.677	0.652	3.7	109	-0.02	6.66
19		ethyl ether	0.187	0.173	7.5	103	0.00	7.13
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A	0.000	0.000#	0.0	0#	-0.02	7.59
23		acrolein	0.049	0.036	26.5#	88	0.00	7.45
24		1,1-dichloroethene	0.386	0.396	-2.6	123	-0.01	7.63
25		acetone	0.084	0.067	20.2#	107	0.00	7.70
26		allyl chloride	0.233	0.239	-2.6	119	0.00	8.25
27		acetonitrile	0.025	0.024	4.0	107	0.00	8.23
28		iodomethane	0.728	0.720	1.1	112	-0.02	7.95
29		iso-butyl alcohol	0.000	0.000#	0.0	122	0.00	11.15
30		carbon disulfide	1.346	1.451	-7.8	127	-0.02	8.10
31		methylene chloride	0.399	0.401	-0.5	112	-0.02	8.47
32		methyl acetate	0.197	0.165	16.2	95	0.00	8.23
33		methyl tert butyl ether	1.014	0.930	8.3	101	-0.01	8.82
34		trans-1,2-dichloroethene	0.400	0.409	-2.2	120	-0.01	8.88
35		di-isopropyl ether	1.131	1.213	-7.3	119	0.00	9.48
36		2-butanone	0.031	0.026	16.1	97	0.00	10.27
37		1,1-dichloroethane	0.646	0.724	-12.1	125	-0.01	9.51
38		chloroprene	0.520	0.585	-12.5	128	0.00	9.63
39		acrylonitrile	0.099	0.084	15.2	95	0.00	8.85
40		vinyl acetate	0.055	0.044	20.0#	94	0.00	9.50
41		ethyl tert-butyl ether	1.126	1.123	0.3	110	0.00	9.98

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

42		ethyl acetate	0.034	0.030	11.8	94	0.00	10.29
43		2,2-dichloropropane	0.589	0.643	-9.2	124	0.00	10.31
44		cis-1,2-dichloroethene	0.421	0.407	3.3	113	0.00	10.31
45		propionitrile	0.038	0.033	13.2	97	0.00	10.39
46		bromochloromethane	0.199	0.190	4.5	103	0.00	10.65
47		tetrahydrofuran	0.089	0.079	11.2	98	0.00	10.69
48		chloroform	0.645	0.672	-4.2	116	-0.01	10.71
49		t-butyl formate	0.290	0.249	14.1	96	0.00	10.73
50	S	dibromofluoromethane (s)	0.385	0.376	2.3	116	-0.01	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.351	11.4	106	0.00	11.35
52		freon 113	0.359	0.362	-0.8	114	0.00	7.61
53		methacrylonitrile	0.157	0.143	8.9	98	0.00	10.59
54		1,1,1-trichloroethane	0.586	0.639	-9.0	121	0.00	10.96
55		Cyclohexane	0.627	0.680	-8.5	124	0.00	11.03
56		tert amyl alcohol	0.000	0.009#	0.0	0#	-0.03	11.33
57	I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.00	11.78
58		Di-isobutylene	0.000	0.000#	0.0	0#	-0.02	11.56
59		epichlorohydrin	0.016	0.013	18.8	84	0.00	13.16
60		n-butyl alcohol	0.005	0.004#	20.0	95	0.00	11.90
61		carbon tetrachloride	0.415	0.438	-5.5	119	0.00	11.17
62		1,1-dichloropropene	0.379	0.431	-13.7	125	0.00	11.14
63		hexane	0.338	0.396	-17.2	129	0.00	9.20
64		tert amyl ethyl ether	0.000	0.003#	0.0	0#	-0.07	12.47
65		iso-octane	0.000	0.000#	0.0	0#	0.00	11.91
66		benzene	1.123	1.221	-8.7	122	-0.01	11.41
67		tert-amyl methyl ether	0.793	0.756	4.7	104	-0.01	11.43
68		heptane	0.189	0.228	-20.6#	131	0.00	11.56
69		isopropyl acetate	0.383	0.338	11.7	97	-0.01	11.32
70		1,2-dichloroethane	0.336	0.320	4.8	102	-0.01	11.43
71		trichloroethene	0.291	0.308	-5.8	118	0.00	12.11
			True	Calc.	% Drift			
72		2-nitropropane	20.000	51.355	-156.8#	125	0.00	13.33
			AvgRF	CCRF	% Dev			
73		2-chloroethyl vinyl ether	0.120	0.098	18.3	87	0.00	12.86
74		methyl methacrylate	0.138	0.122	11.6	94	0.00	12.36
75		1,2-dichloropropane	0.269	0.291	-8.2	114	0.00	12.37
76		dibromomethane	0.159	0.144	9.4	95	0.00	12.52
77		methylcyclohexane	0.496	0.532	-7.3	122	0.00	12.31
78		bromodichloromethane	0.357	0.351	1.7	106	-0.01	12.64
79		cis-1,3-dichloropropene	0.443	0.439	0.9	107	-0.01	13.07
80	S	toluene-d8 (s)	1.027	1.101	-7.2	125	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.064	16.9	89	0.00	13.15
82		toluene	0.674	0.714	-5.9	118	0.00	13.41
83		3-methyl-1-butanol	0.008	0.006#	25.0#	81	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.350	9.6	95	0.00	13.60
85		ethyl methacrylate	0.262	0.227	13.4	92	0.00	13.57
86		1,1,2-trichloroethane	0.187	0.164	12.3	93	0.00	13.80
87		2-hexanone	0.069	0.055	20.3#	84	0.00	13.94
88	I	chlorobenzene-d5	1.000	1.000	0.0	110	0.00	14.75
89		tetrachloroethene	0.309	0.327	-5.8	116	0.00	13.95
90		1,3-dichloropropane	0.438	0.394	10.0	93	0.00	13.97
91		butyl acetate	0.162	0.136	16.0	87	0.00	14.00
92		3,3-dimethyl-1-butanol	0.020	0.016	20.0	79	0.00	14.10
93		dibromochloromethane	0.328	0.296	9.8	94	0.00	14.22
94		1,2-dibromoethane	0.266	0.237	10.9	91	0.00	14.36
95		BUTYL ETHER	0.000	0.010#	0.0	0#	0.00	14.67

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3633-CC3580
Lab FileID: 2C79578.D

96	chlorobenzene	0.891	0.935	-4.9	113	0.00	14.78
97	1,1,1,2-tetrachloroethane	0.326	0.333	-2.1	108	0.00	14.84
98	ethylbenzene	1.525	1.638	-7.4	116	0.00	14.82
99	m,p-xylene	0.587	0.643	-9.5	118	0.00	14.92
100	o-xylene	0.574	0.617	-7.5	115	0.00	15.31
101	styrene	0.906	0.978	-7.9	110	0.00	15.32
102	bromoform	0.220	0.171	22.3#	85	0.00	15.58
103 I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	16.91
104	isopropylbenzene	2.843	3.270	-15.0	117	0.00	15.62
105 S	4-bromofluorobenzene (s)	0.821	0.883	-7.6	105	0.00	15.82
		True	Calc.	% Drift			
106	cyclohexanone	200.000	156.189	21.9#	83	0.00	15.80
		AvgRF	CCRF	% Dev			
107	bromobenzene	0.732	0.779	-6.4	105	0.00	16.01
108	1,1,2,2-tetrachloroethane	0.614	0.528	14.0	84	0.00	15.91
		True	Calc.	% Drift			
109	trans-1,4-dichloro-2-bute	20.000	14.932	25.3#	77	0.00	15.95
		AvgRF	CCRF	% Dev			
110	1,2,3-trichloropropane	0.150	0.129	14.0	83	0.00	15.99
111	n-propylbenzene	3.371	3.856	-14.4	113	0.00	16.00
112	2-chlorotoluene	0.684	0.753	-10.1	112	0.00	16.15
113	4-chlorotoluene	2.112	2.238	-6.0	107	0.00	16.24
114	1,3,5-trimethylbenzene	2.367	2.692	-13.7	113	0.00	16.13
115	tert-butylbenzene	2.077	2.391	-15.1	119	0.00	16.46
116	pentachloroethane	0.454	0.490	-7.9	109	0.00	16.56
117	1,2,4-trimethylbenzene	2.423	2.751	-13.5	112	0.00	16.51
118	sec-butylbenzene	3.166	3.691	-16.6	116	0.00	16.66
119	1,3-dichlorobenzene	1.442	1.582	-9.7	109	0.00	16.86
120	p-isopropyltoluene	2.622	3.074	-17.2	117	0.00	16.77
121	1,4-dichlorobenzene	1.482	1.566	-5.7	107	0.00	16.94
122	1,2-dichlorobenzene	1.395	1.433	-2.7	101	0.00	17.32
123	n-butylbenzene	1.428	1.645	-15.2	112	0.00	17.17
124	1,2-dibromo-3-chloropropa	0.107	0.073	31.8#	66	0.00	18.09
125	1,3,5-trichlorobenzene	1.238	1.380	-11.5	106	0.00	18.27
126	1,2,4-trichlorobenzene	0.978	1.005	-2.8	96	0.00	18.92
127	hexachlorobutadiene	0.671	0.745	-11.0	110	0.00	19.03
128	naphthalene	1.663	1.383	16.8	82	0.00	19.21
129	1,2,3-trichlorobenzene	0.826	0.725	12.2	84	0.00	19.46
130	hexachloroethane	0.452	0.495	-9.5	119	0.00	17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2c78511.D M2C3580.M Fri Feb 25 14:31:30 2011 ACCUNJ

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2c...2c3637-3638\2c79672.D Vial: 2
Acq On : 28 Feb 2011 9:02 am Operator: dezareer
Sample : cc3580-20 Inst : MS2C
Misc : MS8710,V2C3637,W,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT2.P

Method : C:\MSDCHEM\1\METHODS\M2C3580.M (RTE Integrator)
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
Last Update : Fri Jan 21 15:38:12 2011
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	153	0.00	8.43
2		tertiary butyl alcohol	1.125	0.985	12.4	131	0.00	8.55
3		1,4-dioxane	0.091	0.088	3.3	148	0.00	12.47
4	I	pentafluorobenzene	1.000	1.000	0.0	117	-0.01	10.85
5		FREON 115		----------NA----------				
6		FREON 23		----------NA----------				
7		FREON 143A		----------NA----------				
8		FREON 152A		----------NA----------				
9		CHLOROTRIFLUOROETHENE		----------NA----------				
10		chlorodifluoromethane	0.457	0.424	7.2	106	0.00	4.43
11		dichlorodifluoromethane	0.576	0.480	16.7	97	0.00	4.41
12		FREON 114		----------NA----------				
13		FREON 142B		----------NA----------				
14		chloromethane	0.569	0.495	13.0	105	0.00	4.81
15		vinyl chloride	0.581	0.509	12.4	103	-0.01	5.12
16		bromomethane	0.336	0.322	4.2	107	0.00	5.90
17		chloroethane	0.287	0.253	11.8	101	0.00	6.11
18		trichlorofluoromethane	0.677	0.577	14.8	98	0.00	6.68
19		ethyl ether	0.187	0.193	-3.2	117	0.00	7.13
20		FREON 123		----------NA----------				
21		FREON 141B		----------NA----------				
22		FREON 123A		----------NA----------				
23		acrolein	0.049	0.049	0.0	122	0.00	7.45
24		1,1-dichloroethene	0.386	0.352	8.8	111	-0.01	7.63
25		acetone	0.084	0.087	-3.6	141	-0.01	7.70
26		allyl chloride	0.233	0.216	7.3	110	0.00	8.25
27		acetonitrile	0.025	0.027	-8.0	124	0.00	8.23
28		iodomethane	0.728	0.688	5.5	109	0.00	7.97
29		iso-butyl alcohol		----------NA----------				
30		carbon disulfide	1.346	1.259	6.5	113	0.00	8.11
31		methylene chloride	0.399	0.390	2.3	111	-0.01	8.47
32		methyl acetate	0.197	0.214	-8.6	125	0.00	8.23
33		methyl tert butyl ether	1.014	1.030	-1.6	114	-0.01	8.82
34		trans-1,2-dichloroethene	0.400	0.366	8.5	109	-0.01	8.88
35		di-isopropyl ether	1.131	1.094	3.3	110	0.00	9.48
36		2-butanone	0.031	0.034	-9.7	130	0.00	10.28
37		1,1-dichloroethane	0.646	0.630	2.5	111	-0.01	9.51
38		chloroprene	0.520	0.487	6.3	108	0.00	9.63
39		acrylonitrile	0.099	0.112	-13.1	130	0.00	8.85
40		vinyl acetate	0.055	0.057	-3.6	125	0.00	9.50
41		ethyl tert-butyl ether	1.126	1.120	0.5	111	0.00	9.98

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

42		ethyl acetate	0.034	0.040	-17.6	127	0.00	10.29
43		2,2-dichloropropane	0.589	0.535	9.2	105	0.00	10.32
44		cis-1,2-dichloroethene	0.421	0.373	11.4	105	0.00	10.31
45		propionitrile	0.038	0.044	-15.8	134	0.00	10.39
46		bromochloromethane	0.199	0.203	-2.0	112	0.00	10.65
47		tetrahydrofuran	0.089	0.102	-14.6	129	0.00	10.69
48		chloroform	0.645	0.611	5.3	108	-0.01	10.71
49		t-butyl formate	0.290	0.292	-0.7	115	0.00	10.73
50	S	dibromofluoromethane (s)	0.385	0.392	-1.8	124	-0.01	10.92
51	S	1,2-dichloroethane-d4 (s)	0.396	0.400	-1.0	123	0.00	11.35
52		freon 113	0.359	0.325	9.5	105	0.00	7.60
53		methacrylonitrile	0.157	0.181	-15.3	127	0.00	10.58
54		1,1,1-trichloroethane	0.586	0.546	6.8	105	0.00	10.96
55		Cyclohexane	0.627	0.575	8.3	107	0.00	11.04
56		tert amyl alcohol		----------NA----------				
57	I	1,4-difluorobenzene	1.000	1.000	0.0	110	0.00	11.78
58		Di-isobutylene		----------NA----------				
59		epichlorohydrin	0.016	0.019	-18.7	123	0.00	13.16
60		n-butyl alcohol	0.005	0.007#	-40.0#	145	0.00	11.90
61		carbon tetrachloride	0.415	0.389	6.3	104	-0.01	11.17
62		1,1-dichloropropene	0.379	0.379	0.0	108	0.00	11.15
63		hexane	0.338	0.347	-2.7	111	0.00	9.20
64		tert amyl ethyl ether		----------NA----------				
65		iso-octane		----------NA----------				
66		benzene	1.123	1.120	0.3	110	-0.01	11.41
67		tert-amyl methyl ether	0.793	0.831	-4.8	112	-0.01	11.43
68		heptane	0.189	0.188	0.5	106	0.00	11.56
69		isopropyl acetate	0.383	0.426	-11.2	120	0.00	11.33
70		1,2-dichloroethane	0.336	0.344	-2.4	108	0.00	11.44
71		trichloroethene	0.291	0.285	2.1	107	0.00	12.11
		----------	True	Calc.	% Drift	----------		
72		2-nitropropane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
73		2-chloroethyl vinyl ether	0.120	0.138	-15.0	121	0.00	12.86
74		methyl methacrylate	0.138	0.163	-18.1	123	0.00	12.36
75		1,2-dichloropropane	0.269	0.285	-5.9	110	0.00	12.37
76		dibromomethane	0.159	0.169	-6.3	110	0.00	12.53
77		methylcyclohexane	0.496	0.467	5.8	105	0.00	12.31
78		bromodichloromethane	0.357	0.357	0.0	106	-0.01	12.64
79		cis-1,3-dichloropropene	0.443	0.455	-2.7	109	-0.01	13.07
80	S	toluene-d8 (s)	1.027	1.145	-11.5	128	0.00	13.34
81		4-methyl-2-pentanone	0.077	0.091	-18.2	124	0.00	13.15
82		toluene	0.674	0.689	-2.2	112	0.00	13.41
83		3-methyl-1-butanol	0.008	0.010#	-25.0#	125	0.00	13.17
84		trans-1,3-dichloropropene	0.387	0.406	-4.9	109	0.00	13.60
85		ethyl methacrylate	0.262	0.293	-11.8	116	0.00	13.57
86		1,1,2-trichloroethane	0.187	0.199	-6.4	112	0.00	13.80
87		2-hexanone	0.069	0.082	-18.8	123	0.00	13.94
88	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.75
89		tetrachloroethene	0.309	0.306	1.0	109	0.00	13.96
90		1,3-dichloropropane	0.438	0.455	-3.9	108	0.00	13.97
91		butyl acetate	0.162	0.184	-13.6	118	0.00	14.01
92		3,3-dimethyl-1-butanol	0.020	0.025	-25.0#	123	0.00	14.10
93		dibromochloromethane	0.328	0.347	-5.8	110	0.00	14.22
94		1,2-dibromoethane	0.266	0.297	-11.7	115	0.00	14.36
95		BUTYL ETHER		----------NA----------				

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: V2C3637-CC3580
Lab FileID: 2C79672.D

96		chlorobenzene	0.891	0.903	-1.3	110	0.00	14.78
97		1,1,1,2-tetrachloroethane	0.326	0.333	-2.1	109	0.00	14.84
98		ethylbenzene	1.525	1.490	2.3	106	0.00	14.82
99		m,p-xylene	0.587	0.593	-1.0	109	0.00	14.92
100		o-xylene	0.574	0.583	-1.6	109	0.00	15.31
101		styrene	0.906	0.959	-5.8	108	0.00	15.32
102		bromoform	0.220	0.243	-10.5	121	0.00	15.58
103	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	16.91
104		isopropylbenzene	2.843	2.871	-1.0	108	0.00	15.62
105	S	4-bromofluorobenzene (s)	0.821	0.899	-9.5	113	0.00	15.82
			True	Calc.	% Drift			
106		cyclohexanone		NA				
			AvgRF	CCRF	% Dev			
107		bromobenzene	0.732	0.779	-6.4	111	0.00	16.01
108		1,1,2,2-tetrachloroethane	0.614	0.670	-9.1	112	0.00	15.92
			True	Calc.	% Drift			
109		trans-1,4-dichloro-2-bute	20.000	20.437	-2.2	114	0.00	15.95
			AvgRF	CCRF	% Dev			
110		1,2,3-trichloropropane	0.150	0.165	-10.0	113	0.00	15.99
111		n-propylbenzene	3.371	3.312	1.8	102	0.00	16.00
112		2-chlorotoluene	0.684	0.687	-0.4	108	0.00	16.15
113		4-chlorotoluene	2.112	1.998	5.4	101	0.00	16.24
114		1,3,5-trimethylbenzene	2.367	2.370	-0.1	105	0.00	16.13
115		tert-butylbenzene	2.077	2.079	-0.1	109	0.00	16.46
116		pentachloroethane	0.454	0.505	-11.2	118	0.00	16.56
117		1,2,4-trimethylbenzene	2.423	2.422	0.0	104	0.00	16.51
118		sec-butylbenzene	3.166	3.186	-0.6	106	0.00	16.66
119		1,3-dichlorobenzene	1.442	1.496	-3.7	109	0.00	16.86
120		p-isopropyltoluene	2.622	2.680	-2.2	108	0.00	16.77
121		1,4-dichlorobenzene	1.482	1.514	-2.2	109	0.00	16.94
122		1,2-dichlorobenzene	1.395	1.476	-5.8	110	0.00	17.32
123		n-butylbenzene	1.428	1.409	1.3	102	0.00	17.17
124		1,2-dibromo-3-chloropropa	0.107	0.115	-7.5	110	0.00	18.09
125		1,3,5-trichlorobenzene	1.238	1.372	-10.8	112	0.00	18.27
126		1,2,4-trichlorobenzene	0.978	1.174	-20.0#	119	0.00	18.92
127		hexachlorobutadiene	0.671	0.701	-4.5	109	0.00	19.03
128		naphthalene	1.663	2.042	-22.8#	128	0.00	19.21
129		1,2,3-trichlorobenzene	0.826	0.983	-19.0	120	0.00	19.46
130		hexachloroethane	0.452	0.470	-4.0	120	0.00	17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0

2c78511.D M2C3580.M Tue Mar 01 14:26:08 2011 ACCUNJ

New Jersey
ACCUTEST
LABORATORIES

GC/MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 13:06:02 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

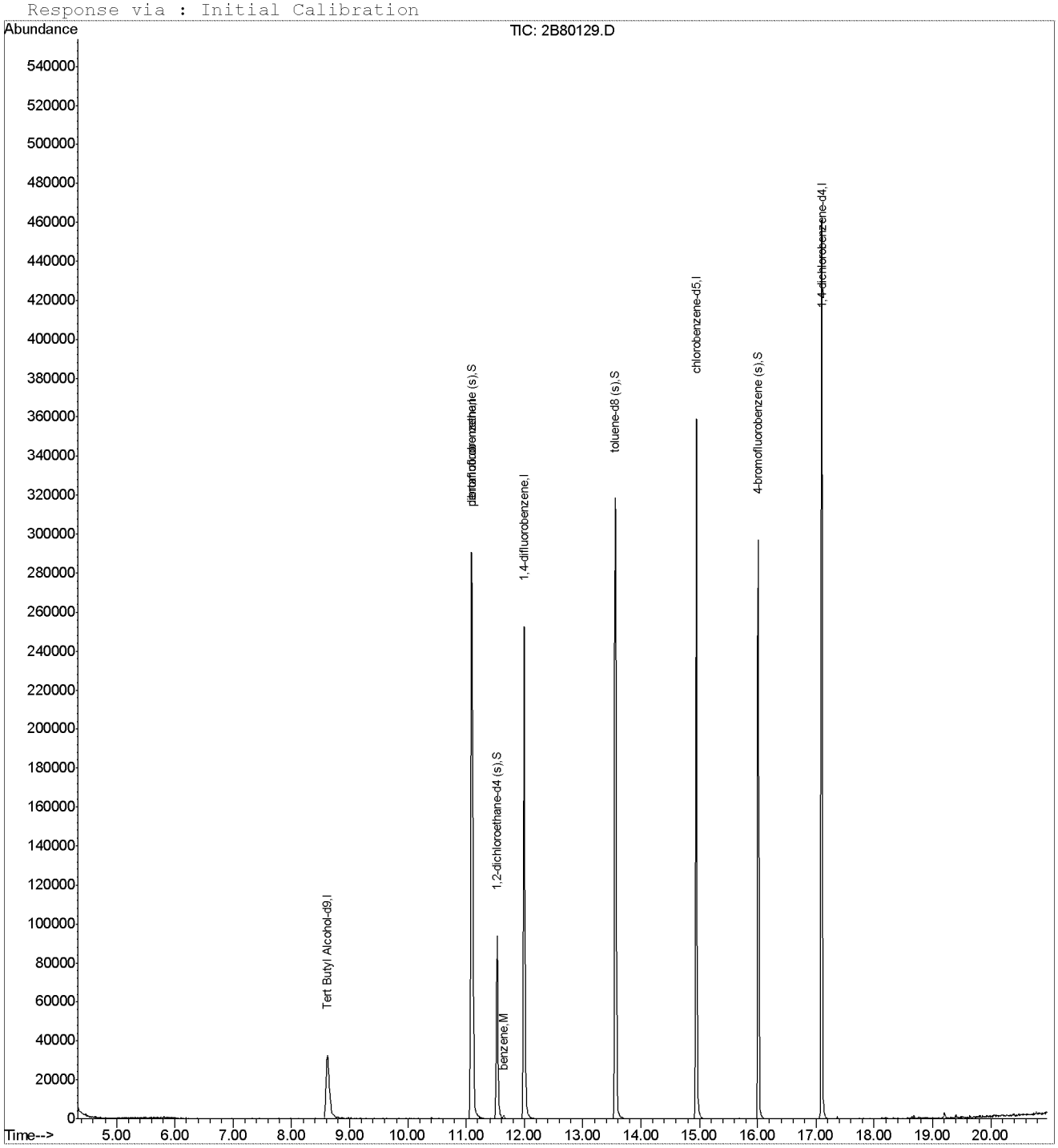
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	70823	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	184652	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	220753	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	192480	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	118628	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	64572	49.23	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.46%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	79911	50.91	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 101.82%			
73) toluene-d8 (s)	13.55	98	212205	49.62	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 99.24%			
98) 4-bromofluorobenzene (s)	16.01	95	82837	50.08	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.16%			
Target Compounds						Qvalue
58) benzene	11.64	78	1525	0.34	ug/L	52

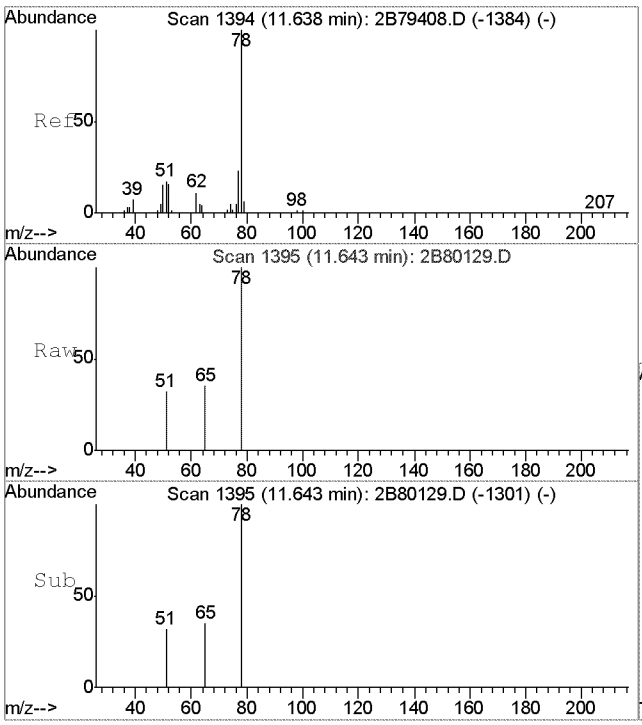
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:26 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration

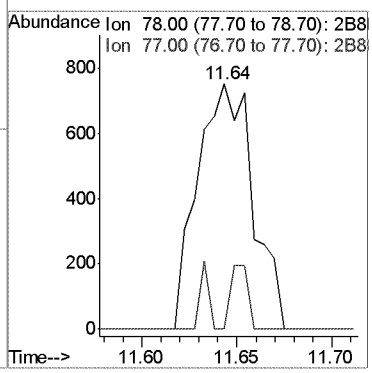




#58
benzene
Concen: 0.34 ug/L
RT: 11.64 min Scan# 1395
Delta R.T. 0.01 min
Lab File: 2B80129.D
Acq: 23 Feb 2011 12:40 pm

Tgt Ion: 78 Resp: 1525

Ion	Ratio	Lower	Upper
78	100		
77	0.0	0.0	53.3



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80129.D Vial: 6
Acq On : 23 Feb 2011 12:40 pm Operator: DEZAREER
Sample : ja68506-1 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.618	52	55	59	rVB	797	795	0.11%	0.021%
2	4.644	59	60	67	rVB	724	704	0.10%	0.019%
3	4.691	67	69	73	rVB	671	671	0.10%	0.018%
4	4.728	73	76	79	rVB	629	542	0.08%	0.014%
5	5.121	148	151	160	rVV2	597	1225	0.18%	0.032%
6	5.325	187	190	194	rBV	593	593	0.08%	0.016%
7	5.478	214	219	220	rVB	530	586	0.08%	0.015%
8	5.493	220	222	231	rBV	546	965	0.14%	0.025%
9	5.635	247	249	252	rBV	824	861	0.12%	0.023%
10	5.813	278	283	291	rVB3	721	1139	0.16%	0.030%
11	5.897	296	299	304	rVB	566	833	0.12%	0.022%
12	5.928	304	305	315	rBV	605	980	0.14%	0.026%
13	6.191	354	355	360	rVB	748	520	0.07%	0.014%
14	6.280	369	372	377	rBB	434	633	0.09%	0.017%
15	6.311	377	378	386	rBV2	478	819	0.12%	0.022%
16	6.385	390	392	396	rVB2	402	500	0.07%	0.013%
17	6.453	402	405	411	rBB	428	627	0.09%	0.016%
18	6.510	415	416	422	rVB	441	549	0.08%	0.014%
19	6.579	422	429	435	rBB	528	877	0.13%	0.023%
20	6.626	435	438	440	rBB	692	552	0.08%	0.015%
21	6.993	503	508	511	rBB	491	825	0.12%	0.022%
22	7.050	512	519	521	rBB	585	644	0.09%	0.017%
23	7.087	524	526	536	rBB	295	741	0.11%	0.019%
24	7.417	588	589	594	rBV	469	604	0.09%	0.016%
25	7.743	648	651	656	rBV	280	492	0.07%	0.013%
26	7.942	684	689	691	rBV	531	593	0.08%	0.016%
27	8.062	707	712	718	rBV	422	816	0.12%	0.021%
28	8.115	718	722	729	rVB2	461	629	0.09%	0.017%
29	8.419	773	780	782	rBB	486	799	0.11%	0.021%
30	8.461	783	788	791	rBV	408	635	0.09%	0.017%
31	8.613	805	817	847	rBV2	32668	130021	18.63%	3.417%
32	8.781	847	849	862	rVV2	654	1621	0.23%	0.043%
33	9.116	909	913	921	rVV2	445	944	0.14%	0.025%
34	9.179	921	925	928	rVB	504	584	0.08%	0.015%
35	9.274	939	943	951	rBV	439	1030	0.15%	0.027%
36	9.436	972	974	978	rBV	495	541	0.08%	0.014%
37	9.483	981	983	989	rBB	407	534	0.08%	0.014%
38	9.588	1001	1003	1008	rVB	451	553	0.08%	0.015%

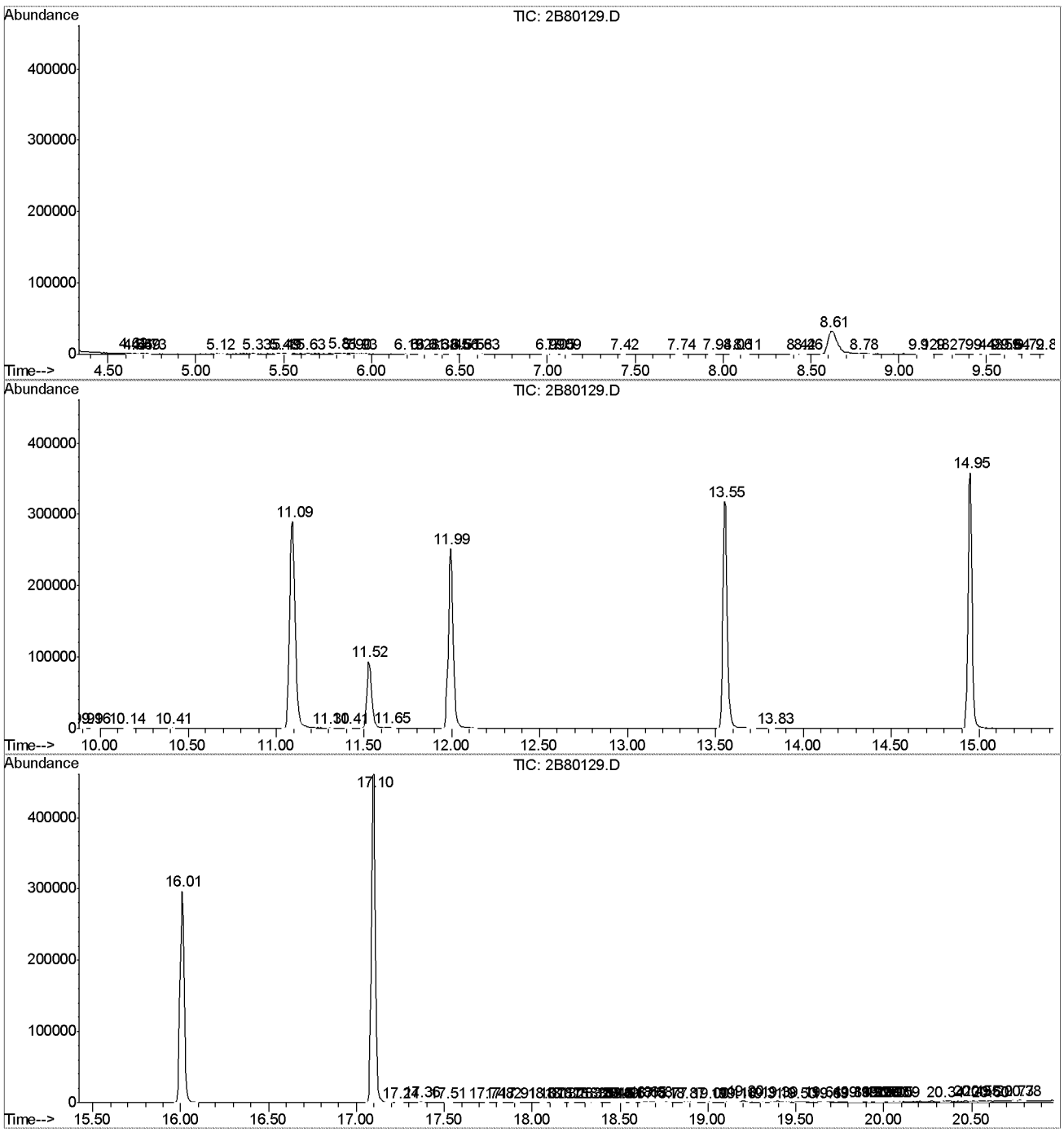
39	9.641	1008	1013	1020	rBB	351	787	0.11%	0.021%
40	9.719	1025	1028	1033	rVB	459	635	0.09%	0.017%
41	9.840	1048	1051	1058	rBB	279	670	0.10%	0.018%
42	9.908	1059	1064	1066	rBV	493	631	0.09%	0.017%
43	9.955	1071	1073	1081	rVB	526	891	0.13%	0.023%
44	10.144	1106	1109	1117	rBB	344	814	0.12%	0.021%
45	10.406	1154	1159	1162	rBV2	729	1287	0.18%	0.034%
46	11.093	1278	1290	1315	rBV2	290907	674117	96.61%	17.715%
47	11.303	1327	1330	1335	rVB2	700	915	0.13%	0.024%
48	11.413	1347	1351	1355	rBB2	436	627	0.09%	0.016%
49	11.523	1363	1372	1389	rBV	93797	192079	27.53%	5.048%
50	11.649	1389	1396	1403	rVB2	1721	3914	0.56%	0.103%
51	11.989	1452	1461	1491	rBV	252692	480009	68.79%	12.614%
52	13.552	1751	1759	1793	rBB	318691	544468	78.03%	14.308%
53	13.830	1806	1812	1814	rBB	412	515	0.07%	0.014%
54	14.946	2017	2025	2041	rBV	359386	560543	80.33%	14.730%
55	16.006	2219	2227	2245	rBB	297172	439464	62.98%	11.549%
56	17.096	2427	2435	2456	rBB	461665	697760	100.00%	18.336%
57	17.238	2459	2462	2468	rBB	462	620	0.09%	0.016%
58	17.363	2483	2486	2491	rBB	1332	1561	0.22%	0.041%
59	17.510	2512	2514	2522	rBB	273	582	0.08%	0.015%
60	17.736	2556	2557	2561	rVB	475	539	0.08%	0.014%
61	17.825	2570	2574	2576	rBB	518	551	0.08%	0.014%
62	17.909	2587	2590	2594	rBB	527	836	0.12%	0.022%
63	18.066	2616	2620	2624	rBB	506	721	0.10%	0.019%
64	18.134	2627	2633	2636	rBV	796	1036	0.15%	0.027%
65	18.166	2636	2639	2642	rBV	411	618	0.09%	0.016%
66	18.234	2647	2652	2653	rBB	488	627	0.09%	0.016%
67	18.323	2665	2669	2671	rVB	714	726	0.10%	0.019%
68	18.349	2672	2674	2676	rBB	589	527	0.08%	0.014%
69	18.375	2676	2679	2682	rBV	698	724	0.10%	0.019%
70	18.459	2692	2695	2699	rVB	546	635	0.09%	0.017%
71	18.491	2699	2701	2703	rBV	603	547	0.08%	0.014%
72	18.512	2703	2705	2709	rVV	428	522	0.07%	0.014%
73	18.569	2713	2716	2720	rBV	614	493	0.07%	0.013%
74	18.648	2725	2731	2734	rVV	1024	1614	0.23%	0.042%
75	18.685	2734	2738	2746	rVB	1563	1893	0.27%	0.050%
76	18.769	2746	2754	2759	rBV2	859	1640	0.24%	0.043%
77	18.868	2771	2773	2787	rBV2	784	1831	0.26%	0.048%
78	19.005	2795	2799	2803	rVB2	797	600	0.09%	0.016%
79	19.109	2816	2819	2824	rVB	681	767	0.11%	0.020%
80	19.157	2824	2828	2830	rBV	388	566	0.08%	0.015%
81	19.204	2830	2837	2843	rBV4	2569	3729	0.53%	0.098%
82	19.314	2854	2858	2860	rBV	526	634	0.09%	0.017%
83	19.393	2865	2873	2888	rVV3	1861	4428	0.63%	0.116%
84	19.503	2892	2894	2904	rVB2	504	876	0.13%	0.023%
85	19.639	2918	2920	2925	rVB	1183	1088	0.16%	0.029%
86	19.686	2925	2929	2930	rBV	535	592	0.08%	0.016%
87	19.807	2950	2952	2958	rBV2	807	819	0.12%	0.022%
88	19.854	2958	2961	2966	rVB	758	852	0.12%	0.022%
89	19.922	2971	2974	2975	rBV	772	566	0.08%	0.015%
90	19.969	2980	2983	2984	rVB	748	645	0.09%	0.017%
91	19.990	2984	2987	2990	rBV2	1209	1412	0.20%	0.037%
92	20.032	2993	2995	2997	rBV2	1004	695	0.10%	0.018%
93	20.053	2997	2999	3004	rVB2	1227	1026	0.15%	0.027%
94	20.090	3004	3006	3009	rBV	1081	818	0.12%	0.021%
95	20.342	3050	3054	3061	rBV3	864	1727	0.25%	0.045%

96	20.494	3082	3083	3091	rBV3	1140	1837	0.26%	0.048%
97	20.546	3092	3093	3100	rVB4	1019	1323	0.19%	0.035%
98	20.598	3100	3103	3104	rBV2	685	668	0.10%	0.018%
99	20.735	3128	3129	3134	rBV2	1339	1183	0.17%	0.031%
100	20.782	3135	3138	3144	rVB4	1506	1957	0.28%	0.051%

Sum of corrected areas: 3805354

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80129.D
Operator : DEZAREER
Acquired : 23 Feb 2011 12:40 pm using AcqMethod M2B3558
Instrument : MS2B
Sample Name: ja68506-1
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 6
Quant File :M2B3558.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 12:40 pm
Data File: C:\MSDCHEM\1\DATA\2B80129.D
Name: ja68506-1
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 13:37:14 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

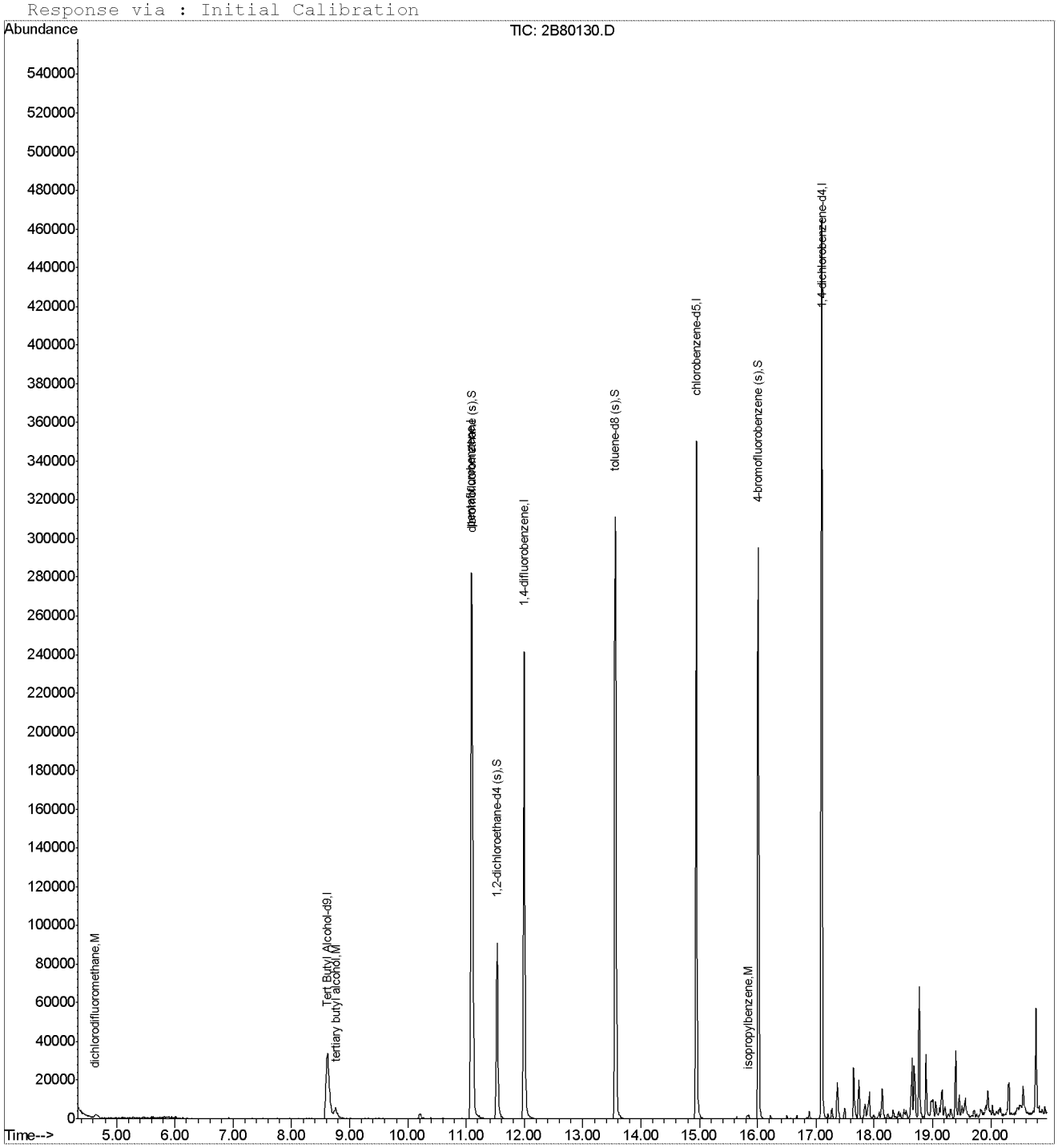
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	72038	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	179572	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	212434	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	189704	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	119957	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	64645	50.68	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.36%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	76692	50.24	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 100.48%			
73) toluene-d8 (s)	13.55	98	207690	50.46	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 100.92%			
98) 4-bromofluorobenzene (s)	16.01	95	81810	48.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 97.82%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.76	59	9830	67.64	ug/L	85
6) dichlorodifluoromethane	4.64	85	4306	2.22	ug/L	85
97) isopropylbenzene	15.84	105	1728	0.30	ug/L	93

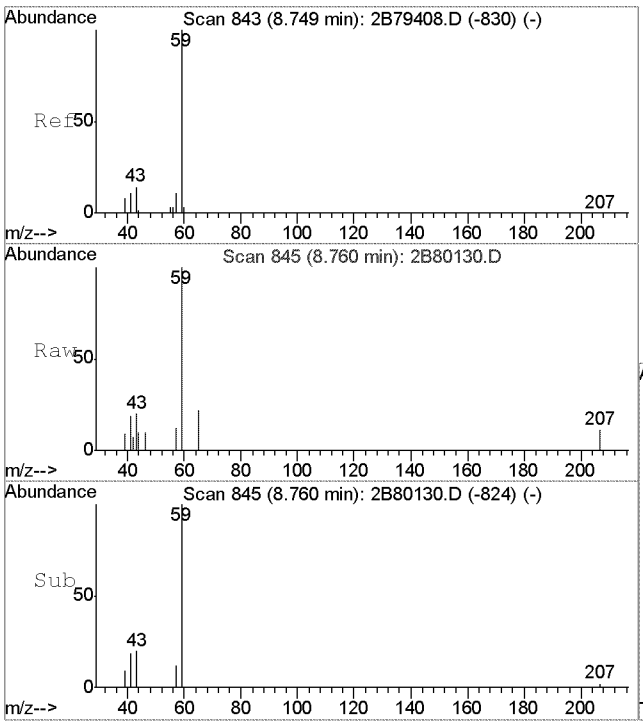
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:28 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration

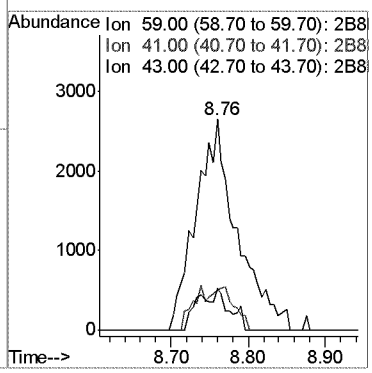


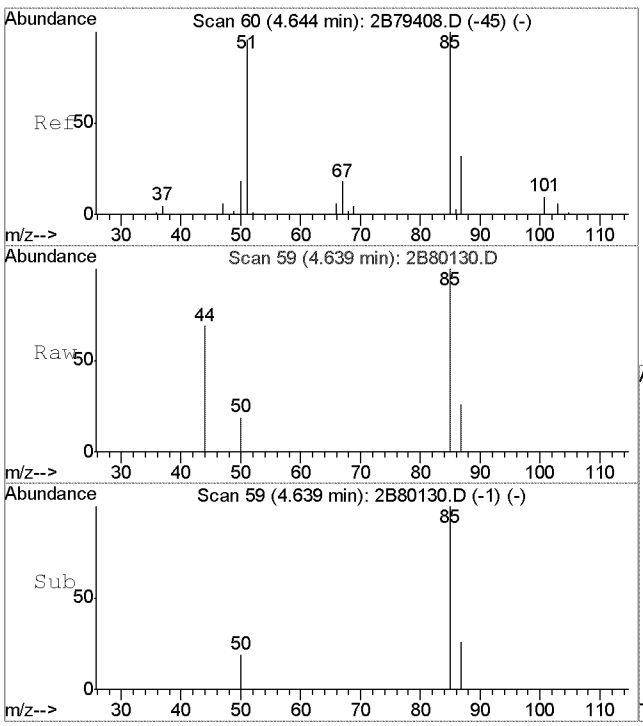


#2
tertiary butyl alcohol
Concen: 67.64 ug/L
RT: 8.76 min Scan# 845
Delta R.T. 0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion: 59 Resp: 9830

Ion	Ratio	Lower	Upper
59	100		
41	19.3	1.1	61.1
43	20.2	0.0	48.3

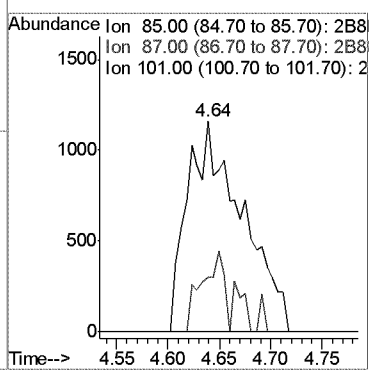


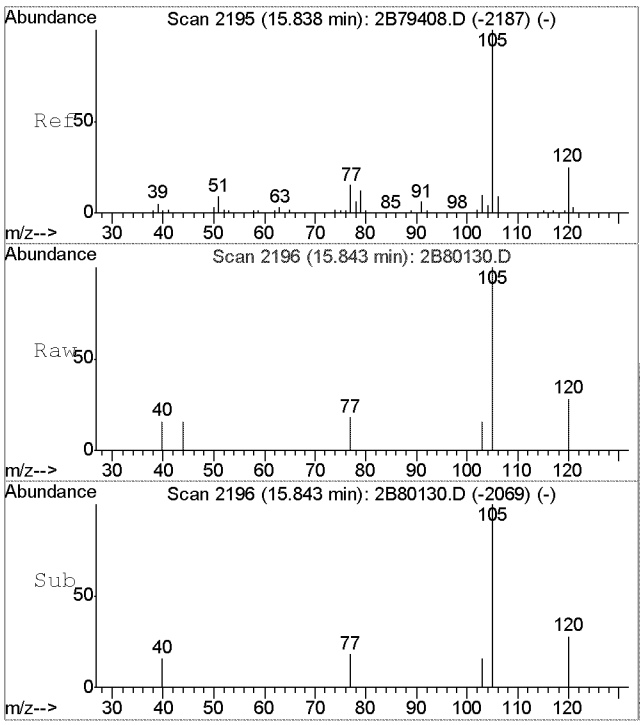


#6
dichlorodifluoromethane
Concen: 2.22 ug/L
RT: 4.64 min Scan# 59
Delta R.T. -0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion: 85 Resp: 4306

Ion	Ratio	Lower	Upper
85	100		
87	25.9	2.4	62.4
101	0.0	0.0	40.0

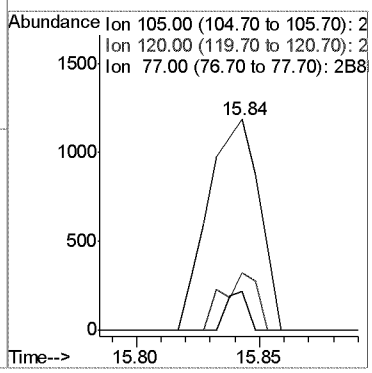




#97
isopropylbenzene
Concen: 0.30 ug/L
RT: 15.84 min Scan# 2196
Delta R.T. 0.01 min
Lab File: 2B80130.D
Acq: 23 Feb 2011 1:11 pm

Tgt Ion:105 Resp: 1728

Ion	Ratio	Lower	Upper
105	100		
120	27.6	0.0	54.8
77	18.3	0.0	44.9



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.639	52	59	75	rVB3	1954	7813	1.12%	0.167%
2	5.110	145	149	151	rVB2	483	646	0.09%	0.014%
3	5.446	212	213	231	rVB	595	1653	0.24%	0.035%
4	5.855	288	291	297	rVV3	498	1014	0.15%	0.022%
5	5.902	297	300	302	rVV	688	662	0.09%	0.014%
6	5.928	302	305	319	rVV3	847	2199	0.32%	0.047%
7	6.012	319	321	328	rVB2	819	857	0.12%	0.018%
8	6.280	369	372	384	rBB2	640	1438	0.21%	0.031%
9	6.453	403	405	413	rBB	622	800	0.11%	0.017%
10	6.552	420	424	427	rBB	455	646	0.09%	0.014%
11	6.799	466	471	477	rBB	423	680	0.10%	0.015%
12	7.758	649	654	658	rVB	468	662	0.09%	0.014%
13	7.957	689	692	696	rVB	518	688	0.10%	0.015%
14	8.314	757	760	764	rBV	682	805	0.12%	0.017%
15	8.618	806	818	836	rBV	34215	131303	18.82%	2.804%
16	8.760	838	845	865	rVV5	5650	19986	2.87%	0.427%
17	8.870	865	866	871	rVV	675	728	0.10%	0.016%
18	9.216	931	932	940	rBV	408	816	0.12%	0.017%
19	9.431	965	973	975	rBV	457	888	0.13%	0.019%
20	9.520	986	990	993	rBV	460	653	0.09%	0.014%
21	9.908	1061	1064	1071	rVB	459	745	0.11%	0.016%
22	10.201	1111	1120	1132	rBV2	2785	7110	1.02%	0.152%
23	10.390	1150	1156	1162	rVB2	851	1505	0.22%	0.032%
24	10.532	1179	1183	1186	rBV	655	706	0.10%	0.015%
25	10.642	1200	1204	1209	rBV	461	786	0.11%	0.017%
26	11.087	1279	1289	1320	rBV2	282464	664948	95.33%	14.202%
27	11.255	1320	1321	1325	rVB	688	681	0.10%	0.015%
28	11.528	1362	1373	1392	rBV	91018	189994	27.24%	4.058%
29	11.633	1392	1393	1401	rVB2	590	921	0.13%	0.020%
30	11.989	1452	1461	1499	rBB	241727	465448	66.73%	9.941%
31	12.828	1617	1621	1625	rBB	703	781	0.11%	0.017%
32	13.552	1751	1759	1788	rBB	311471	528930	75.83%	11.297%
33	14.946	2013	2025	2047	rBV	350545	550671	78.94%	11.761%
34	15.638	2152	2157	2162	rBB2	1548	1704	0.24%	0.036%
35	15.843	2186	2196	2200	rBB2	2300	4552	0.65%	0.097%
36	16.005	2219	2227	2248	rBB	295388	433187	62.10%	9.252%
37	16.215	2260	2267	2276	rBB	1767	3026	0.43%	0.065%
38	16.493	2316	2320	2326	rBB4	1850	2431	0.35%	0.052%

ACCUTEST LABORATORIES JA68506

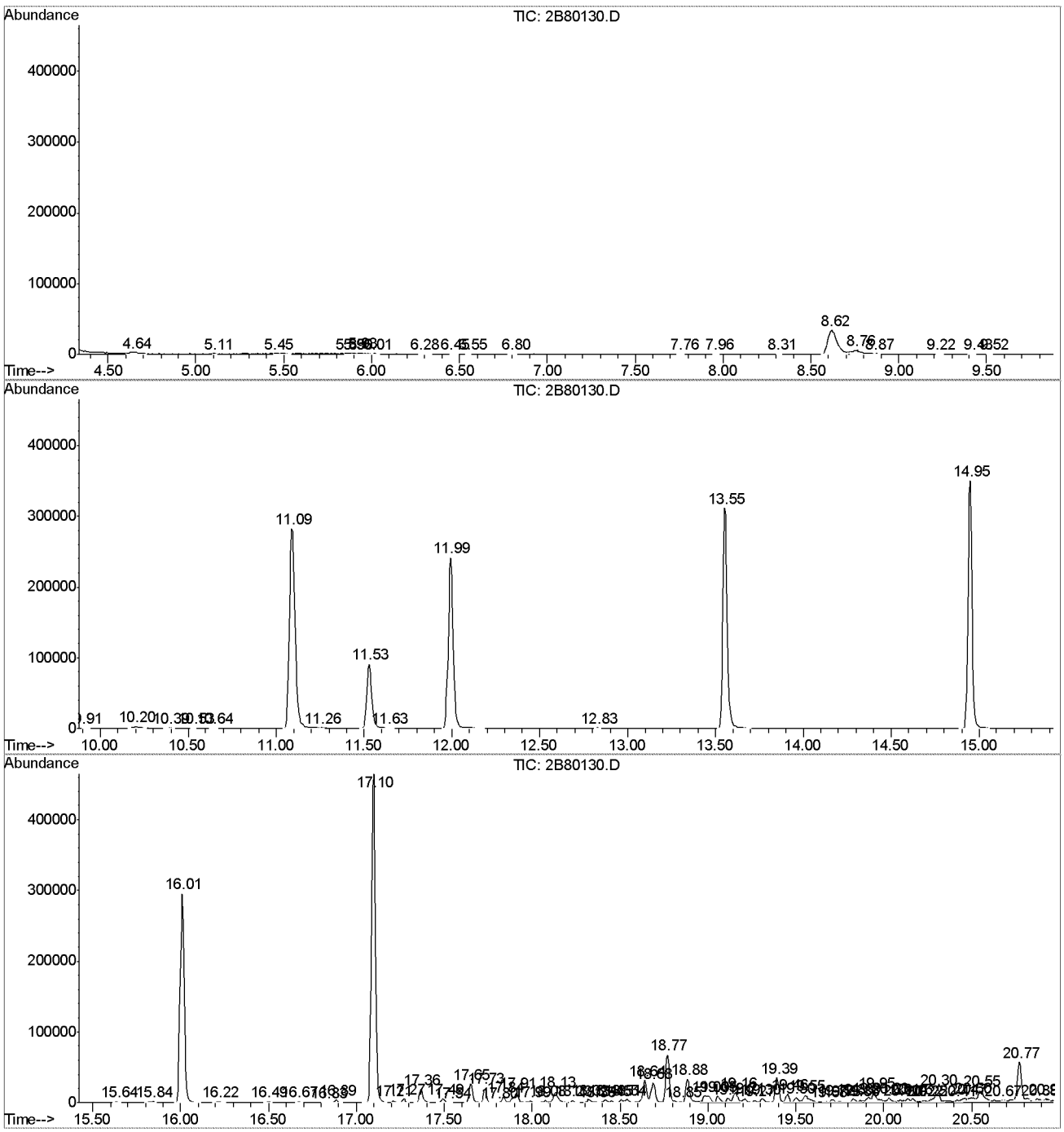
39	16.666	2350	2353	2359	rBB2	1820	1993	0.29%	0.043%
40	16.834	2379	2385	2387	rBV	705	737	0.11%	0.016%
41	16.886	2387	2395	2402	rVB3	4381	6227	0.89%	0.133%
42	17.096	2423	2435	2450	rBV	465101	697550	100.00%	14.898%
43	17.206	2454	2456	2462	rVV3	2720	3131	0.45%	0.067%
44	17.274	2462	2469	2475	rVB2	5601	7550	1.08%	0.161%
45	17.363	2479	2486	2496	rBB	19017	30003	4.30%	0.641%
46	17.494	2503	2511	2516	rBB4	5393	8030	1.15%	0.172%
47	17.536	2516	2519	2522	rBB4	620	661	0.09%	0.014%
48	17.647	2533	2540	2551	rBV2	26636	40695	5.83%	0.869%
49	17.730	2551	2556	2563	rVB2	20469	27794	3.98%	0.594%
50	17.804	2563	2570	2571	rBV	744	1172	0.17%	0.025%
51	17.835	2571	2576	2582	rBV2	7582	11269	1.62%	0.241%
52	17.909	2582	2590	2599	rVV3	13787	27792	3.98%	0.594%
53	17.993	2599	2606	2613	rVB4	2527	5290	0.76%	0.113%
54	18.076	2613	2622	2625	rBV2	3641	5455	0.78%	0.117%
55	18.134	2626	2633	2646	rVV	15228	25763	3.69%	0.550%
56	18.228	2647	2651	2659	rVB2	2722	4458	0.64%	0.095%
57	18.318	2663	2668	2674	rBV3	4264	7231	1.04%	0.154%
58	18.360	2674	2676	2680	rVB2	1058	1001	0.14%	0.021%
59	18.412	2680	2686	2691	rBV	3875	5837	0.84%	0.125%
60	18.449	2691	2693	2700	rVB2	2759	2803	0.40%	0.060%
61	18.506	2700	2704	2708	rBV4	4666	6544	0.94%	0.140%
62	18.538	2708	2710	2717	rVB6	4384	5910	0.85%	0.126%
63	18.643	2717	2730	2734	rBV	31486	49922	7.16%	1.066%
64	18.685	2734	2738	2747	rVV2	27079	41854	6.00%	0.894%
65	18.769	2747	2754	2766	rVB2	68036	107162	15.36%	2.289%
66	18.847	2766	2769	2771	rBV2	950	1020	0.15%	0.022%
67	18.884	2771	2776	2789	rBV2	33100	53812	7.71%	1.149%
68	19.004	2789	2799	2805	rVV5	9173	26391	3.78%	0.564%
69	19.052	2805	2808	2816	rVV4	8251	12516	1.79%	0.267%
70	19.115	2816	2820	2823	rVV3	5234	7853	1.13%	0.168%
71	19.162	2823	2829	2834	rVV2	14337	25235	3.62%	0.539%
72	19.209	2834	2838	2845	rVB3	5912	8349	1.20%	0.178%
73	19.267	2845	2849	2853	rBV3	2429	3476	0.50%	0.074%
74	19.303	2853	2856	2866	rVB3	4600	7991	1.15%	0.171%
75	19.392	2866	2873	2880	rBV	34684	52601	7.54%	1.123%
76	19.455	2880	2885	2889	rVV4	11147	15864	2.27%	0.339%
77	19.497	2889	2893	2899	rVV5	6026	10100	1.45%	0.216%
78	19.555	2899	2904	2918	rVB4	9947	22999	3.30%	0.491%
79	19.676	2922	2927	2930	rBV2	1115	1554	0.22%	0.033%
80	19.718	2930	2935	2939	rVB5	3392	4453	0.64%	0.095%
81	19.754	2939	2942	2948	rVB4	1847	2298	0.33%	0.049%
82	19.828	2948	2956	2961	rBV6	4312	8154	1.17%	0.174%
83	19.864	2961	2963	2966	rVV2	2214	2191	0.31%	0.047%
84	19.912	2967	2972	2975	rVV3	6354	10839	1.55%	0.231%
85	19.948	2975	2979	2989	rVV4	13228	24834	3.56%	0.530%
86	20.027	2989	2994	3002	rVV5	6276	10139	1.45%	0.217%
87	20.095	3003	3007	3012	rVV2	2701	5040	0.72%	0.108%
88	20.137	3012	3015	3018	rVV3	3898	5658	0.81%	0.121%
89	20.163	3018	3020	3025	rVB4	4498	4947	0.71%	0.106%
90	20.221	3030	3031	3033	rBV	1231	716	0.10%	0.015%
91	20.247	3033	3036	3037	rVB	1171	857	0.12%	0.018%
92	20.305	3037	3047	3055	rBV4	17169	31102	4.46%	0.664%
93	20.415	3065	3068	3071	rBV3	1955	2511	0.36%	0.054%
94	20.467	3071	3078	3080	rVV5	4132	8924	1.28%	0.191%
95	20.499	3080	3084	3089	rVV5	5393	12237	1.75%	0.261%

96	20.551	3089	3094	3105	rVB3	14382	30069	4.31%	0.642%
97	20.672	3116	3117	3122	rBV2	987	1020	0.15%	0.022%
98	20.771	3130	3136	3153	rVB	54065	91709	13.15%	1.959%
99	20.876	3153	3156	3161	rVB4	2118	3450	0.49%	0.074%
100	20.923	3161	3165	3169	rBV5	3545	4364	0.63%	0.093%

Sum of corrected areas: 4682170

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80130.D
Operator : DEZAREER
Acquired : 23 Feb 2011 1:11 pm using AcqMethod M2B3558
Instrument : MS2B
Sample Name: ja68506-2
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 7
Quant File :M2B3558.RES (RTE Integrator)



ACCUTEST LABORATORIES JA68506

Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

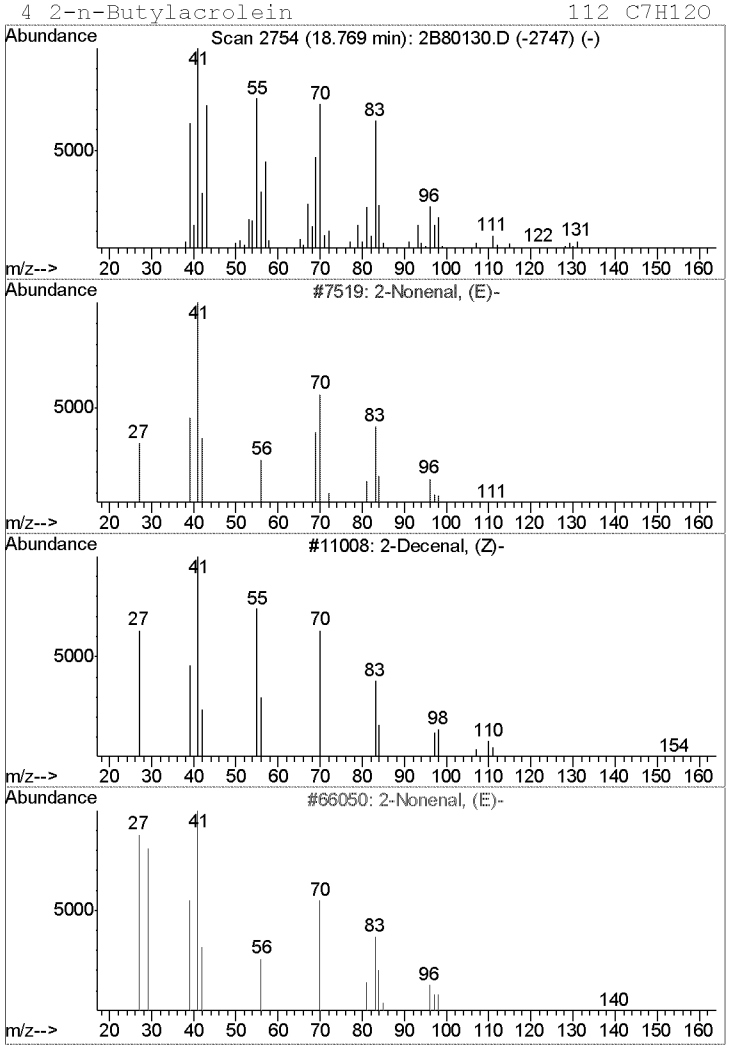
Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library : C:\DATABASE\NBS75K.L

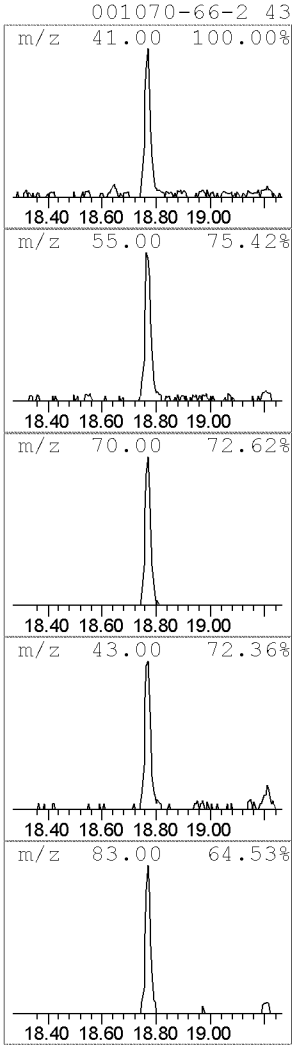
****

Peak Number 1 2-Nonenal, (E)- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.77	7.68 ug/L	107162	1,4-dichlorobenzene-d4	17.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Nonenal, (E)-	140	C9H16O	018829-56-6	72
2	2-Decenal, (Z)-	154	C10H18O	002497-25-8	52
3	2-Nonenal, (E)-	140	C9H16O	018829-56-6	47
4	2-n-Butylacrolein	112	C7H12O	001070-66-2	43





Library Search Compound Report

Data File : C:\MSDCHEM\1\DATA\2B80130.D Vial: 7
Acq On : 23 Feb 2011 1:11 pm Operator: DEZAREER
Sample : ja68506-2 Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

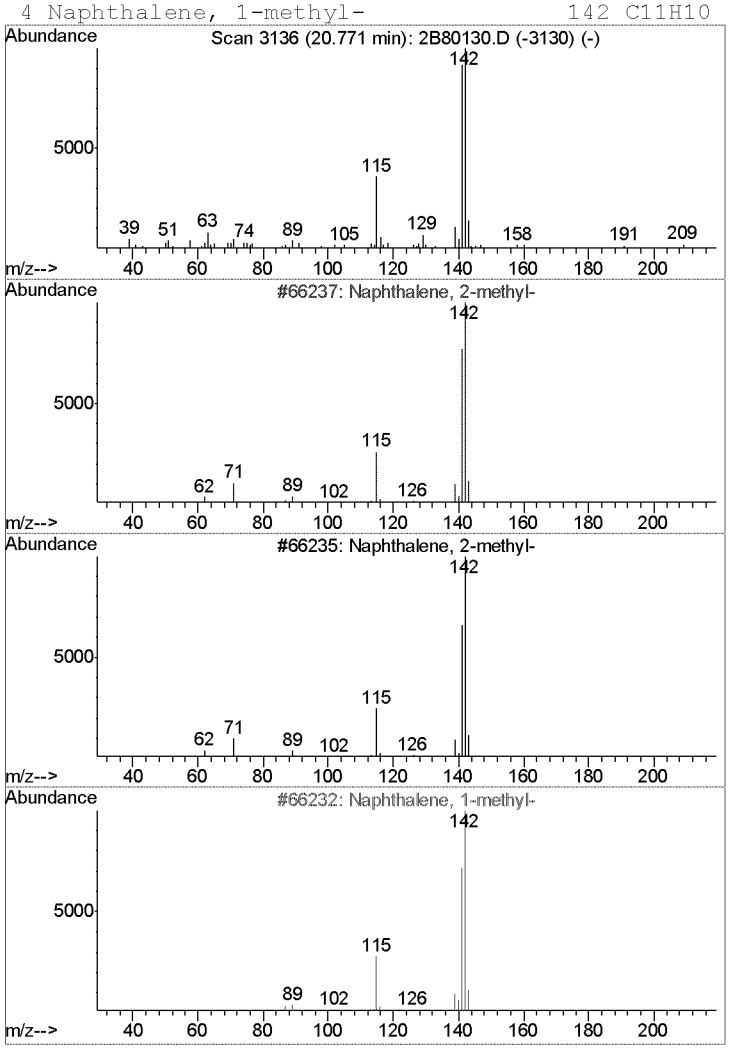
Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library : C:\DATABASE\NBS75K.L

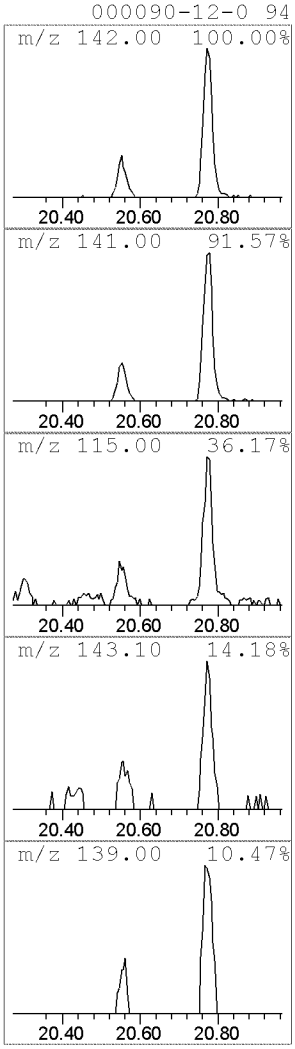
****

Peak Number 2 Naphthalene, 2-methyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.77	6.57 ug/L	91709	1,4-dichlorobenzene-d4	17.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	95
2	Naphthalene, 2-methyl-	142	C11H10	000091-57-6	94
3	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94
4	Naphthalene, 1-methyl-	142	C11H10	000090-12-0	94





Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 1:11 pm
Data File: C:\MSDCHEM\1\DATA\2B80130.D
Name: ja68506-2
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Nonenal, (E)-	18.77	7.7	ug/L	107162	5	17.10	697550	50.0
Naphthalene, 2-me...	20.77	6.6	ug/L	91709	5	17.10	697550	50.0

6.1.4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 01 14:33:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

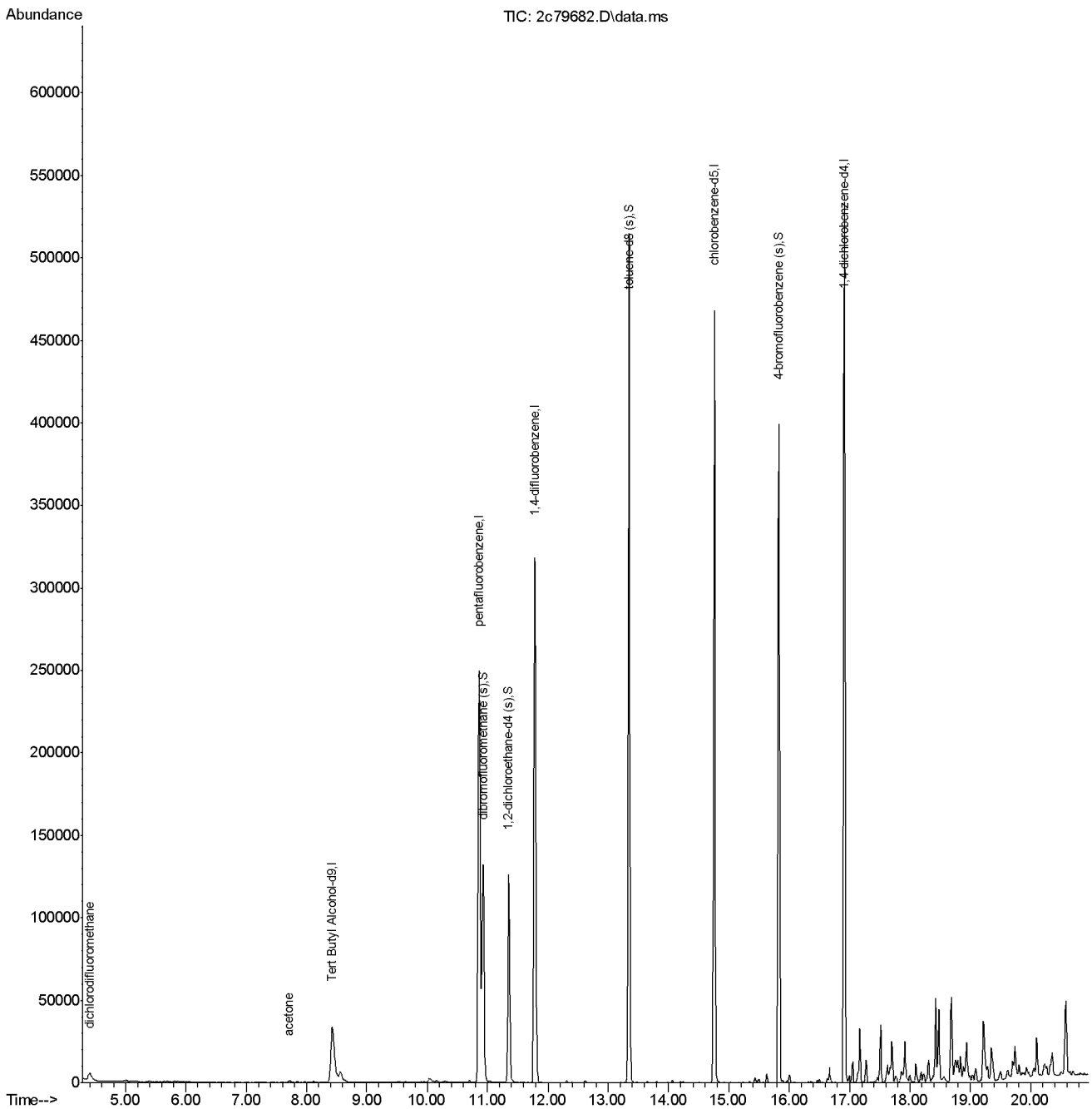
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	91655	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	240241	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	315654	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	271381	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	151632	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	98046	53.04	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.08%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	101305	53.18	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 106.36%			
80) toluene-d8 (s)	13.339	98	364073	56.13	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.26%			
105) 4-bromofluorobenzene (s)	15.824	95	133599	53.63	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.26%			
Target Compounds						Qvalue
11) dichlorodifluoromethane	4.400	85	11340	4.10	ug/L	96
25) acetone	7.708	43	2252	5.58	ug/L	89

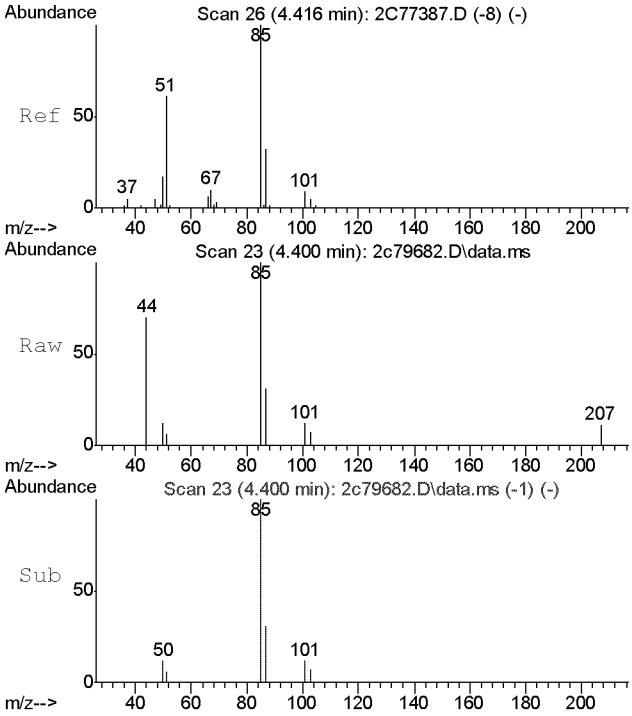
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 01 14:33:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

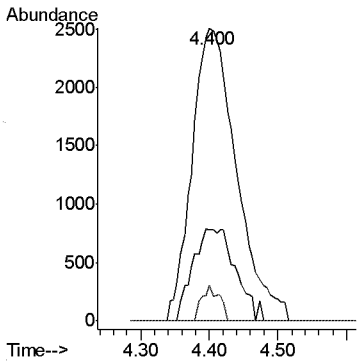


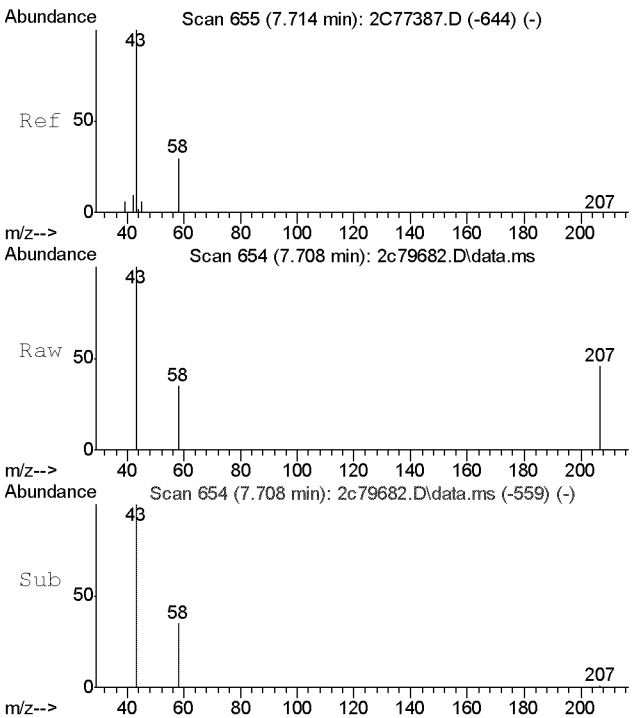


#11
dichlorodifluoromethane
Concen: 4.10 ug/L
RT: 4.400 min Scan# 23
Delta R.T. -0.005 min
Lab File: 2c79682.D
Acq: 28 Feb 2011 2:42 pm

Tgt Ion: 85 Resp: 11340

Ion	Ratio	Lower	Upper
85	100		
87	31.1	2.5	62.5
101	12.1	0.0	39.2

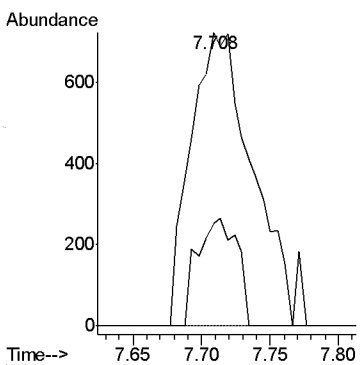




#25
acetone
Concen: 5.58 ug/L
RT: 7.708 min Scan# 654
Delta R.T. 0.000 min
Lab File: 2c79682.D
Acq: 28 Feb 2011 2:42 pm

Tgt Ion: 43 Resp: 2252

Ion	Ratio	Lower	Upper
43	100		
58	34.7	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79682.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.400	13	23	45	rVB3	5080	23073	2.53%	0.351%
2	5.003	129	138	145	rVV2	755	2253	0.25%	0.034%
3	5.076	149	152	159	rVV2	508	905	0.10%	0.014%
4	5.165	166	169	178	rVB2	531	1055	0.12%	0.016%
5	5.386	207	211	219	rVV2	594	1462	0.16%	0.022%
6	5.679	263	267	278	rBV2	481	1015	0.11%	0.015%
7	5.999	326	328	335	rVV2	566	877	0.10%	0.013%
8	6.046	335	337	354	rVB2	635	1157	0.13%	0.018%
9	6.838	483	488	496	rVB2	416	940	0.10%	0.014%
10	7.719	648	656	668	rBV3	1215	3871	0.42%	0.059%
11	7.839	672	679	681	rBV2	854	1100	0.12%	0.017%
12	8.117	720	732	736	rVB3	555	1651	0.18%	0.025%
13	8.426	776	791	809	rBV2	33904	147456	16.14%	2.245%
14	8.558	809	816	835	rVB2	5680	22245	2.44%	0.339%
15	9.538	995	1003	1005	rVB2	451	936	0.10%	0.014%
16	10.026	1088	1096	1114	rBV3	2317	9049	0.99%	0.138%
17	10.151	1114	1120	1131	rVB5	1151	3071	0.34%	0.047%
18	10.293	1140	1147	1160	rVB2	963	3010	0.33%	0.046%
19	10.697	1217	1224	1229	rVV	1008	1631	0.18%	0.025%
20	10.859	1243	1255	1261	rVV	249431	594142	65.05%	9.044%
21	10.917	1261	1266	1283	rVV	132265	315796	34.57%	4.807%
22	11.043	1283	1290	1295	rVB3	942	2106	0.23%	0.032%
23	11.347	1338	1348	1366	rBV	125979	280456	30.70%	4.269%
24	11.682	1406	1412	1417	rBV3	511	1095	0.12%	0.017%
25	11.777	1421	1430	1454	rVB	318507	668949	73.24%	10.182%
26	12.317	1525	1533	1538	rVV3	1777	3119	0.34%	0.047%
27	12.364	1538	1542	1547	rVV	366	837	0.09%	0.013%
28	12.610	1580	1589	1594	rVB3	1151	2020	0.22%	0.031%
29	13.339	1718	1728	1743	rVV	515005	913392	100.00%	13.903%
30	13.649	1780	1787	1793	rBV2	837	1229	0.13%	0.019%
31	13.801	1811	1816	1820	rBV	738	879	0.10%	0.013%
32	13.911	1831	1837	1845	rBV	341	891	0.10%	0.014%
33	14.063	1859	1866	1873	rBV3	1494	2002	0.22%	0.030%
34	14.199	1883	1892	1895	rBV2	926	1779	0.19%	0.027%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	14.236	1895	1899	1906	rVB2	1105	1530	0.17%	0.023%
36	14.755	1989	1998	2009	rBV	468363	763646	83.61%	11.624%
37	14.833	2009	2013	2018	rVB3	1186	1867	0.20%	0.028%
38	15.342	2100	2110	2114	rBV2	1052	1832	0.20%	0.028%
39	15.431	2121	2127	2132	rBV2	2967	4690	0.51%	0.071%
40	15.494	2132	2139	2147	rVB3	1839	3100	0.34%	0.047%
41	15.625	2157	2164	2175	rVV2	5735	9755	1.07%	0.148%
42	15.824	2192	2202	2212	rVV	399135	636856	69.72%	9.694%
43	15.893	2212	2215	2223	rVV4	1707	2494	0.27%	0.038%
44	15.961	2223	2228	2231	rVV2	1640	2439	0.27%	0.037%
45	16.003	2231	2236	2245	rVB	5195	8833	0.97%	0.134%
46	16.066	2245	2248	2252	rBV2	493	881	0.10%	0.013%
47	16.354	2300	2303	2308	rVV	761	1009	0.11%	0.015%
48	16.459	2318	2323	2327	rVV3	1556	1872	0.20%	0.028%
49	16.501	2327	2331	2336	rVV	1929	2475	0.27%	0.038%
50	16.627	2346	2355	2358	rBV3	2379	3899	0.43%	0.059%
51	16.663	2358	2362	2368	rVV	9227	13629	1.49%	0.207%
52	16.910	2400	2409	2419	rBV	534025	848258	92.87%	12.912%
53	16.994	2419	2425	2429	rVV2	3959	6373	0.70%	0.097%
54	17.046	2429	2435	2445	rVB	12539	19722	2.16%	0.300%
55	17.167	2445	2458	2465	rBV2	32639	59424	6.51%	0.905%
56	17.271	2472	2478	2487	rBV2	13591	21862	2.39%	0.333%
57	17.408	2497	2504	2507	rBV4	585	968	0.11%	0.015%
58	17.455	2507	2513	2517	rBV2	2747	4347	0.48%	0.066%
59	17.507	2517	2523	2532	rVB	35017	55683	6.10%	0.848%
60	17.628	2532	2546	2550	rBV3	10775	23654	2.59%	0.360%
61	17.696	2550	2559	2566	rVB2	23651	50441	5.52%	0.768%
62	17.764	2566	2572	2581	rVB8	3488	8281	0.91%	0.126%
63	17.859	2581	2590	2593	rBV	6256	12327	1.35%	0.188%
64	17.911	2595	2600	2612	rVB2	23909	44269	4.85%	0.674%
65	18.000	2612	2617	2624	rVB2	4404	6906	0.76%	0.105%
66	18.095	2629	2635	2644	rVB3	10954	19050	2.09%	0.290%
67	18.184	2644	2652	2656	rBV	5860	9829	1.08%	0.150%
68	18.226	2656	2660	2667	rVB	4751	7036	0.77%	0.107%
69	18.304	2667	2675	2682	rBV3	13279	25434	2.78%	0.387%
70	18.425	2682	2698	2703	rBV	50093	90953	9.96%	1.384%
71	18.477	2703	2708	2716	rVB	43341	76118	8.33%	1.159%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	18.567	2716	2725	2736	rVB	3439	11047	1.21%	0.168%
73	18.682	2738	2747	2755	rBV	51352	96440	10.56%	1.468%
74	18.750	2755	2760	2764	rVV2	10822	21826	2.39%	0.332%
75	18.792	2764	2768	2772	rVV2	10398	17386	1.90%	0.265%
76	18.834	2772	2776	2781	rVV2	12510	19374	2.12%	0.295%
77	18.886	2781	2786	2790	rVV5	6483	11126	1.22%	0.169%
78	18.939	2790	2796	2803	rVB	21298	42599	4.66%	0.648%
79	18.986	2804	2805	2810	rVB4	2503	2753	0.30%	0.042%
80	19.033	2810	2814	2819	rBV5	2969	4035	0.44%	0.061%
81	19.086	2819	2824	2835	rVB3	7710	15402	1.69%	0.234%
82	19.217	2835	2849	2858	rBV2	36327	93883	10.28%	1.429%
83	19.280	2858	2861	2868	rVB3	8269	14167	1.55%	0.216%
84	19.348	2868	2874	2888	rVB4	20075	49055	5.37%	0.747%
85	19.495	2888	2902	2911	rBV5	5857	14611	1.60%	0.222%
86	19.620	2916	2926	2935	rBV8	5748	16047	1.76%	0.244%
87	19.704	2935	2942	2945	rBV	9368	17040	1.87%	0.259%
88	19.741	2945	2949	2957	rVV4	17003	30511	3.34%	0.464%
89	19.809	2959	2962	2967	rVB2	6611	8428	0.92%	0.128%
90	19.856	2967	2971	2980	rBV7	1960	5509	0.60%	0.084%
91	19.930	2980	2985	2990	rBV4	4152	7256	0.79%	0.110%
92	20.056	3000	3009	3012	rBV6	5053	10615	1.16%	0.162%
93	20.097	3012	3017	3027	rVV2	23614	41483	4.54%	0.631%
94	20.160	3027	3029	3033	rVV4	1032	936	0.10%	0.014%
95	20.234	3033	3043	3055	rVV7	7199	24238	2.65%	0.369%
96	20.354	3055	3066	3088	rVB5	13672	34793	3.81%	0.530%
97	20.501	3092	3094	3098	rBV4	1698	2212	0.24%	0.034%
98	20.580	3100	3109	3119	rVV3	43369	83544	9.15%	1.272%
99	20.706	3127	3133	3147	rBV6	2305	4728	0.52%	0.072%
100	20.821	3153	3155	3164	rVB5	1158	1404	0.15%	0.021%

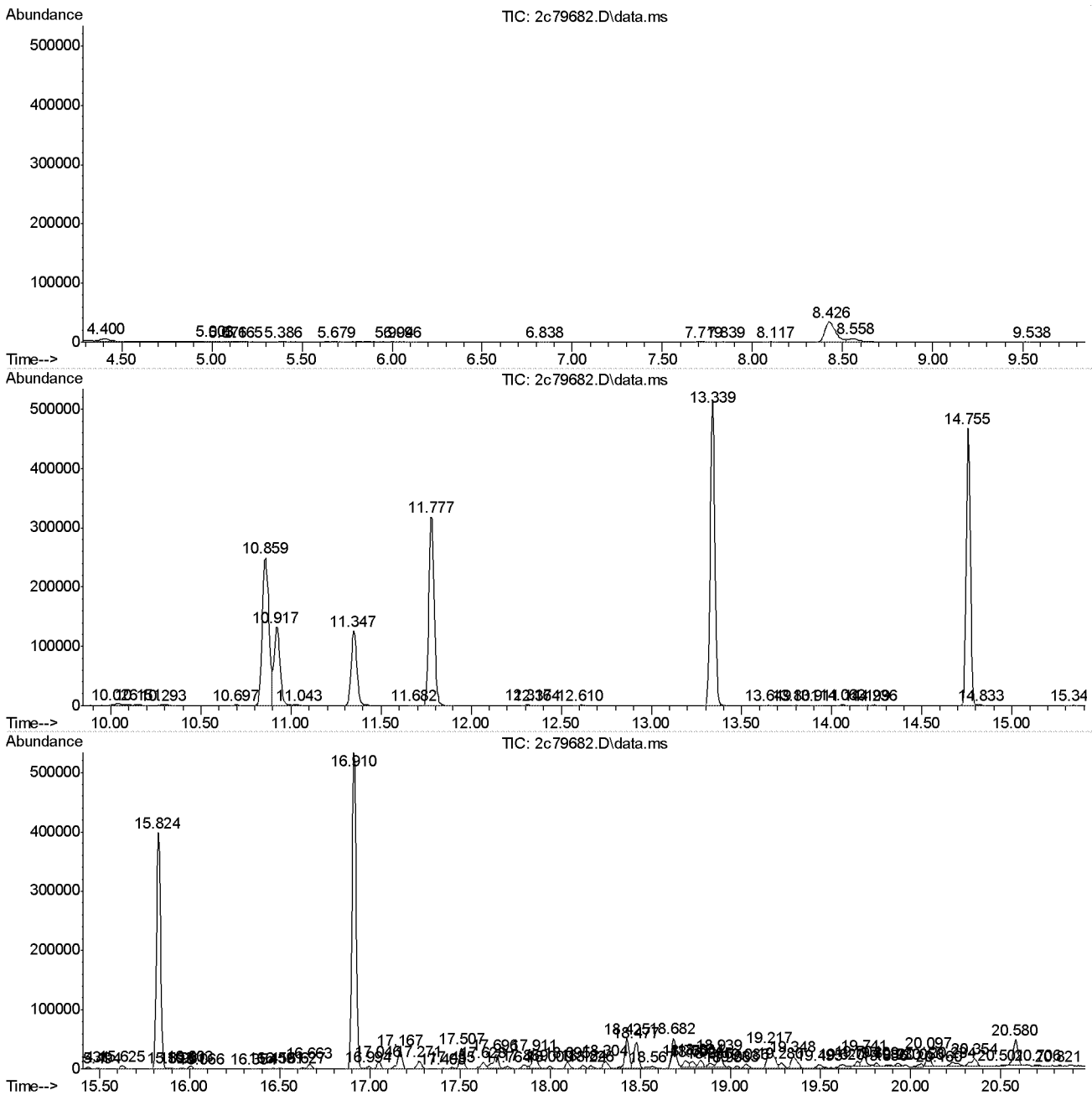
Sum of corrected areas: 6569639

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

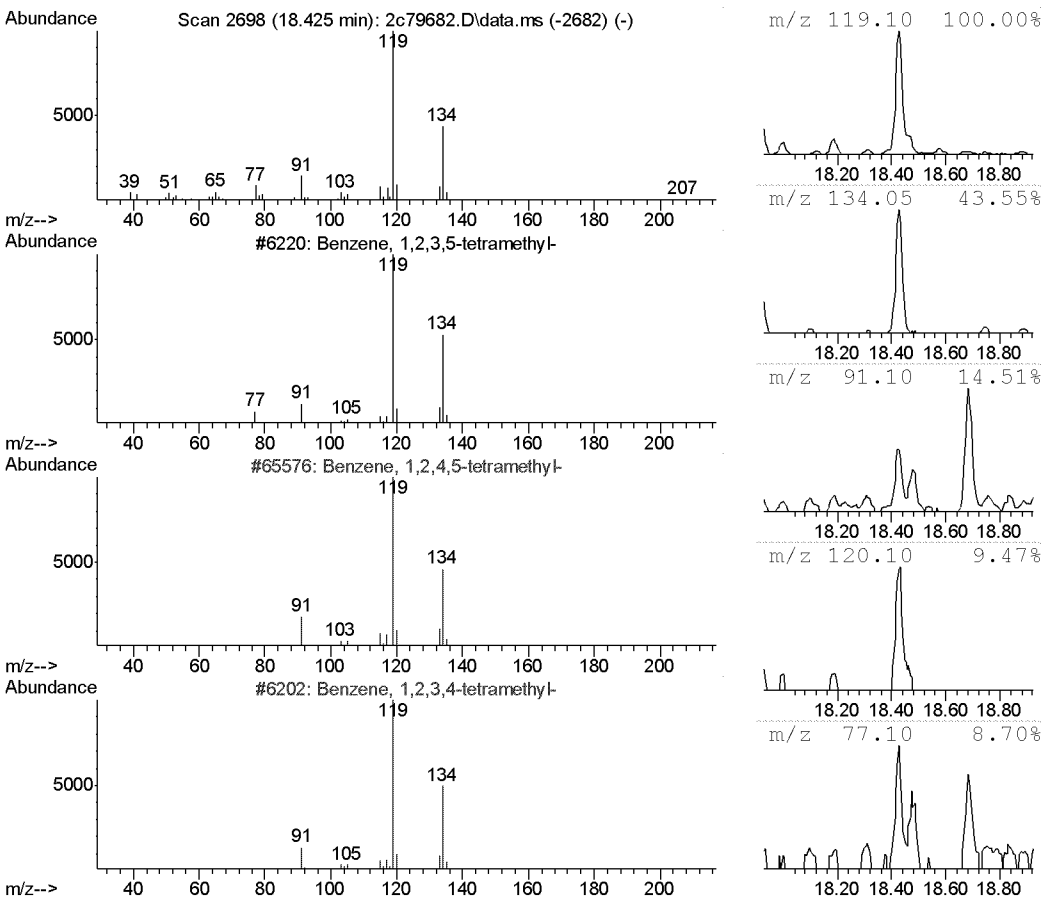
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 1 C4 alkyl benzene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.425	5.36 ug/L	90953	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	97
2	Benzene, 1,2,4,5-tetramethyl-	134	C10H14	000095-93-2	97
3	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	97
4	Benzene, 1,2,3,4-tetramethyl-	134	C10H14	000488-23-3	95
5	Benzene, 1,2,3,5-tetramethyl-	134	C10H14	000527-53-7	95



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

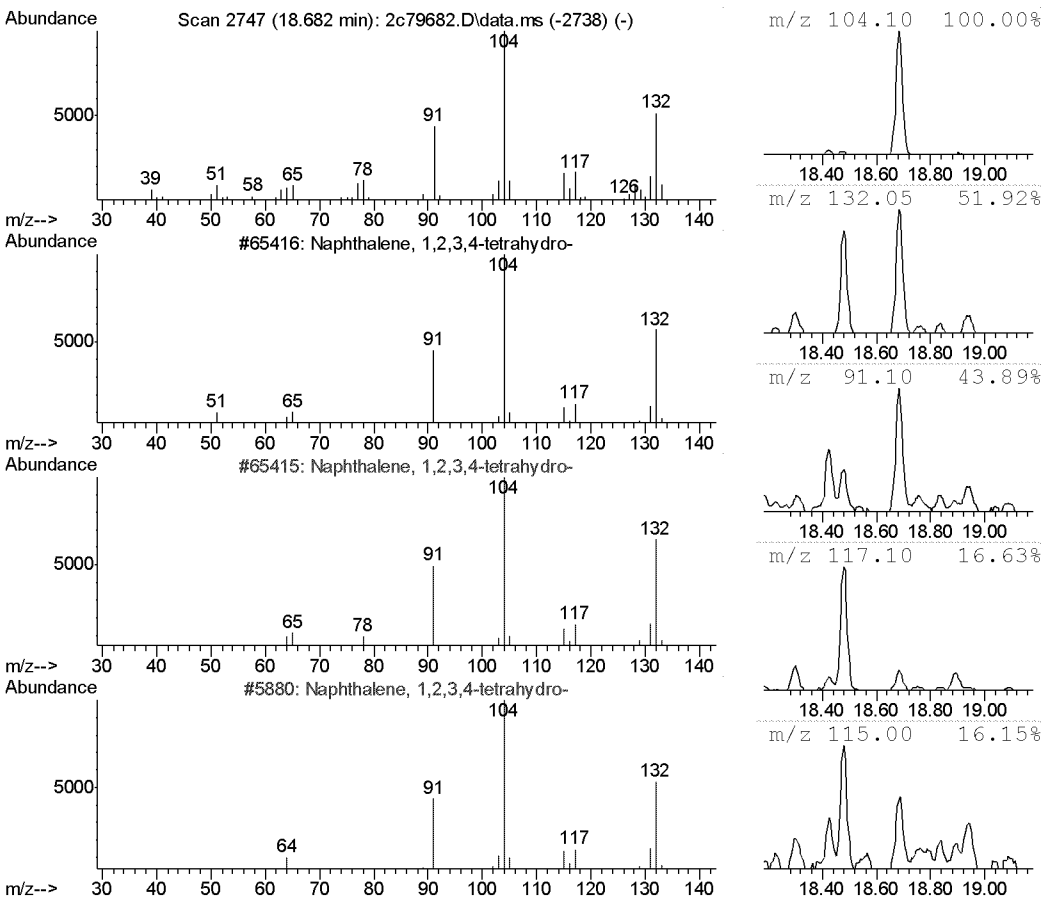
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 2 Naphthalene, 1,2,3,4-tetrah... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.682	5.68 ug/L	96440	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
2	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	96
3	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	94
4	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	93
5	Naphthalene, 1,2,3,4-tetrahydro-	132	C10H12	000119-64-2	64



Library Search Compound Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

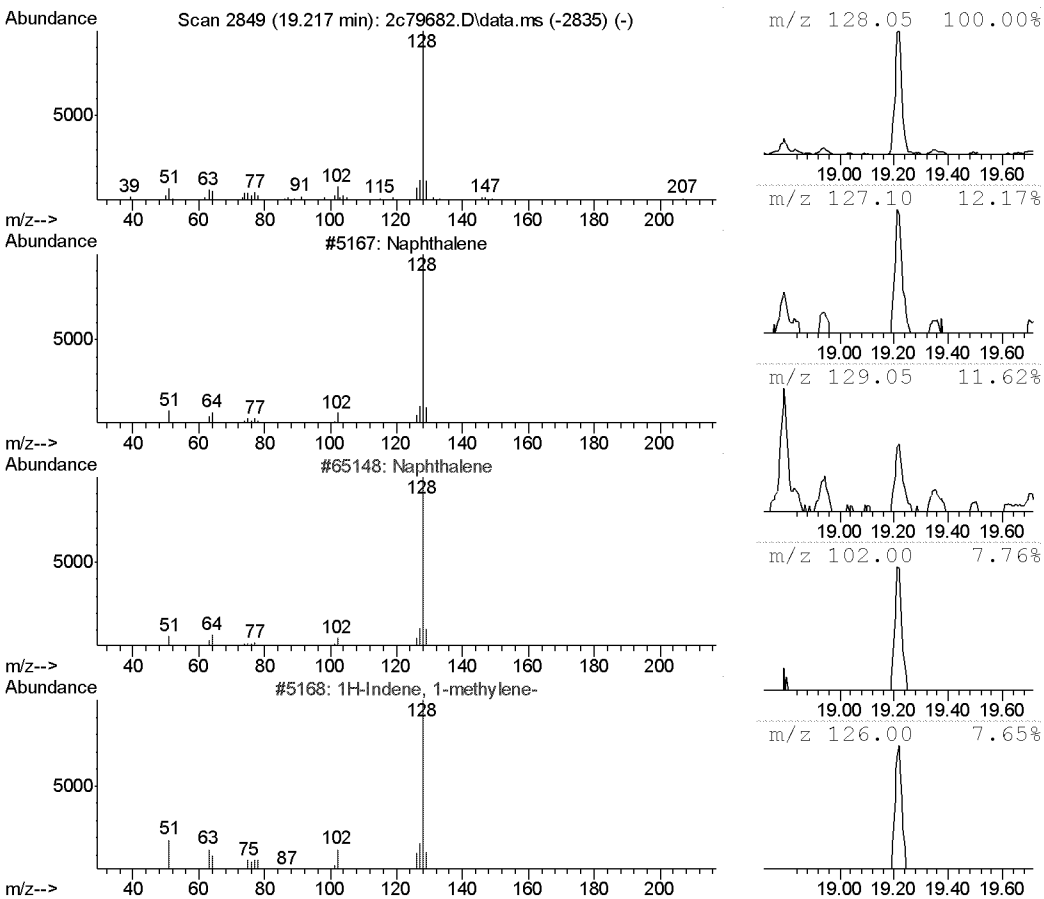
TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

****

Peak Number 3 Naphthalene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.217	5.53 ug/L	93883	1,4-dichlorobenzene-d4	16.910

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Naphthalene	128	C10H8	000091-20-3	94
2	Naphthalene	128	C10H8	000091-20-3	93
3	1H-Indene, 1-methylene-	128	C10H8	002471-84-3	93
4	Naphthalene	128	C10H8	000091-20-3	90
5	Naphthalene	128	C10H8	000091-20-3	90



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79682.D
Acq On : 28 Feb 2011 2:42 pm
Operator : dezareer
Sample : ja68506-3
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
C4 alkyl benzene	18.425	5.4	ug/L	90953	5	16.910	848258	50.0
Naphthalene, 1,...	18.682	5.7	ug/L	96440	5	16.910	848258	50.0
Naphthalene	19.217	5.5	ug/L	93883	5	16.910	848258	50.0

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 14:30:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

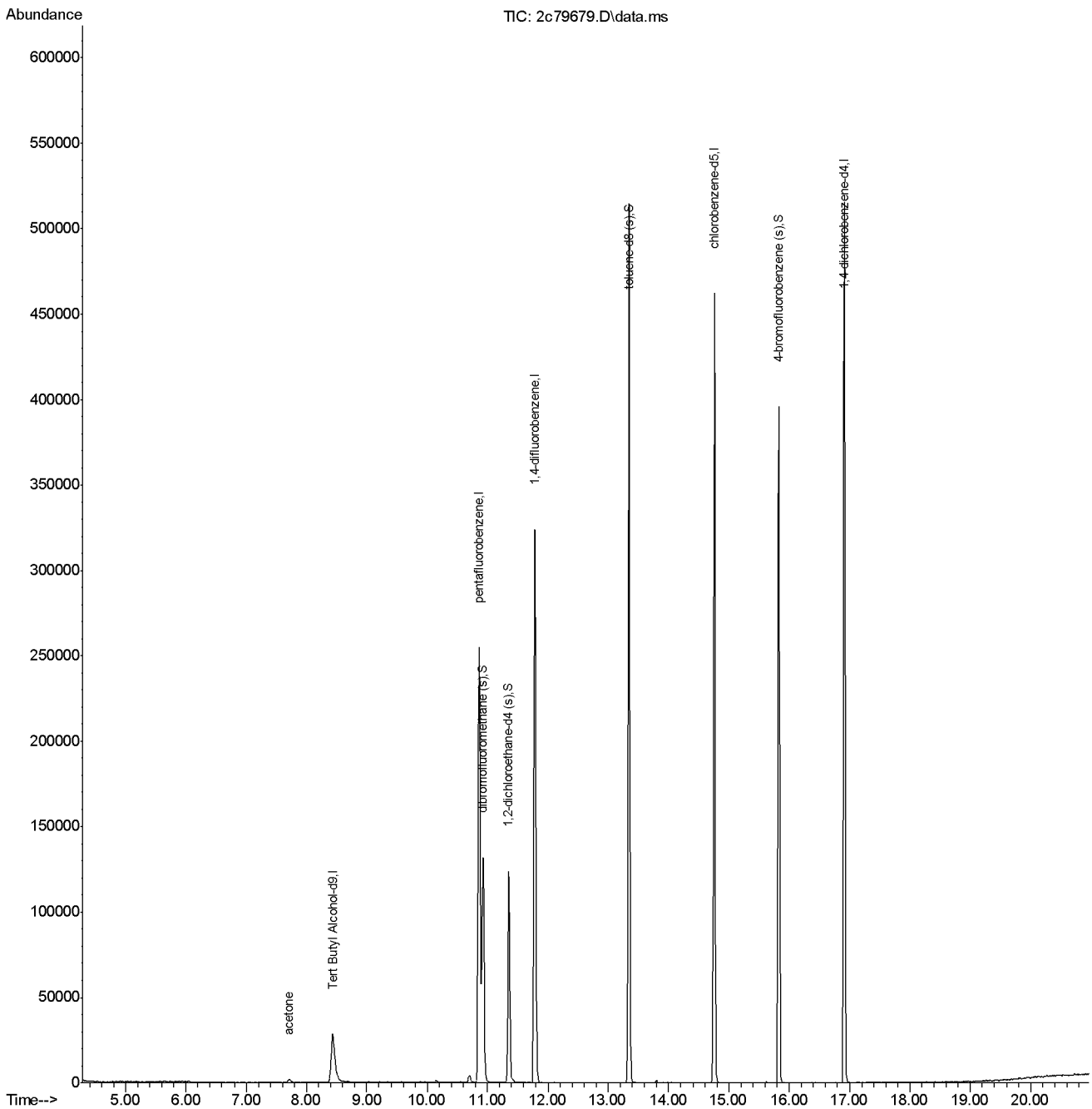
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	77918	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	244930	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	319287	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	272317	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148467	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	98366	52.19	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.38%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	100158	51.57	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 103.14%			
80) toluene-d8 (s)	13.339	98	367771	56.06	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.12%			
105) 4-bromofluorobenzene (s)	15.824	95	131303	53.83	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.66%			
Target Compounds						Qvalue
25) acetone	7.708	43	3947	9.59	ug/L	98

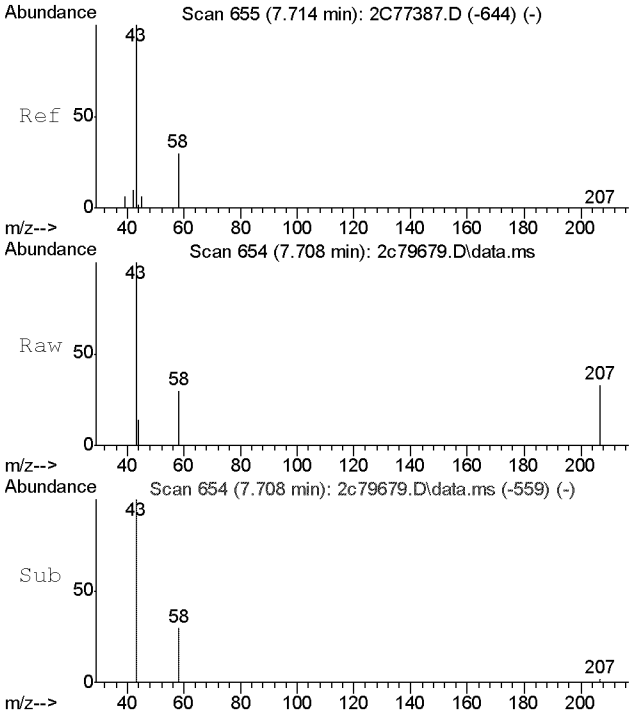
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 01 14:30:40 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

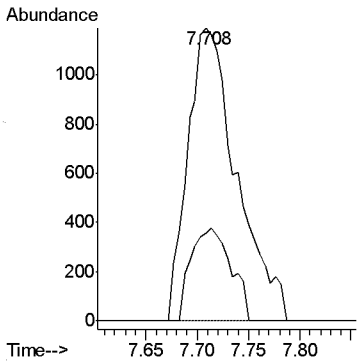




#25
acetone
Concen: 9.59 ug/L
RT: 7.708 min Scan# 654
Delta R.T. 0.000 min
Lab File: 2c79679.D
Acq: 28 Feb 2011 1:09 pm

Tgt Ion: 43 Resp: 3947

Ion	Ratio	Lower	Upper
43	100		
58	30.0	0.0	58.8



6.1.7 9

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79679.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.374	16	18	26	rBV2	384	731	0.08%	0.014%
2	4.505	41	43	58	rVB2	445	1433	0.16%	0.027%
3	4.693	76	79	87	rBV2	329	708	0.08%	0.014%
4	4.783	90	96	99	rBV2	557	786	0.09%	0.015%
5	4.845	104	108	112	rVB2	504	654	0.07%	0.013%
6	4.893	112	117	124	rBV2	412	988	0.11%	0.019%
7	4.940	124	126	132	rVV	458	533	0.06%	0.010%
8	5.024	140	142	147	rVB2	460	491	0.05%	0.009%
9	5.181	169	172	181	rVB2	467	827	0.09%	0.016%
10	5.417	216	217	224	rVB2	343	572	0.06%	0.011%
11	5.564	242	245	250	rBV2	481	681	0.07%	0.013%
12	5.810	291	292	297	rBV2	481	466	0.05%	0.009%
13	5.857	297	301	303	rBV2	453	516	0.06%	0.010%
14	5.915	311	312	321	rVV3	338	637	0.07%	0.012%
15	6.030	333	334	351	rVB2	600	1315	0.14%	0.025%
16	6.518	422	427	436	rBV	256	446	0.05%	0.009%
17	6.633	447	449	455	rVB2	386	482	0.05%	0.009%
18	6.722	462	466	475	rBV	285	700	0.08%	0.013%
19	6.922	498	504	518	rVB2	277	1307	0.14%	0.025%
20	7.210	557	559	564	rVV	312	475	0.05%	0.009%
21	7.477	607	610	615	rVB2	359	558	0.06%	0.011%
22	7.624	633	638	641	rBV2	446	619	0.07%	0.012%
23	7.713	645	655	670	rVB3	1980	6770	0.74%	0.129%
24	7.939	691	698	699	rBV2	318	473	0.05%	0.009%
25	8.018	704	713	715	rVV2	279	608	0.07%	0.012%
26	8.180	739	744	749	rBV	325	602	0.07%	0.012%
27	8.432	777	792	825	rBV2	28103	128718	14.00%	2.461%
28	8.615	825	827	830	rVV	735	810	0.09%	0.015%
29	8.636	830	831	837	rVV	511	808	0.09%	0.015%
30	8.678	837	839	849	rVB3	629	1269	0.14%	0.024%
31	9.082	911	916	920	rBV2	410	613	0.07%	0.012%
32	9.302	954	958	961	rBV	289	467	0.05%	0.009%
33	9.344	961	966	968	rVV	504	477	0.05%	0.009%
34	9.412	978	979	987	rVV2	346	633	0.07%	0.012%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.569	1007	1009	1014	rVB	517	480	0.05%	0.009%
36	9.832	1052	1059	1062	rVB2	268	524	0.06%	0.010%
37	10.041	1097	1099	1108	rVB	349	663	0.07%	0.013%
38	10.146	1113	1119	1131	rVV2	1005	2554	0.28%	0.049%
39	10.314	1149	1151	1159	rBV2	337	586	0.06%	0.011%
40	10.429	1169	1173	1180	rBV2	320	680	0.07%	0.013%
41	10.597	1204	1205	1211	rBV2	348	478	0.05%	0.009%
42	10.697	1215	1224	1234	rVV2	3890	9242	1.01%	0.177%
43	10.859	1243	1255	1261	rBV	254519	600677	65.33%	11.484%
44	10.922	1261	1267	1288	rVB	131670	319220	34.72%	6.103%
45	11.347	1337	1348	1369	rBV	123276	281208	30.59%	5.376%
46	11.504	1375	1378	1386	rBV	210	498	0.05%	0.010%
47	11.672	1406	1410	1415	rBV	376	596	0.06%	0.011%
48	11.782	1421	1431	1449	rBV	324081	671200	73.00%	12.832%
49	11.882	1449	1450	1459	rVB2	455	836	0.09%	0.016%
50	12.107	1488	1493	1500	rBV2	619	1021	0.11%	0.020%
51	12.217	1509	1514	1519	rBB	219	497	0.05%	0.010%
52	12.369	1532	1543	1546	rBV	268	857	0.09%	0.016%
53	12.694	1599	1605	1609	rBV	230	591	0.06%	0.011%
54	12.783	1620	1622	1628	rBV	376	628	0.07%	0.012%
55	13.040	1669	1671	1677	rBV	380	558	0.06%	0.011%
56	13.140	1685	1690	1692	rBV	354	474	0.05%	0.009%
57	13.192	1699	1700	1706	rBV	336	443	0.05%	0.008%
58	13.339	1717	1728	1748	rVV	514464	919419	100.00%	17.578%
59	13.449	1748	1749	1759	rVB	513	738	0.08%	0.014%
60	13.664	1788	1790	1795	rVB	418	448	0.05%	0.009%
61	13.732	1795	1803	1807	rBV	194	641	0.07%	0.012%
62	13.795	1807	1815	1822	rVV2	1573	2754	0.30%	0.053%
63	13.905	1830	1836	1842	rVB2	404	551	0.06%	0.011%
64	14.267	1903	1905	1912	rVB	246	515	0.06%	0.010%
65	14.681	1979	1984	1988	rBV	363	608	0.07%	0.012%
66	14.755	1988	1998	2016	rVB	462420	764985	83.20%	14.625%
67	14.886	2019	2023	2028	rBV	220	546	0.06%	0.010%
68	15.295	2097	2101	2108	rBV	375	714	0.08%	0.014%
69	15.358	2108	2113	2118	rVB	389	670	0.07%	0.013%
70	15.415	2118	2124	2128	rBV	409	715	0.08%	0.014%
71	15.620	2159	2163	2171	rBV	874	1154	0.13%	0.022%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.824	2194	2202	2218	rBV	395938	629909	68.51%	12.043%
73	15.966	2226	2229	2233	rVB	383	460	0.05%	0.009%
74	16.564	2339	2343	2347	rVB	432	600	0.07%	0.011%
75	16.611	2347	2352	2353	rBV	472	552	0.06%	0.011%
76	16.910	2400	2409	2429	rVB	515650	831906	90.48%	15.905%
77	17.146	2451	2454	2460	rVV	378	516	0.06%	0.010%
78	17.198	2460	2464	2470	rVB2	408	521	0.06%	0.010%
79	17.513	2520	2524	2526	rVB2	603	835	0.09%	0.016%
80	17.555	2526	2532	2538	rBV2	745	1874	0.20%	0.036%
81	17.916	2595	2601	2606	rVB2	311	501	0.05%	0.010%
82	18.278	2667	2670	2684	rVB2	406	987	0.11%	0.019%
83	18.362	2684	2686	2692	rBV2	360	497	0.05%	0.010%
84	18.839	2774	2777	2785	rBV	417	494	0.05%	0.009%
85	19.154	2832	2837	2839	rBV2	408	482	0.05%	0.009%
86	19.222	2843	2850	2855	rVB3	714	1183	0.13%	0.023%
87	19.285	2855	2862	2864	rBV3	604	1088	0.12%	0.021%
88	19.332	2868	2871	2878	rVV2	322	524	0.06%	0.010%
89	19.426	2883	2889	2891	rBV2	792	1358	0.15%	0.026%
90	19.447	2891	2893	2898	rVB	532	635	0.07%	0.012%
91	19.505	2900	2904	2909	rBV4	462	1098	0.12%	0.021%
92	19.578	2914	2918	2921	rBV2	434	646	0.07%	0.012%
93	19.683	2937	2938	2941	rVB2	551	450	0.05%	0.009%
94	19.709	2941	2943	2947	rBV3	905	623	0.07%	0.012%
95	19.762	2951	2953	2959	rVB4	803	1057	0.11%	0.020%
96	19.804	2959	2961	2963	rBV2	1115	907	0.10%	0.017%
97	19.851	2969	2970	2973	rBV3	636	520	0.06%	0.010%
98	19.935	2979	2986	2989	rBV4	811	1682	0.18%	0.032%
99	19.961	2990	2991	2997	rVB3	663	1050	0.11%	0.020%
100	20.045	3006	3007	3010	rBV2	552	474	0.05%	0.009%

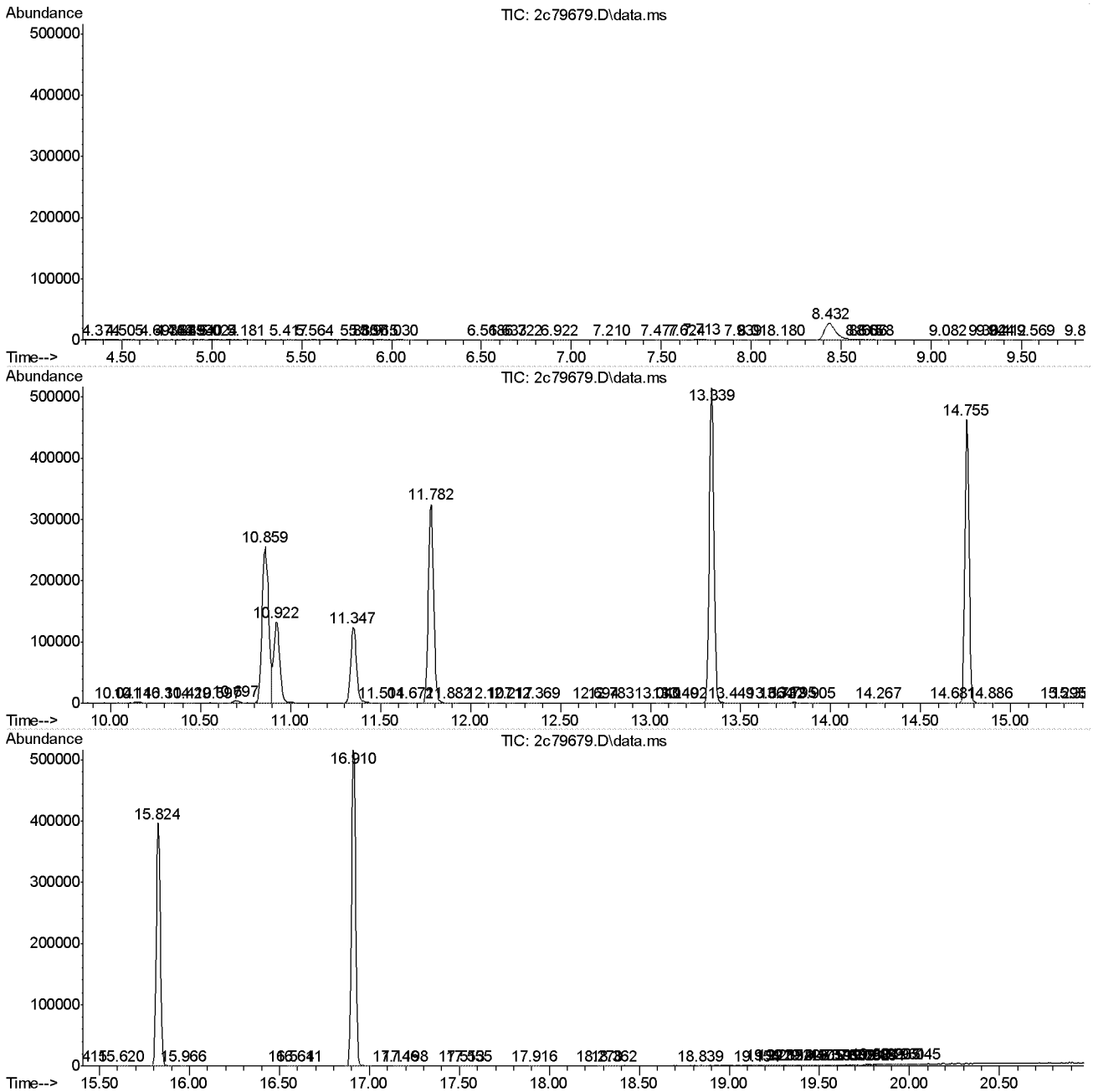
Sum of corrected areas: 5230571

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79679.D
Acq On : 28 Feb 2011 1:09 pm
Operator : dezareer
Sample : ja68506-4
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 07:29:31 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

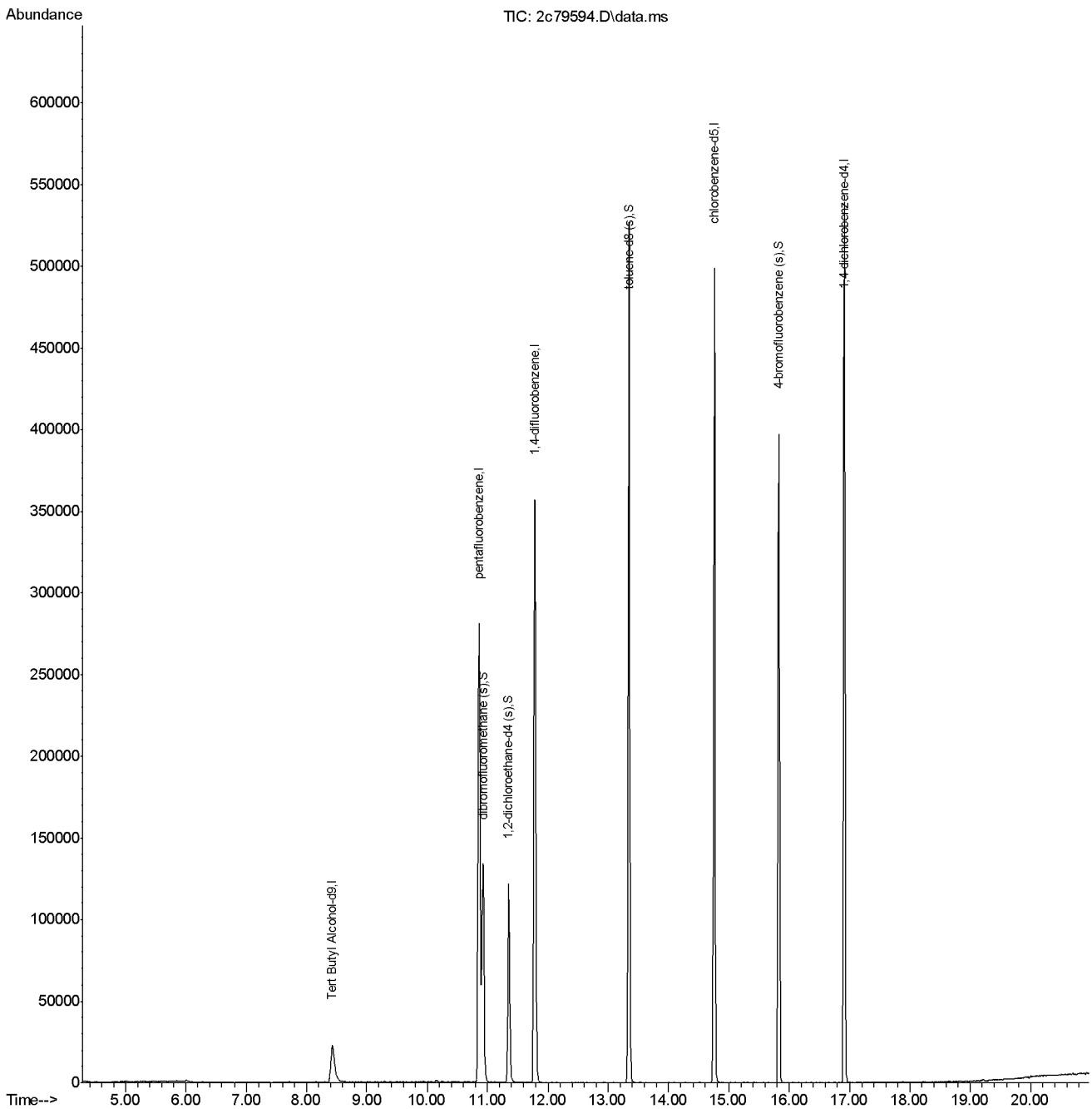
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	62127	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	260684	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	346401	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	289461	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	149290	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	99853	49.78	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.56%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	97248	47.05	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.10%			
80) toluene-d8 (s)	13.339	98	381423	53.59	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 107.18%			
105) 4-bromofluorobenzene (s)	15.824	95	131118	53.46	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.92%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 28 07:29:31 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79594.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.484	37	39	45	rVB3	487	901	0.09%	0.017%
2	4.520	45	46	55	rBV3	514	978	0.10%	0.018%
3	4.767	91	93	96	rBV3	539	429	0.04%	0.008%
4	4.856	108	110	118	rBV2	494	1011	0.10%	0.019%
5	4.914	118	121	124	rVB	523	582	0.06%	0.011%
6	5.097	154	156	157	rBV	558	380	0.04%	0.007%
7	5.307	191	196	203	rBV3	497	1111	0.11%	0.020%
8	5.511	234	235	240	rVB2	395	479	0.05%	0.009%
9	5.800	287	290	297	rBV4	540	998	0.10%	0.018%
10	6.088	342	345	351	rVB2	504	857	0.09%	0.016%
11	6.277	379	381	389	rBV	388	636	0.07%	0.012%
12	6.644	443	451	454	rBV2	243	530	0.05%	0.010%
13	6.806	481	482	486	rBV	335	419	0.04%	0.008%
14	6.843	486	489	493	rVB3	402	583	0.06%	0.011%
15	6.890	493	498	500	rBV	328	493	0.05%	0.009%
16	7.242	562	565	568	rVB	412	508	0.05%	0.009%
17	7.289	572	574	583	rVV2	428	1017	0.11%	0.019%
18	7.378	584	591	596	rVB	444	1063	0.11%	0.019%
19	7.493	610	613	617	rVB2	283	383	0.04%	0.007%
20	7.540	617	622	624	rBV	258	408	0.04%	0.007%
21	7.614	633	636	642	rBV2	338	532	0.05%	0.010%
22	7.713	652	655	658	rVB2	652	813	0.08%	0.015%
23	7.886	684	688	691	rVB2	394	599	0.06%	0.011%
24	8.159	739	740	747	rVB2	343	435	0.04%	0.008%
25	8.426	777	791	844	rBV2	22806	103585	10.70%	1.899%
26	8.762	853	855	862	rVB2	672	957	0.10%	0.018%
27	8.804	862	863	869	rBV2	574	789	0.08%	0.014%
28	8.851	869	872	875	rVB2	695	624	0.06%	0.011%
29	8.904	876	882	890	rVV2	347	746	0.08%	0.014%
30	9.134	924	926	932	rBV	476	703	0.07%	0.013%
31	9.234	941	945	953	rVB2	405	770	0.08%	0.014%
32	9.307	953	959	963	rBV	466	1006	0.10%	0.018%
33	9.800	1047	1053	1055	rBV2	597	995	0.10%	0.018%
34	10.146	1115	1119	1126	rVB2	1056	2168	0.22%	0.040%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	10.335	1151	1155	1159	rBV2	516	971	0.10%	0.018%
36	10.408	1164	1169	1171	rVV2	417	467	0.05%	0.009%
37	10.629	1209	1211	1217	rVB2	524	667	0.07%	0.012%
38	10.691	1222	1223	1233	rVB2	465	597	0.06%	0.011%
39	10.859	1244	1255	1261	rBV	280704	665999	68.82%	12.208%
40	10.917	1261	1266	1289	rVB	133726	321814	33.26%	5.899%
41	11.158	1309	1312	1317	rVB2	392	382	0.04%	0.007%
42	11.195	1317	1319	1323	rBV	331	392	0.04%	0.007%
43	11.347	1337	1348	1372	rVB	121409	271676	28.07%	4.980%
44	11.509	1373	1379	1381	rBV2	362	520	0.05%	0.010%
45	11.640	1400	1404	1406	rBV	397	538	0.06%	0.010%
46	11.656	1406	1407	1412	rVB	381	465	0.05%	0.009%
47	11.782	1419	1431	1460	rVV	356898	754525	77.97%	13.830%
48	11.960	1464	1465	1470	rVB	387	447	0.05%	0.008%
49	12.081	1481	1488	1493	rBV	246	443	0.05%	0.008%
50	12.233	1516	1517	1527	rVB	392	781	0.08%	0.014%
51	12.333	1531	1536	1537	rVB	397	445	0.05%	0.008%
52	12.348	1537	1539	1543	rBB	403	493	0.05%	0.009%
53	12.443	1555	1557	1562	rBV	372	495	0.05%	0.009%
54	12.500	1562	1568	1575	rVV2	272	599	0.06%	0.011%
55	12.637	1593	1594	1599	rVB	362	505	0.05%	0.009%
56	12.710	1607	1608	1615	rVB	405	572	0.06%	0.010%
57	12.768	1615	1619	1621	rBV	379	502	0.05%	0.009%
58	12.825	1628	1630	1635	rBV	407	491	0.05%	0.009%
59	13.030	1667	1669	1672	rVB	407	394	0.04%	0.007%
60	13.061	1672	1675	1678	rBV	437	582	0.06%	0.011%
61	13.129	1687	1688	1694	rBV	378	587	0.06%	0.011%
62	13.339	1717	1728	1752	rVB	527033	967704	100.00%	17.738%
63	13.727	1797	1802	1804	rVB	347	493	0.05%	0.009%
64	13.869	1824	1829	1834	rVB	413	819	0.08%	0.015%
65	13.911	1834	1837	1841	rBV	349	606	0.06%	0.011%
66	14.052	1862	1864	1869	rVB	416	488	0.05%	0.009%
67	14.084	1869	1870	1877	rBV	444	792	0.08%	0.015%
68	14.236	1898	1899	1904	rVB	363	461	0.05%	0.008%
69	14.278	1904	1907	1911	rBV	423	646	0.07%	0.012%
70	14.755	1988	1998	2018	rBV	498678	831162	85.89%	15.235%
71	14.917	2023	2029	2032	rVB	275	450	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.237	2088	2090	2097	rVB	233	396	0.04%	0.007%
73	15.326	2101	2107	2108	rBV2	263	420	0.04%	0.008%
74	15.672	2171	2173	2178	rVB	379	606	0.06%	0.011%
75	15.824	2194	2202	2217	rVB	397351	623440	64.42%	11.428%
76	16.281	2287	2289	2295	rBV2	271	400	0.04%	0.007%
77	16.459	2319	2323	2329	rVB	393	650	0.07%	0.012%
78	16.553	2336	2341	2344	rBB2	370	385	0.04%	0.007%
79	16.642	2355	2358	2365	rBV	315	522	0.05%	0.010%
80	16.731	2371	2375	2378	rBV2	354	442	0.05%	0.008%
81	16.805	2387	2389	2396	rVB2	395	563	0.06%	0.010%
82	16.910	2396	2409	2424	rBV	539452	857267	88.59%	15.714%
83	17.036	2432	2433	2438	rVB	386	469	0.05%	0.009%
84	17.104	2444	2446	2451	rBV2	379	445	0.05%	0.008%
85	17.245	2468	2473	2476	rBV2	426	708	0.07%	0.013%
86	17.303	2481	2484	2489	rVB2	343	619	0.06%	0.011%
87	17.507	2520	2523	2527	rVB3	338	447	0.05%	0.008%
88	17.722	2560	2564	2568	rBV3	300	433	0.04%	0.008%
89	17.885	2593	2595	2600	rVB3	430	432	0.04%	0.008%
90	17.937	2600	2605	2607	rBV2	267	403	0.04%	0.007%
91	18.053	2624	2627	2644	rBV2	396	1302	0.13%	0.024%
92	18.902	2788	2789	2797	rBV2	547	727	0.08%	0.013%
93	18.975	2802	2803	2811	rBV2	602	1193	0.12%	0.022%
94	19.117	2828	2830	2841	rBV4	400	821	0.08%	0.015%
95	19.185	2841	2843	2845	rBV3	477	445	0.05%	0.008%
96	19.631	2909	2928	2931	rBV7	1106	3593	0.37%	0.066%

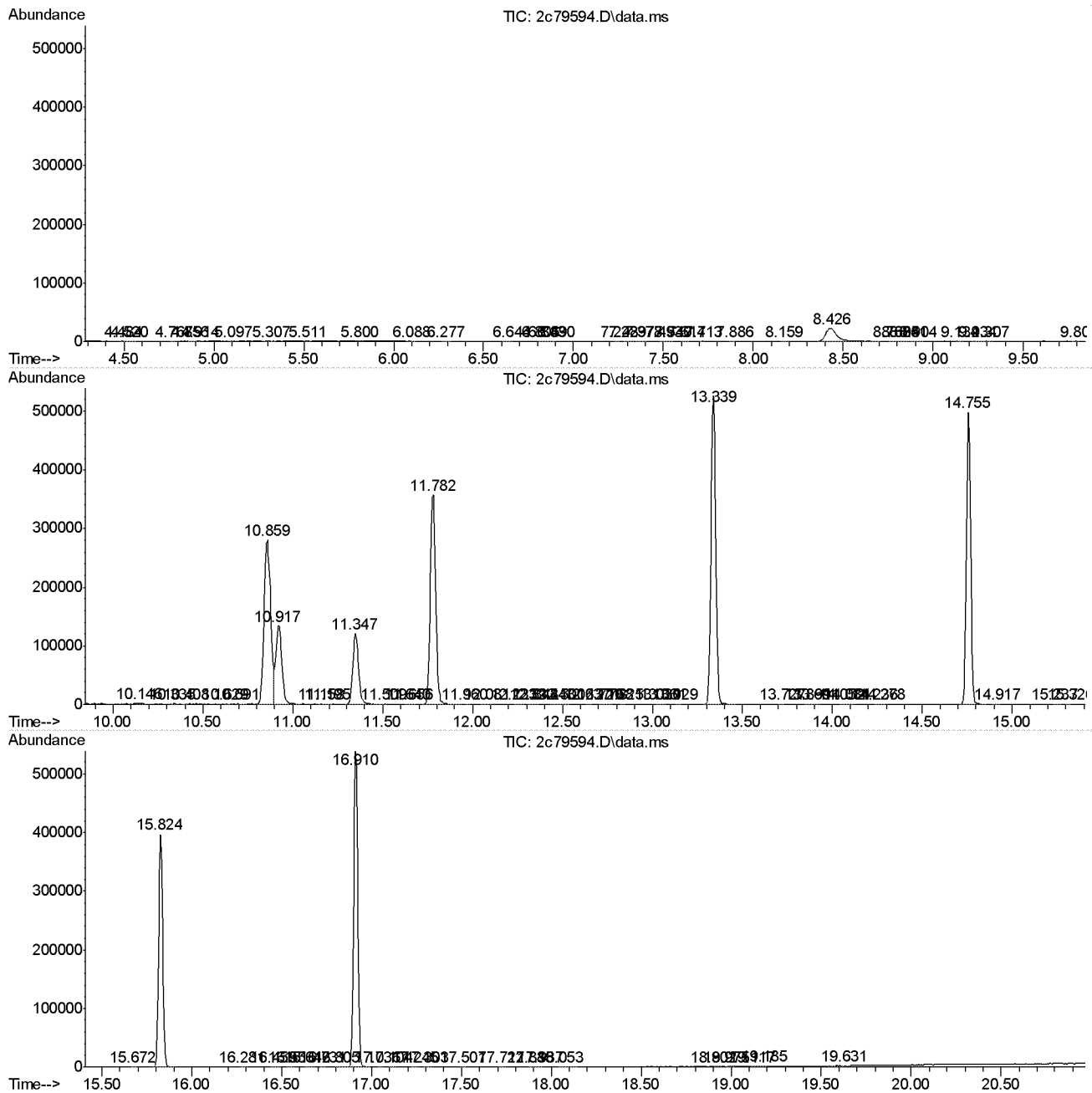
Sum of corrected areas: 5455586

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79594.D
Acq On : 24 Feb 2011 7:32 pm
Operator : dezareer
Sample : ja68506-5
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 01 14:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

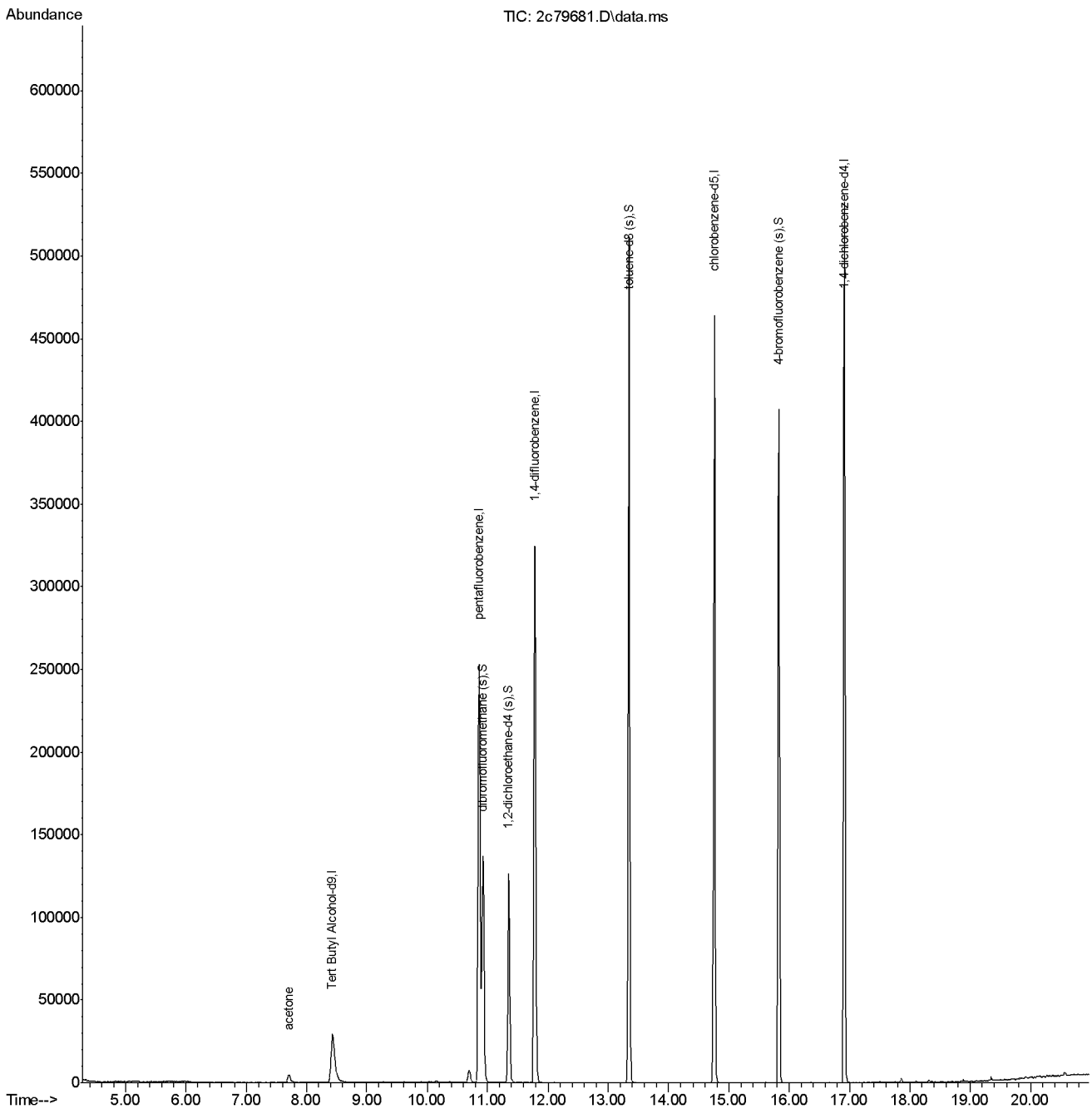
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.427	65	80033	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	244107	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	321964	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	273537	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	150266	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99905	53.19	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 106.38%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	102397	52.90	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 105.80%			
80) toluene-d8 (s)	13.339	98	370025	55.93	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 111.86%			
105) 4-bromofluorobenzene (s)	15.824	95	133830	54.21	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 108.42%			
Target Compounds						Qvalue
25) acetone	7.703	43	10240	24.97	ug/L	91

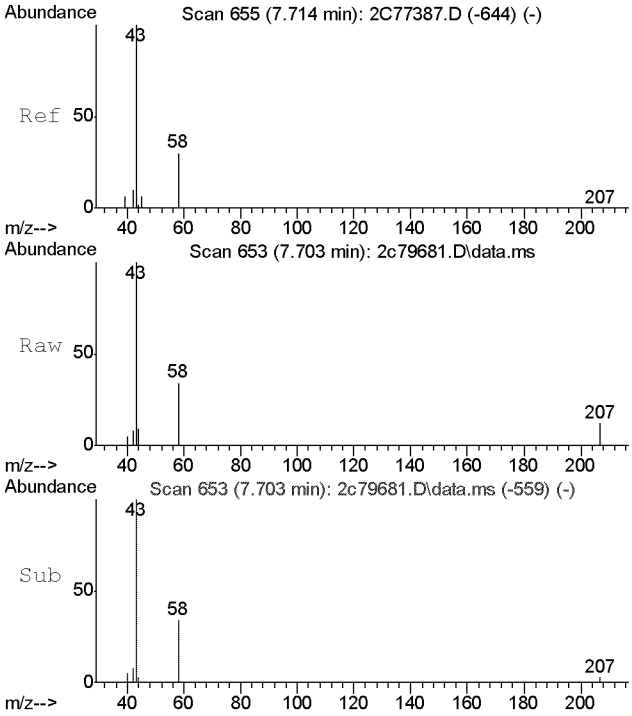
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 01 14:31:55 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

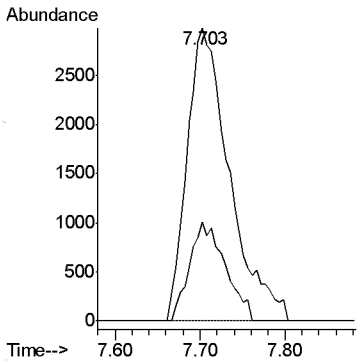




#25
acetone
Concen: 24.97 ug/L
RT: 7.703 min Scan# 653
Delta R.T. -0.005 min
Lab File: 2c79681.D
Acq: 28 Feb 2011 2:11 pm

Tgt Ion: 43 Resp: 10240

Ion	Ratio	Lower	Upper
43	100		
58	33.8	0.0	58.8



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79681.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.306	3	5	8	rBV2	645	550	0.06%	0.010%
2	4.342	8	12	30	rVB2	1350	3941	0.42%	0.074%
3	4.447	30	32	46	rVB2	453	862	0.09%	0.016%
4	4.699	76	80	91	rVB3	586	1329	0.14%	0.025%
5	4.861	110	111	119	rBV2	500	882	0.09%	0.017%
6	4.914	119	121	130	rVV2	421	812	0.09%	0.015%
7	5.134	160	163	170	rVB2	394	684	0.07%	0.013%
8	5.291	190	193	199	rVB2	410	476	0.05%	0.009%
9	5.359	203	206	209	rVB3	546	541	0.06%	0.010%
10	5.391	209	212	214	rBV	446	483	0.05%	0.009%
11	5.412	214	216	223	rVV2	441	508	0.05%	0.010%
12	5.585	247	249	254	rBV	476	491	0.05%	0.009%
13	5.732	274	277	281	rVB2	642	719	0.08%	0.013%
14	5.821	288	294	296	rVV2	398	547	0.06%	0.010%
15	5.968	319	322	330	rVB3	581	1256	0.13%	0.024%
16	6.025	330	333	337	rBV2	666	795	0.09%	0.015%
17	6.429	408	410	418	rVB2	402	861	0.09%	0.016%
18	6.497	418	423	427	rBV2	277	691	0.07%	0.013%
19	6.880	493	496	505	rVB2	406	788	0.08%	0.015%
20	7.011	517	521	525	rVB2	262	470	0.05%	0.009%
21	7.074	530	533	540	rVB2	272	528	0.06%	0.010%
22	7.703	643	653	673	rBV	4689	15874	1.71%	0.298%
23	8.023	712	714	720	rBV	475	568	0.06%	0.011%
24	8.427	776	791	831	rBV	29093	134264	14.42%	2.518%
25	8.689	839	841	844	rBV	431	490	0.05%	0.009%
26	8.851	870	872	878	rVB3	396	544	0.06%	0.010%
27	9.108	913	921	923	rBV2	272	538	0.06%	0.010%
28	9.129	923	925	932	rVV	330	477	0.05%	0.009%
29	9.349	964	967	973	rBV2	338	715	0.08%	0.013%
30	9.480	988	992	994	rBV	379	477	0.05%	0.009%
31	9.507	994	997	1004	rVV2	362	569	0.06%	0.011%
32	9.564	1004	1008	1011	rVV2	378	495	0.05%	0.009%
33	9.617	1014	1018	1022	rVV2	472	711	0.08%	0.013%
34	9.669	1026	1028	1037	rVV	337	790	0.08%	0.015%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.732	1039	1040	1045	rVV2	275	462	0.05%	0.009%
36	9.795	1050	1052	1057	rVV2	335	546	0.06%	0.010%
37	9.895	1069	1071	1076	rVV	450	483	0.05%	0.009%
38	10.041	1090	1099	1101	rVV3	546	1303	0.14%	0.024%
39	10.068	1102	1104	1109	rVV	421	535	0.06%	0.010%
40	10.157	1111	1121	1136	rBV3	949	3353	0.36%	0.063%
41	10.692	1214	1223	1237	rVB	7368	18758	2.01%	0.352%
42	10.859	1242	1255	1261	rVV	252623	603683	64.85%	11.322%
43	10.917	1261	1266	1291	rVB	136811	323551	34.76%	6.068%
44	11.080	1291	1297	1299	rVB	404	684	0.07%	0.013%
45	11.121	1299	1305	1307	rBV2	416	717	0.08%	0.013%
46	11.347	1337	1348	1370	rVB	126358	283555	30.46%	5.318%
47	11.588	1392	1394	1407	rBV2	322	986	0.11%	0.018%
48	11.782	1421	1431	1446	rBV	324211	677555	72.78%	12.707%
49	12.102	1483	1492	1497	rBV2	634	1297	0.14%	0.024%
50	12.191	1506	1509	1513	rBB	349	460	0.05%	0.009%
51	12.369	1542	1543	1552	rVB	237	580	0.06%	0.011%
52	12.658	1594	1598	1603	rBB	233	464	0.05%	0.009%
53	12.904	1641	1645	1650	rBV	242	467	0.05%	0.009%
54	13.051	1669	1673	1679	rVB	226	511	0.05%	0.010%
55	13.339	1716	1728	1743	rBV	511635	930925	100.00%	17.459%
56	13.539	1762	1766	1772	rBV	388	636	0.07%	0.012%
57	13.864	1821	1828	1835	rBB	328	783	0.08%	0.015%
58	13.963	1845	1847	1853	rBV	260	511	0.05%	0.010%
59	14.446	1936	1939	1944	rBV	352	518	0.06%	0.010%
60	14.755	1987	1998	2017	rBV	463960	770418	82.76%	14.449%
61	15.342	2109	2110	2117	rVB	404	544	0.06%	0.010%
62	15.667	2168	2172	2175	rBB	370	548	0.06%	0.010%
63	15.699	2175	2178	2182	rBV	259	466	0.05%	0.009%
64	15.824	2192	2202	2219	rBV	407057	639616	68.71%	11.996%
65	15.935	2221	2223	2229	rVB	318	504	0.05%	0.009%
66	16.003	2229	2236	2241	rBV	354	739	0.08%	0.014%
67	16.359	2299	2304	2305	rVB	387	454	0.05%	0.009%
68	16.910	2397	2409	2425	rBV	532735	840653	90.30%	15.766%
69	17.235	2465	2471	2473	rBV2	419	455	0.05%	0.009%
70	17.308	2481	2485	2493	rVB2	412	974	0.10%	0.018%
71	17.361	2493	2495	2503	rBV2	330	849	0.09%	0.016%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	17.502	2515	2522	2530	rBV3	646	1197	0.13%	0.022%
73	17.597	2539	2540	2551	rVB	257	533	0.06%	0.010%
74	17.754	2566	2570	2573	rVV3	496	606	0.07%	0.011%
75	17.859	2582	2590	2596	rBV	2398	3748	0.40%	0.070%
76	18.095	2629	2635	2645	rVB	892	1523	0.16%	0.029%
77	18.215	2654	2658	2665	rBV2	292	540	0.06%	0.010%
78	18.315	2671	2677	2682	rBV3	1343	2343	0.25%	0.044%
79	18.362	2682	2686	2691	rVV2	590	805	0.09%	0.015%
80	18.415	2692	2696	2701	rVB2	458	573	0.06%	0.011%
81	18.525	2715	2717	2736	rVB2	358	701	0.08%	0.013%
82	18.687	2746	2748	2758	rVB2	460	735	0.08%	0.014%
83	18.755	2758	2761	2766	rBV2	396	518	0.06%	0.010%
84	18.834	2772	2776	2781	rBV2	673	940	0.10%	0.018%
85	18.886	2782	2786	2792	rVV	1164	1684	0.18%	0.032%
86	18.934	2792	2795	2800	rVV3	548	703	0.08%	0.013%
87	19.101	2820	2827	2832	rBV2	1135	2231	0.24%	0.042%
88	19.190	2841	2844	2847	rVB2	554	485	0.05%	0.009%
89	19.274	2858	2860	2863	rBV2	468	467	0.05%	0.009%
90	19.343	2869	2873	2879	rBV2	2099	2537	0.27%	0.048%
91	19.537	2905	2910	2913	rBV3	482	703	0.08%	0.013%
92	19.594	2913	2921	2925	rBV4	665	1379	0.15%	0.026%
93	19.631	2925	2928	2934	rVB4	769	1008	0.11%	0.019%
94	19.689	2934	2939	2944	rBV4	928	2034	0.22%	0.038%
95	19.725	2944	2946	2948	rBV2	582	498	0.05%	0.009%
96	19.825	2962	2965	2969	rVV3	921	920	0.10%	0.017%
97	19.856	2969	2971	2979	rVB3	845	1073	0.12%	0.020%
98	19.914	2979	2982	2998	rBV4	1271	4197	0.45%	0.079%
99	20.260	3044	3048	3056	rBV5	1271	3146	0.34%	0.059%
100	20.575	3101	3108	3147	rBV9	2053	9943	1.07%	0.186%

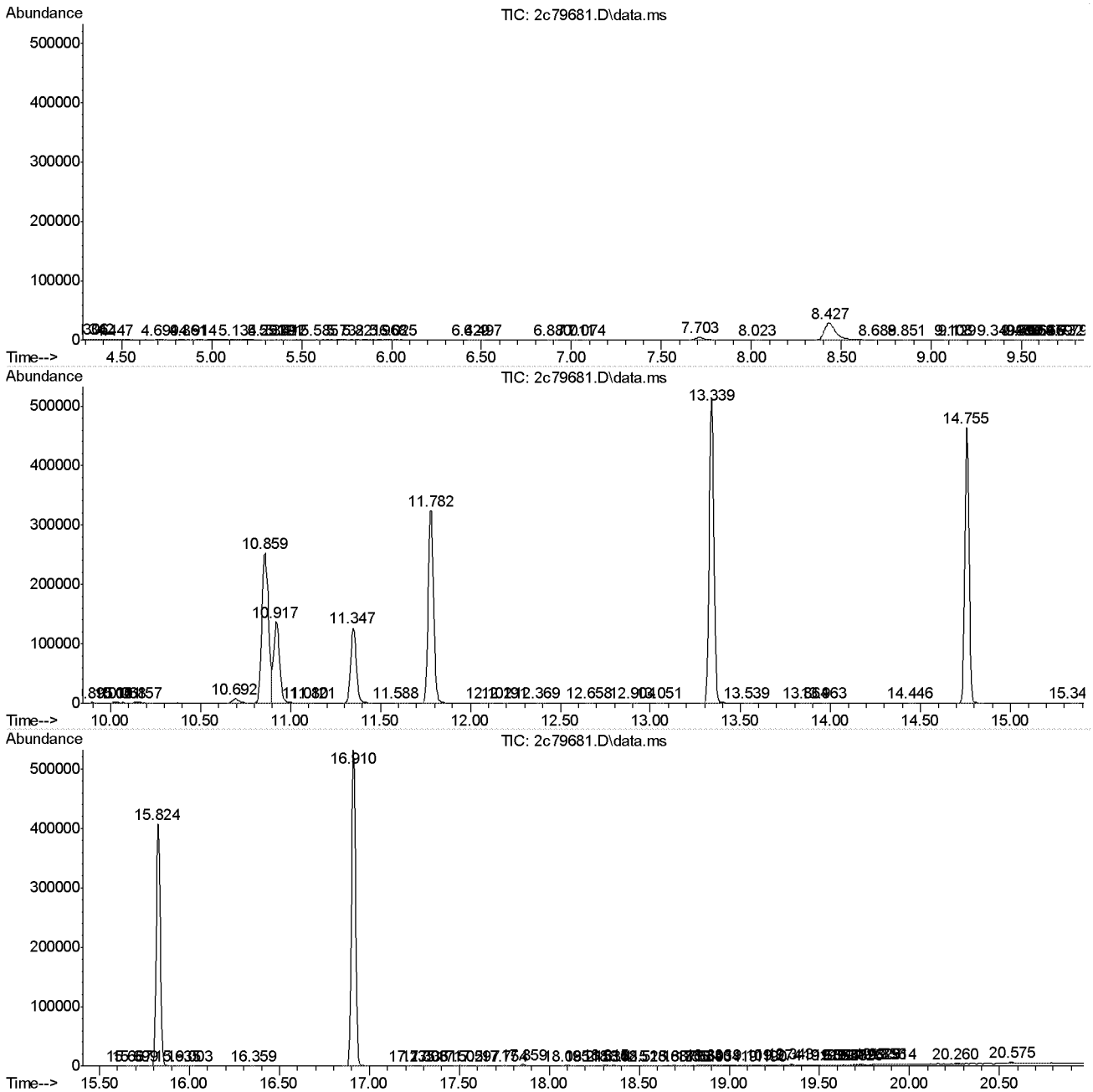
Sum of corrected areas: 5332039

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79681.D
Acq On : 28 Feb 2011 2:11 pm
Operator : dezareer
Sample : ja68506-6
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 14:31:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

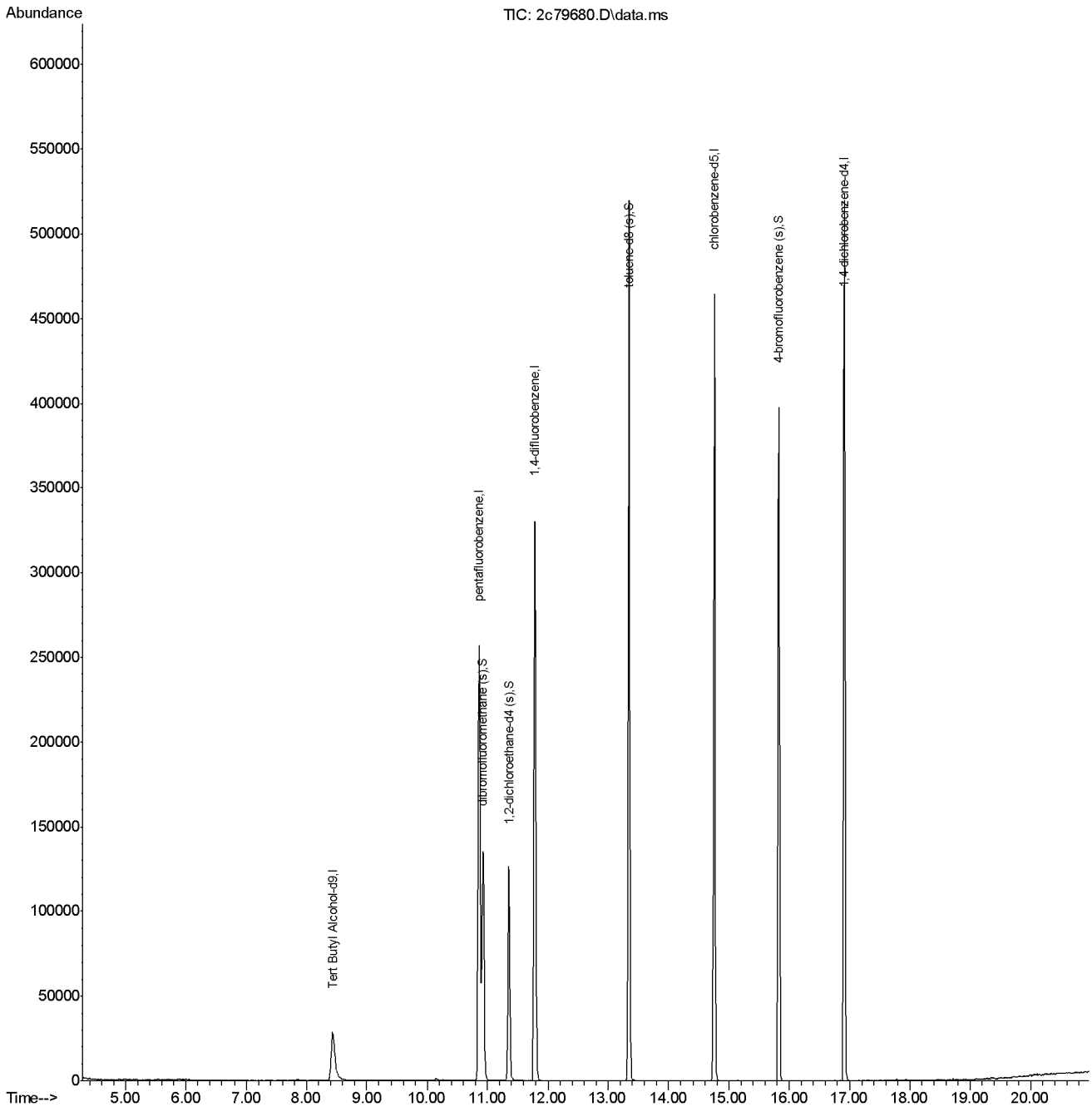
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	79582	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	245737	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	321704	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	273091	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148527	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99408	52.57	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 105.14%			
51) 1,2-dichloroethane-d4 (s)	11.352	65	102487	52.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 105.20%			
80) toluene-d8 (s)	13.339	98	371014	56.13	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.26%			
105) 4-bromofluorobenzene (s)	15.824	95	132180	54.17	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 108.34%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 01 14:31:18 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79680.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.536	47	49	54	rVV2	473	483	0.05%	0.009%
2	4.578	56	57	65	rVV	485	759	0.08%	0.014%
3	4.856	106	110	113	rBV2	380	588	0.06%	0.011%
4	4.893	113	117	127	rVB2	512	1056	0.11%	0.020%
5	4.971	127	132	134	rBV2	422	645	0.07%	0.012%
6	4.992	134	136	142	rBV2	295	420	0.05%	0.008%
7	5.186	172	173	179	rVB2	568	417	0.04%	0.008%
8	5.260	182	187	189	rBV2	294	415	0.04%	0.008%
9	5.359	204	206	208	rBV2	490	425	0.05%	0.008%
10	5.527	235	238	247	rBV2	397	703	0.08%	0.013%
11	5.815	291	293	297	rVB3	445	450	0.05%	0.009%
12	5.905	297	310	314	rBV3	433	1578	0.17%	0.030%
13	6.041	333	336	344	rVB2	573	836	0.09%	0.016%
14	6.099	344	347	359	rVB	316	480	0.05%	0.009%
15	6.833	486	487	493	rVV2	336	446	0.05%	0.008%
16	6.974	513	514	521	rVV2	323	567	0.06%	0.011%
17	7.027	521	524	530	rVV2	286	541	0.06%	0.010%
18	7.069	530	532	537	rVV	354	497	0.05%	0.009%
19	7.100	537	538	543	rVB2	342	454	0.05%	0.009%
20	7.142	543	546	551	rBV	303	486	0.05%	0.009%
21	7.346	578	585	588	rBV	372	465	0.05%	0.009%
22	7.530	619	620	627	rVB2	313	555	0.06%	0.011%
23	7.577	627	629	634	rBV2	302	473	0.05%	0.009%
24	7.656	641	644	649	rVB	339	592	0.06%	0.011%
25	7.692	649	651	656	rBV2	277	421	0.05%	0.008%
26	7.734	656	659	664	rVV	342	495	0.05%	0.009%
27	7.845	676	680	688	rVV4	953	1812	0.19%	0.034%
28	8.059	719	721	733	rBV2	400	1010	0.11%	0.019%
29	8.133	733	735	739	rVB2	416	445	0.05%	0.008%
30	8.264	758	760	767	rVB2	438	738	0.08%	0.014%
31	8.426	777	791	831	rVV2	28532	133245	14.30%	2.535%
32	8.877	871	877	880	rBV	304	686	0.07%	0.013%
33	9.129	921	925	930	rVB	308	541	0.06%	0.010%
34	9.339	962	965	970	rVB2	301	461	0.05%	0.009%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.444	978	985	988	rVB	303	449	0.05%	0.009%
36	9.517	998	999	1007	rVV2	292	565	0.06%	0.011%
37	9.695	1026	1033	1036	rVB2	325	622	0.07%	0.012%
38	9.732	1036	1040	1044	rBV	312	546	0.06%	0.010%
39	10.146	1113	1119	1130	rVB3	948	2590	0.28%	0.049%
40	10.262	1138	1141	1144	rBV	438	543	0.06%	0.010%
41	10.366	1160	1161	1169	rVB2	306	556	0.06%	0.011%
42	10.424	1169	1172	1183	rBV2	428	922	0.10%	0.018%
43	10.560	1194	1198	1207	rBV2	342	1019	0.11%	0.019%
44	10.859	1244	1255	1261	rVV	256523	606891	65.13%	11.546%
45	10.917	1261	1266	1287	rVV	135462	323491	34.72%	6.154%
46	11.053	1287	1292	1294	rVB	317	469	0.05%	0.009%
47	11.263	1330	1332	1338	rBV2	429	628	0.07%	0.012%
48	11.347	1338	1348	1369	rVB	126691	283255	30.40%	5.389%
49	11.562	1388	1389	1397	rVB2	261	473	0.05%	0.009%
50	11.782	1421	1431	1446	rBV	330472	680264	73.01%	12.942%
51	11.866	1446	1447	1454	rVB	691	936	0.10%	0.018%
52	12.044	1472	1481	1482	rBB	201	483	0.05%	0.009%
53	12.264	1521	1523	1530	rBB	210	465	0.05%	0.009%
54	12.768	1614	1619	1623	rBB	339	494	0.05%	0.009%
55	12.993	1657	1662	1664	rBV	320	439	0.05%	0.008%
56	13.182	1695	1698	1704	rBB	231	465	0.05%	0.009%
57	13.240	1704	1709	1713	rBV	223	535	0.06%	0.010%
58	13.339	1718	1728	1759	rVB	520079	931774	100.00%	17.727%
59	13.743	1801	1805	1810	rBB	242	475	0.05%	0.009%
60	13.827	1819	1821	1827	rBB	215	423	0.05%	0.008%
61	14.052	1862	1864	1874	rVB	421	879	0.09%	0.017%
62	14.126	1874	1878	1882	rBB	399	452	0.05%	0.009%
63	14.251	1901	1902	1908	rBV	217	416	0.04%	0.008%
64	14.351	1915	1921	1924	rBV	364	635	0.07%	0.012%
65	14.613	1970	1971	1978	rVB	227	434	0.05%	0.008%
66	14.655	1978	1979	1986	rBB	363	448	0.05%	0.009%
67	14.755	1986	1998	2020	rBV	464676	767483	82.37%	14.602%
68	15.027	2044	2050	2055	rBV	405	721	0.08%	0.014%
69	15.358	2108	2113	2119	rBV	362	743	0.08%	0.014%
70	15.824	2193	2202	2216	rBV	397420	632130	67.84%	12.026%
71	16.731	2371	2375	2377	rVB	393	424	0.05%	0.008%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	16.910	2399	2409	2425	rVV	519989	830295	89.11%	15.797%
73	17.193	2461	2463	2470	rBV2	295	505	0.05%	0.010%
74	17.324	2483	2488	2494	rVB2	328	772	0.08%	0.015%
75	17.403	2500	2503	2508	rBV2	397	555	0.06%	0.011%
76	17.476	2516	2517	2522	rBV2	392	493	0.05%	0.009%
77	17.513	2522	2524	2531	rVB2	332	648	0.07%	0.012%
78	17.555	2531	2532	2540	rBV2	400	701	0.08%	0.013%
79	17.780	2568	2575	2586	rVV3	504	1068	0.11%	0.020%
80	17.943	2600	2606	2615	rVB2	892	1458	0.16%	0.028%
81	18.719	2748	2754	2758	rVV2	937	1063	0.11%	0.020%
82	19.075	2818	2822	2825	rBV	460	514	0.06%	0.010%
83	19.101	2825	2827	2830	rVV	674	543	0.06%	0.010%
84	19.138	2830	2834	2836	rVB2	470	521	0.06%	0.010%
85	19.222	2844	2850	2854	rBV	702	785	0.08%	0.015%
86	19.295	2862	2864	2868	rVB3	689	607	0.07%	0.012%
87	19.348	2868	2874	2891	rBV5	964	4447	0.48%	0.085%
88	19.463	2892	2896	2897	rBV2	575	605	0.06%	0.012%
89	19.505	2901	2904	2913	rVV3	777	1279	0.14%	0.024%
90	19.578	2913	2918	2919	rVB3	607	736	0.08%	0.014%
91	19.699	2934	2941	2944	rBV3	642	1192	0.13%	0.023%
92	19.720	2944	2945	2952	rVB3	857	1044	0.11%	0.020%
93	19.778	2953	2956	2958	rVV2	490	551	0.06%	0.010%
94	19.820	2961	2964	2969	rVB5	608	917	0.10%	0.017%
95	19.877	2974	2975	2983	rVV5	768	581	0.06%	0.011%
96	19.945	2983	2988	2993	rBV5	611	1273	0.14%	0.024%
97	19.982	2993	2995	3002	rBV4	938	1309	0.14%	0.025%
98	20.024	3002	3003	3005	rBV2	592	451	0.05%	0.009%
99	20.134	3022	3024	3031	rBV5	696	1034	0.11%	0.020%
100	20.344	3059	3064	3068	rBV4	1106	1516	0.16%	0.029%

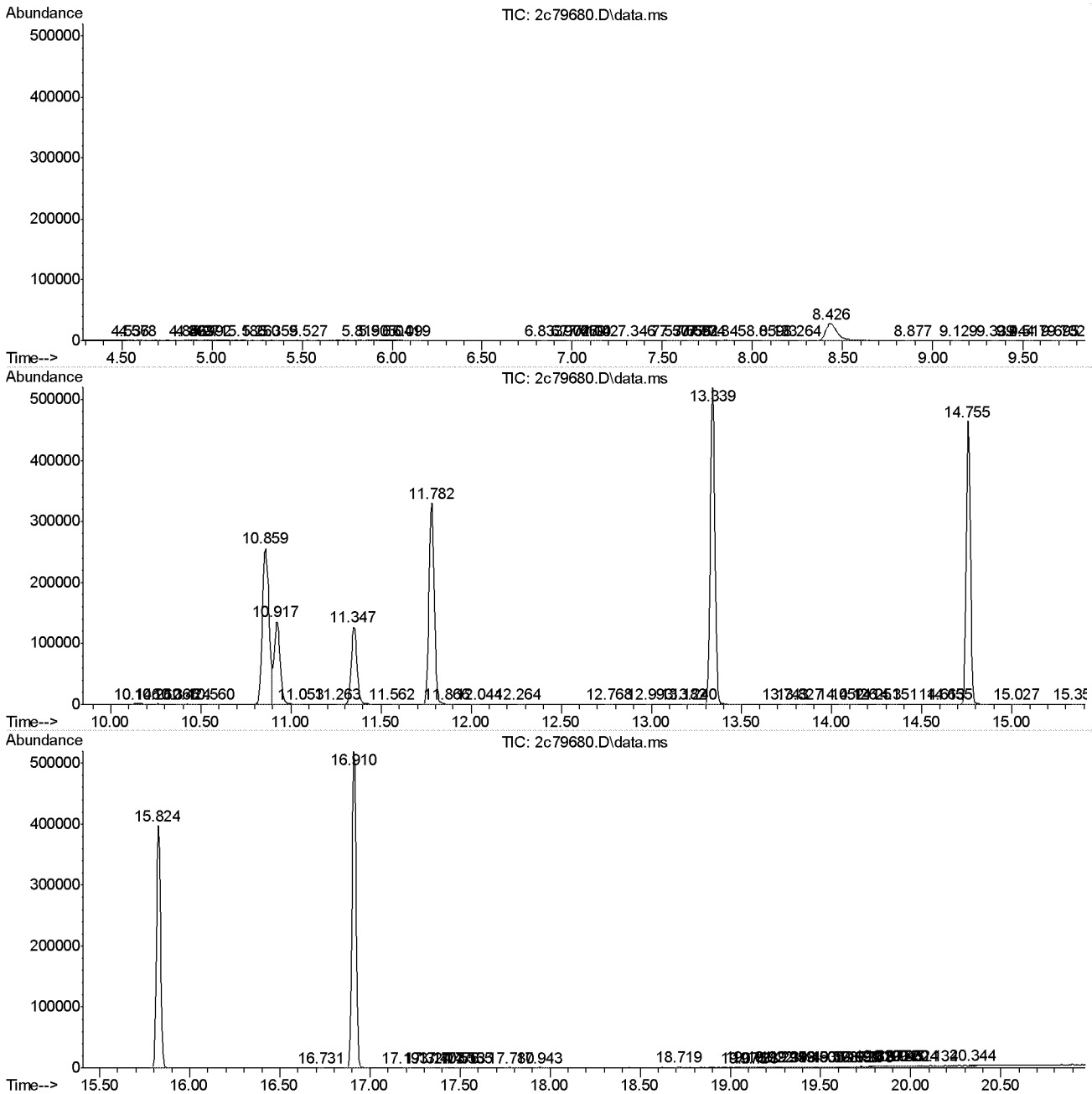
Sum of corrected areas: 5256185

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79680.D
Acq On : 28 Feb 2011 1:40 pm
Operator : dezareer
Sample : ja68506-7
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 07:30:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

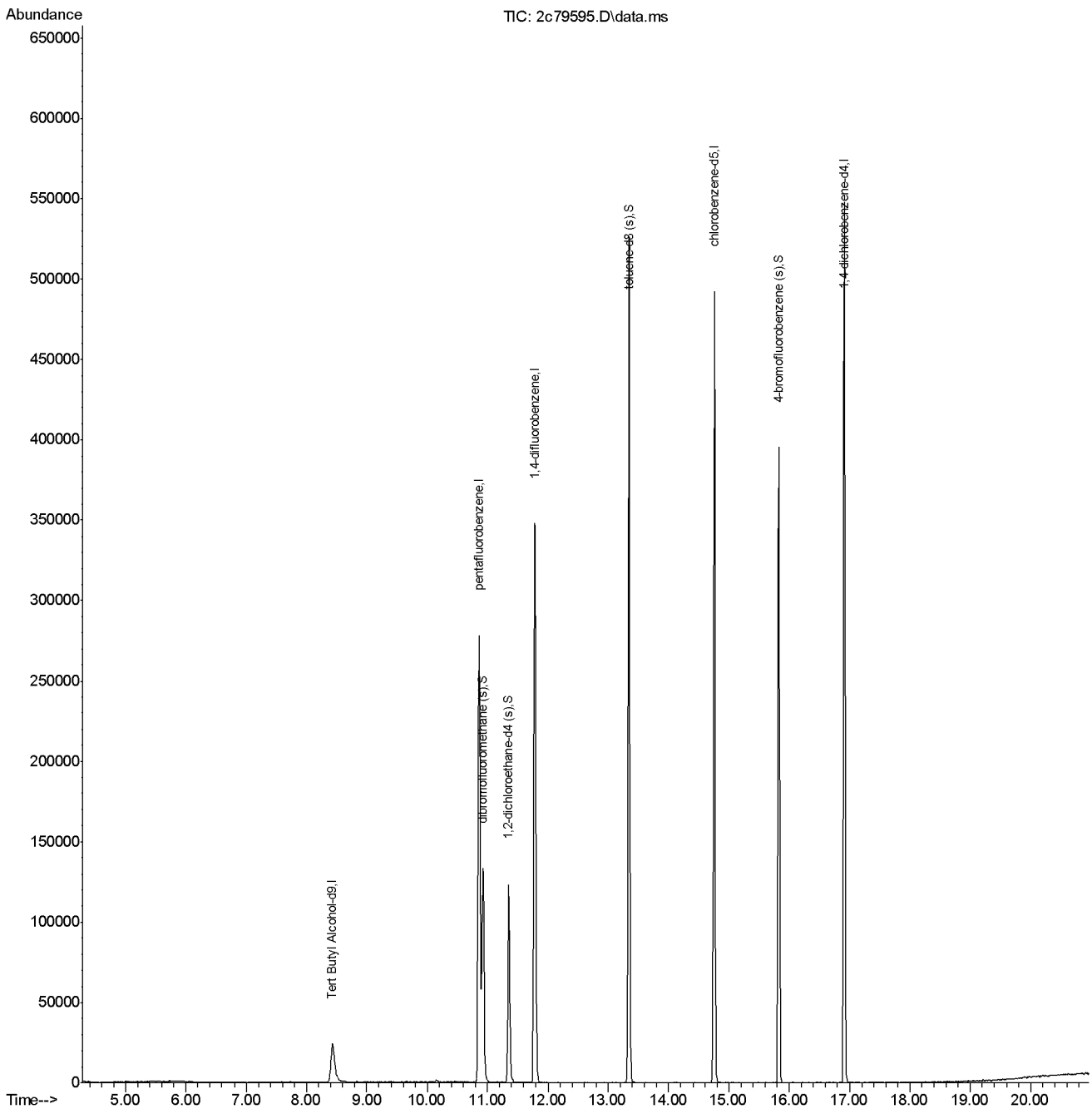
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.421	65	66718	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	256258	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	342933	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	285353	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	150641	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	99243	50.33	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.66%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	97555	48.01	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 96.02%			
80) toluene-d8 (s)	13.339	98	377222	53.53	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 107.06%			
105) 4-bromofluorobenzene (s)	15.825	95	132432	53.51	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.02%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 28 07:30:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79595.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.594	56	60	62	rBV2	458	577	0.06%	0.011%
2	4.610	62	63	70	rVV	353	547	0.06%	0.010%
3	4.762	87	92	97	rBV3	264	465	0.05%	0.009%
4	4.819	97	103	105	rBV2	489	761	0.08%	0.014%
5	4.840	105	107	113	rVB3	403	572	0.06%	0.011%
6	4.945	118	127	134	rBV4	515	1548	0.16%	0.029%
7	5.092	153	155	159	rVB2	474	482	0.05%	0.009%
8	5.124	159	161	165	rVB2	607	691	0.07%	0.013%
9	5.160	165	168	171	rBV2	615	831	0.09%	0.015%
10	5.186	171	173	182	rBV2	478	660	0.07%	0.012%
11	5.627	254	257	263	rBV3	582	1084	0.11%	0.020%
12	5.726	274	276	288	rBV3	579	977	0.10%	0.018%
13	6.036	333	335	342	rVB2	692	1186	0.12%	0.022%
14	6.523	421	428	434	rVB2	415	886	0.09%	0.016%
15	6.581	434	439	442	rBV2	325	450	0.05%	0.008%
16	6.654	449	453	456	rBV2	320	403	0.04%	0.007%
17	6.717	463	465	471	rBV	319	401	0.04%	0.007%
18	7.027	522	524	528	rBV2	515	682	0.07%	0.013%
19	7.289	566	574	578	rBV	275	724	0.08%	0.013%
20	7.462	605	607	617	rVB2	431	880	0.09%	0.016%
21	7.535	619	621	627	rVB	405	683	0.07%	0.013%
22	7.583	627	630	635	rBV	572	790	0.08%	0.015%
23	7.651	639	643	647	rVV2	339	467	0.05%	0.009%
24	7.740	653	660	669	rVB3	449	865	0.09%	0.016%
25	8.421	777	790	840	rBV3	24290	113470	11.85%	2.095%
26	8.836	864	869	871	rBV	428	569	0.06%	0.011%
27	9.056	901	911	916	rBV2	422	1291	0.13%	0.024%
28	9.098	916	919	932	rVB2	483	1013	0.11%	0.019%
29	9.176	932	934	938	rBV2	413	451	0.05%	0.008%
30	9.239	944	946	953	rVB	405	656	0.07%	0.012%
31	9.360	965	969	974	rBV2	357	666	0.07%	0.012%
32	9.638	1019	1022	1024	rBV	529	583	0.06%	0.011%
33	9.716	1030	1037	1040	rBV2	500	672	0.07%	0.012%
34	9.816	1053	1056	1066	rBV2	522	1107	0.12%	0.020%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.973	1085	1086	1094	rBV2	434	686	0.07%	0.013%
36	10.146	1115	1119	1127	rVB4	1100	2821	0.29%	0.052%
37	10.215	1127	1132	1137	rBV2	470	942	0.10%	0.017%
38	10.277	1142	1144	1154	rBV2	572	1184	0.12%	0.022%
39	10.340	1154	1156	1168	rVV2	544	1241	0.13%	0.023%
40	10.409	1168	1169	1180	rVV2	508	1047	0.11%	0.019%
41	10.498	1180	1186	1189	rVB2	378	582	0.06%	0.011%
42	10.592	1194	1204	1206	rVV2	434	861	0.09%	0.016%
43	10.618	1206	1209	1213	rVB	379	390	0.04%	0.007%
44	10.671	1218	1219	1229	rVB2	463	942	0.10%	0.017%
45	10.859	1243	1255	1261	rBV	277952	654070	68.32%	12.075%
46	10.917	1262	1266	1292	rVB2	133160	301947	31.54%	5.575%
47	11.242	1325	1328	1334	rVB2	438	678	0.07%	0.013%
48	11.347	1337	1348	1379	rBV	123269	274274	28.65%	5.064%
49	11.525	1379	1382	1388	rVB3	318	464	0.05%	0.009%
50	11.777	1419	1430	1450	rVB	347856	739839	77.27%	13.659%
51	11.971	1462	1467	1476	rBV2	292	625	0.07%	0.012%
52	12.170	1503	1505	1509	rBV	395	518	0.05%	0.010%
53	12.254	1516	1521	1523	rBB	375	433	0.05%	0.008%
54	12.270	1523	1524	1528	rBV	431	418	0.04%	0.008%
55	12.621	1585	1591	1595	rBV2	229	410	0.04%	0.008%
56	12.757	1613	1617	1619	rBB	370	382	0.04%	0.007%
57	13.041	1668	1671	1673	rBV	393	469	0.05%	0.009%
58	13.339	1717	1728	1751	rVB	526547	957411	100.00%	17.676%
59	13.512	1758	1761	1765	rVB	384	443	0.05%	0.008%
60	13.612	1776	1780	1785	rBV2	420	857	0.09%	0.016%
61	13.680	1790	1793	1799	rVB	391	601	0.06%	0.011%
62	13.717	1799	1800	1805	rBV	386	547	0.06%	0.010%
63	13.806	1814	1817	1819	rBV	403	416	0.04%	0.008%
64	14.084	1868	1870	1876	rVB	421	661	0.07%	0.012%
65	14.121	1876	1877	1884	rBV2	419	838	0.09%	0.015%
66	14.304	1908	1912	1914	rBV	409	543	0.06%	0.010%
67	14.755	1989	1998	2020	rBV	492503	823598	86.02%	15.205%
68	14.876	2020	2021	2026	rVB	419	509	0.05%	0.009%
69	14.923	2026	2030	2033	rBV	429	542	0.06%	0.010%
70	15.033	2047	2051	2060	rBV	235	583	0.06%	0.011%
71	15.631	2159	2165	2167	rVB	395	643	0.07%	0.012%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	15.825	2194	2202	2219	rVB	395471	625348	65.32%	11.545%
73	16.165	2261	2267	2270	rVB	381	726	0.08%	0.013%
74	16.207	2270	2275	2276	rBV	413	465	0.05%	0.009%
75	16.317	2293	2296	2302	rBV2	351	426	0.04%	0.008%
76	16.459	2319	2323	2328	rBV2	224	407	0.04%	0.008%
77	16.527	2333	2336	2339	rVB	365	388	0.04%	0.007%
78	16.669	2358	2363	2367	rVB2	248	461	0.05%	0.009%
79	16.737	2372	2376	2380	rVV	362	407	0.04%	0.008%
80	16.910	2400	2409	2424	rVB	547875	864066	90.25%	15.952%
81	16.999	2424	2426	2440	rVB3	548	1597	0.17%	0.029%
82	17.104	2440	2446	2448	rBV2	391	679	0.07%	0.013%
83	17.167	2453	2458	2462	rVB	434	603	0.06%	0.011%
84	17.203	2462	2465	2469	rVB2	428	529	0.06%	0.010%
85	17.230	2469	2470	2473	rBV2	429	391	0.04%	0.007%
86	17.256	2473	2475	2479	rVB2	393	426	0.04%	0.008%
87	17.298	2479	2483	2484	rBV2	472	415	0.04%	0.008%
88	17.434	2504	2509	2513	rVB2	259	465	0.05%	0.009%
89	17.591	2536	2539	2542	rBV	566	627	0.07%	0.012%
90	17.707	2554	2561	2566	rVB2	304	651	0.07%	0.012%
91	17.827	2582	2584	2588	rBV	432	561	0.06%	0.010%
92	18.152	2641	2646	2650	rVB2	295	475	0.05%	0.009%
93	18.189	2651	2653	2663	rBV2	271	458	0.05%	0.008%
94	18.299	2673	2674	2683	rVB3	297	575	0.06%	0.011%
95	18.404	2690	2694	2700	rBV3	313	551	0.06%	0.010%
96	18.509	2709	2714	2719	rBV3	398	743	0.08%	0.014%
97	18.551	2720	2722	2729	rVB3	515	688	0.07%	0.013%
98	18.970	2800	2802	2821	rBV3	718	1939	0.20%	0.036%

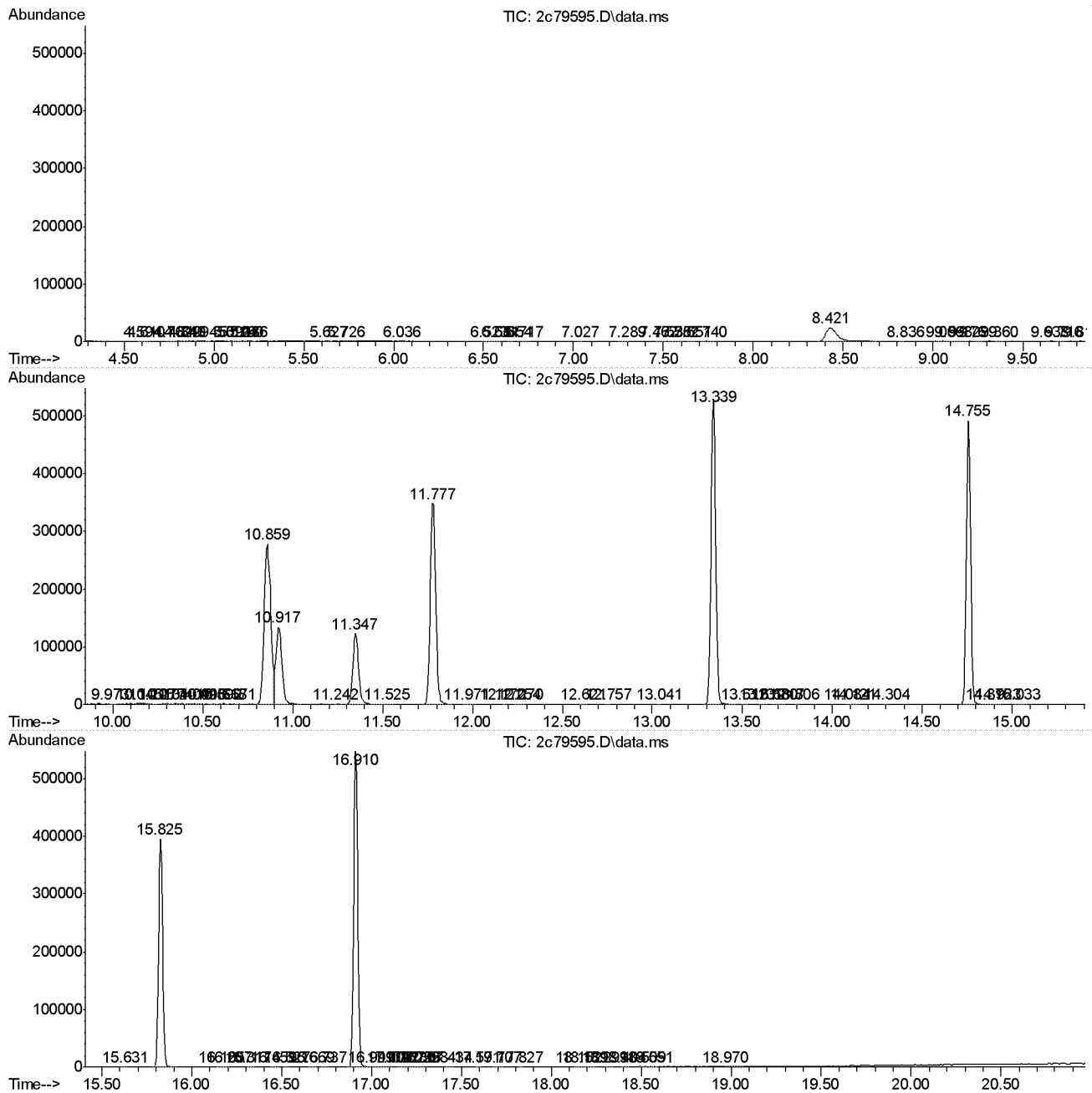
Sum of corrected areas: 5416572

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79595.D
Acq On : 24 Feb 2011 8:02 pm
Operator : dezareer
Sample : ja68506-8
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 07:31:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

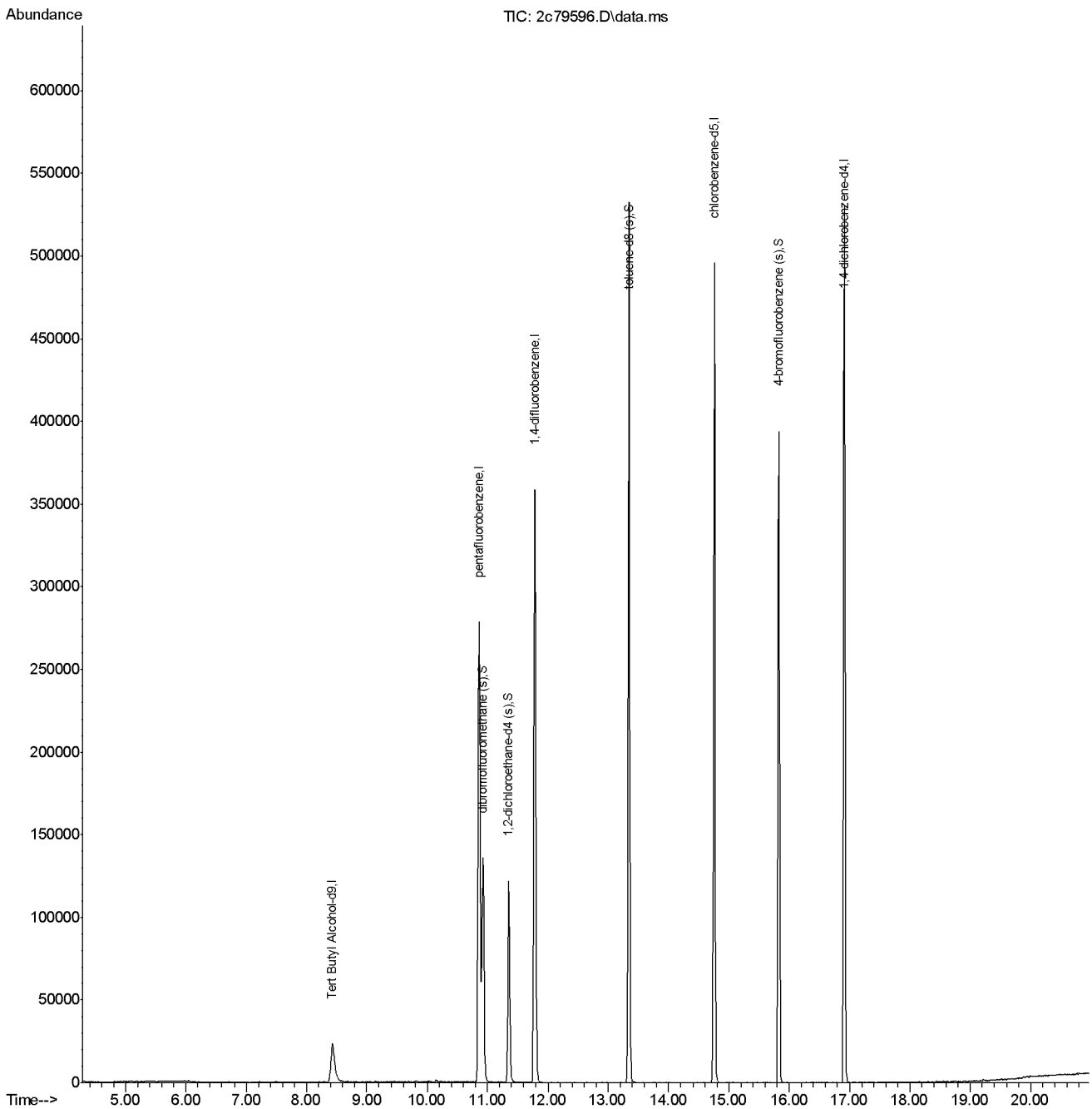
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.421	65	64747	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	258452	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	345628	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	285608	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.915	152	149907	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.917	113	100175	50.37	ug/L	-0.01
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.74%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	96702	47.19	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 94.38%			
80) toluene-d8 (s)	13.339	98	379381	53.42	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 106.84%			
105) 4-bromofluorobenzene (s)	15.824	95	131600	53.43	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.86%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 28 07:31:09 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79596.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.547	39	51	60	rVB3	378	1201	0.12%	0.022%
2	4.615	63	64	80	rBV3	464	1612	0.17%	0.030%
3	4.741	87	88	96	rVB	406	758	0.08%	0.014%
4	4.814	98	102	103	rVV	394	452	0.05%	0.008%
5	4.877	110	114	116	rBV2	521	554	0.06%	0.010%
6	5.543	240	241	247	rVB3	407	430	0.04%	0.008%
7	6.235	370	373	378	rBV3	319	439	0.05%	0.008%
8	6.324	389	390	399	rBV3	322	621	0.06%	0.011%
9	6.712	460	464	471	rBV	353	514	0.05%	0.009%
10	7.090	531	536	540	rBV2	519	903	0.09%	0.017%
11	7.226	560	562	578	rVB2	442	1327	0.14%	0.025%
12	7.483	608	611	617	rVB2	453	727	0.08%	0.013%
13	7.645	639	642	645	rBV2	346	441	0.05%	0.008%
14	7.698	645	652	654	rVB3	493	937	0.10%	0.017%
15	7.734	654	659	663	rBV2	487	835	0.09%	0.015%
16	8.101	728	729	735	rVB	436	469	0.05%	0.009%
17	8.426	777	791	833	rVB2	23324	107245	11.12%	1.980%
18	8.731	847	849	855	rVB2	347	395	0.04%	0.007%
19	8.925	883	886	891	rVB	409	659	0.07%	0.012%
20	8.972	891	895	898	rBV2	427	562	0.06%	0.010%
21	9.035	905	907	923	rVB2	515	939	0.10%	0.017%
22	9.140	923	927	935	rVB3	484	1286	0.13%	0.024%
23	9.187	935	936	943	rBV2	379	663	0.07%	0.012%
24	9.386	970	974	979	rBV2	414	539	0.06%	0.010%
25	9.722	1036	1038	1045	rVB2	353	397	0.04%	0.007%
26	9.805	1051	1054	1062	rVB3	646	1380	0.14%	0.025%
27	9.957	1082	1083	1091	rVB3	676	1000	0.10%	0.018%
28	10.010	1091	1093	1104	rBV2	504	1553	0.16%	0.029%
29	10.162	1113	1122	1128	rBV4	1123	2700	0.28%	0.050%
30	10.225	1132	1134	1140	rVB2	301	487	0.05%	0.009%
31	10.440	1172	1175	1179	rVB	660	795	0.08%	0.015%
32	10.597	1203	1205	1212	rVB	641	1020	0.11%	0.019%
33	10.655	1212	1216	1219	rVB3	493	717	0.07%	0.013%
34	10.676	1219	1220	1224	rBV2	465	596	0.06%	0.011%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	10.859	1243	1255	1261	rBV	278360	659283	68.35%	12.172%
36	10.917	1262	1266	1288	rVB	135506	301425	31.25%	5.565%
37	11.074	1294	1296	1304	rVB2	325	404	0.04%	0.007%
38	11.190	1317	1318	1322	rBV2	412	425	0.04%	0.008%
39	11.347	1335	1348	1382	rVB	121704	273968	28.40%	5.058%
40	11.551	1382	1387	1389	rVB2	449	641	0.07%	0.012%
41	11.782	1421	1431	1451	rVV	358319	750361	77.79%	13.854%
42	11.897	1451	1453	1460	rVB2	406	590	0.06%	0.011%
43	12.757	1614	1617	1621	rBV	409	608	0.06%	0.011%
44	12.867	1635	1638	1642	rVB	419	558	0.06%	0.010%
45	12.904	1642	1645	1647	rBV	362	381	0.04%	0.007%
46	12.936	1647	1651	1658	rVB	425	935	0.10%	0.017%
47	12.977	1658	1659	1664	rBV2	373	532	0.06%	0.010%
48	13.056	1671	1674	1677	rBV	406	467	0.05%	0.009%
49	13.234	1704	1708	1710	rBV	421	494	0.05%	0.009%
50	13.339	1717	1728	1751	rBV	532716	964618	100.00%	17.810%
51	13.559	1767	1770	1776	rVB	279	405	0.04%	0.007%
52	13.774	1808	1811	1815	rVB	256	399	0.04%	0.007%
53	14.314	1913	1914	1920	rBB	380	430	0.04%	0.008%
54	14.755	1989	1998	2013	rVB	495915	822540	85.27%	15.186%
55	15.048	2052	2054	2062	rVB	434	989	0.10%	0.018%
56	15.111	2062	2066	2068	rBV	422	519	0.05%	0.010%
57	15.824	2192	2202	2216	rBV	394011	623189	64.60%	11.506%
58	15.966	2223	2229	2234	rBV	235	576	0.06%	0.011%
59	16.553	2337	2341	2345	rBV2	425	791	0.08%	0.015%
60	16.600	2345	2350	2352	rVV2	356	589	0.06%	0.011%
61	16.616	2352	2353	2363	rVV2	473	704	0.07%	0.013%
62	16.726	2370	2374	2377	rVB2	388	435	0.05%	0.008%
63	16.773	2382	2383	2388	rBV	421	431	0.04%	0.008%
64	16.910	2401	2409	2429	rBV	530097	862290	89.39%	15.920%
65	17.046	2433	2435	2439	rBV3	379	460	0.05%	0.008%
66	17.146	2453	2454	2463	rBV3	491	916	0.09%	0.017%
67	17.219	2464	2468	2470	rVB	380	437	0.05%	0.008%
68	17.261	2471	2476	2479	rVB2	423	668	0.07%	0.012%
69	17.340	2488	2491	2500	rVB	408	568	0.06%	0.010%
70	17.445	2508	2511	2514	rBV2	322	424	0.04%	0.008%
71	17.597	2534	2540	2551	rVB2	372	869	0.09%	0.016%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	17.733	2563	2566	2574	rBV3	317	643	0.07%	0.012%
73	17.869	2589	2592	2602	rBV3	240	557	0.06%	0.010%
74	18.299	2671	2674	2679	rVB2	368	527	0.05%	0.010%
75	18.373	2686	2688	2698	rBV2	398	750	0.08%	0.014%
76	18.441	2698	2701	2705	rVV2	289	422	0.04%	0.008%
77	18.540	2719	2720	2736	rBV	442	1326	0.14%	0.024%
78	18.724	2752	2755	2762	rBV3	428	816	0.08%	0.015%
79	18.844	2774	2778	2781	rVB2	423	510	0.05%	0.009%
80	19.211	2845	2848	2855	rBV3	765	1248	0.13%	0.023%

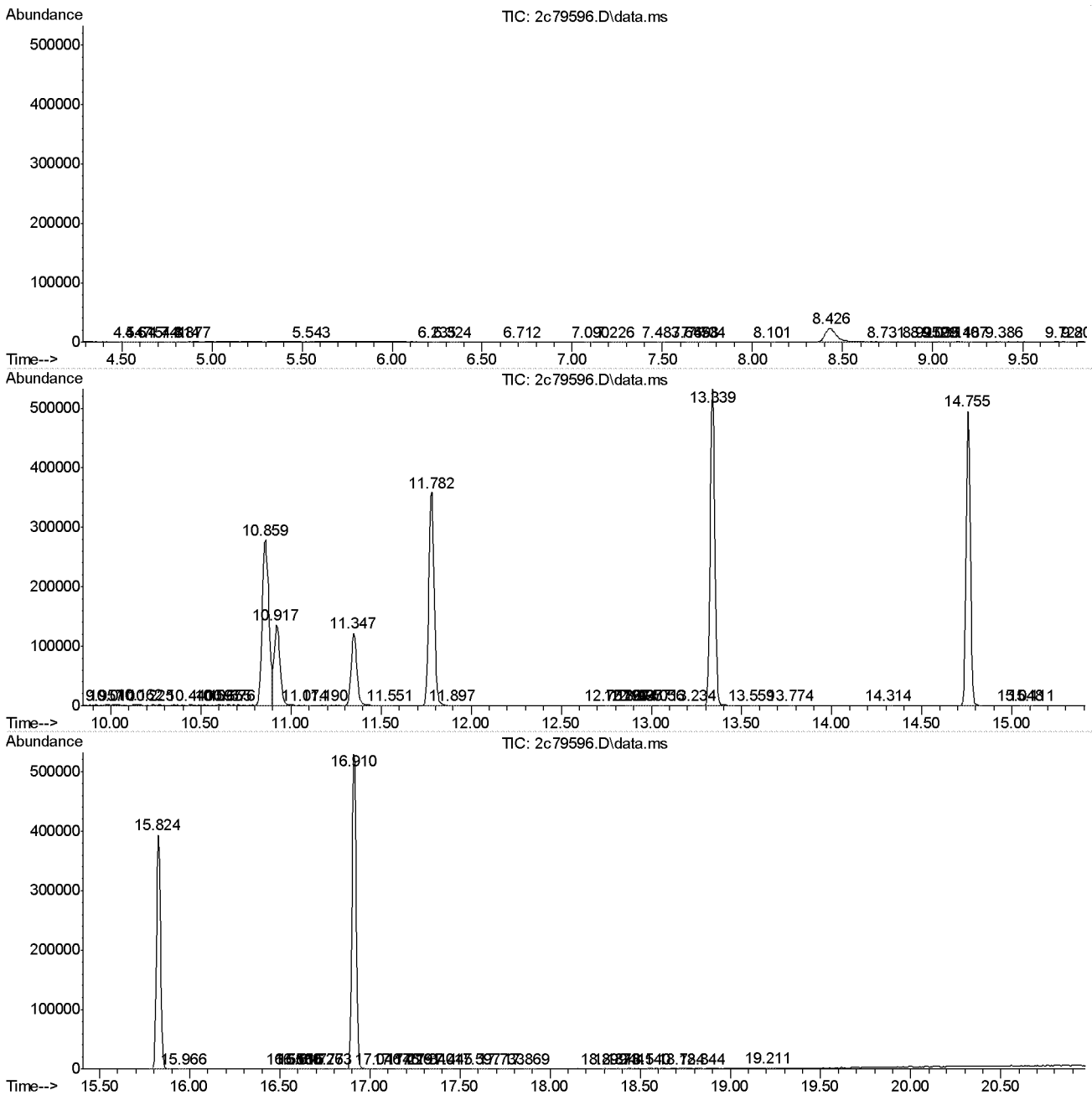
Sum of corrected areas: 5416271

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79596.D
Acq On : 24 Feb 2011 8:33 pm
Operator : dezareer
Sample : ja68506-9
Misc : MS8528,V2C3633,W,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 23 11:11:06 2011 Quant Results File: M2B3558.RES

Quant Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration
DataAcq Meth : M2B3558

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.62	65	74874	500.00	ug/L	0.00
4) pentafluorobenzene	11.09	168	189438	50.00	ug/L	0.00
50) 1,4-difluorobenzene	11.99	114	220750	50.00	ug/L	0.00
81) chlorobenzene-d5	14.95	117	192951	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	17.10	152	120540	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.10	113	66670	49.54	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.08%			
44) 1,2-dichloroethane-d4 (s)	11.53	65	79788	49.54	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 99.08%			
73) toluene-d8 (s)	13.55	98	214554	50.17	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 100.34%			
98) 4-bromofluorobenzene (s)	16.01	95	82690	49.19	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 98.38%			

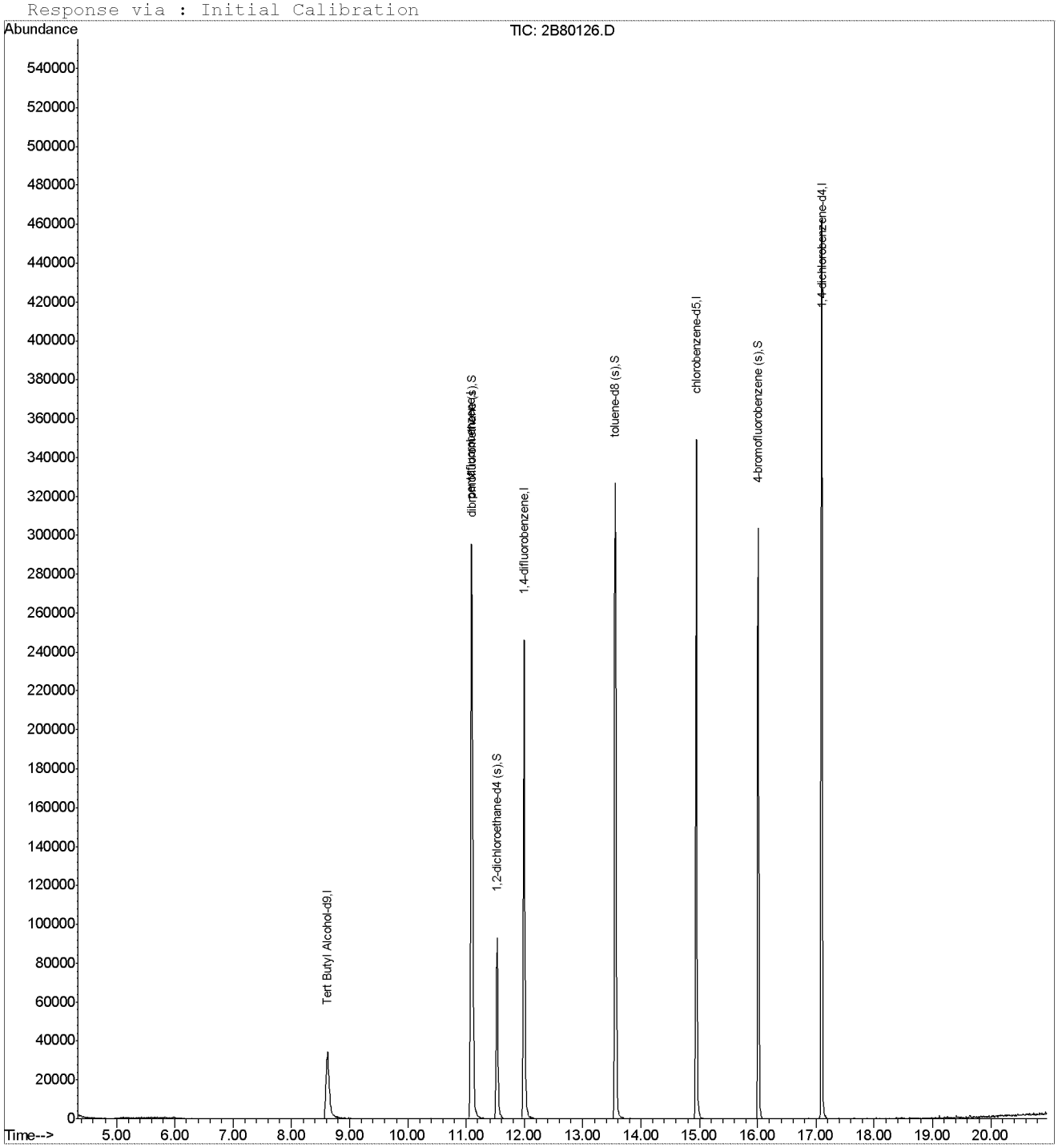
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
2B80126.D M2B3558.M Thu Feb 24 15:11:17 2011 MS2B Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:24 2011 Quant Results File: M2B3558.RES

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Last Update : Tue Feb 01 16:05:20 2011
Response via : Initial Calibration



ACCUTEST LABORATORIES JA68506

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\2B80126.D Vial: 3
Acq On : 23 Feb 2011 10:45 am Operator: DEZAREER
Sample : mb Inst : MS2B
Misc : MS8528,V2B3591,W,,,,1 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title : SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.376	7	9	17	rVB	1051	1608	0.23%	0.042%
2	4.481	27	29	33	rVB	562	557	0.08%	0.015%
3	4.518	33	36	43	rVV	560	653	0.09%	0.017%
4	4.565	43	45	49	rVB	436	449	0.06%	0.012%
5	4.791	85	88	98	rVB	650	1409	0.20%	0.037%
6	4.859	99	101	106	rBV	481	582	0.08%	0.015%
7	4.911	109	111	114	rVB	492	436	0.06%	0.011%
8	4.979	118	124	129	rBV	620	1435	0.20%	0.037%
9	5.215	168	169	174	rVB	497	382	0.05%	0.010%
10	5.273	179	180	185	rVB2	328	391	0.06%	0.010%
11	5.346	189	194	196	rBV2	564	548	0.08%	0.014%
12	5.504	220	224	229	rVV	317	440	0.06%	0.011%
13	5.630	244	248	250	rVB	456	473	0.07%	0.012%
14	5.656	250	253	255	rBV	522	442	0.06%	0.012%
15	5.703	259	262	266	rVB	487	551	0.08%	0.014%
16	5.834	283	287	291	rVB2	338	498	0.07%	0.013%
17	5.960	309	311	313	rVV	615	424	0.06%	0.011%
18	5.976	313	314	318	rVV2	521	635	0.09%	0.017%
19	6.007	318	320	326	rVV	573	678	0.10%	0.018%
20	6.232	360	363	366	rVB	423	436	0.06%	0.011%
21	6.280	366	372	376	rBB	418	836	0.12%	0.022%
22	6.589	430	431	438	rBB	429	411	0.06%	0.011%
23	6.725	456	457	465	rBB	233	391	0.06%	0.010%
24	6.793	465	470	474	rBB	427	574	0.08%	0.015%
25	7.444	589	594	599	rBB	476	471	0.07%	0.012%
26	8.618	806	818	853	rBV2	34924	135311	19.25%	3.534%
27	8.807	853	854	858	rVV	902	1019	0.14%	0.027%
28	8.854	860	863	866	rVV2	822	967	0.14%	0.025%
29	8.901	870	872	875	rVB	723	613	0.09%	0.016%
30	8.933	875	878	881	rBV	568	650	0.09%	0.017%
31	8.980	881	887	891	rBV	577	542	0.08%	0.014%
32	10.390	1151	1156	1163	rBB	646	1231	0.18%	0.032%
33	11.088	1279	1289	1321	rBV2	295640	692067	98.44%	18.074%
34	11.282	1321	1326	1333	rVB	738	1403	0.20%	0.037%
35	11.523	1364	1372	1388	rBV	93125	197003	28.02%	5.145%
36	11.617	1388	1390	1399	rVB	1158	1754	0.25%	0.046%
37	11.989	1452	1461	1482	rBV	246076	478782	68.10%	12.504%
38	13.552	1751	1759	1783	rBV	326987	548697	78.05%	14.330%

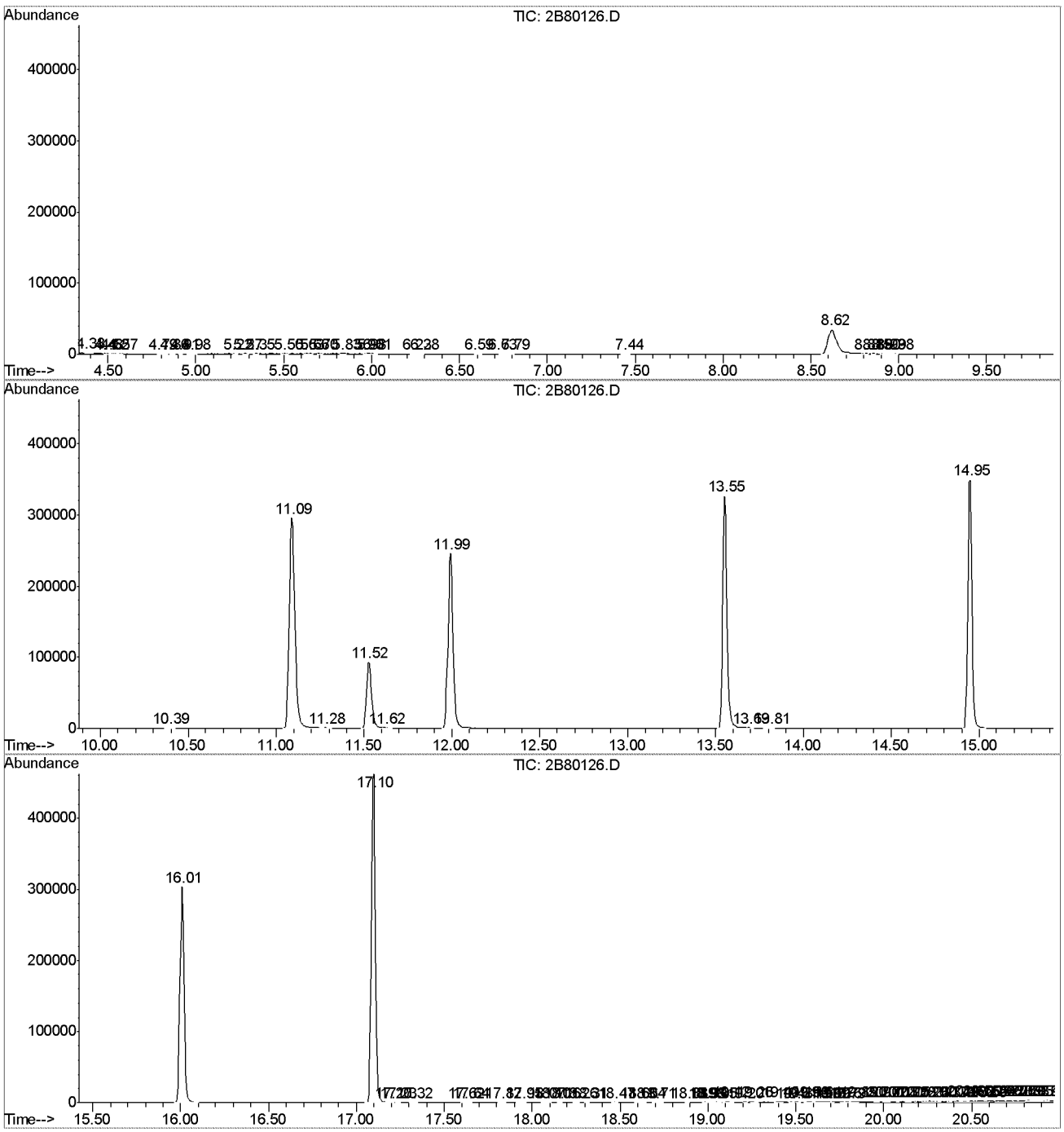
39	13.693	1783	1786	1791	rVB2	809	1155	0.16%	0.030%
40	13.809	1801	1808	1814	rBB	607	1086	0.15%	0.028%
41	14.946	2017	2025	2043	rBV	349646	560202	79.68%	14.630%
42	16.006	2219	2227	2246	rBB	303716	438224	62.33%	11.445%
43	17.096	2426	2435	2453	rBB	462599	703042	100.00%	18.360%
44	17.201	2453	2455	2458	rBV	575	464	0.07%	0.012%
45	17.227	2459	2460	2465	rVB	459	388	0.06%	0.010%
46	17.322	2474	2478	2483	rBB	225	377	0.05%	0.010%
47	17.615	2530	2534	2537	rBB	525	418	0.06%	0.011%
48	17.641	2537	2539	2542	rBV	587	646	0.09%	0.017%
49	17.825	2570	2574	2580	rBB	454	628	0.09%	0.016%
50	17.945	2589	2597	2601	rBB	441	799	0.11%	0.021%
51	18.071	2617	2621	2623	rVB	448	421	0.06%	0.011%
52	18.103	2623	2627	2629	rBB	487	535	0.08%	0.014%
53	18.160	2635	2638	2640	rBV	475	453	0.06%	0.012%
54	18.260	2651	2657	2659	rBV	456	836	0.12%	0.022%
55	18.312	2664	2667	2670	rBV	649	601	0.09%	0.016%
56	18.470	2693	2697	2701	rVB	808	945	0.13%	0.025%
57	18.596	2718	2721	2725	rVB	708	856	0.12%	0.022%
58	18.643	2725	2730	2732	rBV	570	886	0.13%	0.023%
59	18.706	2737	2742	2750	rBV	467	1076	0.15%	0.028%
60	18.884	2773	2776	2779	rBV	334	462	0.07%	0.012%
61	18.984	2791	2795	2796	rVV2	414	469	0.07%	0.012%
62	18.994	2796	2797	2805	rVV	331	479	0.07%	0.013%
63	19.052	2805	2808	2813	rVB2	483	573	0.08%	0.015%
64	19.120	2814	2821	2827	rBV3	1295	1964	0.28%	0.051%
65	19.204	2836	2837	2841	rBV2	626	654	0.09%	0.017%
66	19.256	2844	2847	2853	rVB2	925	1269	0.18%	0.033%
67	19.403	2870	2875	2880	rVV2	1048	1391	0.20%	0.036%
68	19.482	2886	2890	2892	rBV	547	489	0.07%	0.013%
69	19.508	2893	2895	2899	rVB	524	387	0.06%	0.010%
70	19.576	2902	2908	2912	rBV	833	1038	0.15%	0.027%
71	19.639	2912	2920	2927	rBV3	1271	2808	0.40%	0.073%
72	19.691	2927	2930	2932	rVB	502	496	0.07%	0.013%
73	19.707	2932	2933	2936	rBV	683	557	0.08%	0.015%
74	19.760	2941	2943	2946	rVB	557	539	0.08%	0.014%
75	19.786	2946	2948	2952	rBV	532	439	0.06%	0.011%
76	19.849	2952	2960	2962	rBV2	802	1596	0.23%	0.042%
77	19.969	2978	2983	2985	rBV2	930	1146	0.16%	0.030%
78	20.001	2988	2989	2992	rBV	703	714	0.10%	0.019%
79	20.022	2992	2993	2996	rBV	626	511	0.07%	0.013%
80	20.079	3002	3004	3006	rBV	828	807	0.11%	0.021%
81	20.148	3012	3017	3019	rBV	579	781	0.11%	0.020%
82	20.179	3022	3023	3025	rBV	905	488	0.07%	0.013%
83	20.226	3030	3032	3037	rVB3	726	870	0.12%	0.023%
84	20.258	3037	3038	3044	rVB2	938	1359	0.19%	0.035%
85	20.300	3044	3046	3051	rBV	916	1059	0.15%	0.028%
86	20.368	3057	3059	3063	rBV	727	934	0.13%	0.024%
87	20.425	3065	3070	3074	rVB2	856	1153	0.16%	0.030%
88	20.457	3074	3076	3082	rBV3	1076	1246	0.18%	0.033%
89	20.520	3082	3088	3090	rVV2	477	675	0.10%	0.018%
90	20.546	3090	3093	3100	rVB3	750	1424	0.20%	0.037%
91	20.588	3100	3101	3103	rBV2	686	410	0.06%	0.011%
92	20.635	3109	3110	3113	rBV2	994	687	0.10%	0.018%
93	20.677	3113	3118	3121	rVB2	1128	1355	0.19%	0.035%
94	20.729	3121	3128	3130	rBV2	1179	1551	0.22%	0.041%
95	20.750	3130	3132	3135	rVB3	897	849	0.12%	0.022%

96	20.792	3135	3140	3143	rBV3	1075	1863	0.26%	0.049%
97	20.824	3143	3146	3149	rVB2	1279	1057	0.15%	0.028%
98	20.850	3149	3151	3154	rBV2	819	868	0.12%	0.023%
99	20.871	3154	3155	3162	rBV4	854	1064	0.15%	0.028%
100	20.929	3163	3166	3169	rVB	1083	850	0.12%	0.022%

Sum of corrected areas: 3829118

LSC Report - Integrated Chromatogram

File : C:\MSDCHEM\1\DATA\2B80126.D
Operator : DEZAREER
Acquired : 23 Feb 2011 10:45 am using AcqMethod M2B3558
Instrument : MS2B
Sample Name: mb
Misc Info : MS8528,V2B3591,W,,,,1
Vial Number: 3
Quant File :M2B3558.RES (RTE Integrator)



Tentatively Identified Compound (LSC) summary

Operator ID: DEZAREER Date Acquired: 23 Feb 2011 10:45 am
Data File: C:\MSDCHEM\1\DATA\2B80126.D
Name: mb
Misc: MS8528,V2B3591,W,,,,1
Method: C:\MSDCHEM\1\METHODS\M2B3558.M (RTE Integrator)
Title: SW-846 Method 8260, db624, 60mx0.25mmx1.4um
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 25 14:32:36 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

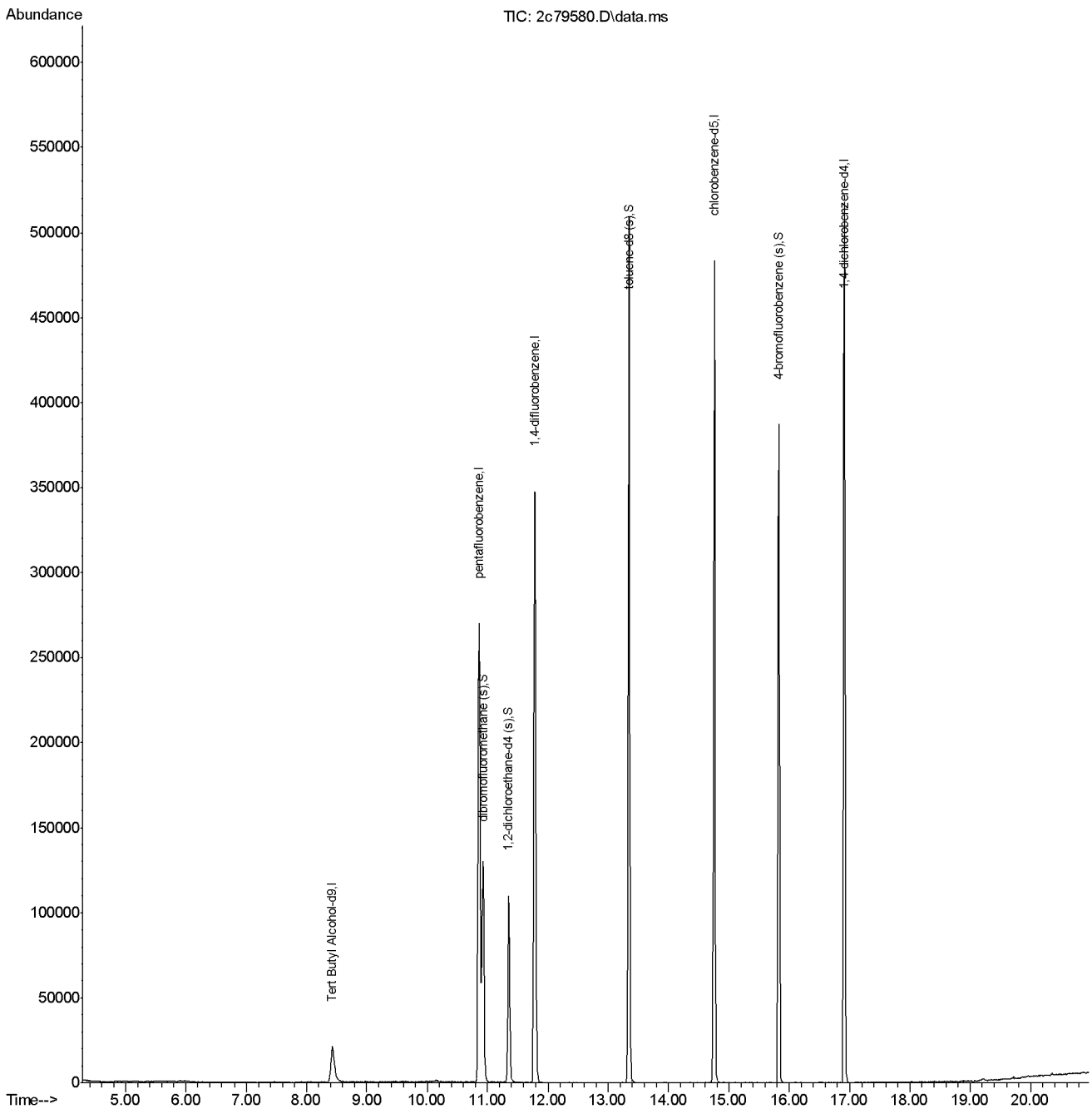
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.426	65	54499	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	252883	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	336423	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	277650	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	145044	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	96291	49.48	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.96%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	88967	44.37	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 88.74%			
80) toluene-d8 (s)	13.339	98	367772	53.20	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 106.40%			
105) 4-bromofluorobenzene (s)	15.824	95	128497	53.92	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 107.84%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 25 14:32:36 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79580.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.762	89	92	98	rBV3	380	619	0.07%	0.012%
2	4.798	98	99	103	rBV2	345	441	0.05%	0.008%
3	4.956	127	129	141	rBV3	450	734	0.08%	0.014%
4	5.165	167	169	179	rVB3	503	1181	0.13%	0.023%
5	5.228	179	181	193	rVB2	457	991	0.11%	0.019%
6	5.344	201	203	212	rVB3	580	938	0.10%	0.018%
7	5.459	223	225	235	rBV3	455	1342	0.14%	0.026%
8	5.527	235	238	245	rVV3	480	946	0.10%	0.018%
9	5.627	245	257	269	rVB4	461	2382	0.26%	0.045%
10	6.382	399	401	408	rVB2	310	548	0.06%	0.010%
11	6.434	408	411	418	rBV2	359	612	0.07%	0.012%
12	6.895	498	499	505	rVB2	404	495	0.05%	0.009%
13	7.226	561	562	568	rBV	422	422	0.05%	0.008%
14	7.278	570	572	581	rBV2	409	866	0.09%	0.017%
15	7.383	589	592	595	rVB	352	418	0.04%	0.008%
16	7.441	600	603	606	rBV2	440	475	0.05%	0.009%
17	7.614	630	636	637	rVB	447	595	0.06%	0.011%
18	7.666	641	646	647	rVB	413	461	0.05%	0.009%
19	7.761	663	664	670	rVB2	405	552	0.06%	0.011%
20	7.829	670	677	682	rBV	478	1154	0.12%	0.022%
21	7.865	682	684	688	rVV2	373	518	0.06%	0.010%
22	7.902	688	691	694	rVB2	536	488	0.05%	0.009%
23	7.981	705	706	712	rBV2	457	530	0.06%	0.010%
24	8.180	741	744	751	rBV2	345	605	0.06%	0.012%
25	8.295	763	766	770	rVB2	456	552	0.06%	0.011%
26	8.426	776	791	822	rBV3	21094	91734	9.84%	1.750%
27	8.662	835	836	842	rVB2	440	508	0.05%	0.010%
28	8.704	842	844	848	rBV2	428	560	0.06%	0.011%
29	8.856	870	873	878	rBV2	398	636	0.07%	0.012%
30	8.982	889	897	899	rBV2	506	988	0.11%	0.019%
31	9.255	947	949	956	rVB	344	445	0.05%	0.008%
32	9.454	984	987	989	rBV	436	425	0.05%	0.008%
33	9.580	1009	1011	1015	rBV2	305	429	0.05%	0.008%
34	9.648	1021	1024	1030	rVB	416	809	0.09%	0.015%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.721	1036	1038	1051	rBV	561	1057	0.11%	0.020%
36	9.805	1052	1054	1060	rVB	427	567	0.06%	0.011%
37	9.847	1060	1062	1067	rBV	467	604	0.06%	0.012%
38	10.020	1085	1095	1103	rVB2	510	1875	0.20%	0.036%
39	10.078	1103	1106	1108	rBV2	683	584	0.06%	0.011%
40	10.151	1115	1120	1129	rVB4	1022	2957	0.32%	0.056%
41	10.408	1166	1169	1177	rBV2	452	805	0.09%	0.015%
42	10.503	1182	1187	1190	rBB2	438	592	0.06%	0.011%
43	10.560	1194	1198	1205	rVB2	452	694	0.07%	0.013%
44	10.859	1242	1255	1261	rBV	269902	644418	69.11%	12.296%
45	10.917	1262	1266	1288	rVB	129902	290370	31.14%	5.540%
46	11.347	1335	1348	1370	rBV	109775	248344	26.63%	4.738%
47	11.583	1390	1393	1398	rBV	447	638	0.07%	0.012%
48	11.703	1414	1416	1419	rBV	393	433	0.05%	0.008%
49	11.782	1419	1431	1450	rVB	347381	726488	77.91%	13.862%
50	11.960	1462	1465	1469	rBV	354	461	0.05%	0.009%
51	12.002	1469	1473	1479	rVB	342	696	0.07%	0.013%
52	12.055	1479	1483	1488	rBB	362	510	0.05%	0.010%
53	12.102	1488	1492	1494	rBV	376	406	0.04%	0.008%
54	12.228	1514	1516	1521	rVB	375	549	0.06%	0.010%
55	12.259	1521	1522	1527	rBV	366	440	0.05%	0.008%
56	12.474	1558	1563	1566	rVB	379	569	0.06%	0.011%
57	12.642	1592	1595	1597	rVB	392	388	0.04%	0.007%
58	12.804	1625	1626	1632	rVB	327	388	0.04%	0.007%
59	13.166	1694	1695	1700	rBV	359	496	0.05%	0.009%
60	13.245	1706	1710	1712	rVB	372	523	0.06%	0.010%
61	13.261	1712	1713	1717	rBV	442	467	0.05%	0.009%
62	13.339	1717	1728	1746	rVV	509365	932462	100.00%	17.792%
63	13.449	1747	1749	1755	rVB	665	826	0.09%	0.016%
64	13.575	1766	1773	1775	rBV	405	723	0.08%	0.014%
65	13.811	1815	1818	1822	rBV	369	543	0.06%	0.010%
66	13.968	1843	1848	1851	rVB	404	658	0.07%	0.013%
67	14.026	1856	1859	1863	rBV	349	457	0.05%	0.009%
68	14.346	1917	1920	1923	rVB	398	418	0.04%	0.008%
69	14.613	1968	1971	1975	rVB	403	504	0.05%	0.010%
70	14.650	1975	1978	1983	rBV2	385	725	0.08%	0.014%
71	14.755	1988	1998	2018	rVV	483639	799193	85.71%	15.249%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	14.928	2022	2031	2034	rVV2	517	805	0.09%	0.015%
73	15.274	2095	2097	2103	rVB2	384	614	0.07%	0.012%
74	15.332	2103	2108	2109	rBV	364	507	0.05%	0.010%
75	15.379	2113	2117	2121	rBV	419	832	0.09%	0.016%
76	15.824	2192	2202	2222	rVB	387497	611011	65.53%	11.658%
77	15.940	2222	2224	2228	rBV2	432	598	0.06%	0.011%
78	16.516	2327	2334	2344	rVB2	465	1292	0.14%	0.025%
79	16.674	2358	2364	2365	rBV	251	392	0.04%	0.007%
80	16.836	2393	2395	2401	rVB2	376	507	0.05%	0.010%
81	16.910	2401	2409	2426	rBV	517998	828337	88.83%	15.805%
82	17.088	2439	2443	2450	rBV2	441	986	0.11%	0.019%
83	17.182	2458	2461	2466	rVB2	446	698	0.07%	0.013%
84	17.240	2469	2472	2479	rVB3	390	823	0.09%	0.016%
85	17.303	2479	2484	2486	rBV	470	628	0.07%	0.012%
86	17.371	2490	2497	2503	rBV2	486	1306	0.14%	0.025%
87	17.722	2561	2564	2570	rBV2	340	515	0.06%	0.010%
88	17.785	2571	2576	2583	rVB2	341	672	0.07%	0.013%
89	17.885	2593	2595	2604	rBV3	310	697	0.07%	0.013%
90	17.943	2604	2606	2613	rVV2	301	522	0.06%	0.010%
91	18.011	2613	2619	2623	rVV	365	525	0.06%	0.010%
92	18.409	2693	2695	2707	rVB2	278	604	0.06%	0.012%
93	18.608	2731	2733	2739	rBV2	424	699	0.07%	0.013%
94	18.760	2760	2762	2765	rVB2	408	436	0.05%	0.008%
95	18.829	2772	2775	2777	rBV2	529	387	0.04%	0.007%
96	18.850	2777	2779	2785	rVB2	547	782	0.08%	0.015%
97	18.892	2785	2787	2789	rBV	693	480	0.05%	0.009%
98	18.960	2798	2800	2807	rBV3	551	786	0.08%	0.015%
99	19.138	2816	2834	2835	rBV2	704	2809	0.30%	0.054%
100	19.217	2843	2849	2861	rVB2	1602	3512	0.38%	0.067%

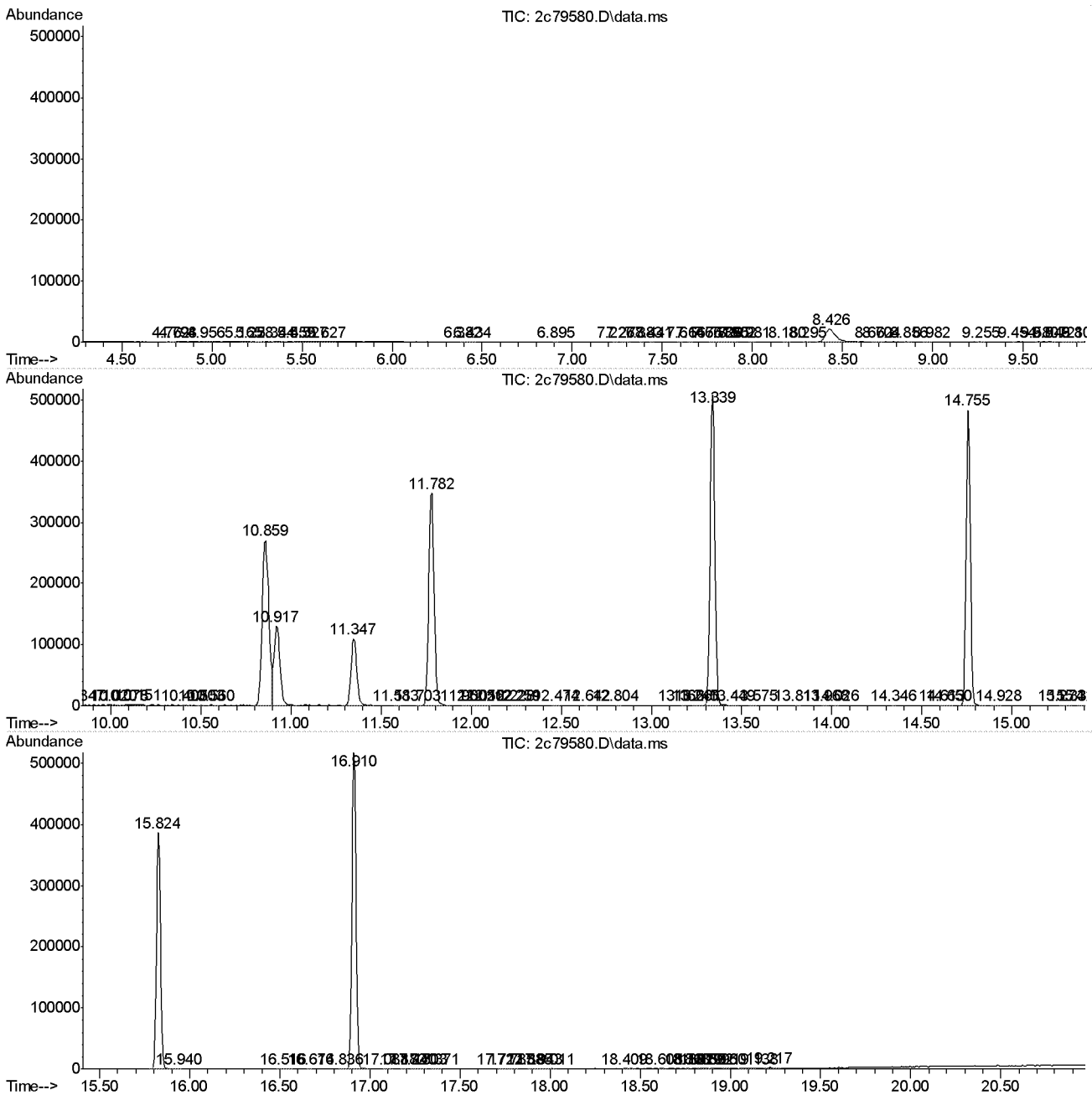
Sum of corrected areas: 5240989

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3633-3634\
Data File : 2c79580.D
Acq On : 24 Feb 2011 12:17 pm
Operator : dezareer
Sample : mb
Misc : MS8526,V2C3633,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected
****

ACCUTEST LABORATORIES JA68506

SII-SSA-0014-006440

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 01 14:26:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.432	65	80430	500.00	ug/L	0.00
4) pentafluorobenzene	10.859	168	256064	50.00	ug/L	0.00
57) 1,4-difluorobenzene	11.782	114	326942	50.00	ug/L	0.00
88) chlorobenzene-d5	14.755	117	274721	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	16.910	152	148062	50.00	ug/L	0.00
System Monitoring Compounds						
50) dibromofluoromethane (s)	10.922	113	100369	50.94	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.88%			
51) 1,2-dichloroethane-d4 (s)	11.347	65	102746	50.60	ug/L	0.00
Spiked Amount 50.000	Range 64 - 135		Recovery = 101.20%			
80) toluene-d8 (s)	13.339	98	377669	56.22	ug/L	0.00
Spiked Amount 50.000	Range 76 - 117		Recovery = 112.44%			
105) 4-bromofluorobenzene (s)	15.824	95	132568	54.50	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 109.00%			
Target Compounds						Qvalue

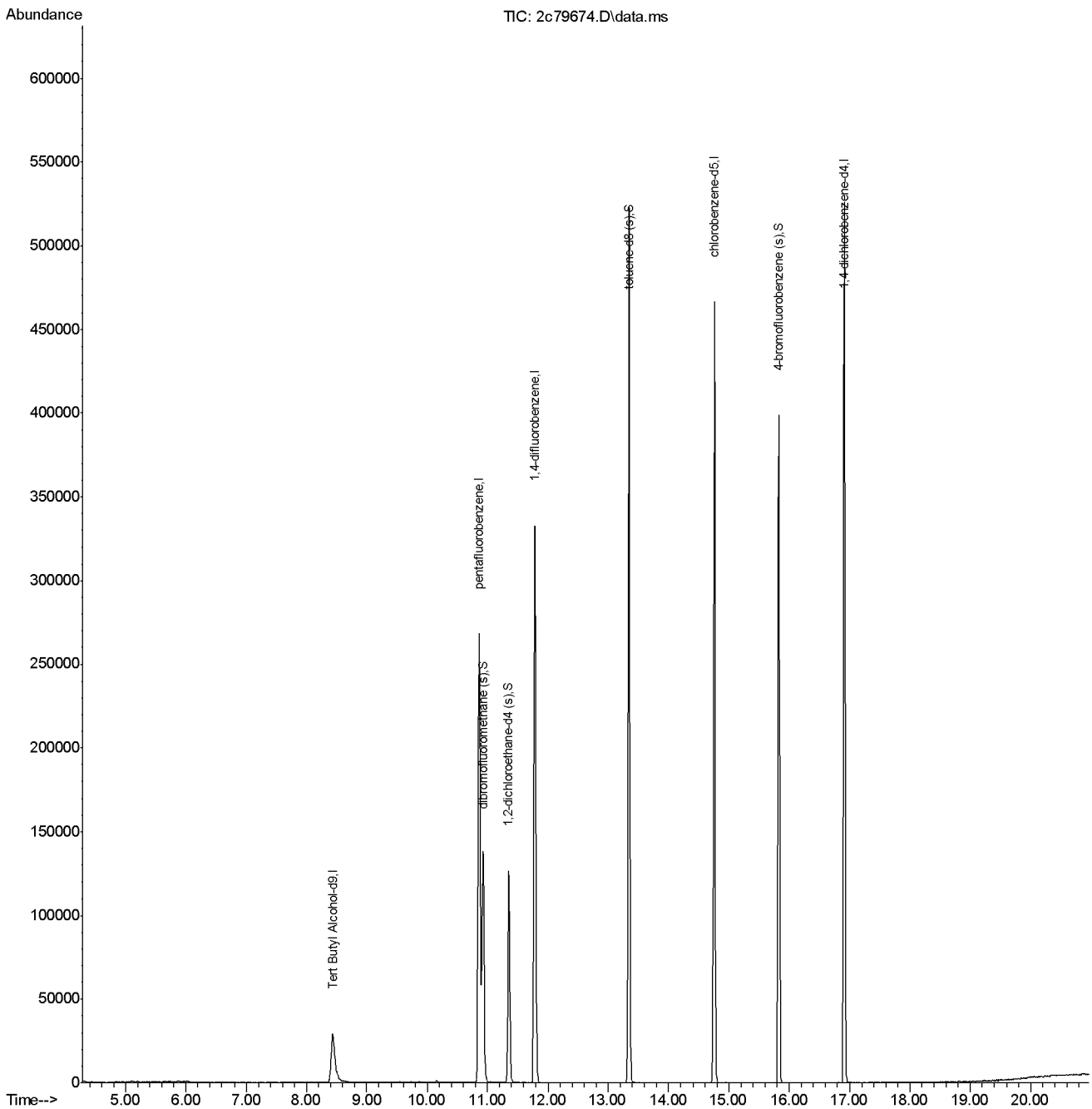
(#) = qualifier out of range (m) = manual integration (+) = signals summed

6.2.5

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 01 14:26:54 2011
Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um
QLast Update : Fri Jan 21 15:38:12 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

Signal : TIC: 2c79674.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.589	54	59	61	rBV2	440	513	0.05%	0.010%
2	4.615	61	64	72	rVB2	288	649	0.07%	0.012%
3	4.798	95	99	100	rBV2	291	391	0.04%	0.007%
4	4.835	104	106	112	rVB2	438	612	0.06%	0.012%
5	4.956	125	129	136	rBV2	479	1109	0.12%	0.021%
6	5.013	136	140	144	rBV2	336	573	0.06%	0.011%
7	5.055	144	148	150	rBV	359	479	0.05%	0.009%
8	5.102	154	157	169	rVB2	439	835	0.09%	0.016%
9	5.275	186	190	193	rVB2	533	577	0.06%	0.011%
10	5.359	198	206	208	rVV2	414	695	0.07%	0.013%
11	5.391	208	212	218	rVV	339	541	0.06%	0.010%
12	5.511	230	235	238	rVV2	543	535	0.06%	0.010%
13	5.553	241	243	247	rVB	465	569	0.06%	0.011%
14	5.632	251	258	260	rVB3	366	626	0.07%	0.012%
15	5.716	268	274	276	rVV2	491	627	0.07%	0.012%
16	5.810	290	292	297	rVB	369	500	0.05%	0.009%
17	5.852	297	300	302	rBV2	450	415	0.04%	0.008%
18	5.884	305	306	314	rVB2	442	621	0.07%	0.012%
19	6.387	398	402	408	rVB2	360	813	0.09%	0.015%
20	6.439	408	412	416	rBV	352	656	0.07%	0.012%
21	6.492	416	422	424	rBV2	284	449	0.05%	0.008%
22	6.738	464	469	475	rBV	421	658	0.07%	0.012%
23	6.922	499	504	512	rBV2	256	729	0.08%	0.014%
24	7.268	564	570	572	rVB2	308	416	0.04%	0.008%
25	7.598	628	633	637	rBV2	350	461	0.05%	0.009%
26	7.645	639	642	651	rVV	234	552	0.06%	0.010%
27	8.432	776	792	842	rVV2	28971	138160	14.62%	2.603%
28	8.699	842	843	850	rVB3	388	630	0.07%	0.012%
29	8.825	862	867	871	rVB	352	420	0.04%	0.008%
30	8.909	879	883	887	rBV	250	469	0.05%	0.009%
31	9.066	906	913	916	rBV2	229	428	0.05%	0.008%
32	9.150	927	929	937	rVB2	415	623	0.07%	0.012%
33	9.229	940	944	948	rVV2	225	396	0.04%	0.007%
34	9.323	959	962	968	rVB	319	503	0.05%	0.009%

M2C3580.M Tue Mar 01 14:27:12 2011 ACCUNJ

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

35	9.407	974	978	986	rBV	248	576	0.06%	0.011%
36	9.543	997	1004	1007	rBV2	521	864	0.09%	0.016%
37	9.590	1011	1013	1024	rVB2	250	552	0.06%	0.010%
38	9.957	1076	1083	1086	rBV2	269	408	0.04%	0.008%
39	10.162	1111	1122	1128	rBV4	982	2741	0.29%	0.052%
40	10.702	1221	1225	1234	rBV2	266	616	0.07%	0.012%
41	10.859	1239	1255	1261	rBV	268011	626726	66.32%	11.807%
42	10.917	1261	1266	1287	rVV2	137731	326913	34.59%	6.159%
43	11.038	1287	1289	1294	rVB2	498	483	0.05%	0.009%
44	11.116	1297	1304	1309	rBV	385	988	0.10%	0.019%
45	11.179	1314	1316	1319	rBV	322	418	0.04%	0.008%
46	11.347	1337	1348	1367	rVV	126446	284878	30.15%	5.367%
47	11.509	1375	1379	1388	rVV2	369	935	0.10%	0.018%
48	11.588	1392	1394	1407	rVV	368	1197	0.13%	0.023%
49	11.682	1407	1412	1413	rVV2	500	575	0.06%	0.011%
50	11.782	1417	1431	1450	rVV	333028	689842	73.00%	12.996%
51	11.987	1464	1470	1473	rBV	210	504	0.05%	0.009%
52	12.028	1473	1478	1482	rVB	191	452	0.05%	0.009%
53	12.306	1524	1531	1532	rVB	206	406	0.04%	0.008%
54	12.348	1532	1539	1542	rBV	321	597	0.06%	0.011%
55	12.432	1552	1555	1562	rBB	382	588	0.06%	0.011%
56	12.511	1569	1570	1578	rVB	234	503	0.05%	0.009%
57	12.616	1586	1590	1597	rBB	389	636	0.07%	0.012%
58	12.684	1600	1603	1607	rBV	315	435	0.05%	0.008%
59	12.825	1627	1630	1635	rBB	373	427	0.05%	0.008%
60	12.867	1635	1638	1643	rBV	230	489	0.05%	0.009%
61	13.051	1671	1673	1678	rBB	323	426	0.05%	0.008%
62	13.109	1678	1684	1685	rBB	330	400	0.04%	0.008%
63	13.166	1689	1695	1696	rBV	338	480	0.05%	0.009%
64	13.339	1717	1728	1754	rVV	522897	944976	100.00%	17.803%
65	13.512	1758	1761	1766	rVV	454	750	0.08%	0.014%
66	13.722	1798	1801	1809	rBB	334	628	0.07%	0.012%
67	13.921	1837	1839	1847	rBB	247	521	0.06%	0.010%
68	13.979	1847	1850	1853	rBV	343	437	0.05%	0.008%
69	14.173	1880	1887	1893	rBV	347	813	0.09%	0.015%
70	14.314	1911	1914	1919	rBV	366	524	0.06%	0.010%
71	14.372	1919	1925	1932	rVB	385	935	0.10%	0.018%

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: RTEINT2.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 100 Area counts
Start Thrs: 0.06 Max Peaks: 100
Stop Thrs : 0.04 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

72	14.561	1954	1961	1963	rBV	224	553	0.06%	0.010%
73	14.755	1988	1998	2012	rBV	466597	769030	81.38%	14.488%
74	15.510	2141	2142	2153	rVB	262	720	0.08%	0.014%
75	15.615	2153	2162	2167	rBV	418	927	0.10%	0.017%
76	15.824	2193	2202	2215	rVB	398934	633690	67.06%	11.938%
77	16.910	2400	2409	2421	rBV	526248	826877	87.50%	15.578%
78	17.036	2428	2433	2436	rVB	368	444	0.05%	0.008%
79	17.083	2436	2442	2443	rVV2	348	455	0.05%	0.009%
80	17.334	2485	2490	2493	rBV2	398	562	0.06%	0.011%
81	17.361	2494	2495	2501	rVB2	372	529	0.06%	0.010%
82	17.476	2514	2517	2522	rVB2	371	545	0.06%	0.010%
83	18.414	2692	2696	2702	rBV2	301	490	0.05%	0.009%
84	18.504	2707	2713	2716	rBV2	436	588	0.06%	0.011%
85	18.813	2771	2772	2777	rVB2	384	445	0.05%	0.008%
86	18.881	2784	2785	2792	rBV2	340	559	0.06%	0.011%
87	19.211	2846	2848	2854	rVB3	482	798	0.08%	0.015%
88	19.316	2864	2868	2871	rBV4	552	666	0.07%	0.013%
89	19.369	2877	2878	2882	rBV2	558	428	0.05%	0.008%
90	19.432	2887	2890	2894	rVB3	637	623	0.07%	0.012%
91	19.463	2894	2896	2900	rBV4	628	657	0.07%	0.012%
92	19.500	2900	2903	2904	rVB2	637	436	0.05%	0.008%
93	19.573	2914	2917	2922	rBV2	411	551	0.06%	0.010%
94	19.720	2943	2945	2949	rBV2	649	677	0.07%	0.013%
95	19.757	2949	2952	2955	rBV2	697	774	0.08%	0.015%
96	20.061	3004	3010	3014	rBV5	671	1390	0.15%	0.026%
97	20.166	3026	3030	3037	rBV6	691	1565	0.17%	0.029%
98	20.276	3048	3051	3060	rVB5	1050	1723	0.18%	0.032%
99	20.449	3060	3084	3092	rBV8	1092	8485	0.90%	0.160%
100	20.868	3160	3164	3165	rBV4	747	915	0.10%	0.017%

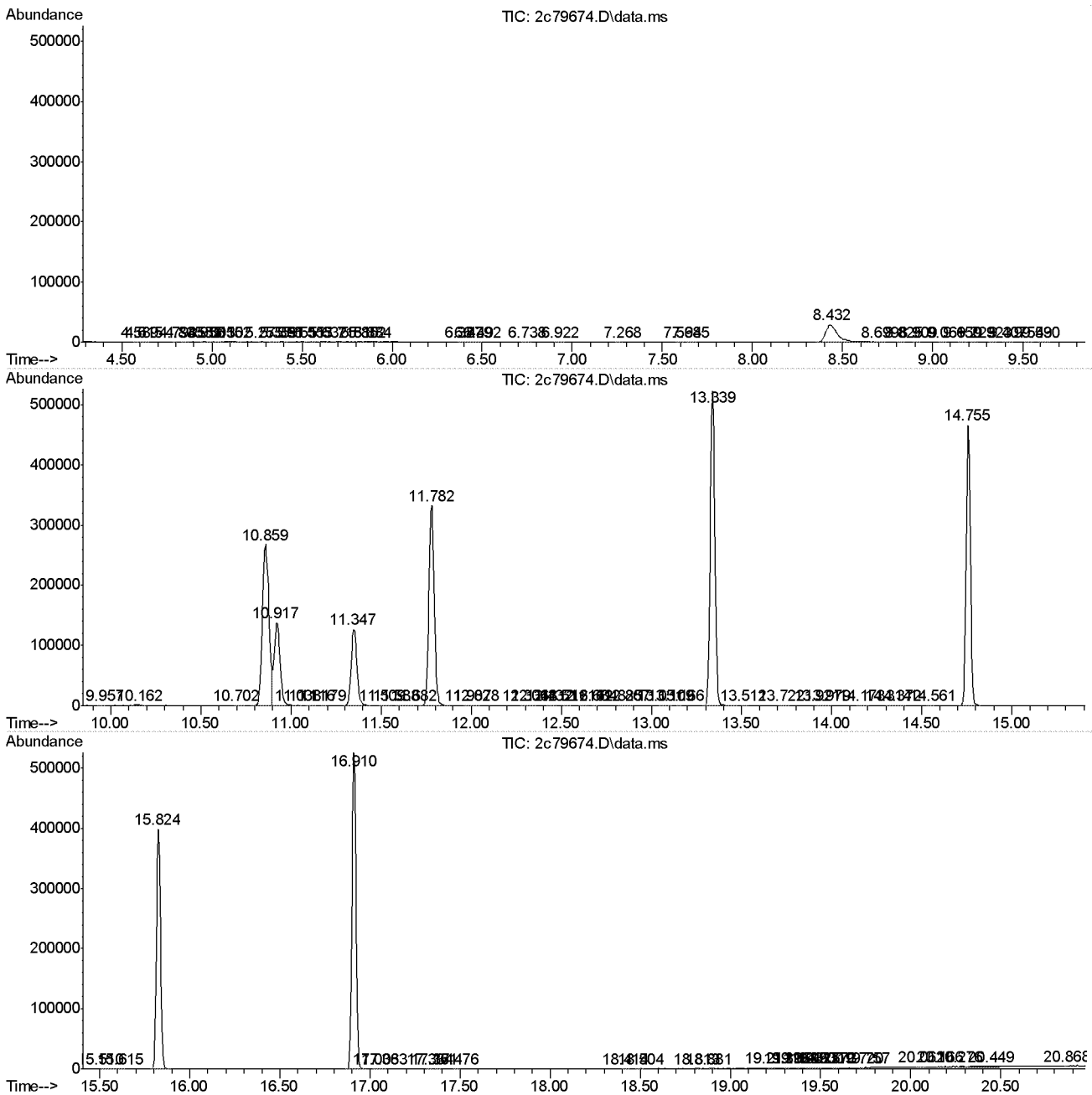
Sum of corrected areas: 5307971

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\2c-core\v2c3637-3638\
Data File : 2c79674.D
Acq On : 28 Feb 2011 10:20 am
Operator : dezareer
Sample : mb
Misc : MS8528,V2C3637,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2C3580.M
Quant Title : SW846 8260B, Column ZB624 60mX0.25mmX1.4um

TIC Library : C:\DATABASE\NBS75K.L
TIC Integration Parameters: LSCINT.P

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	Internal Standard RT	Internal Standard Resp	Internal Standard Conc

No Library Search Compounds Detected

New Jersey ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MB1	P54982.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Result	RL	MDL	Units	Q
98-86-2	Acetophenone	ND	2.0	0.40	ug/l	
1912-24-9	Atrazine	ND	5.0	0.39	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.40	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.25	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.42	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.42	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.25	ug/l	
86-74-8	Carbazole	ND	1.0	0.17	ug/l	
105-60-2	Caprolactam	ND	2.0	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.39	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.35	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	2.0	0.22	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	2.0	0.33	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	0.30	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.19	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.40	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.17	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.13	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.24	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.21	ug/l	
78-59-1	Isophorone	ND	2.0	0.25	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.66	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.29	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.18	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.44	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.48	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MB1	P54982.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	98%	25-112%
321-60-8	2-Fluorobiphenyl	91%	31-106%
1718-51-0	Terphenyl-d14	77%	14-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM test	5.03	4.9	ug/l	J
	Internal standard added for SIM test	7.78	4.3	ug/l	J
	Internal standard added for SIM test	10.14	5.4	ug/l	J
	Internal standard added for SIM test	13.22	6	ug/l	J
	Internal standard added for SIM test	16.24	5	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-MB1	4M23774.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	0.10	0.011	ug/l	
208-96-8	Acenaphthylene	ND	0.10	0.011	ug/l	
120-12-7	Anthracene	ND	0.10	0.0084	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.10	0.0098	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.10	0.016	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.0095	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.10	0.010	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.013	ug/l	
218-01-9	Chrysene	ND	0.10	0.011	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.019	ug/l	
206-44-0	Fluoranthene	ND	0.10	0.0081	ug/l	
86-73-7	Fluorene	ND	0.10	0.0090	ug/l	
118-74-1	Hexachlorobenzene	ND	0.020	0.010	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.016	ug/l	
91-20-3	Naphthalene	ND	0.10	0.012	ug/l	
85-01-8	Phenanthrene	ND	0.10	0.0094	ug/l	
129-00-0	Pyrene	ND	0.10	0.012	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	93%	32-135%
321-60-8	2-Fluorobiphenyl	94%	31-121%
1718-51-0	Terphenyl-d14	105%	10-130%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-BS1	P54983.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
98-86-2	Acetophenone	50	42.5	85	46-113
1912-24-9	Atrazine	50	43.9	88	55-127
100-52-7	Benzaldehyde	50	56.8	114	31-130
101-55-3	4-Bromophenyl phenyl ether	50	39.7	79	55-121
85-68-7	Butyl benzyl phthalate	50	39.5	79	55-132
92-52-4	1,1'-Biphenyl	50	38.6	77	43-107
91-58-7	2-Chloronaphthalene	50	35.2	70	39-108
106-47-8	4-Chloroaniline	50	32.3	65	34-103
86-74-8	Carbazole	50	38.9	78	63-122
105-60-2	Caprolactam	50	4.8	10	1-99
111-91-1	bis(2-Chloroethoxy)methane	50	39.1	78	43-119
111-44-4	bis(2-Chloroethyl)ether	50	33.9	68	36-124
108-60-1	bis(2-Chloroisopropyl)ether	50	34.5	69	40-106
7005-72-3	4-Chlorophenyl phenyl ether	50	37.2	74	50-117
121-14-2	2,4-Dinitrotoluene	50	40.3	81	56-124
606-20-2	2,6-Dinitrotoluene	50	49.6	99	55-128
91-94-1	3,3'-Dichlorobenzidine	50	36.7	73	42-116
132-64-9	Dibenzofuran	50	38.2	76	53-109
84-74-2	Di-n-butyl phthalate	50	42.1	84	58-130
117-84-0	Di-n-octyl phthalate	50	41.6	83	55-133
84-66-2	Diethyl phthalate	50	40.8	82	52-123
131-11-3	Dimethyl phthalate	50	32.1	64	44-126
117-81-7	bis(2-Ethylhexyl)phthalate	50	40.0	80	57-134
87-68-3	Hexachlorobutadiene	50	33.3	67	11-100
77-47-4	Hexachlorocyclopentadiene	100	85.4	85	5-120
67-72-1	Hexachloroethane	50	27.1	54	13-88
78-59-1	Isophorone	50	40.3	81	43-120
91-57-6	2-Methylnaphthalene	50	33.1	66	33-103
88-74-4	2-Nitroaniline	50	48.0	96	48-132
99-09-2	3-Nitroaniline	50	38.0	76	48-115
100-01-6	4-Nitroaniline	50	35.2	70	51-125
98-95-3	Nitrobenzene	50	31.6	63	41-114
621-64-7	N-Nitroso-di-n-propylamine	50	43.0	86	41-121
86-30-6	N-Nitrosodiphenylamine	50	35.2	70	54-136
95-94-3	1,2,4,5-Tetrachlorobenzene	50	37.8	76	18-130

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-BS1	P54983.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	100%	25-112%
321-60-8	2-Fluorobiphenyl	93%	31-106%
1718-51-0	Terphenyl-d14	80%	14-122%

Blank Spike Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-BS12	4M23775.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	1	0.866	87	53-125
208-96-8	Acenaphthylene	1	0.906	91	51-111
120-12-7	Anthracene	1	0.992	99	62-134
56-55-3	Benzo(a)anthracene	1	0.901	90	46-142
50-32-8	Benzo(a)pyrene	1	0.855	86	49-132
205-99-2	Benzo(b)fluoranthene	1	0.679	68	36-167
191-24-2	Benzo(g,h,i)perylene	1	0.885	89	43-149
207-08-9	Benzo(k)fluoranthene	1	0.999	100	27-173
218-01-9	Chrysene	1	1.06	106	59-137
53-70-3	Dibenzo(a,h)anthracene	1	0.802	80	47-149
206-44-0	Fluoranthene	1	0.852	85	57-126
86-73-7	Fluorene	1	0.848	85	58-126
118-74-1	Hexachlorobenzene	1	0.913	91	36-140
193-39-5	Indeno(1,2,3-cd)pyrene	1	0.829	83	51-151
91-20-3	Naphthalene	1	0.765	77	40-130
85-01-8	Phenanthrene	1	0.862	86	52-130
129-00-0	Pyrene	1	0.916	92	60-134

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	88%	32-135%
321-60-8	2-Fluorobiphenyl	89%	31-121%
1718-51-0	Terphenyl-d14	97%	10-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
OP48193-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
JA68506-1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	JA68506-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
98-86-2	Acetophenone	ND		100	48.0	48	81.1	81	51* [a]	25-127/35
1912-24-9	Atrazine	ND		100	53.7	54	80.4	80	40* [a]	40-133/27
100-52-7	Benzaldehyde	ND		100	55.8	56	98.8	99	56* [a]	9-151/37
101-55-3	4-Bromophenyl phenyl ether	ND		100	44.9	45* [b]	71.4	71	46* [a]	47-123/28
85-68-7	Butyl benzyl phthalate	ND		100	43.7	44* [b]	71.6	72	48* [a]	47-137/27
92-52-4	1,1'-Biphenyl	ND		100	45.0	45	75.4	75	50* [a]	36-113/32
91-58-7	2-Chloronaphthalene	ND		100	41.6	42	69.1	69	50* [a]	35-110/32
106-47-8	4-Chloroaniline	ND		100	40.3	40	59.6	60	39* [a]	22-98/36
86-74-8	Carbazole	ND		100	46.8	47* [b]	72.9	73	44* [a]	54-127/26
105-60-2	Caprolactam	ND		100	15.6	16	26.5	27	52* [a]	1-103/43
111-91-1	bis(2-Chloroethoxy)methane	ND		100	43.7	44	74.3	74	52* [a]	33-116/36
111-44-4	bis(2-Chloroethyl)ether	ND		100	36.3	36	63.2	63	54* [a]	24-124/34
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	37.8	38	64.7	65	52* [a]	31-104/35
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	45.3	45	71.9	72	45* [a]	42-119/28
121-14-2	2,4-Dinitrotoluene	ND		100	47.8	48	79.6	80	50* [a]	45-129/28
606-20-2	2,6-Dinitrotoluene	ND		100	61.4	61	98.9	99	47* [a]	46-132/29
91-94-1	3,3'-Dichlorobenzidine	ND		100	44.7	45	67.6	68	41* [a]	17-119/36
132-64-9	Dibenzofuran	ND		100	44.9	45	73.9	74	49* [a]	44-114/30
84-74-2	Di-n-butyl phthalate	ND		100	47.0	47* [b]	75.5	76	47* [a]	49-134/26
117-84-0	Di-n-octyl phthalate	ND		100	48.2	48	77.8	78	47* [a]	46-140/25
84-66-2	Diethyl phthalate	ND		100	46.1	46	74.9	75	48* [a]	46-123/27
131-11-3	Dimethyl phthalate	ND		100	31.8	32* [b]	52.7	53	49* [a]	39-123/32
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	48.2	48* [b]	76.3	76	45* [a]	49-141/27
87-68-3	Hexachlorobutadiene	ND		100	40.1	40	71.2	71	56* [a]	15-99/39
77-47-4	Hexachlorocyclopentadiene	ND		200	88.4	44	167	84	62* [a]	4-124/39
67-72-1	Hexachloroethane	ND		100	30.5	31	56.6	57	60* [a]	16-86/39
78-59-1	Isophorone	ND		100	47.3	47	77.7	78	49* [a]	33-117/36
91-57-6	2-Methylnaphthalene	ND		100	38.9	39	64.1	64	49* [a]	22-117/37
88-74-4	2-Nitroaniline	ND		100	58.8	59	95.1	95	47* [a]	37-135/29
99-09-2	3-Nitroaniline	ND		100	48.0	48	72.4	72	41* [a]	34-115/28
100-01-6	4-Nitroaniline	ND		100	45.3	45	72.2	72	46* [a]	36-128/30
98-95-3	Nitrobenzene	ND		100	35.7	36	61.9	62	54* [a]	30-116/37
621-64-7	N-Nitroso-di-n-propylamine	ND		100	50.8	51	81.8	82	47* [a]	32-118/35
86-30-6	N-Nitrosodiphenylamine	ND		100	42.9	43	65.8	66	42* [a]	42-145/27
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	43.7	44	73.2	73	50* [a]	23-131/18

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
OP48193-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378
JA68506-1	P54989.D	1	02/22/11	NAP	02/21/11	OP48193	EP2378

The QC reported here applies to the following samples: **Method:** SW846 8270C

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-1	Limits
4165-60-0	Nitrobenzene-d5	55%	96%	77%	25-112%
321-60-8	2-Fluorobiphenyl	53%	88%	69%	31-106%
1718-51-0	Terphenyl-d14	31%	52%	45%	14-122%

(a) Analytical precision exceeds standard laboratory control limits.
(b) Outside of in house control limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP48193A-MS	P54990.D	1	02/22/11	NAP	02/21/11	OP48193A	EP2378
OP48193A-MSD	P54991.D	1	02/22/11	NAP	02/21/11	OP48193A	EP2378
JA68506-1	4M23778.D	1	02/22/11	NAP	02/21/11	OP48193A	E4M1040

The QC reported here applies to the following samples: **Method:** SW846 8270C BY SIM

JA68506-1, JA68506-2, JA68506-3, JA68506-4, JA68506-5, JA68506-6, JA68506-7, JA68506-8

CAS No.	Compound	JA68506-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		100	43.7	44* [a]	73.9	74	51* [b]	51-125/22
208-96-8	Acenaphthylene	0.442		100	42.1	42* [a]	68.5	68	48* [b]	46-113/22
120-12-7	Anthracene	ND		100	44.6	45* [a]	71.8	72	47* [b]	59-131/23
56-55-3	Benzo(a)anthracene	ND		100	44.2	44* [a]	70.3	70	46* [b]	53-127/23
50-32-8	Benzo(a)pyrene	ND		100	45.9	46* [a]	72.1	72	44* [b]	49-135/23
205-99-2	Benzo(b)fluoranthene	ND		100	46.6	47	69.5	70	39* [b]	42-140/30
191-24-2	Benzo(g,h,i)perylene	ND		100	48.1	48	75.7	76	45* [b]	37-146/25
207-08-9	Benzo(k)fluoranthene	ND		100	51.8	52	89.3	89	53* [b]	41-141/34
218-01-9	Chrysene	ND		100	43.6	44* [a]	69.8	70	46* [b]	54-129/21
53-70-3	Dibenzo(a,h)anthracene	ND		100	49.7	50	78.8	79	45* [b]	38-146/25
206-44-0	Fluoranthene	ND		100	46.5	47* [a]	73.5	74	45* [b]	56-129/22
86-73-7	Fluorene	ND		100	47.8	48* [a]	75.4	75	45* [b]	58-126/25
118-74-1	Hexachlorobenzene	ND		100	44.1	44* [a]	68.5	69	43* [b]	52-129/23
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	48.0	48	76.4	76	46* [b]	36-150/25
91-20-3	Naphthalene	ND		100	37.8	38	66.4	66	55* [b]	38-121/25
85-01-8	Phenanthrene	ND		100	45.0	45* [a]	72.4	72	47* [b]	57-127/23
129-00-0	Pyrene	ND		100	43.5	44* [a]	69.4	69	46* [b]	51-128/23

CAS No.	Surrogate Recoveries	MS	MSD	JA68506-1	Limits
4165-60-0	Nitrobenzene-d5	55%	96%	75%	32-135%
321-60-8	2-Fluorobiphenyl	53%	88%	76%	31-121%
1718-51-0	Terphenyl-d14	31%	52%	69%	10-130%

(a) Outside of in house control limits.
(b) Analytical precision exceeds standard laboratory control limits.

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1016-DFTPP	**Injection Date:**	01/21/11
Lab File ID:	4M23284.D	**Injection Time:**	09:44
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33290	33.3		Pass
68	Less than 2.0% of mass 69	510	0.51	(1.63) [a]	Pass
69	Mass 69 relative abundance	31340	31.4		Pass
70	Less than 2.0% of mass 69	102	0.10	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47020	47.1		Pass
197	Less than 1.0% of mass 198	366	0.37		Pass
198	Base peak, 100% relative abundance	99900	100.0		Pass
199	5.0 - 9.0% of mass 198	6849	6.86		Pass
275	10.0 - 30.0% of mass 198	19792	19.8		Pass
365	1.0 - 100.0% of mass 198	2508	2.51		Pass
441	Present, but less than mass 443	11432	11.4	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	77293	77.4		Pass
443	17.0 - 23.0% of mass 442	15327	15.3	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1016-IC1016	4M23287.D	01/21/11	13:00	03:16	Initial cal 5
E4M1016-ICC1016	4M23288.D	01/21/11	13:27	03:43	Initial cal 1
E4M1016-IC1016	4M23289.D	01/21/11	13:51	04:07	Initial cal .01
E4M1016-IC1016	4M23290.D	01/21/11	14:15	04:31	Initial cal .02
E4M1016-IC1016	4M23291.D	01/21/11	14:39	04:55	Initial cal .05
E4M1016-IC1016	4M23293.D	01/21/11	15:58	06:14	Initial cal .2
E4M1016-IC1016	4M23294.D	01/21/11	16:22	06:38	Initial cal .5
E4M1016-IC1016	4M23295.D	01/21/11	16:46	07:02	Initial cal 2.5
E4M1016-IC1016	4M23292.D	01/21/11	17:10	07:26	Initial cal .1
E4M1016-ICV1016	4M23296.D	01/21/11	17:34	07:50	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1040-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	4M23772.D	**Injection Time:**	07:10
Instrument ID:	GCMS4M		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	16653	41.6		Pass
68	Less than 2.0% of mass 69	186	0.46	(1.15) [a]	Pass
69	Mass 69 relative abundance	16237	40.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	20038	50.0		Pass
197	Less than 1.0% of mass 198	98	0.24		Pass
198	Base peak, 100% relative abundance	40075	100.0		Pass
199	5.0 - 9.0% of mass 198	2730	6.81		Pass
275	10.0 - 30.0% of mass 198	8167	20.4		Pass
365	1.0 - 100.0% of mass 198	964	2.41		Pass
441	Present, but less than mass 443	4869	12.1	(75.7) [b]	Pass
442	40.0 - 100.0% of mass 198	32632	81.4		Pass
443	17.0 - 23.0% of mass 442	6431	16.0	(19.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M1040-CC1016	4M23773.D	02/22/11	07:56	00:46	Continuing cal .5
OP48193A-MB1	4M23774.D	02/22/11	08:27	01:17	Method Blank
OP48193A-BS12	4M23775.D	02/22/11	08:54	01:44	Blank Spike
ZZZZZZ	4M23776.D	02/22/11	09:18	02:08	(unrelated sample)
JA68506-1	4M23778.D	02/22/11	10:05	02:55	CG
JA68506-2	4M23779.D	02/22/11	10:29	03:19	CD
JA68506-3	4M23780.D	02/22/11	10:53	03:43	CD-DUP
JA68506-4	4M23781.D	02/22/11	11:17	04:07	CE
JA68506-5	4M23782.D	02/22/11	11:40	04:30	FB-02172011
JA68506-6	4M23783.D	02/22/11	12:04	04:54	CC
JA68506-8	4M23785.D	02/22/11	12:52	05:42	FB-02182011
ZZZZZZ	4M23786.D	02/22/11	13:16	06:06	(unrelated sample)
ZZZZZZ	4M23787.D	02/22/11	13:41	06:31	(unrelated sample)
ZZZZZZ	4M23788.D	02/22/11	14:05	06:55	(unrelated sample)
ZZZZZZ	4M23789.D	02/22/11	14:29	07:19	(unrelated sample)
ZZZZZZ	4M23790.D	02/22/11	14:54	07:44	(unrelated sample)
ZZZZZZ	4M23791.D	02/22/11	15:18	08:08	(unrelated sample)
ZZZZZZ	4M23792.D	02/22/11	15:42	08:32	(unrelated sample)
ZZZZZZ	4M23793.D	02/22/11	16:06	08:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	E4M1040-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	4M23772.D	**Injection Time:**	07:10
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M23794.D	02/22/11	16:30	09:20	(unrelated sample)
ZZZZZZ	4M23795.D	02/22/11	16:54	09:44	(unrelated sample)
JA68506-7	4M23796.D	02/22/11	17:18	10:08	CF
ZZZZZZ	4M23797.D	02/22/11	17:42	10:32	(unrelated sample)
ZZZZZZ	4M23798.D	02/22/11	18:06	10:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2339-DFTPP	**Injection Date:**	12/29/10
Lab File ID:	P54216.D	**Injection Time:**	14:06
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	62252	30.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	81862	40.0		Pass
70	Less than 2.0% of mass 69	554	0.27	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	102292	50.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	204529	100.0		Pass
199	5.0 - 9.0% of mass 198	14305	6.99		Pass
275	10.0 - 30.0% of mass 198	49843	24.4		Pass
365	1.0 - 100.0% of mass 198	5966	2.92		Pass
441	Present, but less than mass 443	26016	12.7	(78.0) [b]	Pass
442	40.0 - 100.0% of mass 198	165461	80.9		Pass
443	17.0 - 23.0% of mass 442	33333	16.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2339-ICC2339	P54217.D	12/29/10	14:20	00:14	Initial cal 50
EP2339-IC2339	P54218.D	12/29/10	14:48	00:42	Initial cal 1
EP2339-IC2339	P54219.D	12/29/10	15:17	01:11	Initial cal 2
EP2339-IC2339	P54220.D	12/29/10	15:45	01:39	Initial cal 5
EP2339-IC2339	P54221.D	12/29/10	16:13	02:07	Initial cal 10
EP2339-IC2339	P54222.D	12/29/10	16:42	02:36	Initial cal 25
EP2339-IC2339	P54223.D	12/29/10	17:10	03:04	Initial cal 80
EP2339-IC2339	P54224.D	12/29/10	17:39	03:33	Initial cal 100
EP2339-ICV2338	P54225.D	12/29/10	18:07	04:01	Initial cal verification 50
EP2339-ICV2339	P54225A.D	12/29/10	18:07	04:01	Initial cal verification 50
EP2339-ICV2338	P54226.D	12/29/10	18:36	04:30	Initial cal verification 50
EP2339-ICV2339	P54226A.D	12/29/10	18:36	04:30	Initial cal verification 50
EP2339-ICV2338	P54227.D	12/29/10	19:04	04:58	Initial cal verification 50
EP2339-ICV2338	P54228.D	12/29/10	19:33	05:27	Initial cal verification 50
EP2339-ICV2338	P54229.D	12/29/10	20:01	05:55	Initial cal verification 50
EP2339-ICV2339	P54229A.D	12/29/10	20:01	05:55	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2364-DFTPP	**Injection Date:**	02/01/11
Lab File ID:	P54689.D	**Injection Time:**	09:48
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	58014	40.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	72347	50.7		Pass
70	Less than 2.0% of mass 69	359	0.25	(0.50) [a]	Pass
127	40.0 - 60.0% of mass 198	78237	54.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	142709	100.0		Pass
199	5.0 - 9.0% of mass 198	10109	7.08		Pass
275	10.0 - 30.0% of mass 198	34096	23.9		Pass
365	1.0 - 100.0% of mass 198	3944	2.76		Pass
441	Present, but less than mass 443	16406	11.5	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	99317	69.6		Pass
443	17.0 - 23.0% of mass 442	19400	13.6	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2364-ICC2364	P54690.D	02/01/11	10:18	00:30	Initial cal 50
EP2364-IC2364	P54691.D	02/01/11	10:48	01:00	Initial cal 1
EP2364-IC2364	P54692.D	02/01/11	11:16	01:28	Initial cal 2
EP2364-IC2364	P54693.D	02/01/11	11:45	01:57	Initial cal 5
EP2364-IC2364	P54694.D	02/01/11	12:14	02:26	Initial cal 10
EP2364-IC2364	P54695.D	02/01/11	12:43	02:55	Initial cal 25
EP2364-IC2364	P54696.D	02/01/11	13:11	03:23	Initial cal 80
EP2364-IC2364	P54697.D	02/01/11	13:40	03:52	Initial cal 100
EP2364-ICV2364	P54698.D	02/01/11	15:17	05:29	Initial cal verification 50
EP2364-ICV2364	P54700.D	02/01/11	15:46	05:58	Initial cal verification 50
EP2364-ICV2364	P54701.D	02/01/11	16:15	06:27	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2378-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	P54978.D	**Injection Time:**	07:27
Instrument ID:	GCMSP		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	64125	37.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	77200	45.1		Pass
70	Less than 2.0% of mass 69	423	0.25	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	87504	51.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	171157	100.0		Pass
199	5.0 - 9.0% of mass 198	12081	7.06		Pass
275	10.0 - 30.0% of mass 198	43090	25.2		Pass
365	1.0 - 100.0% of mass 198	6367	3.72		Pass
441	Present, but less than mass 443	20768	12.1	(81.6) [b]	Pass
442	40.0 - 100.0% of mass 198	131104	76.6		Pass
443	17.0 - 23.0% of mass 442	25442	14.9	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP2378-CC2364	P54979.D	02/22/11	07:40	00:13	Continuing cal 50
EP2378-CC2339	P54980.D	02/22/11	08:08	00:41	Continuing cal 25
OP48193-MB1	P54982.D	02/22/11	09:07	01:40	Method Blank
OP48193-BS1	P54983.D	02/22/11	09:35	02:08	Blank Spike
JA68506-5	P54984.D	02/22/11	10:04	02:37	FB-02172011
JA68506-8	P54985.D	02/22/11	10:32	03:05	FB-02182011
ZZZZZZ	P54986.D	02/22/11	11:00	03:33	(unrelated sample)
ZZZZZZ	P54987.D	02/22/11	11:29	04:02	(unrelated sample)
ZZZZZZ	P54988.D	02/22/11	11:58	04:31	(unrelated sample)
JA68506-1	P54989.D	02/22/11	12:26	04:59	CG
OP48193-MS	P54990.D	02/22/11	12:55	05:28	Matrix Spike
OP48193A-MS	P54990.D	02/22/11	12:55	05:28	Matrix Spike
OP48193-MSD	P54991.D	02/22/11	13:24	05:57	Matrix Spike Duplicate
OP48193A-MSD	P54991.D	02/22/11	13:24	05:57	Matrix Spike Duplicate
JA68506-2	P54992.D	02/22/11	13:52	06:25	CD
JA68506-3	P54993.D	02/22/11	14:21	06:54	CD-DUP
JA68506-4	P54994.D	02/22/11	14:50	07:23	CE
JA68506-6	P54995.D	02/22/11	15:19	07:52	CC
JA68506-7	P54996.D	02/22/11	15:47	08:20	CF

Instrument Performance Check (DFTPP)

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample:	EP2378-DFTPP	**Injection Date:**	02/22/11
Lab File ID:	P54978.D	**Injection Time:**	07:27
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	P54997.D	02/22/11	16:16	08:49	(unrelated sample)
ZZZZZZ	P54998.D	02/22/11	16:45	09:18	(unrelated sample)
ZZZZZZ	P54999.D	02/22/11	17:13	09:46	(unrelated sample)
ZZZZZZ	P55000.D	02/22/11	17:42	10:15	(unrelated sample)
ZZZZZZ	P55001.D	02/22/11	18:11	10:44	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	E4M1040-CC1016	**Injection Date:**	02/22/11
Lab File ID:	4M23773.D	**Injection Time:**	07:56
Instrument ID:	GCMS4M	**Method:**	SW846 8270C BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	24227	6.76	18462	9.06	30952	12.36	30706	15.45
Upper Limit [a]	48454	7.26	36924	9.56	61904	12.86	61412	15.95
Lower Limit [b]	12114	6.26	9231	8.56	15476	11.86	15353	14.95

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP48193A-MB1	19201	6.76	12967	9.04	22653	12.36	23394	15.45
OP48193A-BS12	20390	6.76	14627	9.04	24918	12.36	25845	15.45
ZZZZZZ	12185	6.76	15323	9.06	19973	12.38	22361	15.45
JA68506-1	19324	6.77	12584	9.06	22191	12.37	25321	15.46
JA68506-2	17238	6.76	13210	9.04	22959	12.36	25739	15.45
JA68506-3	17113	6.77	13034	9.06	22864	12.37	25099	15.45
JA68506-4	16866	6.76	13018	9.05	22030	12.37	26242	15.46
JA68506-5	16782	6.76	12101	9.04	19877	12.36	22306	15.45
JA68506-6	16649	6.77	13067	9.06	22964	12.37	27759	15.46
JA68506-8	12931	6.77	9689	9.05	17530	12.37	19408	15.46
ZZZZZZ	10901*	6.77	8722*	9.05	15213*	12.37	17359	15.46
ZZZZZZ	15031	6.76	11877	9.04	20892	12.36	23183	15.45
ZZZZZZ	11965*	6.77	10215	9.05	19369	12.37	23178	15.46
ZZZZZZ	16809	6.77	13357	9.05	22457	12.37	25446	15.46
ZZZZZZ	16098	6.77	13769	9.06	24121	12.37	26793	15.46
ZZZZZZ	16145	6.76	12120	9.04	19867	12.36	21528	15.45
ZZZZZZ	17367	6.76	13554	9.04	23376	12.36	25424	15.45
ZZZZZZ	16779	6.77	13930	9.06	23465	12.36	25588	15.46
ZZZZZZ	18175	6.77	14631	9.06	25339	12.37	26709	15.46
ZZZZZZ	14687	6.77	12164	9.05	21786	12.37	30835	15.46
JA68506-7	13339	6.76	10388	9.04	18708	12.36	22359	15.45
ZZZZZZ	6467*	6.77	5337*	9.06	9389*	12.37	10979*	15.46
ZZZZZZ	11474*	6.77	8904*	9.06	16118	12.36	18897	15.46

IS 1 = 1-Methylnaphthalene-d10
IS 2 = Fluorene-d10
IS 3 = Fluoranthene-d10
IS 4 = Benzo(a)pyrene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Internal Standard Area Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Check Std:	EP2378-CC2364	**Injection Date:**	02/22/11
Lab File ID:	P54979.D	**Injection Time:**	07:40
Instrument ID:	GCMSP	**Method:**	SW846 8270C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	117374	4.78	428789	6.58	283001	9.33	458815	11.65	485209	14.85	458101	16.33
Upper Limit [a]	234748	5.28	857578	7.08	566002	9.83	917630	12.15	970418	15.35	916202	16.83
Lower Limit [b]	58687	4.28	214395	6.08	141501	8.83	229408	11.15	242605	14.35	229051	15.83
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP48193-MB1	156843	4.78	544048	6.57	344454	9.33	607637	11.64	671707	14.85	561533	16.33
OP48193-BS1	126203	4.78	473344	6.58	280151	9.33	482579	11.64	508352	14.85	471782	16.33
JA68506-5	161372	4.78	575979	6.57	355651	9.33	609508	11.64	672762	14.85	576551	16.33
JA68506-8	160648	4.78	557580	6.57	360586	9.33	622742	11.64	684669	14.85	571229	16.33
ZZZZZZ	164254	4.78	571365	6.57	365699	9.33	637879	11.64	699223	14.85	583588	16.33
ZZZZZZ	148943	4.79	501037	6.58	245035	9.33	362814	11.65	384091	14.86	401197	16.33
ZZZZZZ	149448	4.78	531183	6.57	311925	9.33	507352	11.64	579736	14.85	467944	16.33
JA68506-1	152671	4.78	540381	6.57	330608	9.33	579415	11.64	652840	14.85	548258	16.33
OP48193-MS	140501	4.78	528241	6.58	320807	9.33	571409	11.64	594908	14.85	543368	16.33
OP48193A-MS	140501	4.78	528241	6.58	320807	9.33	571409	11.64	594908	14.85	543368	16.33
OP48193-MSD	126847	4.78	462750	6.58	274710	9.33	493814	11.65	502849	14.85	462760	16.33
OP48193A-MSD	126847	4.78	462750	6.58	274710	9.33	493814	11.65	502849	14.85	462760	16.33
JA68506-2	144025	4.78	504955	6.57	290881	9.33	461733	11.65	569067	14.85	503336	16.33
JA68506-3	150848	4.78	530356	6.57	305333	9.33	471038	11.64	594393	14.85	538009	16.33
JA68506-4	155533	4.78	554125	6.57	346833	9.33	584336	11.64	643221	14.85	549267	16.33
JA68506-6	170412	4.78	597617	6.57	377525	9.33	634571	11.64	709052	14.85	600666	16.33
JA68506-7	158740	4.78	558030	6.57	333733	9.33	543598	11.64	636496	14.85	548275	16.33
ZZZZZZ	158674	4.78	565373	6.57	357348	9.33	616432	11.64	666724	14.85	562397	16.33
ZZZZZZ	178532	4.78	624445	6.57	395592	9.33	686640	11.64	758127	14.85	635413	16.33
ZZZZZZ	179325	4.78	627166	6.57	399642	9.33	680081	11.64	739932	14.85	625464	16.33
ZZZZZZ	145060	4.78	482778	6.57	282143	9.33	482698	11.64	622362	14.85	553046	16.33
ZZZZZZ	161481	4.78	535959	6.57	327862	9.33	565631	11.64	691890	14.85	601597	16.33

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA68506-1	P54989.D	77.0	69.0	45.0
JA68506-2	P54992.D	76.0	72.0	36.0
JA68506-3	P54993.D	83.0	79.0	38.0
JA68506-4	P54994.D	83.0	80.0	75.0
JA68506-5	P54984.D	85.0	82.0	64.0
JA68506-6	P54995.D	87.0	82.0	64.0
JA68506-7	P54996.D	84.0	82.0	66.0
JA68506-8	P54985.D	93.0	86.0	65.0
OP48193-BS1	P54983.D	100.0	93.0	80.0
OP48193-MB1	P54982.D	98.0	91.0	77.0
OP48193-MS	P54990.D	55.0	53.0	31.0
OP48193-MSD	P54991.D	96.0	88.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	25-112%
S2 = 2-Fluorobiphenyl	31-106%
S3 = Terphenyl-d14	14-122%

Semivolatile Surrogate Recovery Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Method: SW846 8270C BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JA68506-1	4M23778.D	75.0	76.0	69.0
JA68506-2	4M23779.D	86.0	88.0	58.0
JA68506-3	4M23780.D	102.0	98.0	60.0
JA68506-4	4M23781.D	103.0	100.0	105.0
JA68506-5	4M23782.D	105.0	106.0	105.0
JA68506-6	4M23783.D	106.0	108.0	99.0
JA68506-7	4M23796.D	97.0	107.0	98.0
JA68506-8	4M23785.D	106.0	114.0	99.0
OP48193A-BS12	4M23775.D	88.0	89.0	97.0
OP48193A-MB1	4M23774.D	93.0	94.0	105.0
OP48193A-MS	P54990.D	55.0	53.0	31.0
OP48193A-MSD	P54991.D	96.0	88.0	52.0

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	32-135%
S2 = 2-Fluorobiphenyl	31-121%
S3 = Terphenyl-d14	10-130%

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

Response Factor Report MS4M

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Initial Calibration

Calibration Files
0.05=4m23291.D .2 =4m23293.D 2.5 =4m23295.D .02 =4m23290.D
.1 =4m23292.D 1 =4m23288.D .01 =4m23289.D .5 =4m23294.D
5 =4m23287.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	ISTD										
2) 2-Fluorophenol	0.614	0.610	0.578	0.604	0.604	0.590		0.575	0.558	0.592	3.34
3) Phenol-d5	0.771	0.763	0.694	0.761	0.795	0.746		0.740	0.615	0.736	7.71
4) Phenol	0.761	0.825	0.795	0.721	0.793	0.840		0.759	0.929	0.803	7.92
5) bis(2-Chloroethyl)ether	0.822	0.802	0.779	0.912	0.783	0.757	1.004	0.744	0.758	0.818	10.56
6) Nitrobenzene-d5	0.590	0.611	0.600	0.551	0.589	0.596		0.590	0.570	0.587	3.17
7) Naphthalene	1.926	1.856	1.675	1.901	1.851	1.691		1.687	1.661	1.781	6.32
8) Hexachlorobutadiene	0.316	0.283		0.328	0.287			0.298	0.277	0.298	6.71
9) 2-Methylnaphthalene	1.520	1.346	1.397	1.509	1.343	1.372	1.868	1.322	1.352	1.448	11.97
10) 1-Methylnaphthalene	1.450	1.431	1.269	1.475	1.365	1.351		1.296	1.255	1.362	6.19
11) 2-Fluorobiphenyl	1.430	1.397	1.287	1.374	1.383	1.280		1.298	1.313	1.345	4.26
12) I Fluorene-d10	ISTD										
13) Acenaphthylene	2.355	2.183	2.225	2.585	2.243	2.203		1.993	2.333	2.265	7.49
14) Acenaphthene	1.777	1.681	1.594	2.043	1.698	1.624		1.517	1.598	1.691	9.60
15) Fluorene	1.377	1.277	1.184	1.569	1.326	1.191		1.139	1.190	1.282	11.03
16) 2,6-Dinitrotoluene	0.388	0.582		0.384	0.568			0.418	0.682	0.504	24.67
----- Linear regression ----- Coefficient = 0.9953											
Response Ratio = -0.02627 + 0.68713 *A											
17) 2,4,6-Tribromophenol	0.135	0.172		0.129	0.168			0.146	0.181	0.155	13.83
18) Hexachlorobenzene	0.536	0.461	0.413	0.587	0.499	0.416		0.423	0.420	0.469	13.91
19) Pentachlorophenol	0.155	0.140	0.220	0.282	0.155	0.214		0.151	0.262	0.197	27.88
----- Linear regression ----- Coefficient = 0.9936											
Response Ratio = -0.03525 + 0.25937 *A											
20) Phenanthrene											

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICC1016
Lab FileID: 4M23288.D

```
      2.032 1.826 1.725 2.438 1.942 1.701       1.654 1.757        1.884   13.66
21)  Anthracene
      1.687 1.389 1.590 1.987 1.356 1.562       1.277 1.673        1.565   14.55
22)  2,4-Dinitrotoluene
            0.342 0.679       0.301 0.596       0.391 0.735        0.507   36.65
            ----- Linear regression -----  Coefficient =  0.9983
              Response Ratio = -0.03017 + 0.75147 *A


23) I   Fluoranthene-d10      ----------------ISTD---------------------
24)  Fluoranthene
      1.482 1.176 1.099       1.282 1.141       1.073 1.118        1.196   11.99
25)  Pyrene
      1.137 1.026 1.115 1.371 1.030 1.092       0.974 1.137        1.110   10.88
26)  Terphenyl-d14
      0.432 0.441 0.377 0.536 0.405 0.419       0.420 0.416        0.431   10.79
27)  Benzo[a]anthracene
      0.629 0.531 0.797       0.540 0.709       0.542 0.813        0.652   18.81
            ----- Linear regression -----  Coefficient =  0.9991
              Response Ratio = -0.01678 + 0.82341 *A

28)  Chrysene
      0.888 0.774 0.772       0.742 0.884       0.710 0.881        0.807    9.32
29)  bis(2-Ethylhexyl)phthalate
      0.327 0.247 0.348       0.357 0.290       0.220 0.497        0.327   27.83
         ----- Quadratic regression -----              Coefficient =  0.9998
              Response Ratio = 0.00237 + 0.20009 *A + 0.23586 *A^2


30) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
31)  Benzo[b]fluoranthene
      0.319 0.258 0.327       0.280 0.306       0.271 0.329        0.298    9.62
32)  Benzo[k]fluoranthene
      0.302 0.207 0.255       0.271 0.281       0.231 0.286        0.262   12.66
33)  Benzo[a]pyrene
            1.506 1.258       1.889 1.394       1.293 1.289        1.438   16.62
            ----- Linear regression -----  Coefficient =  0.9995
              Response Ratio = 0.01149 + 1.27359 *A

34)  Indeno[1,2,3-cd]pyrene
      1.027 0.746 1.097       0.762 1.036       0.778 1.252        0.957   20.56
            ----- Linear regression -----  Coefficient =  0.9961
              Response Ratio = -0.03593 + 1.25236 *A

35)  Dibenz[a,h]anthracene
      0.736 0.555 0.856       0.602 0.796       0.573 0.973        0.727   21.78
            ----- Linear regression -----  Coefficient =  0.9962
              Response Ratio = -0.02925 + 0.97470 *A

36)  Benzo[g,h,i]perylene
      1.308 0.968 1.096       1.019 1.091       0.962 1.160        1.086   11.20
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M1016SIM.M        Mon Jan 24 15:30:58 2011   RPT1
```

7.1.1

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1016-ICV1016
Lab FileID: 4M23296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1016\4m23296.D Vial: 11
Acq On : 21 Jan 2011 5:34 pm Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1016,acid Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 08:13:52 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	68	0.00	6.77
4	t	Phenol	0.803	0.921	-14.7	75	0.00	3.57
12	I	Fluorene-d10	1.000	1.000	0.0	67	0.00	9.07
19	t	Pentachlorophenol	5.000	5.009	-0.2	73	0.00	10.40
23	I	Fluoranthene-d10	1.000	1.000	0.0	64	0.00	12.38
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	57	0.00	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 08:29:16 2011 RPT1

7.7.2

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1017\4m23300.D Vial: 3
Acq On : 24 Jan 2011 10:50 am Operator: ninap
Sample : icv1016-1 Inst : MS4M
Misc : op47723a,e4m1017 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Jan 24 15:29:58 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.02	6.79
5	t	bis(2-Chloroethyl)ether	0.818	0.702	14.2	75	0.00	3.62
7	t	Naphthalene	1.781	1.785	-0.2	86	0.00	5.62
8	t	Hexachlorobutadiene	0.298	0.321	-7.7	91	0.01	5.97
9	t	2-Methylnaphthalene	1.448	1.236	14.6	73	0.00	6.67
12	I	Fluorene-d10	1.000	1.000	0.0	70	0.00	9.07
13	t	Acenaphthylene	2.265	2.256	0.4	71	0.00	8.03
14	t	Acenaphthene	1.691	1.774	-4.9	76	0.00	8.33
15	t	Fluorene	1.282	1.315	-2.6	77	0.01	9.12
18	t	Hexachlorobenzene	0.469	0.447	4.7	75	0.02	10.11
20	t	Phenanthrene	1.884	1.826	3.1	75	0.02	10.57
21	t	Anthracene	1.565	1.469	6.1	65	0.00	10.63
		----------	AvgRF	CCRF	% Dev	----------		
23	I	Fluoranthene-d10	1.000	1.000	0.0	61	0.01	12.39
24	t	Fluoranthene	1.196	1.223	-2.3	65	0.01	12.41
25	t	Pyrene	1.110	1.137	-2.4	63	0.00	12.70
		----------	True	Calc.	% Drift	----------		
27	t	Benzo[a]anthracene	1.000	0.943	5.7	61	0.02	14.16
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.947	-17.3	65	0.00	14.19
		----------	True	Calc.	% Drift	----------		
29		bis(2-Ethylhexyl)phthalat	1.000	1.148	-14.8	66	0.00	14.43
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	61	0.01	15.48
31	t	Benzo[b]fluoranthene	0.298	0.280	6.0	56	0.01	15.22
32	t	Benzo[k]fluoranthene	0.262	0.256	2.3	56	0.01	15.24

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1017-ICV1016
Lab FileID: 4M23300.D

			True	Calc.	% Drift			
33	t	Benzo[a]pyrene	1.000	0.934	6.6	54	0.00	15.49
34	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	56	0.01	16.38
35	t	Dibenz[a,h]anthracene	1.000	0.893	10.7	58	0.01	16.41

			AvgRF	CCRF	% Dev			
36	t	Benzo[g,h,i]perylene	1.086	1.066	1.8	59	0.01	16.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23288.D M4M1016SIM.M Mon Jan 24 15:33:12 2011 RPT1

7.7.3

7

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1040-CC1016
Lab FileID: 4M23773.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e4m1040\4m23773.D Vial: 2
Acq On : 22 Feb 2011 7:56 am Operator: ninap
Sample : cc1016-.5 Inst : MS4M
Misc : op48186a,e4m1040 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
Last Update : Mon Feb 21 12:22:38 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	103	-0.02	6.76
2	S	2-Fluorophenol	0.592	0.568	4.1	101	0.00	2.47
3	S	Phenol-d5	0.736	0.711	3.4	99	0.00	3.55
4	t	Phenol	0.803	0.762	5.1	103	0.00	3.57
5	t	bis(2-Chloroethyl)ether	0.818	0.719	12.1	99	-0.02	3.60
6	S	Nitrobenzene-d5	0.587	0.548	6.6	95	-0.01	4.60
7	t	Naphthalene	1.781	1.637	8.1	100	-0.01	5.61
8	t	Hexachlorobutadiene	0.298	0.303	-1.7	105	-0.01	5.94
9	t	2-Methylnaphthalene		----------	NA	----------		
10	t	1-Methylnaphthalene	1.362	1.289	5.4	102	-0.02	6.81
11	S	2-Fluorobiphenyl	1.345	1.373	-2.1	109	-0.02	7.30
12	I	Fluorene-d10	1.000	1.000	0.0	100	-0.02	9.06
13	t	Acenaphthylene	2.265	2.370	-4.6	119	-0.02	8.02
14	t	Acenaphthene	1.691	1.607	5.0	106	-0.02	8.31
15	t	Fluorene	1.282	1.189	7.3	104	-0.02	9.09
		----------	True	Calc.	% Drift		----------	
16	t	2,6-Dinitrotoluene	0.500	0.547	-9.4	129	-0.02	8.13
		----------	AvgRF	CCRF	% Dev		----------	
17	S	2,4,6-Tribromophenol	0.155	0.188	-21.3#	129	-0.02	9.50
18	t	Hexachlorobenzene	0.469	0.462	1.5	109	-0.02	10.08
		----------	True	Calc.	% Drift		----------	
19	t	Pentachlorophenol	2.500	2.968	-18.7	167	-0.02	10.39
		----------	AvgRF	CCRF	% Dev		----------	
20	t	Phenanthrene	1.884	1.702	9.7	103	-0.02	10.54
21	t	Anthracene	1.565	1.596	-2.0	125	-0.01	10.62
		----------	True	Calc.	% Drift		----------	
22	t	2,4-Dinitrotoluene	0.500	0.475	5.0	121	0.00	8.71
		----------	AvgRF	CCRF	% Dev		----------	
23	I	Fluoranthene-d10	1.000	1.000	0.0	107	-0.02	12.36
24	t	Fluoranthene	1.196	1.091	8.8	109	-0.02	12.38
25	t	Pyrene	1.110	1.066	4.0	117	-0.02	12.67
26	S	Terphenyl-d14	0.431	0.403	6.5	103	-0.02	13.01
		----------	True	Calc.	% Drift		----------	

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: E4M1040-CC1016
Lab FileID: 4M23773.D

27	t	Benzo[a]anthracene	0.500	0.591	-18.2	166	-0.02	14.13
		----------	AvgRF	CCRF	% Dev	----------		
28	t	Chrysene	0.807	0.802	0.6	121	-0.04	14.18
		----------	True	Calc.	% Drift	----------		
29		bis(2-Ethylhexyl)phthalat		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
30	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	120	0.00	15.45
31	t	Benzo[b]fluoranthene	0.298	0.301	-1.0	133	0.00	15.21
32	t	Benzo[k]fluoranthene	0.262	0.215	17.9	112	-0.02	15.21
		----------	True	Calc.	% Drift	----------		
33	t	Benzo[a]pyrene	0.500	0.512	-2.4	129	-0.01	15.47
34	t	Indeno[1,2,3-cd]pyrene	0.500	0.508	-1.6	152	-0.02	16.35
35	t	Dibenz[a,h]anthracene	0.500	0.495	1.0	153	-0.02	16.38
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[g,h,i]perylene	1.086	1.062	2.2	132	-0.02	16.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m23294.D M4M1016SIM.M Tue Feb 22 09:50:16 2011 RPT1

7.7.4

SII-SSA-0014-006475

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICC2339
Lab FileID: P54217.D

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Initial Calibration

Calibration Files
100 =P54224.D 80 =P54223.D 50 =P54217.D 25 =P54222.D
10 =P54221.D 5 =P54220.D 2 =P54219.D 1 =P54218.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
102) 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	0.630	0.821	0.855	0.997	0.858	0.890	0.988	0.863		14.23
104) Phenanthrene-d10a	ISTD									
105) Atrazine	0.120	0.125	0.134	0.139	0.140	0.127	0.123	0.156	0.133	8.97
106) Acenaphthene-d10a	ISTD									
107) 1,2,4,5-Tetr	0.527	0.539	0.570	0.615	0.671	0.638	0.695	0.786	0.630	13.80
108) Chrysene-d12a	ISTD									
109) Benzidine	0.362	0.392	0.638	0.627	0.708	0.602	0.488	0.583	0.550	22.45

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP2339.M Thu Dec 30 12:19:21 2010 MSP

7.7.5

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54225A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54225A.D Vial: 10
Acq On : 29 Dec 2010 6:07 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.29- 5.29
103	Benzaldehyde		----------NA----------				
104	Phenanthrene-d10a	1.000	1.000	0.0	89	0.00	11.15-12.15
105	Atrazine		----------NA----------				
106	Acenaphthene-d10a	1.000	1.000	0.0	79	0.00	8.84- 9.84
107	1,2,4,5-Tetrachloroben	0.630	0.687	-9.0	96	0.00	7.50- 8.50
108	Chrysene-d12a	1.000	1.000	0.0	76	0.00	14.35-15.35
109	Benzidine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54217.D MP2339.M Thu Dec 30 12:47:20 2010 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54226A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54226A.D Vial: 11
Acq On : 29 Dec 2010 6:36 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,bn#2 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2339.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 11:50:35 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	4.29- 5.29
103	Benzaldehyde	0.863	1.016	-17.7	128	0.00	3.76- 4.76
104	Phenanthrene-d10a	1.000	1.000	0.0	87	0.00	11.15-12.15
105	Atrazine	0.133	0.147	-10.5	95	0.00	10.85-11.85
106	Acenaphthene-d10a	1.000	1.000	0.0	98	0.00	8.84- 9.84
107	1,2,4,5-Tetrachlorobenzen		----------NA----------				
108	Chrysene-d12a	1.000	1.000	0.0	106	0.00	14.35-15.35
109	Benzidine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54217.D MP2339.M Thu Dec 30 12:48:58 2010 MSP

7.7.7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2339-ICV2339
Lab FileID: P54229A.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2339\P54229A.D Vial: 14
Acq On : 29 Dec 2010 8:01 pm Operator: ninap
Sample : icv2339-50 Inst : MSP
Misc : op47379,ep2339,benzidine Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2338.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Dec 30 12:52:11 2010
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	146	0.00	4.29- 5.29
103	Benzaldehyde		----------NA----------				
104	Phenanthrene-d10a	1.000	1.000	0.0	143	0.00	11.15-12.15
105	Atrazine		----------NA----------				
106	Acenaphthene-d10a	1.000	1.000	0.0	135	0.00	8.84- 9.84
107	1,2,4,5-Tetrachlorobenzen		----------NA----------				
108	Chrysene-d12a	1.000	1.000	0.0	121	0.00	14.35-15.35
109	Benzidine	0.550	1.001	-82.0#	190	0.04	12.93-13.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54208.D MP2338.M Thu Dec 30 13:01:43 2010 MSP

7.7.8

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Calibration Files
100 =P54697.D 80 =P54696.D 50 =P54690.D 25 =P54695.D
10 =P54694.D 5 =P54693.D 2 =P54692.D 1 =P54691.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.970	0.991	1.052	1.005	0.940	0.893	0.907	1.019	0.972	5.71
3) Pyridine	1.923	2.001	2.202	2.186	2.168	2.115	2.210	2.556	2.170	8.61
4) N-Nitrosodim	1.424	1.475	1.585	1.535	1.425	1.354	1.403	1.570	1.471	5.71
5) 2-Fluorophen	1.686	1.734	1.810	1.768	1.676	1.585	1.545	1.721	1.691	5.28
6) Indene	1.932	1.972	2.040	2.076	2.023	2.001	2.179	2.399	2.078	7.19
7) Cumene	3.446	3.603	3.789	3.916	3.834	3.730	3.780	4.319	3.802	6.69
8) Phenol-d5	2.107	2.176	2.262	2.218	2.144	2.022	2.015	2.060	2.126	4.27
9) Phenol	2.070	2.158	2.353	2.444	2.434	2.325	2.386	2.428	2.325	5.95
10) Aniline	1.940	1.962	2.460	2.594	2.557	2.541	2.697		2.393	12.96
11) bis(2-Chloro	1.436	1.495	1.568	1.594	1.640	1.634	1.818	2.089	1.659	12.48
12) 2-Chlorophen	1.305	1.354	1.441	1.513	1.575	1.567	1.649	1.712	1.514	9.27
13) Decane	1.723	1.797	1.982	2.087	2.185	2.228	2.434		2.062	12.09
14) 1,3-Dichloro	1.570	1.617	1.690	1.706	1.791	1.783	1.927	2.220	1.788	11.56
15) 1,4-Dichloro	1.430	1.475	1.547	1.567	1.544	1.572	1.654	2.016	1.601	11.28
16) Benzyl alcoh	1.056	1.075	1.065	1.052	0.975	0.879	0.853	0.814	0.971	11.03
17) 1,2-Dichloro	1.286	1.334	1.431	1.531	1.571	1.586	1.708	1.945	1.549	13.67
18) Acetophenone	1.960	2.025	2.128	2.086	2.025	2.025	1.988	2.175	2.052	3.52
19) 2-Methylphen	1.144	1.182	1.259	1.289	1.265	1.244	1.314	1.344	1.255	5.26
20) 2,2'-oxybis(	0.430	0.444	0.471	0.480	0.502	0.500	0.551	0.661	0.505	14.54
21) 3&4-Methylph	1.273	1.315	1.360	1.385	1.333	1.295	1.341	1.390	1.336	3.10
22) n-Nitroso-di	1.023	1.050	1.121	1.135	1.124	1.091	1.161	1.307	1.127	7.62
23) Hexachloroet	0.521	0.548	0.571	0.585	0.595	0.586	0.650	0.748	0.601	11.71
24) I Naphthalene-d8	ISTD									
25) Nitrobenzene	0.490	0.496	0.501	0.509	0.498	0.484	0.491	0.563	0.504	4.95
26) Nitrobenzene	0.189	0.193	0.203	0.209	0.214	0.205	0.227	0.257	0.212	10.17
27) Quinoline	0.710	0.726	0.736	0.741	0.721	0.699	0.722	0.848	0.738	6.30
28) Isophorone	0.911	0.929	0.948	0.951	0.922	0.875	0.940	1.056	0.942	5.55
29) 2-Nitropheno	0.231	0.236	0.243	0.245	0.227	0.224	0.214	0.261	0.235	6.22
30) 2,4-Dimethyl	0.378	0.386	0.408	0.419	0.396	0.399	0.430	0.490	0.413	8.55
31) Benzoic Acid	0.325	0.322	0.251	0.263	0.187	0.114			0.244	33.42
----- Linear regression ----- Coefficient = 0.9912										
Response Ratio = -0.04716 + 0.33766 *A										
32) bis(2-Chloro	0.496	0.508	0.513	0.521	0.525	0.515	0.546	0.604	0.528	6.39
33) 2,4-Dichloro	0.311	0.320	0.336	0.342	0.348	0.331	0.349	0.381	0.340	6.24
34) 2,6-Dichloro	0.292	0.296	0.310	0.323	0.317	0.311	0.321	0.346	0.314	5.37
35) 1,3,5-Trichl	0.342	0.354	0.377	0.409	0.417	0.425	0.456	0.516	0.412	13.76
36) 1,2,4-Trichl	0.347	0.360	0.375	0.399	0.404	0.408	0.452	0.493	0.405	11.87
37) 1,2,3-Trichl	0.330	0.339	0.346	0.373	0.365	0.362	0.399	0.466	0.372	11.68
38) Naphthalene	1.006	1.023	1.053	1.087	1.071	1.065	1.160	1.308	1.097	8.87
39) 4-Chloroanil	0.466	0.473	0.500	0.521	0.490	0.463	0.496	0.552	0.495	6.07
40) 2,3-Dichloro	0.351	0.362	0.368	0.390	0.395	0.393	0.447	0.484	0.399	11.37
41) Caprolactam	0.248	0.250	0.242	0.236	0.222	0.210	0.209	0.263	0.235	8.35
42) Hexachlorobu	0.183	0.192	0.199	0.211	0.214	0.220	0.231	0.263	0.214	11.76

7.7.9

7

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

43)	4-Chloro-3-m	0.391	0.400	0.408	0.407	0.389	0.349	0.376	0.378	0.387	5.07
44)	2-Methylnaph	0.784	0.806	0.835	0.886	0.892	0.866	0.914	1.022	0.876	8.45
45)	1-Methylnaph	0.745	0.764	0.785	0.830	0.834	0.846	0.917	1.029	0.844	10.95
46)	Dimethylnaph	0.651	0.669	0.680	0.721	0.714	0.721	0.744	0.845	0.718	8.34
47)	I Acenaphthene-d10	----------	ISTD	----------							
48)	Hexachlorocy	0.321	0.332	0.341	0.337	0.311	0.276	0.251	0.249	0.302	12.56
49)	2,4,6-Trichl	0.371	0.388	0.407	0.415	0.416	0.394	0.410	0.454	0.407	6.01
50)	2,4,5-Trichl	0.386	0.401	0.406	0.426	0.425	0.399	0.411	0.501	0.419	8.48
51)	2-Fluorobiph	1.186	1.236	1.289	1.360	1.433	1.483	1.627		1.374	11.18
52)	2-Chloronaph	1.073	1.115	1.147	1.212	1.285	1.315	1.494		1.234	11.70
53)	Biphenyl	1.397	1.434	1.489	1.539	1.633	1.643	1.845	2.105	1.636	14.48
54)	2-Nitroanili	0.454	0.470	0.481	0.483	0.479	0.449	0.458	0.479	0.469	2.88
55)	Dimethylphth	1.476	1.520	1.569	1.588	1.615	1.538	1.731	1.949	1.623	9.36
56)	Acenaphthyle	1.752	1.827	1.930	2.000	2.067	2.030	2.210	2.461	2.034	10.97
57)	2,6-Dinitrot	0.191	0.195	0.203	0.206	0.211	0.203	0.216	0.256	0.210	9.66
58)	3-Nitroanili	0.368	0.378	0.384	0.377	0.353	0.319	0.299	0.351	0.353	8.56
59)	Acenaphthene	1.073	1.103	1.137	1.157	1.147	1.116	1.236	1.402	1.171	8.95
60)	2,4-Dinitrop	0.182	0.184	0.168	0.136	0.098	0.065	0.042		0.125	46.03
	----- Linear regression ----- Coefficient = 0.9976										
	Response Ratio = -0.03895 + 0.18933 *A										
61)	4-Nitropheno	0.220	0.228	0.227	0.217	0.190	0.129	0.121		0.190	24.34
	----- Linear regression ----- Coefficient = 0.9991										
	Response Ratio = -0.00683 + 0.22686 *A										
62)	Dibenzofuran	1.602	1.655	1.732	1.784	1.827	1.785	1.946	2.275	1.826	11.48
63)	2,4-Dinitrot	0.421	0.438	0.448	0.443	0.438	0.396	0.376	0.375	0.417	7.24
64)	2,3,4,6-Tetr	0.363	0.369	0.374	0.371	0.358	0.316	0.307	0.328	0.348	7.74
65)	Diethylphtha	1.469	1.518	1.570	1.578	1.572	1.515	1.587	1.797	1.576	6.23
66)	Fluorene	1.217	1.260	1.322	1.403	1.476	1.426	1.567	1.747	1.427	12.07
67)	4-Chlorophen	0.556	0.575	0.619	0.663	0.719	0.727	0.815		0.668	13.83
68)	4-Nitroanili	0.357	0.362	0.365	0.361	0.352	0.323	0.321	0.358	0.350	5.02
69)	I Phenanthrene-d10	----------	ISTD	----------							
70)	4,6-Dinitro-	0.169	0.170	0.170	0.162	0.138	0.106	0.082	0.086	0.136	28.42
	----- Linear regression ----- Coefficient = 0.9997										
	Response Ratio = -0.00543 + 0.17221 *A										
71)	n-Nitrosodip	0.570	0.591	0.610	0.638	0.662	0.649	0.676	0.763	0.645	9.31
72)	1,2-Diphenyl	0.894	0.923	0.973	0.992	1.033	1.010	1.098	1.193	1.014	9.43
73)	2,4,6-Tribro	0.106	0.112	0.113	0.117	0.111	0.105	0.105	0.111	0.110	3.98
74)	4-Bromopheny	0.252	0.261	0.269	0.277	0.272	0.251	0.280	0.293	0.269	5.36
75)	Hexachlorobe	0.254	0.267	0.279	0.294	0.300	0.303	0.321	0.364	0.298	11.46
76)	Pentachlorop	0.160	0.167	0.174	0.172	0.155	0.131	0.112	0.107	0.147	18.20
	----- Linear regression ----- Coefficient = 0.9982										
	Response Ratio = 0.00007 + 0.16436 *A										
77)	Phenanthrene	1.004	1.032	1.068	1.080	1.083	1.077	1.177	1.331	1.106	9.36
78)	Anthracene	1.026	1.060	1.114	1.152	1.171	1.137	1.228	1.328	1.152	8.23
79)	Carbazole	1.068	1.107	1.164	1.186	1.189	1.123	1.183	1.289	1.164	5.73
80)	Di-n-butylph	1.565	1.606	1.690	1.677	1.633	1.463	1.475	1.596	1.588	5.31
81)	Fluoranthene	1.365	1.419	1.475	1.528	1.522	1.421	1.499	1.616	1.481	5.32
82)	Octadecane	0.608	0.630	0.674	0.689	0.681	0.636	0.655	0.694	0.658	4.74
83)	I Chrysene-d12	----------	ISTD	----------							
84)	Pyrene	1.359	1.402	1.375	1.387	1.504	1.455	1.598	1.775	1.482	9.62
85)	Butyl steara	0.469	0.482	0.484	0.452	0.486	0.452	0.604		0.490	10.64
86)	Terphenyl-d1	0.925	0.937	0.923	0.916	0.944	0.902	0.960	1.054	0.945	5.04
87)	Butylbenzylp	0.786	0.789	0.784	0.733	0.706	0.622	0.642	0.698	0.720	9.04

Initial Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICC2364
Lab FileID: P54690.D

88)	Benzo[a]anth	1.177	1.195	1.222	1.230	1.274	1.239	1.376	1.585	1.287	10.49
89)	3,3'-Dichlor	0.540	0.548	0.527	0.502	0.485	0.429	0.429	0.544	0.500	9.83
90)	Chrysene	1.075	1.079	1.058	1.053	1.067	1.038	1.169	1.304	1.106	8.10
91)	bis(2-Ethylh	0.815	0.828	0.822	0.775	0.752	0.674	0.712	0.804	0.773	7.27
92)	I Perylene-d12	----------ISTD----------									
93)	Di-n-octylph	1.773	1.816	1.845	1.725	1.576	1.375	1.339	1.360	1.601	13.55
94)	Benzo[b]fluo	1.410	1.547	1.471	1.468	1.576	1.331	1.355	1.472	1.454	5.89
95)	Benzo[k]fluo	0.977	0.916	1.061	1.193	1.208	1.341	1.477	1.701	1.234	21.40

----- Linear regression ----- Coefficient = 0.9942
Response Ratio = 0.06376 + 0.94090 *A

96)	Benzo[a]pyre	1.232	1.267	1.311	1.331	1.280	1.203	1.287	1.379	1.286	4.31
97)	Indeno[1,2,3	1.378	1.421	1.435	1.474	1.484	1.382	1.434	1.574	1.448	4.38
98)	Dibenz(a,h)a	1.154	1.195	1.169	1.171	1.078	0.996	0.985	1.136	1.111	7.36
99)	Dibenz[a,h]a	1.090	1.130	1.160	1.192	1.212	1.080	1.173	1.262	1.162	5.30
100)	7,12-Dimethy	0.569	0.579	0.604	0.623	0.590	0.559	0.588	0.608	0.590	3.58
101)	Benzo[g,h,i]	1.210	1.252	1.254	1.276	1.264	1.187	1.228	1.285	1.244	2.72

(#) = Out of Range ### Number of calibration levels exceeded format ###

MP2364.M Fri Feb 04 06:58:04 2011 MSP

7.7.9

SII-SSA-0014-006482

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54698.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54698.D Vial: 10
Acq On : 1 Feb 2011 3:17 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,bn#1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	127	0.00	4.35- 5.35
3	t	Pyridine	2.170	1.746	19.5	100	0.00	1.88- 2.88
4	t	N-Nitrosodimethylamine	1.471	1.185	19.4	95	0.00	1.86- 2.86
11	t	bis(2-Chloroethyl)ethe	1.659	1.725	-4.0	139	0.00	4.05- 5.05
14	t	1,3-Dichlorobenzene	1.788	1.794	-0.3	134	0.00	4.31- 5.31
15	t	1,4-Dichlorobenzene	1.601	1.530	4.4	125	0.00	4.37- 5.37
16	t	Benzyl alcohol	0.971	0.984	-1.3	117	0.00	4.56- 5.56
17	t	1,2-Dichlorobenzene	1.549	1.497	3.4	132	0.00	4.62- 5.62
20	t	2,2'-oxybis(1-Chloropr	0.505	0.527	-4.4	142	0.00	4.76- 5.76
22	t	n-Nitroso-di-n-propyla	1.127	1.259	-11.7	142	-0.01	4.95- 5.95
23	t	Hexachloroethane	0.601	0.591	1.7	131	0.00	5.04- 6.04
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	6.15- 7.15
26	t	Nitrobenzene	0.212	0.213	-0.5	129	0.00	5.16- 6.16
28	t	Isophorone	0.942	0.946	-0.4	123	0.00	5.48- 6.48
32	t	bis(2-Chloroethoxy)met	0.528	0.574	-8.7	138	0.00	5.83- 6.83
36	t	1,2,4-Trichlorobenzene	0.405	0.402	0.7	132	0.00	6.09- 7.09
38	t	Naphthalene	1.097	1.059	3.5	124	0.00	6.18- 7.18
42	t	Hexachlorobutadiene	0.214	0.231	-7.9	143	0.00	6.47- 7.47
44	t	2-Methylnaphthalene	0.876	0.783	10.6	116	0.00	7.24- 8.24
47	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00	8.91- 9.91
48	t	Hexachlorocyclopentadi	0.302	0.440	-45.7#	144	0.00	7.61- 8.61
52	t	2-Chloronaphthalene	1.234	1.382	-12.0	134	0.00	8.00- 9.00
54	t	2-Nitroaniline	0.469	0.515	-9.8	119	0.00	8.23- 9.23
55	t	Dimethylphthalate	1.623	1.577	2.8	111	0.00	8.59- 9.59
56	t	Acenaphthylene	2.034	1.892	7.0	109	0.00	8.66- 9.66
57	t	2,6-Dinitrotoluene	0.210	0.197	6.2	108	0.00	8.68- 9.68
58	t	3-Nitroaniline	0.353	0.329	6.8	95	0.00	8.90- 9.90
59	t	Acenaphthene	1.171	1.166	0.4	114	0.00	8.96- 9.96
62	t	Dibenzofuran	1.826	1.795	1.7	115	0.00	9.22-10.22
63	t	2,4-Dinitrotoluene	0.417	0.407	2.4	101	0.00	9.30-10.30
65	t	Diethylphthalate	1.576	1.551	1.6	110	0.00	9.73-10.73
66	t	Fluorene	1.427	1.395	2.2	117	0.00	9.77-10.77
67	t	4-Chlorophenyl-phenyle	0.668	0.595	10.9	107	0.00	9.79-10.79
68	t	4-Nitroaniline	0.350	0.337	3.7	102	0.00	9.89-10.89
69	I	Phenanthrene-d10	1.000	1.000	0.0	121	0.00	11.22-12.22
71	t	n-Nitrosodiphenylamine	0.645	0.552	14.4	110	0.00	9.99-10.99
72	t	1,2-Diphenylhydrazine	1.014	0.908	10.5	113	0.00	10.04-11.04

7.7.10

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54698.D

74	t	4-Bromophenyl-phenylet	0.269	0.242	10.0	109	0.00	10.56-11.56
75	t	Hexachlorobenzene	0.298	0.246	17.4	107	0.00	10.78-11.78
77	t	Phenanthrene	1.106	1.037	6.2	118	0.00	11.25-12.25
78	t	Anthracene	1.152	1.020	11.5	111	0.00	11.31-12.31
79	t	Carbazole	1.164	1.038	10.8	108	0.00	11.56-12.56
80	t	Di-n-butylphthalate	1.588	1.421	10.5	102	0.00	12.13-13.13
81	t	Fluoranthene	1.481	1.269	14.3	104	0.00	12.81-13.81
83	I	Chrysene-d12	1.000	1.000	0.0	101	0.00	14.41-15.41
84	t	Pyrene	1.482	1.511	-2.0	111	0.00	13.07-14.07
87	t	Butylbenzylphthalate	0.720	0.780	-8.3	100	0.00	13.85-14.85
88	t	Benzo[a]anthracene	1.287	1.257	2.3	104	0.00	14.39-15.39
89	t	3,3'-Dichlorobenzidine	0.500	0.426	14.8	81	0.00	14.38-15.38
90	t	Chrysene	1.106	1.082	2.2	103	0.00	14.43-15.43
91	t	bis(2-Ethylhexyl)phtha	0.773	0.783	-1.3	96	0.00	14.48-15.48
92	I	Perylene-d12	1.000	1.000	0.0	95	0.00	15.90-16.90
93	t	Di-n-octylphthalate	1.601	1.814	-13.3	93	0.00	15.06-16.06
94	t	Benzo[b]fluoranthene	1.454	1.566	-7.7	101	0.00	15.49-16.49
			True	Calc.	% Drift			
95	t	Benzo[k]fluoranthene	50.000	57.569	-15.1	101	0.00	15.51-16.51
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.286	1.331	-3.5	96	0.00	15.84-16.84
97	t	Indeno[1,2,3-cd]pyrene	1.448	1.512	-4.4	100	0.00	17.29-18.29
99	t	Dibenz[a,h]anthracene	1.162	1.237	-6.5	101	0.00	17.30-18.30
101	t	Benzo[g,h,i]perylene	1.244	1.304	-4.8	99	0.00	17.69-18.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 01 16:23:44 2011 MSP

7.7.10

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54700.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54700.D Vial: 12
Acq On : 1 Feb 2011 3:46 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,acid Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	138	0.00	4.35- 5.35
9	t	Phenol	2.325	2.130	8.4	125	0.00	3.96- 4.96
12	t	2-Chlorophenol	1.514	1.493	1.4	143	0.00	4.13- 5.13
19	t	2-Methylphenol	1.255	1.318	-5.0	145	0.00	4.74- 5.74
21	t	3&4-Methylphenol	1.336	1.308	2.1	133	0.00	4.93- 5.93
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	6.15- 7.15
29	t	2-Nitrophenol	0.235	0.259	-10.2	131	0.00	5.62- 6.62
30	t	2,4-Dimethylphenol	0.413	0.420	-1.7	126	0.00	5.70- 6.70
		---------- True Calc. % Drift ----------						
31		Benzoic Acid	50.000	44.946	10.1	130	0.00	5.89- 6.89
		---------- AvgRF CCRF % Dev ----------						
33	t	2,4-Dichlorophenol	0.340	0.315	7.4	115	0.00	5.97- 6.97
34		2,6-Dichlorophenol	0.314	0.319	-1.6	126	-0.01	6.31- 7.31
43	t	4-Chloro-3-methylpheno	0.387	0.384	0.8	116	-0.01	7.08- 8.08
47	I	Acenaphthene-d10	1.000	1.000	0.0	133	0.00	8.91- 9.91
49	t	2,4,6-Trichlorophenol	0.407	0.398	2.2	130	0.00	7.74- 8.74
50	t	2,4,5-Trichlorophenol	0.419	0.377	10.0	124	-0.01	7.80- 8.80
		---------- True Calc. % Drift ----------						
60	t	2,4-Dinitrophenol	100.000	89.330	10.7	110	0.00	9.05-10.05
61	t	4-Nitrophenol	50.000	42.707	14.6	110	0.00	9.22-10.22
		---------- AvgRF CCRF % Dev ----------						
64		2,3,4,6-Tetrachlorophe	0.348	0.291	16.4	103	0.00	9.50-10.50
69	I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00	11.22-12.22
		---------- True Calc. % Drift ----------						
70	t	4,6-Dinitro-2-methylph	50.000	48.623	2.8	115	0.00	9.95-10.95
		---------- AvgRF CCRF % Dev ----------						
		---------- True Calc. % Drift ----------						
76	t	Pentachlorophenol	100.000	106.888	-6.9	122	0.00	11.06-12.06
		---------- AvgRF CCRF % Dev ----------						
83	I	Chrysene-d12	1.000	1.000	0.0	131	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	112	0.00	15.90-16.90

7.7.11

7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54700.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 01 16:18:26 2011 MSP

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2364-ICV2364
Lab FileID: P54701.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2364\P54701.D Vial: 13
Acq On : 1 Feb 2011 4:15 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47858,ep2364,3rd source Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	161	0.00	4.35- 5.35
10	t	Aniline	2.393	2.411	-0.8	158	0.00	3.99- 4.99
24	I	Naphthalene-d8	1.000	1.000	0.0	163	0.00	6.15- 7.15
39	t	4-Chloroaniline	0.495	0.435	12.1	142	0.00	6.31- 7.31
47	I	Acenaphthene-d10	1.000	1.000	0.0	141	0.00	8.91- 9.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	162	0.00	11.22-12.22
83	I	Chrysene-d12	1.000	1.000	0.0	180	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	160	0.00	15.90-16.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Wed Feb 02 12:55:57 2011 MSP

7.7.12
7

Initial Calibration Verification

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2365-ICV2364
Lab FileID: P54723.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2365\P54723.D Vial: 21
Acq On : 2 Feb 2011 1:39 pm Operator: ninap
Sample : icv2364-50 Inst : MSP
Misc : op47915,ep2365,1000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Tue Feb 01 14:34:24 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	0.00	4.35- 5.35
2	t	1,4-Dioxane	0.972	1.090	-12.1	124	0.00	1.65- 2.65
6	t	Indene	2.078	2.932	-41.1#	172	0.00	4.72- 5.72
7	t	Cumene	3.802	4.566	-20.1#	144	0.00	3.45- 4.45
13	t	Decane	2.062	2.353	-14.1	142	0.00	4.16- 5.16
18	t	Acetophenone	2.052	2.236	-9.0	126	0.00	4.92- 5.92
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.15- 7.15
27	t	Quinoline	0.738	0.814	-10.3	143	-0.02	6.69- 7.69
40	t	2,3-Dichloroaniline	0.399	0.345	13.5	122	0.00	7.74- 8.74
41	t	Caprolactam	0.235	0.200	14.9	107	-0.03	6.76- 7.76
45	t	1-Methylnaphthalene	0.844	0.775	8.2	128	0.00	7.41- 8.41
46	t	Dimethylnaphthalene	0.718	0.656	8.6	125	0.00	8.24- 9.24
47	I	Acenaphthene-d10	1.000	1.000	0.0	121	0.00	8.91- 9.91
53	t	Biphenyl	1.636	1.607	1.8	130	0.00	8.00- 9.00
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	11.22-12.22
			True	Calc.	% Drift			
82	t	Octadecane	0.658	0.818	-24.3#	124	0.00	11.14-12.14
83	I	Chrysene-d12	1.000	1.000	0.0	126	0.00	14.41-15.41
92	I	Perylene-d12	1.000	1.000	0.0	102	0.00	15.90-16.90
100	t	7,12-Dimethylbenz(a)an	0.590	0.702	-19.0	119	0.00	15.50-16.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Wed Feb 02 14:19:37 2011 MSP

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2378\P54979.D Vial: 2
Acq On : 22 Feb 2011 7:40 am Operator: ninap
Sample : cc2364-50 Inst : MSP
Misc : op48151,ep2378 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	63	-0.07	4.28- 5.28
2	t	1,4-Dioxane	0.972	0.886	8.8	53	-0.05	1.59- 2.59
3	t	Pyridine	2.170	1.956	9.9	56	-0.05	1.83- 2.83
4	t	N-Nitrosodimethylamine	1.471	1.397	5.0	56	-0.05	1.81- 2.81
5	S	2-Fluorophenol	1.691	1.634	3.4	57	-0.05	2.88- 3.88
6	t	Indene	2.078	1.997	3.9	62	-0.07	4.66- 5.66
7	t	Cumene	3.802	3.872	-1.8	65	-0.06	3.39- 4.39
8	S	Phenol-d5	2.126	2.101	1.2	59	-0.06	3.89- 4.89
9	t	Phenol	2.325	2.249	3.3	60	-0.06	3.91- 4.91
10	t	Aniline	2.393	2.036	14.9	52	-0.07	3.92- 4.92
11	t	bis(2-Chloroethyl)ethe	1.659	1.431	13.7	58	-0.07	3.98- 4.98
12	t	2-Chlorophenol	1.514	1.424	5.9	62	-0.06	4.07- 5.07
13	t	Decane	2.062	2.187	-6.1	70	-0.06	4.10- 5.10
14	t	1,3-Dichlorobenzene	1.788	1.678	6.2	63	-0.07	4.24- 5.24
15	t	1,4-Dichlorobenzene	1.601	1.551	3.1	63	-0.07	4.30- 5.30
16	t	Benzyl alcohol	0.971	1.041	-7.2	62	-0.07	4.49- 5.49
17	t	1,2-Dichlorobenzene	1.549	1.469	5.2	65	-0.08	4.55- 5.55
18	t	Acetophenone	2.052	2.185	-6.5	65	-0.07	4.85- 5.85
19	t	2-Methylphenol	1.255	1.200	4.4	60	-0.06	4.68- 5.68
20	t	2,2'-oxybis(1-Chloropr	0.505	0.465	7.9	62	-0.07	4.70- 5.70
21	t	3&4-Methylphenol	1.336	1.321	1.1	61	-0.06	4.88- 5.88
22	t	n-Nitroso-di-n-propyla	1.127	1.238	-9.8	70	-0.08	4.89- 5.89
23	t	Hexachloroethane	0.601	0.621	-3.3	69	-0.07	4.97- 5.97
24	I	Naphthalene-d8	1.000	1.000	0.0	63	-0.08	6.08- 7.08
25	S	Nitrobenzene-d5	0.504	0.550	-9.1	70	-0.07	5.07- 6.07
26	t	Nitrobenzene	0.212	0.191	9.9	60	-0.08	5.09- 6.09
27	t	Quinoline	0.738	0.743	-0.7	64	-0.08	6.63- 7.63
28	t	Isophorone	0.942	1.008	-7.0	68	-0.07	5.42- 6.42
29	t	2-Nitrophenol	0.235	0.245	-4.3	64	-0.08	5.55- 6.55
30	t	2,4-Dimethylphenol	0.413	0.425	-2.9	66	-0.07	5.63- 6.63
			True	Calc.	% Drift			
31		Benzoic Acid	50.000	55.234	-10.5	85	-0.04	5.85- 6.85
			AvgRF	CCRF	% Dev			
32	t	bis(2-Chloroethoxy)met	0.528	0.500	5.3	62	-0.07	5.76- 6.76
33	t	2,4-Dichlorophenol	0.340	0.342	-0.6	65	-0.07	5.91- 6.91
34		2,6-Dichlorophenol	0.314	0.329	-4.8	67	-0.08	6.25- 7.25
35	t	1,3,5-Trichlorobenzene	0.412	0.399	3.2	67	-0.08	5.56- 6.56
36	t	1,2,4-Trichlorobenzene	0.405	0.398	1.7	67	-0.08	6.02- 7.02
37	t	1,2,3-Trichlorobenzene	0.372	0.378	-1.6	69	-0.08	6.38- 7.38

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

38	t	Naphthalene	1.097	1.088	0.8	66	-0.08	6.10- 7.10
39	t	4-Chloroaniline	0.495	0.491	0.8	62	-0.07	6.24- 7.24
40	t	2,3-Dichloroaniline	0.399	0.405	-1.5	70	-0.08	7.67- 8.67
41	t	Caprolactam	0.235	0.265	-12.8	69	-0.07	6.72- 7.72
42	t	Hexachlorobutadiene	0.214	0.248	-15.9	79	-0.08	6.39- 7.39
43	t	4-Chloro-3-methylpheno	0.387	0.451	-16.5	70	-0.06	7.03- 8.03
44	t	2-Methylnaphthalene	0.876	0.867	1.0	66	-0.08	7.17- 8.17
45	t	1-Methylnaphthalene	0.844	0.815	3.4	66	-0.08	7.33- 8.33
46	t	Dimethylnaphthalene	0.718	0.758	-5.6	71	-0.08	8.16- 9.16
47	I	Acenaphthene-d10	1.000	1.000	0.0	70	-0.08	8.83- 9.83
48	t	Hexachlorocyclopentadi	0.302	0.325	-7.6	67	-0.08	7.53- 8.53
49	t	2,4,6-Trichlorophenol	0.407	0.411	-1.0	71	-0.08	7.67- 8.67
50	t	2,4,5-Trichlorophenol	0.419	0.408	2.6	71	-0.06	7.75- 8.75
51	S	2-Fluorobiphenyl	1.374	1.268	7.7	69	-0.08	7.79- 8.79
52	t	2-Chloronaphthalene	1.234	1.166	5.5	71	-0.07	7.93- 8.93
53	t	Biphenyl	1.636	1.514	7.5	71	-0.08	7.92- 8.92
54	t	2-Nitroaniline	0.469	0.555	-18.3	81	-0.07	8.16- 9.16
55	t	Dimethylphthalate	1.623	1.607	1.0	72	-0.08	8.51- 9.51
56	t	Acenaphthylene	2.034	1.873	7.9	68	-0.08	8.59- 9.59
57	t	2,6-Dinitrotoluene	0.210	0.252	-20.0#	87	-0.08	8.61- 9.61
58	t	3-Nitroaniline	0.353	0.355	-0.6	65	-0.08	8.82- 9.82
59	t	Acenaphthene	1.171	1.131	3.4	70	-0.08	8.88- 9.88
			True	Calc.	% Drift			
60	t	2,4-Dinitrophenol	100.000	93.248	6.8	68	-0.06	8.99- 9.99
61	t	4-Nitrophenol	50.000	59.922	-19.8	82	-0.05	9.17-10.17
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.826	1.732	5.1	70	-0.07	9.14-10.14
63	t	2,4-Dinitrotoluene	0.417	0.428	-2.6	67	-0.07	9.23-10.23
64		2,3,4,6-Tetrachlorophe	0.348	0.392	-12.6	74	-0.07	9.43-10.43
65	t	Diethylphthalate	1.576	1.657	-5.1	74	-0.08	9.65-10.65
66	t	Fluorene	1.427	1.323	7.3	70	-0.08	9.69-10.69
67	t	4-Chlorophenyl-phenyle	0.668	0.630	5.7	71	-0.08	9.71-10.71
68	t	4-Nitroaniline	0.350	0.326	6.9	63	-0.08	9.82-10.82
69	I	Phenanthrene-d10	1.000	1.000	0.0	70	-0.08	11.15-12.15
			True	Calc.	% Drift			
70	t	4,6-Dinitro-2-methylph	50.000	49.855	0.3	69	-0.06	9.89-10.89
			AvgRF	CCRF	% Dev			
71	t	n-Nitrosodiphenylamine	0.645	0.607	5.9	70	-0.08	9.92-10.92
72	t	1,2-Diphenylhydrazine	1.014	1.044	-3.0	75	-0.08	9.96-10.96
73	S	2,4,6-Tribromophenol	0.110	0.139	-26.4#	86	-0.08	10.11-11.11
74	t	4-Bromophenyl-phenylet	0.269	0.294	-9.3	77	-0.08	10.48-11.48
75	t	Hexachlorobenzene	0.298	0.310	-4.0	78	-0.07	10.70-11.70
			True	Calc.	% Drift			
76	t	Pentachlorophenol	100.000	118.284	-18.3	78	-0.07	10.99-11.99
			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.106	1.066	3.6	70	-0.08	11.18-12.18
78	t	Anthracene	1.152	1.115	3.2	70	-0.08	11.24-12.24
79	t	Carbazole	1.164	1.137	2.3	68	-0.06	11.50-12.50
80	t	Di-n-butylphthalate	1.588	1.712	-7.8	71	-0.06	12.07-13.07
81	t	Fluoranthene	1.481	1.530	-3.3	73	-0.06	12.74-13.74
82	t	Octadecane	0.658	0.700	-6.4	73	-0.07	11.07-12.07

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2364
Lab FileID: P54979.D

83	I	Chrysene-d12	1.000	1.000	0.0	78	-0.06	14.35-15.35
84	t	Pyrene	1.482	1.371	7.5	77	-0.06	13.01-14.01
85		Butyl stearate	0.490	0.434	11.4	70	-0.06	13.82-14.82
86	S	Terphenyl-d14	0.945	0.919	2.8	77	-0.06	13.21-14.21
87	t	Butylbenzylphthalate	0.720	0.766	-6.4	76	-0.06	13.79-14.79
88	t	Benzo[a]anthracene	1.287	1.196	7.1	76	-0.06	14.33-15.33
89	t	3,3'-Dichlorobenzidine	0.500	0.539	-7.8	79	-0.06	14.32-15.32
90	t	Chrysene	1.106	1.034	6.5	76	-0.06	14.38-15.38
91	t	bis(2-Ethylhexyl)phtha	0.773	0.817	-5.7	77	-0.06	14.42-15.42
92	I	Perylene-d12	1.000	1.000	0.0	80	-0.07	15.83-16.83
93	t	Di-n-octylphthalate	1.601	1.709	-6.7	74	-0.06	15.00-16.00
94	t	Benzo[b]fluoranthene	1.454	1.470	-1.1	80	-0.06	15.42-16.42
			True	Calc.	% Drift			
95	t	Benzo[k]fluoranthene	50.000	54.994	-10.0	81	-0.06	15.45-16.45
			AvgRF	CCRF	% Dev			
96	t	Benzo[a]pyrene	1.286	1.210	5.9	73	-0.07	15.77-16.77
97	t	Indeno[1,2,3-cd]pyrene	1.448	1.463	-1.0	81	-0.10	17.19-18.19
98	t	Dibenz(a,h)acridine	1.111	1.140	-2.6	78	-0.09	16.86-17.86
99	t	Dibenz[a,h]anthracene	1.162	1.219	-4.9	84	-0.10	17.20-18.20
100	t	7,12-Dimethylbenz(a)an	0.590	0.616	-4.4	81	-0.07	15.43-16.43
101	t	Benzo[g,h,i]perylene	1.244	1.277	-2.7	81	-0.10	17.58-18.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54690.D MP2364.M Tue Feb 22 08:07:51 2011 MSP

7.7.14 7

Continuing Calibration Summary

Job Number: JA68506
Account: AGMPAL Arcadis
Project: PSEG-Diesel, Salem, NJ

Sample: EP2378-CC2339
Lab FileID: P54980.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP2378\P54980.D Vial: 3
Acq On : 22 Feb 2011 8:08 am Operator: ninap
Sample : cc2339-25 Inst : MSP
Misc : op48151,ep2378, Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP2364.M (RTE Integrator)
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
Last Update : Thu Feb 03 10:19:37 2011
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
102	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	47	-0.07	4.28- 5.28
103	Benzaldehyde	0.863	0.925	-7.2	51	-0.06	3.76- 4.76
104	Phenanthrene-d10a	1.000	1.000	0.0	54	-0.08	11.14-12.14
105	Atrazine	0.133	0.136	-2.3	53	0.04	10.83-11.83
106	Acenaphthene-d10a	1.000	1.000	0.0	51	-0.09	8.83- 9.83
107	1,2,4,5-Tetrachloroben	0.630	0.603	4.3	50	0.05	7.49- 8.49
108	Chrysene-d12a	1.000	1.000	0.0	57	-0.06	14.35-15.35
109	Benzidine	0.550	0.579	-5.3	53	0.03	12.92-13.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P54695.D MP2364.M Tue Feb 22 09:55:25 2011 MSP

7.7.15
7

New Jersey
ACCUTEST
LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 22 12:49:12 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	152671	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	540381	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	330608	40.00	ppb	-0.08
69) Phenanthrene-d10	11.64	188	579415	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	652840	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	548258	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	152671	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	579415	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	330608	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	652840	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	261321	38.38	ppb	-0.07
Spiked Amount 50.000			Recovery =	76.76%		
51) 2-Fluorobiphenyl	8.29	172	389860	34.34	ppb	-0.08
Spiked Amount 50.000			Recovery =	68.68%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	347883	22.55	ppb	-0.06
Spiked Amount 50.000			Recovery =	45.10%		

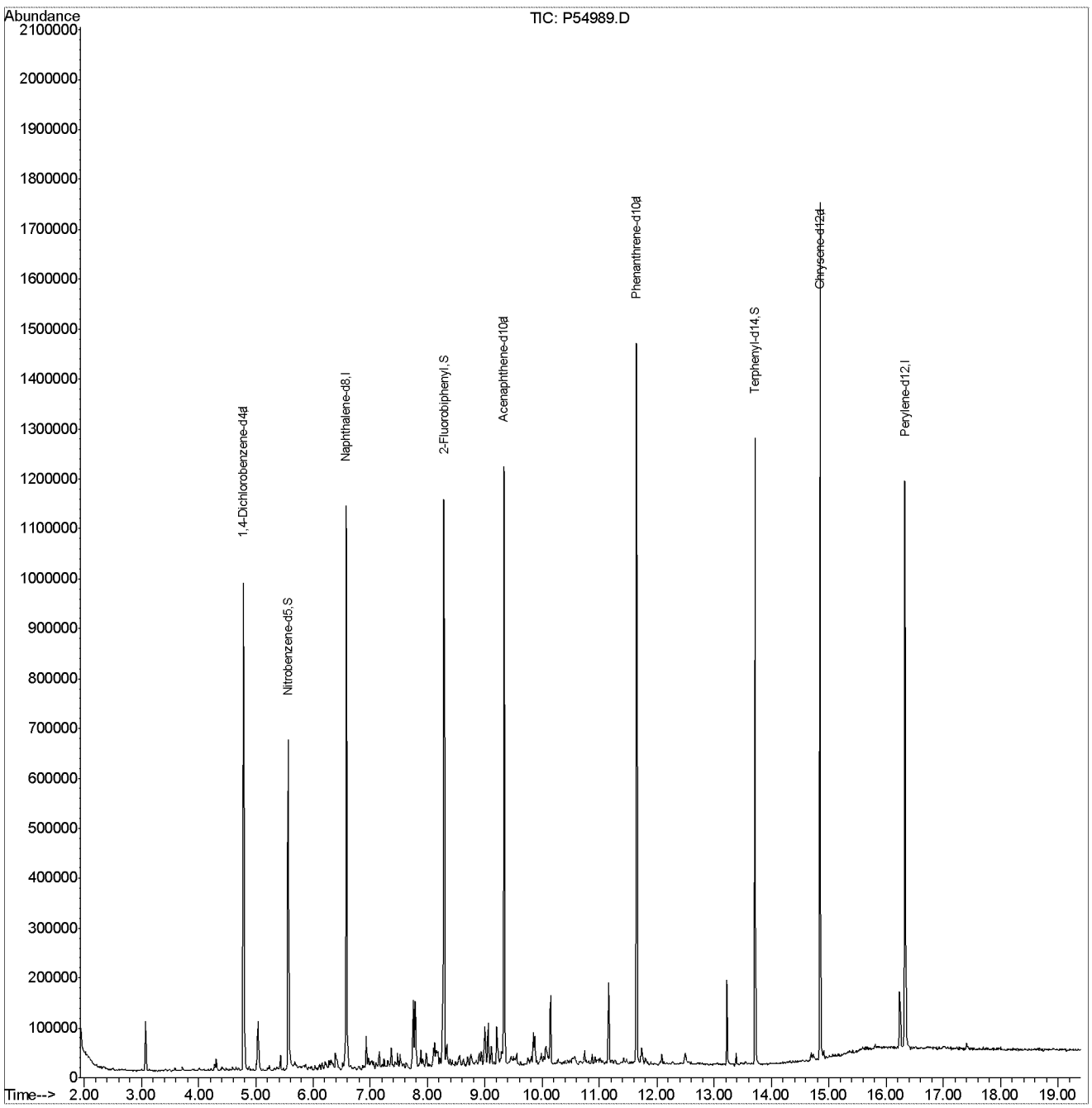
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 22 12:49:12 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.507	101	108	112	rVB10	5720	12481	0.73%	0.075%
2	3.067	209	213	221	rBV	99568	119424	6.98%	0.718%
3	3.580	305	309	314	rVB8	7208	11660	0.68%	0.070%
4	3.719	328	335	340	rVB2	8496	12302	0.72%	0.074%
5	4.275	435	439	442	rBV4	13145	17197	1.01%	0.103%
6	4.307	442	445	457	rVB	23375	30189	1.77%	0.182%
7	4.398	457	462	474	rBV	6927	17323	1.01%	0.104%
8	4.782	524	534	548	rBV	977494	1173315	68.60%	7.057%
9	4.873	548	551	558	rVB9	8416	13096	0.77%	0.079%
10	5.033	572	581	594	rVB2	98468	161599	9.45%	0.972%
11	5.231	614	618	623	rVB5	10421	13940	0.82%	0.084%
12	5.365	639	643	649	rVV8	6707	15075	0.88%	0.091%
13	5.429	649	655	659	rVV	30494	41239	2.41%	0.248%
14	5.562	671	680	695	rBV	661717	851581	49.79%	5.122%
15	5.680	698	702	713	rVB9	12384	25264	1.48%	0.152%
16	5.872	734	738	743	rVB7	9966	13682	0.80%	0.082%
17	6.032	762	768	776	rBV7	10191	16147	0.94%	0.097%
18	6.107	776	782	787	rBV9	11162	16039	0.94%	0.096%
19	6.161	787	792	796	rBV6	13533	19481	1.14%	0.117%
20	6.209	796	801	811	rBV9	13846	30440	1.78%	0.183%
21	6.278	811	814	816	rBV3	14812	15746	0.92%	0.095%
22	6.305	817	819	831	rVV9	19343	48424	2.83%	0.291%
23	6.390	831	835	851	rVB7	32192	76054	4.45%	0.457%
24	6.508	853	857	860	rBV3	14502	18463	1.08%	0.111%
25	6.572	860	869	881	rVB	1126124	1399003	81.80%	8.414%
26	6.722	893	897	904	rVB10	4986	12126	0.71%	0.073%
27	6.791	904	910	919	rBV10	8067	15410	0.90%	0.093%
28	6.925	930	935	940	rBV5	62945	85046	4.97%	0.512%
29	6.967	940	943	946	rVB3	16543	16015	0.94%	0.096%
30	7.021	947	953	956	rVV7	11933	22653	1.32%	0.136%
31	7.047	956	958	963	rVB5	13964	15661	0.92%	0.094%
32	7.096	963	967	971	rBV7	13573	18696	1.09%	0.112%
33	7.149	973	977	984	rVB7	31173	45152	2.64%	0.272%
34	7.240	990	994	1002	rBV6	16851	22812	1.33%	0.137%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.304	1002	1006	1010	rVV4	12668	17049	1.00%	0.103%
36	7.363	1012	1017	1021	rBV3	36788	39112	2.29%	0.235%
37	7.432	1026	1030	1034	rBV7	10913	17572	1.03%	0.106%
38	7.469	1034	1037	1042	rVV3	28087	35043	2.05%	0.211%
39	7.518	1042	1046	1054	rVV6	27871	48637	2.84%	0.293%
40	7.582	1054	1058	1061	rVB6	9362	13097	0.77%	0.079%
41	7.624	1062	1066	1074	rVB10	11958	21137	1.24%	0.127%
42	7.742	1080	1088	1092	rBV4	136926	213200	12.47%	1.282%
43	7.779	1092	1095	1105	rVB2	130940	178959	10.46%	1.076%
44	7.875	1107	1113	1116	rBV3	31633	36085	2.11%	0.217%
45	7.913	1117	1120	1126	rVB3	16193	21900	1.28%	0.132%
46	7.972	1126	1131	1136	rBV4	27921	42335	2.48%	0.255%
47	8.100	1148	1155	1157	rBV2	38368	55467	3.24%	0.334%
48	8.121	1157	1159	1162	rVV	47920	54935	3.21%	0.330%
49	8.148	1162	1164	1173	rVB5	29307	69045	4.04%	0.415%
50	8.217	1174	1177	1180	rVV3	17720	21530	1.26%	0.129%
51	8.281	1180	1189	1195	rVV	1136041	1504781	87.99%	9.050%
52	8.330	1195	1198	1206	rVV3	43888	60564	3.54%	0.364%
53	8.388	1206	1209	1212	rVB3	13137	12943	0.76%	0.078%
54	8.426	1212	1216	1223	rVB10	13372	20242	1.18%	0.122%
55	8.485	1223	1227	1232	rBV7	9803	14066	0.82%	0.085%
56	8.554	1232	1240	1246	rBV7	20523	43931	2.57%	0.264%
57	8.618	1247	1252	1258	rVB9	15193	24327	1.42%	0.146%
58	8.693	1262	1266	1272	rVB7	16981	23760	1.39%	0.143%
59	8.752	1272	1277	1287	rBV5	23227	44330	2.59%	0.267%
60	8.891	1299	1303	1308	rBV8	21701	32568	1.90%	0.196%
61	8.933	1308	1311	1316	rVB3	27481	35341	2.07%	0.213%
62	8.992	1316	1322	1329	rBV2	77211	123611	7.23%	0.743%
63	9.051	1329	1333	1339	rVV	82675	97884	5.72%	0.589%
64	9.110	1339	1344	1350	rVV	36362	45523	2.66%	0.274%
65	9.206	1357	1362	1370	rBV2	74519	126501	7.40%	0.761%
66	9.286	1371	1377	1380	rVV8	24448	45572	2.66%	0.274%
67	9.329	1380	1385	1397	rVB	1197878	1509344	88.25%	9.078%
68	9.451	1403	1408	1411	rBV7	11470	15786	0.92%	0.095%
69	9.548	1422	1426	1430	rVB4	19510	23645	1.38%	0.142%
70	9.751	1459	1464	1468	rBV8	13383	22002	1.29%	0.132%
71	9.804	1469	1474	1477	rVV5	15515	20093	1.17%	0.121%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	9.841	1477	1481	1484	rVV3	60967	85100	4.98%	0.512%
73	9.868	1484	1486	1491	rVB3	53154	57608	3.37%	0.346%
74	9.980	1498	1507	1512	rBV3	19704	44384	2.60%	0.267%
75	10.023	1512	1515	1518	rBV4	10163	12331	0.72%	0.074%
76	10.060	1518	1522	1528	rVV4	28045	47288	2.76%	0.284%
77	10.141	1533	1537	1547	rVB	138524	177422	10.37%	1.067%
78	10.274	1558	1562	1575	rVB	11567	24502	1.43%	0.147%
79	10.525	1606	1609	1611	rBV4	10544	12564	0.73%	0.076%
80	10.734	1643	1648	1651	rBV3	24342	26581	1.55%	0.160%
81	10.862	1668	1672	1677	rVB7	17430	22346	1.31%	0.134%
82	10.915	1678	1682	1686	rBV7	10634	12499	0.73%	0.075%
83	11.150	1721	1726	1733	rBV	163389	191909	11.22%	1.154%
84	11.262	1744	1747	1759	rVB	8907	16170	0.95%	0.097%
85	11.417	1772	1776	1782	rVB8	9093	13958	0.82%	0.084%
86	11.471	1783	1786	1792	rVB7	10757	16385	0.96%	0.099%
87	11.642	1811	1818	1829	rVB2	1440751	1641262	95.97%	9.871%
88	11.738	1829	1836	1843	rVB5	32386	59123	3.46%	0.356%
89	11.797	1843	1847	1854	rBV7	13519	22650	1.32%	0.136%
90	12.053	1890	1895	1897	rBV6	7425	12035	0.70%	0.072%
91	12.080	1897	1900	1906	rVB2	20010	24977	1.46%	0.150%
92	12.491	1971	1977	1985	rBV2	20938	50414	2.95%	0.303%
93	13.218	2108	2113	2124	rBV	171693	197380	11.54%	1.187%
94	13.378	2139	2143	2153	rVB9	22878	27603	1.61%	0.166%
95	13.709	2200	2205	2219	rBV	1254499	1250126	73.10%	7.519%
96	14.692	2386	2389	2393	rBV5	16416	22885	1.34%	0.138%
97	14.847	2411	2418	2427	rBV	1717754	1710258	100.00%	10.286%
98	14.911	2428	2430	2434	rVB2	14172	12946	0.76%	0.078%
99	16.236	2673	2678	2688	rBV	113178	169954	9.94%	1.022%
100	16.327	2688	2695	2713	rVB	1138503	1509282	88.25%	9.078%

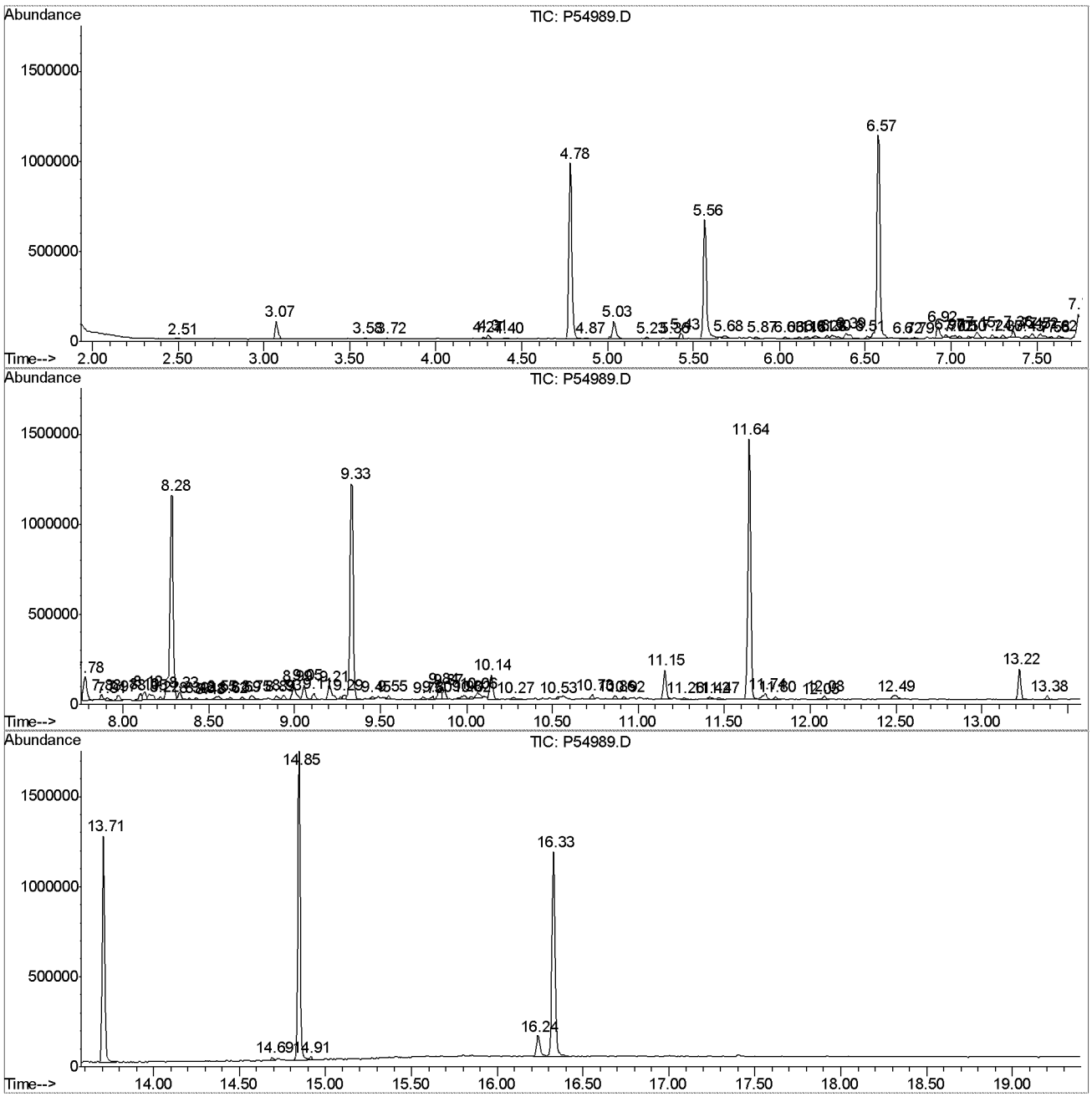
Sum of corrected areas: 16626594

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

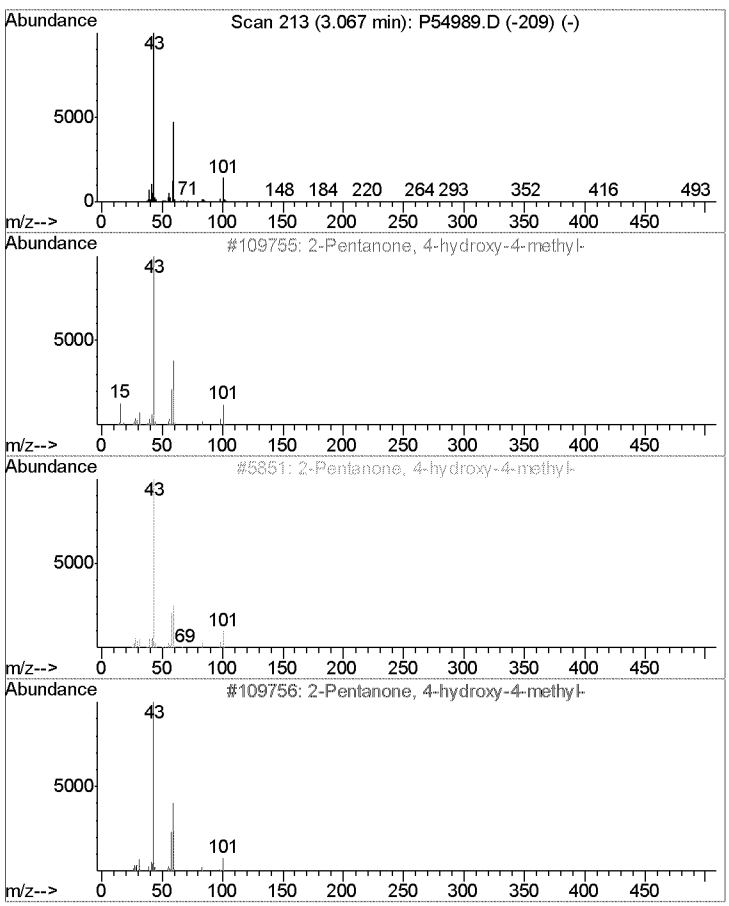
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

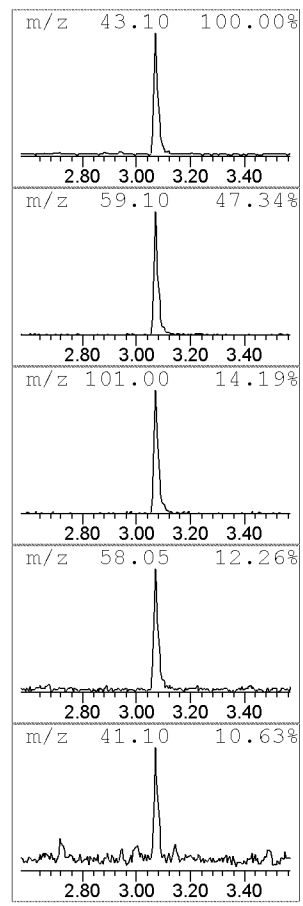
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.07 ppb	119424	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	25
5	1-Propanamine	59	C3H9N	000107-10-8	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

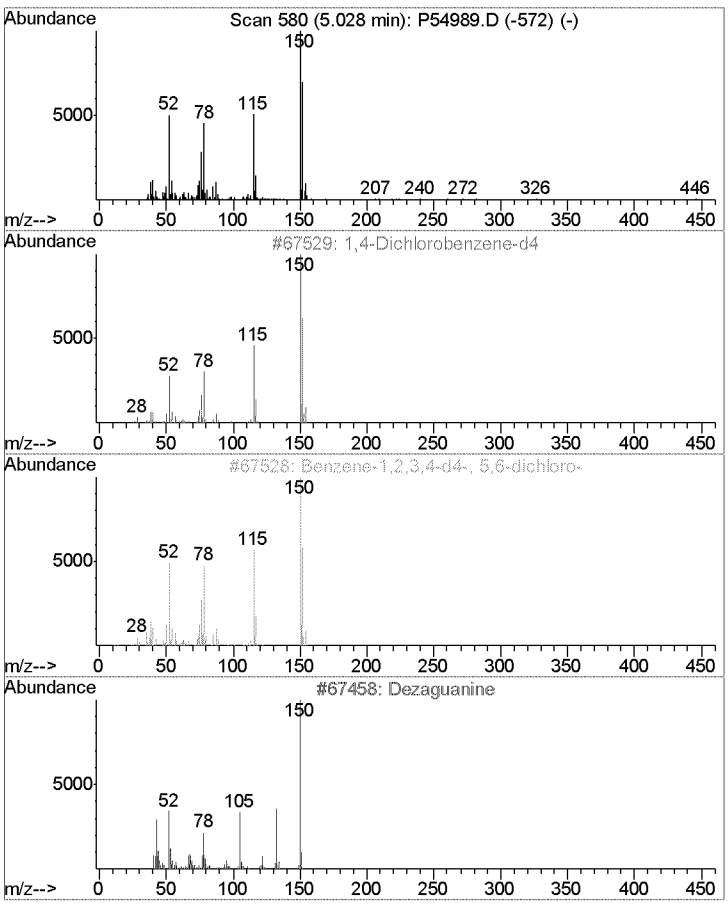
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

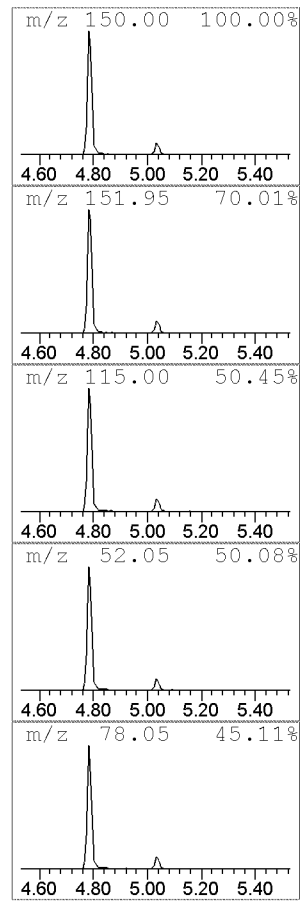
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.87 ppb	142985	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	94
2	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
3	Dezaguanine	150	C6H6N4O	041729-52-6	28
4	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
5	Cyclobuta[1,2-A:3,4-A']diindene,...	300	C18H14Cl2	110848-73-2	12





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

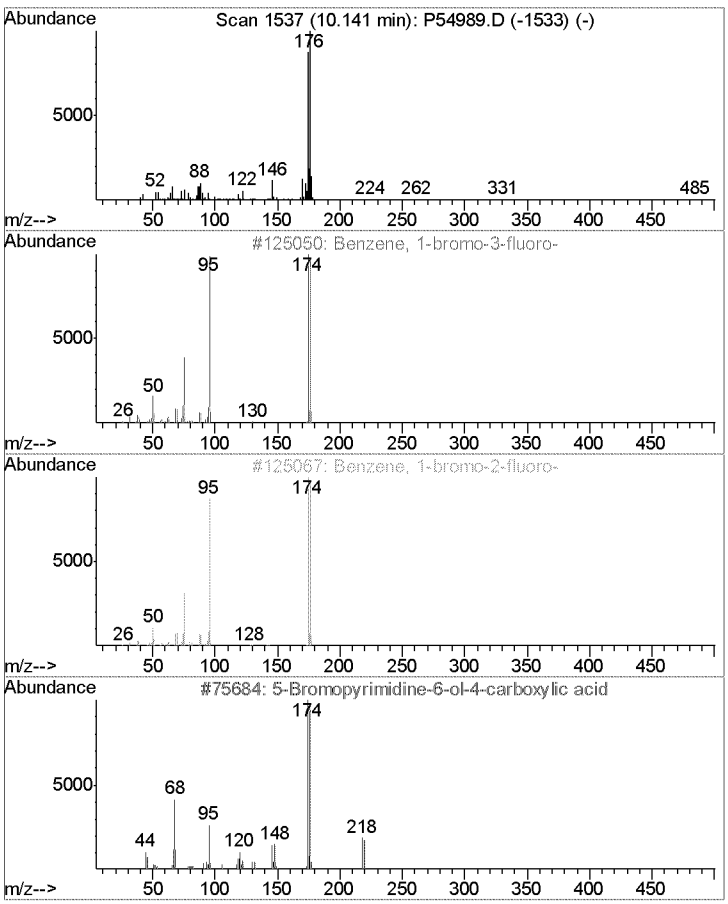
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

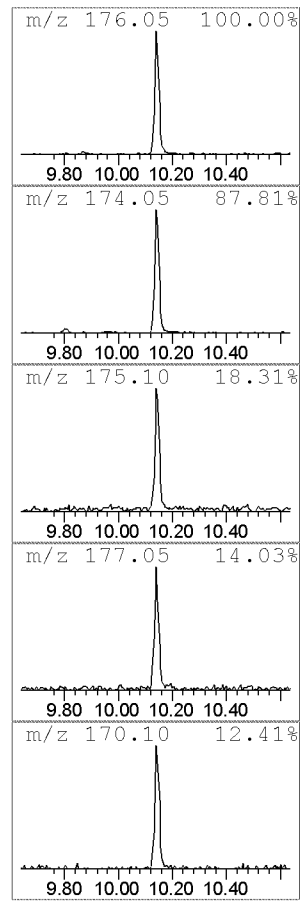
****

Peak Number 3 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.70 ppb	177422	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	64
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	50
3	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	39
4	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	35
5	Phenol, 4-[(5,6,7,8-tetrahydro-1...	283	C17H17NO3	034168-00-8	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

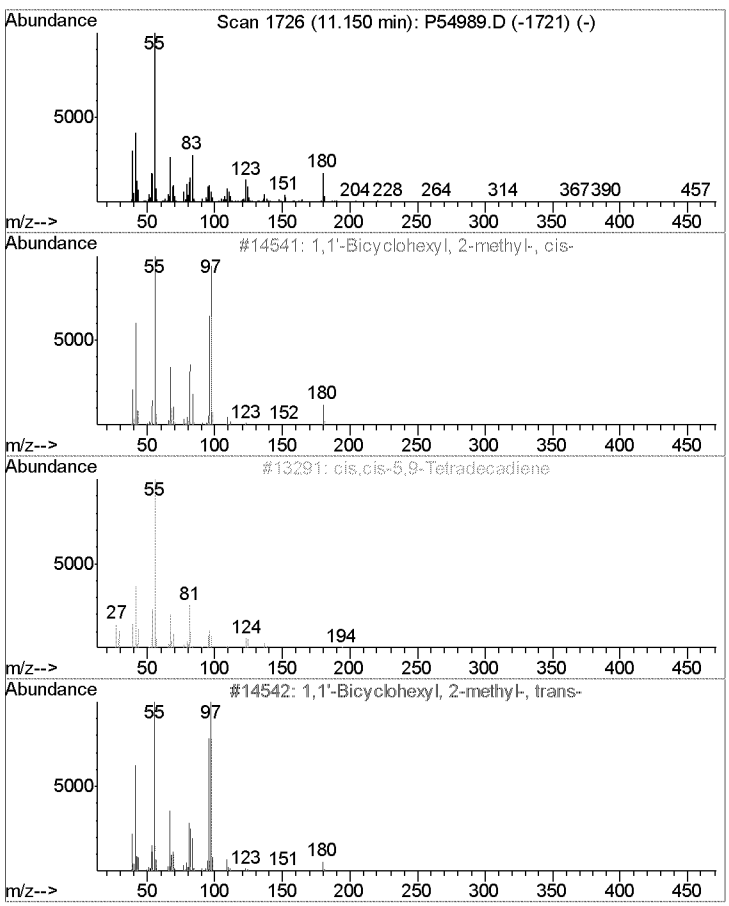
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

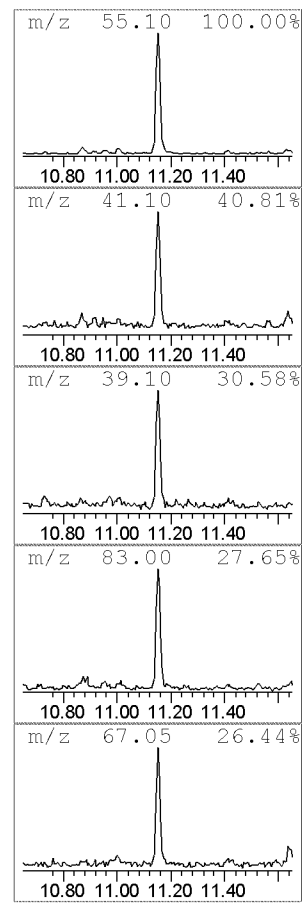
****

Peak Number 4 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.15	4.68 ppb	191909	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Bicyclohexyl, 2-methyl-, cis-	180	C13H24	050991-08-7	46
2	cis,cis-5,9-Tetradecadiene	194	C14H26	051255-62-0	43
3	1,1'-Bicyclohexyl, 2-methyl-, tr...	180	C13H24	050991-09-8	43
4	Cyclohexanemethanol	114	C7H14O	000100-49-2	38
5	1-Cyclohexylheptene	180	C13H24	114614-83-4	38





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

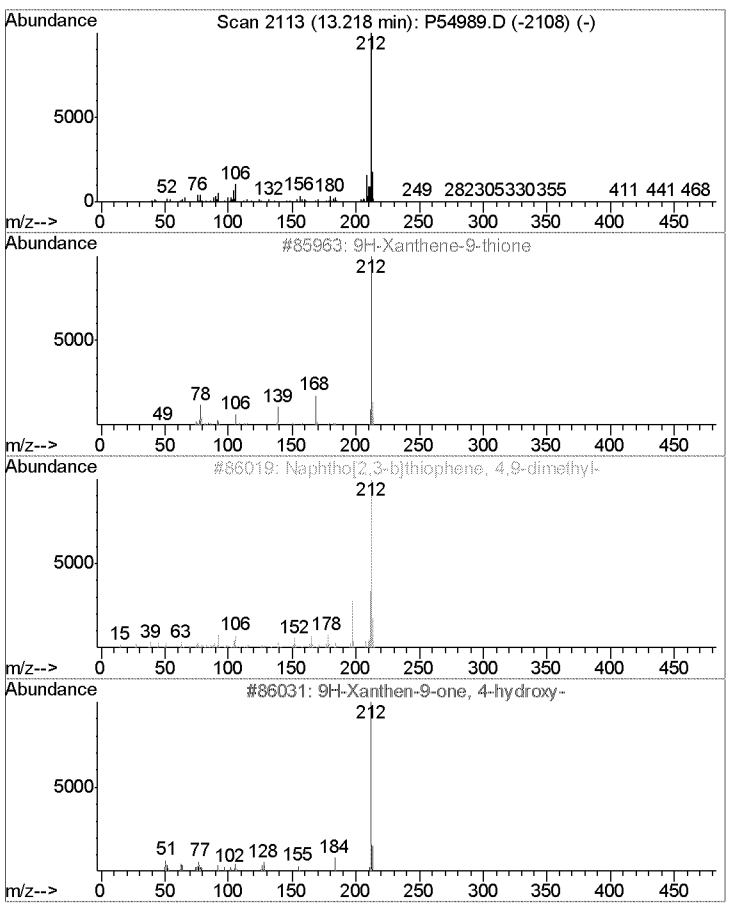
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

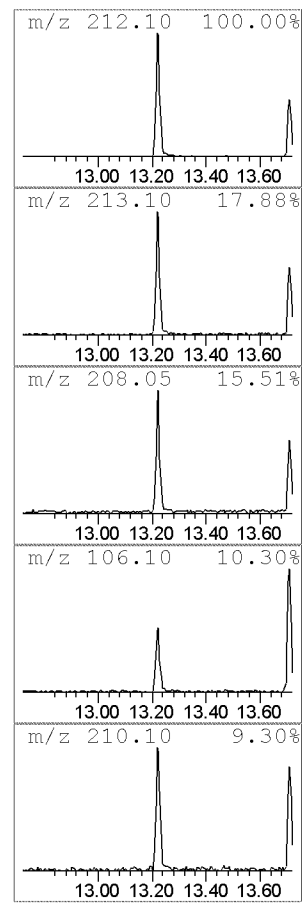
****

Peak Number 5 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.81 ppb	197380	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	53
4	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	47
5	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	45





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

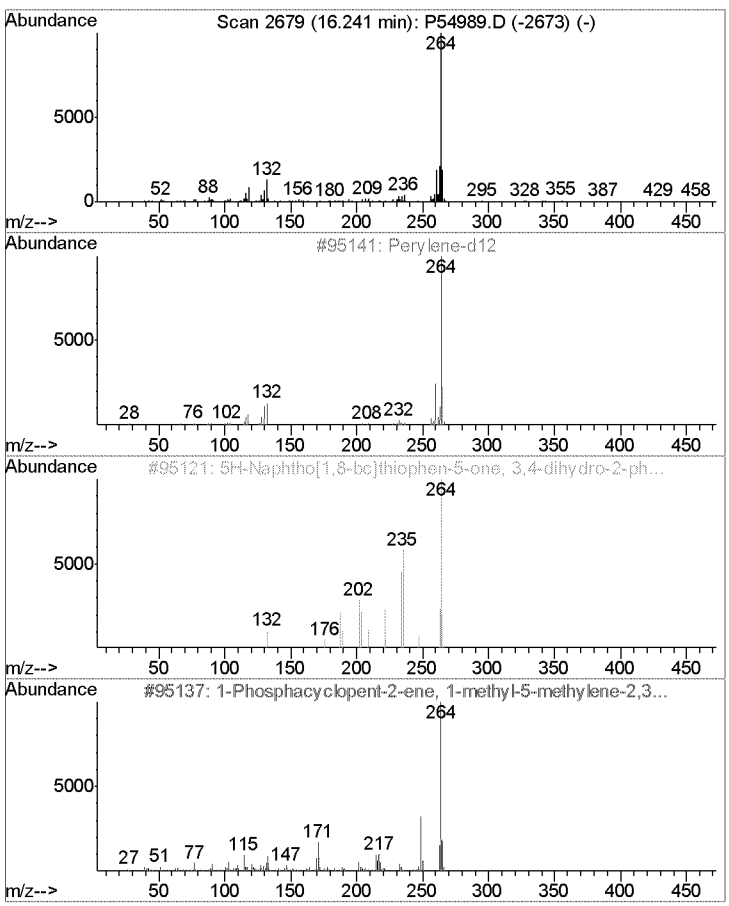
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

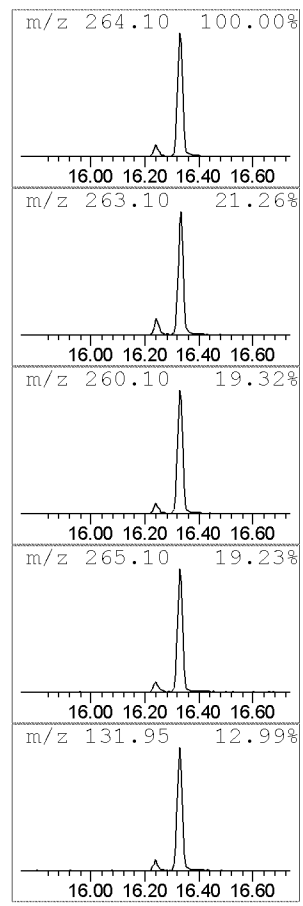
****

Peak Number 6 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.50 ppb	169954	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	93
2	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	53
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	53
5	Naphtho[2,1-b]furan-2,8-dione, d...	264	C16H24O3	029065-00-7	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54989.D
Acq On : 22 Feb 2011 12:26 pm
Operator : ninap
Sample : ja68506-1
Misc : op48193,ep2378,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.1	ppb	119424	1	4.78	1173320	40.0
Internal standard...	5.03	4.9	ppb	142985	2	4.78	1173320	40.0
Internal standard...	10.14	4.7	ppb	177422	5	9.33	1509340	40.0
unknown	11.15	4.7	ppb	191909	6	11.64	1641260	40.0
Internal standard...	13.22	4.8	ppb	197380	7	11.64	1641260	40.0
Internal standard...	16.24	4.5	ppb	169954	10	16.33	1509280	40.0

8.1.2
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:18:25 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

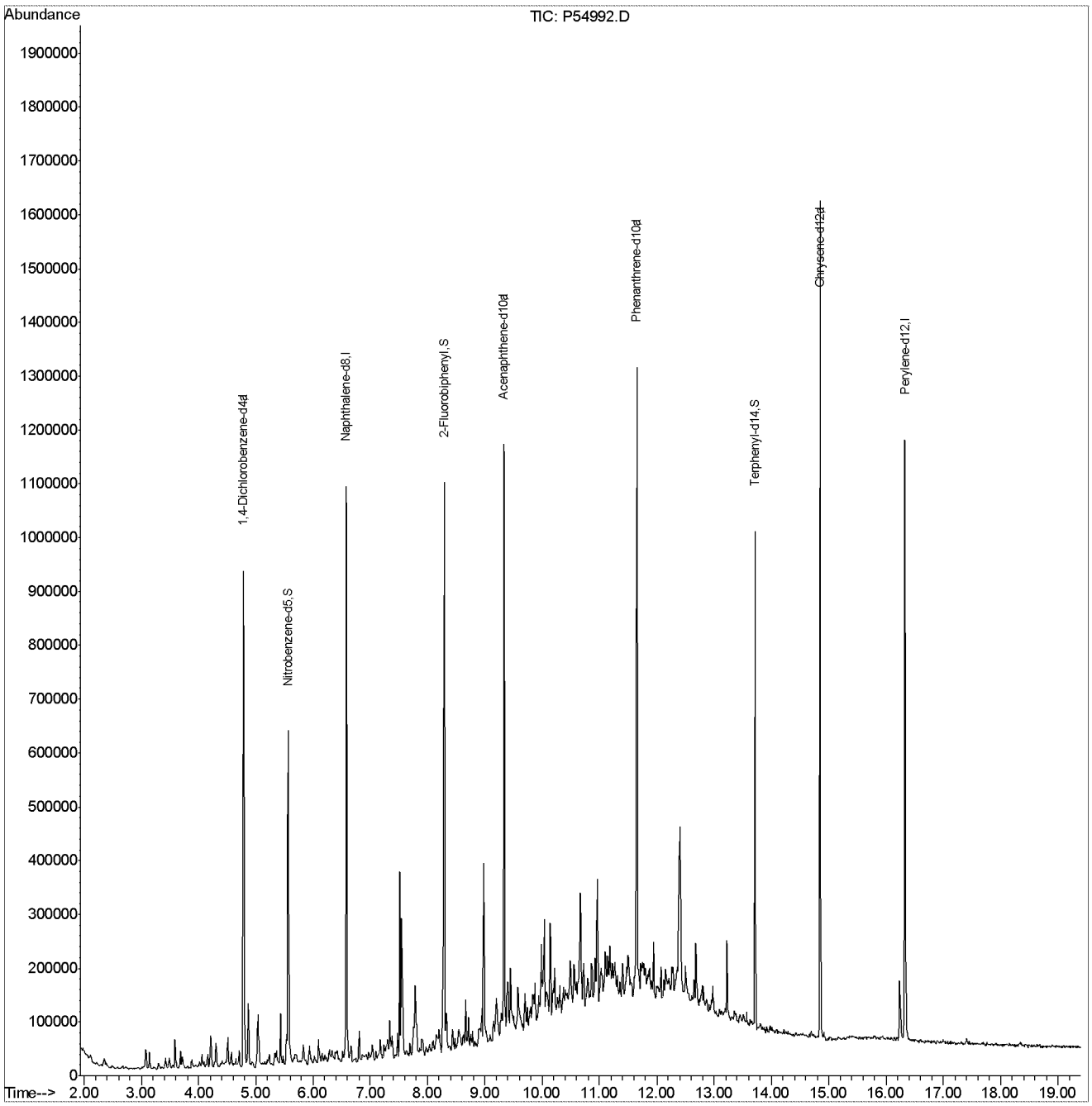
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	144025	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	504955	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	290881	40.00	ppb	-0.08
69) Phenanthrene-d10	11.65	188	461733	40.00	ppb	-0.07
83) Chrysene-d12	14.85	240	569067	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	503336	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	144025	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.65	188	461733	40.00	ppb	-0.07
106) Acenaphthene-d10a	9.33	164	290881	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	569067	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	241442	37.95	ppb	-0.07
Spiked Amount 50.000			Recovery =	75.90%		
51) 2-Fluorobiphenyl	8.29	172	360116	36.05	ppb	-0.08
Spiked Amount 50.000			Recovery =	72.10%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	241505	17.96	ppb	-0.06
Spiked Amount 50.000			Recovery =	35.92%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 22 14:18:25 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.073	204	214	221	rVV3	34797	58778	3.91%	0.280%
2	3.137	223	226	234	rVB	31588	40291	2.68%	0.192%
3	3.420	274	279	285	rBV3	19921	27841	1.85%	0.133%
4	3.484	285	291	298	rVV5	20342	29744	1.98%	0.142%
5	3.586	306	310	322	rVB2	53036	74189	4.93%	0.354%
6	3.682	322	328	331	rBV	31349	38842	2.58%	0.185%
7	3.714	331	334	344	rVB2	21051	32285	2.15%	0.154%
8	3.879	358	365	372	rBV2	16937	27565	1.83%	0.131%
9	4.152	409	416	421	rBV2	24256	35630	2.37%	0.170%
10	4.205	421	426	435	rVB2	57929	87371	5.81%	0.417%
11	4.302	435	444	452	rBV5	44230	87015	5.78%	0.415%
12	4.505	477	482	488	rVV3	52341	70997	4.72%	0.339%
13	4.569	488	494	501	rVB2	24603	34843	2.32%	0.166%
14	4.702	513	519	526	rVB2	30262	44063	2.93%	0.210%
15	4.782	526	534	543	rBV	921893	1116635	74.22%	5.326%
16	4.862	544	549	559	rVV	113233	140613	9.35%	0.671%
17	4.932	559	562	572	rVB8	12206	27857	1.85%	0.133%
18	5.033	572	581	594	rBV2	99102	201421	13.39%	0.961%
19	5.231	615	618	624	rVB5	19853	26545	1.76%	0.127%
20	5.327	632	636	638	rBV2	24647	28438	1.89%	0.136%
21	5.354	638	641	650	rVV4	29187	56271	3.74%	0.268%
22	5.429	650	655	660	rVV2	96119	118830	7.90%	0.567%
23	5.562	669	680	694	rBV	620994	871932	57.95%	4.159%
24	5.685	700	703	713	rVB8	15135	34748	2.31%	0.166%
25	5.824	725	729	743	rVB5	36112	70542	4.69%	0.336%
26	5.936	743	750	761	rBV7	35308	74016	4.92%	0.353%
27	6.091	775	779	787	rBV3	43948	72073	4.79%	0.344%
28	6.284	810	815	819	rBV5	19987	30914	2.05%	0.147%
29	6.321	819	822	831	rVB10	18384	36593	2.43%	0.175%
30	6.572	861	869	880	rVV	1068900	1337654	88.91%	6.381%
31	6.657	880	885	891	rVB7	29671	45464	3.02%	0.217%
32	6.796	906	911	918	rBV3	57626	85320	5.67%	0.407%
33	7.031	950	955	962	rVB7	28805	54762	3.64%	0.261%
34	7.170	971	981	988	rVB10	37228	76856	5.11%	0.367%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.240	989	994	997	rBV4	23912	33798	2.25%	0.161%
36	7.299	998	1005	1008	rVV6	36286	89622	5.96%	0.428%
37	7.336	1008	1012	1016	rVV3	71606	109445	7.27%	0.522%
38	7.373	1016	1019	1026	rVB	43481	57947	3.85%	0.276%
39	7.469	1027	1037	1040	rBV	47782	67107	4.46%	0.320%
40	7.512	1040	1045	1048	rBV	343152	408777	27.17%	1.950%
41	7.544	1048	1051	1062	rVB	251306	323428	21.50%	1.543%
42	7.779	1083	1095	1107	rBV5	130451	336221	22.35%	1.604%
43	7.897	1114	1117	1126	rVB6	30656	59919	3.98%	0.286%
44	7.966	1126	1130	1137	rBV9	15644	33203	2.21%	0.158%
45	8.153	1161	1165	1169	rBV6	19231	34664	2.30%	0.165%
46	8.196	1170	1173	1181	rVB6	43753	72552	4.82%	0.346%
47	8.287	1181	1190	1194	rBV	1060324	1390175	92.40%	6.631%
48	8.324	1195	1197	1202	rVB2	65684	74058	4.92%	0.353%
49	8.431	1211	1217	1222	rBV7	39499	72441	4.81%	0.346%
50	8.538	1232	1237	1247	rVB7	30571	78584	5.22%	0.375%
51	8.655	1256	1259	1265	rVV	81743	94507	6.28%	0.451%
52	8.709	1265	1269	1273	rVV2	52547	63491	4.22%	0.303%
53	8.746	1273	1276	1280	rVV4	22998	26891	1.79%	0.128%
54	8.784	1280	1283	1286	rVB3	29191	31473	2.09%	0.150%
55	8.896	1298	1304	1309	rBV10	34155	95641	6.36%	0.456%
56	8.939	1309	1312	1315	rVV3	57535	61648	4.10%	0.294%
57	8.976	1315	1319	1325	rVV2	322025	395475	26.29%	1.886%
58	9.152	1347	1352	1355	rBV5	36292	58509	3.89%	0.279%
59	9.195	1355	1360	1370	rVB5	74289	187476	12.46%	0.894%
60	9.286	1370	1377	1380	rBV6	43048	86055	5.72%	0.410%
61	9.329	1380	1385	1391	rVV	1086860	1339718	89.05%	6.391%
62	9.398	1391	1398	1402	rVV4	82848	156879	10.43%	0.748%
63	9.446	1402	1407	1414	rVV3	103733	160382	10.66%	0.765%
64	9.574	1427	1431	1444	rVB3	74302	154391	10.26%	0.736%
65	9.697	1449	1454	1458	rBV4	64682	86140	5.73%	0.411%
66	9.735	1458	1461	1465	rVB4	34853	45051	2.99%	0.215%
67	9.831	1475	1479	1483	rBV7	43812	80938	5.38%	0.386%
68	9.868	1483	1486	1491	rVB4	68887	89782	5.97%	0.428%
69	9.938	1496	1499	1502	rBV5	41873	47710	3.17%	0.228%
70	9.980	1502	1507	1511	rBV3	118465	174807	11.62%	0.834%
71	10.028	1512	1516	1520	rVB2	164575	211910	14.08%	1.011%

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.135	1532	1536	1541	rVB2	173139	236775	15.74%	1.129%
73	10.189	1542	1546	1547	rBV4	45493	57881	3.85%	0.276%
74	10.210	1548	1550	1556	rVB4	78458	91233	6.06%	0.435%
75	10.301	1564	1567	1573	rVB7	52494	74930	4.98%	0.357%
76	10.365	1575	1579	1582	rBV5	42504	61023	4.06%	0.291%
77	10.488	1599	1602	1610	rVB6	79273	136527	9.07%	0.651%
78	10.552	1610	1614	1619	rBV6	71868	120192	7.99%	0.573%
79	10.664	1630	1635	1640	rVB3	199475	277935	18.47%	1.326%
80	10.718	1641	1645	1650	rVB4	79120	105437	7.01%	0.503%
81	10.787	1655	1658	1664	rVB6	38390	59531	3.96%	0.284%
82	10.856	1668	1671	1677	rVB7	61923	99847	6.64%	0.476%
83	10.921	1679	1683	1686	rBV4	66820	99905	6.64%	0.477%
84	10.958	1686	1690	1695	rVB2	228529	279230	18.56%	1.332%
85	11.022	1698	1702	1710	rBV9	45737	90951	6.05%	0.434%
86	11.097	1712	1716	1722	rBV7	59325	96617	6.42%	0.461%
87	11.177	1729	1731	1735	rVB4	60627	59334	3.94%	0.283%
88	11.396	1768	1772	1778	rBV9	62295	85658	5.69%	0.409%
89	11.647	1812	1819	1829	rVB	1155803	1472159	97.85%	7.022%
90	11.717	1829	1832	1834	rBV2	48290	54682	3.63%	0.261%
91	11.936	1870	1873	1881	rVB2	103040	117702	7.82%	0.561%
92	12.064	1895	1897	1902	rVB3	57489	67818	4.51%	0.323%
93	12.400	1953	1960	1972	rVB3	307100	685595	45.57%	3.270%
94	12.497	1975	1978	1995	rVB10	64440	137141	9.12%	0.654%
95	12.678	2009	2012	2021	rVB2	116846	162332	10.79%	0.774%
96	13.218	2110	2113	2125	rVB	150541	195612	13.00%	0.933%
97	13.709	2201	2205	2213	rVB	924412	873249	58.04%	4.165%
98	14.847	2412	2418	2427	rVB	1556047	1504521	100.00%	7.177%
99	16.236	2673	2678	2688	rBV	110961	164654	10.94%	0.785%
100	16.327	2688	2695	2719	rVB	1118317	1407797	93.57%	6.715%

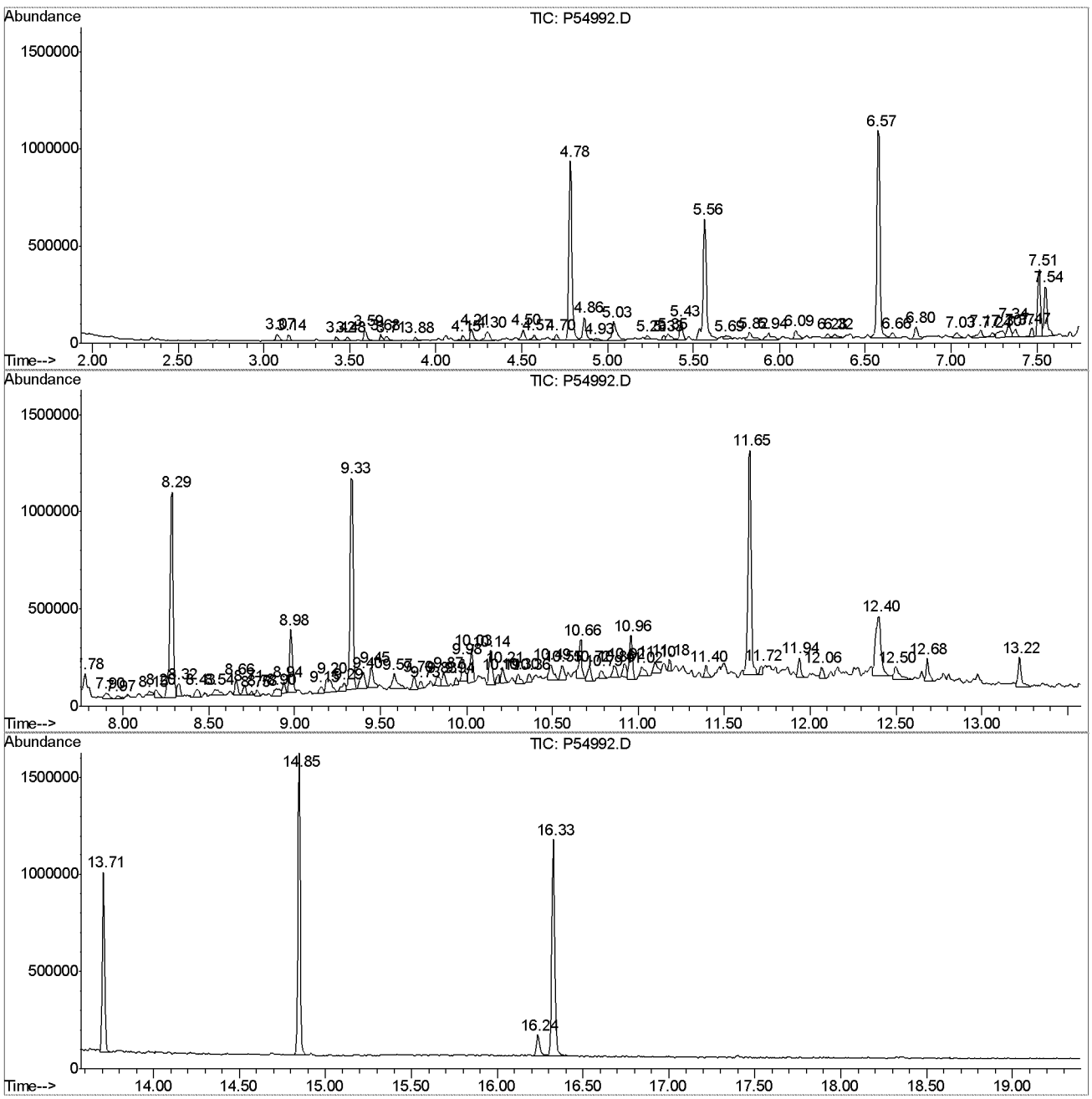
Sum of corrected areas: 20964021

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

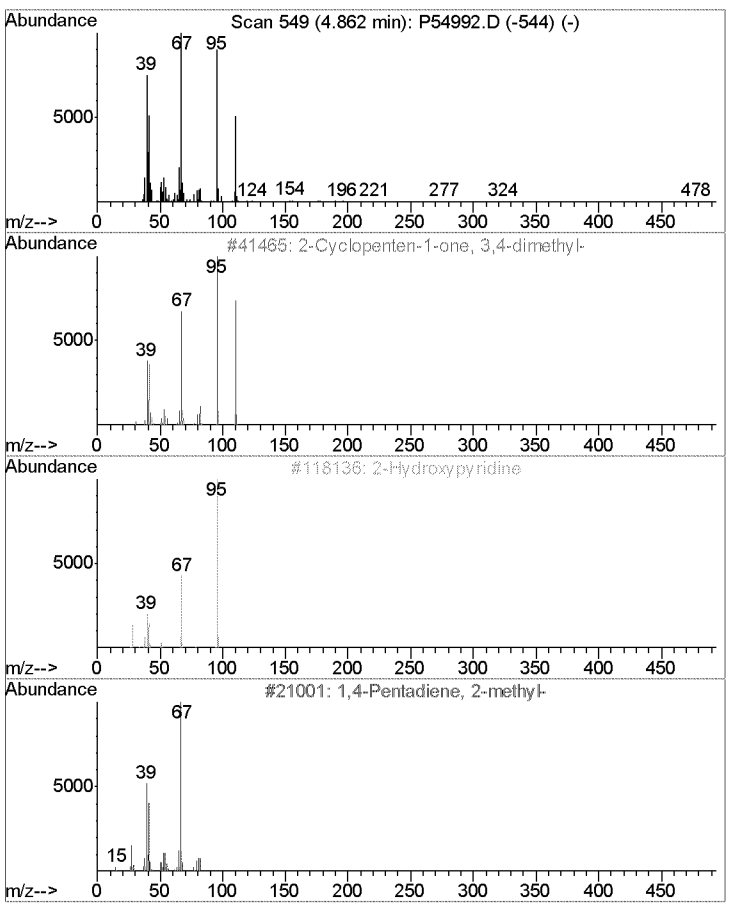
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

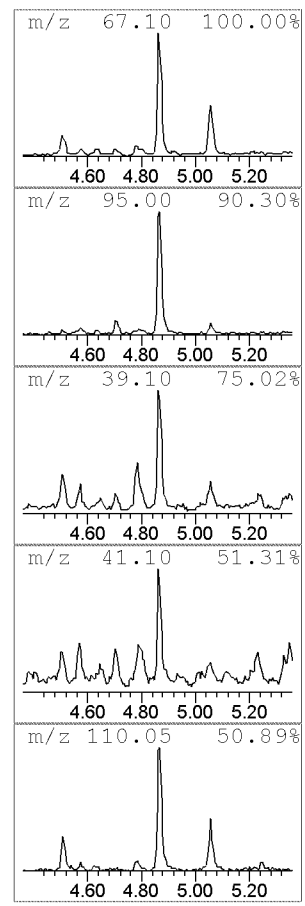
****

Peak Number 1 cycloalkane/alkene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	5.04 ppb	140613	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4-dimethyl-	110	C7H10O	030434-64-1	91
2	2-Hydroxypyridine	95	C5H5NO	000142-08-5	80
3	1,4-Pentadiene, 2-methyl-	82	C6H10	000763-30-4	76
4	1,5-Hexadiene	82	C6H10	000592-42-7	62
5	1,4-Hexadiene, 2,3-dimethyl-	110	C8H14	018669-52-8	59





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

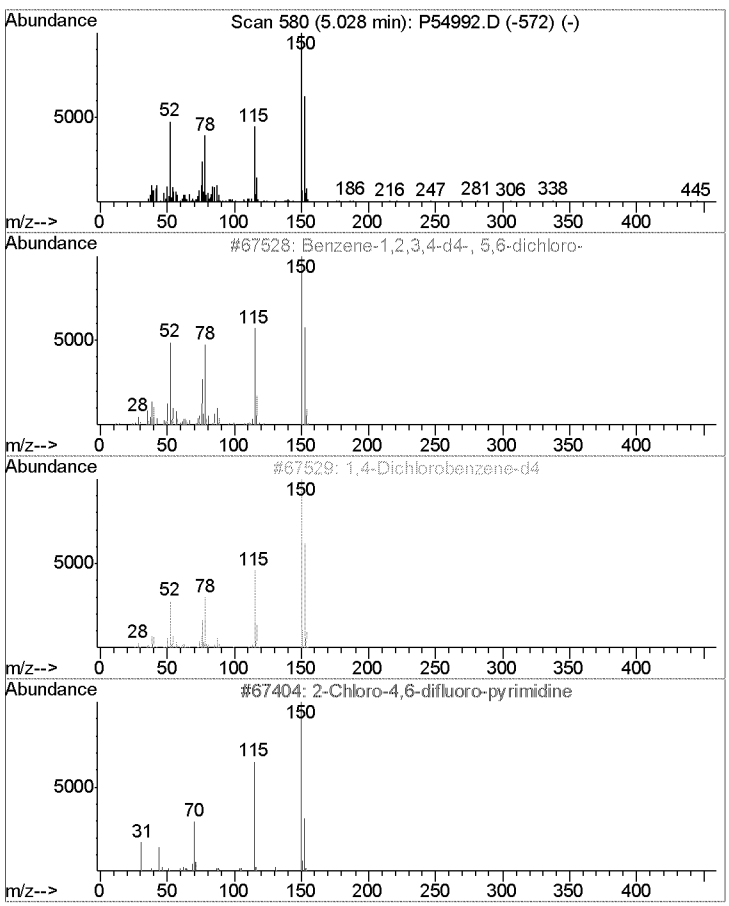
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

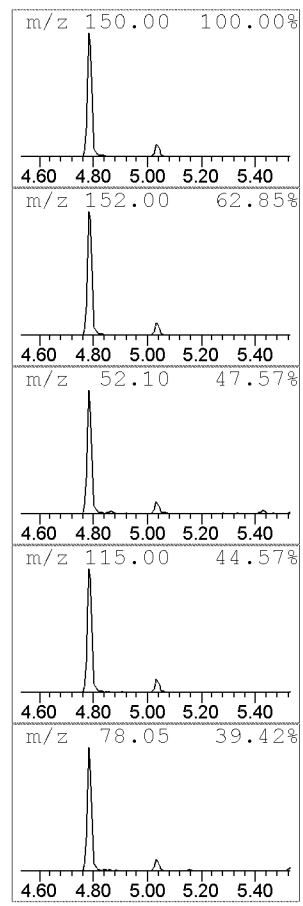
****

Peak Number 2 Internal standard added for... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.96 ppb	138385	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	91
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
4	4H-1-Benzopyran-4-one, 2,3-dihyd...	254	C16H14O3	005128-69-8	12
5	4-Nitrophenylglyoxylic acid	195	C8H5NO5	014922-36-2	11





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

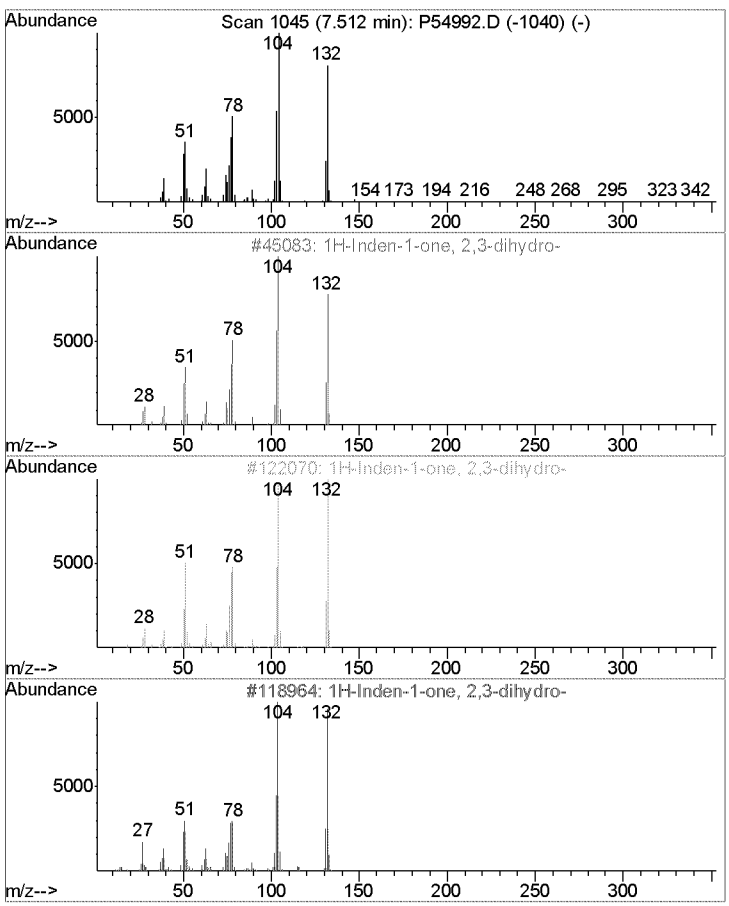
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

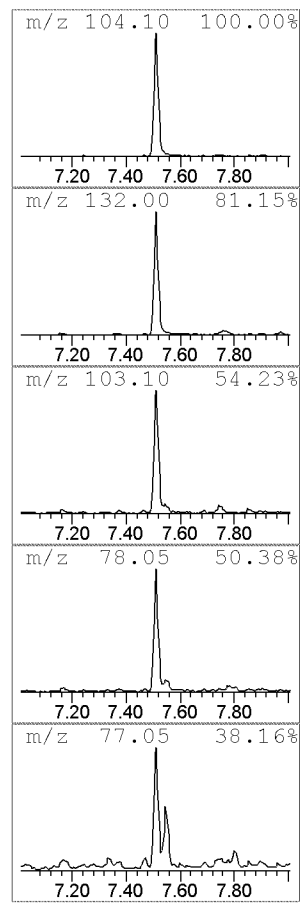
****

Peak Number 3 1H-Inden-1-one, -dihydro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.51	12.22 ppb	408777	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	98
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
4	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	94
5	Pyrazolo(2,3-a)pyridine, 7-methyl-	132	C8H8N2	034760-58-2	64





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

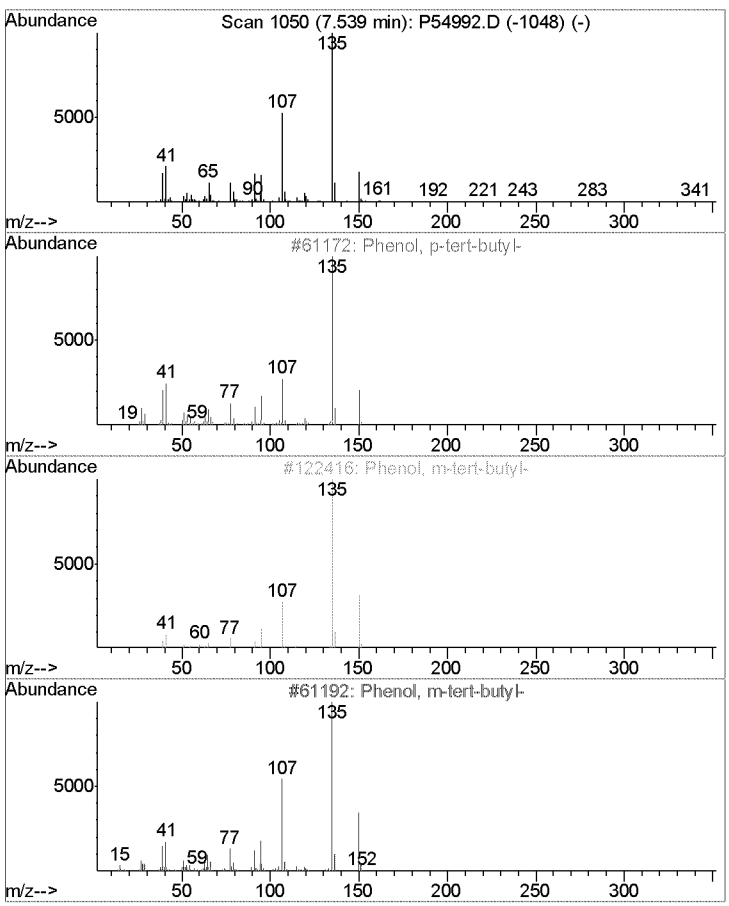
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

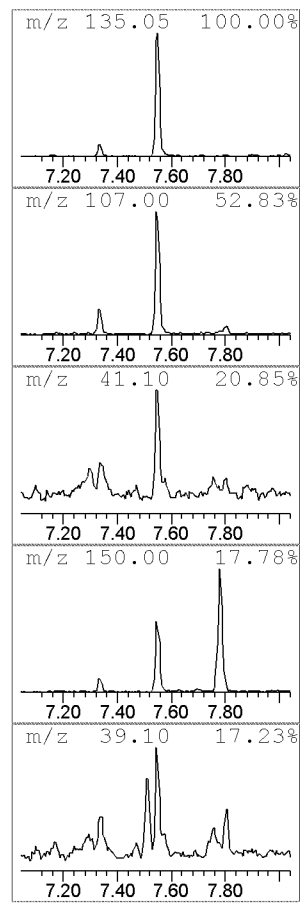
****

Peak Number 4 Phenol, -tert-butyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.54	9.67 ppb	323428	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	93
2	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
3	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	76
4	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	64
5	Ethanone, 1-(3-methoxyphenyl)-	150	C9H10O2	000586-37-8	64





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

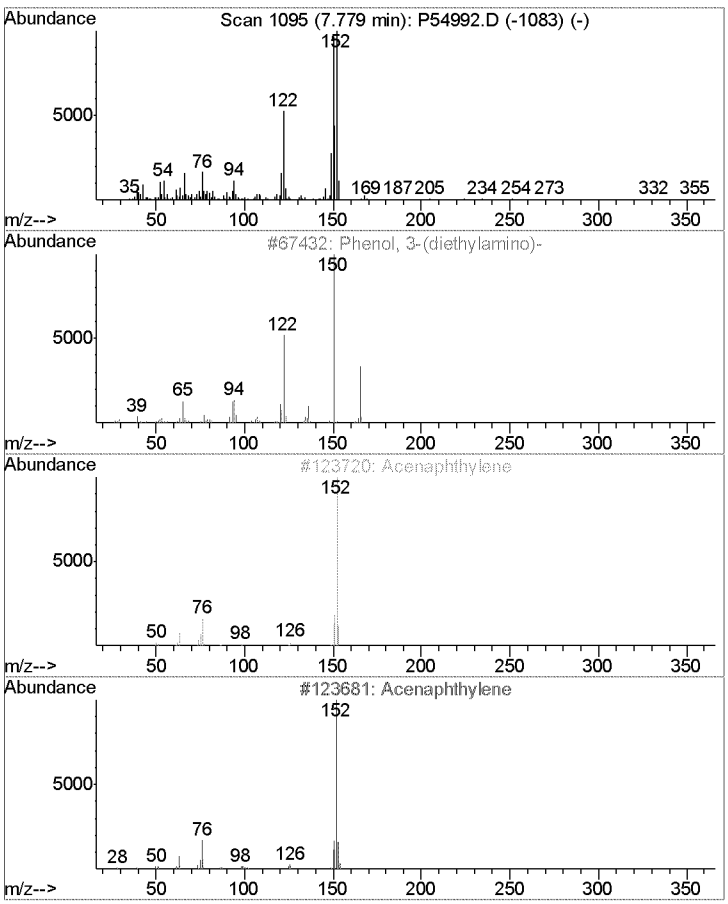
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

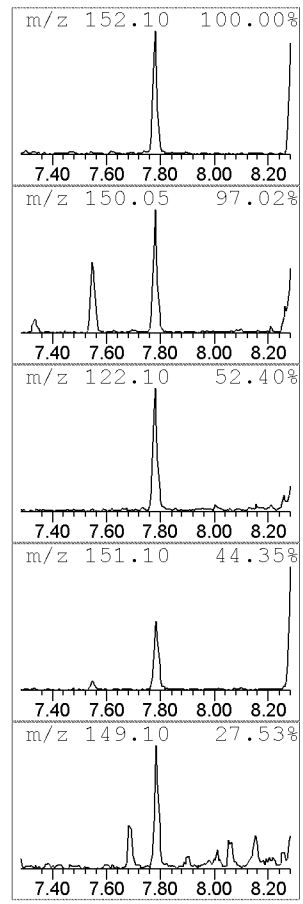
****

Peak Number 5 Internal standard added for... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.78	4.70 ppb	157020	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, 3-(diethylamino)-	165	C10H15NO	000091-68-9	25
2	Acenaphthylene	152	C12H8	000208-96-8	22
3	Acenaphthylene	152	C12H8	000208-96-8	22
4	1,4-Benzenediol, 2,3,5-trimethyl-	152	C9H12O2	000700-13-0	22
5	2,6-Dimethoxytoluene	152	C9H12O2	005673-07-4	16





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

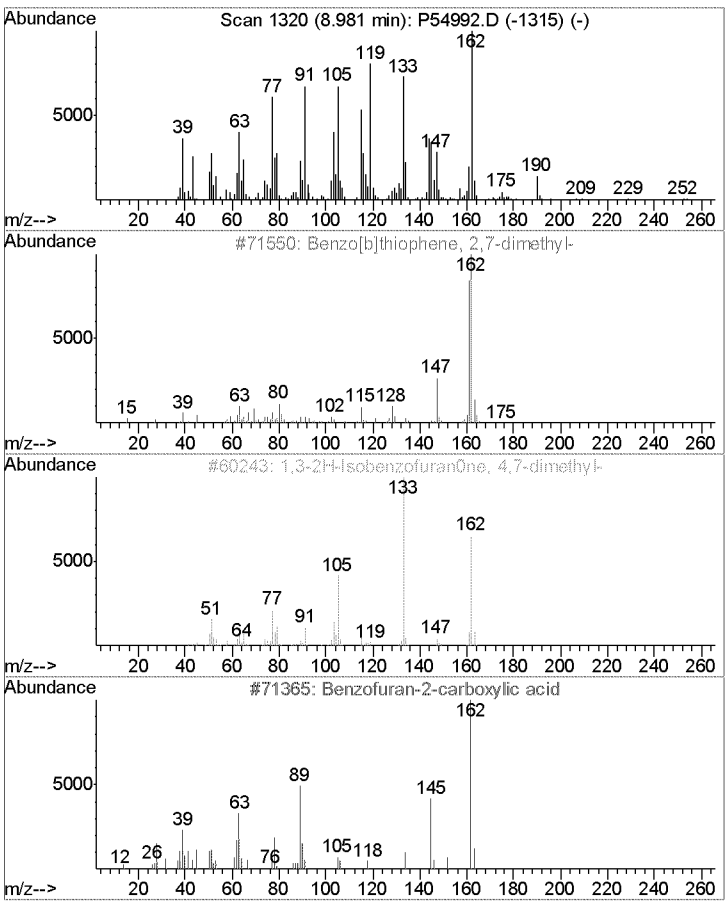
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

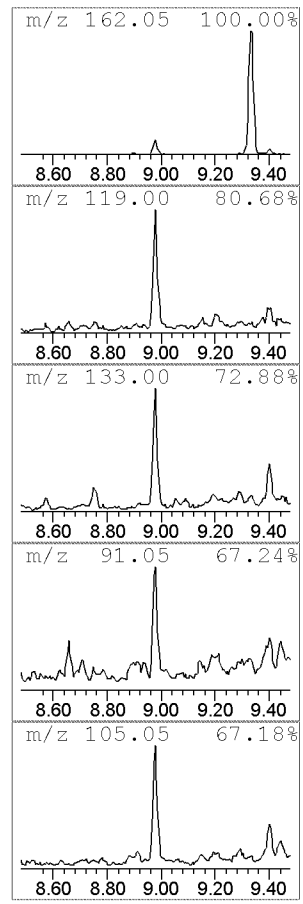
****

Peak Number 6 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.98	10.23 ppb	342605	Acenaphthene-d10	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]thiophene, 2,7-dimethyl-	162	C10H10S	016587-40-9	55
2	1,3-2H-Isobenzofuran0ne, 4,7-dim...	162	C10H10O2	1000129-71-5	55
3	Benzofuran-2-carboxylic acid	162	C9H6O3	000496-41-3	55
4	Indoxazene, 3-ethyl-	147	C9H9NO	1000131-51-1	49
5	1,4-Benzenedicarboxaldehyde, 2,5...	162	C10H10O2	007044-92-0	35





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

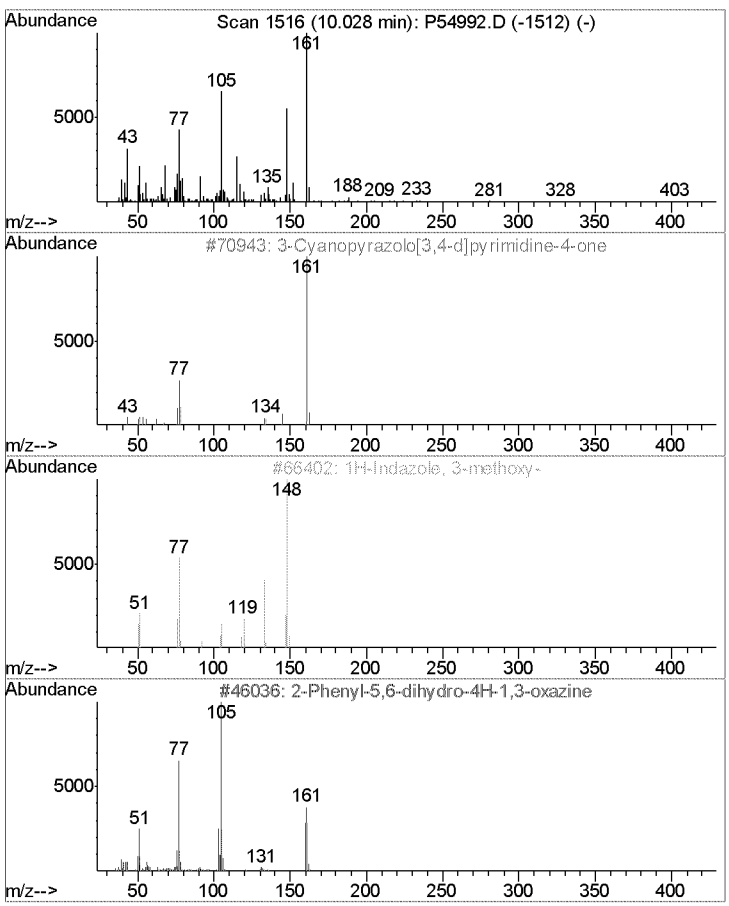
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

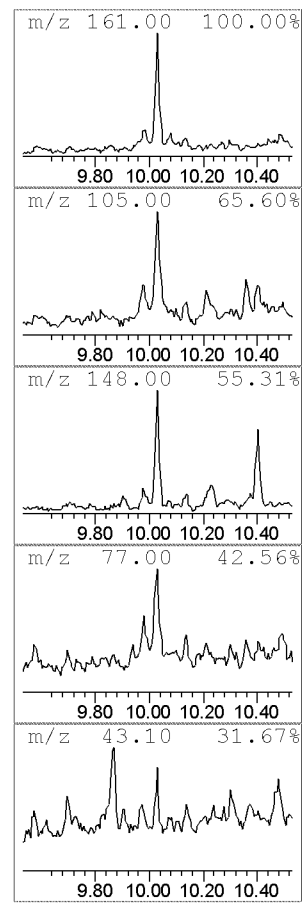
****

Peak Number 7 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.03	4.69 ppb	157055	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Cyanopyrazolo[3,4-d]pyrimidine...	161	C6H3N5O	1000212-40-6	35
2	1H-Indazole, 3-methoxy-	148	C8H8N2O	001848-41-5	27
3	2-Phenyl-5,6-dihydro-4H-1,3-oxazine	161	C10H11NO	1000223-47-5	22
4	4-Dimethylaminobenzoin	255	C16H17NO2	006317-85-7	22
5	Thiazole, 5-phenyl-	161	C9H7NS	001826-13-7	22





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

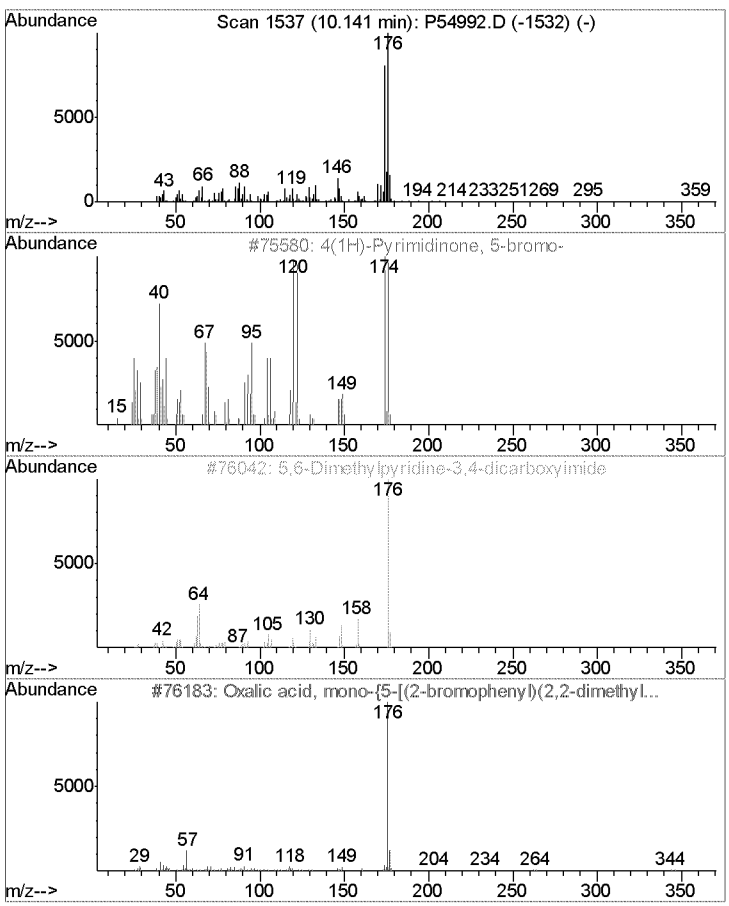
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

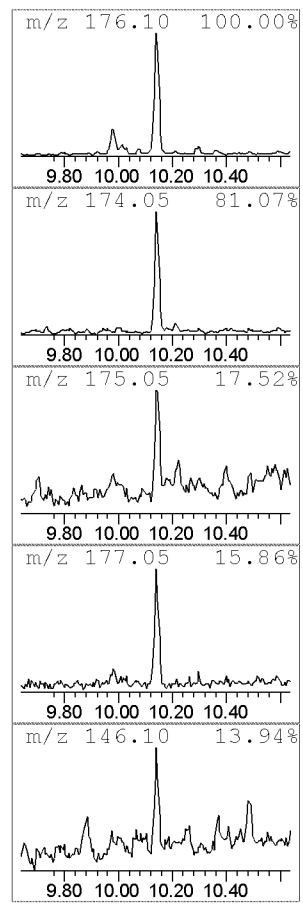
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 8 Internal standard added for... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.67 ppb	190027	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	4(1H)-Pyrimidinone, 5-bromo-	174	C4H3BrN2O	019808-30-1	50
2	5,6-Dimethylpyridine-3,4-dicarbo...	176	C9H8N2O2	1000222-05-7	27
3	Oxalic acid, mono-{5-[(2-bromoph...	535	C24H26BrNO8	1000188-38-2	27
4	7-Methoxy-1-tetralone	176	C11H12O2	006836-19-7	27
5	4-Hydrazino-1-oxo-1,2-dihydropht...	176	C8H8N4O	014161-35-4	27





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

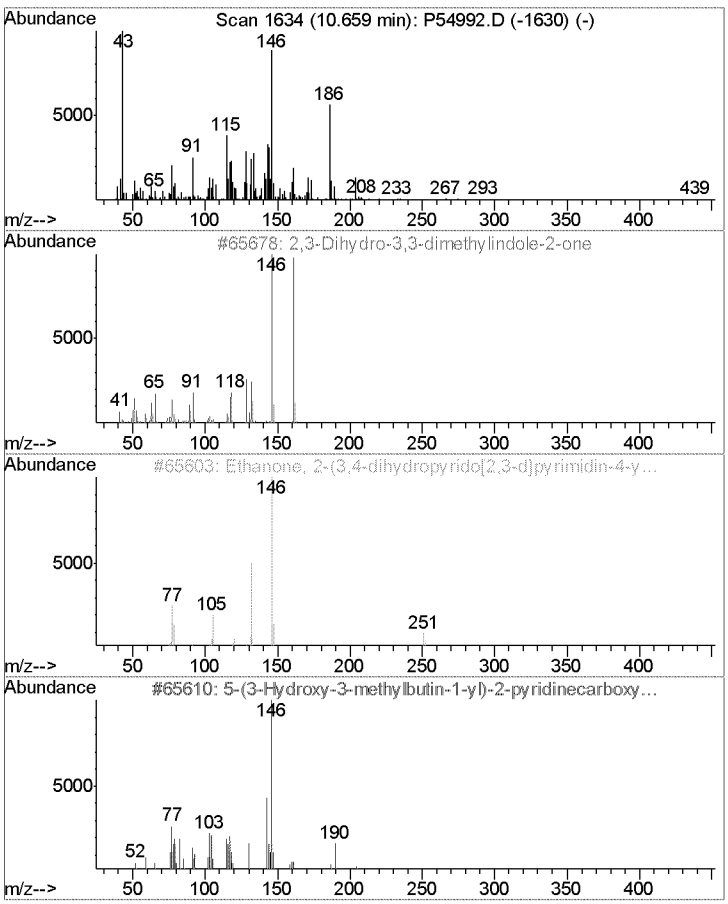
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

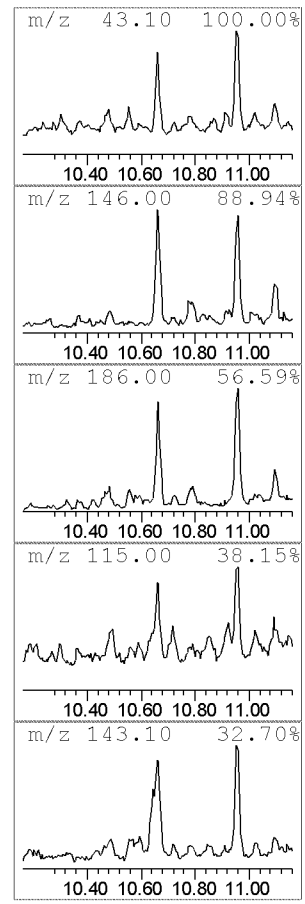
****

Peak Number 9 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.66	4.00 ppb	147309	Phenanthrene-d10	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,3-Dihydro-3,3-dimethylindole-2...	161	C10H11NO	1000128-67-0	38
2	Ethanone, 2-(3,4-dihydropyrido[2...	251	C15H13N3O	028732-76-5	30
3	5-(3-Hydroxy-3-methylbutin-1-yl)...	205	C11H11NO3	017880-58-9	27
4	1H-Isoindole, 3-methoxy-1-methyl-	161	C10H11NO	083889-38-7	25
5	4(1H)-Quinazolinone	146	C8H6N2O	000491-36-1	22





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

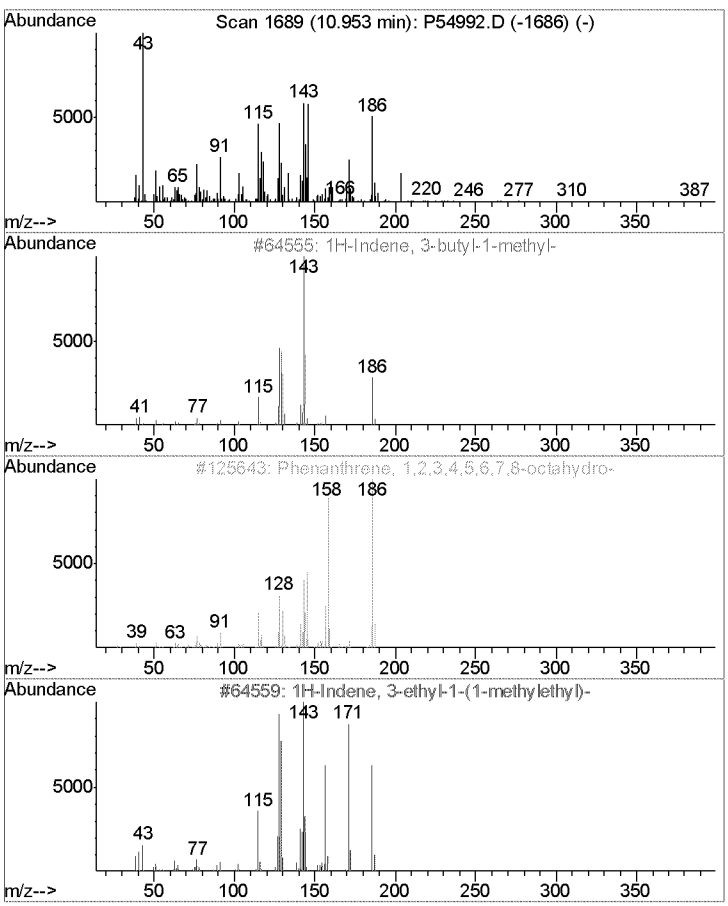
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

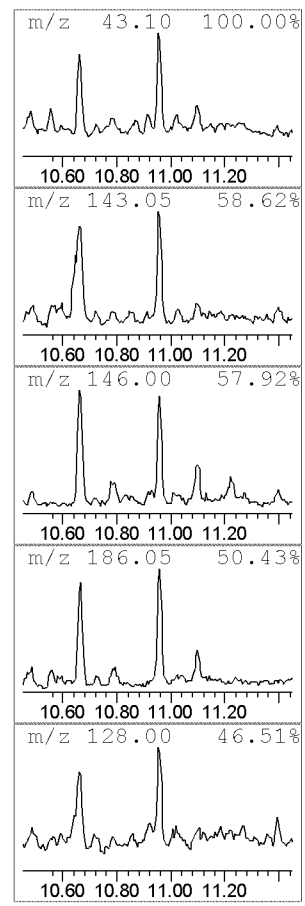
****

Peak Number 10 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.95	6.34 ppb	233210	Phenanthrene-d10	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 3-butyl-1-methyl-	186	C14H18	111400-84-1	50
2	Phenanthrene, 1,2,3,4,5,6,7,8-oc...	186	C14H18	005325-97-3	38
3	1H-Indene, 3-ethyl-1-(1-methylet...	186	C14H18	111400-85-2	27
4	Propanamide, N-[3-(acetylmethyla...	186	C9H18N2O2	067139-07-5	22
5	Detomidine	186	C12H14N2	076631-46-4	22





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

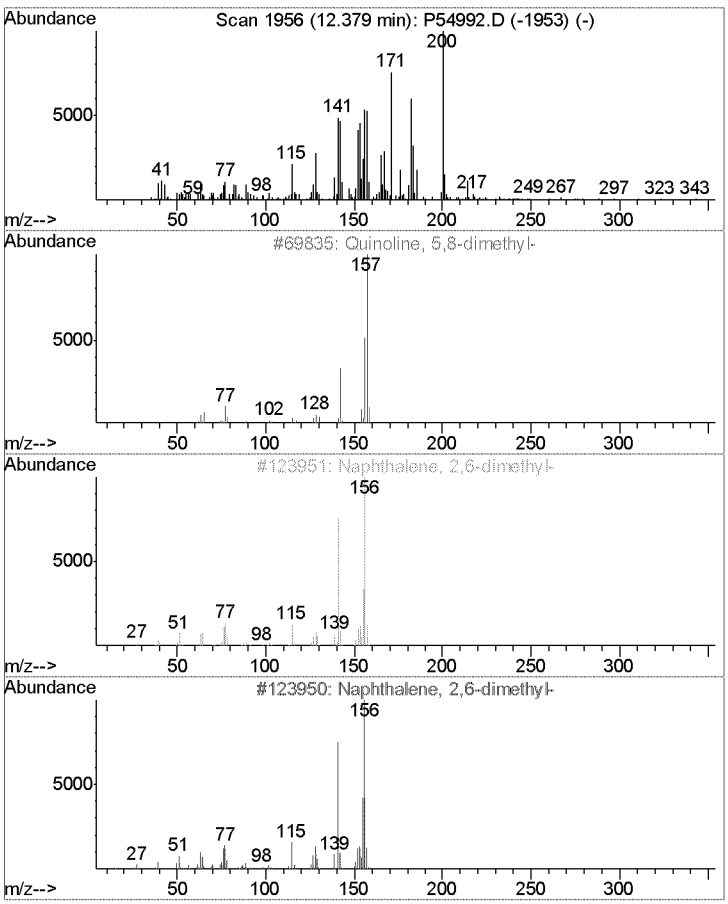
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

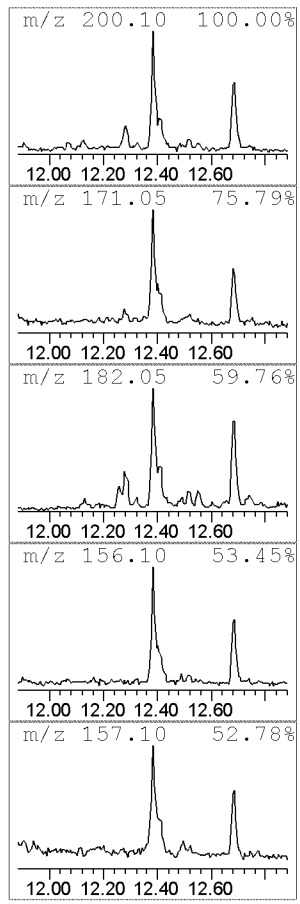
****

Peak Number 11 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	6.92 ppb	254597	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Quinoline, 5,8-dimethyl-	157	C11H11N	002623-50-9	11
2	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
3	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
4	Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	11
5	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	11





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

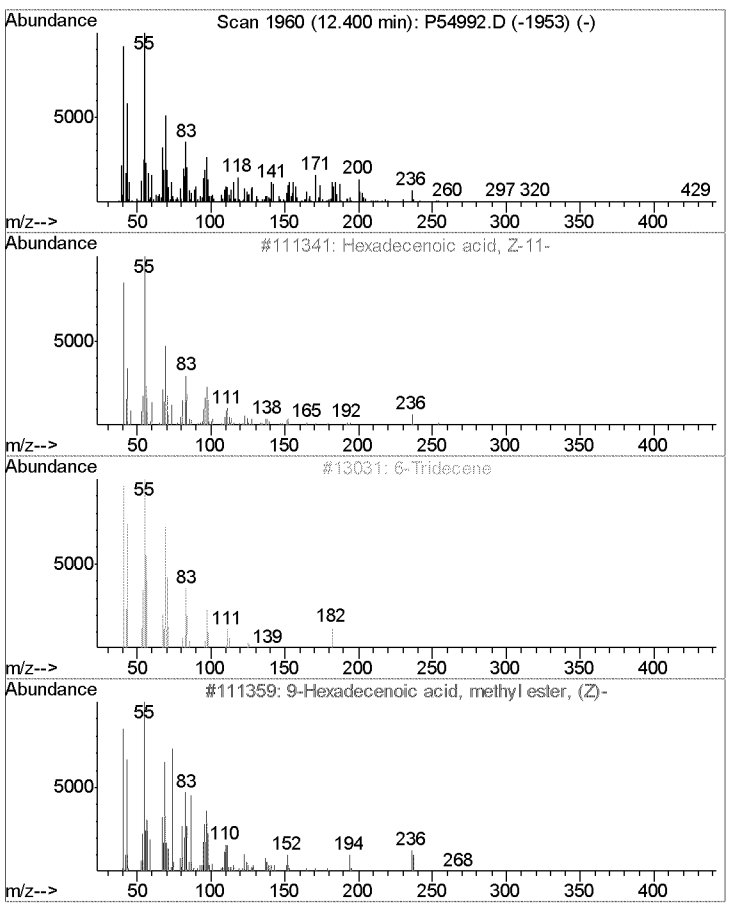
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

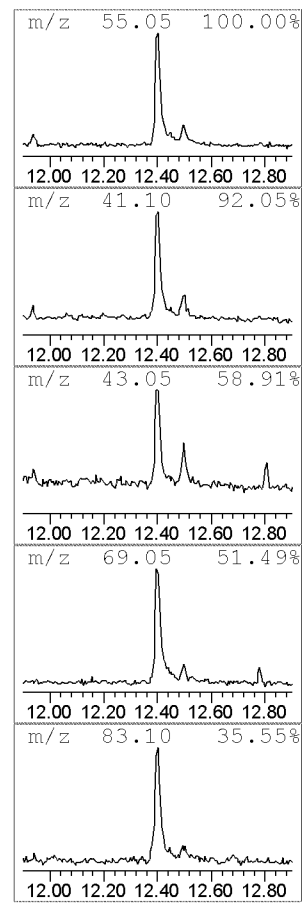
****

Peak Number 12 unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	10.11 ppb	372207	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	50
2	6-Tridecene	182	C13H26	024949-38-0	49
3	9-Hexadecenoic acid, methyl este...	268	C17H32O2	001120-25-8	45
4	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	42
5	2-Tridecene, (Z)-	182	C13H26	041446-59-7	42





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

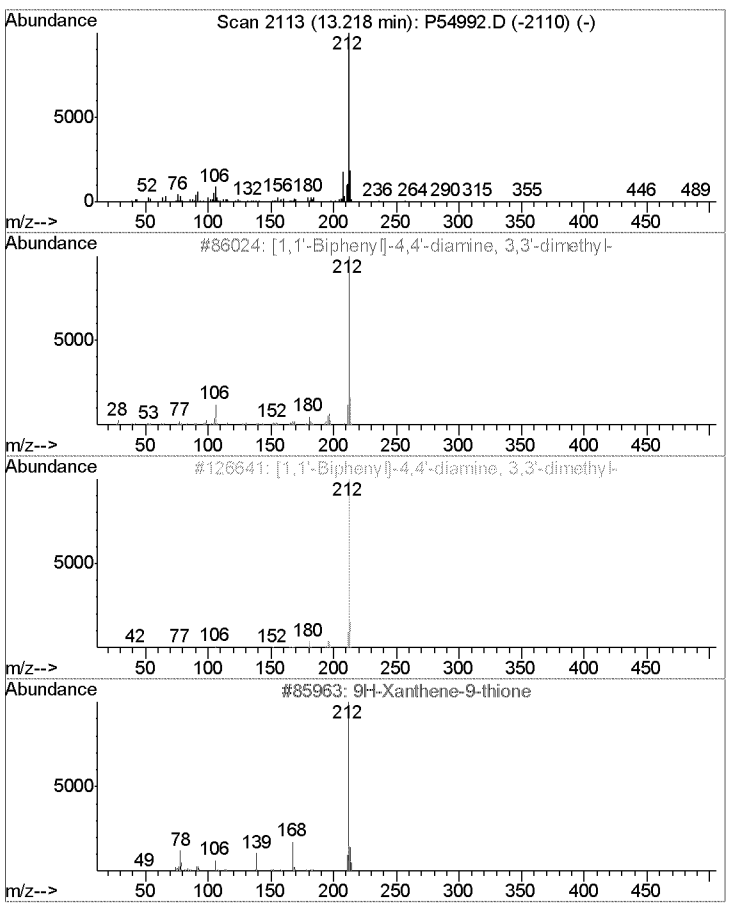
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

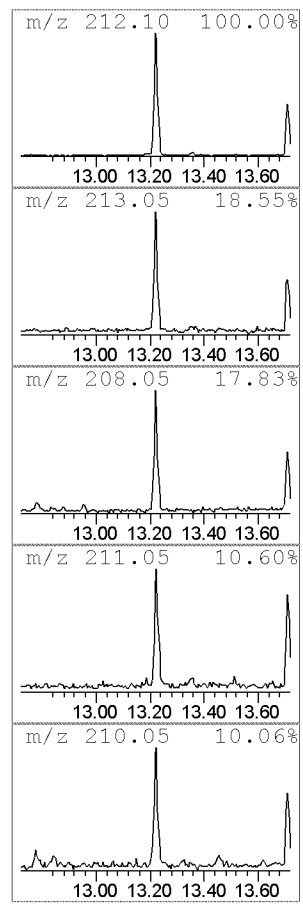
****

Peak Number 13 Internal standard added for... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.31 ppb	195612	Phenanthrene-d10a	11.65

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
5	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

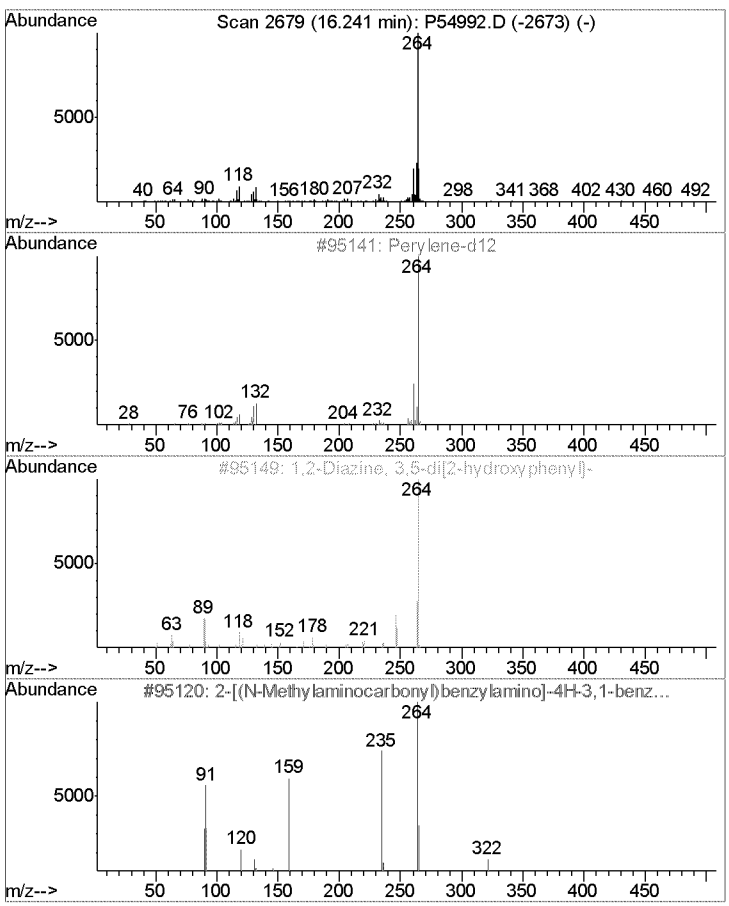
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

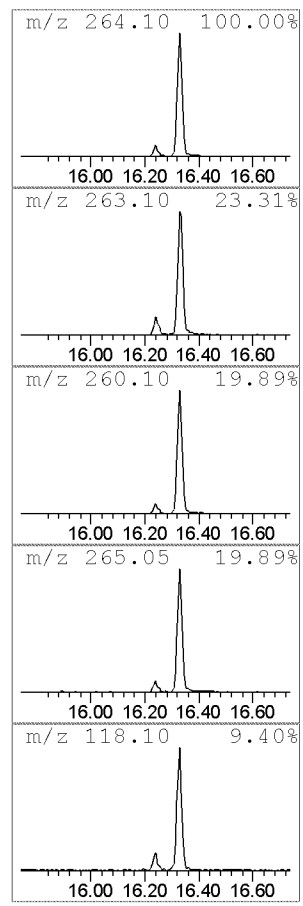
****

Peak Number 14 Internal standard added for... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.68 ppb	164654	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	96
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	58
3	2-[(N-Methylaminocarbonyl)benzyl...	322	C18H18N4O2	1000148-36-9	50
4	1H-Pyrazole-4,5-dione, 1-phenyl-...	264	C15H12N4O	016335-50-5	47
5	2-Nitro-4-methoxytrifluoroacetan...	264	C9H7F3N2O4	1000214-43-5	41





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54992.D
Acq On : 22 Feb 2011 1:52 pm
Operator : ninap
Sample : ja68506-2
Misc : op48193,ep2378,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
cycloalkane/alkene	4.86	5.0	ppb	140613	2	4.78	1116640	40.0
Internal standard...	5.03	5.0	ppb	138385	2	4.78	1116640	40.0
1H-Inden-1-one, -...	7.51	12.2	ppb	408777	3	6.57	1337650	40.0
Phenol, -tert-butyl-	7.54	9.7	ppb	323428	3	6.57	1337650	40.0
Internal standard...	7.78	4.7	ppb	157020	3	6.57	1337650	40.0
unknown	8.98	10.2	ppb	342605	4	9.33	1339720	40.0
unknown	10.03	4.7	ppb	157055	5	9.33	1339720	40.0
Internal standard...	10.14	5.7	ppb	190027	5	9.33	1339720	40.0
unknown	10.66	4.0	ppb	147309	6	11.65	1472160	40.0
unknown	10.95	6.3	ppb	233210	6	11.65	1472160	40.0
unknown	12.38	6.9	ppb	254597	7	11.65	1472160	40.0
unknown	12.40	10.1	ppb	372207	7	11.65	1472160	40.0
Internal standard...	13.22	5.3	ppb	195612	7	11.65	1472160	40.0
Internal standard...	16.24	4.7	ppb	164654	10	16.33	1407800	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:17:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

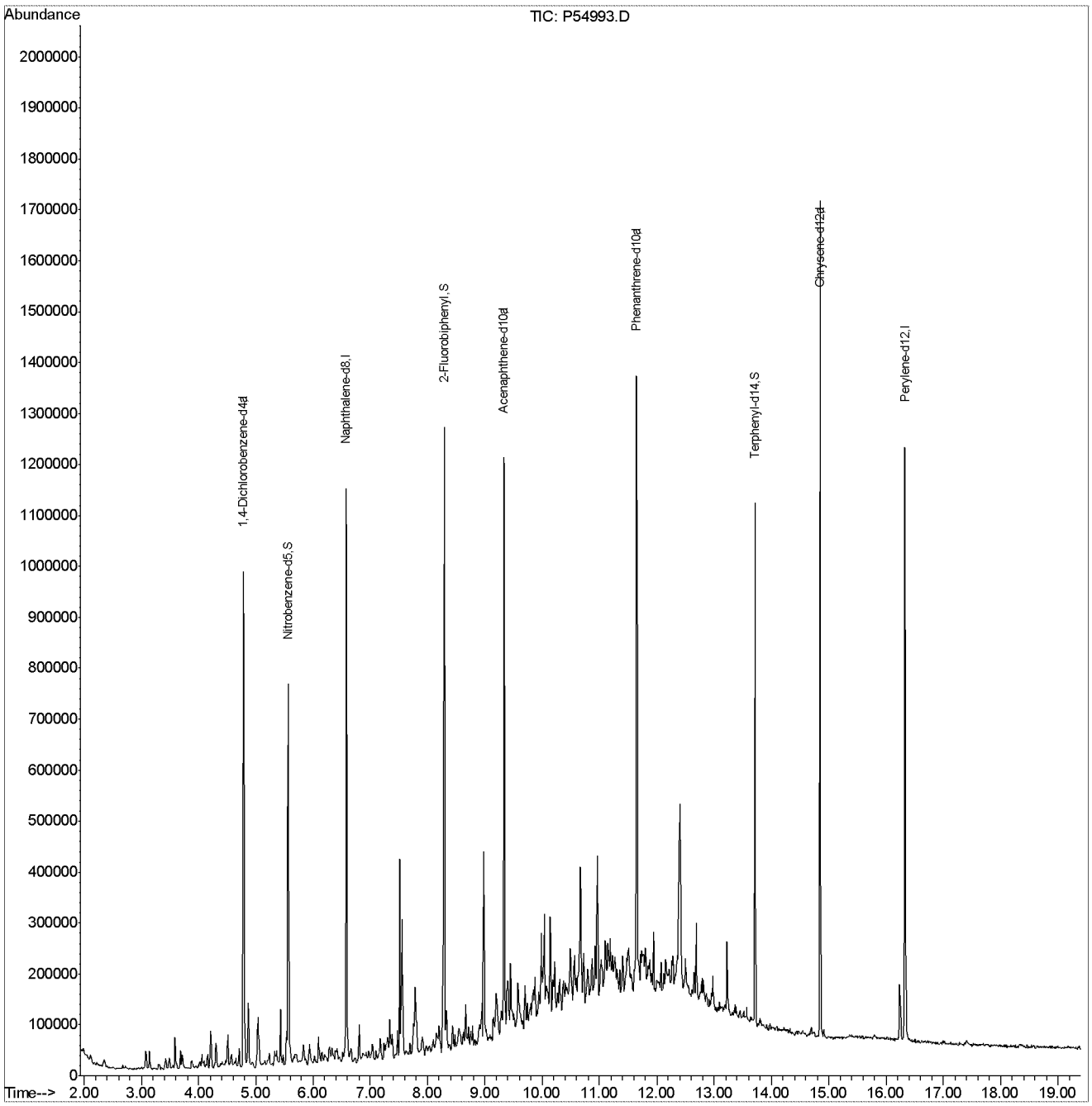
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	150848	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	530356	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	305333	40.00	ppb	-0.08
69) Phenanthrene-d10	11.64	188	471038	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	594393	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	538009	40.00	ppb	-0.08
102) 1,4-Dichlorobenzene-d4a	4.78	152	150848	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	471038	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	305333	40.00	ppb	-0.08
108) Chrysene-d12a	14.85	240	594393	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	278793	41.72	ppb	-0.08
Spiked Amount 50.000			Recovery =	83.44%		
51) 2-Fluorobiphenyl	8.29	172	415995	39.68	ppb	-0.08
Spiked Amount 50.000			Recovery =	79.36%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	268234	19.10	ppb	-0.06
Spiked Amount 50.000			Recovery =	38.20%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Feb 23 11:17:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.106	30	33	44	rVB8	17664	38247	2.24%	0.165%
2	3.073	208	214	223	rVV3	36475	65700	3.84%	0.284%
3	3.142	223	227	236	rVV2	35806	51315	3.00%	0.222%
4	3.585	306	310	321	rVB	60395	82326	4.81%	0.355%
5	3.676	322	327	331	rVV	34845	42073	2.46%	0.182%
6	3.714	331	334	343	rVB2	25683	36101	2.11%	0.156%
7	4.056	394	398	402	rVV3	26331	35153	2.05%	0.152%
8	4.152	409	416	421	rVB3	26290	39447	2.31%	0.170%
9	4.205	421	426	435	rBV	71741	103540	6.05%	0.447%
10	4.301	435	444	454	rBV5	48354	97043	5.67%	0.419%
11	4.504	477	482	488	rVB3	58823	76286	4.46%	0.329%
12	4.649	501	509	513	rVV5	18153	37634	2.20%	0.162%
13	4.702	513	519	526	rVB2	36756	51543	3.01%	0.223%
14	4.782	527	534	543	rBV	971503	1180777	69.01%	5.097%
15	4.862	543	549	557	rVB	123121	159241	9.31%	0.687%
16	5.033	572	581	592	rBV2	98635	200607	11.72%	0.866%
17	5.231	607	618	624	rVB9	22921	49611	2.90%	0.214%
18	5.354	638	641	648	rVB5	26366	44028	2.57%	0.190%
19	5.429	650	655	660	rVB	105549	124313	7.26%	0.537%
20	5.562	669	680	694	rBV	748484	1019381	59.57%	4.401%
21	5.685	701	703	713	rVB4	16288	37245	2.18%	0.161%
22	5.824	725	729	734	rVB4	31557	38484	2.25%	0.166%
23	5.936	742	750	761	rBV7	40845	81518	4.76%	0.352%
24	6.091	775	779	788	rBV4	52534	88582	5.18%	0.382%
25	6.203	796	800	809	rVB4	12660	34075	1.99%	0.147%
26	6.283	810	815	818	rBV4	28096	36965	2.16%	0.160%
27	6.321	819	822	831	rVB8	23915	44941	2.63%	0.194%
28	6.572	860	869	880	rVV	1124836	1387772	81.10%	5.991%
29	6.657	880	885	892	rVB7	25795	44038	2.57%	0.190%
30	6.796	905	911	918	rBV2	75544	109014	6.37%	0.471%
31	7.031	949	955	962	rVB9	30975	58040	3.39%	0.251%
32	7.170	971	981	988	rVB10	41168	88141	5.15%	0.380%
33	7.240	988	994	997	rBV5	33350	49909	2.92%	0.215%
34	7.298	998	1005	1008	rVV8	39333	95734	5.59%	0.413%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.336	1008	1012	1017	rVV3	74488	123556	7.22%	0.533%
36	7.373	1017	1019	1027	rVB	49118	54126	3.16%	0.234%
37	7.469	1027	1037	1040	rBV2	55749	81109	4.74%	0.350%
38	7.512	1040	1045	1048	rVV	385381	447084	26.13%	1.930%
39	7.549	1048	1052	1061	rVB	265565	339472	19.84%	1.465%
40	7.747	1083	1089	1092	rVV5	58840	108215	6.32%	0.467%
41	7.779	1092	1095	1108	rVB3	127682	228799	13.37%	0.988%
42	7.902	1114	1118	1126	rVB8	38253	79818	4.66%	0.345%
43	7.971	1126	1131	1136	rBV8	20771	43864	2.56%	0.189%
44	8.148	1161	1164	1169	rBV4	24311	39332	2.30%	0.170%
45	8.190	1169	1172	1181	rVB6	54382	106023	6.20%	0.458%
46	8.287	1181	1190	1194	rBV	1229337	1605734	93.84%	6.932%
47	8.324	1195	1197	1202	rVB2	77061	87106	5.09%	0.376%
48	8.431	1211	1217	1222	rBV7	49414	89532	5.23%	0.386%
49	8.548	1232	1239	1248	rVB7	33283	94005	5.49%	0.406%
50	8.618	1248	1252	1255	rBV5	25544	33540	1.96%	0.145%
51	8.655	1255	1259	1265	rBV2	72948	81481	4.76%	0.352%
52	8.709	1266	1269	1273	rVV5	37832	49586	2.90%	0.214%
53	8.746	1273	1276	1280	rVV3	28533	34997	2.05%	0.151%
54	8.783	1280	1283	1286	rVB2	38416	36837	2.15%	0.159%
55	8.890	1298	1303	1308	rBV9	38116	87388	5.11%	0.377%
56	8.938	1308	1312	1315	rVB3	67915	75028	4.38%	0.324%
57	8.976	1315	1319	1325	rBV	362611	441117	25.78%	1.904%
58	9.147	1347	1351	1354	rBV4	44313	69193	4.04%	0.299%
59	9.189	1355	1359	1369	rVB5	84474	222109	12.98%	0.959%
60	9.286	1371	1377	1380	rBV7	42127	82168	4.80%	0.355%
61	9.328	1380	1385	1391	rVV	1122658	1403026	81.99%	6.057%
62	9.398	1391	1398	1402	rVV5	87173	184793	10.80%	0.798%
63	9.446	1402	1407	1414	rVV3	113437	178933	10.46%	0.772%
64	9.574	1426	1431	1444	rVB3	83867	192129	11.23%	0.829%
65	9.697	1449	1454	1458	rBV4	87007	121263	7.09%	0.523%
66	9.734	1458	1461	1465	rVB5	38924	51344	3.00%	0.222%
67	9.836	1475	1480	1483	rBV6	46637	83754	4.89%	0.362%
68	9.868	1484	1486	1491	rVB4	78628	89812	5.25%	0.388%
69	9.937	1496	1499	1502	rBV5	44224	54835	3.20%	0.237%
70	9.980	1502	1507	1511	rBV5	141278	201647	11.78%	0.870%
71	10.028	1512	1516	1520	rVB2	169978	212397	12.41%	0.917%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.135	1532	1536	1541	rVB2	186137	244862	14.31%	1.057%
73	10.183	1542	1545	1548	rBV5	59118	86587	5.06%	0.374%
74	10.210	1548	1550	1556	rVB5	91085	116410	6.80%	0.503%
75	10.301	1564	1567	1574	rVB5	62546	98855	5.78%	0.427%
76	10.365	1575	1579	1583	rBV6	57334	96507	5.64%	0.417%
77	10.488	1599	1602	1610	rVB7	103120	184189	10.76%	0.795%
78	10.557	1610	1615	1619	rBV6	89364	154971	9.06%	0.669%
79	10.664	1631	1635	1640	rVB	246930	296411	17.32%	1.280%
80	10.717	1641	1645	1650	rVB4	97654	131080	7.66%	0.566%
81	10.862	1668	1672	1677	rVB6	62549	97189	5.68%	0.420%
82	10.920	1679	1683	1686	rBV3	79803	108429	6.34%	0.468%
83	10.958	1686	1690	1695	rVB	274426	328676	19.21%	1.419%
84	11.022	1697	1702	1710	rBV	63380	149146	8.72%	0.644%
85	11.097	1711	1716	1722	rBV6	91038	180206	10.53%	0.778%
86	11.145	1723	1725	1729	rVV4	61425	75565	4.42%	0.326%
87	11.182	1729	1732	1735	rVB2	62619	66373	3.88%	0.287%
88	11.396	1768	1772	1777	rBV6	71790	98599	5.76%	0.426%
89	11.642	1807	1818	1829	rBV2	1210277	1711124	100.00%	7.387%
90	11.935	1870	1873	1881	rVB2	117208	141941	8.30%	0.613%
91	12.069	1895	1898	1902	rVB3	57212	63759	3.73%	0.275%
92	12.400	1953	1960	1971	rVB4	360950	805834	47.09%	3.479%
93	12.646	2003	2006	2009	rVV2	43189	43673	2.55%	0.189%
94	12.683	2009	2013	2021	rVB	148215	179415	10.49%	0.775%
95	12.972	2065	2067	2075	rVB2	66465	87384	5.11%	0.377%
96	13.218	2110	2113	2126	rVB	146835	193916	11.33%	0.837%
97	13.709	2200	2205	2213	rVB	1026343	993039	58.03%	4.287%
98	14.847	2413	2418	2427	rBV	1641327	1576521	92.13%	6.806%
99	16.236	2674	2678	2687	rVB	107712	153890	8.99%	0.664%
100	16.327	2688	2695	2710	rVB	1165313	1456501	85.12%	6.287%

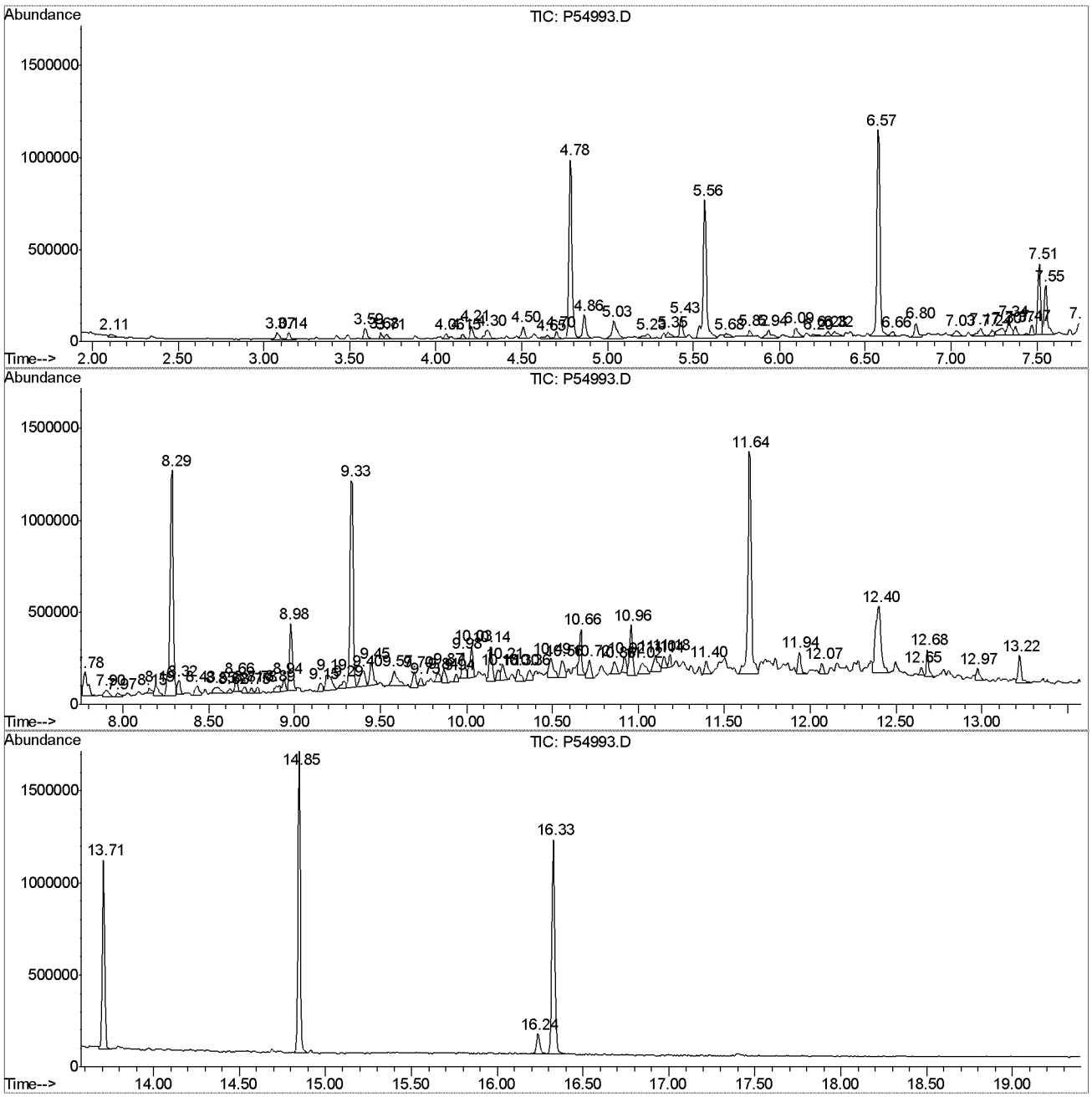
Sum of corrected areas: 23165028

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

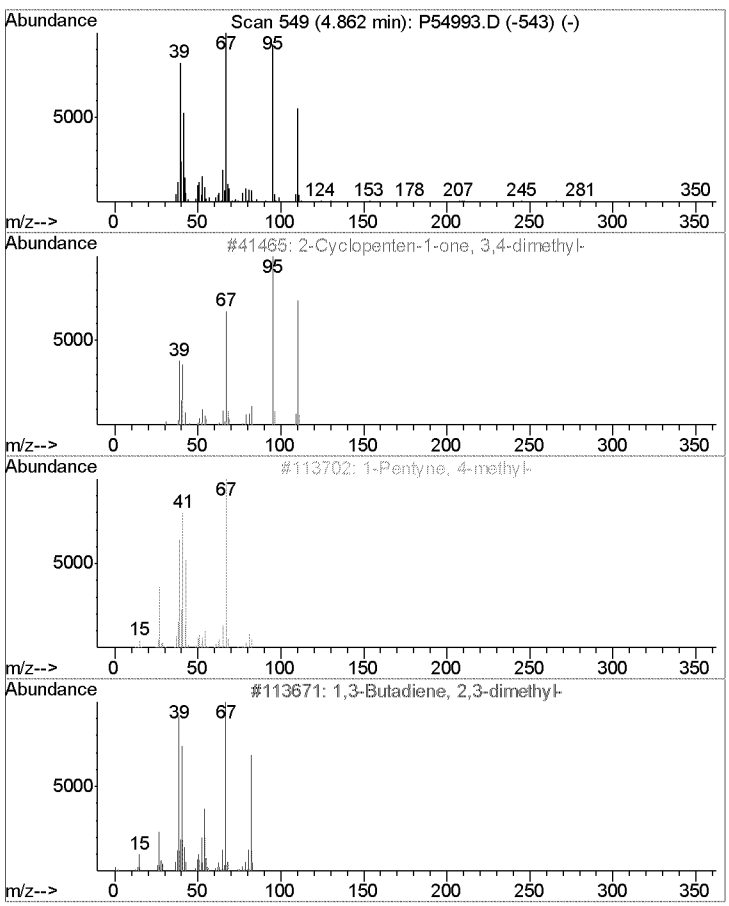
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

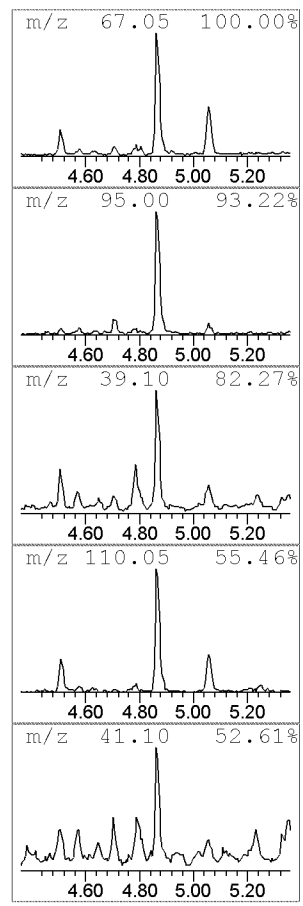
****

Peak Number 1 unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.86	5.39 ppb	159241	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclopenten-1-one, 3,4-dimethyl-	110	C7H10O	030434-64-1	91
2	1-Pentyne, 4-methyl-	82	C6H10	007154-75-8	68
3	1,3-Butadiene, 2,3-dimethyl-	82	C6H10	000513-81-5	59
4	Spiropentane	68	C5H8	000157-40-4	58
5	Cyclopropane, (1-methylethenyl)-	82	C6H10	004663-22-3	53





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

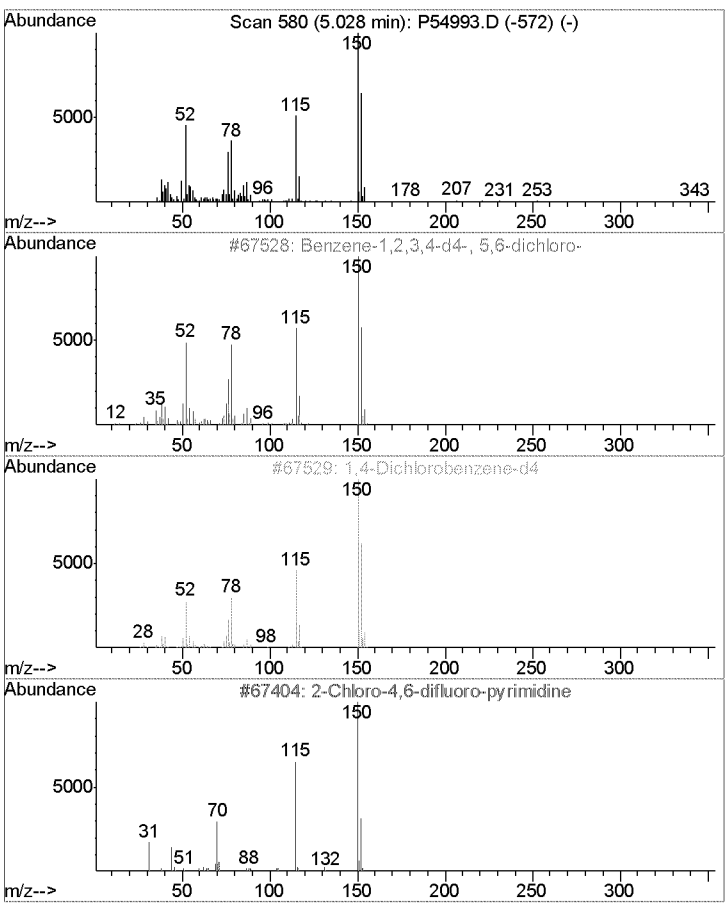
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

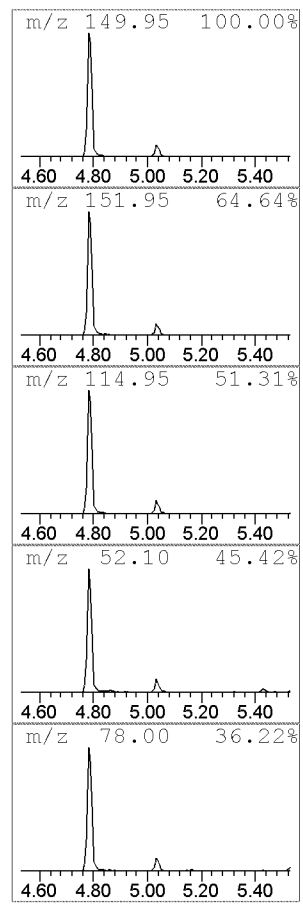
****

Peak Number 2 Internal standard added for... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.68 ppb	138172	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	12
4	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	10
5	3-Methyl-4,4'-bi(1,2,4-triazole)	150	C5H6N6	1000146-57-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

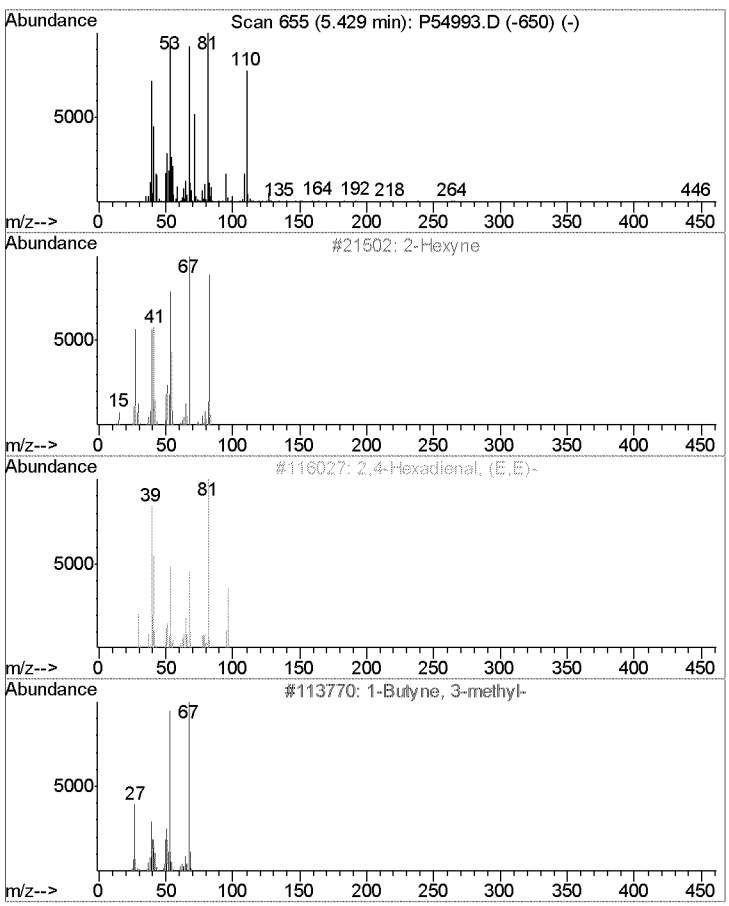
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

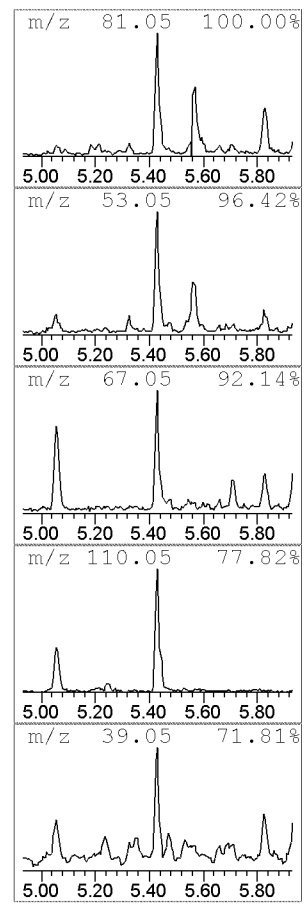
****

Peak Number 3 unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.43	4.21 ppb	124313	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Hexyne	82	C6H10	000764-35-2	64
2	2,4-Hexadienal, (E,E)-	96	C6H8O	000142-83-6	59
3	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	49
4	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	49
5	1-Butyne, 3-methyl-	68	C5H8	000598-23-2	47





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

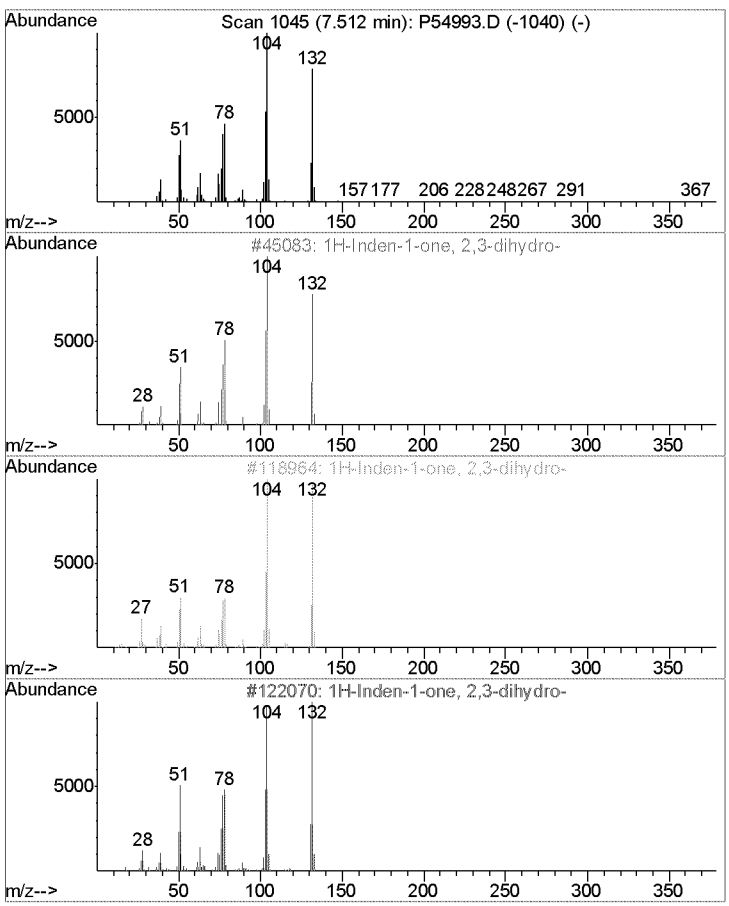
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

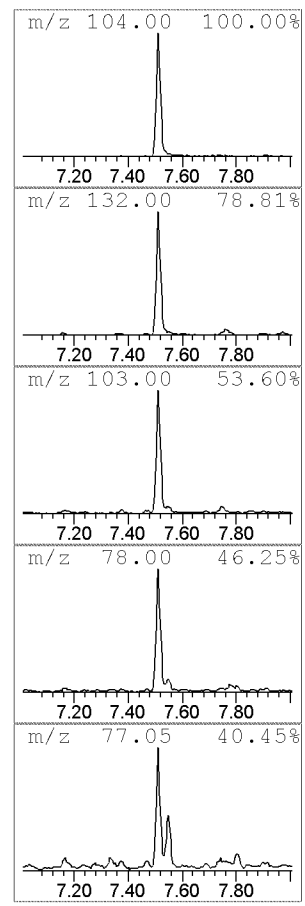
****

Peak Number 4 1H-Inden-1-one, -dihydro- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.51	12.89 ppb	447084	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	98
2	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	97
3	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
4	1H-Inden-1-one, 2,3-dihydro-	132	C9H8O	000083-33-0	96
5	Styrene	104	C8H8	000100-42-5	64





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

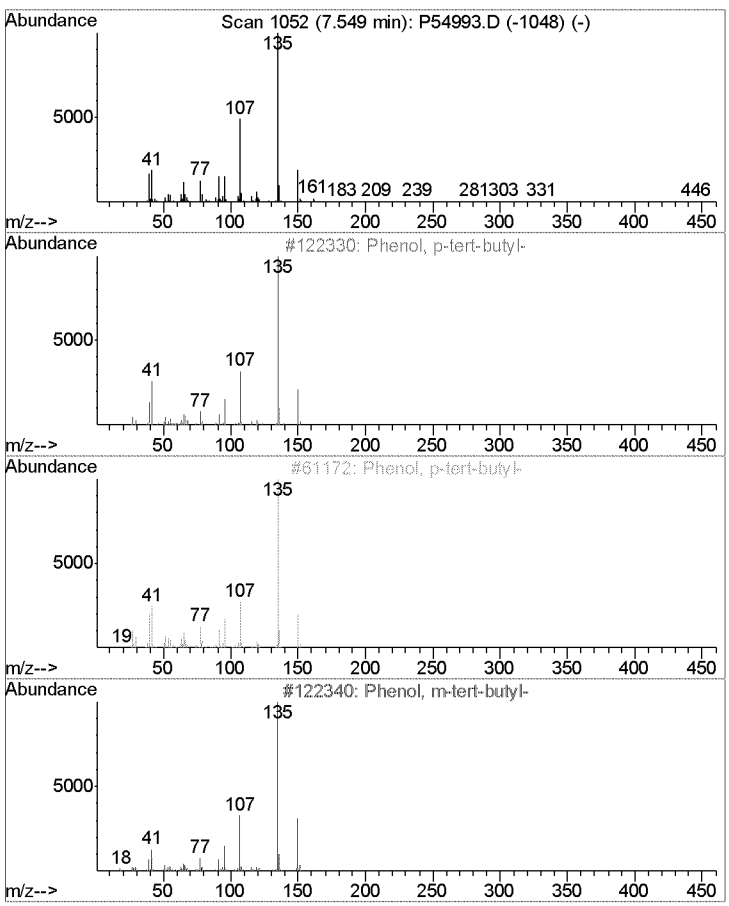
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

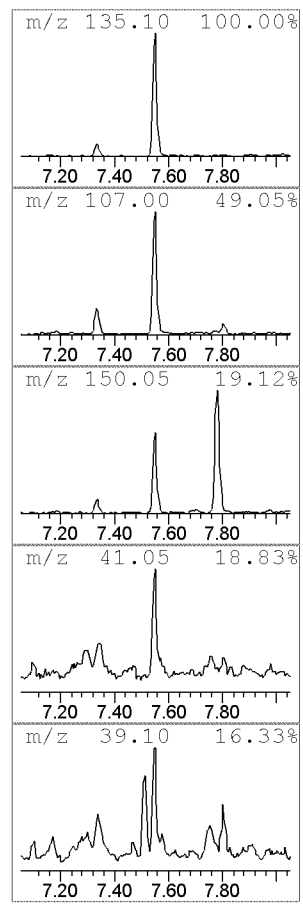
****

Peak Number 5 Phenol, -tert-butyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.55	9.78 ppb	339472	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	87
2	Phenol, p-tert-butyl-	150	C10H14O	000098-54-4	87
3	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
4	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	86
5	Phenol, m-tert-butyl-	150	C10H14O	000585-34-2	83





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

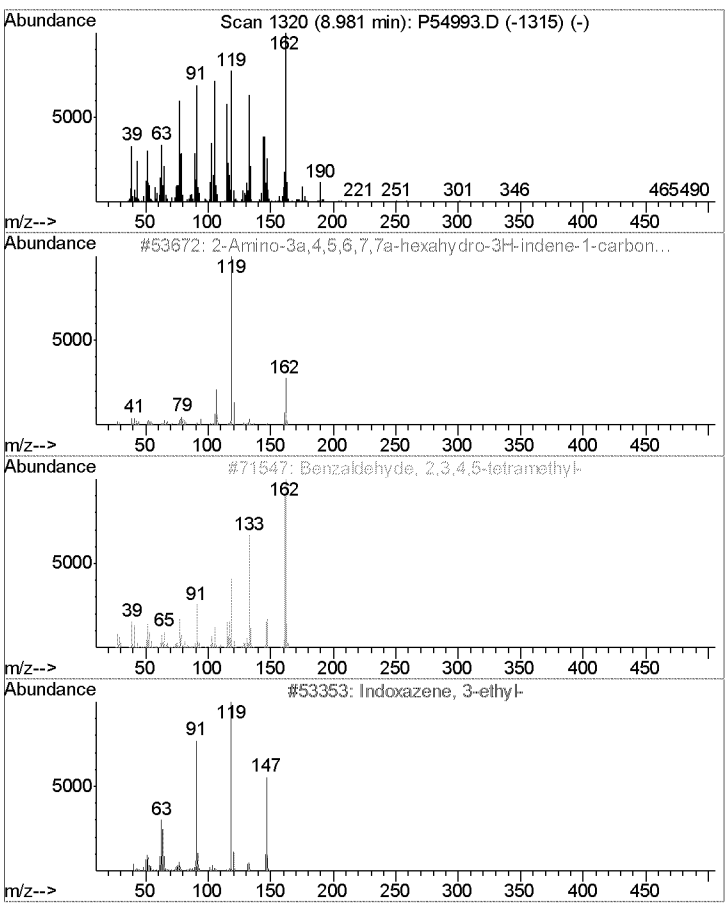
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

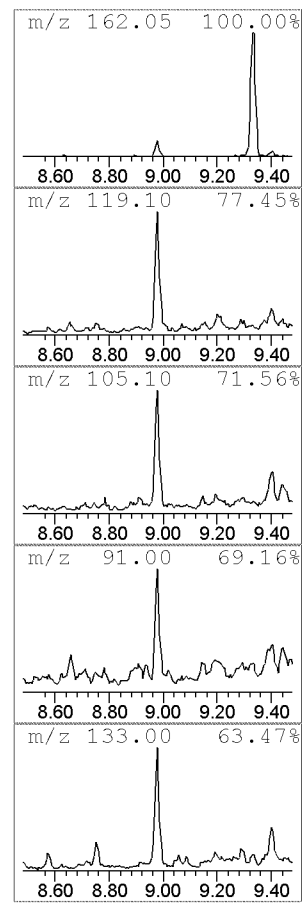
****

Peak Number 6 unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.98	12.58 ppb	441117	Acenaphthene-d10	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Amino-3a,4,5,6,7,7a-hexahydro-...	162	C10H14N2	1000185-29-8	42
2	Benzaldehyde, 2,3,4,5-tetramethyl-	162	C11H14O	029344-95-4	38
3	Indoxazene, 3-ethyl-	147	C9H9NO	1000131-51-1	38
4	Anisole, p-(1-ethylvinyl)-	162	C11H14O	021758-19-0	30
5	Benzene, 1-(2-methoxy-1-propenyl...	162	C11H14O	053291-92-2	30





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

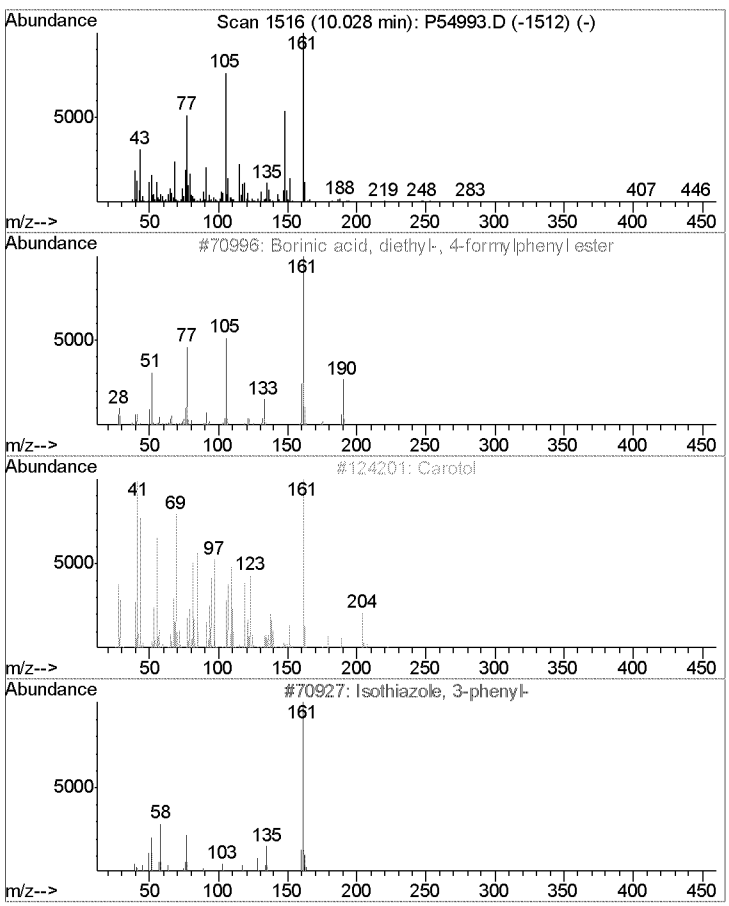
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

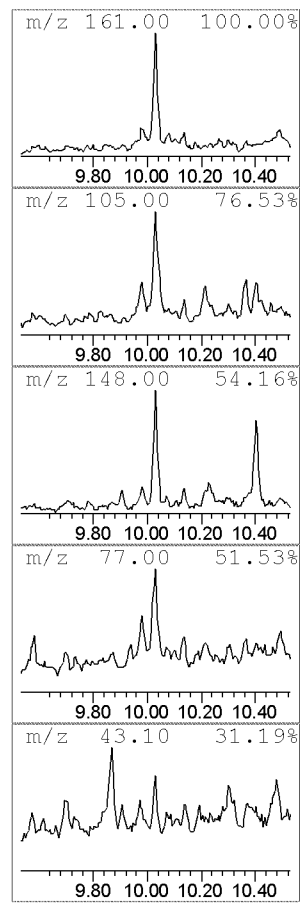
****

Peak Number 7 unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.03	4.33 ppb	151705	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Borinic acid, diethyl-, 4-formyl...	190	C11H15BO2	061142-75-4	43
2	Carotol	222	C15H26O	000465-28-1	38
3	Isothiazole, 3-phenyl-	161	C9H7NS	010514-34-8	35
4	2-(3-Thienyl)pyridine	161	C9H7NS	021298-55-5	35
5	3-Cyanopyrazolo[3,4-d]pyrimidine...	161	C6H3N5O	1000212-40-6	35





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

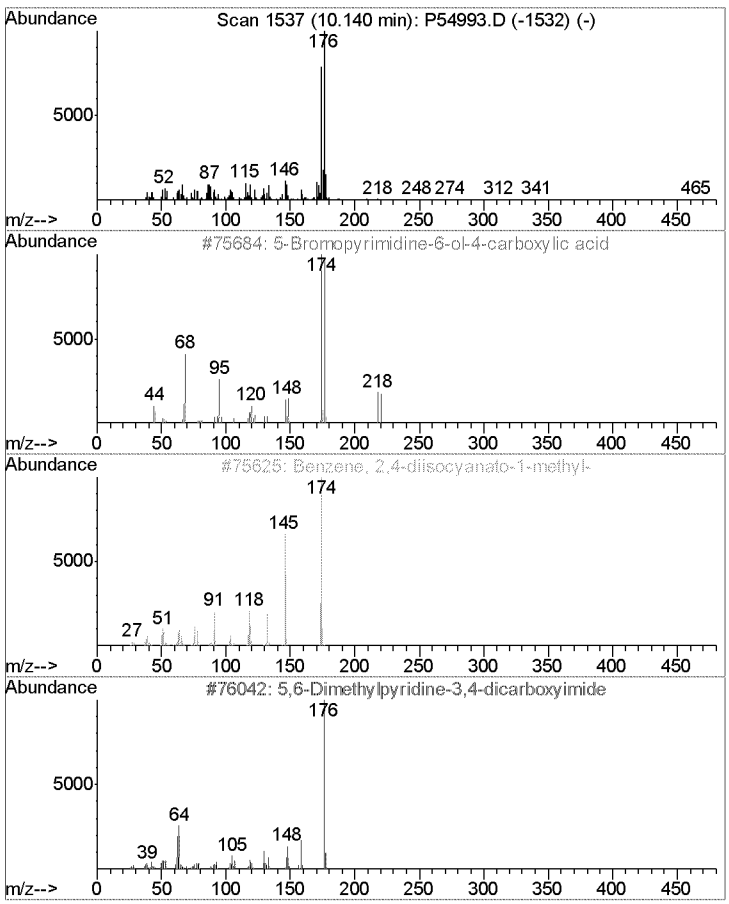
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

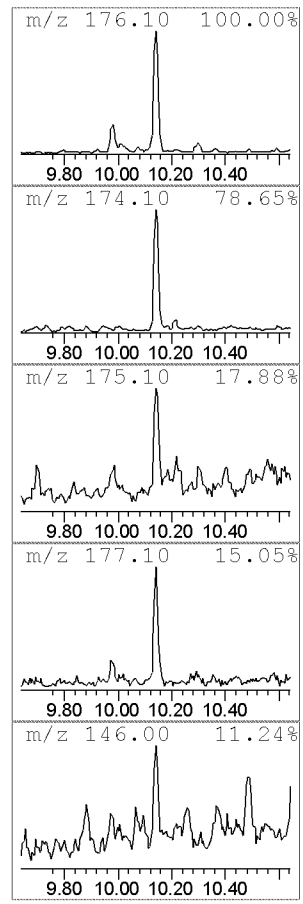
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 8 Internal standard added for... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.80 ppb	203342	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	40
2	Benzene, 2,4-diisocyanato-1-methyl-	174	C9H6N2O2	000584-84-9	38
3	5,6-Dimethylpyridine-3,4-dicarbo...	176	C9H8N2O2	1000222-05-7	35
4	2-Cyanomethyl-1,3-benzothiazole	174	C9H6N2S	056278-50-3	35
5	5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	35





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

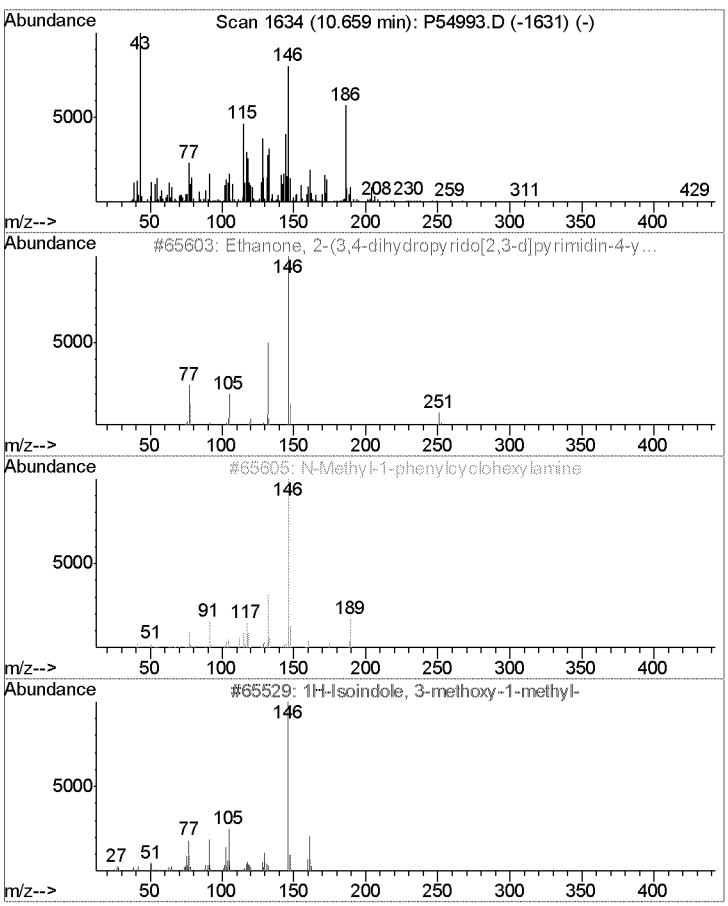
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

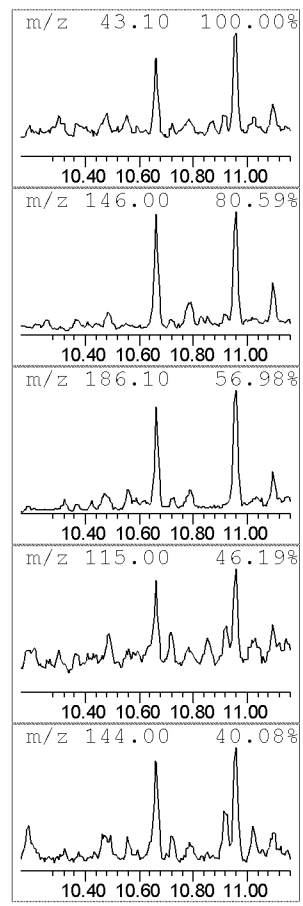
****

Peak Number 9 unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.66	6.93 ppb	296411	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanone, 2-(3,4-dihydropyrido[2...	251	C15H13N3O	028732-76-5	22
2	N-Methyl-1-phenylcyclohexylamine	189	C13H19N	002201-16-3	22
3	1H-Isoindole, 3-methoxy-1-methyl-	161	C10H11NO	083889-38-7	18
4	Phenanthrene, 1,2,3,4,5,6,7,8-oc...	186	C14H18	005325-97-3	18
5	Naphth[1,2-b]oxirene, 1a,2,3,7b-...	146	C10H10O	002461-34-9	18





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

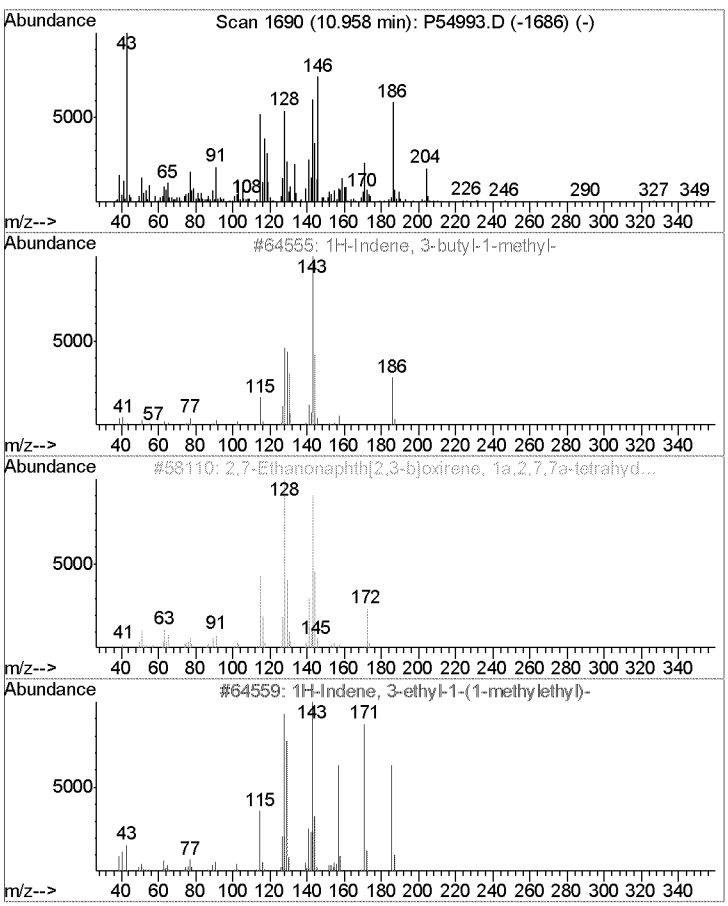
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

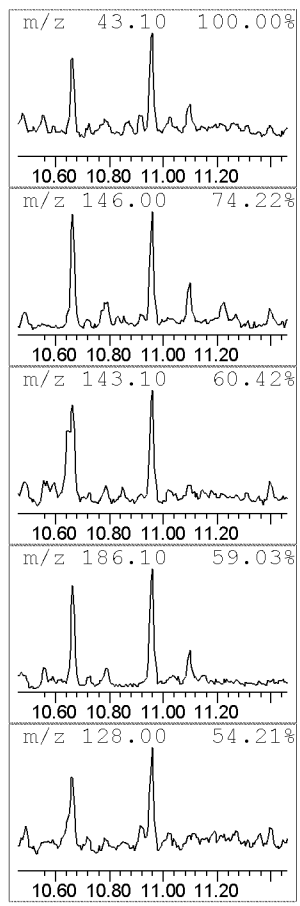
****

Peak Number 10 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.96	7.68 ppb	328676	Phenanthrene-d10	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Indene, 3-butyl-1-methyl-	186	C14H18	111400-84-1	38
2	2,7-Ethanonaphth[2,3-b]oxirene, ...	172	C12H12O	054515-76-3	27
3	1H-Indene, 3-ethyl-1-(1-methylet...	186	C14H18	111400-85-2	25
4	Benzene, (1,2,3-trimethyl-2-cycl...	158	C12H14	006393-13-1	18
5	(1-Methylpenta-1,3-dienyl)benzene	158	C12H14	116669-49-9	14





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

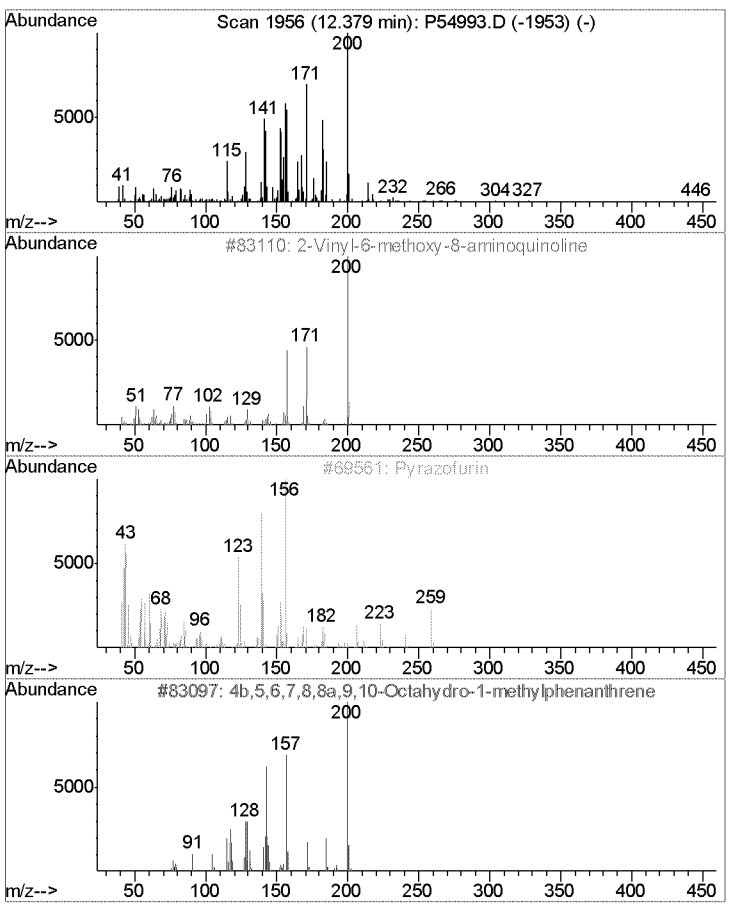
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

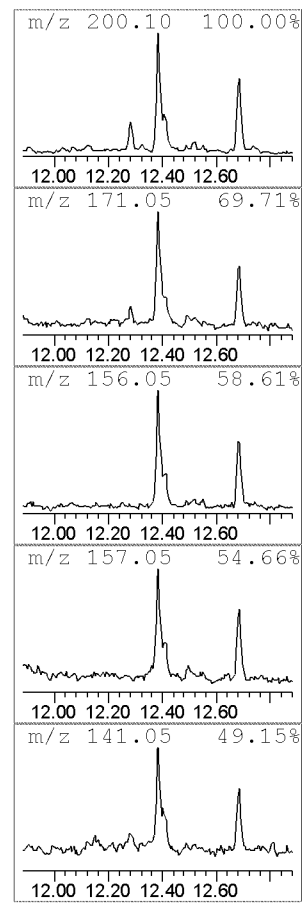
****

Peak Number 11 unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.38	6.72 ppb	287599	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	30
2	Pyrazofurin	259	C9H13N3O6	030868-30-5	18
3	4b,5,6,7,8,8a,9,10-Octahydro-1-m...	200	C15H20	1000080-19-3	14
4	Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	11
5	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	11





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

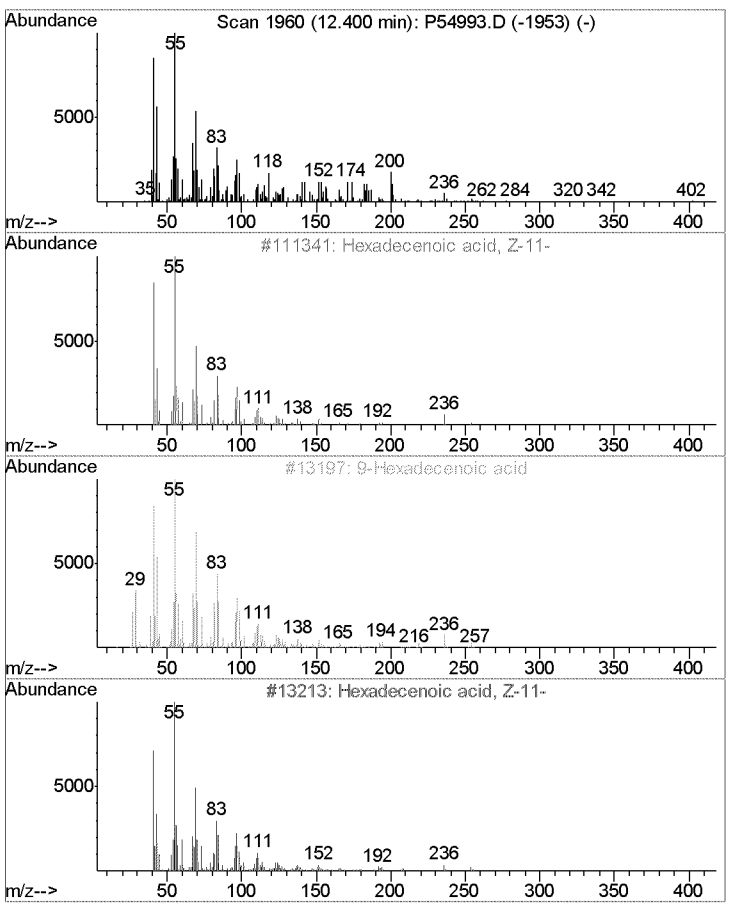
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

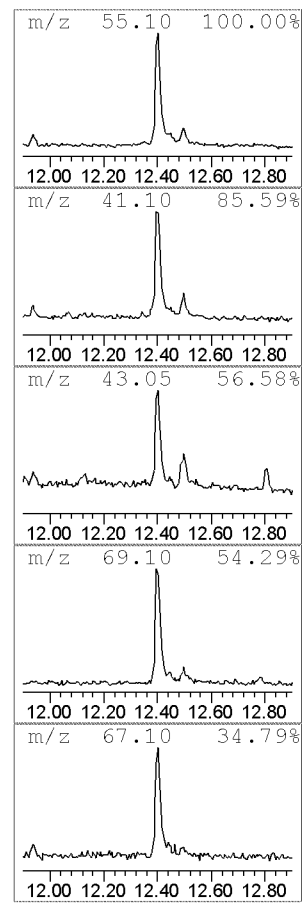
****

Peak Number 12 unknown acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.40	9.57 ppb	409243	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	93
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	91
3	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	91
4	2-Tridecene, (E)-	182	C13H26	041446-58-6	42
5	4-Tridecene, (Z)-	182	C13H26	041446-54-2	38





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

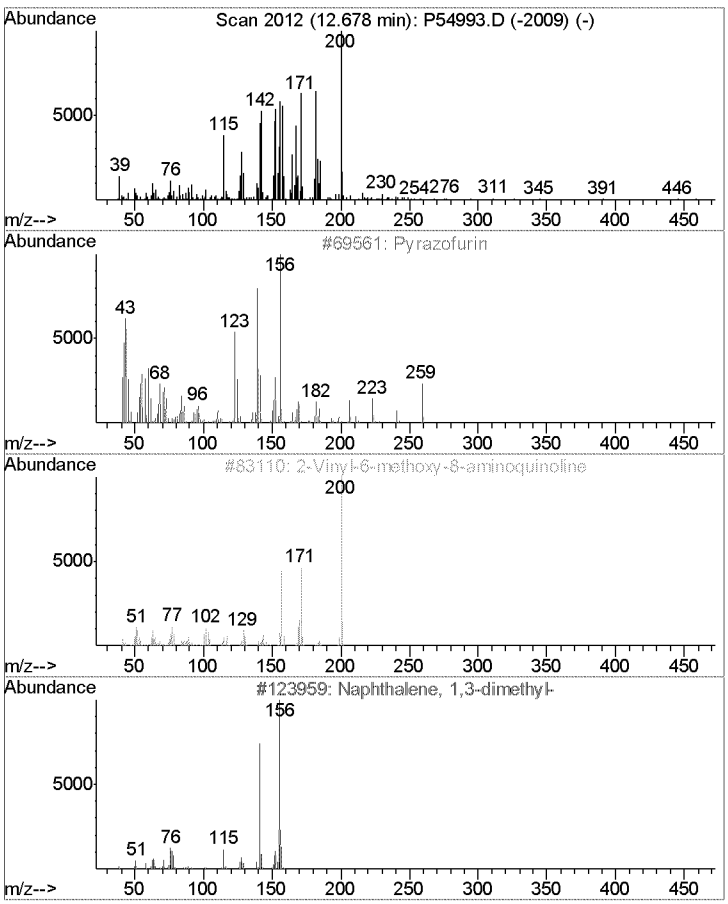
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

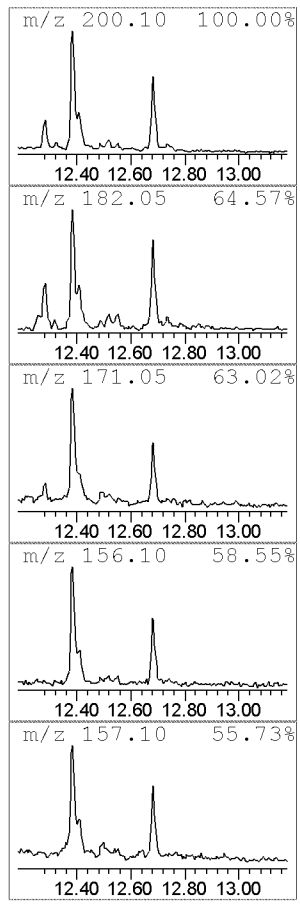
****

Peak Number 13 unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.68	4.19 ppb	179415	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrazofurin	259	C9H13N3O6	030868-30-5	92
2	2-Vinyl-6-methoxy-8-aminoquinoline	200	C12H12N2O	1000213-65-0	22
3	Naphthalene, 1,3-dimethyl-	156	C12H12	000575-41-7	11
4	4,6(1H,5H)-Pyrimidinedione, 1,3-...	200	C8H12N2O2S	005217-47-0	11
5	Naphthalene, 1,8-dimethyl-	156	C12H12	000569-41-5	11





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

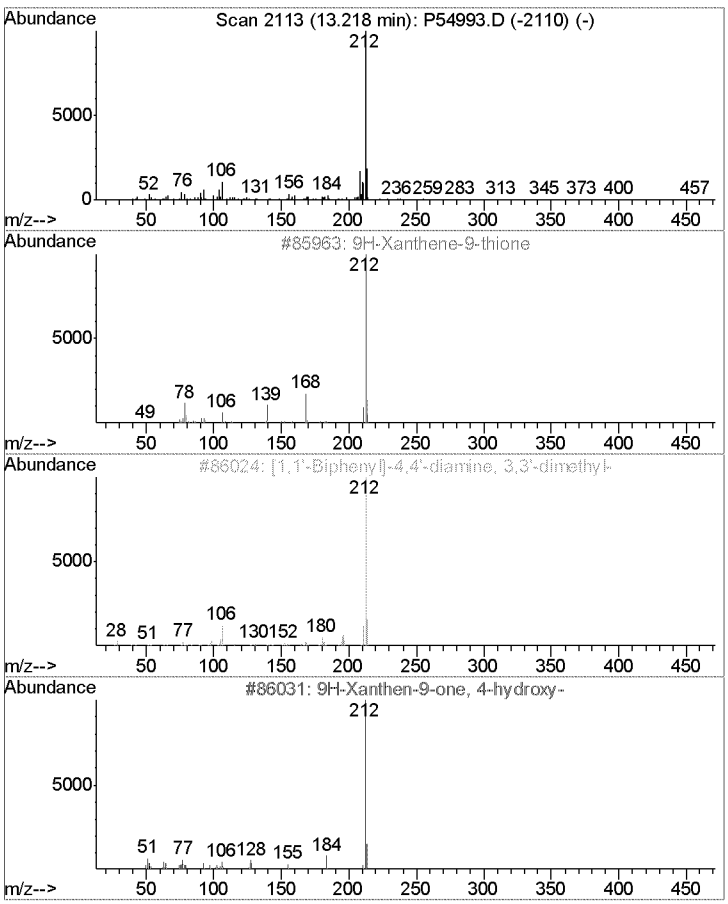
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

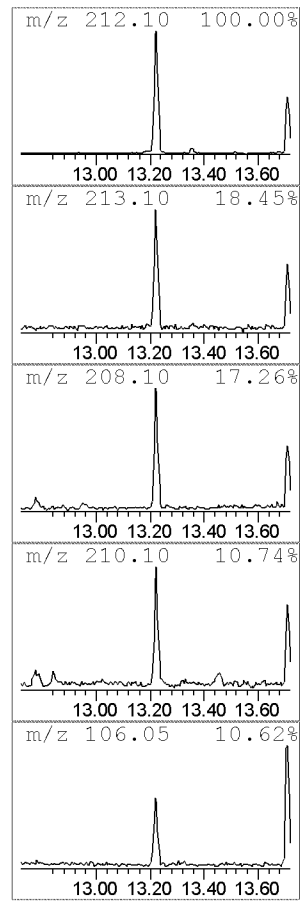
****

Peak Number 14 Internal standard added for... Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.53 ppb	193916	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	52
4	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	50
5	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	50





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

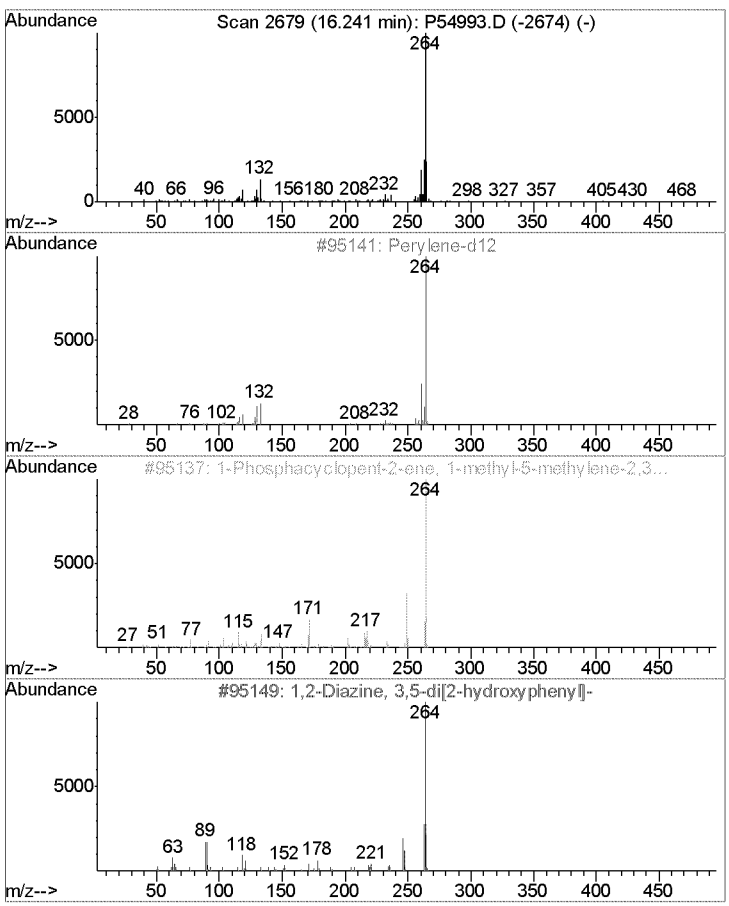
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

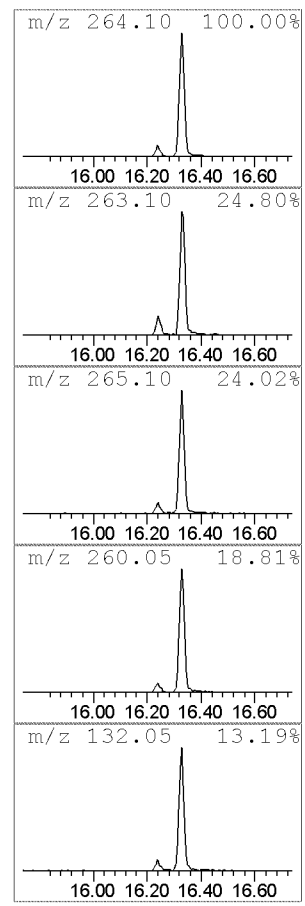
****

Peak Number 15 Internal standard added for... Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.23 ppb	153890	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	95
2	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	72
3	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	64
4	2-[(N-Methylaminocarbonyl)benzyl...	322	C18H18N4O2	1000148-36-9	53
5	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	49





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54993.D
Acq On : 22 Feb 2011 2:21 pm
Operator : ninap
Sample : ja68506-3
Misc : op48193,ep2378,1000
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
unknown	4.86	5.4	ppb	159241	2	4.78	1180780	40.0
Internal standard...	5.03	4.7	ppb	138172	2	4.78	1180780	40.0
unknown	5.43	4.2	ppb	124313	2	4.78	1180780	40.0
1H-Inden-1-one, -...	7.51	12.9	ppb	447084	3	6.57	1387770	40.0
Phenol, -tert-butyl-	7.55	9.8	ppb	339472	3	6.57	1387770	40.0
unknown	8.98	12.6	ppb	441117	4	9.33	1403030	40.0
unknown	10.03	4.3	ppb	151705	5	9.33	1403030	40.0
Internal standard...	10.14	5.8	ppb	203342	5	9.33	1403030	40.0
unknown	10.66	6.9	ppb	296411	6	11.64	1711120	40.0
unknown	10.96	7.7	ppb	328676	6	11.64	1711120	40.0
unknown	12.38	6.7	ppb	287599	7	11.64	1711120	40.0
unknown acid	12.40	9.6	ppb	409243	7	11.64	1711120	40.0
unknown	12.68	4.2	ppb	179415	7	11.64	1711120	40.0
Internal standard...	13.22	4.5	ppb	193916	7	11.64	1711120	40.0
Internal standard...	16.24	4.2	ppb	153890	10	16.33	1456500	40.0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	155533	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	554125	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	346833	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	584336	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	643221	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	549267	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	155533	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	584336	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	346833	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	643221	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	289308	41.44	ppb	-0.07
Spiked Amount 50.000			Recovery =	82.88%		
51) 2-Fluorobiphenyl	8.28	172	478893	40.21	ppb	-0.09
Spiked Amount 50.000			Recovery =	80.42%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	566776	37.29	ppb	-0.06
Spiked Amount 50.000			Recovery =	74.58%		

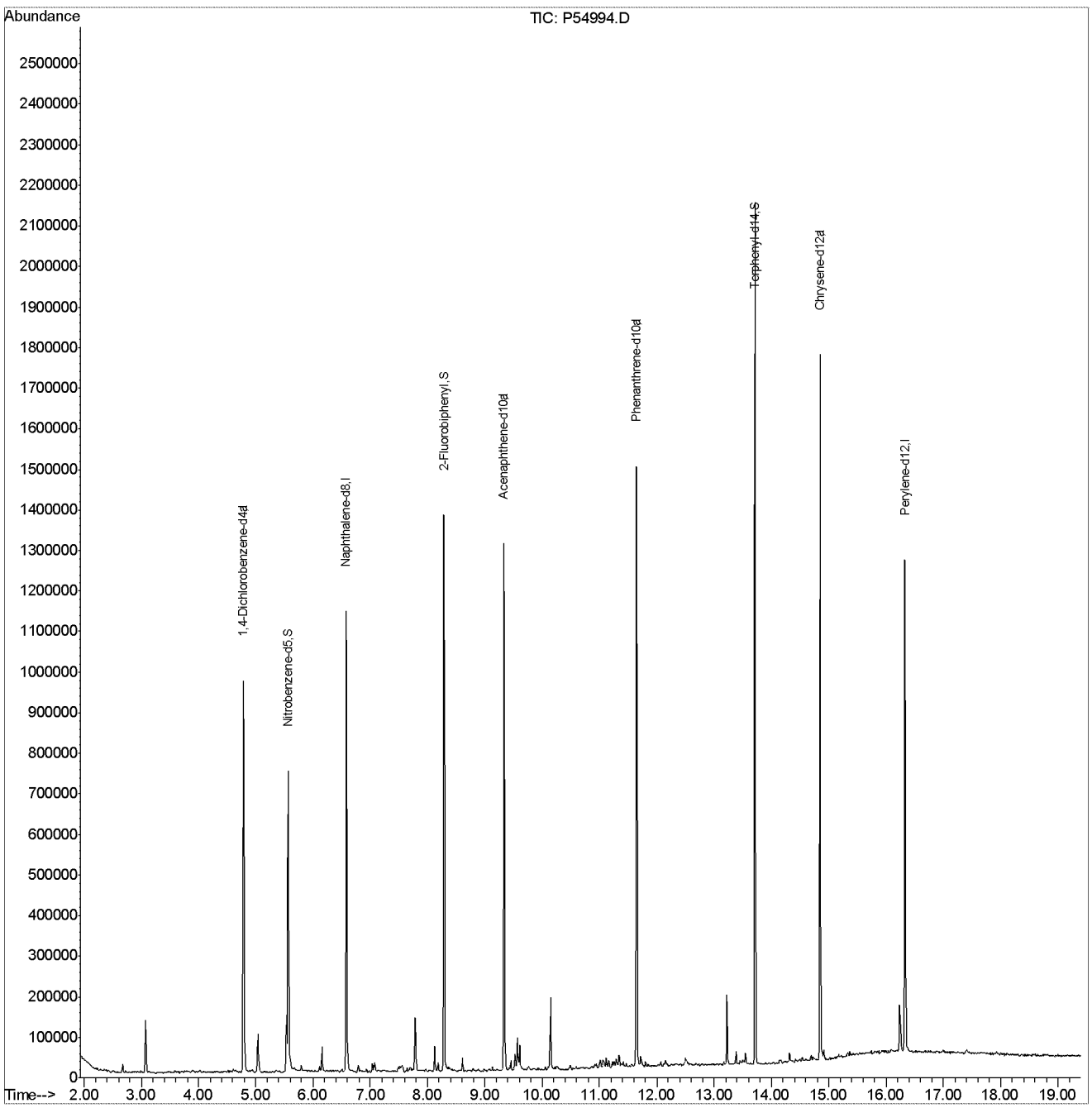
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 23 11:20:06 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.384	82	85	100	rVB	7252	18643	0.92%	0.112%
2	2.501	100	107	114	rVB	4482	10529	0.52%	0.063%
3	2.667	134	138	144	rVV2	20694	27565	1.36%	0.165%
4	2.726	144	149	156	rVB2	5349	11297	0.56%	0.068%
5	3.068	205	213	222	rBV	130265	158651	7.81%	0.951%
6	3.137	222	226	231	rBV8	3761	6787	0.33%	0.041%
7	3.591	303	311	315	rBV10	4721	9922	0.49%	0.059%
8	3.794	345	349	361	rVB10	4254	10354	0.51%	0.062%
9	3.896	361	368	377	rVB10	5921	13851	0.68%	0.083%
10	4.024	383	392	397	rBV10	5224	11726	0.58%	0.070%
11	4.435	465	469	477	rBV9	3335	8869	0.44%	0.053%
12	4.601	497	500	504	rBV5	7582	11184	0.55%	0.067%
13	4.638	504	507	516	rVB7	6365	10786	0.53%	0.065%
14	4.782	526	534	549	rBV	964731	1164577	57.31%	6.978%
15	4.937	559	563	571	rVB7	7427	12756	0.63%	0.076%
16	5.033	576	581	591	rVB	93359	120255	5.92%	0.721%
17	5.349	634	640	641	rBV6	5977	8676	0.43%	0.052%
18	5.402	646	650	659	rVB9	4399	8701	0.43%	0.052%
19	5.530	665	674	677	rBV	141713	177662	8.74%	1.064%
20	5.562	677	680	697	rVB	738837	907967	44.68%	5.440%
21	5.792	719	723	729	rVB4	14442	17917	0.88%	0.107%
22	6.113	779	783	786	rBV5	12734	14652	0.72%	0.088%
23	6.155	786	791	802	rVB	60414	75585	3.72%	0.453%
24	6.497	846	855	860	rBV9	7799	13407	0.66%	0.080%
25	6.572	860	869	888	rBV	1134405	1409229	69.35%	8.444%
26	6.780	903	908	913	rBV5	17462	23409	1.15%	0.140%
27	6.930	932	936	940	rVB6	8982	11173	0.55%	0.067%
28	7.031	950	955	958	rBV	21793	26253	1.29%	0.157%
29	7.069	958	962	966	rVB	20775	24391	1.20%	0.146%
30	7.218	985	990	995	rBV9	5260	8452	0.42%	0.051%
31	7.486	1035	1040	1042	rBV5	11828	17184	0.85%	0.103%
32	7.512	1042	1045	1049	rVV5	13829	23974	1.18%	0.144%
33	7.550	1049	1052	1061	rVB4	17067	32456	1.60%	0.194%
34	7.640	1061	1069	1072	rBV9	11537	20240	1.00%	0.121%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.689	1073	1078	1085	rBV9	7305	12988	0.64%	0.078%
36	7.779	1090	1095	1107	rVB2	132730	177043	8.71%	1.061%
37	7.966	1126	1130	1136	rVB9	7488	10409	0.51%	0.062%
38	8.020	1136	1140	1147	rBV8	5896	9974	0.49%	0.060%
39	8.116	1150	1158	1165	rBV	63234	81065	3.99%	0.486%
40	8.175	1165	1169	1176	rVB4	22481	28692	1.41%	0.172%
41	8.282	1181	1189	1200	rBV	1373010	1622903	79.86%	9.724%
42	8.356	1200	1203	1206	rVB2	5730	6698	0.33%	0.040%
43	8.538	1233	1237	1244	rBV10	3883	8857	0.44%	0.053%
44	8.602	1244	1249	1256	rVB	32538	41634	2.05%	0.249%
45	8.704	1265	1268	1273	rBV7	4652	7306	0.36%	0.044%
46	8.789	1279	1284	1293	rBV7	6924	12466	0.61%	0.075%
47	8.875	1294	1300	1310	rVB7	6857	16911	0.83%	0.101%
48	8.981	1316	1320	1329	rVB10	6269	12582	0.62%	0.075%
49	9.062	1330	1335	1343	rBV10	6196	15710	0.77%	0.094%
50	9.126	1343	1347	1350	rBV6	8981	10336	0.51%	0.062%
51	9.195	1356	1360	1369	rVB6	5254	11843	0.58%	0.071%
52	9.329	1377	1385	1398	rBV	1298790	1586717	78.08%	9.507%
53	9.414	1398	1401	1404	rVV4	5875	7153	0.35%	0.043%
54	9.451	1404	1408	1412	rVB	24917	31060	1.53%	0.186%
55	9.521	1412	1421	1424	rBV	41452	54430	2.68%	0.326%
56	9.564	1424	1429	1433	rVV	80612	117737	5.79%	0.705%
57	9.606	1433	1437	1449	rVB	61988	92750	4.56%	0.556%
58	9.761	1457	1466	1475	rBV	9619	25044	1.23%	0.150%
59	9.847	1475	1482	1484	rBV8	3850	7266	0.36%	0.044%
60	10.050	1514	1520	1524	rBV7	7083	13123	0.65%	0.079%
61	10.141	1526	1537	1547	rBV2	179964	250675	12.34%	1.502%
62	10.247	1554	1557	1564	rVB9	6395	9101	0.45%	0.055%
63	10.488	1597	1602	1610	rVB9	9156	15385	0.76%	0.092%
64	10.589	1616	1621	1625	rBV7	6813	11100	0.55%	0.067%
65	10.867	1668	1673	1676	rBV6	6610	9236	0.45%	0.055%
66	10.910	1678	1681	1684	rBV5	9127	9859	0.49%	0.059%
67	10.942	1685	1687	1692	rVB2	11101	11314	0.56%	0.068%
68	11.006	1695	1699	1704	rBV	19971	24219	1.19%	0.145%
69	11.065	1707	1710	1716	rBV4	16040	25060	1.23%	0.150%
70	11.113	1716	1719	1723	rVV3	20337	22517	1.11%	0.135%
71	11.156	1724	1727	1733	rVB4	18875	21745	1.07%	0.130%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	11.220	1733	1739	1742	rBV4	15529	24825	1.22%	0.149%
73	11.252	1742	1745	1748	rVV5	11958	12225	0.60%	0.073%
74	11.284	1748	1751	1757	rVV5	18070	28420	1.40%	0.170%
75	11.337	1757	1761	1765	rVB2	27786	37592	1.85%	0.225%
76	11.407	1771	1774	1781	rVB4	12280	12686	0.62%	0.076%
77	11.471	1781	1786	1792	rVB8	8483	12758	0.63%	0.076%
78	11.562	1800	1803	1809	rBV8	7013	15071	0.74%	0.090%
79	11.642	1811	1818	1828	rBV2	1476640	1745432	85.89%	10.458%
80	11.722	1830	1833	1844	rVB7	25459	39964	1.97%	0.239%
81	11.797	1844	1847	1853	rBV6	13316	17105	0.84%	0.102%
82	11.845	1854	1856	1862	rVB7	5280	6951	0.34%	0.042%
83	12.064	1894	1897	1904	rVB7	10898	12979	0.64%	0.078%
84	12.123	1904	1908	1910	rVV4	6801	9611	0.47%	0.058%
85	12.149	1910	1913	1924	rVB4	14341	25891	1.27%	0.155%
86	12.497	1972	1978	1990	rBV4	19302	52474	2.58%	0.314%
87	13.164	2099	2103	2107	rBV7	8014	12336	0.61%	0.074%
88	13.218	2108	2113	2125	rVB	173468	193882	9.54%	1.162%
89	13.378	2139	2143	2147	rVB2	29583	29559	1.45%	0.177%
90	13.448	2153	2156	2160	rBV6	8246	13817	0.68%	0.083%
91	13.544	2171	2174	2187	rVB	26921	29088	1.43%	0.174%
92	13.709	2199	2205	2224	rVB	2124624	2032060	100.00%	12.176%
93	14.142	2283	2286	2295	rVB	8794	15841	0.78%	0.095%
94	14.313	2315	2318	2328	rVB4	21440	25862	1.27%	0.155%
95	14.692	2386	2389	2393	rBV6	11968	14265	0.70%	0.085%
96	14.847	2413	2418	2428	rBV	1736285	1704648	83.89%	10.214%
97	14.911	2428	2430	2443	rVB	25923	32909	1.62%	0.197%
98	15.365	2513	2515	2519	rBV5	11247	11629	0.57%	0.070%
99	16.236	2673	2678	2688	rBV	115013	164332	8.09%	0.985%
100	16.327	2688	2695	2718	rVB	1212042	1493543	73.50%	8.949%

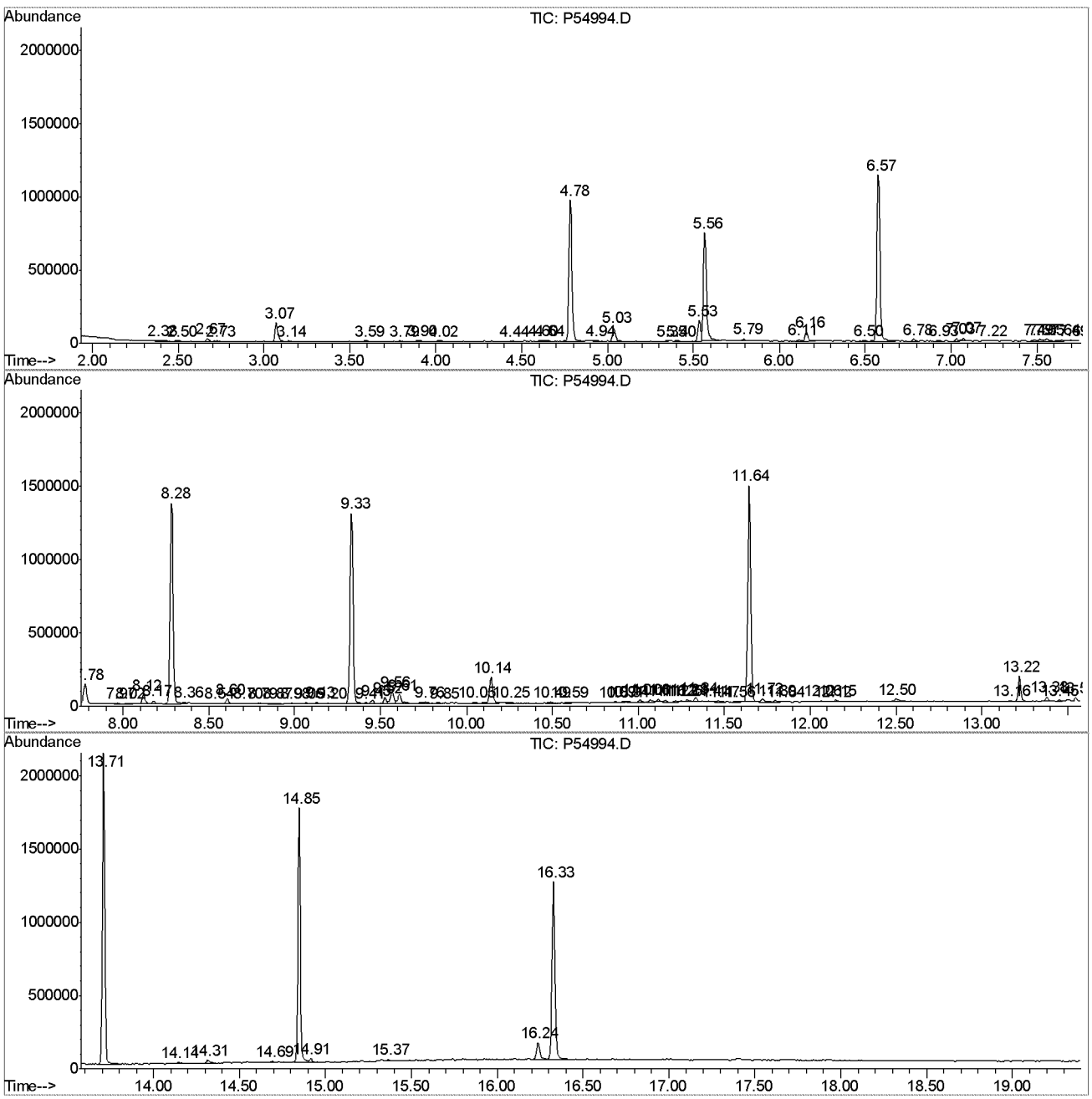
Sum of corrected areas: 16689743

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

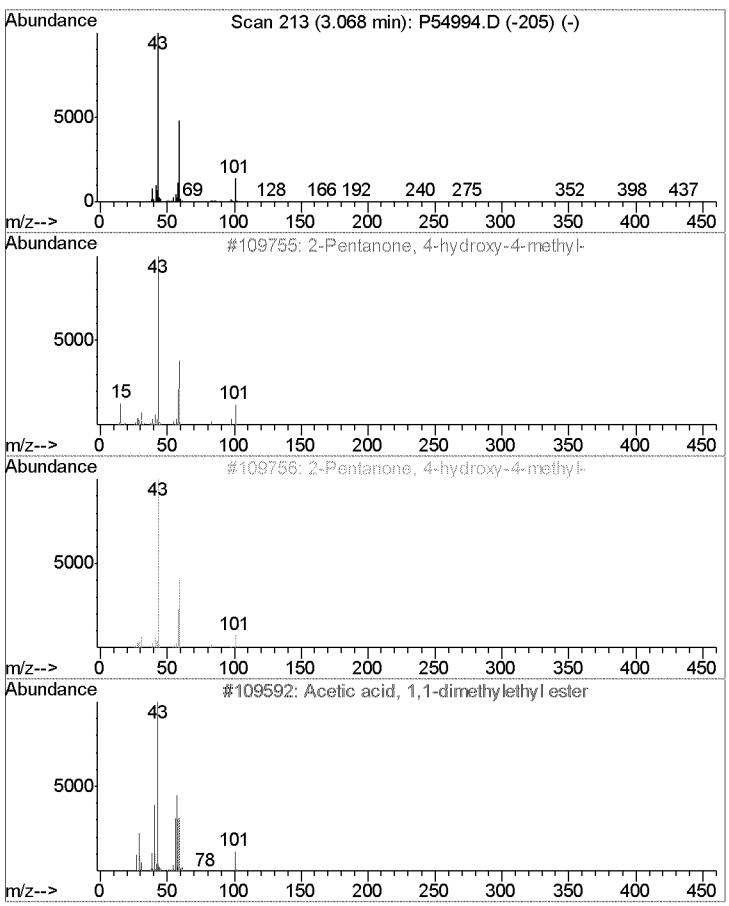
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

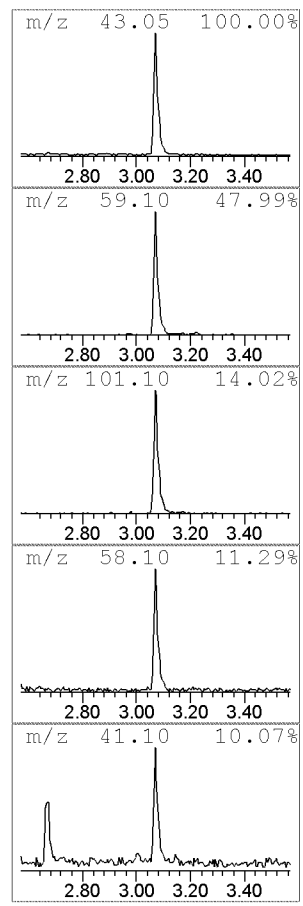
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	5.45 ppb	158651	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	1-Butene, 4-ethoxy-	100	C6H12O	044611-46-3	23
5	Diacetamide	101	C4H7NO2	000625-77-4	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

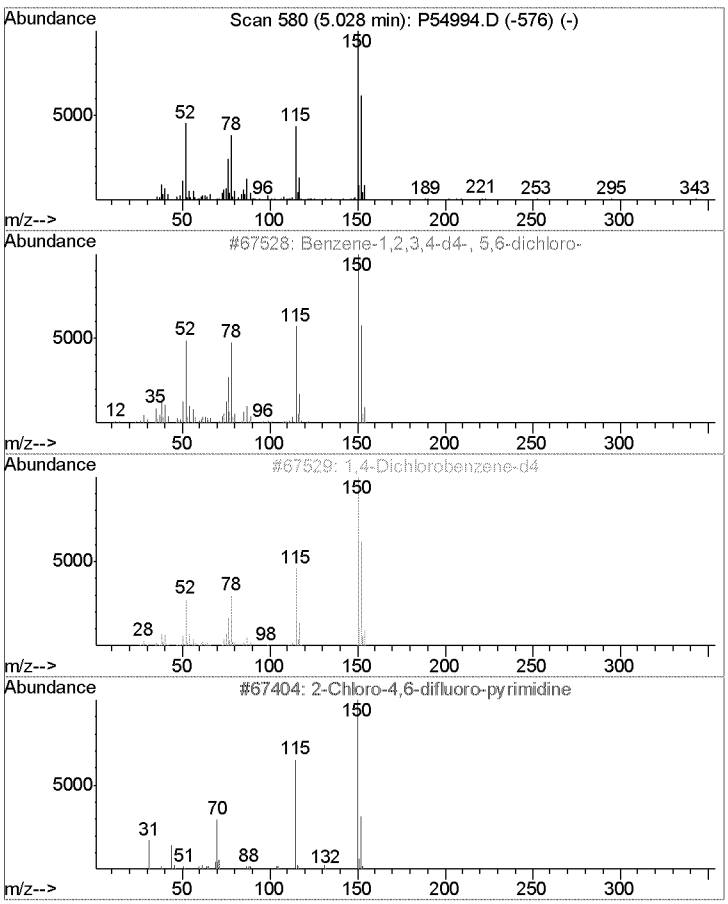
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

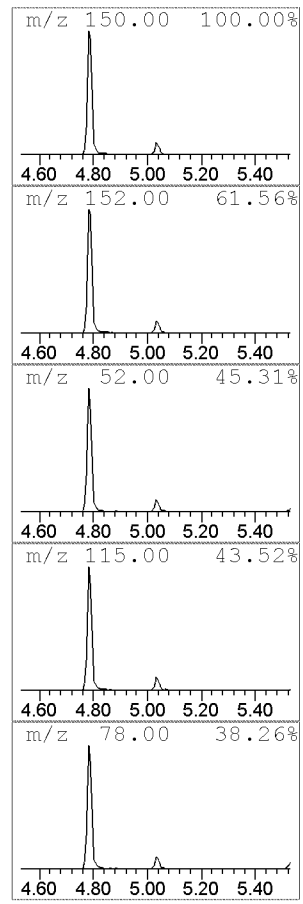
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 2 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.13 ppb	120255	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	91
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	90
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	22
4	Benzeneacetonitrile, 2,4-dichloro-	185	C8H5Cl2N	006306-60-1	10
5	Ethanone, 1-(3,5-dimethylpyrazin...	150	C8H10N2O	054300-08-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

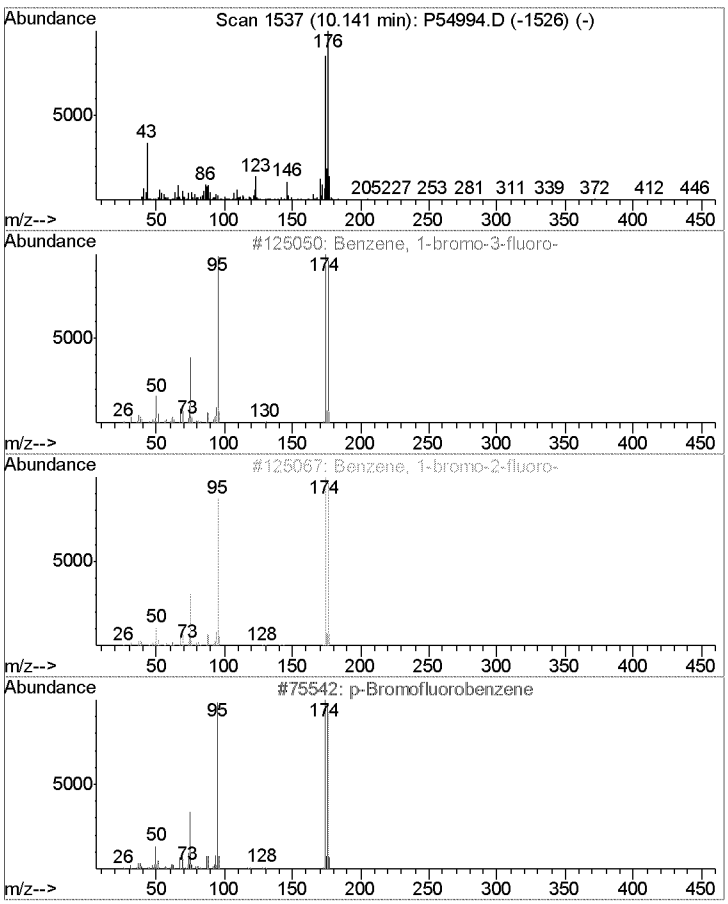
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

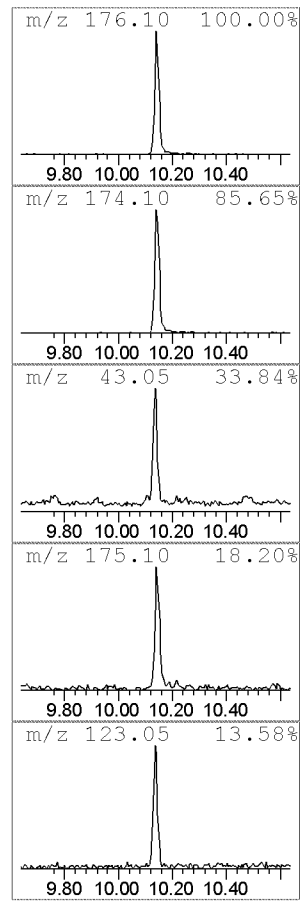
****

Peak Number 3 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.55 ppb	180600	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	53
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	42
3	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	36
4	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	27
5	Thieno[3,2-e]benzofuran	174	C10H6OS	000438-27-7	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

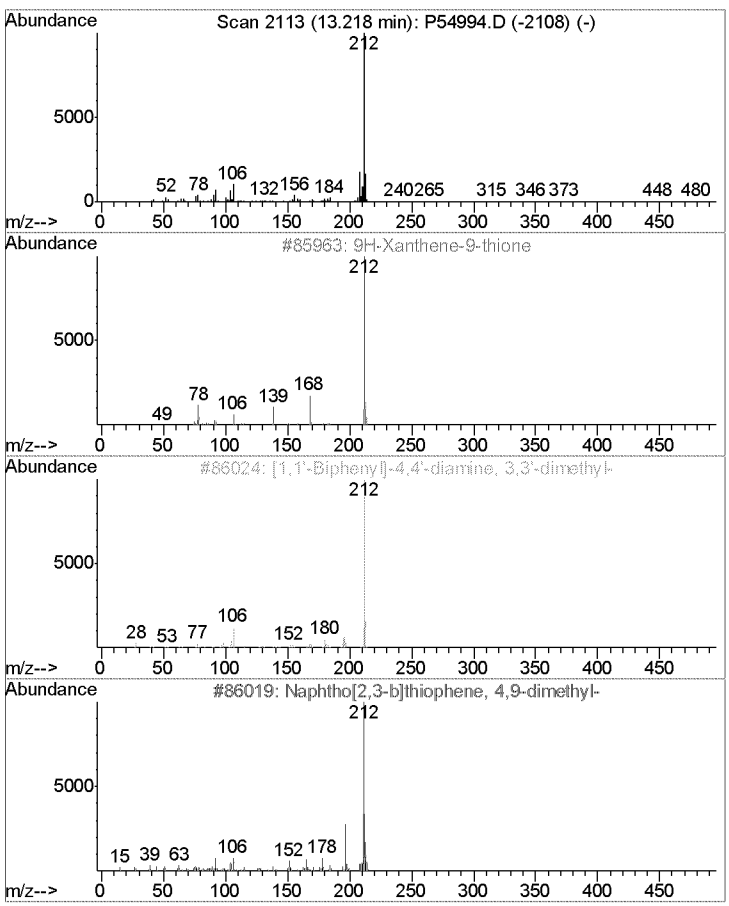
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

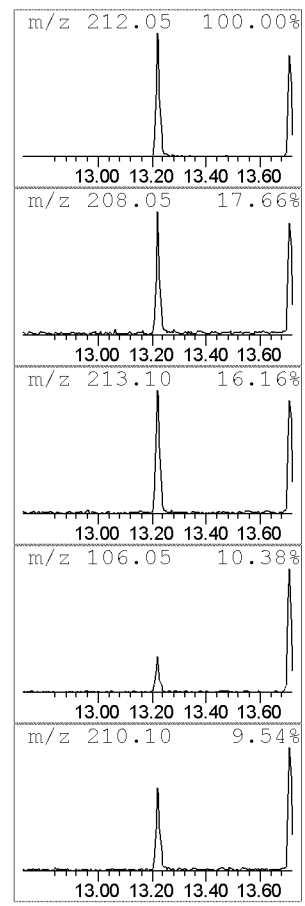
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 4 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.44 ppb	193882	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
4	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	59
5	Harmine	212	C13H12N2O	000442-51-3	59





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

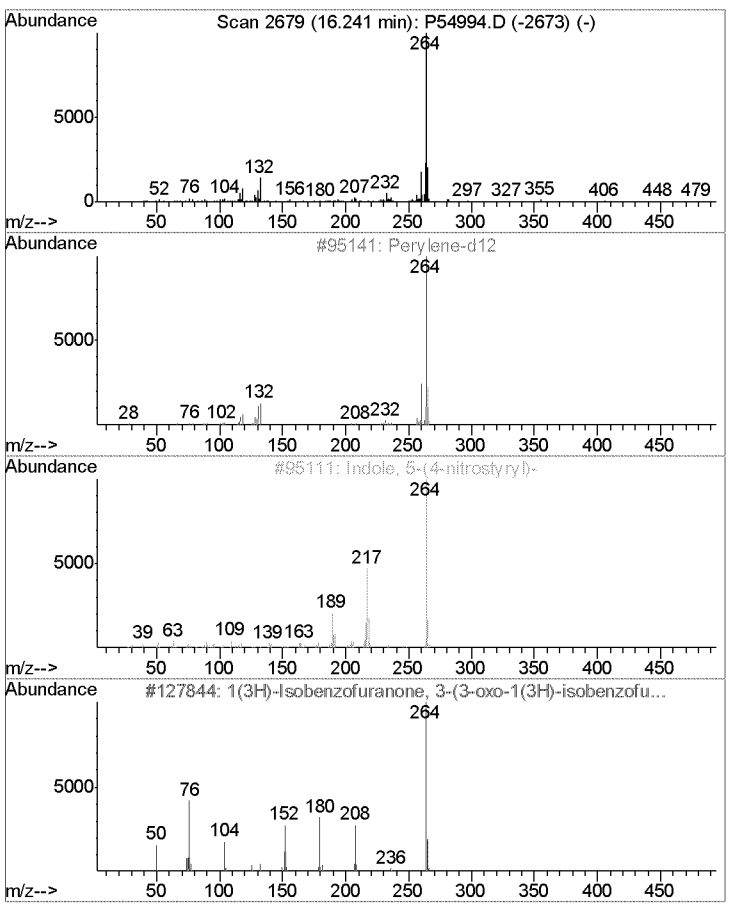
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

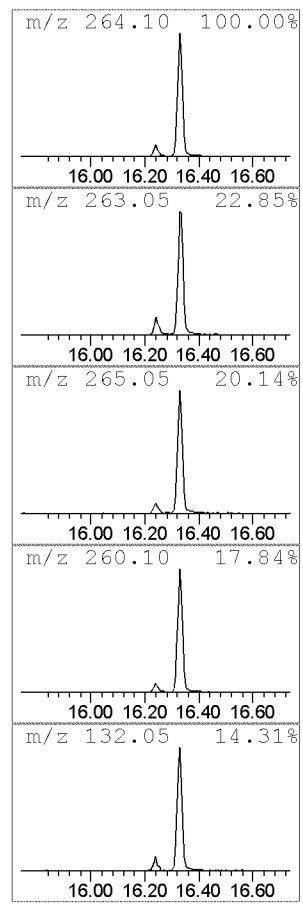
****

Peak Number 5 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.40 ppb	164332	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	94
2	Indole, 5-(4-nitrostyryl)-	264	C16H12N2O2	1000151-40-1	50
3	1(3H)-Isobenzofuranone, 3-(3-oxo...	264	C16H8O4	000482-23-5	47
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	45
5	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	45





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54994.D
Acq On : 22 Feb 2011 2:50 pm
Operator : ninap
Sample : ja68506-4
Misc : op48193,ep2378,1000
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	5.5	ppb	158651	1	4.78	1164580	40.0
Internal standard...	5.03	4.1	ppb	120255	2	4.78	1164580	40.0
Internal standard...	10.14	4.5	ppb	180600	5	9.33	1586720	40.0
Internal standard...	13.22	4.4	ppb	193882	7	11.64	1745430	40.0
Internal standard...	16.24	4.4	ppb	164332	10	16.33	1493540	40.0

8.1.8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:39:00 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	161372	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	575979	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	355651	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	609508	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	672762	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	576551	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	161372	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	609508	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	355651	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	672762	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	308955	42.58	ppb	-0.08
Spiked Amount 50.000			Recovery =	85.16%		
51) 2-Fluorobiphenyl	8.29	172	500372	40.97	ppb	-0.08
Spiked Amount 50.000			Recovery =	81.94%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	505683	31.81	ppb	-0.06
Spiked Amount 50.000			Recovery =	63.62%		

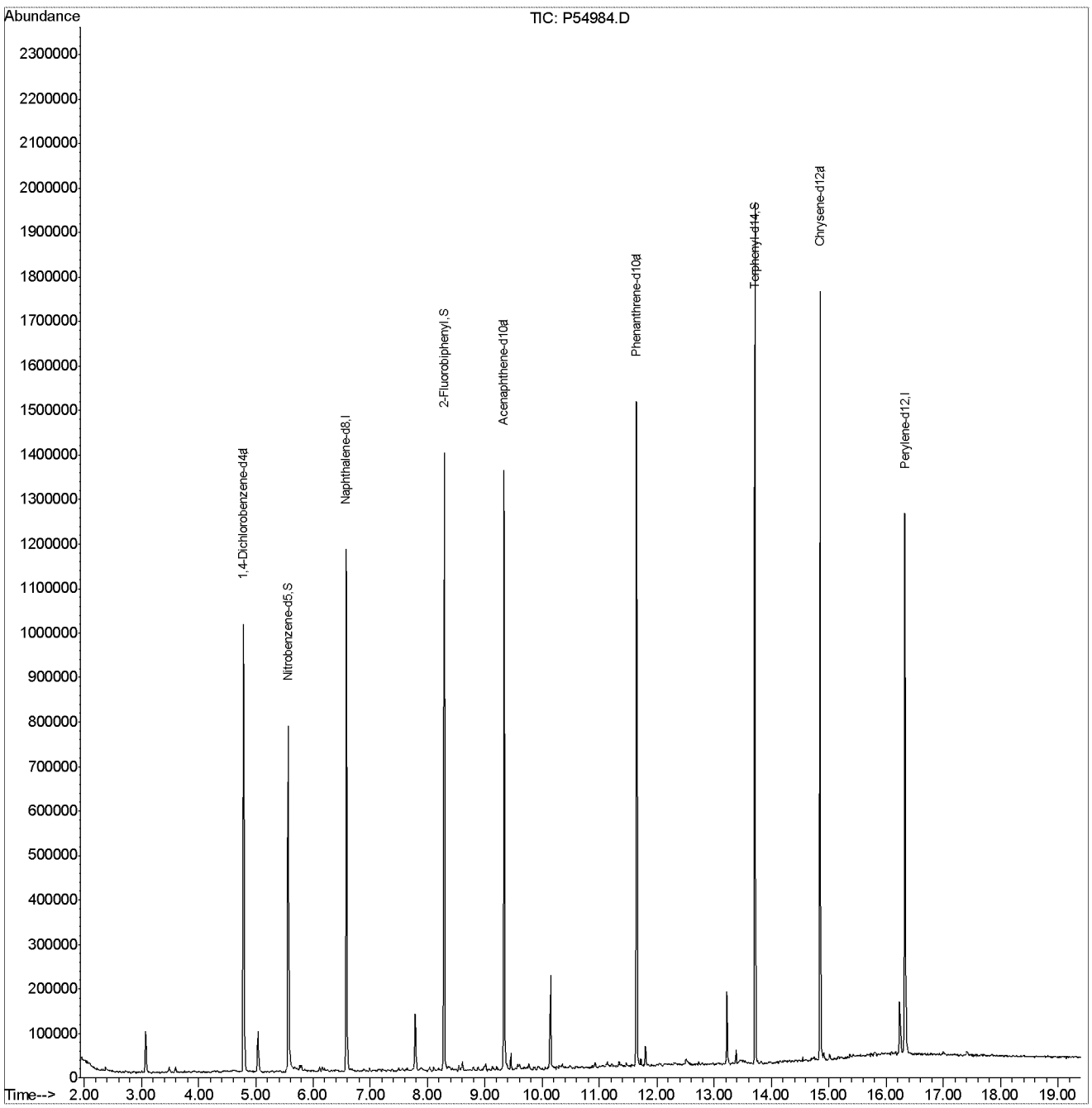
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 12:39:00 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



8.1.9

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.373	80	83	85	rBV4	6542	3938	0.22%	0.025%
2	2.496	102	106	114	rVB8	5104	10746	0.60%	0.067%
3	2.587	117	123	127	rVB8	2929	5260	0.29%	0.033%
4	2.715	143	147	158	rVB8	4253	9160	0.51%	0.057%
5	2.789	159	161	167	rVB7	2784	4393	0.24%	0.028%
6	2.838	167	170	173	rBV5	3273	4147	0.23%	0.026%
7	2.880	174	178	183	rVB7	2769	4932	0.27%	0.031%
8	3.003	197	201	205	rBV6	4846	5912	0.33%	0.037%
9	3.067	209	213	224	rVB	91427	121119	6.72%	0.758%
10	3.206	235	239	246	rBV10	3898	8365	0.46%	0.052%
11	3.361	261	268	271	rBV8	3609	7422	0.41%	0.046%
12	3.484	284	291	297	rVB3	11553	18357	1.02%	0.115%
13	3.596	304	312	321	rBV7	12070	21541	1.19%	0.135%
14	4.323	444	448	453	rVB8	3576	7466	0.41%	0.047%
15	4.446	465	471	478	rVB8	3432	5802	0.32%	0.036%
16	4.595	495	499	506	rVB9	4263	10068	0.56%	0.063%
17	4.643	506	508	513	rBV6	3924	4199	0.23%	0.026%
18	4.782	526	534	550	rBV	1005446	1199272	66.52%	7.509%
19	5.033	576	581	595	rVB	91561	124605	6.91%	0.780%
20	5.471	659	663	667	rVB7	3032	4455	0.25%	0.028%
21	5.562	671	680	698	rBV	779481	1017424	56.44%	6.370%
22	5.669	699	700	705	rVB5	4586	6834	0.38%	0.043%
23	5.765	714	718	720	rBV4	9937	9965	0.55%	0.062%
24	5.792	720	723	731	rVB5	14055	21223	1.18%	0.133%
25	5.851	731	734	736	rBV4	4650	4439	0.25%	0.028%
26	5.920	743	747	749	rVB5	3690	4050	0.22%	0.025%
27	5.989	757	760	764	rBV6	4082	4680	0.26%	0.029%
28	6.112	776	783	787	rBV10	10344	16704	0.93%	0.105%
29	6.160	787	792	795	rVV5	10660	14169	0.79%	0.089%
30	6.193	795	798	802	rVB4	7615	8230	0.46%	0.052%
31	6.390	834	835	840	rBV4	3980	4359	0.24%	0.027%
32	6.433	840	843	848	rVB7	5202	6367	0.35%	0.040%
33	6.492	851	854	861	rVB9	2843	5652	0.31%	0.035%
34	6.572	863	869	881	rBV	1175311	1443233	80.06%	9.037%

MP2364.M Tue Feb 22 12:39:37 2011 MSP

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	6.785	904	909	913	rVB7	3039	4991	0.28%	0.031%
36	6.887	926	928	933	rVB6	4919	5548	0.31%	0.035%
37	6.983	942	946	950	rVB4	9700	12055	0.67%	0.075%
38	7.031	950	955	958	rBV7	3337	5378	0.30%	0.034%
39	7.133	967	974	980	rBV7	5871	13866	0.77%	0.087%
40	7.208	984	988	995	rBV10	4730	10969	0.61%	0.069%
41	7.304	1000	1006	1016	rBV10	4857	13106	0.73%	0.082%
42	7.378	1016	1020	1024	rVV7	5154	6903	0.38%	0.043%
43	7.491	1036	1041	1044	rBV7	6548	8259	0.46%	0.052%
44	7.549	1048	1052	1062	rVB7	7667	13041	0.72%	0.082%
45	7.640	1062	1069	1074	rBV7	7166	16362	0.91%	0.102%
46	7.747	1084	1089	1090	rBV5	4818	7081	0.39%	0.044%
47	7.779	1090	1095	1106	rVB2	128463	171472	9.51%	1.074%
48	7.870	1107	1112	1114	rBV5	5871	7810	0.43%	0.049%
49	7.966	1128	1130	1134	rVB5	3866	4553	0.25%	0.029%
50	8.025	1134	1141	1147	rBV6	11024	19704	1.09%	0.123%
51	8.105	1150	1156	1162	rBV9	8870	14554	0.81%	0.091%
52	8.180	1166	1170	1173	rBV6	4765	6560	0.36%	0.041%
53	8.287	1182	1190	1199	rBV	1389393	1672012	92.75%	10.469%
54	8.356	1200	1203	1207	rVB2	5594	6407	0.36%	0.040%
55	8.426	1213	1216	1220	rVB6	3727	4129	0.23%	0.026%
56	8.543	1233	1238	1242	rBV7	12747	20016	1.11%	0.125%
57	8.607	1243	1250	1257	rVB3	20693	36332	2.02%	0.227%
58	8.794	1279	1285	1294	rBV3	8535	14012	0.78%	0.088%
59	8.874	1295	1300	1308	rVB3	8430	15235	0.85%	0.095%
60	8.986	1316	1321	1322	rBV5	9049	12812	0.71%	0.080%
61	9.008	1322	1325	1331	rVB8	17327	24330	1.35%	0.152%
62	9.125	1344	1347	1350	rBV4	9296	11120	0.62%	0.070%
63	9.206	1358	1362	1367	rVB7	7766	10761	0.60%	0.067%
64	9.328	1375	1385	1403	rBV	1349310	1648572	91.45%	10.322%
65	9.451	1403	1408	1415	rVV	37332	44549	2.47%	0.279%
66	9.526	1418	1422	1424	rBV5	4755	6382	0.35%	0.040%
67	9.569	1425	1430	1432	rVV3	11130	14398	0.80%	0.090%
68	9.596	1432	1435	1441	rVB5	9686	16536	0.92%	0.104%
69	9.676	1449	1450	1457	rBV7	4397	7444	0.41%	0.047%
70	9.761	1463	1466	1475	rVB7	13479	17242	0.96%	0.108%
71	9.868	1479	1486	1489	rBV9	6824	13816	0.77%	0.087%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	9.921	1493	1496	1507	rVB9	7978	20107	1.12%	0.126%
73	10.050	1518	1520	1525	rBV6	5039	4571	0.25%	0.029%
74	10.140	1531	1537	1548	rVB2	210068	287896	15.97%	1.803%
75	10.258	1555	1559	1563	rBV7	5958	9975	0.55%	0.062%
76	10.295	1563	1566	1569	rBV4	8205	10650	0.59%	0.067%
77	10.349	1572	1576	1581	rVB8	11751	16560	0.92%	0.104%
78	10.397	1583	1585	1590	rVB6	5173	5740	0.32%	0.036%
79	10.578	1616	1619	1620	rBV3	4883	4283	0.24%	0.027%
80	10.685	1636	1639	1642	rBV5	3940	4940	0.27%	0.031%
81	10.867	1669	1673	1677	rBV6	6358	9117	0.51%	0.057%
82	10.915	1677	1682	1687	rVV8	11388	17814	0.99%	0.112%
83	11.113	1715	1719	1720	rBV4	6029	7109	0.39%	0.045%
84	11.284	1748	1751	1756	rBV7	5914	8386	0.47%	0.053%
85	11.337	1756	1761	1767	rBV7	11235	21528	1.19%	0.135%
86	11.465	1781	1785	1794	rBV9	9423	18649	1.03%	0.117%
87	11.642	1811	1818	1829	rBV2	1494682	1752564	97.22%	10.973%
88	11.716	1829	1832	1840	rVB6	16557	23172	1.29%	0.145%
89	11.797	1843	1847	1854	rBV	44487	51412	2.85%	0.322%
90	12.293	1937	1940	1942	rBV4	5431	4926	0.27%	0.031%
91	12.507	1975	1980	1988	rBV4	12484	27822	1.54%	0.174%
92	12.726	2018	2021	2027	rVB8	7944	10246	0.57%	0.064%
93	13.218	2107	2113	2124	rVB	164306	202251	11.22%	1.266%
94	13.378	2140	2143	2147	rVB2	30036	28894	1.60%	0.181%
95	13.709	2199	2205	2220	rBV	1935285	1802752	100.00%	11.288%
96	14.542	2359	2361	2364	rBV3	8490	5443	0.30%	0.034%
97	14.847	2411	2418	2428	rBV	1728510	1760338	97.65%	11.022%
98	14.911	2428	2430	2438	rVB2	16742	19383	1.08%	0.121%
99	16.236	2673	2678	2687	rBV2	117108	159898	8.87%	1.001%
100	16.327	2688	2695	2721	rVB	1216490	1587658	88.07%	9.941%

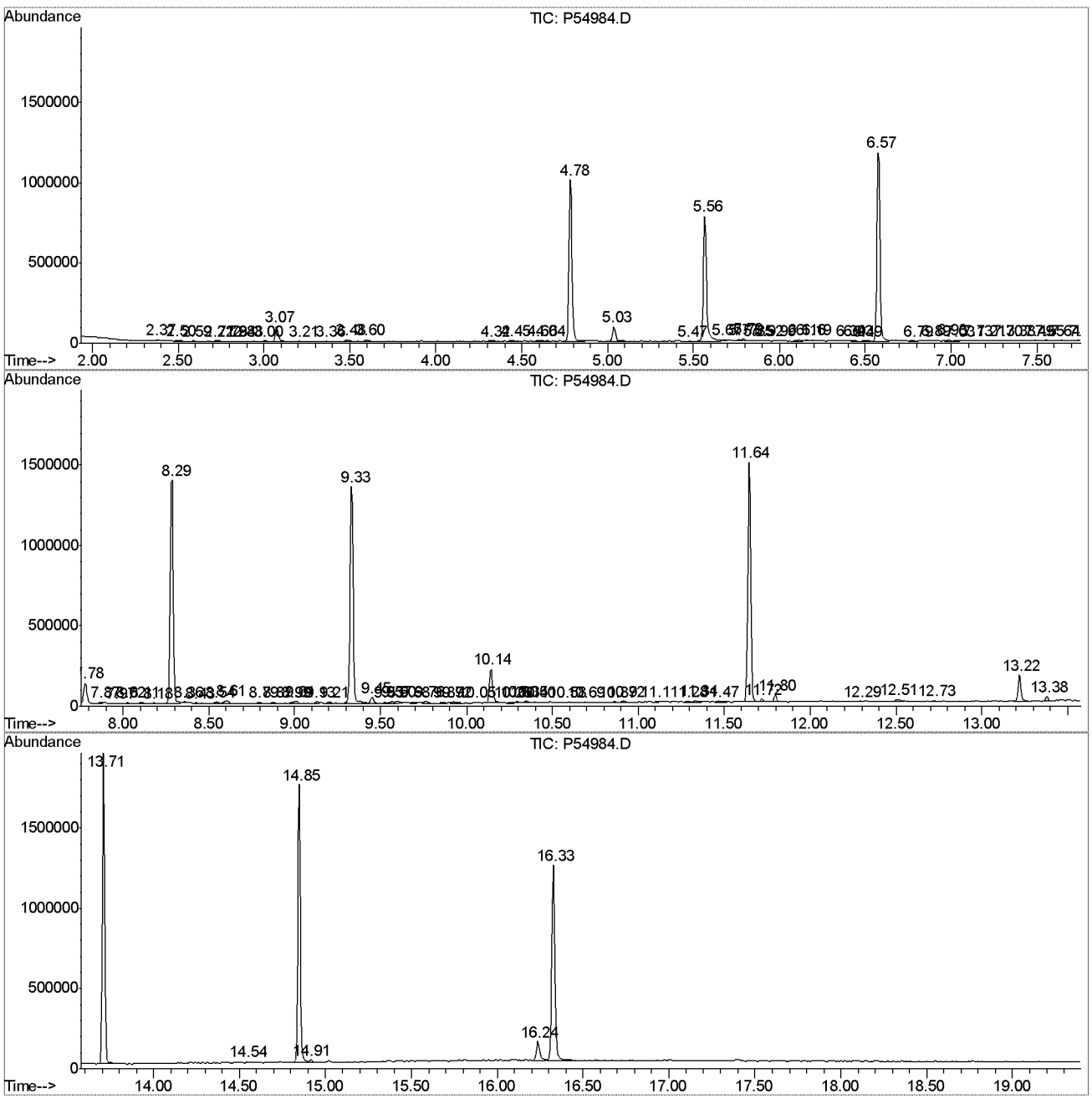
Sum of corrected areas: 15970889

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

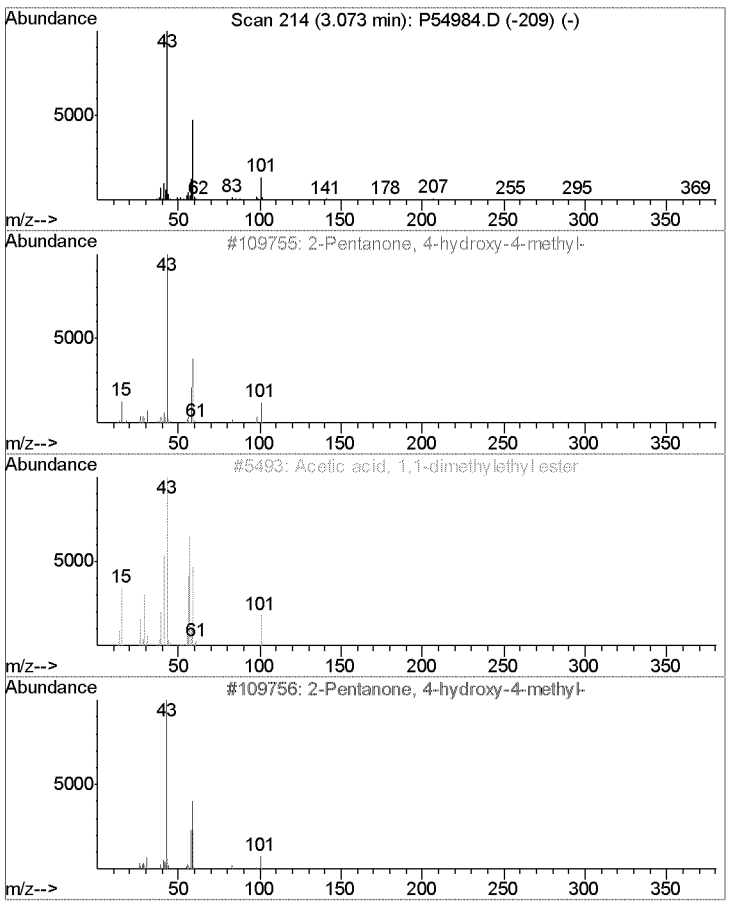
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

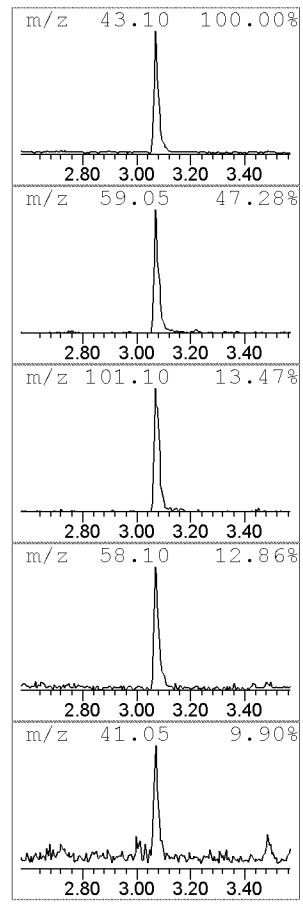
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.04 ppb	121119	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	39
5	Diacetamide	101	C4H7NO2	000625-77-4	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

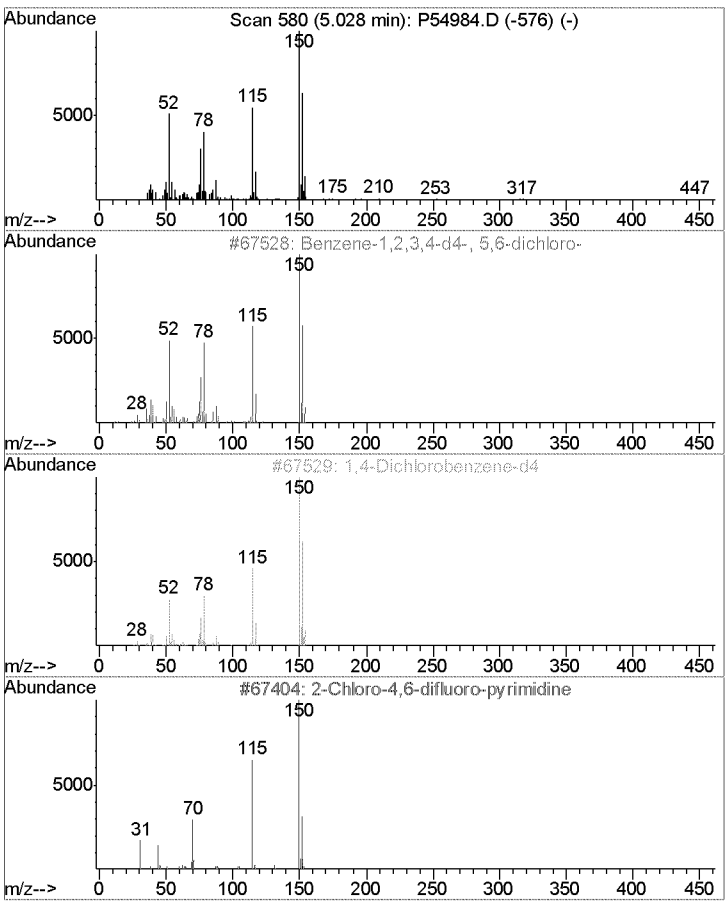
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

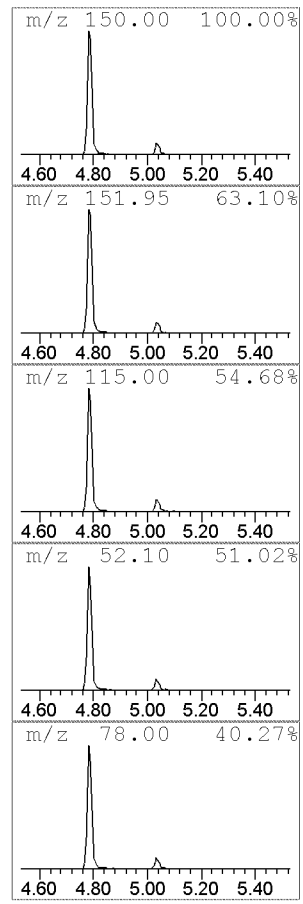
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.16 ppb	124605	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	14
4	Dezaguanine	150	C6H6N4O	041729-52-6	12
5	Ethanone, 1-(2-nitrophenyl)-	165	C8H7NO3	000577-59-3	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

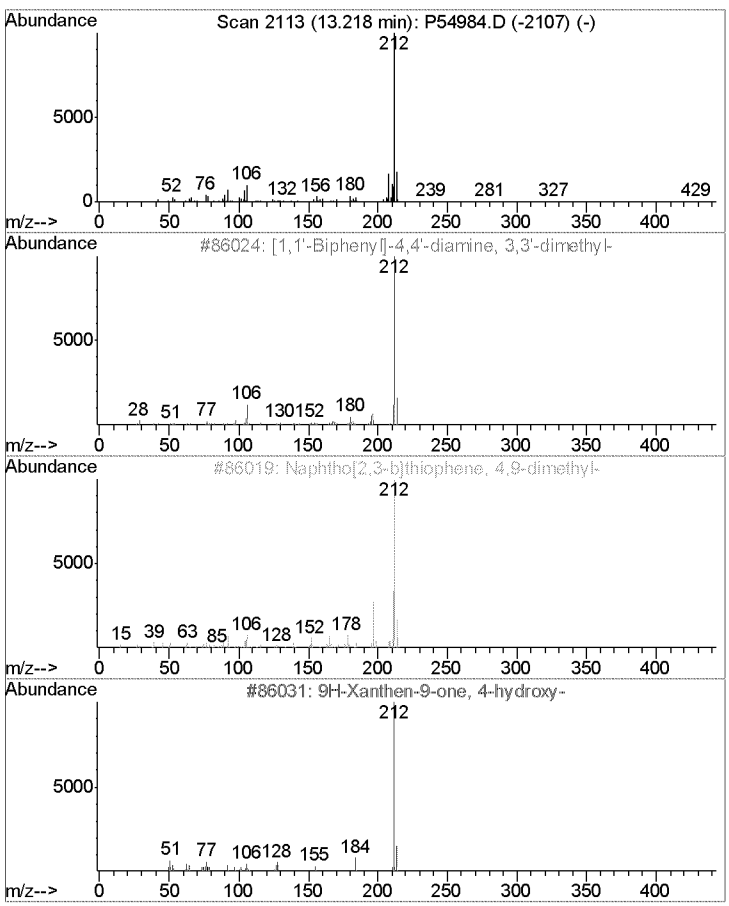
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

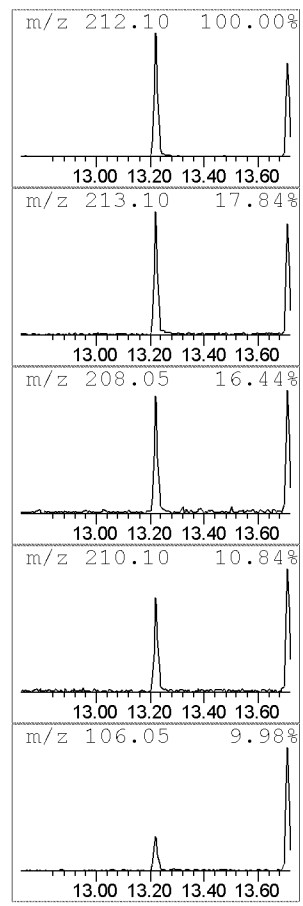
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.62 ppb	202251	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	72
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	64
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	59
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
5	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	53





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54984.D
Acq On : 22 Feb 2011 10:04 am
Operator : ninap
Sample : ja68506-5
Misc : op48193,ep2378,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.0	ppb	121119	1	4.78	1199270	40.0
Internal standard...	5.03	4.2	ppb	124605	2	4.78	1199270	40.0
Internal standard...	13.22	4.6	ppb	202251	7	11.64	1752560	40.0

8.1.10
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 23 11:21:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	170412	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	597617	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	377525	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	634571	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	709052	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	600666	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	170412	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	634571	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	377525	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	709052	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	329145	43.72	ppb	-0.07
Spiked Amount 50.000			Recovery =	87.44%		
51) 2-Fluorobiphenyl	8.29	172	531982	41.04	ppb	-0.08
Spiked Amount 50.000			Recovery =	82.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	535665	31.97	ppb	-0.06
Spiked Amount 50.000			Recovery =	63.94%		

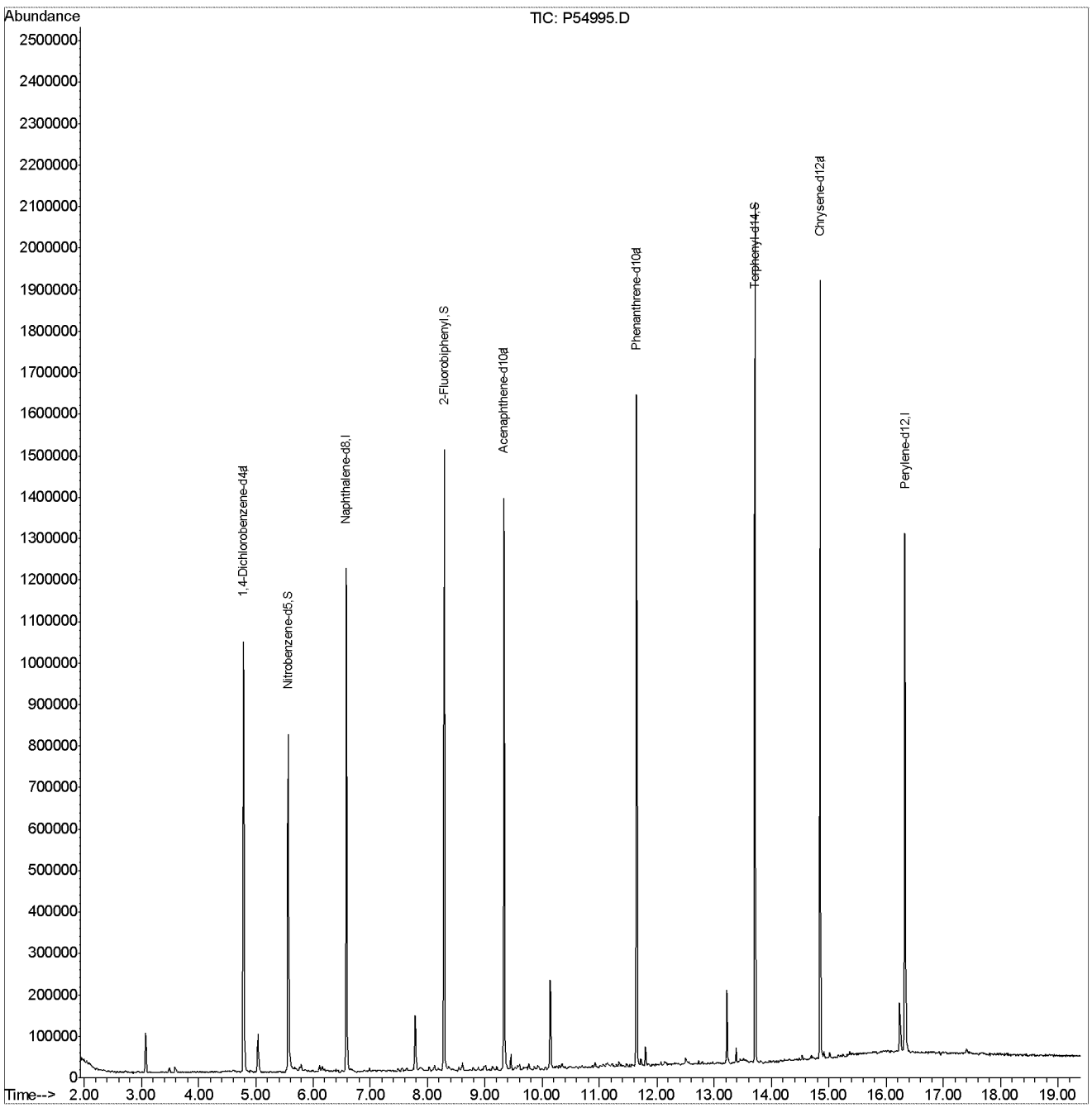
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 23 11:21:44 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.346	75	78	84	rVB7	5018	7662	0.40%	0.045%
2	2.496	103	106	112	rVB5	4373	5370	0.28%	0.032%
3	2.715	144	147	155	rVB8	4232	7748	0.41%	0.046%
4	2.827	165	168	173	rVB7	3287	4568	0.24%	0.027%
5	2.934	184	188	194	rVB7	2358	4689	0.25%	0.028%
6	3.003	194	201	208	rBV10	4029	7191	0.38%	0.043%
7	3.067	208	213	223	rBV	94948	124985	6.54%	0.742%
8	3.489	287	292	296	rBV3	11492	15997	0.84%	0.095%
9	3.591	306	311	321	rBV6	14212	21199	1.11%	0.126%
10	4.419	460	466	468	rBV7	3147	6044	0.32%	0.036%
11	4.601	495	500	505	rBV9	3722	7137	0.37%	0.042%
12	4.782	527	534	548	rBV	1037128	1255148	65.63%	7.447%
13	5.033	576	581	592	rBV	92326	124902	6.53%	0.741%
14	5.252	618	622	626	rVB7	3133	4784	0.25%	0.028%
15	5.418	646	653	657	rVB9	3860	9024	0.47%	0.054%
16	5.562	667	680	696	rBV	816768	1075474	56.24%	6.381%
17	5.674	699	701	705	rVB5	5258	5150	0.27%	0.031%
18	5.760	714	717	721	rBV5	7815	12144	0.64%	0.072%
19	5.792	721	723	729	rVB3	14759	16321	0.85%	0.097%
20	5.851	730	734	742	rVB10	4482	9686	0.51%	0.057%
21	5.915	744	746	752	rVB6	4483	5449	0.28%	0.032%
22	5.990	757	760	765	rBV7	4705	6034	0.32%	0.036%
23	6.112	777	783	788	rBV8	15316	21503	1.12%	0.128%
24	6.161	788	792	795	rVV4	12685	17428	0.91%	0.103%
25	6.193	795	798	803	rVV6	7248	10638	0.56%	0.063%
26	6.246	803	808	816	rVV6	4274	9360	0.49%	0.056%
27	6.358	826	829	834	rVB6	3609	4741	0.25%	0.028%
28	6.396	834	836	839	rVV4	5930	4948	0.26%	0.029%
29	6.428	839	842	851	rVB4	6323	10575	0.55%	0.063%
30	6.492	851	854	858	rBV5	5536	6815	0.36%	0.040%
31	6.572	861	869	881	rBV	1214121	1500748	78.47%	8.904%
32	6.892	925	929	934	rVB8	5398	7244	0.38%	0.043%
33	6.983	942	946	950	rVB4	8986	10185	0.53%	0.060%
34	7.069	957	962	967	rVB8	4423	7180	0.38%	0.043%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.128	970	973	977	rBV5	3250	5562	0.29%	0.033%
36	7.224	986	991	999	rVB5	4792	8921	0.47%	0.053%
37	7.485	1035	1040	1045	rBV9	6400	12857	0.67%	0.076%
38	7.550	1047	1052	1057	rVB8	8394	16281	0.85%	0.097%
39	7.640	1062	1069	1072	rVB9	6853	9591	0.50%	0.057%
40	7.742	1084	1088	1090	rBV5	6832	8633	0.45%	0.051%
41	7.779	1090	1095	1107	rVV2	133269	181811	9.51%	1.079%
42	7.865	1107	1111	1124	rVB2	6425	19253	1.01%	0.114%
43	8.020	1135	1140	1146	rVB7	9749	16534	0.86%	0.098%
44	8.116	1147	1158	1166	rBV9	14845	35415	1.85%	0.210%
45	8.287	1182	1190	1200	rBV	1496861	1767789	92.44%	10.488%
46	8.356	1200	1203	1213	rVV7	8158	18061	0.94%	0.107%
47	8.538	1233	1237	1242	rBV8	10733	17479	0.91%	0.104%
48	8.602	1242	1249	1257	rVB2	20139	36289	1.90%	0.215%
49	8.746	1269	1276	1278	rBV8	3400	5791	0.30%	0.034%
50	8.784	1278	1283	1290	rBV8	7587	14358	0.75%	0.085%
51	8.874	1296	1300	1304	rBV6	7158	9303	0.49%	0.055%
52	8.981	1316	1320	1322	rBV4	11398	13851	0.72%	0.082%
53	9.008	1322	1325	1330	rVB6	13157	17477	0.91%	0.104%
54	9.126	1343	1347	1355	rVB10	9995	15301	0.80%	0.091%
55	9.206	1357	1362	1370	rVB10	10884	18909	0.99%	0.112%
56	9.329	1375	1385	1403	rBV	1380569	1748749	91.44%	10.375%
57	9.451	1403	1408	1412	rVB	38223	46437	2.43%	0.276%
58	9.526	1419	1422	1424	rBV2	4820	4556	0.24%	0.027%
59	9.569	1425	1430	1432	rBV4	9522	12520	0.65%	0.074%
60	9.601	1433	1436	1440	rVB3	12315	16183	0.85%	0.096%
61	9.660	1444	1447	1450	rBV5	5284	4359	0.23%	0.026%
62	9.761	1462	1466	1472	rBV5	15716	19050	1.00%	0.113%
63	9.863	1480	1485	1490	rBV9	7478	12154	0.64%	0.072%
64	9.922	1491	1496	1503	rVB10	10923	21955	1.15%	0.130%
65	10.050	1514	1520	1526	rBV10	8954	18358	0.96%	0.109%
66	10.135	1526	1536	1548	rVV2	217023	322233	16.85%	1.912%
67	10.215	1548	1551	1555	rVV6	5214	6853	0.36%	0.041%
68	10.247	1555	1557	1562	rVB6	7287	9446	0.49%	0.056%
69	10.295	1562	1566	1569	rBV6	9372	13054	0.68%	0.077%
70	10.349	1570	1576	1582	rVV6	13486	25635	1.34%	0.152%
71	10.397	1582	1585	1589	rVB6	6317	6639	0.35%	0.039%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	10.450	1589	1595	1596	rBV6	4446	5143	0.27%	0.031%
73	10.477	1597	1600	1611	rVB6	6428	13369	0.70%	0.079%
74	10.589	1618	1621	1627	rVB8	6211	10332	0.54%	0.061%
75	10.685	1636	1639	1645	rVB8	6763	8455	0.44%	0.050%
76	10.867	1671	1673	1677	rVB5	5827	5107	0.27%	0.030%
77	10.915	1678	1682	1688	rVV9	11778	14199	0.74%	0.084%
78	11.006	1695	1699	1702	rBV6	4901	6599	0.35%	0.039%
79	11.059	1706	1709	1715	rVB8	6462	8686	0.45%	0.052%
80	11.134	1716	1723	1733	rVV8	8951	21216	1.11%	0.126%
81	11.337	1757	1761	1765	rVB6	9711	12717	0.66%	0.075%
82	11.465	1782	1785	1793	rVV8	7542	13124	0.69%	0.078%
83	11.524	1793	1796	1799	rVB5	6281	7029	0.37%	0.042%
84	11.562	1800	1803	1807	rBV5	5045	7727	0.40%	0.046%
85	11.642	1812	1818	1829	rBV2	1617010	1834079	95.90%	10.882%
86	11.722	1829	1833	1843	rVB8	16642	24738	1.29%	0.147%
87	11.797	1844	1847	1852	rBV	45498	51224	2.68%	0.304%
88	12.064	1892	1897	1902	rVB9	8959	13680	0.72%	0.081%
89	12.133	1904	1910	1913	rBV8	8182	16655	0.87%	0.099%
90	12.496	1975	1978	1994	rVB8	14769	35824	1.87%	0.213%
91	12.726	2018	2021	2025	rVB6	7836	7987	0.42%	0.047%
92	13.218	2107	2113	2125	rVB	178215	209813	10.97%	1.245%
93	13.378	2139	2143	2148	rVB4	34784	31047	1.62%	0.184%
94	13.709	2200	2205	2221	rVB	2074617	1912421	100.00%	11.347%
95	14.698	2386	2390	2392	rBV5	8907	10014	0.52%	0.059%
96	14.847	2412	2418	2427	rBV	1877904	1846708	96.56%	10.957%
97	14.911	2428	2430	2436	rVB2	17464	18877	0.99%	0.112%
98	15.013	2447	2449	2463	rVB5	15526	19076	1.00%	0.113%
99	16.236	2673	2678	2689	rBV2	115950	164178	8.58%	0.974%
100	16.327	2689	2695	2714	rVB	1252625	1638963	85.70%	9.724%

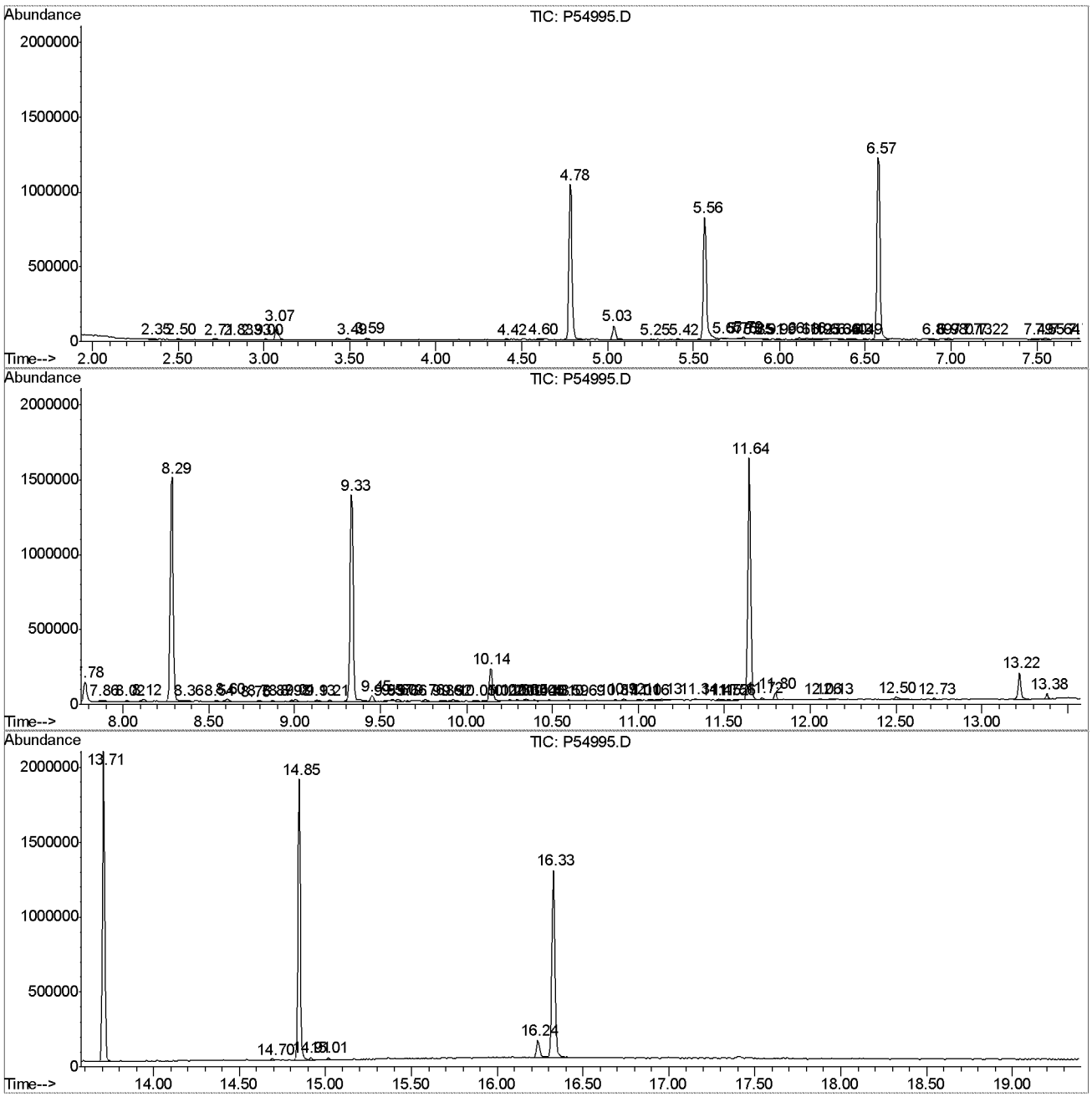
Sum of corrected areas: 16854705

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

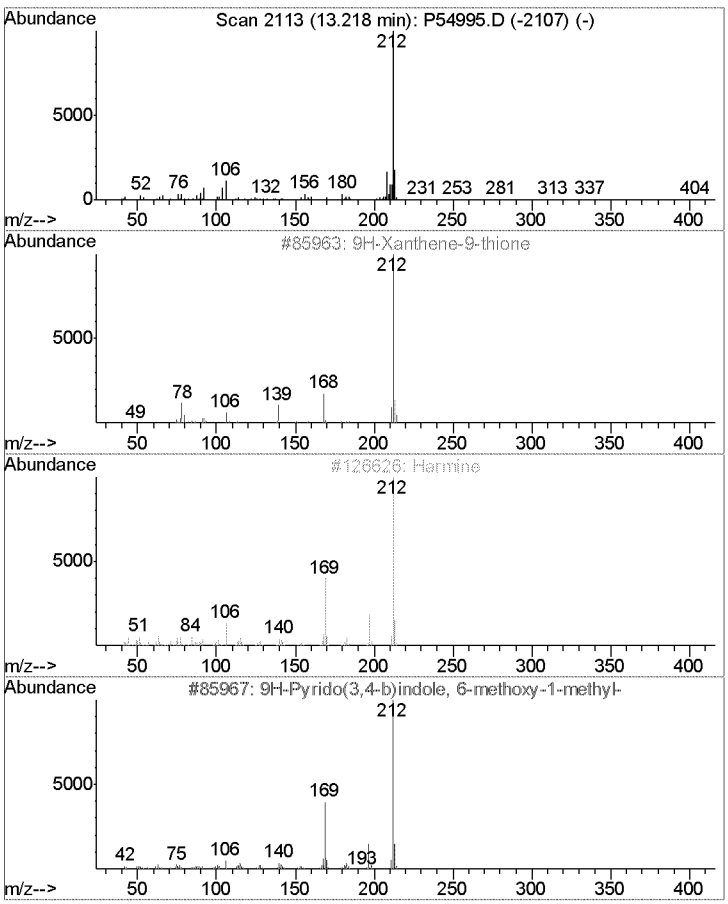
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

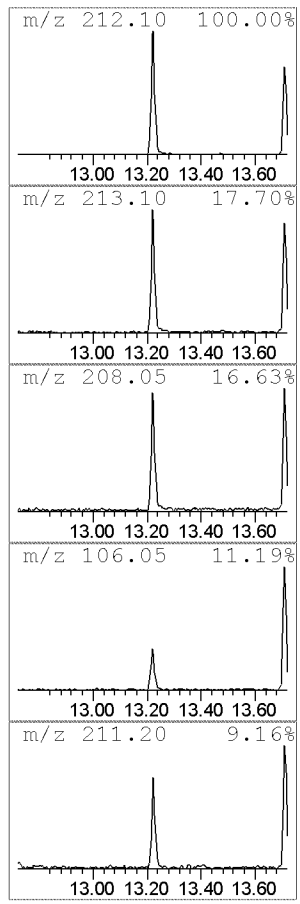
****

Peak Number 1 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.58 ppb	209813	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	80
2	Harmine	212	C13H12N2O	000442-51-3	72
3	9H-Pyrido(3,4-b)indole, 6-methox...	212	C13H12N2O	003589-72-8	64
4	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	64
5	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54995.D
Acq On : 22 Feb 2011 3:19 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193,ep2378,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	13.22	4.6	ppb	209813	7	11.64	1834080	40.0

8.1.12
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 23 11:22:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	158740	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	558030	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	333733	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	543598	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	636496	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	548275	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	158740	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	543598	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	333733	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	636496	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	296988	42.24	ppb	-0.07
Spiked Amount 50.000			Recovery =	84.48%		
51) 2-Fluorobiphenyl	8.29	172	471262	41.12	ppb	-0.08
Spiked Amount 50.000			Recovery =	82.24%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	494447	32.88	ppb	-0.06
Spiked Amount 50.000			Recovery =	65.76%		

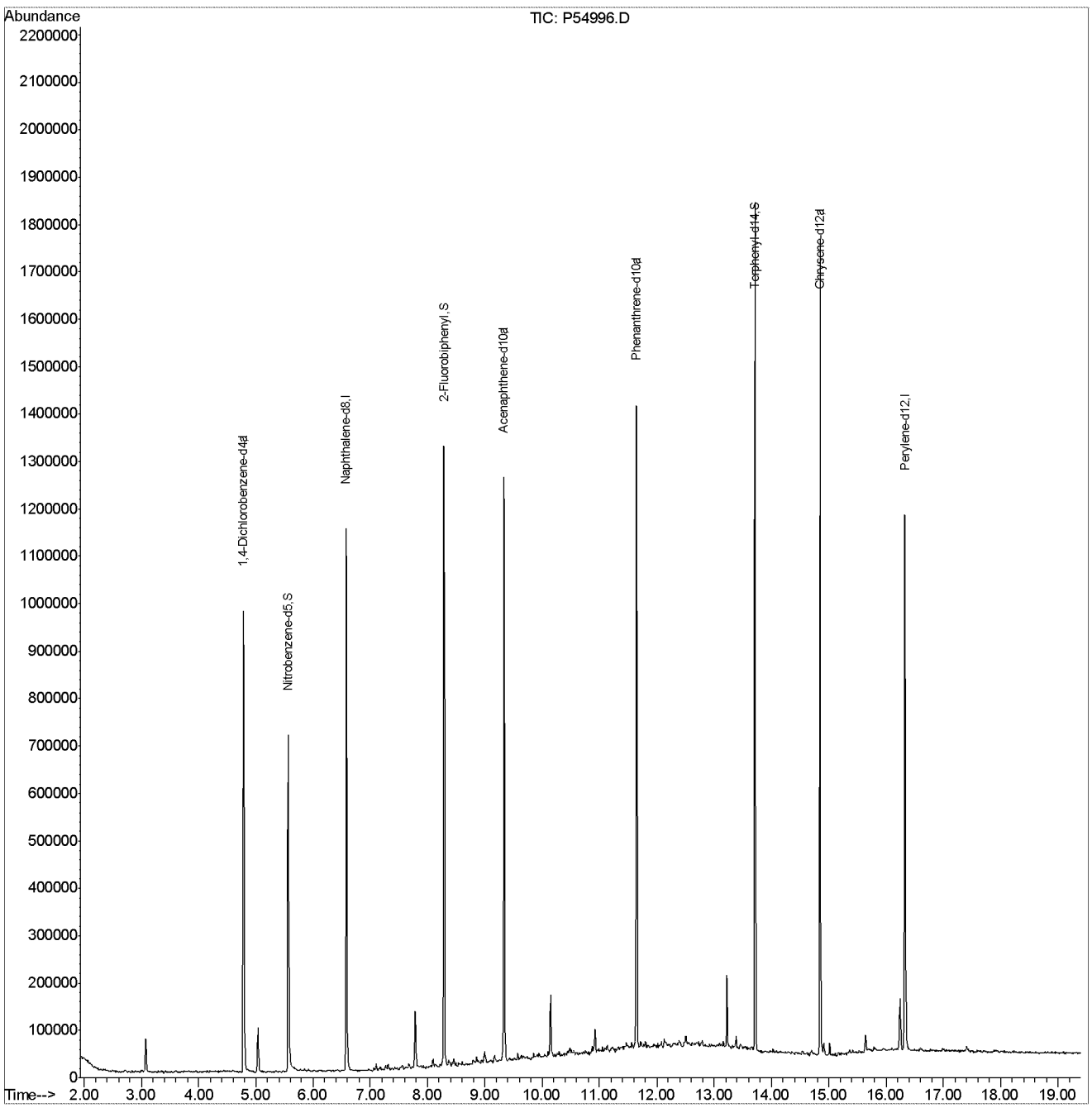
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 23 11:22:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.362	75	81	87	rVB9	4176	8794	0.50%	0.060%
2	2.720	144	148	157	rVB10	3516	6864	0.39%	0.046%
3	2.832	165	169	173	rBV6	4141	4748	0.27%	0.032%
4	2.955	187	192	194	rBV6	2346	4016	0.23%	0.027%
5	3.003	194	201	202	rBV6	3290	4312	0.25%	0.029%
6	3.073	208	214	225	rBV	71168	99603	5.67%	0.674%
7	3.297	254	256	262	rVB6	2931	4369	0.25%	0.030%
8	3.351	262	266	270	rBV6	3367	4861	0.28%	0.033%
9	3.420	274	279	282	rBV6	4012	6476	0.37%	0.044%
10	3.505	294	295	304	rBV9	2700	4852	0.28%	0.033%
11	3.949	374	378	381	rVB4	3031	3745	0.21%	0.025%
12	4.024	387	392	395	rVB6	2494	3545	0.20%	0.024%
13	4.323	443	448	451	rVB7	2142	3796	0.22%	0.026%
14	4.430	464	468	477	rBV7	3128	4793	0.27%	0.032%
15	4.601	497	500	505	rBV7	3250	4082	0.23%	0.028%
16	4.782	527	534	550	rBV	971395	1181750	67.23%	7.999%
17	5.033	573	581	594	rBV	94953	121536	6.91%	0.823%
18	5.562	673	680	700	rBV	710333	965387	54.92%	6.535%
19	5.776	717	720	727	rVB9	4098	5932	0.34%	0.040%
20	5.845	729	733	741	rVV9	4967	10451	0.59%	0.071%
21	5.915	741	746	752	rVB10	7044	12313	0.70%	0.083%
22	6.011	762	764	771	rVB7	3074	5343	0.30%	0.036%
23	6.112	778	783	788	rBV8	4051	6779	0.39%	0.046%
24	6.438	840	844	848	rVB7	4192	5690	0.32%	0.039%
25	6.572	863	869	888	rVB	1143283	1406446	80.01%	9.520%
26	6.748	899	902	906	rVB6	4405	5890	0.34%	0.040%
27	6.892	927	929	933	rVB5	3573	3938	0.22%	0.027%
28	6.930	933	936	941	rBV7	2610	4919	0.28%	0.033%
29	6.967	941	943	949	rVB7	2990	4546	0.26%	0.031%
30	7.058	954	960	963	rBV7	6774	12445	0.71%	0.084%
31	7.101	963	968	973	rVB8	14743	20156	1.15%	0.136%
32	7.176	973	982	984	rBV10	7130	11027	0.63%	0.075%
33	7.261	993	998	1002	rBV6	10334	11608	0.66%	0.079%
34	7.309	1002	1007	1016	rVB8	12814	23735	1.35%	0.161%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	7.379	1016	1020	1024	rBV6	5074	7621	0.43%	0.052%
36	7.421	1025	1028	1034	rBV7	4114	7080	0.40%	0.048%
37	7.555	1043	1053	1058	rVB7	9994	21617	1.23%	0.146%
38	7.619	1060	1065	1067	rBV6	4826	5591	0.32%	0.038%
39	7.667	1071	1074	1080	rVB6	10877	14943	0.85%	0.101%
40	7.726	1081	1085	1088	rBV6	4718	4810	0.27%	0.033%
41	7.779	1088	1095	1102	rBV3	120053	165551	9.42%	1.121%
42	7.982	1130	1133	1137	rBV6	3540	6019	0.34%	0.041%
43	8.089	1148	1153	1157	rBV4	17254	21759	1.24%	0.147%
44	8.132	1158	1161	1168	rVB9	6490	11355	0.65%	0.077%
45	8.217	1174	1177	1181	rBV6	5515	7114	0.40%	0.048%
46	8.281	1181	1189	1199	rVV	1307151	1586076	90.23%	10.736%
47	8.362	1200	1204	1212	rVB8	13243	28541	1.62%	0.193%
48	8.420	1212	1215	1217	rBV4	7457	8933	0.51%	0.060%
49	8.452	1217	1221	1225	rVB5	13747	18715	1.06%	0.127%
50	8.533	1234	1236	1246	rVB5	4817	9846	0.56%	0.067%
51	8.597	1246	1248	1253	rBV5	7049	7442	0.42%	0.050%
52	8.789	1282	1284	1290	rBV7	7076	12543	0.71%	0.085%
53	8.848	1291	1295	1299	rBV7	13065	16363	0.93%	0.111%
54	8.939	1309	1312	1317	rBV6	7081	10621	0.60%	0.072%
55	8.992	1317	1322	1329	rVV4	24324	38077	2.17%	0.258%
56	9.168	1350	1355	1363	rBV4	15774	24509	1.39%	0.166%
57	9.329	1377	1385	1396	rVB	1231280	1524883	86.75%	10.322%
58	9.569	1427	1430	1434	rVB	13026	13387	0.76%	0.091%
59	10.141	1532	1537	1547	rVB	130998	170387	9.69%	1.153%
60	10.482	1598	1601	1605	rBV2	12828	15393	0.88%	0.104%
61	10.867	1670	1673	1676	rBV5	10744	12864	0.73%	0.087%
62	10.915	1678	1682	1687	rVB	47129	57240	3.26%	0.387%
63	11.642	1811	1818	1828	rVB2	1353304	1548870	88.11%	10.484%
64	13.218	2109	2113	2127	rVB	154122	182450	10.38%	1.235%
65	13.378	2140	2143	2152	rVB5	27315	32913	1.87%	0.223%
66	13.709	2199	2205	2218	rVB	1791610	1757848	100.00%	11.899%
67	14.847	2413	2418	2427	rBV	1710150	1663694	94.64%	11.261%
68	14.911	2427	2430	2444	rVB	25252	34609	1.97%	0.234%
69	15.018	2447	2450	2458	rVB	26433	29242	1.66%	0.198%
70	15.638	2562	2566	2574	rBV2	36266	48763	2.77%	0.330%
71	16.241	2673	2679	2687	rVB	106951	153345	8.72%	1.038%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.005 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

72	16.327	2689	2695	2712	rVB	1128235	1503861	85.55%	10.179%

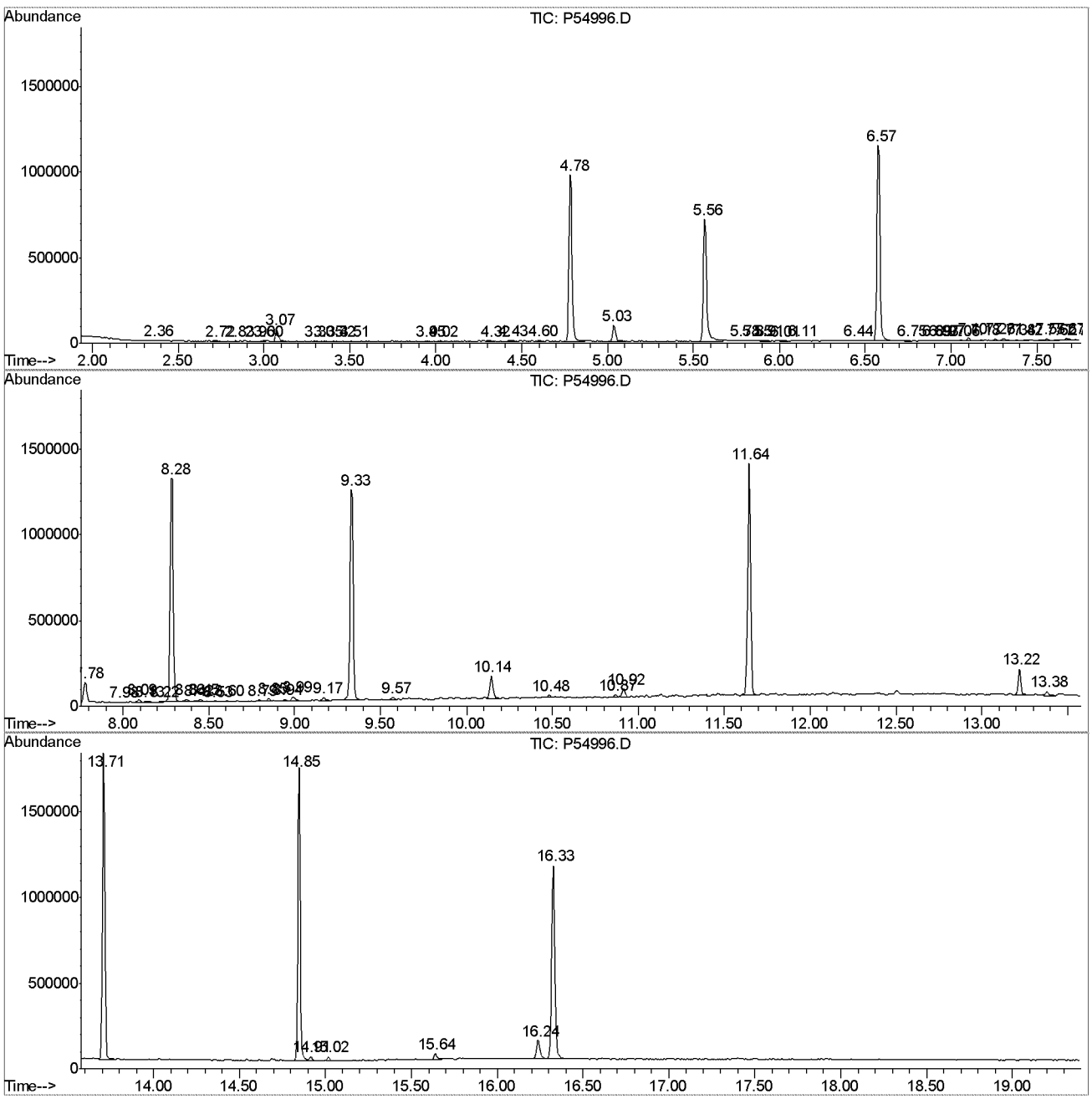
Sum of corrected areas: 14773622

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

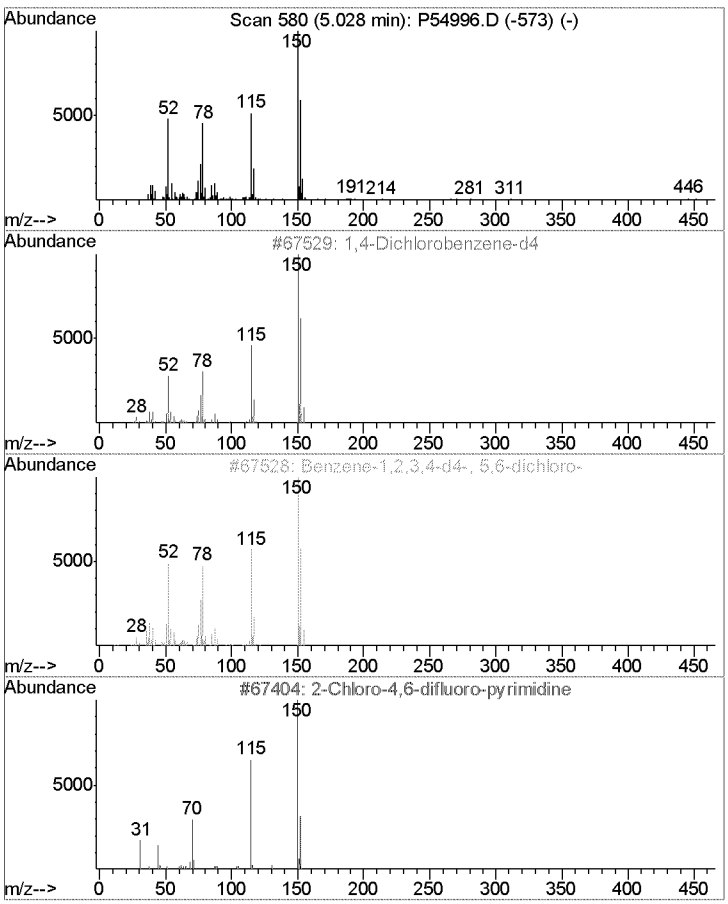
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

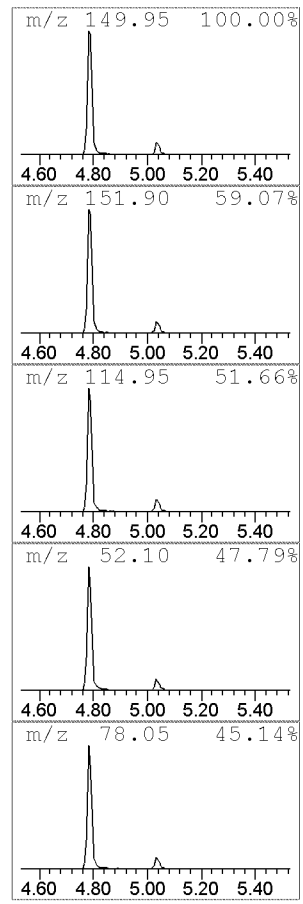
****

Peak Number 1 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.11 ppb	121536	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	94
2	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	72
3	2-Chloro-4,6-difluoro-pyrimidine	150	C4HClF2N2	1000146-57-7	12
4	2-Bromo-3'-nitroacetophenone	243	C8H6BrNO3	002227-64-7	10
5	Cyclobuta[1,2-A:3,4-A']diindene,...	300	C18H14Cl2	110848-73-2	10





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

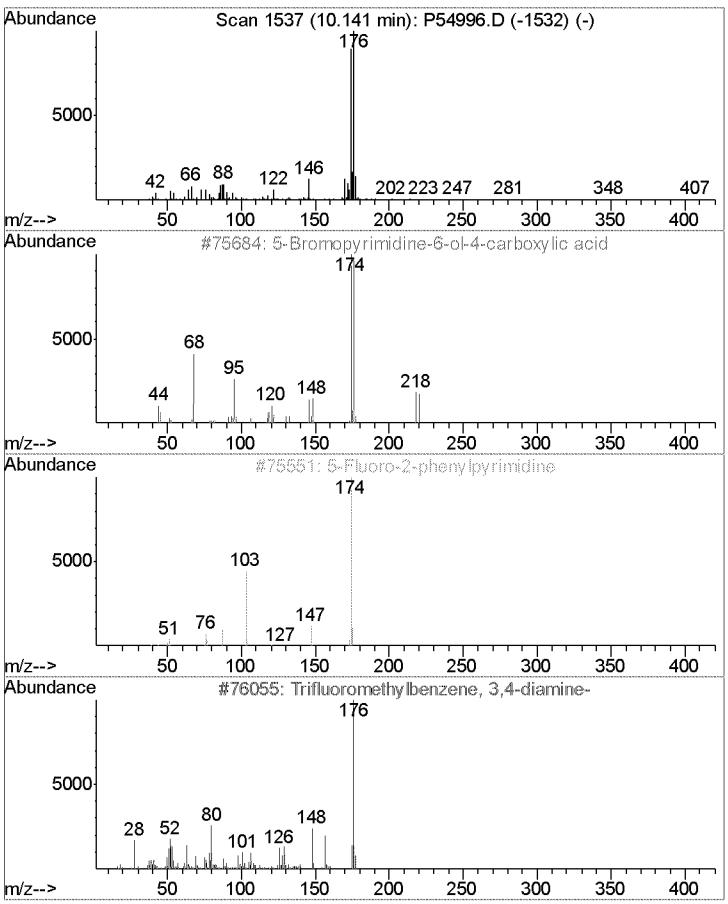
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

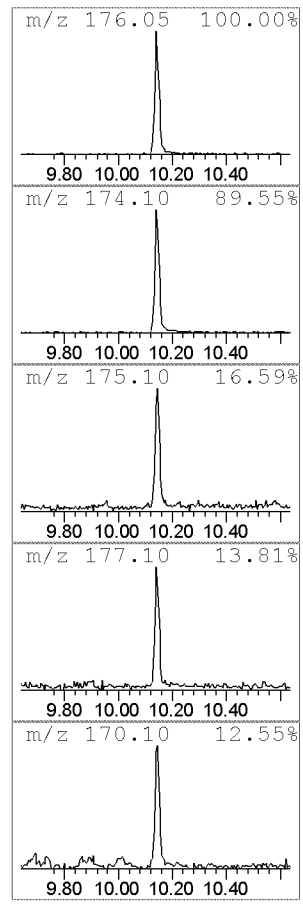
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.47 ppb	170387	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Bromopyrimidine-6-ol-4-carboxy...	218	C5H3BrN2O3	1000128-90-9	38
2	5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	35
3	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	35
4	6-Amino-2,3-diethyl-1H-pyrrolo[2...	189	C11H15N3	055463-66-6	32
5	Benzenemethanol, .alpha.-1-penty...	174	C12H14O	108946-34-5	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

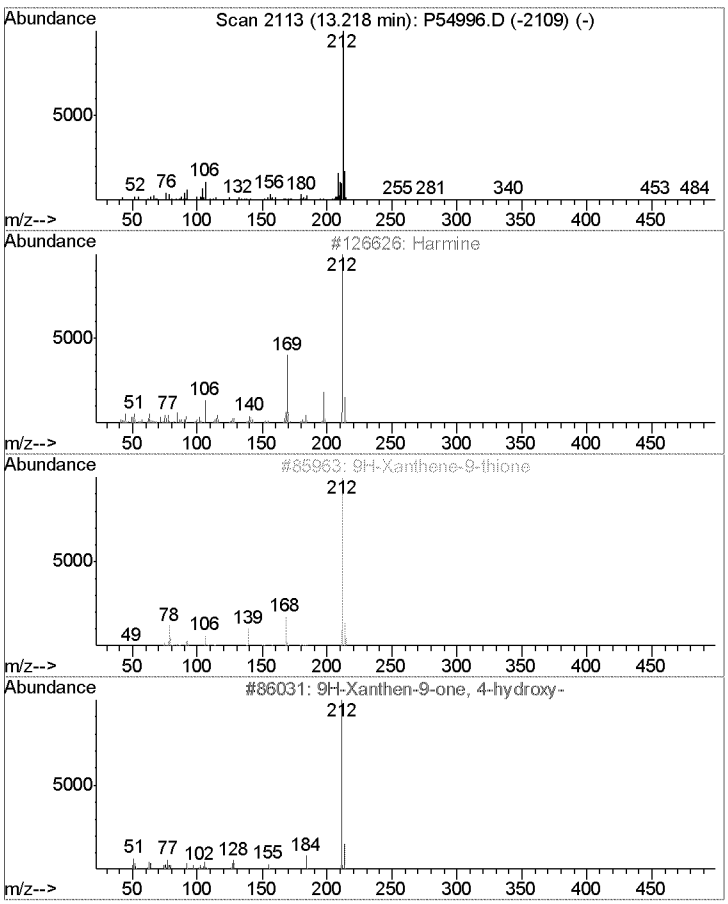
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

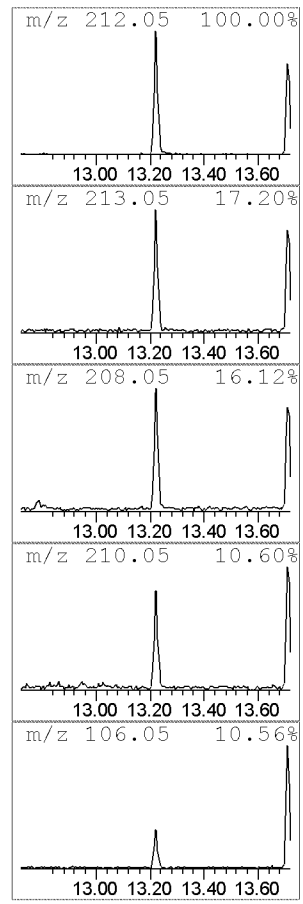
****

Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.71 ppb	182450	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Harmine	212	C13H12N2O	000442-51-3	64
2	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	59
3	9H-Xanthen-9-one, 4-hydroxy-	212	C13H8O3	014686-63-6	50
4	Imidazole, 4-trifluoromethyl-2-p...	212	C10H7F3N2	033469-36-2	50
5	9H-Xanthen-9-one, 2-hydroxy-	212	C13H8O3	001915-98-6	45





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

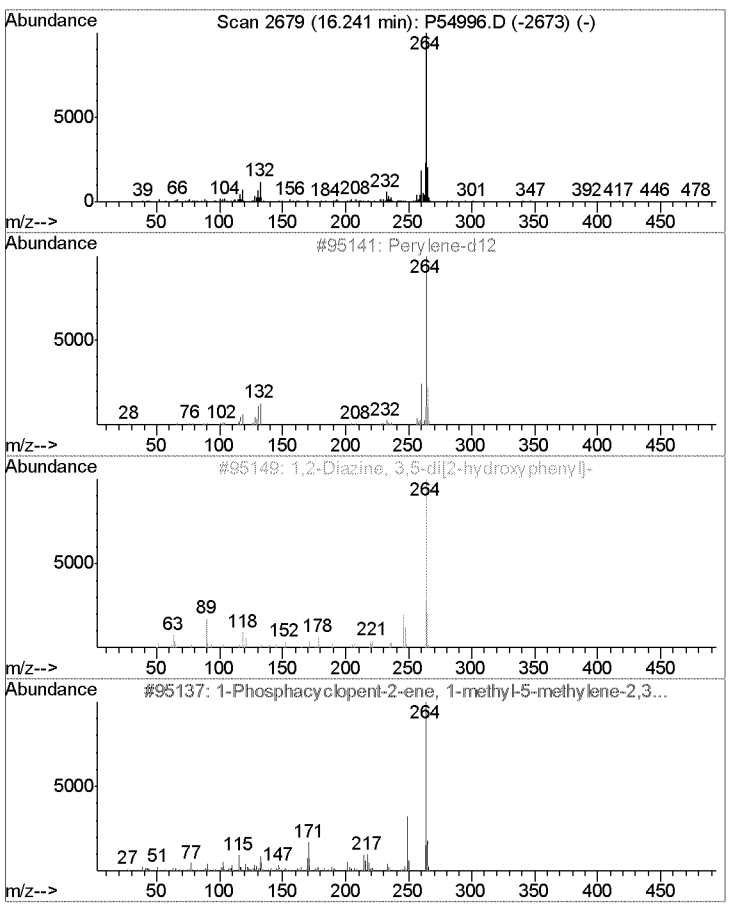
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

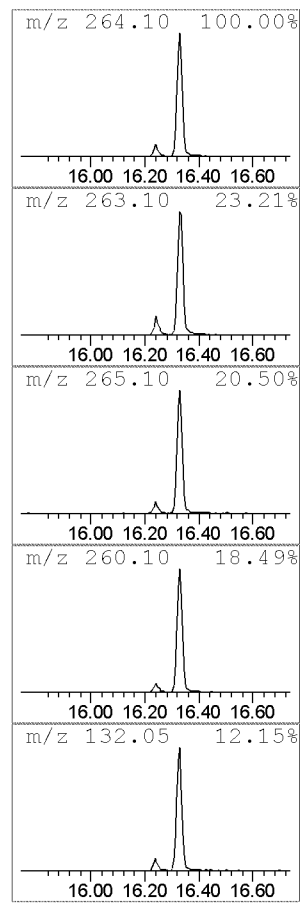
****

Peak Number 4 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.08 ppb	153345	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	94
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	59
4	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	59
5	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	53





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54996.D
Acq On : 22 Feb 2011 3:47 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193,ep2378,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	5.03	4.1	ppb	121536	2	4.78	1181750	40.0
Internal standard...	10.14	4.5	ppb	170387	5	9.33	1524880	40.0
Internal standard...	13.22	4.7	ppb	182450	7	11.64	1548870	40.0
Internal standard...	16.24	4.1	ppb	153345	10	16.33	1503860	40.0

8.1.14
8

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 12:39:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	160648	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	557580	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	360586	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	622742	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	684669	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	571229	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	160648	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	622742	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	360586	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	684669	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	327557	46.63	ppb	-0.07
Spiked Amount 50.000			Recovery =	93.26%		
51) 2-Fluorobiphenyl	8.28	172	532909	43.04	ppb	-0.09
Spiked Amount 50.000			Recovery =	86.08%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	529825	32.75	ppb	-0.06
Spiked Amount 50.000			Recovery =	65.50%		

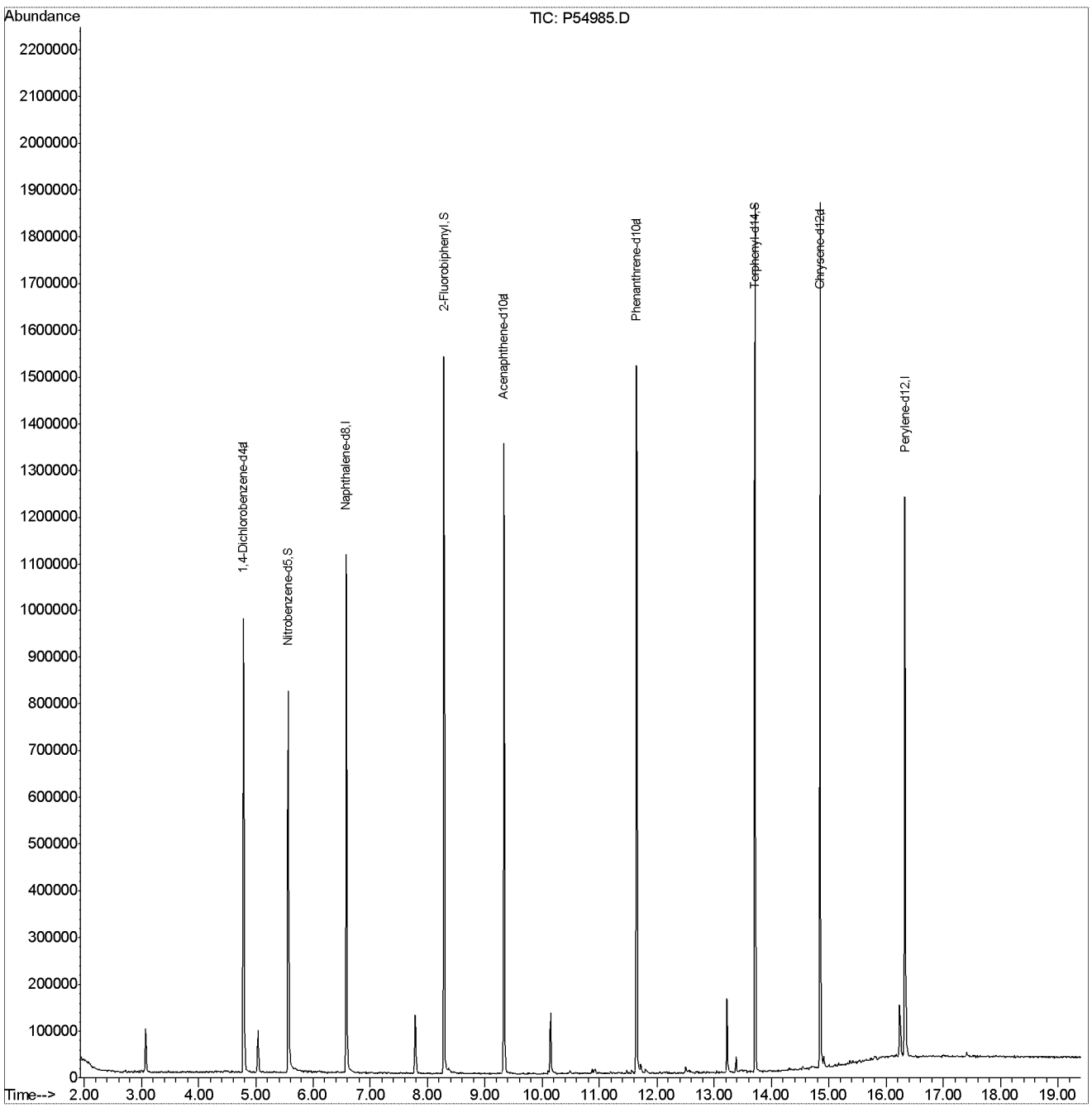
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 12:39:50 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.416	88	91	94	rBV5	3322	4177	0.22%	0.027%
2	2.496	104	106	114	rVB8	4757	7509	0.40%	0.049%
3	2.726	141	149	155	rBV8	5399	11693	0.62%	0.076%
4	2.886	176	179	183	rVB6	3247	4680	0.25%	0.030%
5	3.009	199	202	206	rVB6	4245	5144	0.27%	0.033%
6	3.067	208	213	226	rVB	94669	124197	6.61%	0.802%
7	3.238	241	245	251	rVB8	2377	3686	0.20%	0.024%
8	4.782	527	534	553	rBV	970941	1170438	62.32%	7.562%
9	5.033	574	581	588	rBV	89849	116878	6.22%	0.755%
10	5.333	628	637	639	rBV10	2642	4125	0.22%	0.027%
11	5.562	671	680	699	rBV	817938	1055587	56.21%	6.820%
12	5.835	730	731	737	rBV5	2720	3952	0.21%	0.026%
13	5.926	746	748	752	rBV5	3065	3695	0.20%	0.024%
14	6.572	863	869	892	rBV	1108642	1422632	75.75%	9.191%
15	6.780	906	908	913	rVB5	2770	3656	0.19%	0.024%
16	7.229	990	992	1000	rVB9	2095	3814	0.20%	0.025%
17	7.528	1044	1048	1052	rBV7	2425	4275	0.23%	0.028%
18	7.779	1087	1095	1108	rBV2	126276	177087	9.43%	1.144%
19	8.046	1141	1145	1149	rVB5	2880	3913	0.21%	0.025%
20	8.281	1181	1189	1200	rBV	1536057	1783248	94.95%	11.521%
21	8.356	1200	1203	1212	rVB7	9763	21624	1.15%	0.140%
22	8.452	1219	1221	1226	rVB6	3253	3545	0.19%	0.023%
23	8.602	1245	1249	1256	rBV10	2665	4154	0.22%	0.027%
24	8.992	1318	1322	1328	rVB9	3164	5640	0.30%	0.036%
25	9.072	1332	1337	1344	rVB10	2365	3542	0.19%	0.023%
26	9.216	1360	1364	1368	rBV7	2988	4191	0.22%	0.027%
27	9.259	1369	1372	1375	rVB5	3570	5077	0.27%	0.033%
28	9.329	1375	1385	1401	rBV	1350200	1640155	87.33%	10.597%
29	9.446	1404	1407	1413	rVB8	3705	5447	0.29%	0.035%
30	9.660	1441	1447	1452	rBV8	2963	6041	0.32%	0.039%
31	10.103	1527	1530	1532	rBV4	6915	6921	0.37%	0.045%
32	10.141	1532	1537	1550	rVB	129910	175495	9.34%	1.134%
33	10.477	1597	1600	1610	rVB10	5994	10233	0.54%	0.066%
34	10.600	1616	1623	1627	rVB9	3692	7503	0.40%	0.048%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	10.760	1649	1653	1655	rBV5	3413	3502	0.19%	0.023%
36	10.867	1669	1673	1677	rBV3	10818	12768	0.68%	0.082%
37	10.915	1677	1682	1688	rVV4	10477	17191	0.92%	0.111%
38	10.958	1688	1690	1697	rVB8	2607	4744	0.25%	0.031%
39	11.193	1731	1734	1740	rVB9	3865	4987	0.27%	0.032%
40	11.241	1740	1743	1749	rBV7	2118	3541	0.19%	0.023%
41	11.321	1756	1758	1765	rVB8	3091	4195	0.22%	0.027%
42	11.471	1775	1786	1791	rBV5	9151	18559	0.99%	0.120%
43	11.562	1799	1803	1811	rVB6	6618	8949	0.48%	0.058%
44	11.642	1811	1818	1828	rBV2	1515115	1758878	93.65%	11.364%
45	11.722	1828	1833	1843	rVV4	18120	32197	1.71%	0.208%
46	11.802	1843	1848	1861	rVB4	9876	18942	1.01%	0.122%
47	12.048	1890	1894	1901	rVB9	4721	7590	0.40%	0.049%
48	12.128	1904	1909	1912	rVB7	3009	5165	0.28%	0.033%
49	12.165	1912	1916	1920	rBV7	4017	4941	0.26%	0.032%
50	12.326	1940	1946	1950	rVB9	2906	5160	0.27%	0.033%
51	12.363	1950	1953	1956	rBV4	2483	3527	0.19%	0.023%
52	12.497	1972	1978	1986	rBV10	13019	25122	1.34%	0.162%
53	12.561	1987	1990	1996	rVB5	6775	10989	0.59%	0.071%
54	13.041	2077	2080	2084	rBV5	4767	5516	0.29%	0.036%
55	13.218	2108	2113	2125	rBV	158629	196059	10.44%	1.267%
56	13.378	2138	2143	2149	rBV3	34072	38226	2.04%	0.247%
57	13.447	2154	2156	2160	rBV5	4911	6232	0.33%	0.040%
58	13.474	2160	2161	2165	rVB4	3841	3844	0.20%	0.025%
59	13.544	2170	2174	2181	rVB10	7233	14782	0.79%	0.096%
60	13.586	2181	2182	2186	rBV3	3545	4726	0.25%	0.031%
61	13.709	2199	2205	2223	rBV	1857459	1878100	100.00%	12.134%
62	13.864	2231	2234	2238	rBV5	3049	4719	0.25%	0.030%
63	14.313	2316	2318	2321	rBV4	4468	3615	0.19%	0.023%
64	14.425	2333	2339	2343	rBV9	3635	6597	0.35%	0.043%
65	14.543	2357	2361	2367	rBV9	5945	7981	0.42%	0.052%
66	14.847	2411	2418	2428	rBV	1851905	1795283	95.59%	11.599%
67	14.917	2428	2431	2439	rVB	22246	27998	1.49%	0.181%
68	15.168	2474	2478	2489	rBV	7733	18580	0.99%	0.120%
69	15.365	2512	2515	2520	rBV7	7592	10305	0.55%	0.067%
70	16.236	2673	2678	2688	rBV	110213	156405	8.33%	1.011%
71	16.327	2688	2695	2710	rVB	1196317	1533985	81.68%	9.911%

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

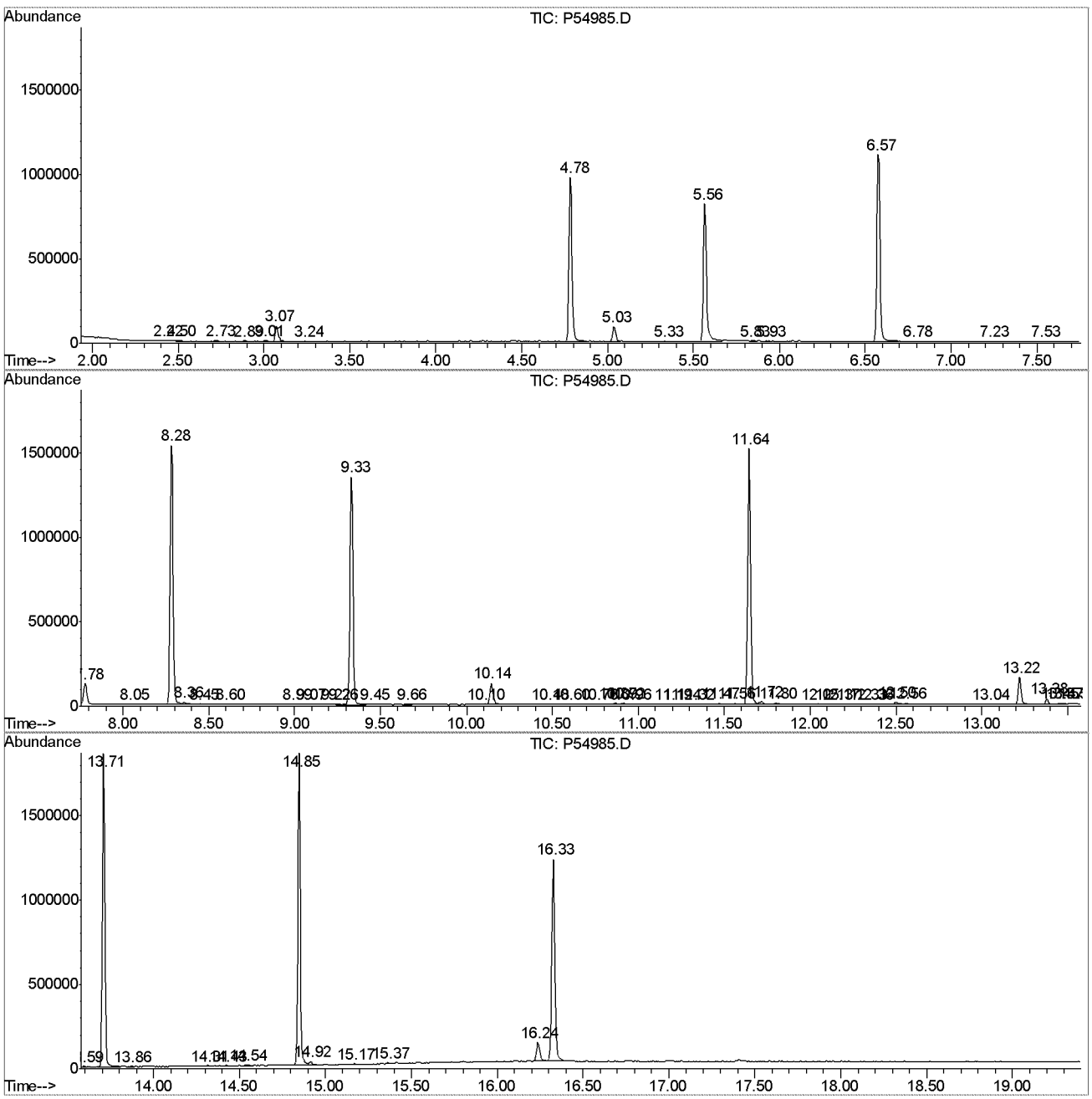
Sum of corrected areas: 15477854

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

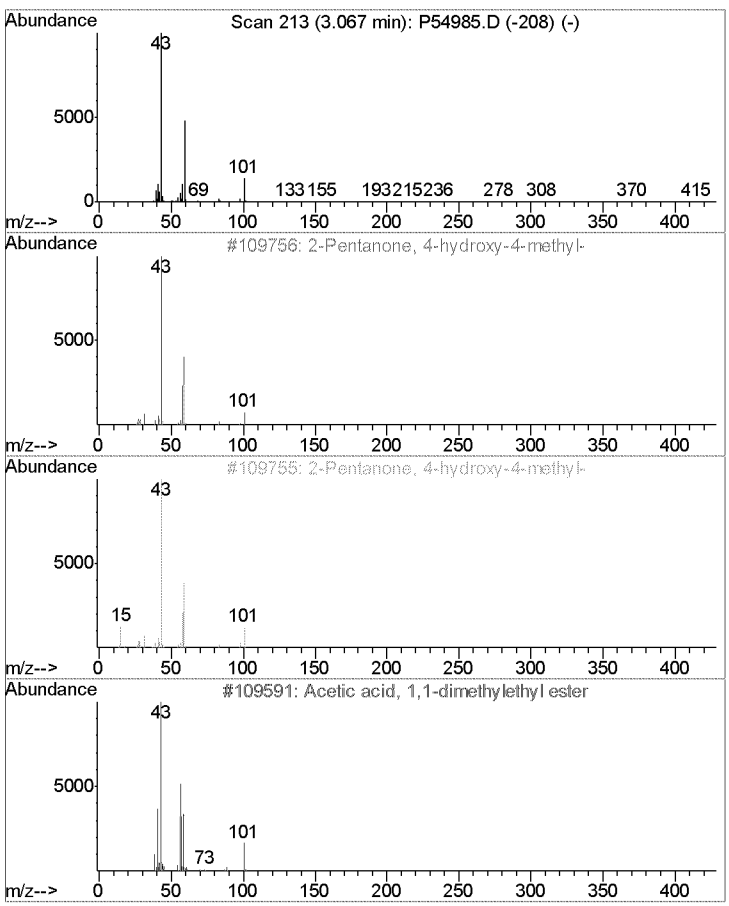
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

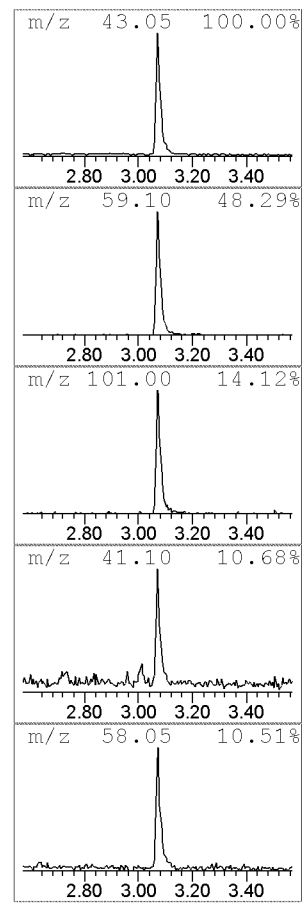
****

Peak Number 1 system artifact/aldol-conde... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.07	4.24 ppb	124197	1,4-Dichlorobenzene-d4	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	28
5	Propanenitrile, 3-ethoxy-	99	C5H9NO	002141-62-0	9





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

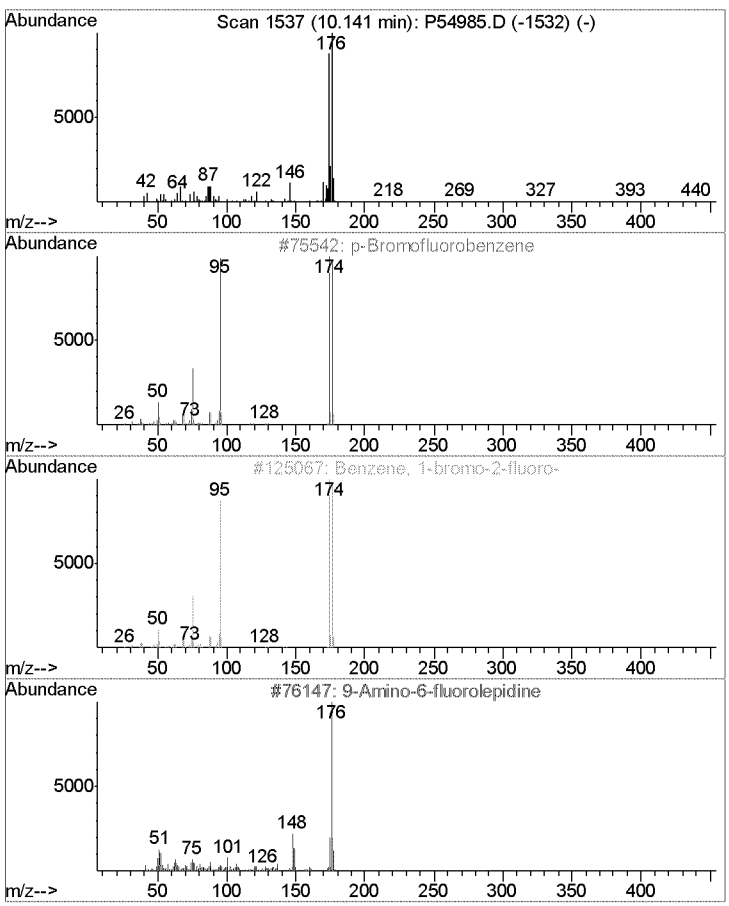
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

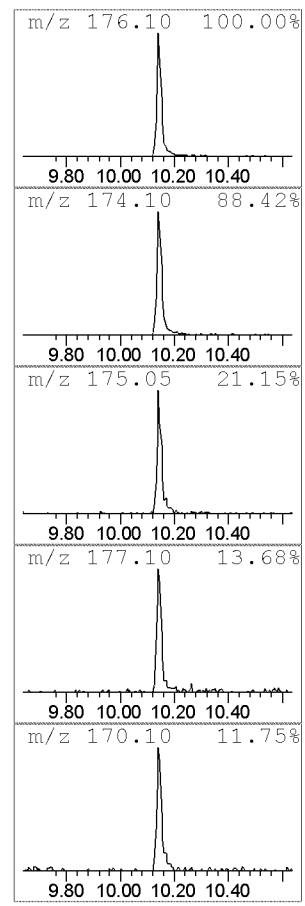
****

Peak Number 2 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	4.28 ppb	175495	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	p-Bromofluorobenzene	174	C6H4BrF	000460-00-4	59
2	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	45
3	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	30
4	Silanamine, 1,1,1-trimethyl-N-(2...	265	C14H27NSi2	058367-45-6	27
5	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	27





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

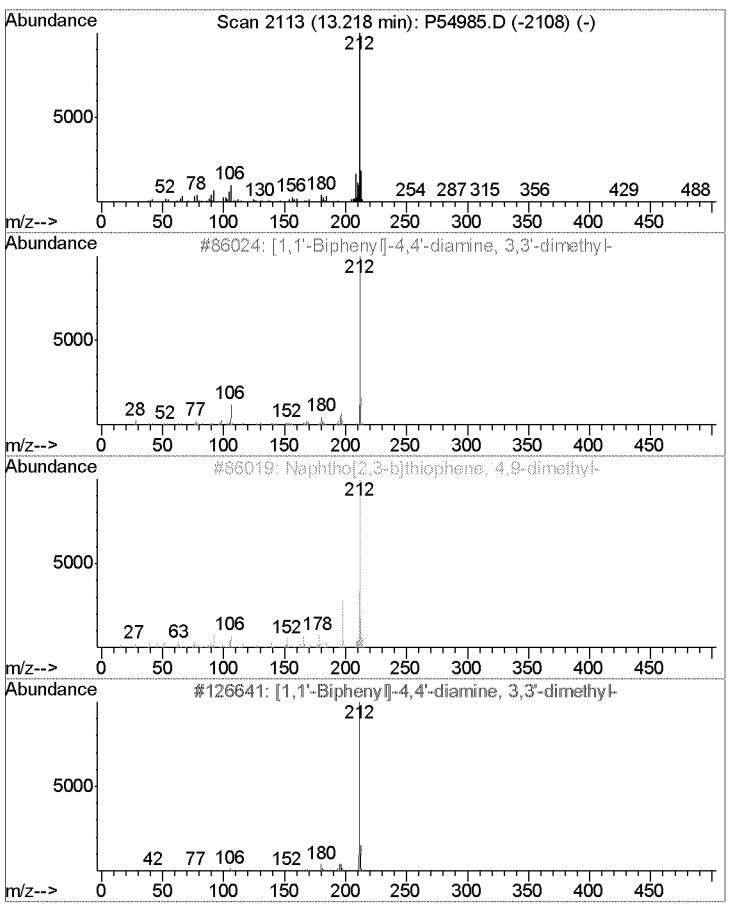
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

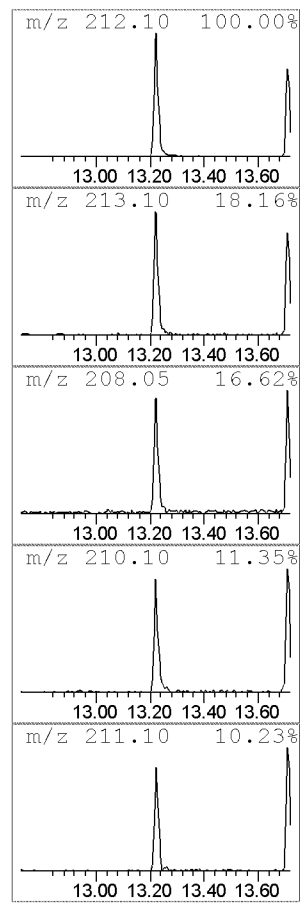
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 3 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	4.46 ppb	196059	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	74
2	Naphtho[2,3-b]thiophene, 4,9-dim...	212	C14H12S	016587-34-1	59
3	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	59
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	53
5	Benzenamine, 3-methoxy-N-(3-pyri...	212	C13H12N2O	041855-70-3	52





Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

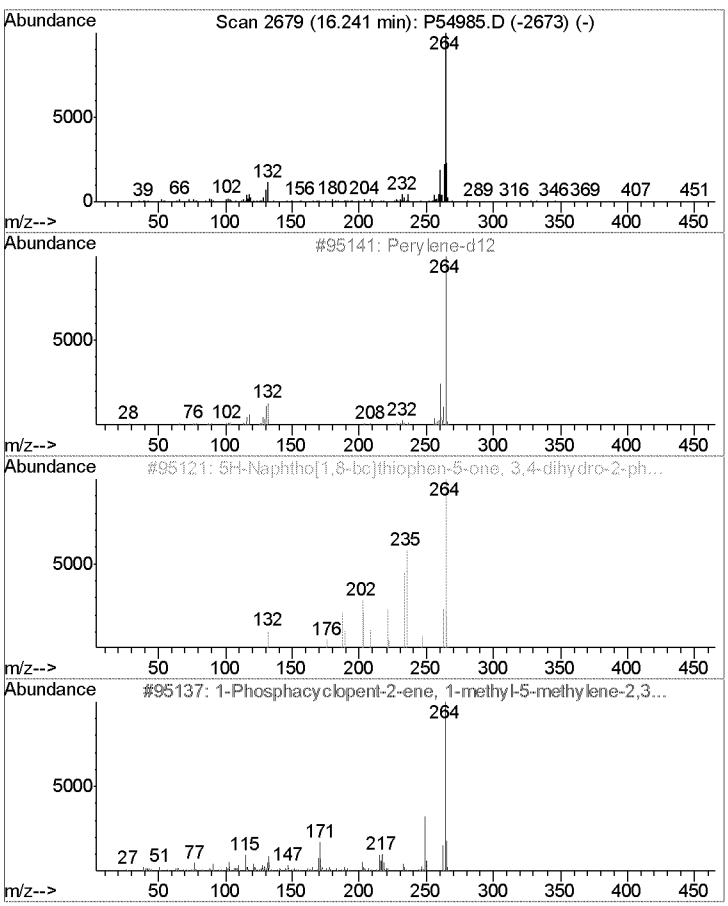
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

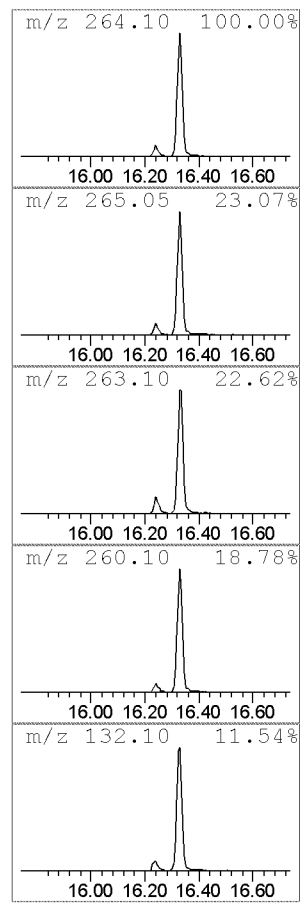
****

Peak Number 4 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	4.08 ppb	156405	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	81
2	5H-Naphtho[1,8-bc]thiophen-5-one...	264	C17H12OS	010245-65-5	64
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	58
4	2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	1000110-62-7	50
5	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	50





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDChem\1\DATA\ep2378\
Data File : P54985.D
Acq On : 22 Feb 2011 10:32 am
Operator : ninap
Sample : ja68506-8
Misc : op48193,ep2378,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
system artifact/a...	3.07	4.2	ppb	124197	1	4.78	1170440	40.0
Internal standard...	10.14	4.3	ppb	175495	5	9.33	1640160	40.0
Internal standard...	13.22	4.5	ppb	196059	7	11.64	1758880	40.0
Internal standard...	16.24	4.1	ppb	156405	10	16.33	1533990	40.0

8.1.16
8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23778.D
Acq On : 22 Feb 2011 10:05 am
Operator : ninap
Sample : ja68506-1
Misc : op48193a,e4m1040,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:39:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

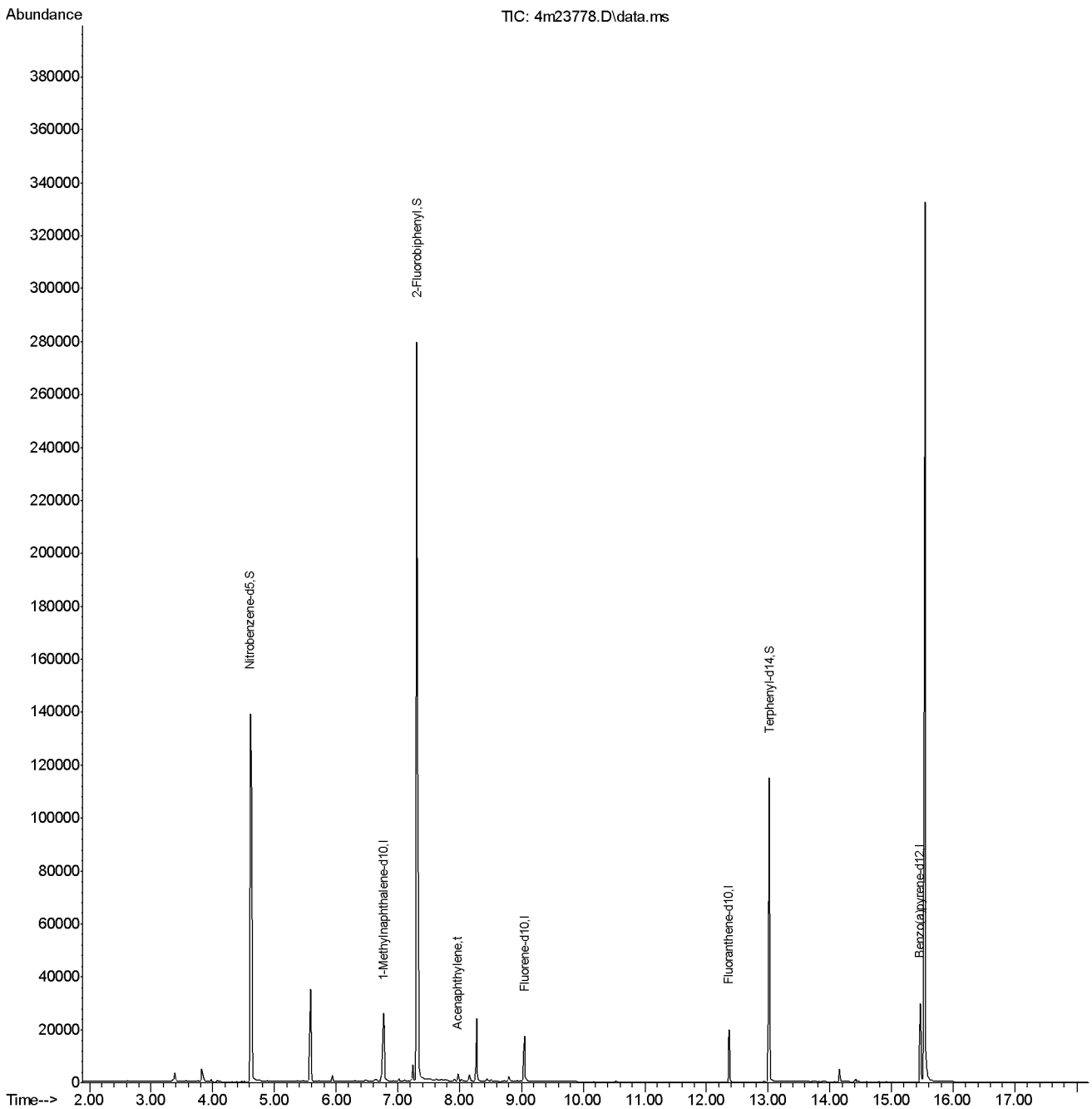
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	19324	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	12584	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22191	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	25321	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	106133	37.43	ppb	-0.01
Spiked Amount 50.000			Recovery =	74.86%		
11) 2-Fluorobiphenyl	7.304	172	246342	37.90	ppb	-0.02
Spiked Amount 50.000			Recovery =	75.80%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	82113	34.36	ppb	-0.02
Spiked Amount 50.000			Recovery =	68.72%		
Target Compounds						Qvalue
13) Acenaphthylene	7.972	152	3146	0.44	ppb	76

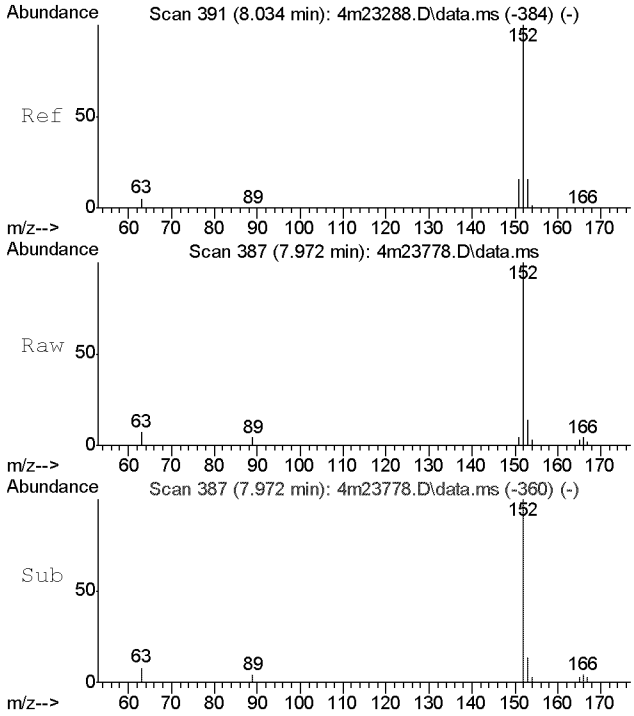
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23778.D
Acq On : 22 Feb 2011 10:05 am
Operator : ninap
Sample : ja68506-1
Misc : op48193a,e4m1040,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 22 14:39:35 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

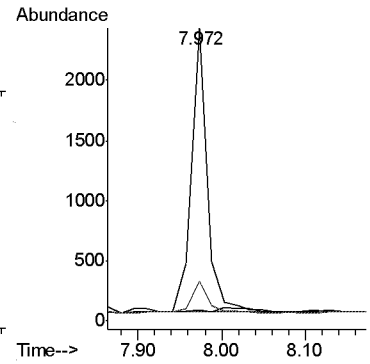




#13
Acenaphthylene
Concen: 0.44 ppb
RT: 7.972 min Scan# 387
Delta R.T. -0.062 min
Lab File: 4m23778.D
Acq: 22 Feb 2011 10:05 am

Tgt Ion:152 Resp: 3146

Ion	Ratio	Lower	Upper
152	100		
151	0.5	0.0	45.6
153	10.9	0.0	45.7



8.1.17

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23779.D
Acq On : 22 Feb 2011 10:29 am
Operator : ninap
Sample : ja68506-2
Misc : op48193a,e4m1040,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:43:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

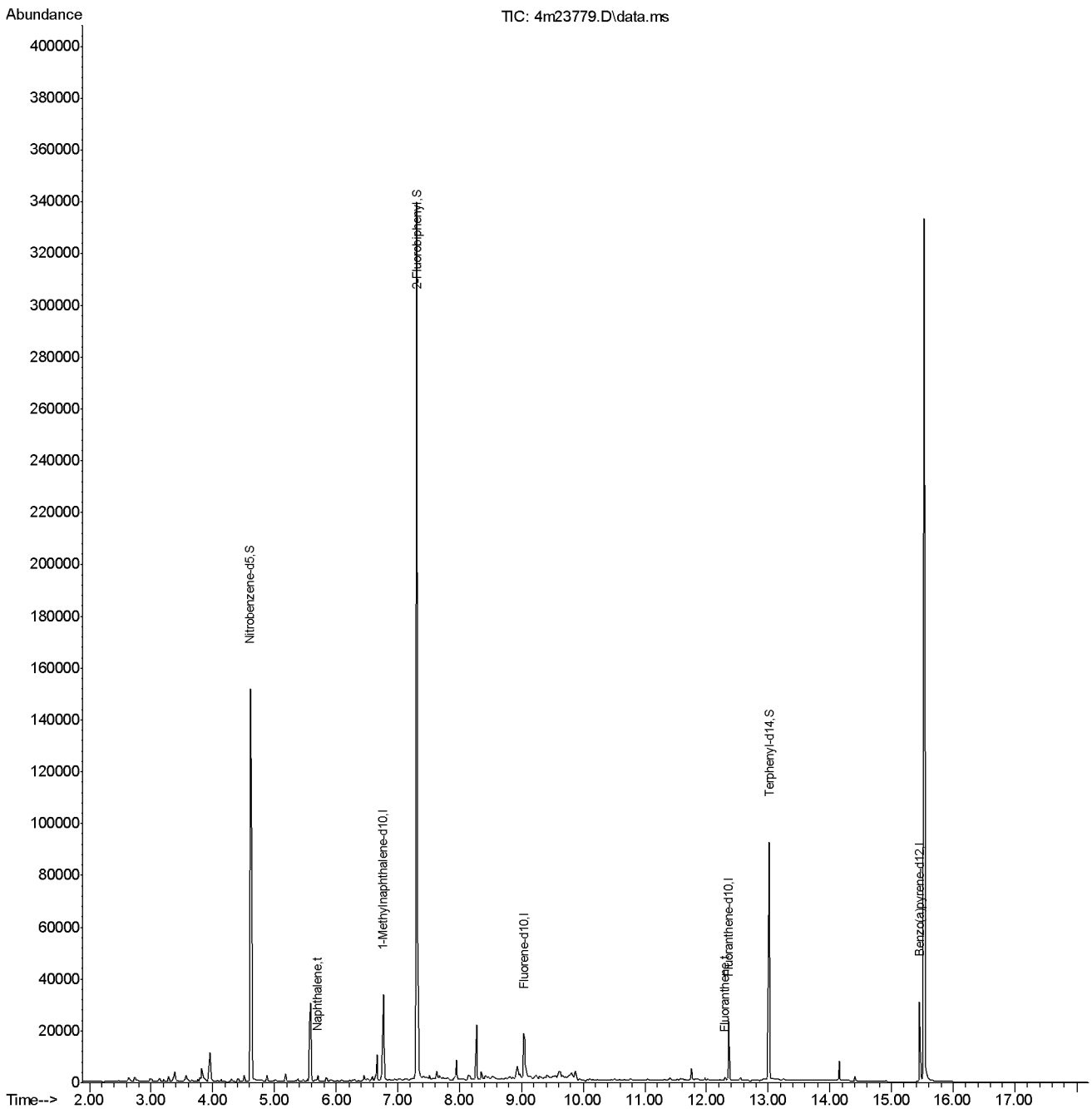
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	17238	4.00	ppb	0.00
12) Fluorene-d10	9.039	174	13210	4.00	ppb	# 0.00
23) Fluoranthene-d10	12.357	212	22959	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.452	264	25739	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	108931	43.06	ppb	0.00
Spiked Amount 50.000			Recovery =	86.12%		
11) 2-Fluorobiphenyl	7.303	172	254751	43.94	ppb	0.00
Spiked Amount 50.000			Recovery =	87.88%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	71731	29.01	ppb	0.00
Spiked Amount 50.000			Recovery =	58.02%		
Target Compounds						Qvalue
7) Naphthalene	5.694	128	2200	0.29	ppb	98
24) Fluoranthene	12.305	202	1528	0.22	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

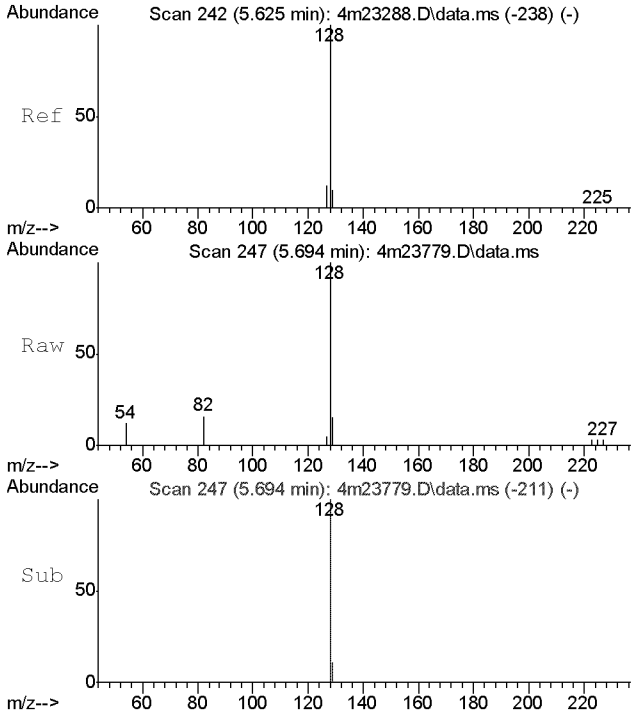
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23779.D
Acq On : 22 Feb 2011 10:29 am
Operator : ninap
Sample : ja68506-2
Misc : op48193a,e4m1040,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 22 14:43:43 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration



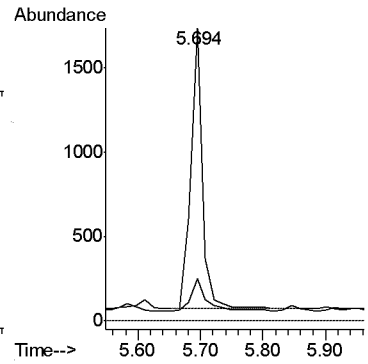
M4M1016SIM.M Tue Feb 22 14:43:57 2011 RPT1 Page: 2

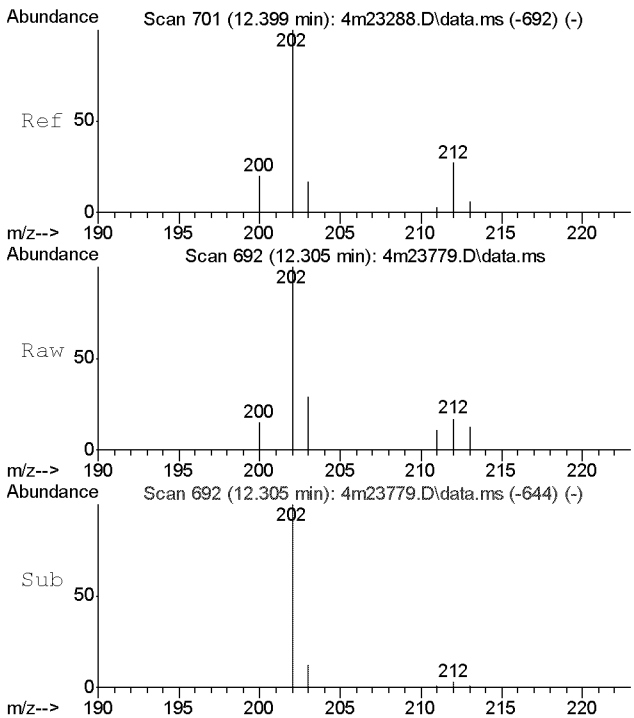


#7
Naphthalene
Concen: 0.29 ppb
RT: 5.694 min Scan# 247
Delta R.T. 0.000 min
Lab File: 4m23779.D
Acq: 22 Feb 2011 10:29 am

Tgt Ion:128 Resp: 2200

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.4
122	0.0	0.0	30.0

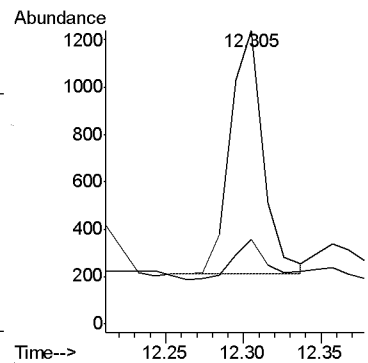




#24
Fluoranthene
Concen: 0.22 ppb
RT: 12.305 min Scan# 692
Delta R.T. 0.000 min
Lab File: 4m23779.D
Acq: 22 Feb 2011 10:29 am

Tgt Ion:202 Resp: 1528

Ion	Ratio	Lower	Upper
202	100		
203	14.1	0.0	47.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23780.D
Acq On : 22 Feb 2011 10:53 am
Operator : ninap
Sample : ja68506-3
Misc : op48193a,e4m1040,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

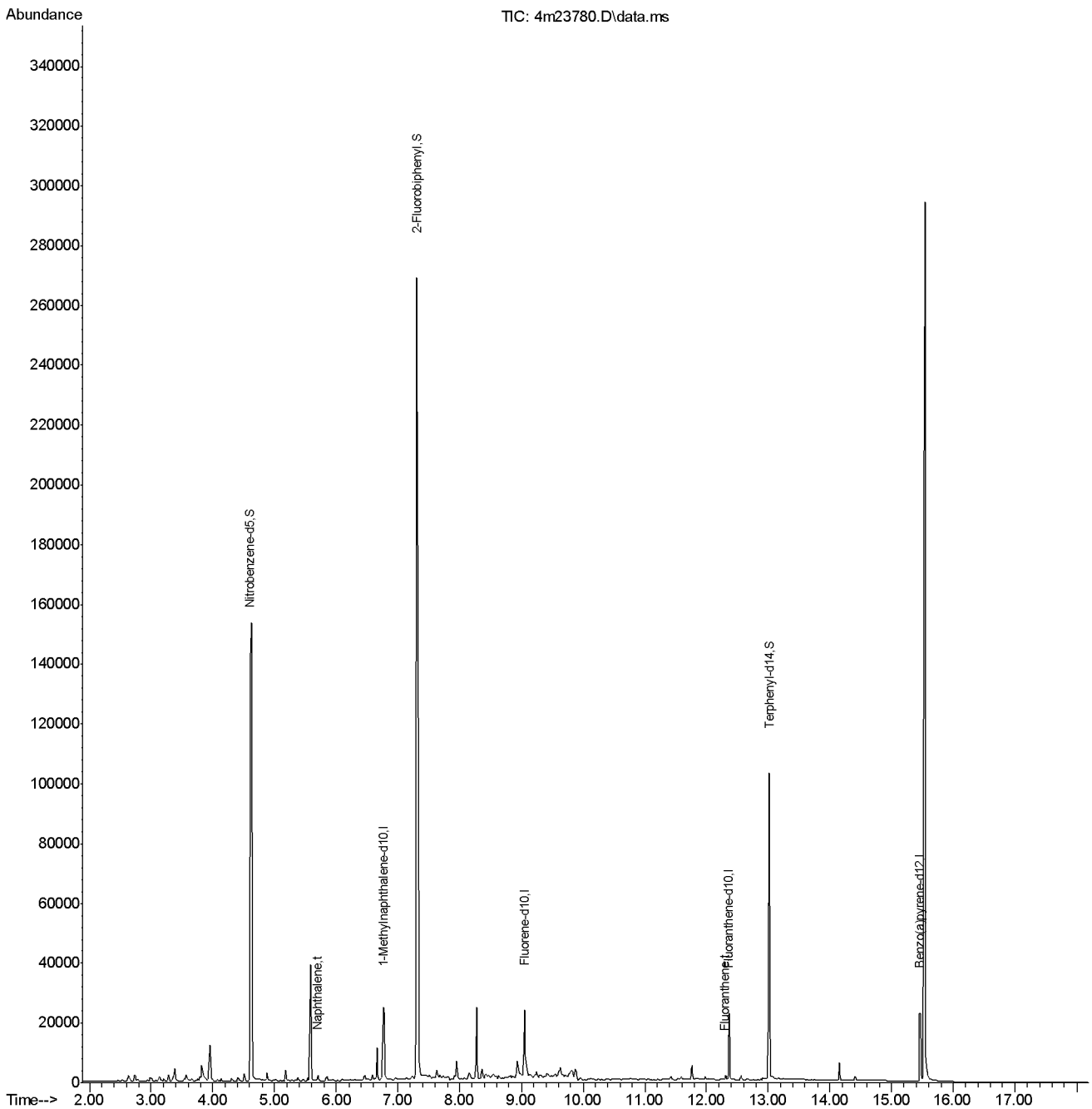
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	17113	4.00	ppb	0.02
12) Fluorene-d10	9.055	174	13034	4.00	ppb	# 0.02
23) Fluoranthene-d10	12.368	212	22864	4.00	ppb	0.01
30) Benzo(a)pyrene-d12	15.452	264	25099	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	128017	50.97	ppb	0.00
Spiked Amount 50.000			Recovery =	101.94%		
11) 2-Fluorobiphenyl	7.303	172	281095	48.84	ppb	0.00
Spiked Amount 50.000			Recovery =	97.68%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	74042	30.07	ppb	0.00
Spiked Amount 50.000			Recovery =	60.14%		
Target Compounds						Qvalue
7) Naphthalene	5.694	128	1967	0.26	ppb	99
24) Fluoranthene	12.306	202	1565	0.23	ppb	86

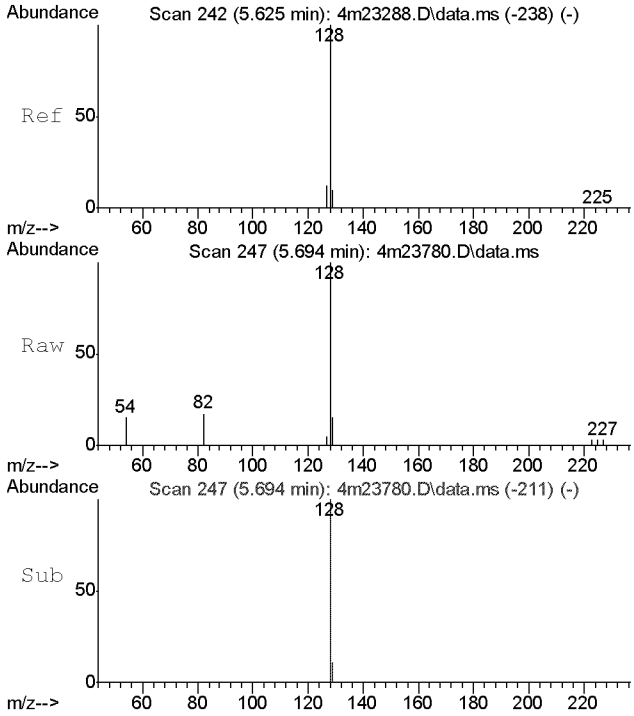
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23780.D
Acq On : 22 Feb 2011 10:53 am
Operator : ninap
Sample : ja68506-3
Misc : op48193a,e4m1040,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 22 14:44:38 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Tue Feb 22 14:42:56 2011
Response via : Initial Calibration

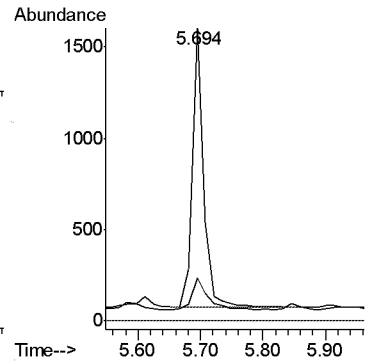


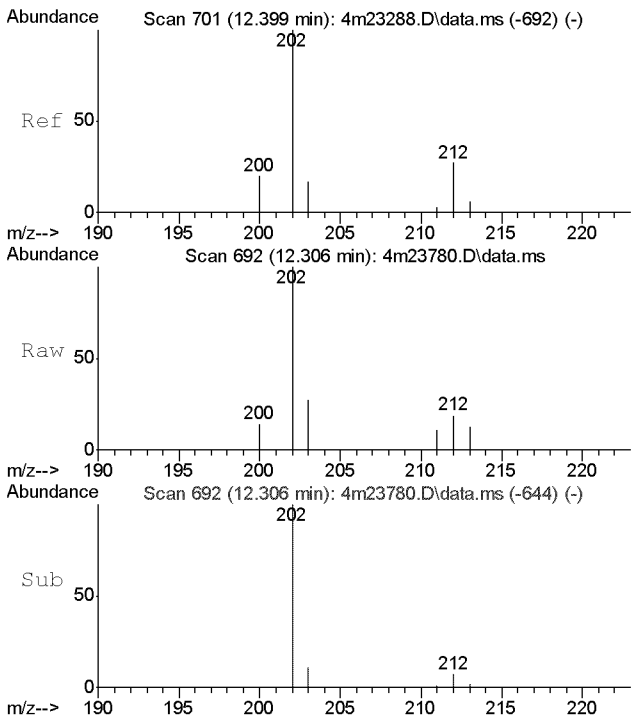


#7
Naphthalene
Concen: 0.26 ppb
RT: 5.694 min Scan# 247
Delta R.T. 0.000 min
Lab File: 4m23780.D
Acq: 22 Feb 2011 10:53 am

Tgt Ion:128 Resp: 1967

Ion	Ratio	Lower	Upper
128	100		
129	10.6	0.0	40.4
122	0.0	0.0	30.0

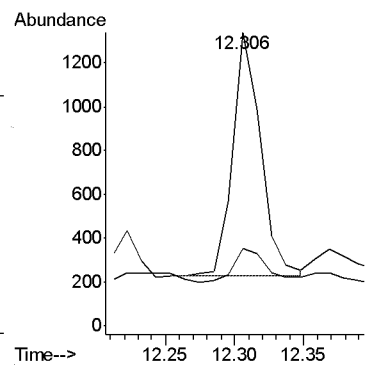




#24
Fluoranthene
Concen: 0.23 ppb
RT: 12.306 min Scan# 692
Delta R.T. 0.000 min
Lab File: 4m23780.D
Acq: 22 Feb 2011 10:53 am

Tgt Ion:202 Resp: 1565

Ion	Ratio	Lower	Upper
202	100		
203	11.2	0.0	47.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23781.D
Acq On : 22 Feb 2011 11:17 am
Operator : ninap
Sample : ja68506-4
Misc : op48193a,e4m1040,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 14:45:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

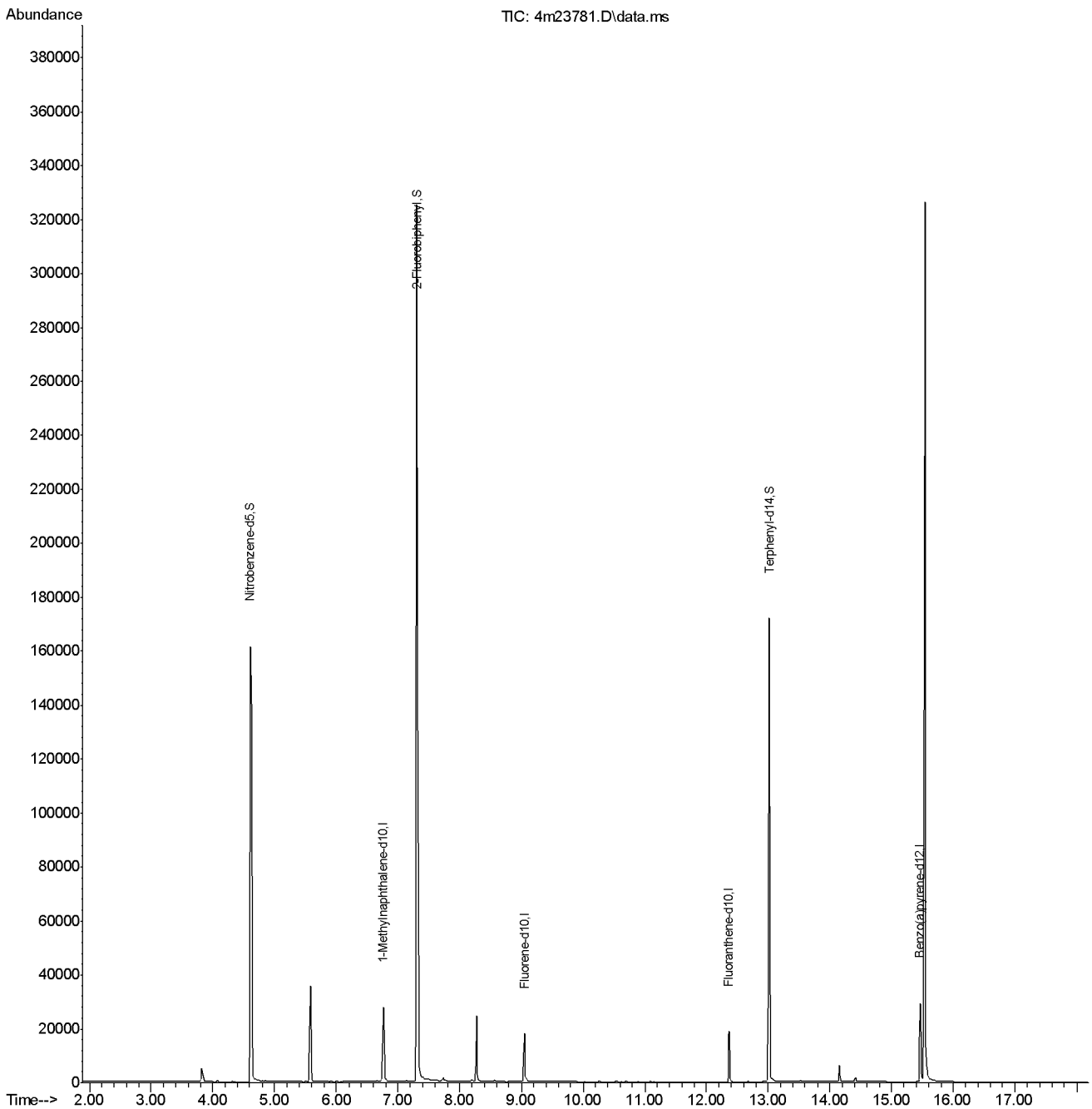
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	16866	4.00	ppb	-0.02
12) Fluorene-d10	9.055	174	13018	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22030	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	26242	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	127851	51.65	ppb	-0.01
Spiked Amount 50.000			Recovery =	103.30%		
11) 2-Fluorobiphenyl	7.303	172	283931	50.06	ppb	-0.02
Spiked Amount 50.000			Recovery =	100.12%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	124185	52.34	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.68%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23781.D
Acq On : 22 Feb 2011 11:17 am
Operator : ninap
Sample : ja68506-4
Misc : op48193a,e4m1040,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 22 14:45:37 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



M4M1016SIM.M Tue Feb 22 14:45:44 2011 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23782.D
Acq On : 22 Feb 2011 11:40 am
Operator : ninap
Sample : ja68506-5
Misc : op48193a,e4m1040,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 14:46:24 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	16782	4.00	ppb	-0.02
12) Fluorene-d10	9.039	174	12101	4.00	ppb	-0.03
23) Fluoranthene-d10	12.357	212	19877	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	22306	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	128869	52.33	ppb	-0.01
Spiked Amount 50.000			Recovery =	104.66%		
11) 2-Fluorobiphenyl	7.303	172	297895	52.78	ppb	-0.02
Spiked Amount 50.000			Recovery =	105.56%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	112201	52.41	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.82%		

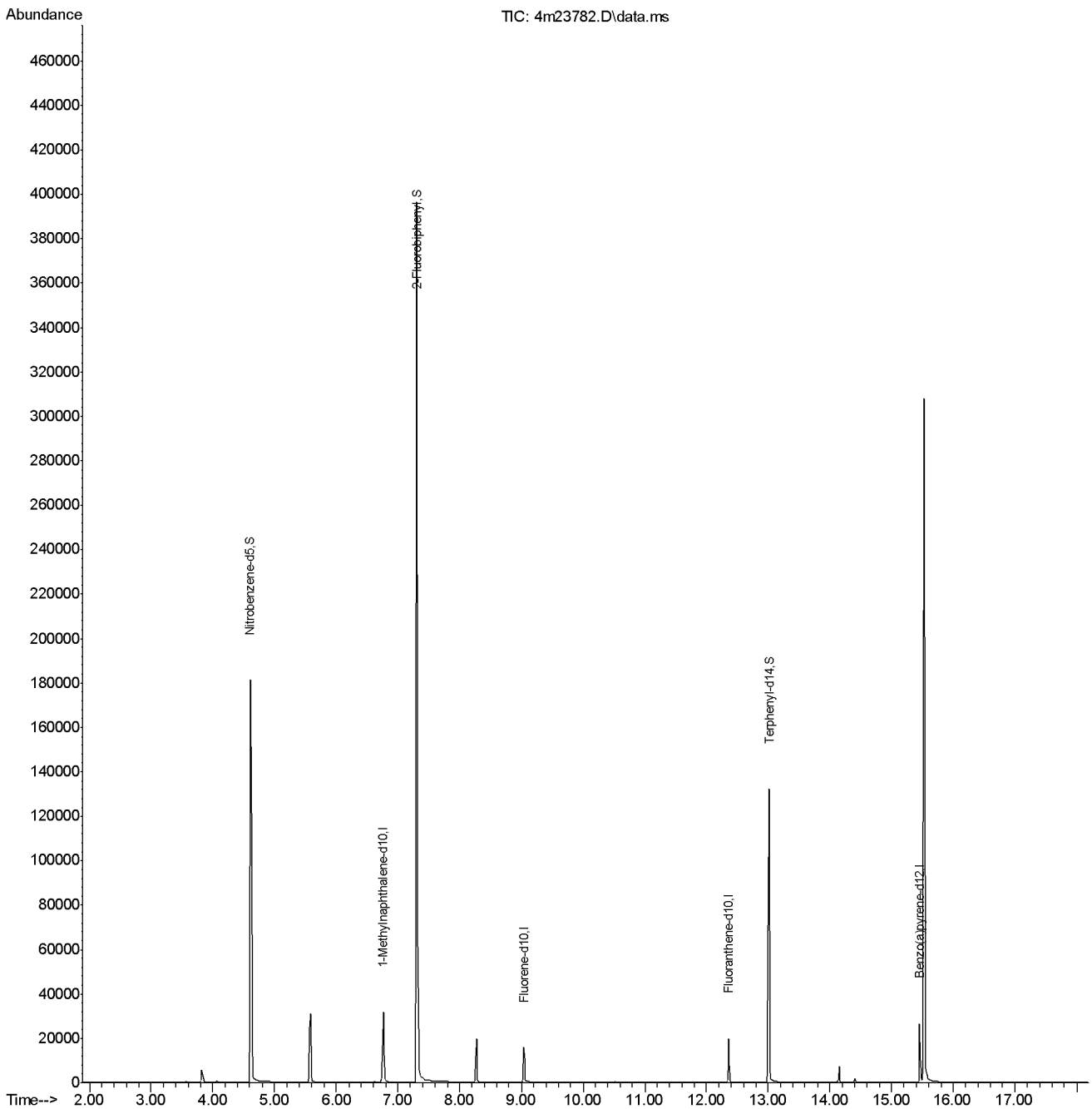
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23782.D
Acq On : 22 Feb 2011 11:40 am
Operator : ninap
Sample : ja68506-5
Misc : op48193a,e4m1040,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 22 14:46:24 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23783.D
Acq On : 22 Feb 2011 12:04 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193a,e4m1040,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 25 14:24:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

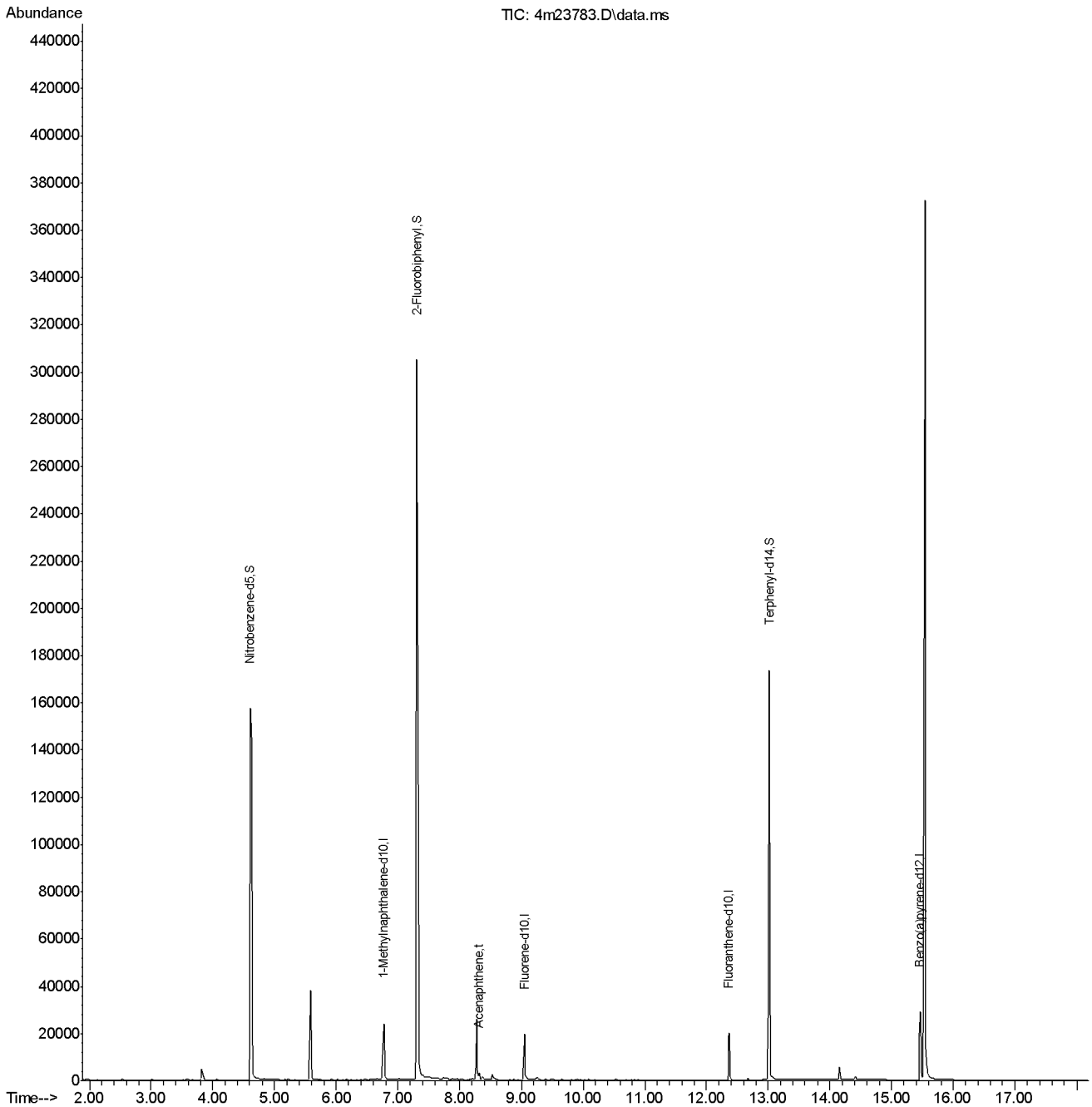
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	16649	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	13067	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	22964	4.00	ppb	0.00
30) Benzo(a)pyrene-d12	15.463	264	27759	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	129266	52.91	ppb	-0.01
Spiked Amount 50.000			Recovery =	105.82%		
11) 2-Fluorobiphenyl	7.304	172	303411	54.19	ppb	-0.02
Spiked Amount 50.000			Recovery =	108.38%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	122653	49.59	ppb	-0.02
Spiked Amount 50.000			Recovery =	99.18%		
Target Compounds						Qvalue
14) Acenaphthene	8.312	153	1552	0.28	ppb	95

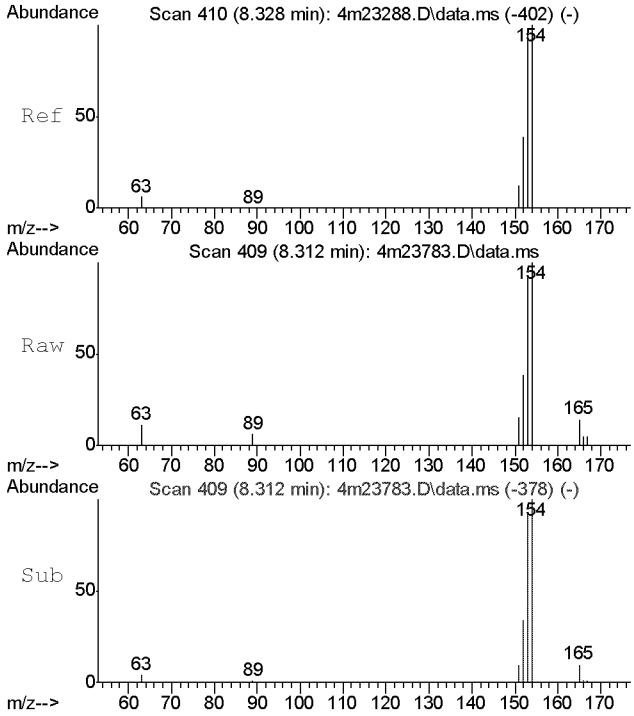
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23783.D
Acq On : 22 Feb 2011 12:04 pm
Operator : ninap
Sample : ja68506-6
Misc : op48193a,e4m1040,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 25 14:24:49 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

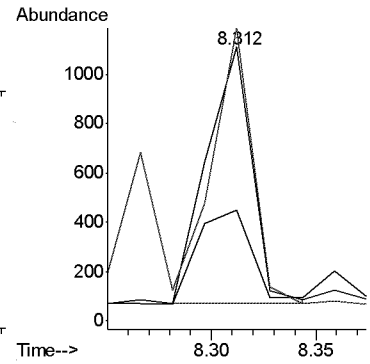




#14
Acenaphthene
Concen: 0.28 ppb
RT: 8.312 min Scan# 409
Delta R.T. -0.016 min
Lab File: 4m23783.D
Acq: 22 Feb 2011 12:04 pm

Tgt Ion:153 Resp: 1552

Ion	Ratio	Lower	Upper
153	100		
152	35.7	9.6	69.6
154	105.5	71.6	131.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23796.D
Acq On : 22 Feb 2011 5:18 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193a,e4m1040,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 10:25:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

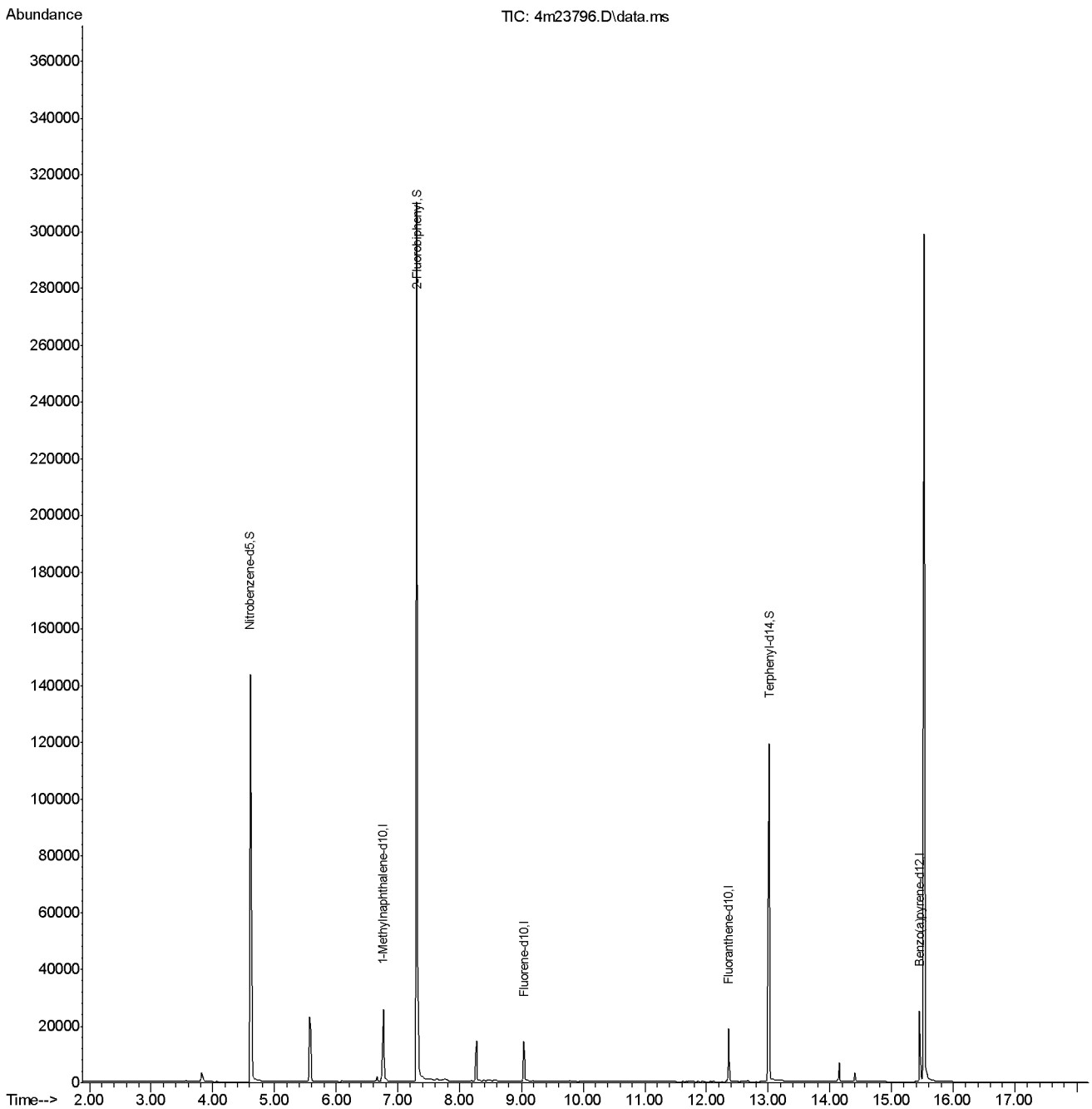
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	13339	4.00	ppb	-0.02
12) Fluorene-d10	9.039	174	10388	4.00	ppb	-0.03
23) Fluoranthene-d10	12.357	212	18708	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	22359	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	95357	48.71	ppb	-0.01
Spiked Amount 50.000			Recovery =	97.42%		
11) 2-Fluorobiphenyl	7.303	172	240215	53.55	ppb	-0.02
Spiked Amount 50.000			Recovery =	107.10%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	99033	49.15	ppb	-0.02
Spiked Amount 50.000			Recovery =	98.30%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23796.D
Acq On : 22 Feb 2011 5:18 pm
Operator : ninap
Sample : ja68506-7
Misc : op48193a,e4m1040,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 23 10:25:45 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23785.D
Acq On : 22 Feb 2011 12:52 pm
Operator : ninap
Sample : ja68506-8
Misc : op48193a,e4m1040,1000
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:48:33 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

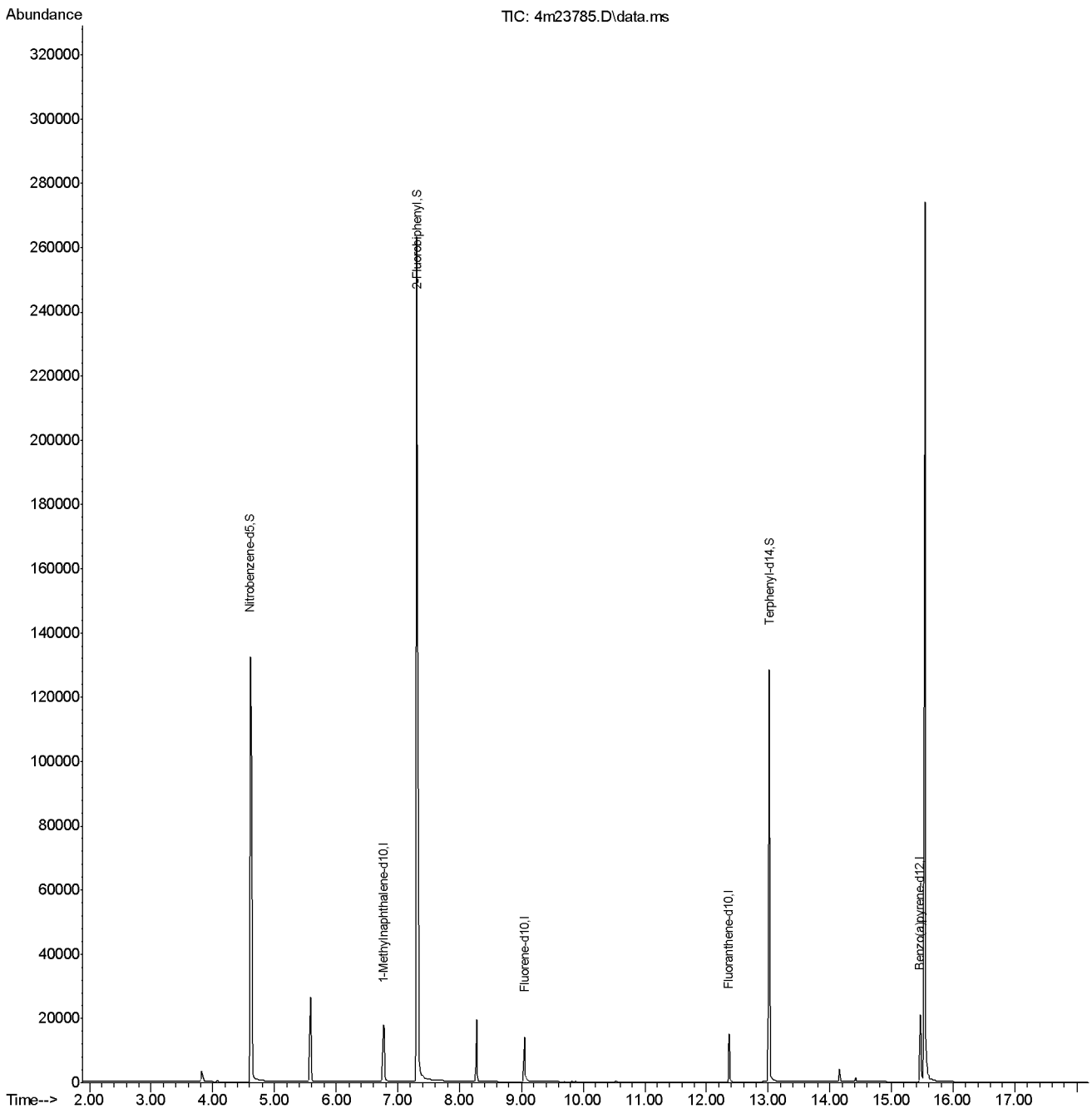
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.772	152	12931	4.00	ppb	0.00
12) Fluorene-d10	9.055	174	9689	4.00	ppb	-0.02
23) Fluoranthene-d10	12.368	212	17530	4.00	ppb	-0.01
30) Benzo(a)pyrene-d12	15.463	264	19408	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	100605	53.02	ppb	-0.01
Spiked Amount 50.000			Recovery =	106.04%		
11) 2-Fluorobiphenyl	7.303	172	248779	57.20	ppb	-0.02
Spiked Amount 50.000			Recovery =	114.40%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	93507	49.53	ppb	-0.02
Spiked Amount 50.000			Recovery =	99.06%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23785.D
Acq On : 22 Feb 2011 12:52 pm
Operator : ninap
Sample : ja68506-8
Misc : op48193a,e4m1040,1000
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 22 14:48:33 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23774.D
Acq On : 22 Feb 2011 8:27 am
Operator : ninap
Sample : op48193a-mb1
Misc : op48193a,e4m1040,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 09:44:01 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	6.755	152	19201	4.00	ppb	-0.02
12) Fluorene-d10	9.040	174	12967	4.00	ppb	-0.03
23) Fluoranthene-d10	12.358	212	22653	4.00	ppb	-0.02
30) Benzo(a)pyrene-d12	15.452	264	23394	4.00	ppb	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
3) Phenol-d5	0.000	99	0d	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
6) Nitrobenzene-d5	4.604	82	131105	46.53	ppb	-0.01
Spiked Amount 50.000			Recovery =	93.06%		
11) 2-Fluorobiphenyl	7.304	172	302519	46.85	ppb	-0.02
Spiked Amount 50.000			Recovery =	93.70%		
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
26) Terphenyl-d14	13.012	244	127724	52.35	ppb	-0.02
Spiked Amount 50.000			Recovery =	104.70%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

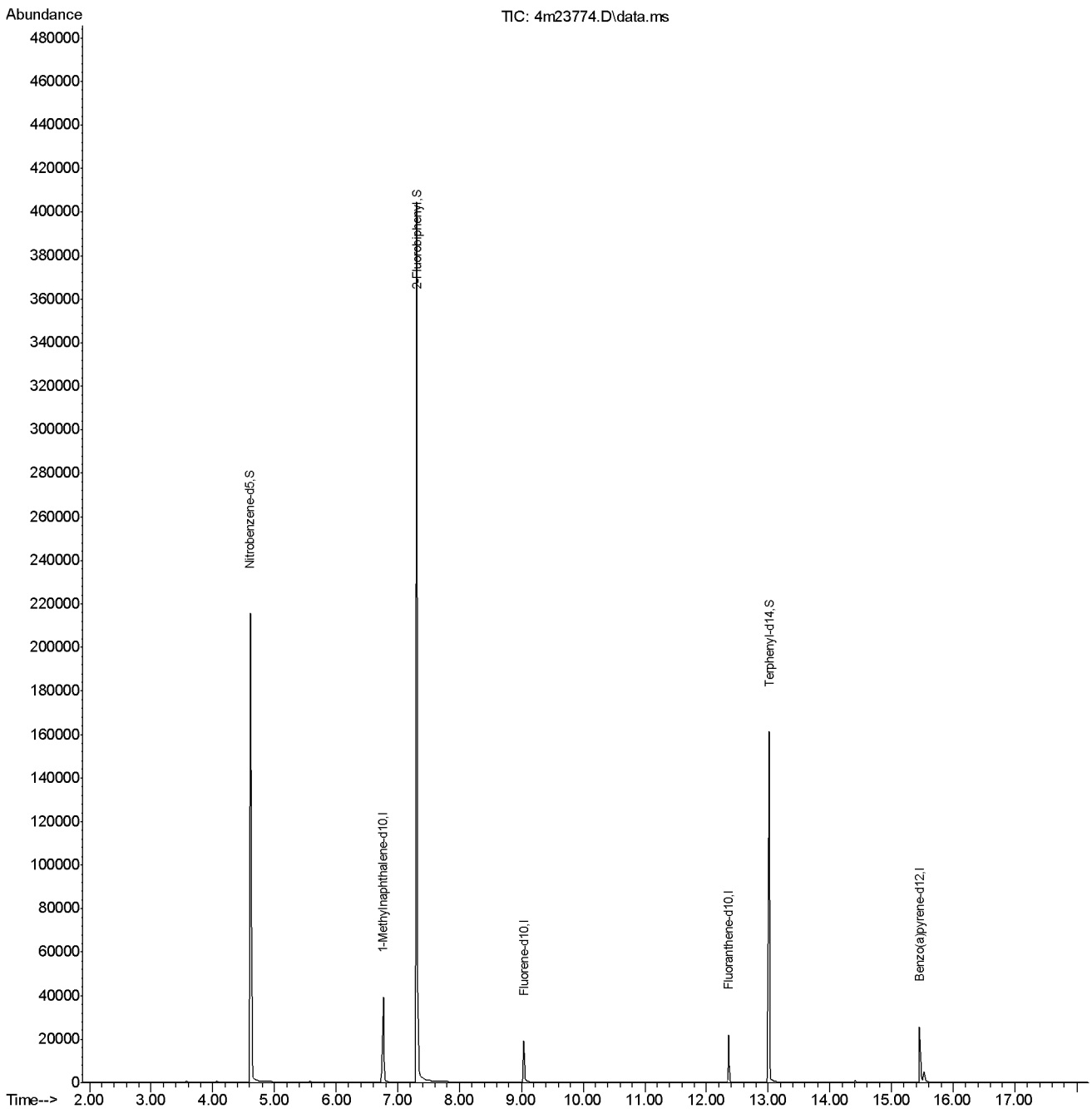
ACCUTEST LABORATORIES JA68506

SII-SSA-0014-006622

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e4m1040\
Data File : 4m23774.D
Acq On : 22 Feb 2011 8:27 am
Operator : ninap
Sample : op48193a-mb1
Misc : op48193a,e4m1040,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 22 09:44:01 2011
Quant Method : C:\MSDCHEM\1\METHODS\M4M1016SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .25um
QLast Update : Mon Jan 24 08:13:52 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 10:04:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	156843	40.00	ppb	-0.07
24) Naphthalene-d8	6.57	136	544048	40.00	ppb	-0.08
47) Acenaphthene-d10	9.33	164	344454	40.00	ppb	-0.09
69) Phenanthrene-d10	11.64	188	607637	40.00	ppb	-0.08
83) Chrysene-d12	14.85	240	671707	40.00	ppb	-0.06
92) Perylene-d12	16.33	264	561533	40.00	ppb	-0.07
102) 1,4-Dichlorobenzene-d4a	4.78	152	156843	40.00	ppb	-0.07
104) Phenanthrene-d10a	11.64	188	607637	40.00	ppb	-0.08
106) Acenaphthene-d10a	9.33	164	344454	40.00	ppb	-0.09
108) Chrysene-d12a	14.85	240	671707	40.00	ppb	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
8) Phenol-d5	0.00	99	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
25) Nitrobenzene-d5	5.56	82	336734	49.13	ppb	-0.07
Spiked Amount 50.000			Recovery =	98.26%		
51) 2-Fluorobiphenyl	8.29	172	536493	45.36	ppb	-0.08
Spiked Amount 50.000			Recovery =	90.72%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppb	
Spiked Amount 50.000			Recovery =	0.00%		
86) Terphenyl-d14	13.71	244	608732	38.35	ppb	-0.06
Spiked Amount 50.000			Recovery =	76.70%		

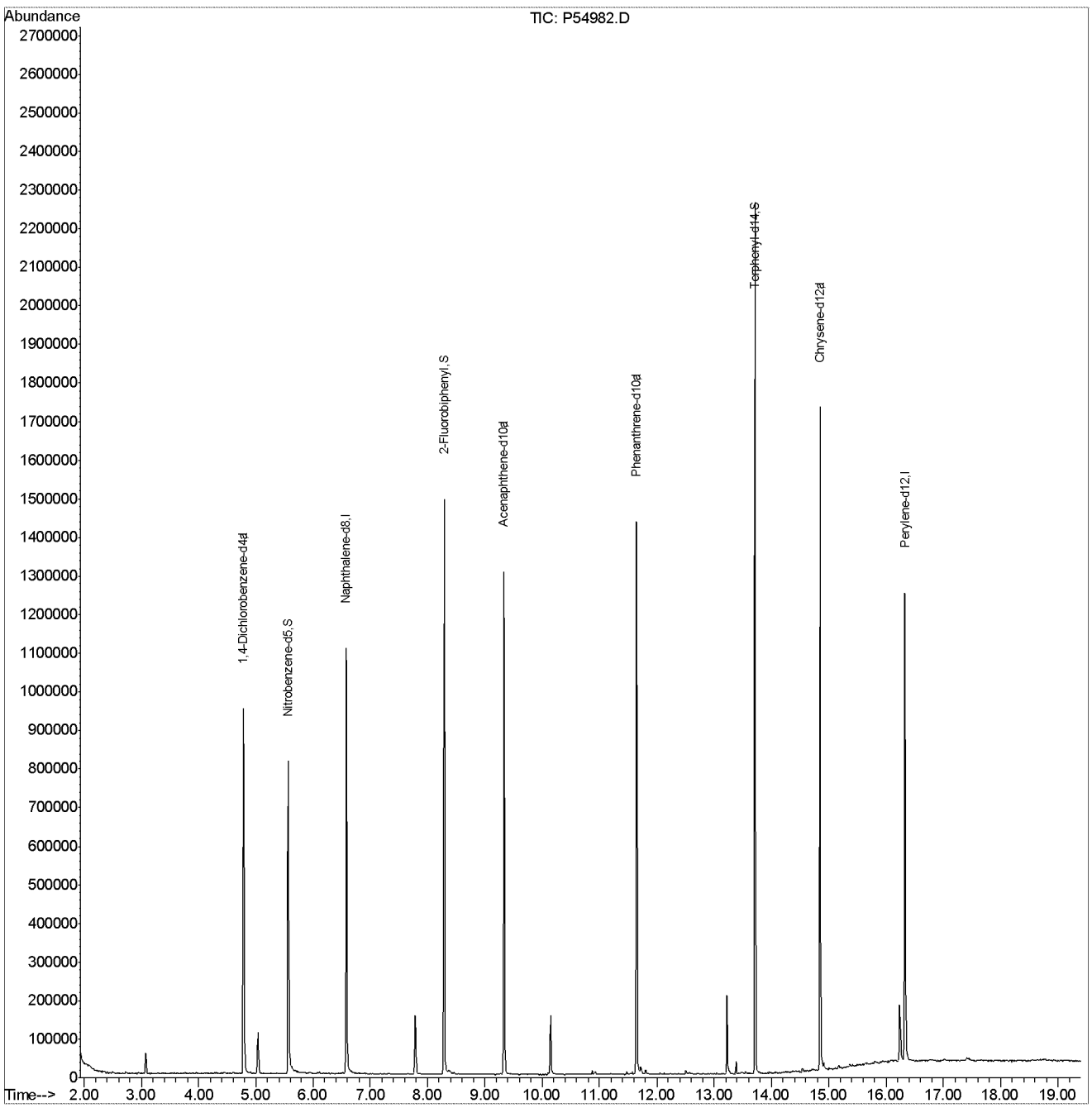
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 22 10:04:21 2011
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u
QLast Update : Thu Feb 03 10:19:37 2011
Response via : Initial Calibration



MP2364.M Tue Feb 22 10:04:40 2011 MSP

ACCUTEST LABORATORIES
JA68506

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.496	103	106	115	rVB9	4163	8053	0.37%	0.052%
2	2.725	143	149	154	rBV10	4249	7515	0.35%	0.048%
3	2.832	165	169	171	rBV5	3453	3738	0.17%	0.024%
4	2.891	177	180	185	rVB4	3932	4588	0.21%	0.029%
5	3.073	210	214	224	rBV	52168	69555	3.21%	0.445%
6	3.586	306	310	314	rVB7	2504	4432	0.20%	0.028%
7	3.837	355	357	364	rBV6	2723	4380	0.20%	0.028%
8	4.285	435	441	443	rBV7	3029	4698	0.22%	0.030%
9	4.595	495	499	504	rBV6	3583	6736	0.31%	0.043%
10	4.782	527	534	550	rBV	945457	1158558	53.50%	7.410%
11	4.905	555	557	562	rVB6	3512	3644	0.17%	0.023%
12	5.033	576	581	594	rVB	107451	140943	6.51%	0.901%
13	5.365	640	643	653	rVB	3296	6799	0.31%	0.043%
14	5.562	673	680	699	rBV	810422	1056986	48.81%	6.760%
15	6.112	779	783	787	rVB7	4761	6297	0.29%	0.040%
16	6.278	811	814	819	rVB6	3539	4563	0.21%	0.029%
17	6.492	850	854	859	rBV7	3081	6169	0.28%	0.039%
18	6.572	862	869	891	rBV	1102153	1371847	63.35%	8.774%
19	6.791	907	910	916	rBV8	2440	3527	0.16%	0.023%
20	6.898	927	930	935	rVB7	3792	5340	0.25%	0.034%
21	7.624	1062	1066	1070	rBV6	2172	3540	0.16%	0.023%
22	7.779	1084	1095	1104	rBV2	152883	218131	10.07%	1.395%
23	8.287	1181	1190	1201	rBV	1490810	1790755	82.70%	11.453%
24	8.362	1201	1204	1207	rVV4	4887	6375	0.29%	0.041%
25	8.549	1231	1239	1241	rBV9	2477	3984	0.18%	0.025%
26	9.328	1376	1385	1403	rBV	1303024	1591781	73.51%	10.180%
27	9.441	1404	1406	1411	rVV5	3845	4534	0.21%	0.029%
28	9.494	1411	1416	1421	rVB9	3147	4077	0.19%	0.026%
29	9.665	1444	1448	1458	rVB10	4198	7043	0.33%	0.045%
30	10.044	1515	1519	1524	rBV9	2466	4120	0.19%	0.026%
31	10.103	1524	1530	1532	rBV4	5786	7647	0.35%	0.049%
32	10.140	1532	1537	1554	rVB	152453	213297	9.85%	1.364%
33	10.408	1582	1587	1590	rBV7	2391	4288	0.20%	0.027%
34	10.488	1597	1602	1607	rVB6	3574	5289	0.24%	0.034%

MP2364.M Tue Feb 22 10:05:06 2011 MSP

LSC Area Percent Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: rteint.p
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1000 Area counts
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0.2 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\MP2364.M
Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

35	10.595	1618	1622	1628	rVB8	3275	5963	0.28%	0.038%
36	10.867	1668	1673	1677	rVB4	9008	8858	0.41%	0.057%
37	10.910	1677	1681	1688	rVB5	8225	12323	0.57%	0.079%
38	11.193	1730	1734	1739	rBV8	2856	4266	0.20%	0.027%
39	11.332	1754	1760	1763	rBV7	2299	4073	0.19%	0.026%
40	11.369	1766	1767	1775	rVB8	2422	3763	0.17%	0.024%
41	11.471	1780	1786	1790	rBV2	8183	14780	0.68%	0.095%
42	11.567	1794	1804	1806	rBV7	6484	9236	0.43%	0.059%
43	11.642	1811	1818	1828	rBV2	1431138	1705146	78.75%	10.905%
44	11.722	1829	1833	1840	rVB6	15709	22927	1.06%	0.147%
45	11.802	1844	1848	1861	rVB6	10792	22552	1.04%	0.144%
46	12.053	1889	1895	1898	rBV7	3929	5618	0.26%	0.036%
47	12.502	1974	1979	1984	rBV7	8626	14532	0.67%	0.093%
48	13.127	2092	2096	2099	rBV6	2979	4396	0.20%	0.028%
49	13.223	2108	2114	2136	rVB	203239	254567	11.76%	1.628%
50	13.378	2136	2143	2148	rBV2	34178	41309	1.91%	0.264%
51	13.474	2154	2161	2171	rBV2	4860	16283	0.75%	0.104%
52	13.544	2171	2174	2179	rVB7	4028	4254	0.20%	0.027%
53	13.709	2198	2205	2217	rBV	2257409	2165395	100.00%	13.849%
54	14.238	2302	2304	2310	rBV7	2878	5002	0.23%	0.032%
55	14.366	2325	2328	2334	rBV8	3771	7049	0.33%	0.045%
56	14.537	2358	2360	2366	rBV7	7832	9868	0.46%	0.063%
57	14.708	2386	2392	2395	rBV7	4858	9461	0.44%	0.061%
58	14.847	2412	2418	2428	rBV	1717143	1765294	81.52%	11.290%
59	14.916	2428	2431	2443	rVB2	17580	25214	1.16%	0.161%
60	15.173	2474	2479	2485	rBV10	8499	14764	0.68%	0.094%
61	16.236	2673	2678	2688	rBV	145098	193251	8.92%	1.236%
62	16.327	2688	2695	2719	rVB	1213341	1542357	71.23%	9.864%

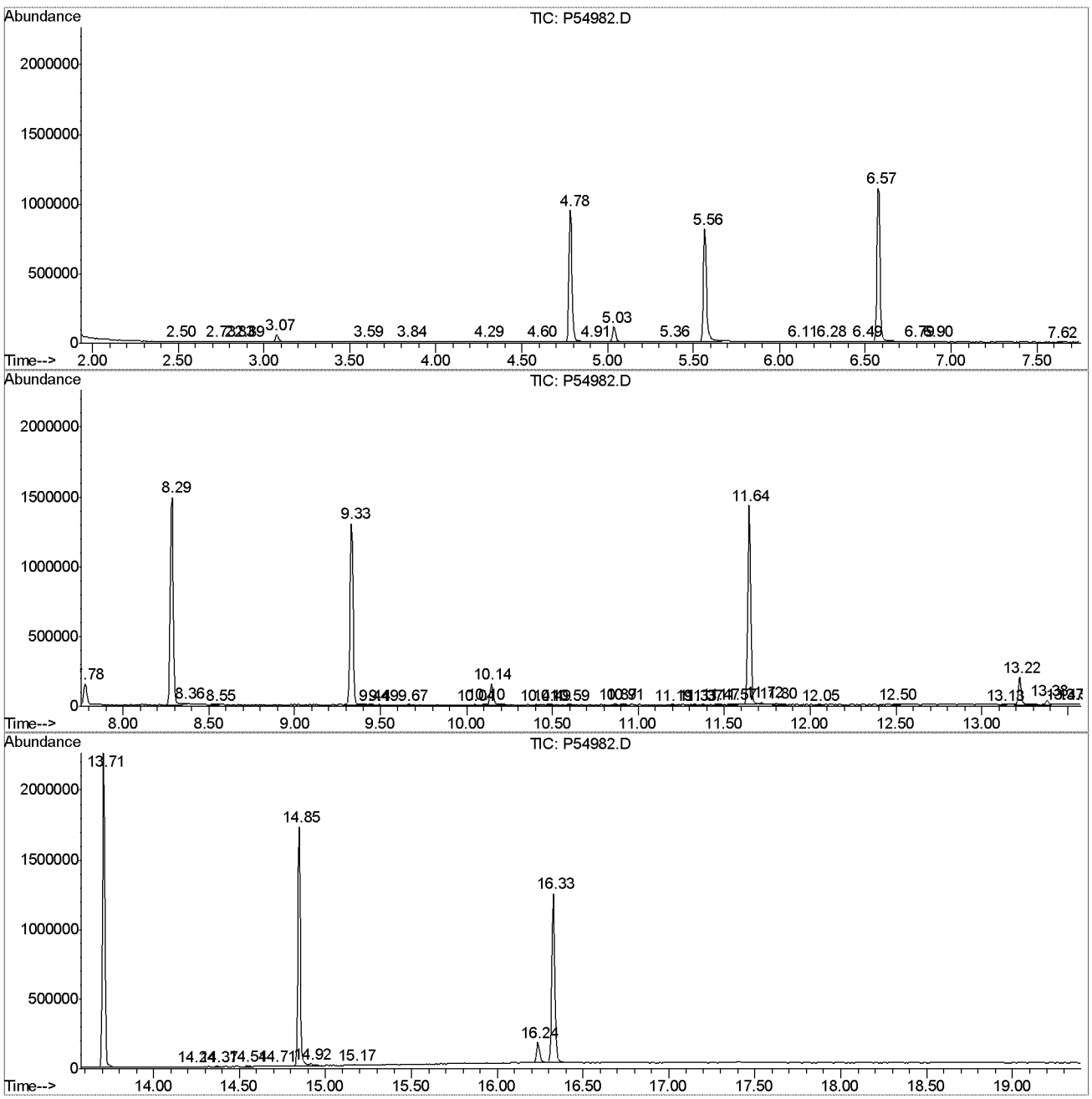
Sum of corrected areas: 15635730

LSC Report - Integrated Chromatogram

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p



Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

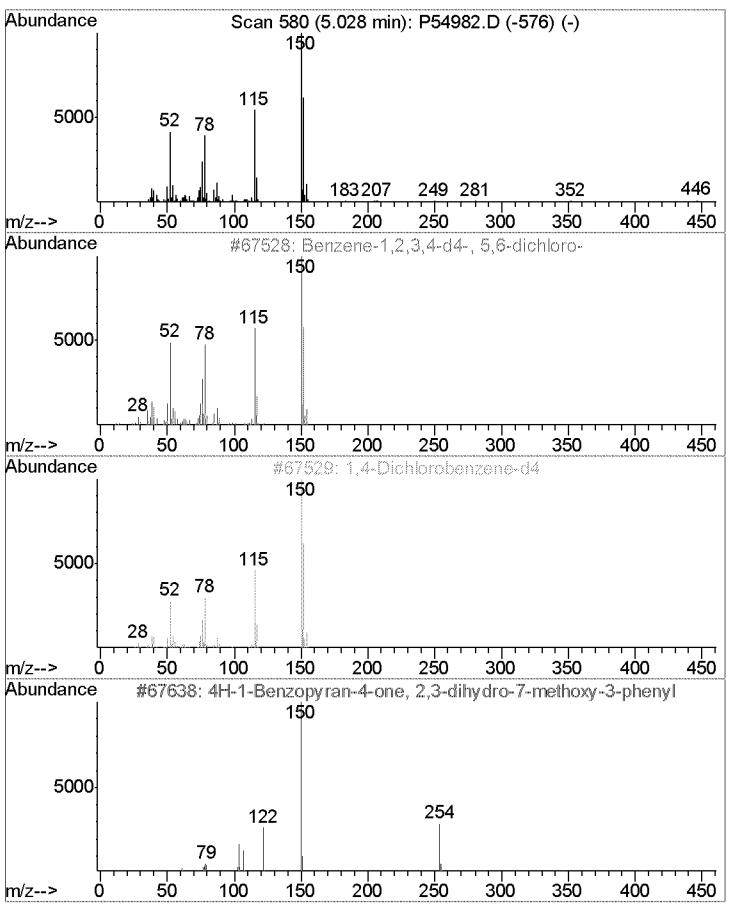
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

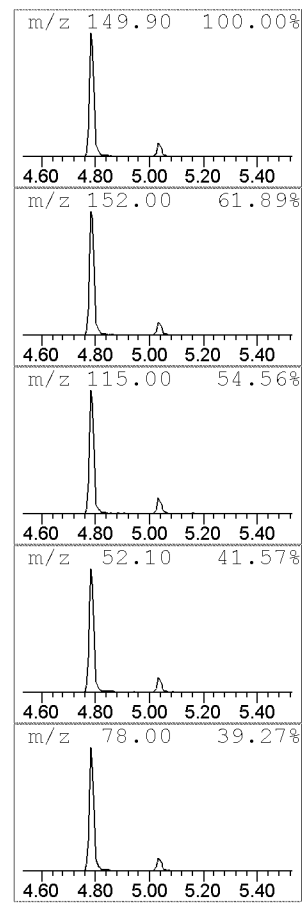
****

Peak Number 1 Internal standard added for... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.03	4.87 ppb	140943	1,4-Dichlorobenzene-d4a	4.78

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene-1,2,3,4-d4-, 5,6-dichloro-	150	C6D4Cl2	002199-69-1	95
2	1,4-Dichlorobenzene-d4	150	C6D4Cl2	003855-82-1	76
3	4H-1-Benzopyran-4-one, 2,3-dihyd...	254	C16H14O3	005128-69-8	10
4	Ethanone, 1-(3-nitrophenyl)-	165	C8H7NO3	000121-89-1	10
5	Benzene, 1,2,3,4-tetrafluoro-	150	C6H2F4	000551-62-2	9





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

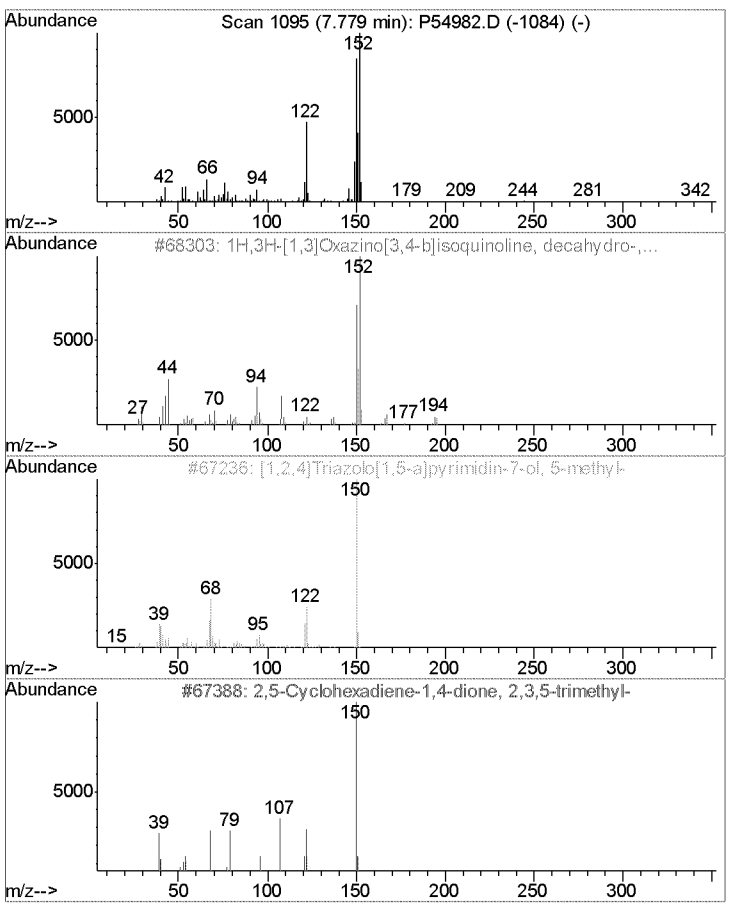
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

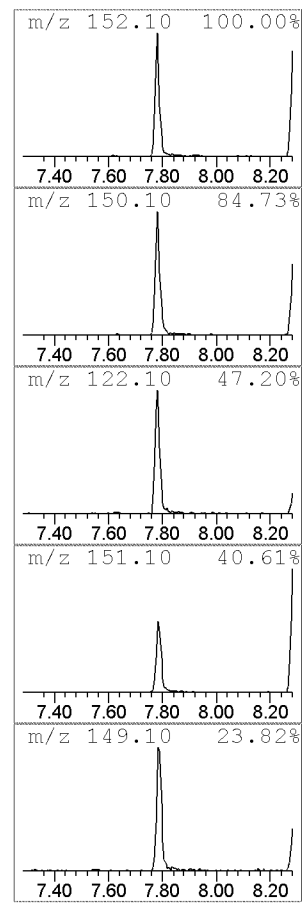
****

Peak Number 2 Internal standard added for... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.78	4.32 ppb	148162	Naphthalene-d8	6.57

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1H,3H-[1,3]Oxazino[3,4-b]isoquin...	195	C12H21NO	076097-55-7	36
2	[1,2,4]Triazolo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	27
3	2,5-Cyclohexadiene-1,4-dione, 2,...	150	C9H10O2	000935-92-2	27
4	Acenaphthylene	152	C12H8	000208-96-8	25
5	Biphenylene	152	C12H8	000259-79-0	25





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

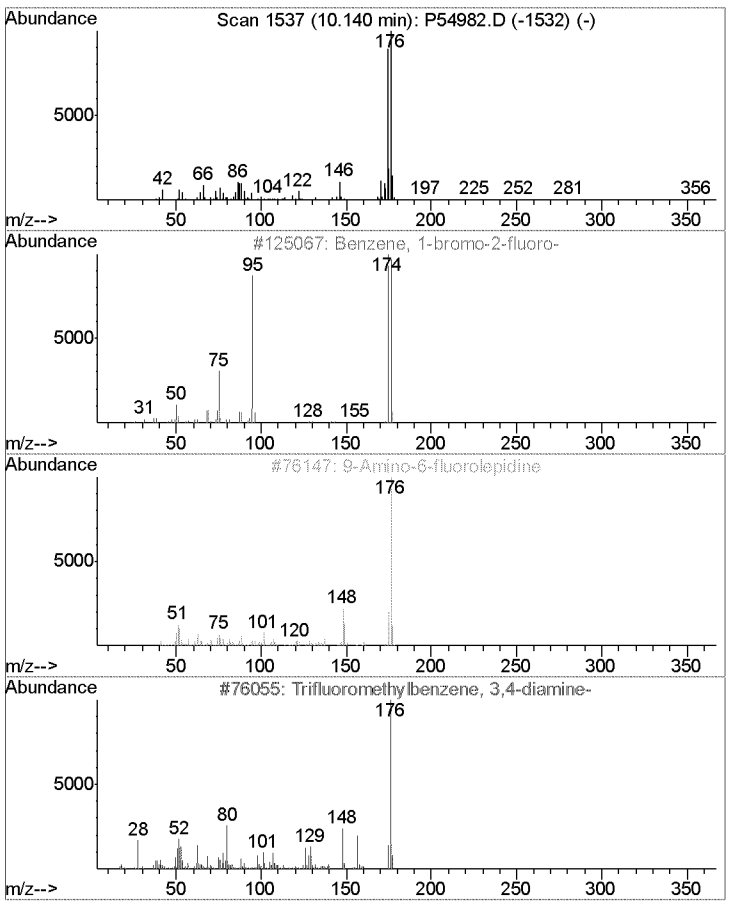
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

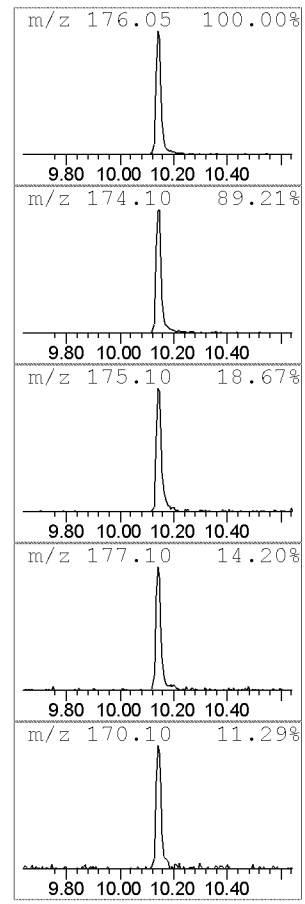
****

Peak Number 3 Internal standard added for... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.14	5.36 ppb	213297	Acenaphthene-d10a	9.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzene, 1-bromo-2-fluoro-	174	C6H4BrF	001072-85-1	64
2	9-Amino-6-fluorolepidine	176	C10H9FN2	1000214-41-0	30
3	Trifluoromethylbenzene, 3,4-diam...	176	C7H7F3N2	000368-71-8	25
4	Thiocyanic acid, 1H-indol-3-yl e...	174	C9H6N2S	023706-25-4	25
5	Benzenemethanol, .alpha.-1-penty...	174	C12H14O	108946-34-5	22





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

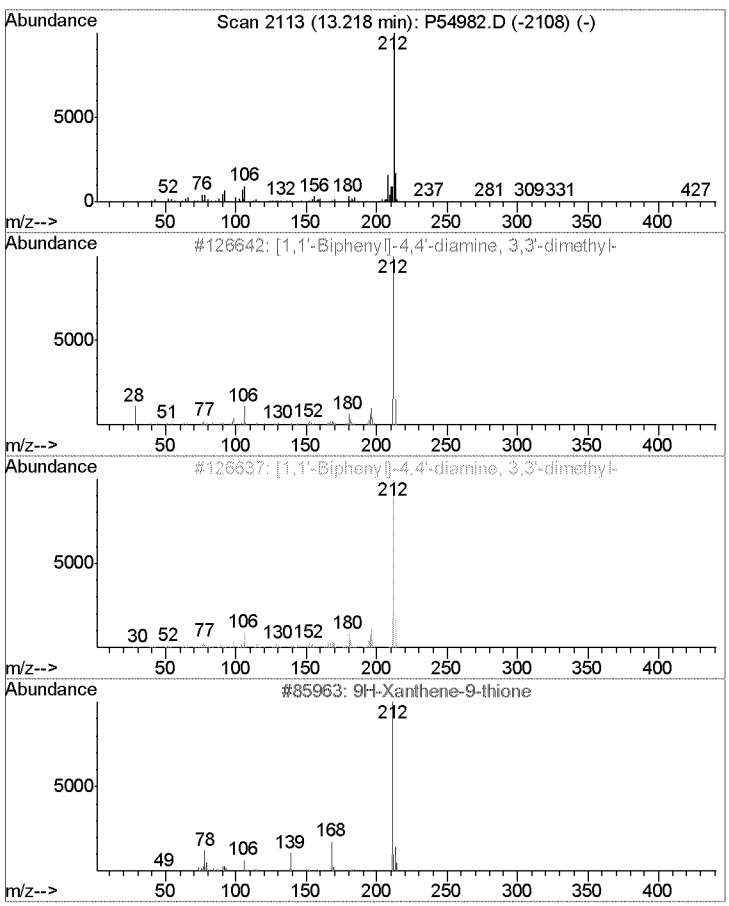
Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

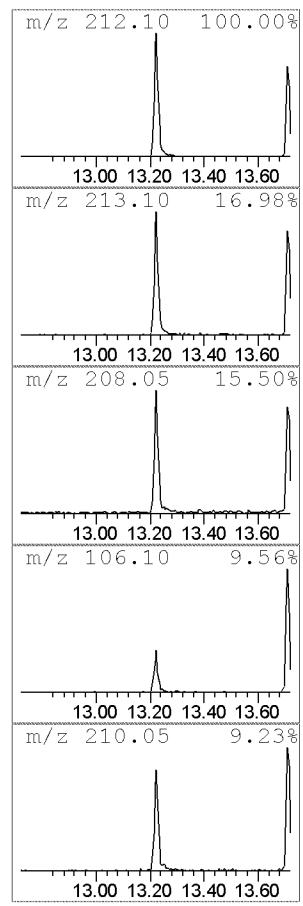
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

****
Peak Number 4 Internal standard added for... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.22	5.97 ppb	254567	Phenanthrene-d10a	11.64

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
2	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	64
3	9H-Xanthene-9-thione	212	C13H8OS	000492-21-7	64
4	[1,1'-Biphenyl]-4,4'-diamine, 3,...	212	C14H16N2	000119-93-7	53
5	2,8-Dimethyldibenzo(B,D)thiophene	212	C14H12S	001207-15-4	50





Library Search Compound Report

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

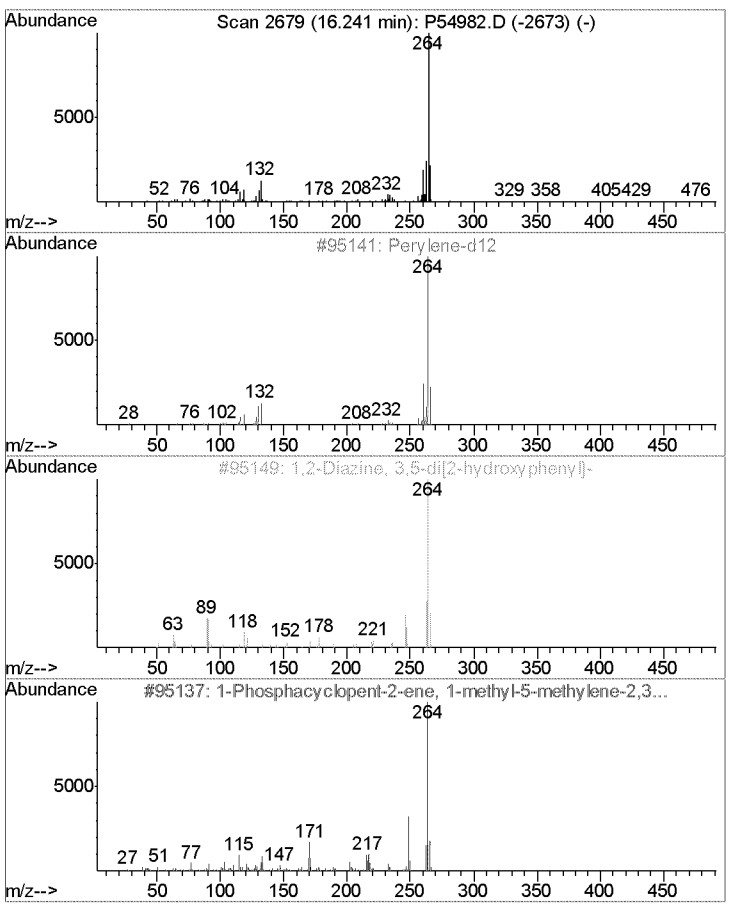
TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

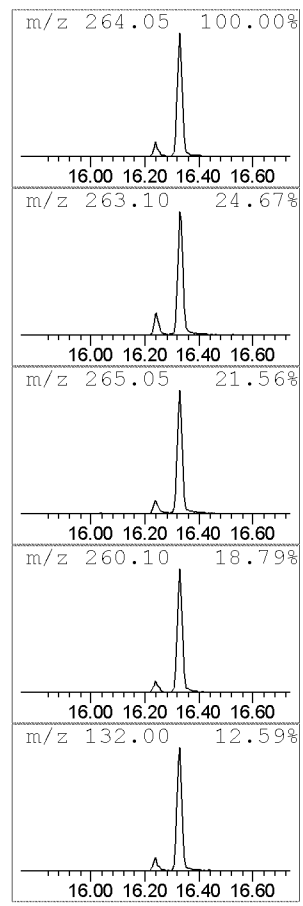
****

Peak Number 5 Internal standard added for... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.24	5.01 ppb	193251	Perylene-d12	16.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Perylene-d12	264	C20D12	001520-96-3	95
2	1,2-Diazine, 3,5-di[2-hydroxyphe...	264	C16H12N2O2	1000131-48-8	72
3	1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	64
4	5,2',4'-Trimethyl-2-benzylidene-...	264	C18H16O2	1000148-36-4	49
5	2,4,6,8-Tetrathiatricyclo[3.3.1....	264	C10H16S4	007000-79-5	47





Tentatively Identified Compound (LSC) summary

Data Path : C:\MSDCHEM\1\DATA\EP2378\
Data File : P54982.D
Acq On : 22 Feb 2011 9:07 am
Operator : ninap
Sample : op48193-mb1
Misc : op48193,ep2378,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MP2364.M
Quant Title : SEMI-VOA METHOD. ColumnZB-5ms 30mX0.25mmIDX0.25u

TIC Library : C:\DATABASE\NIST98.L
TIC Integration Parameters: rteint3.p

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Internal standard...	5.03	4.9	ppb	140943	2	4.78	1158560	40.0
Internal standard...	7.78	4.3	ppb	148162	3	6.57	1371850	40.0
Internal standard...	10.14	5.4	ppb	213297	5	9.33	1591780	40.0
Internal standard...	13.22	6.0	ppb	254567	7	11.64	1705150	40.0
Internal standard...	16.24	5.0	ppb	193251	10	16.33	1542360	40.0

ARCADIS

Appendix C

Well CG Monitoring Well Record, Form B, and Well Construction Diagram

New Jersey State Department of Environmental Protection
Bureau of Water Systems and Well Permitting
PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number
E201006624

MONITORING WELL RECORD

PROPERTY OWNER: JOHN SEARS

Company/Organization: PSE&G Nuclear, LLC

Address: Alloway Creek Neck Road Hancocks Bridge, New Jersey 08038

WELL LOCATION: PSE&G Nuclear Plant

Address: Alloway Creek Neck Road

County: Salem Municipality: Lower Alloways Creek Twp Lot: 4 Block: 26

Easting (X): 199559 Northing (Y): 230801
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: December 22, 2010

DATE WELL COMPLETED: December 22, 2010

WELL USE: MONITORING

Other Use(s):

Local ID: MW-CG

WELL CONSTRUCTION

Total Depth Drilled (ft.): 10 Finished Well Depth (ft.): 10 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	10	8		
Casing	0	3	4	PVC	Sch 40
Screen	3	10	4	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	2	10	4	2	38	3.5
Gravel Pack	2	10	10	4	#1 Morie		

Grouting Method: Pressure method (Tremie Pipe) Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: Yes
Static Water Level: 6 ft. below land surface
Water Level Measure Tool: M-Scope
Well Development Period: 2 hrs.
Method of Development: Pump & Surge
Pump Type:

Pump Capacity: _ gpm
Total Design Head: _ ft.
Drilling Fluid:
Drill Rig: CME-55LC
Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 10: Tan SW - Well-graded sands and gravelly sands, little or no fines

ADDITIONAL INFORMATION:

Driller of Record: Gerald Freck, MASTER LICENSE # 490750 Company: UNI-TECH DRILLING CO INC

ARCADIS **SOIL DESCRIPTION LOG**

Boring/Well MW-CG Project/No. NP000603.0010 Page 1 of 1

Site Location PSE&G Salem Diesel Unit 1 - Hancock's Bridge, New Jersey Drilling Started 12/22/2010 Drilling Completed 12/22/2010

Total Depth Drilled 10 feet Hole Diameter 8-inches Type of Sample/ Coring Device Air Knife

Length and Diameter of Coring Device NA Sampling Interval NA

Land-Surface Elev. ____ [X] Surveyed [ ] Estimated Datum Site Datum

Drilling Method Air Knife/Vac Ex Bit Size NA

Drilling Contractor Uni-Tech Drilling Company, Inc. Driller Dan Evans

Geologist Jon Shafer Hammer Weight NA Hammer Drop NA

Sample Depth (feet below ground surface) From	To	Core Recovery (feet)	PID Reading (ppm)	Sample/Core Description
0	0.5	NA	0.0	Asphalt
0.5	10		0.0	Tan fine to coarse SAND and SILT, some fine to medium subrounded to subangular gravel, medium firm, dry to moist

Notes: NA-Not applicable.

MONITORING WELL CERTIFICATION FORM B
LOCATION CERTIFICATION

Name of Owner PSE&G Salem Generating Facility

Name of Facility PSE&G Salem Generating Facility

Location: Lower Alloways Creek, Salem County, New Jersey

UST Number: _____ SRP Case No.: _____

LAND SURVEYOR'S CERTIFICATION
Well Permit Number:
This number must be permanently affixed to the well casing.
Owners Well Number (As shown on application or plans) MW-CG

Geographic Coordinates NAD 83 (to the nearest 1/10 of second)

Longitude: West 75° 32' 10.6" Latitude: North 39° 27' 44.8"

North 230,801 East 199,559

Elevation of Top of Inner Casing (Cap off) at
Reference mark (to nearest 0.01' in relation to permanent
on-site datum) Rim 99.23 Pvc 98.87

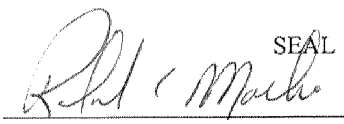
Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximate actual elevation. Please note that, if information from the well is to be submitted electronically, the EDSA manual specifies the well elevation to be reported according to NAVD 1988 to an accuracy of 0.2'.)

Site Monument N 5+0 E 2+0 Elevation 102.78 scaled actual elevation 10

Significant observations and notes: _____

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false, inaccurate, and incomplete information and that I am committing a crime in the fourth degree if I make a false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.



PROFESSIONAL LAND SURVEYOR'S SIGNATURE — DATE: 12/27/10

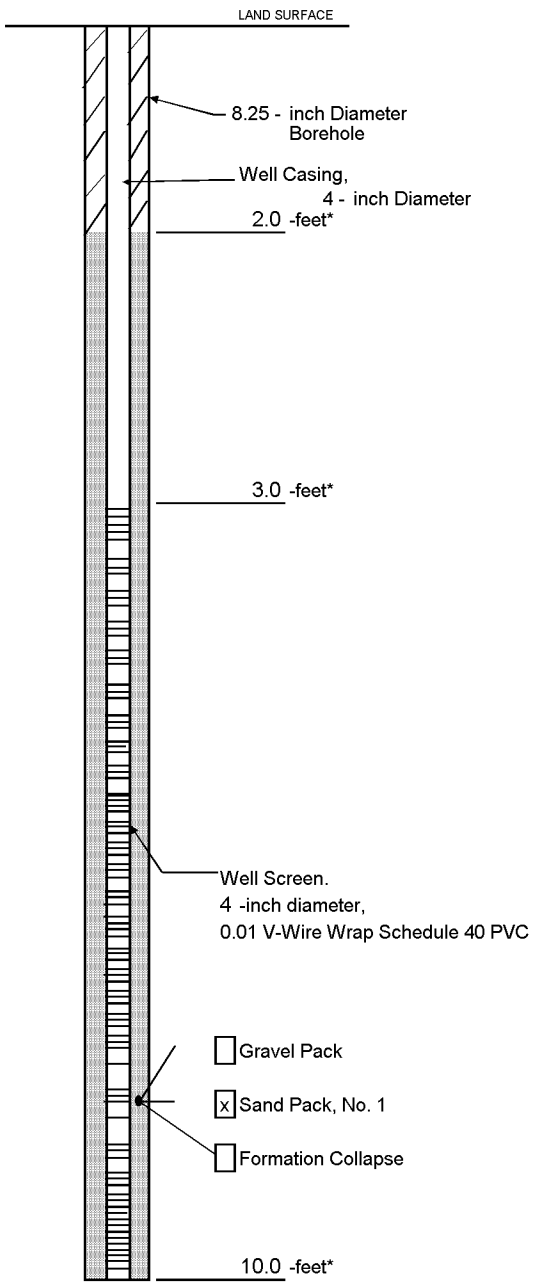
RICHARD C. MATHEWS GS29353
PROFESSIONAL LAND SURVEYOR'S NAME AND LICENSE NUMBER

43 WEST HIGH STREET, SOMERVILLE, NEW JERSEY 908 725 0230
PROFESSIONAL LAND SURVEYOR'S ADDRESS AND PHONE NUMBER

ARCADIS US

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project	NP000603.0010	Well	MW-CG
Town/City	Hancock's Bridge		
County	Salem	State	NJ
Permit No.	E201006624		

Land-Surface Elevation and Datum:

[X] Surveyed
[ ] Estimated

Installation Date(s)	12/22/2010
Drilling Method	Air Knife
Drilling Contractor	Uni-Tech Drilling Company, Inc.
Drilling Fluid	NA

Development Technique(s) and Date(s)

Pump and Surge development techniques

Water Removed During Development: NA

Static Depth to Water: 5.25 - feet below M.P.

Well Purpose: Diesel Monitoring Program

Remarks

Geologist: Jon Shafer

State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Southern Field Operations
401 East State Street
P.O. Box 420
Trenton, NJ 08625-0407
Phone #: 609-633-1475
Fax #: 609-984-6004

BOB MARTIN
Commissioner

December 16, 2011

Jeffrey Pantazes
PSE&G Nuclear, LLC
Nuclear Environmental Affairs Manager
PO Box 236
Hancocks Bridge, NJ 08038

Remedial Action Work Plan Approval

Re: May 2011 Remedial Investigation Report & September 2011 Redial Action Work Plan
Hope Creek Generating Station
Lower Alloways Creek, Salem County
SRP PI# 004157
EA ID #: SUB110002
Case #10-04-16-1649-11
BFO File Number: 17-04-08

Dear Mr. Pantazes:

The New Jersey Department of Environmental Protection (Department) has completed review of the Remedial Investigation Report and Remedial Action Work Plan received on May 23, 2011 and September 12, 2011. The Department has determined that the submittals are in compliance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E and other applicable requirements. The Department hereby approves the Remedial Action Work Plan, effective the date of this letter.

Contaminated soil is to be excavated for offsite disposal, followed by confirmatory sampling. Ground water monitoring will be performed at monitor well CD on a semi-annual basis, for VOC+10 and SVOC+15, the schedule of which will coincide with ground water sampling associated with Incident #04-08-02-2350-16.

As regarding future report submittals, as with Incident #04-08-02-2350-16, the following is offered.

Please be aware that on May 7, 2009 the Site Remediation Reform Act (SRRA) was enacted. SRRA establishes criteria for the licensing of site remediation professionals, known as LSRP's, who will assure that contaminated sites are remediated in accordance

with all prevailing statures, regulations and guidance. The timeframes and criteria that define when a LSRP must be hired, as well as other requirements of SRRA have been reflected in the ARRCS Rule and Tech Rule adopted on November 4, 2009. These rules can be found at http://nj.gov.dep/srp/regs/. All parties who initiated remediation prior to November 3, 2009 will not be required to hire a LSRP to conduct the remediation right away. Remediation will follow the remediation process with traditional NJDEP oversight and approvals until 2012. All parties remediating sites on or after May 7, 2012 will be required to follow N.J.S.A. 58:10B-1.3b 1-9 and hire an LSRP.

Please be advised that based upon the Department's review of your file, it is our opinion that the remediation will not be completed, reports submitted and evaluated for this site before the May 7, 2012 deadline. Therefore it will be necessary for you to complete the remediation under the LSRP program. Information regarding opting into the LSRP program can be found at http://www.nj.gov/dep/srp/srra/lsrp/opt_in.htm.

It is important to note that there are regulatory and mandatory timeframes that started March 1, 2010 that may apply to this site. Guidance for this topic can be found at http://www.nj.gov/dep/srp/srra/training/matrix/new_responsib/6_timeframe_req.pdf. Your failure to meet a mandatory timeframe will subject you to direct oversight pursuant to N.J.S.A. 58:10c-27.

Thank you for your cooperation in this matter. If you have any questions, call Linda Range at (609) 984-6606.

Sincerely,

George King, Chief
Bureau of Southern Field Operations

C: Bradley Pierce, Arcadis, 500 North Gulph Rd, Suite 401, King of Prussia, PA 19406
Luis Cataldo, PSE&G Nuclear, LLC, PO Box 236, Hancocks Bridge, NJ 08038
Mayor/Clerk, Lower Alloways Creek
Salem County Health Dept
File #17-04-08

APPENDIX C

Cover/Certification Form and Case Inventory Document

New Jersey Department of Environmental Protection
Site Remediation and Waste Management Program

AUTHORIZATION TO SUBMIT A REMEDIAL PHASE REPORT THROUGH NJDEP ONLINE

[Except Remedial Action Outcome (RAO)]

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Salem Generating Station

Street Address: PO Box 236

Municipality: Hancocks Bridge (Township, Borough or City)

County: Salem Zip Code: 08038

Program Interest (PI) Number(s): 004156

SECTION B. STATEMENT OF AUTHORIZATION TO SUBMIT THE REMEDIAL PHASE REPORT

I authorize the Licensed Site Remediation Professional, retained for this site pursuant to the Brownfield and Contaminated Site Remediation Act at N.J.S.A. 58:10B-1.3b, and named below to submit, as applicable, the remedial phase report listed below, updated Receptor Evaluation Form, and CEA/Well Restriction Fact Sheet Form, for the Program Interest Number noted above. I understand that I am assuming full responsibility that the information provided in the remedial phase report is true, accurate, and complete.

Name and Date of Remedial Phase Report:

Remedial Investigation Report, August 14, 2017

Authorized Licensed Site Remediation Professional (LSRP)

First Name: Gregory Last Name: Albright

LSRP License #: 543886

SECTION C. CERTIFICATION BY THE PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION

Full Name of Person Responsible for Conducting the Remediation: PSEG Nuclear, LLC

Representative First Name: David Representative Last Name: Mannai

Mailing Address: Alloway Creek Neck Rd.

Municipality: Hancocks Bridge State: NJ Zip Code: 08038

Telephone Number: (856) 339-2061 Ext.: Fax:

Email Address: David.Mannai@pseg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this Authorization and Report in accordance with the Administrative Requirements for the Remediation of Contaminated Sites at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 8/14/17

Name/Title: David Mannai/Senior Director Regulatory Operations

Completed form should be uploaded to NJDEP Online.

New Jersey Department of Environmental Protection
Site Remediation Program

COVER/CERTIFICATION FORM

(Submit with Remedial Phase Report, Receptor Evaluation, and CEA Forms)

Date Stamp
(For Department use only)

SECTION A. SITE INFORMATION

Site Name: Salem Generating Station

AKAs: PSEG Nuclear

Street Address: PO Box 236

Municipality: Hancocks Bridge (*Township, Borough or City*)

County: Salem Zip Code: 08038

Program Interest (PI) Number(s): 004156

Case Tracking Number(s) for this submission: 04-08-02-2350-16 and 10-0416-1649-11

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2: 08/02/2004

State Plane Coordinates for a central location at the site: Easting: 199,503 Northing: 230,881

List current Municipal Block and Lot Numbers of the Site:

Block # 26	Lot #(s) 4.01	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)
Block #	Lot #(s)	Block #	Lot #(s)

SECTION B. SUBMISSION STATUS

1. Indicate how the Electronic Data Deliverable (EDD) for this submission is being provided to the NJDEP:
   - ☒ Via Email at srpedd@dep.state.nj.us (attach NJDEP confirmation email); or
   - ☐ CD (attach to this submission)
   - ☐ Not Applicable – No EDD
2. Complete the following Submission and Permit Status Table:

Remedial Phase Documents	N/A	Included in this Submission	Previously Submitted	Date of Submission	Date of Revised Submission	Date of Previous NJDEP Approval	Date of Document Withdrawal
Preliminary Assessment Report	☐	☐	☒	01/28/2005			
Site Investigation Report	☐	☐	☒	01/28/2005			
Remedial Investigation Report	☐	☒	☐	06/03/2005			
Remedial Action Work Plan	☐	☐	☒	06/03/2005			
Remedial Action Report	☒	☐	☐				
Response Action Outcome	☒	☐	☐				
Other Submissions							
Alternative Soil Remediation Standard and/or Screening level Application Form	☒	☐	☐				
Case Inventory Document		☒					
Classification Exception Area / Well Restriction Area (CEA/WRA)	☐	☒	☐				
Discharge to Ground Water Permit by Rule Authorization Request	☒	☐	☐				

IEC Engineered System Response Action Report	☒	☐	☐				
Immediate Environmental Concern Report	☒	☐	☐				
LNAPL Interim Remedial Measure Report	☐	☐	☒	06/03/2005			
Public Notification	☐	☐	☒	01/17/2017			
Receptor Evaluation	☐	☒	☐	02/25/2011			
Technical Impracticability Determination	☒	☐	☐				
Vapor Concern Mitigation Report	☒	☐	☐				
Permit Application – list:	☐						
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
Radionuclide Remedial Action Report	☒	☐	☐				
Radionuclide Remedial Action Workplan	☒	☐	☐				
Radionuclide Remedial Investigation Report	☒	☐	☐				
Radionuclide Remedial Investigation Workplan	☒	☐	☐				

SECTION C. SITE USE

Current Site Use: (*check all that apply*)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Agricultural
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Other: _____

Intended Future Site Use, if known: (*check all that apply*)

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government
- ☐ Future site use unknown
- ☐ Other: _____

SECTION D. CASE TYPE: (*check all that apply*)

- ☐ Administrative Consent Order (ACO)
- ☐ Brownfield Development Area (BDA)
- ☐ Child Care Facility
- ☐ Chrome Site (Chromate chemical production waste)
- ☐ Coal Gas
- ☐ Due Diligence with RAO
- ☐ Hazardous Discharge Remediation Fund (HDSRF) Grant/Loan
- ☐ ISRA
- ☐ Landfill (SRP subject only)
- ☐ Regulated Underground Storage Tank (UST)
- ☐ Remediation Agreement (RA)/Remediation Certification
- ☐ School Development Authority (SDA)
- ☐ School facility
- ☐ Spill Act Defense – Government Entity
- ☒ Spill Act Discharge
- ☐ UST Grant/Loan
- ☐ Other: _____

Federal Case (*check all that apply*)

☐ RCRA GPRA 2020 ☐ CERCLA/NPL ☐ USDOD ☐ USDOE

1. Is the party conducting remediation a government entity? ..... ☐ Yes ☒ No

If "Yes," check one: ☐ Federal ☐ State ☐ Municipal ☐ County

SECTION E. PUBLIC FUNDS

Did the remediation utilize public funds? ..... ☐ Yes ☒ No

If "Yes," check applicable:

- ☐ UST Grant
- ☐ HDSRF Grant
- ☐ Spill Fund
- ☐ UST Loan
- ☐ HDSRF Loan
- ☐ Schools Development Authority
- ☐ Brownfield Reimbursement Program
- ☐ Landfill Reimbursement Program
- ☐ Environmental Infrastructure Trust

SECTION F. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION

Full Legal Name of the Person Responsible for Conducting the Remediation: PSEG Nuclear, LLC

Representative First Name: David Representative Last Name: Mannai

Title: Senior Director Regulatory Operations

Phone Number: (856) 339-2061 Ext: Fax:

Mailing Address: Alloway Creek Neck Rd.

City/Town: Hancocks Bridge State: NJ Zip Code: 08038

Email Address: David.Mannai@pseg.com

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Signature: Date: 8/14/17

Name/Title: David Mannai/Sr. Dir. Regulatory Operations

For CEA Submissions:

☒ Check this box if the person above is also the property owner of the site or their representative. If this person is not the site property owner, please ensure the site property owner's name and address is in the first line of the table in Section E.2 of the Classification Exception Area / Well Restriction Area (CEA/WRA) Fact Sheet Form.

SECTION G. LICENSED SITE REMEDIATION PROFESSIONAL INFORMATION AND STATEMENT

LSRP ID Number: 585761

First Name: Gregory Last Name: Albright

Phone Number: (609) 366-9067 Ext: Fax: (609) 860-8007

Mailing Address: 6033 Long Breach Boulevard

City/Town: Long Beach Township State: NJ Zip Code: 08008-3738

Email Address: gregory.albright@arcadis-us.com

This statement shall be signed by the LSRP who is submitting this notification in accordance with section 14 of P.L.2009 c.60 (N.J.S.A. 58:10C-14), and paragraphs (1) and (2) of subsection b. of section 30 of P.L.2009 c.60 (N.J.S.A. 58:10B=1.3b(1) and (2)).

I certify that I am a Licensed Site Remediation Professional authorized pursuant to N.J.S.A. 58:10C to conduct business in New Jersey. As the Licensed Site Remediation Professional of record for this remediation, I:

[SELECT ONE OR BOTH OF THE FOLLOWING AS APPLICABLE]:

☐ *directly oversaw and supervised all of the referenced remediation, and\or*

☒ *personally reviewed and accepted all of the referenced remediation presented herein.*

I believe that the information contained herein, and including all attached documents, is true, accurate and complete.

It is my independent professional judgment and opinion that the remediation conducted at this site, as reflected in this submission to the Department, conforms to, and is consistent with, the remediation requirements in N.J.S.A. 58:10C-14.

My conduct and decisions in this matter were made upon the exercise of reasonable care and diligence, and by applying the knowledge and skill ordinarily exercised by licensed site remediation professionals practicing in good standing, in accordance with N.J.S.A. 58:10C-16, in the State of New Jersey at the time I performed these professional services.

I am aware pursuant to N.J.S.A. 58:10C-17 that for purposely, knowingly or recklessly submitting false statement, representation or certification in any document or information submitted to the board or Department, etc., that there are significant civil, administrative and criminal penalties, including license revocation or suspension, fines and being punished by imprisonment for conviction of a crime of the third degree.

LSRP Signature: Date: August 16, 2017

LSRP Name/Title: Gregory R. Albright / Principal Geologist

Company Name: Arcadis U.S., Inc.

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420

Case Name: Salem Generating Station

PI #: 004156

IMPORTANT: *1) Do not delete or copy and paste across multiple columns because it can disrupt hidden equations.*
2) If pasting from a Word document, use the Paste option: ***Match Destination Formatting***
3) If the text turns red you have exceeded the character limit for that column

Case Inventory Document Version 1.4 02/23/17

AOC ID	AOC Type	AOC Description	Confirmed Contamination	AOC Status	Status Date	Incident #	DEP AOC Number	Contaminated Media	Contaminants of Concern	Additional Contaminants of Concern	Additional Contaminants of Concern	Applicable Remediation Standard	Exposure Route	Additional Exposure Route	RA Type	Additional RA Type	Additional RA Type	Was an Order of Magnitude Evaluation Conducted?	Activity
Unit 1 Diesel Release	Storage tank and appurtenance - Piping, above/below ground pump station, sump/pit	Area includes piping that supplies diesel from bulk storage tanks to diesel/generator storage tanks	Yes	RAR	2/6/2006	04-08-02-2350-16		Ground Water	VO	BN		Remediation Standards	Ground Water		LNAPL skimming				On August 2, 2004, site workers observed a diesel odor in a catch basin. Source investigation focused on underground piping that supplies diesel from bulk storage tanks to diesel/generator tanks. In January 2005, an RIWP was submitted to NJDEP. A Site Investigation Report was submitted in January 2005. A Remedial Investigation Report and interim RAR submitted in June 2005. In February 2006, PSEG submits a Remedial Action Report. On March 24, 2008, NJDEP approves semi-annually groundwater monitoring. On June 21, 2010, NJDEP issues a NOD to PSEG requiring installation of a shallow well near Well AI for further delineation. In December 2010, PSEG installs Well CG, no SPH detected.
Unit 2 Diesel Release	Storage tank and appurtenance - Piping, above/below ground pump station, sump/pit	Area includes a historical release caused by overflow from a bulk storage AST system	Yes	RAW	9/9/2011	10-04-16-1649-11		Soil	TPHC			Remediation Standards	Ingestion/Dermal						On April 16, 2010. diesel odors and staining are observed in a soil boring during a independent investigation. On July 12, 2010, PSEG submitts Site Investigation / Remedial Investigation Workplan. On May 17, 2011, PSEG submitted a Remedial Investigation Report. On September 9, 2011 a Remedial Action Workplan was submitted showing the excavation area around the TPHC impacts and indicating groundwater monitoring next to the soil impacts will continue until remedial action is completed. DEP approved both the RIR and the RAWP in a letter dated December 16, 2011.
Sodium Hypochlorite Release	Other areas of concern - Discolored area or spill area	A release of approximately 1,000 gallons of water containing sodium hypochlorite was release into the waters of the State.	No	RAO-A (Unrestricted Use)	4/25/2017	12-05-16-2210-44		None	Not Applicable			Remediation Standards							As discussed in the Preliminary Assessment / Site Investigation Report, no further action is required based on the surface water investigation results which show that either constituents were not detected or they were detected at concentratoins less than NJDEP Surface Water Ecological Screening Criteria. On April 25, 2017, the LSRP issued a RAO-A (unrestricted use) for the AOC indicating no impacts persist.
Ammonia in Groundwater	Other areas of concern - Open area away from production operations	Ammonia was detected in groundwater within an excavation at concentrations greater than NJDEP GWQC.	Yes	RAO-A (Unrestricted Use)	4/25/2017	12-07-11-1157-10		Ground Water	Other			Remediation Standards	Ground Water		No Remedial Action				As discussed in the Preliminary Assessment / Site Investigation Report, ammonia, total dissolved solids, and sodium were detected at concentrations greater than NJDEP GWQS. Additional groundwater investigation was conducted as part of a remedial investigation. The results presented in the RIR show the source of the COCs is naturally occuring background conditions. On April 25, 2017, the LSRP issued a RAO-A (unrestricted use) for the AOC indicating the COCs are associated with background conditions.
Vegetable Oil Release Area	Environmental media - Media Surface water	One pint of hydro safe hydraulic (vegetable) oil was released from the Circulating Water Intake Structure trash rakes into the Delaware River.	No	No Sampling Trigger	4/14/2015	14-04-16-0922-51		None	Not Applicable			Remediation Standards							As discussed in the Preliminary Assessment / Site Investigation Report, a leak occurred from a trash rake hydraulic hose located within circulating water intake structure. The leak released approximately one pint of vegetable based oil into the Delaware River. Sampling was not performed based on the emulsification and breakdown of the oil. The report recommended no additional investigation is required. On April 14, 2015, the site's LSRP (Gregory Albright) submitted the PA/SIR to the NJDEP via email following a conversation with NJDEP who instructed him that the NJDEP closed out the case. The NJDEP instructed PSEG that no further action is required for this AOC.

APPENDIX D

Receptor Evaluation

New Jersey Department of Environmental Protection
Site Remediation Program

RECEPTOR EVALUATION (RE) FORM

Date Stamp
(For Department use only)

SECTION A. SITE

Site Name: Salem Generating Station

Program Interest (PI) Number(s): 004156

Case Tracking Number(s) for this submission: 04-08-02-2350-16 and 10-0416-1649-11

This form must be attached to the Cover/Certification Form if not submitted through the RIR Online Service

Indicate the type of submission:

☐ Initial RE Submission

☒ Updated RE Submission

Indicate the reason for submission of an updated RE form

☐ Submission of an Immediate Environmental Concern (IEC) source control report;
☒ Submission of a Remedial Investigation Report;
☐ Submission of a Remedial Action Report;

Check if included in updated RE

☐ The known concentration or extent of contamination in any medium has increased;
☐ A new AOC has been identified;
☐ A new receptor is identified;
☐ A new exposure pathway has been identified.

SECTION B. ON SITE AND SURROUNDING PROPERTY USE

1. Identify any sensitive populations/uses that are currently on-site or surrounding property usage within 200 feet of the site boundary (check all that apply):

	On-site	Off-site
None of the following	☒	☒
Residences or residential property	☐	☐
Public or Private Schools grades K-12	☐	☐
Child care centers	☐	☐
Public parks, playgrounds or other recreation areas	☐	☐
Other sensitive population use(s) Explain See attached figure	☐	☒

If any of the above applies, attach a list of addresses, facility names, type of use, and a map depicting each location relative to the site.

2. Current site uses (check all that apply):

☒ Industrial ☐ Residential ☐ Commercial ☐ Agricultural
☐ School or child care ☐ Government ☐ Park or recreational use
☐ Vacant ☐ Other: _____

3. Planned future site uses and off-site use within 200 ft of site boundary (check all that apply):

☒ Industrial ☐ Residential ☐ Commercial ☐ Agricultural
☐ School or child care ☐ Government ☐ Park or recreational use
☐ Vacant ☐ Other: _____

Provide a map depicting the location of the proposed changes in land use.

SECTION C. DESCRIPTION OF CONTAMINATION

1. Identify if any of the following exist at the site (check all that apply):
   - ☒ Free product [N.J.A.C. 7:26E-1.8] identified is ☒ LNAPL* or ☐ DNAPL**. Date identified: 08/02/2004
   - ☒ Residual product [N.J.A.C. 7:26E-1.8]
   - ☐ Other high concentration source materials not identified above (e.g., buried drums, containers, unsecured friable asbestos)

     Explain: _____

   * LNAPL – measured thickness of .01 feet or more

   **DNAPL – See US EPA DNAPL Overview

2. Soil Migration Pathway

   Has soil contamination been delineated to the applicable Direct Contact Soil Remediation Standard? ..... ☒ Yes ☐ No

   Are all soils either below the applicable Direct Contact Criteria or under an institutional control (i.e. deed notice)? ..... ☐ Yes ☒ No

3. If this evaluation is submitted with a technical document that includes contaminant summary information, proceed to Section D. Otherwise attach a brief summary of all currently available data and information to be included in the site investigation or remedial investigation report.

SECTION D. GROUND WATER USE

1. Has the requirement for ground water sampling been triggered? ..... ☒ Yes ☐ No ☐ Unknown
   If "No," proceed to Section F. If "Unknown," explain:

   _____

2. Is Ground water contaminated above the Ground Water Remediation Standards [N.J.A.C.7:9C]? ..... ☒ Yes ☐ No ☐ Unknown

   Or ☐ Awaiting laboratory data with the expected due date: _____

   If "Yes," provide the date that the laboratory data was available and confirmed contamination above the Ground Water Remediation Standards. Date: 01/01/2005

   If "Unknown," explain: _____

   If "No," or awaiting laboratory data proceed to Section F.

3. Has ground water contamination been delineated to the applicable Remediation Standard? ..... ☒ Yes ☐ No
4. Has a well search been completed? ..... ☒ Yes ☐ No

   Date of most recent or updated well search: 07/20/2017

   Identify if any of the following conditions exist based on the well search [N.J.A.C.7:26E-1.14(a)] (check all that apply):
   - ☐ Potable wells located within 500 feet from the downgradient edge of the currently known extent of contamination.
   - ☐ Potable well located 250 feet upgradient or 500 feet side gradient of the currently known extent of contamination.
   - ☐ Ground water contamination is located within a Tier 1 wellhead protection area (WHPA).

5. Is a completed Well Search Spreadsheet or historical well search table attached and has an electronic copy of the spreadsheet been submitted to srpgis_wrs@dep.state.nj.us. ..... ☒ Yes ☐ No

   If "No," explain: _____

6. Are any private potable or irrigation wells located within ½ mile of the currently known extent of contamination? ..... ☒ Yes ☐ No

   If "Yes," was a door to door survey completed? ..... ☐ Yes ☒ No

   If survey was not completed explain: Wells are owned by PSEG

7. Has sampling been conducted of ☒ potable well(s) and /or ☒ non-potable use well(s)? ..... ☐ Yes ☒ No

   If "No," provide justification then proceed to Section E.

   Wells are screened hundreds of feet deeper than contamination

8 Has contamination been identified in potable well(s) above Ground Water Remediation Standards that is not suspected to be from the site? (If "Yes," provide justification) ..... ☐ Yes ☒ No

_____

9 Has contamination been identified in potable well(s) that is above the Ground Water Remediation Standards or Federal Drinking Water Standards? ..... ☐ Yes ☒ No

Provide date laboratory data was received: _____

Or ☐ awaiting laboratory data with the expected due date: _____

If "Yes" for potable well contamination **not attributable to background**, follow the IEC Guidance Document at http://www.nj.gov/dep/srp/guidance/index.html#iec for required actions and answer the following:

Has an engineered system response action been completed on all receptors? ..... ☐ Yes ☐ No

Provide a brief narrative description:

Date completed: _____ NJDEP Case Manager: _____

10. Were Non-potable use well(s) sampled and results were above Class II Ground Water Remediation Standards? ..... ☐ Yes ☒ No

Provide date laboratory data was received: _____

Or ☐ awaiting laboratory data with the expected due date: _____

11. Has the ground water use evaluation been completed? ..... ☒ Yes ☐ No

SECTION E. VAPOR INTRUSION (VI)

1. Contaminants present in ground water exceed the Vapor Intrusion Ground Water Screening Levels that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance). ... ☐ Yes ☒ No ☐ Unknown

Or ☐ Awaiting laboratory data and the expected due date: _____

Provide the date that the laboratory data was available and confirmed contamination above the Vapor Intrusion Trigger Levels. Date: _____

2. Other existing conditions that trigger a VI evaluation. (see NJDEP Vapor Intrusion Technical Guidance)

☐ Wet basement or sump containing free product or ground water containing volatile organics
☐ Methane generating conditions causing oxygen deficient or explosion concern
☐ Other human or safety concern from the VI pathway (i.e. elemental mercury, unsaturated contamination, elevated soil gas or indoor vapor (explain):

If you answered "No," or awaiting laboratory data to Question 1., *and* did not check any boxes in Question 2, proceed to Section F, "Ecological Receptors", otherwise complete the rest of this section.

3. Has ground water contamination been delineated to the applicable Ground Water Vapor Screening Level? ..... ☐ Yes ☐ No

4. Was a site specific screening level, modeling or other alternative approach employed for the VI pathway? ..... ☐ Yes ☐ No

5. Identify and locate on a scaled map any buildings/sensitive populations that exist within the following distances from ground water contamination with concentrations above the Vapor Intrusion Ground Water Screening Levels or specific threats (check all that apply):

☐ 30 feet of petroleum free product or dissolved petroleum hydrocarbon contamination in ground water
☐ 100 feet of any non-petroleum free product or any non-petroleum dissolved volatile organic ground water contamination
☐ No buildings exist within the specified distances

6. The vapor intrusion pathway is a concern at or adjacent to the site (if "No," attach justification) ..... ☐ Yes ☐ No

7. Has soil gas sampling of the building(s) been conducted? ☐ Yes ☐ No ☐ N/A
   If "No," or "N/A," proceed to #12

8. Has indoor air sampling been conducted at the identified building(s)? ☐ Yes ☐ No
   If "No," proceed to #12

9 Has indoor air contamination been identified but not suspected to be from the site?
   (if "Yes," attach justification) ☐ Yes ☐ No

10. Indoor air results were above the NJDEP's Rapid Action Levels. ☐ Yes ☐ No

    Provide the date that the laboratory data was available. Date: _____

    Or ☐ Awaiting laboratory data with the expected due date: _____

    If "Yes" to #10 above, follow the IEC Guidance Document at
    http://www.nj.gov/dep/srp/guidance/index.html#iec **for required actions.**

    The IEC engineering system response for control was implemented for all
    identified structures ☐ Yes ☐ No

    Date: _____ NJDEP Case Manager: _____

11. Indoor air sampling was conducted and results were above the NJDEP's Indoor Air Screening
    Levels but at or below the Rapid Action Levels ☐ Yes ☐ No

    Provide the date that the laboratory data was available. Date: _____

    Or ☐ Awaiting laboratory data with the expected due date: _____

    If "Yes" to #11 above, answer the following:

    Has the Vapor Concern (VC) Response Action Form notifying the NJDEP of the exceedances
    been submitted? ☐ Yes ☐ No

    Date: _____

    Has a plan to mitigate and monitor the exposure been submitted? ☐ Yes ☐ No

    Date: _____

    Has the Mitigation Response Action Report been submitted? ☐ Yes ☐ No

    Date: _____

12. Has the vapor intrusion investigation been completed? ☐ Yes ☐ No
    If "No", is the vapor intrusion investigation stepping out as part of the site
    investigation or remedial investigation. (If "No," attach justification) ☐ Yes ☐ No

SECTION F. ECOLOGICAL RECEPTORS

1. Has an Ecological Evaluation (EE) has been conducted? [N.J.A.C. 7:26E-1.16] ☒ Yes ☐ No
   Date conducted: 05/01/2005

2. Do the results of an EE trigger a remedial investigation of ecological receptors? [N.J.A.C. 7:26E-4.8] ☐ Yes ☒ No

3. Has a remedial investigation of ecological receptors been conducted? ☐ Yes ☒ No
   Date conducted: _____

4. Provide the following information for any surface water body on or within 200 feet of the site:

Surface Water Body Name	Stream Classification	Antidegradation Designation	Trout Production	Trout Maintenance
Delaware River	Zone 5	Zone 5	☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

5. Does the site contain any features regulated by the Land Use Regulation Program (LURP)? (e.g. wetlands, flood hazard area, tidelands, etc.). ☐ Yes ☒ No

   If "Yes," identify the type(s) of features: _____

6. Have any formal LURP jurisdiction letters or approvals been issued for the site? ☐ Yes ☒ No

   If "Yes," what is the LURP Program Interest (PI) number(s) for the site? _____

7. Have any applications for formal LURP jurisdiction letters or approvals been submitted the NJDEP? ☐ Yes ☒ No

   If "Yes," what is the LURP Program Interest (PI) number(s) for the site? _____

8. Is free product or residual product located within 100 feet from an ecological receptor? ☐ Yes ☒ No

9. Does available data indicate an impact on Ecological receptor(s), Surface water, or Sediment? ☐ Yes ☒ No

   If "Yes,"

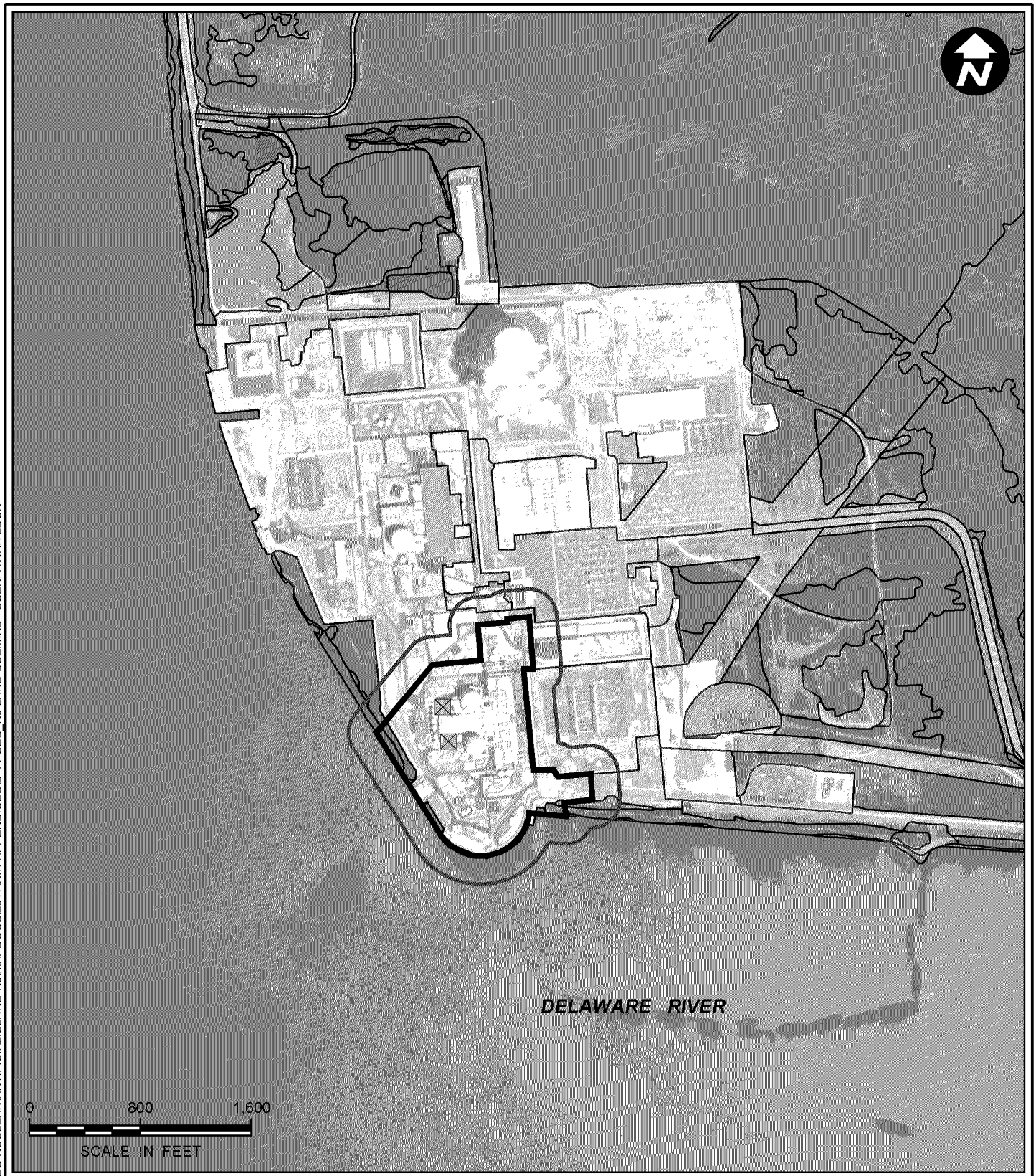
   a) Check all that apply:

      ☐ Ecological receptor(s) ☐ Surface water ☐ Sediment

   b) Submit with this evaluation either a technical document that includes contaminant summary information, or a description of the type of contamination, a schedule, and a description of all actions to be taken to mitigate exposure.

Completed forms should be sent to the municipal clerk, designate health department, and:

Bureau of Case Assignment & Initial Notice
Site Remediation Program
NJ Department of Environmental Protection
401-05H
PO Box 420
Trenton, NJ 08625-0420



PROJECTION: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2013).
REFERENCE: Maurice, Salem, Cohansey Watershet Management Area (WMA-17) NJ epartment of Environmental Protection, Bureau of GIS (2007).

LEGEND

- 200-foot Radius Boundary
- Salem Station Boundary
- SGS Unit 1 Investigation Area (NJDEP Case No. 04-08-02-2350-16)
- SGS Unit 2 Investigation Area (NJDEP Case No. 10-0416-0164911)

Land Use/Land Cover

- Barren Land
- Forest
- Urban Area
- Water
- Wetlands

PSEG NUCLEAR, LLC, SALEM GENERATING STATION,
ARTIFICIAL ISLAND, HANCOCKS BRIDGE, NEW JERSEY

RECEPTOR EVALUATION

SURROUNDING LAND-USE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
D-1

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:() PM:() TM:(A.BALARIA)
PROJECT: NP000603.SP15 PATH: G:\GIS\PSEG NUCLEAR\ARTIFICIALISLAND-NJ\MAPDOCS\2017RIR APPENDICES\B-1 PSEG_NJ LAND USE.MXD USER: AWHITLOCK

LEGEND

- SGS Unit 1 Investigation Area (NJDEP Case No. 04-08-02-2350-16)
- SGS Unit 2 Investigation Area (NJDEP Case No. 10-0416-0164911)
- Domestic Well
- Industrial Well (Potentially Potable)
- Public Non-Community Well
- Salem Site Boundary
- 0.5-mile Radius Boundary

NOTES:
1. NJDEP GWQS - New Jersey Department of Environmental Protection Groundwater Quality Standard.
2. The domestic well location is displayed offset from its location for clarity.

0 1,250 2,500

SCALE IN FEET

PROJECTION: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
AERIAL SOURCE: ESRI Online Services (NAIP, July 2015).

PSEG NUCLEAR, LLC, SALEM GENERATING STATION,
ARTIFICIAL ISLAND, HANCOCKS BRIDGE, NEW JERSEY

RECEPTOR EVALUATION

POTABLE WELL LOCATIONS

ARCADIS Design & Consultancy for natural and built assets

FIGURE
D-2

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:() PM:() TM:(A.BALARIA)
PROJECT: NP000603.SP15 PATH: G:\GIS\PSEG_NUCLEAR\ARTIFICIALISLAND\MAPDOCS\2017\RI2 APPENDICES\E2 PSEG_NJ_POTABLEWELLS.MXD USER: AWHITLOCK

APPENDIX E

Quality Assurance Project Plan

ARCADIS Design & Consultancy for natural and built assets

PSEG Nuclear, LLC

QUALITY ASSURANCE PROJECT PLAN

Diesel Remedial Investigation – Salem Generating Station, Hancocks Bridge, New Jersey

July 2017

,

QUALITY ASSURANCE PROJECT PLAN

Diesel Remedial Investigation – Salem Generating Station, Hancocks Bridge, New Jersey

Glenn C. Palmer
Senior Scientist

Ankit Balaria
Staff Engineer

Prepared for:

PSEG Nuclear, LLC

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Tel 716 667 0900
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Our Ref.:

NP000603.0015

Date:

July 2017

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APPENDICES

A Field Sampling Standard Operating Procedures

SII-SSA-0014-006663

LIST OF ACRONYMS

%R	percent recovery
Accutest	Accutest Laboratories
Arcadis	Arcadis U.S., Inc.
bgs	below ground surface
COC	chain of custody
COCs	constituents of concern
CSV	comma separated value
DQI	data quality indicator
DQO	data quality objective
EDD	electronic data deliverable
FSPM	Field Sampling Procedures Manual
GPS	global positioning system
GWQC	Groundwater Quality Criteria
HazMat	hazardous materials
HCGS	Hope Creek Generating Station
HHB	house heating boiler
IDW	investigation-derived waste
IRMS	isotope ration mass spectrometer
LCS	laboratory control sample
LSRP	Licensed Site Remediation Professional
MDL	method detection limit
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
NJDEP	New Jersey Department of Environmental Protection
OSHA	Occupational Safety and Health Administration
PM	project manager
ppb	parts per billion
PSEG	PSEG Nuclear, LLC

QA	quality assurance
QAC	Quality Assurance Coordinator
QAPP	Quality Assurance Project Plan
QC	quality control
RI	remedial investigation
RIWP	Remedial Investigation Work Plan
RL	reporting limit
RPD	relative percent difference
SGS	Salem Generating Station
SI	Site Investigation
SIR	Site Investigation Report
SOP	Standard Operating Procedure
SRP	Site Remediation Program
TDS	total dissolved solids
TOC	total organic carbon
USDOT	United Stated Department of Transportation
USEPA	United States Environmental Protection Agency

SII-SSA-0014-006665

INTRODUCTION

This Quality Assurance Project Plan (QAPP) presents the specific quality assurance (QA) and quality control (QC) procedures associated with the work to be conducted by Arcadis U.S, Inc. (Arcadis) on behalf of PSEG Nuclear, LLC (PSEG) at the Salem Generating Station (SGS, or Station) located on Artificial Island in Hancocks Bridge, Salem County, New Jersey. The QAPP is designed to ensure that data quality objectives (DQO), field sampling activities, and laboratory analysis conform to specific standards and guidelines from project initiation to completion.

This QAPP was prepared in a manner consistent with the following reference and guidance documents:

- New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual (FSPM) (NJDEP 2005);
- NJDEP Site Remediation Program (SRP) Quality Assurance Project Plan Technical Guidance (NJDEP 2014);
- NJDEP SRP Data Quality Assessment and Data Usability Evaluation Technical Guidance (NJDEP 2014);
- NJDEP SRP Data of Known Quality Protocols Technical Guidance (NJDEP 2014);
- United States Environmental Protection Agency (USEPA) Test Methods for Evaluating Solid Waste, SW-846 (USEPA 1996);
- USEPA Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA-QA/G-4 (USEPA 2006); and
- USEPA Guidance for Quality Assurance Project Plans, EPA-QA/G-5 (USEPA 2002).

Title and Approval Page

Site Name/Project Name:	Salem Nuclear Generating Station
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Lead Organization:	NJDEP
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Preparation Date:	January 2016
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Note: Copies of the QAPP will be distributed to the individuals listed above. The copies will include the following documents: QAPP and any subsequent QAPP revisions and addenda.

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1 PROJECT DEFINITION/BACKGROUND

1.1 Project Definition

The objective of the current scope of work is to, horizontally and vertically delineate site-related constituents of concern (COCs) in soil and groundwater at concentrations greater than applicable NJDEP Groundwater Quality Criteria (GWQC) and Soil Remediation Standards (SRS); and

Previous site investigations have identified the primary site-related COCs as diesel related compounds.

1.2 Background

PSEG operates two nuclear generating stations, SGS, located on Artificial Island in Lower Alloways Creek Township, Salem County, New Jersey. SGS is composed of two nuclear generating units (Units 1 and 2) and one distillate oil fueled combustion turbine unit (Unit 3). Commercial operating of Units 1 and 2 commenced in 1976 and 1981, respectively. Unit 3 commenced operations in 1972.

On August 2, 2004, PSEG personnel observed a diesel fuel odor in a catch basin associated with the stormwater collection system just to the south of the SGS Unit 1 Fuel Handling Building. Investigation of the catch basin, Catch Basin 27, revealed the presence of a red-dyed diesel fuel (the red-dye is more typical of a recent release of diesel fuel). At the time, PSEG notified the NJDEP through its spill hotline (Incident No. 10-0416-164911).

To prevent the migration of diesel fuel within the stormwater collection system, the storm drains upstream and downstream of Catch Basin 27 were temporarily blocked to isolate the affected section of piping. Further, a cover was placed over Catch Basin 27 to prevent rain water from entering. Investigations of the remainder of the stormwater system indicated that the diesel fuel had not migrated beyond Catch Basin 27, no diesel fuel was released to the Delaware River, and the diesel fuel in the catch basin was removed.

Investigations into the source of the diesel fuel focused on the underground piping adjacent to Catch Basin 27 that supplies diesel fuel from the bulk storage tanks to diesel/generator storage tanks located within the Auxiliary Building and to the service water and circulating water boilers. PSEG performed a pressure test on this underground piping. The results revealed the leak was in an approximate 300-foot section of the piping extending south from the Auxiliary Building. To pinpoint the location of the leak along this 300-foot section of piping, PSEG subcontracted Praxair Services, Inc. to perform a “Tracer Tight” gas analysis. The results of this test showed that the location of the leak was directly adjacent to Catch Basin 27. The results of the Tracer Tight gas analysis indicated that there were no other leaks along the 300-foot section of piping.

Excavation in the area of the leaking underground piping was initiated on August 23, 2004 by PSEG with the support of Clean Harbors, Inc. to repair the piping. During the excavation process, residual diesel fuel was observed on soil excavated from below the piping (approximately six feet below ground surface (bgs)). Soil excavated from the piping area was stockpiled by PSEG pending waste characterization. Following characterization, the soil was disposed of by Clean Harbors. Separate-phase hydrocarbons (SPH) was observed on standing water within the excavation. Prior to backfilling, approximately 150 gallons of diesel fuel were recovered from the excavation.

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In November 2004, PSEG initiated remedial investigation and interim product recovery actions. In accordance with the scope of work presented within the Remedial Investigation Workplan (RIWP), soil borings were advanced at locations downgradient of the source area to delineate the horizontal extent of diesel related COCs in soil. The soil borings were converted to monitoring/product recovery wells to facilitate the collection of groundwater samples and for the recovery of SPH, if present. Interim remedial actions completed to date in this area include the installation of a Spill Buster® Product Recovery System, a passive product skimmer, and the use of absorbent socks. In June 2005, PSEG submitted *Salem Unit 1 Remedial Investigation/Interim Remedial Action Report* (RIR/IRAR) to document the investigation findings and an update on the interim remedial action. The RIR/IRAR was conditionally approved by NJDEP, contingent with a well installation south of well AY. The requested well was installed and the well installation details were summarized in a Remedial Action Progress Report (RAPR) submitted in February 2007. In the March 24, 2008 letter from the NJDEP to PSEG, NJDEP approves the February 2007 RAPR. On June 21, 2010, NJDEP issues a Notice of Deficiency requiring the installation of a well near Well AI to delineate SPH. August 25, 2010 PSEG and NJDEP participate in a technical meeting to discuss the project status and path forward. In November 2011, PSEG submits a RAPR including a summary of the installation of Well CG. On December 16, 2011, NJDEP issues an approval of the November 2011 RAPR.

On April 16, 2010, while completing groundwater investigation activities associated with a separate and independent investigation, PSEG personnel observed suspected diesel-related odors and staining in soil and groundwater during the opening of a temporary utility clearance (TW-2). At this time, PSEG notified the NJDEP through its spill hotline (incident No. 10-0416-164911).

The temporary utility clearance consisted of a Schedule 40 PVC sleeve installed to an approximate depth of 10 feet bgs using vacuum excavation equipment. The utility clearance was installed to allow the safe advancement of direct-push borings for the collection of groundwater samples. During the advancement of the vacuum excavation, diesel fuel odors were noted and suspected petroleum hydrocarbon sheen was observed on the water once the water table was encountered. To facilitate the collection of a groundwater sample and to evaluate the presence of SPH at the location of TW-2, and subsequently at the locations of TW-37 and TW-50, PVC well screen was installed in lieu of the solid PVC sleeve. The three locations were then identified as temporary observation point TW-2, TW-37, and TW-50. Over the next several days, the temporary observation points were evaluated for the presence of SPH and groundwater samples were collected for laboratory analysis.

Investigations into the source of the suspected diesel fuel revealed the presence of the following components of the SGS Unit 2 Diesel Fuel Oil System within the vicinity of TW-2:

1. Diesel fuel above ground storage tanks (AST);
2. Diesel fuel underground piping;
3. An emergency fill valve; and;
4. An overflow tank.

PSEG performed both a pressure test and a guided wave test on the underground piping and the results of the tests did not identify any integrity issues associated with the piping. In addition, initial soil and groundwater investigation activities were completed in association with the emergency fill valve and the overflow tank, at the three temporary observation points (TW-2, TW-37, and TW-50), and in an area that was excavated to expose the underground piping during the guided wave testing. The details and results of these investigation activities were provided in the July 12, 2010 Site Investigation Report (SIR)/ RIWP.

Based on the results of the investigation activities, additional soil and groundwater investigation activities were conducted in accordance with SIR/RIWP as amended in a letter dated October 28, 2010 and verbally agreed upon in meeting with NJDEP on August 25, 2010.

1.3 Project/Task Description

Samples were collected during the RI to evaluate potential sources and to delineate the extent of constituents in soil and groundwater. The site specific scope of work includes the following components:

- The advancement of soil borings and installation of a permanent groundwater monitoring well; and
- Groundwater sampling.

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2 PROJECT/TASK ORGANIZATION

2.1 Project Team

The site will require integration of personnel from the organizations identified below, collectively referred to as the project team. A description of the responsibilities of each member of the project team is also presented below.

Arcadis, on behalf of PSEG, has overall technical responsibility for site activities. Arcadis personnel will perform the related sampling activities and will evaluate data and prepare the deliverables. Project direction will be provided by PSEG. A list of responsibilities and duties of key project personnel is provided below. Contact information for each individual is provided above in the distribution list.

Arcadis PM

- Managing and coordinating the project as defined in the scope of work with an emphasis on adhering to the objectives of the site activities.
- Reviewing documents prepared by Arcadis.
- Verifying that corrective actions are taken for deficiencies cited during audits of site activities.
- Managing relevant day-to-day activities.
- Developing, establishing, and maintaining files on relevant site activities.
- Reviewing data management and evaluation from the relevant site activities.
- Performing final review of field data and reports on relevant site activities.
- Verifying that corrective actions are taken for deficiencies cited during audits of relevant site activities.
- Performing overall QA/QC of relevant portions of the site activities.
- Reviewing relevant field records and logs.
- Instructing personnel working on relevant site activities.
- Coordinating field and laboratory schedules pertaining to relevant site activities.
- Requesting sample bottles from the laboratory.
- Reviewing field instrumentation maintenance and calibration to meet quality objectives.
- Preparing reports pertaining to relevant site activities.
- Maintaining field and laboratory files of log books, data reductions, and calculations. Transmitting originals to the PM.

Arcadis Field Manager

- Performing field procedures associated with the investigations.
- Performing field analyses and collecting QA/QC samples.
- Calibrating, operating, and maintaining field equipment.
- Reducing field data.
- Maintaining sample custody.
- Preparing field records and logs.

Arcadis QAC

- Reviewing laboratory data packages
- Overseeing and interfacing with the analytical laboratory.
- Coordinating field QA/QC procedures with PM, concentrating on field analytical measurements and practices to meet DQOs.
- Reviewing audit reports.
- Preparing QA/QC reports, including an evaluation of laboratory data and data usability reports.

Analytical Laboratories

Accutest Laboratories of Dayton, New Jersey (Accutest, NJDEP certification number 12129) will serve as the primary analytical laboratory for the project. The Water Science Laboratory at the University of Nebraska will provide nitrogen isotope analysis; note that this specialty analysis is not covered by the NJDEP certification process. General responsibilities and duties of the analytical laboratory include:

- Performing sample analyses and associated laboratory QA/QC procedures.
- Supplying sample bottles and coolers.
- Maintaining laboratory custody of samples.
- Strictly adhering to all protocols in the QAPP.

Laboratory PM

- Serving as primary communication link between Arcadis and laboratory technical staff.
- Monitoring workloads and maintaining availability of resources.
- Overseeing preparation of analytical reports.
- Supervising in-house chain-of-custody.

2.2 Special Training Needs/Certification

The Arcadis PM is responsible for assuring that the project team and subcontractors have the appropriate training and certifications.

Special training requirements, licenses or certifications for laboratories and drillers used for this project include the following:

- Certification by NJDEP.

Special training requirements for field personnel working on this project include the following:

- Completion of Occupational Safety and Health Administration (OSHA) 40-hour Hazardous Waste Operations and Emergency Response initial training and current 8-hour refresher training.
- Persons in field supervisory positions will have also completed the additional OSHA 8 Hour Supervisory Training.
- Field personnel involved with the shipping of samples to the subcontracted laboratory will have completed the United States Department of Transportation (USDOT) Hazardous Materials (HazMat) #1 – USDOT/International Air Transportation Association HazMat Shipping and Transportation.

3 DATA QUALITY OBJECTIVES AND CRITERIA FOR MEASUREMENT DATA

3.1 Data Quality Objectives

The primary use of data will be to ensure that the RI activities conform to the objectives of the RIWP and RIWP Addendum. To serve this purpose, the data must be of known and acceptable quality, and must have sufficient sensitivity to confidently detect target analytes at or below their respective remediation standards. The constituents of concern and applicable cleanup criteria are presented in Table 1.

The DQO process as described in EPA QA/G-4 (USEPA 2006) is intended to provide a "logical framework" for planning field investigations. The following section addresses, in turn, each of the seven sequential steps in the USEPA's DQO process.

Step 1: State the Problem

The site operates as a nuclear generating station. Concentrations of total petroleum hydrocarbon (TPHC) was detected in soil and groundwater at concentrations greater than the applicable NJDEP GWQC and SRS.

Step 2: Identify the Goal of the Study

The goal of the current scope of work is to delineate the extent of constituents in soil and groundwater.

Step 3: Identifying Information Inputs

Soil and groundwater samples will be collected and analyzed for the constituents presented in **Table 1**. Laboratory analysis will be performed with sufficient sensitivity to confidently detect target parameters. The data will be evaluated for completeness, general conformance with requirements of this QAPP, and consistency among data sets and with historical data, as appropriate.

Step 4: Define the Boundaries of the Study

The Station is located on a portion of Artificial Island, in Lower Alloways Creek Township, Salem County, New Jersey. The Station borders the Delaware Estuary.

Step 5: Developing the Analytical Approach

Groundwater and soil samples will be collected and analyzed as described in **Section 3.2** of this QAPP. Laboratory reporting limits (RLs) will be less than the applicable screening levels as presented in **Table 1**. All analytical data will be validated to ensure QA/QC limits are met in accordance with this QAPP. The decision on whether data can be used will be based on the validation results. Following validation, the data will be flagged, as appropriate, and any use restrictions will be noted. A reasonable decision rule would be that 90% of the data points not be rejected or deemed unusable.

Step 6: Specify Performance or Acceptance Criteria

Specifications for this step call for: (1) giving forethought to corrective actions to improve data usability and (2) understanding the representative nature of the sampling design. This QAPP has been designed to meet both specifications for this step. The sampling program has been developed based on a review of

previous site data and knowledge of present site conditions. Corrective actions are described in **Section 6.2** of this QAPP. The representative nature of the planned sampling program has been facilitated by discussions among professionals familiar with the site and the appropriate government agencies.

Step 7: Develop the Plan for Obtaining Data

The overall QA objective is to develop and implement procedures for field sampling, COC, laboratory analysis, and reporting that will provide results to support the evaluation of the site data consistent with project requirements. Specific procedures for sampling, COC, laboratory instrument calibration, laboratory analysis, data reporting, internal QC, audits, preventive maintenance of field equipment, and corrective action are described in this QAPP.

3.1.1 Data Categories

Three data categories have been defined to address the analytical data uses and the associated QA/QC effort and methods required to achieve the desired levels of quality. These categories are: (1) screening data, (2) screening data with definitive confirmation, and (3) definitive data. It is anticipated that only definitive data will be collected during this investigation.

Definitive data are generated using approved USEPA reference methods. Data are analyte-specific, with confirmation of analyte identity and concentration. For this project, data will be generated by a NJDEP-certified laboratory using USEPA soil analytical methods 418.1 for total petroleum hydrocarbons (TPHC) and 8260B for volatile organic compounds (VOCs), extractable petroleum hydrocarbons (EPH) using EPH method revision 2, and USEPA groundwater methods 8270 and 8260B for semi-volatile organic compounds (SVOCs) and VOCs, respectively. For data to be definitive, either analytical or total measurement error must be determined. The laboratory is responsible for preparing reduced laboratory data deliverables (as defined in Appendix A of N.J.A.C. 7:26E) for all samples; the contents of the required laboratory data deliverable is further described in **Section 4.3** of this QAPP.

3.1.2 Data Quality Indicators

The primary QA objective is to ensure that the data are of known and acceptable quality, and that the analysis is performed with sufficient sensitivity to confidently detect target parameters. To support the overall project DQOs and to gauge measurement performance, six data quality indicators (DQI) have been defined: precision, accuracy, representativeness, comparability, completeness, and sensitivity. Each DQI is defined below.

- **Precision:** Precision is a measure of agreement among repeated measurements. The goal is to maintain a level of analytical precision consistent with the objectives of the remedial investigation. To maximize precision, sampling and analytical procedures will be strictly followed and work will adhere to established protocols presented in this QAPP. Analytical precision will be determined through the use of the same analytical methods to perform repeated analyses on the same sample, including the analysis of matrix spike duplicate samples and field duplicates. Collection of field duplicate samples allows for evaluating the precision of sample collection, sample handling, preservation, and storage.

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Precision for laboratory and field measurements will be expressed as the relative percent difference (RPD) between two duplicate determinations. Acceptance criteria for laboratory and field precision are presented in **Tables 2a and 2b**.

- **Accuracy/Bias:** Accuracy is the degree of agreement of a measured value with its true value. Accuracy can be expressed as a percent recovery or percent deviation of the measurement with respect to its known or true value. Accuracy will be determined through evaluation of spike recoveries (e.g., laboratory control sample recoveries and matrix spike recoveries) and instrument calibration. Acceptance criteria for spike recoveries are presented in **Tables 2a** and **2b**.

  Bias is defined as the constant or systematic distortion of a measurement process as a persistent positive or negative deviation from the known or true value. This may be due to improper sample collection, sample matrix, poorly calibrated analytical or sampling equipment, or limitations or errors in analytical methods and techniques. Blank samples (laboratory or field) are also used to assess contamination of samples that may bias results high.

- **Representativeness:** Representativeness is the extent to which measurements represent the site conditions. It is dependent on sampling and analytical variability and the variability (or homogeneity) of the site itself. The remedial investigation has been designed to assess the presence of the chemical constituents at the time of sampling throughout the study area. This QAPP presents field sampling methodologies and laboratory analytical methodologies. The use of the prescribed field and laboratory analytical methods with associated holding times and preservation requirements are intended to provide representative data.

- **Comparability:** Comparability is defined as the extent to which data from one data set can be compared directly to similar or related data sets and/or decision-making standards. Comparability between phases of the current investigation, and to the extent possible, between subsequent and historical data will be maintained through consistent use of the sampling and analytical methodologies set forth in this QAPP, the analytical methods, stringent application of established QA/QC procedures, and utilization of appropriately trained personnel.

- **Completeness:** Completeness is defined as a measure of the amount of usable data collected compared to the total amount of data that was expected to be obtained. This will be determined upon final assessment of the analytical results. Three measures of completeness are defined: (1) sampling completeness, defined as the number of valid samples collected relative to the number of samples planned for collection, (2) analytical completeness, defined as the number of valid sample measurements relative to the number of valid samples collected, and (3) overall completeness, defined as the number of valid sample measurements relative to the number of samples planned for collection.

- **Sensitivity:** Sensitivity refers to the ability of an analytical procedure to quantify an analyte at a given concentration. The sensitivity requirements should be established such that the laboratory RL are at or below the relevant and applicable regulatory limits for each contaminant of concern for the project. For the purpose of NJDEP SRP projects, the RL is defined as the lowest initial calibration standard as adjusted for the dilution factor, sample weight/volume, and moisture content. The method detection limit (MDL) is defined as the minimum concentration of a substance that can be identified, measured, and reported with a 99 percent confidence that the

analyte concentration is greater than zero and is determined from repeated analysis of a sample in a given matrix containing the analyte. Results greater than the MDL and less than the RL will be qualified estimated (J) by the laboratory. The MDLs and RLs for the constituents of concern are presented in **Table 1**.

3.2 Remedial Investigation Process Design

3.2.1 Soil Remedial Investigation

Details regarding the soil remedial investigation are provided in the RIWP. Soil borings will be advanced using vacuum extraction techniques to a depth of 10 feet bgs. Upon encountering saturated material, a hand auger will be used to retrieve a sample from the open borehole.

The soil samples will be submitted to Accutest and analyzed for EPH or VOCs and SVOCs.

3.2.2 Groundwater Remedial Investigation

Details regarding the groundwater remedial investigation are provided in the RIWP. The investigation will include the installation of shallow overburden monitoring wells and the collection of groundwater samples.

The groundwater samples will be submitted to Accutest and analyzed for VOCs and SVOCs.

3.2.3 Residuals Management

Investigation-derived wastes (IDW) include debris, such as plastic and personal protective equipment; residual solids, such as drill cuttings; purge water; and decontamination liquids. The intent of managing IDW is to insure that impacted materials and media are not allowed to contaminate non-impacted materials and media. An example of an impacting event would be the purging of impacted groundwater and discharging that water onto non-impacted soil and shallow groundwater. Those kinds of activities will not be allowed.

IDW will be containerized in 55-gallon drums and stored at a designated on-site location until completion of RI field activities. Upon completion of the RI field activities, IDW will be screened for radiological activity. Soil will be disposed of at the Station soil stockpile area and liquids will be disposed of through the Station permitted liquid waste effluent.

3.3 Investigation Methods

Soil and groundwater sampling will be conducted in accordance with the established NJDEP protocols contained in the “Field Sampling Procedures Manual” (August 2005 and updates) and the RIWP and RIWP Addendum.

Arcadis general standard operating procedures (SOPs) related to field activities are provided in **Appendix A** and include:

- Field Equipment Decontamination, Revision 3, April 2010.
- Chain-of-Custody, Handling, Packing, and Shipping, Revision 2, March 2009.
- Field Log Book Entries, Revision 0, August 2009.

Sediment and groundwater analyses will be conducted in accordance with the relevant analytical methods and laboratory-specific SOPs. Copies of the laboratory SOPs are available upon request.

3.4 Field Quality Control Checks

Field QC activities are designed to confirm and document that the actual measurement process is achieving its specified level of quality. Each field QC activity addresses one of the DQIs specified in **Section 3.1**. Field QC samples will include, as appropriate, field blanks, cooler temperature blanks, field duplicate pairs, and matrix spike/matrix spike duplicate (MS/MSD) samples, as presented below and in Table 3.

3.4.1 Field Blanks

Field blanks are used to assess any contamination contributed from sampling location conditions and the transport, handling, and storage of samples. Field blanks are not required for the investigation since all sampling equipment was dedicated.

3.4.2 Cooler Temperature Blank

A cooler temperature blank is a small sample bottle filled with distilled water that is placed in each cooler prior to shipment to the laboratory. Upon arrival at the laboratory, the temperature of this vial is measured. The purpose of the temperature indicator is to evaluate if samples were adequately cooled during data shipment. The temperature blank is not analyzed by the laboratory and does not measure introduced contamination, therefore, it is not truly a blank.

3.4.3 Field Duplicates

Field duplicates will be collected to evaluate precision, sample homogeneity, and to verify the reproducibility of the sampling methods. Field duplicates are two samples collected from the same location in the field and submitted to the laboratory as two distinct samples. In general, field duplicates will be analyzed at a 5 percent frequency (i.e., one field duplicate of every 20 samples collected) and are submitted blind to the laboratory.

3.4.4 Matrix Spike/Matrix Spike Duplicates

Measurements of data precision are necessary to demonstrate the reproducibility of the analytical data. Precision will be determined from the analysis of MS/MSD samples. MS/MSD samples will be collected at a frequency of 5 percent per matrix (i.e., one MS and one MSD per 20 samples per matrix) or at least on per sampling event. Extra sample volume (usually three times the required sample volume per analysis) will be collected for each MS/MSD sample taken.

3.5 Field Instrument/Equipment Calibration and Frequency

Soil sampling equipment will consist of a device for obtaining the sample, and stainless steel bowls and/or plastic sealable bags as necessary for sample homogenization. Groundwater sampling equipment will consist of a device for obtaining the sample and a multi-meter for obtaining groundwater indicator

parameter measurements (i.e., temperature, specific conductance, pH, oxidation-reduction potential, dissolved oxygen, and turbidity). Sampling locations will be located using a hand-held global positioning system (GPS) unit as necessary.

Prior to any field sampling and daily thereafter, all sampling equipment will be cleaned and inspected to confirm that it is operational. All meters that require charging or batteries will be fully charged or have fresh batteries. As appropriate, spare parts will be on-hand for sampling equipment and field instruments. Damaged or defective equipment will be immediately repaired or replaced. If field instrument servicing is required, it is the responsibility of the Field Manager to follow the maintenance schedule and arrange for prompt service. Field equipment returned from the site will be inspected to confirm that it is in working order. This inspection will be recorded in the equipment log book or field log book as appropriate. It will also be the obligation of the last user to record any equipment problems in the equipment log book or field log book.

Calibration checks will be performed daily or as often is as required to ensure the accuracy of field equipment. Field calibration solutions and standards will be used within specified expiration dates and will be obtained from manufacturers or authorized suppliers. Calibration solutions and standards will be discarded or returned to the supplier if expiration dates have been exceeded.

Field personnel are responsible for confirming that a master calibration/maintenance log is maintained following the procedures specified for each measuring device. A calibration log for each specific field instrument (as identified by serial/instrument number) will be used to link daily calibrations to that specific field instrument. Where applicable, each log will include, at a minimum, the following information in order to link daily calibrations to specific field instruments:

- Name of device and/or instrument calibrated
- Device/instrument serial/identification numbers
- Calibration method
- Tolerance
- Calibration standard used
- Frequency of calibration
- Date(s) of calibration(s)
- Name of person(s) performing calibration(s)

Instruments and equipment used to gather, generate, or measure environmental data will be calibrated at the intervals specified by the manufacturer or more frequently, and in such a manner that accuracy and reproducibility of results are consistent with the manufacturer's specifications. If an internally calibrated field instrument fails to meet calibration/checkout procedures, it will be returned to the manufacturer for service. Equipment found to be out of tolerance during the period of use will be removed from the field, and measuring and testing activities performed using the equipment will be addressed via the corrective action system described in **Section 6.2** of this QAPP.

3.6 Inspections/Acceptance of Supplies and Consumables

All supplies to be used in the field, including certified clean sample containers (certificates will be maintained by the laboratory), shipping coolers, and corresponding labels and sampling chain of custody

(COC) forms, will be provided by the laboratory. Sample containers provided by the laboratory will be analyte free or demonstrated to not contain contaminants for the analytes being monitored.

All laboratory reagents will be tested by the laboratory for acceptability, prior to use in the analyses of site samples. All standards will be verified against a second source standard. The laboratory will follow a "first in/first out" procedure for the storage and use of all consumables to minimize the risk of contamination and degradation.

3.7 Sample Handling and Custody Requirements

Appropriate sample containers, preservation methods, and laboratory holding times for the samples are presented in Table 4.

3.7.1 Field Sample Custody

The sampling team will maintain overall responsibility for the care and custody of the samples until they are transferred or properly dispatched to the laboratory. The objective of field sample custody is to ensure that samples are not tampered or modified from the time of collection through transport and transfer to the analytical laboratory. Persons will have "custody of samples" when the samples are in their physical possession, in their view after being in their possession, or in their physical possession and secured so they cannot be tampered with. In addition, when samples are secured in a restricted area accessible only to authorized personnel, they will be deemed to be in the custody of such authorized personnel.

3.7.2 Field Log Books

Field log books will provide the means of recording the data collecting activities that are performed. As such, entries will be described with sufficient detail so that persons going to the site could reconstruct a particular situation without reliance on memory. Field log books will be bound field survey books or notebooks, and have numbered, water resistant pages. Notations will be made in log book fashion, noting the time and date of all entries. Entries will be made in ink, with no erasures. If an incorrect entry is made, the information will be crossed out with a single strike mark.

Recorded information typically includes, but not be limited to the following:

- Name and location of site of investigation
- Date and time of arrival and departure
- Name and signature of person keeping log
- Names of all persons on site
- Purpose of visit
- Level of personal protection equipment used
- Field instrument identification and calibration information
- Location of sampling points
- Results of field measurements made
- Number of samples taken, volume of samples taken
- Preservation
- Method of sample collection and any factors that may affect its quality

- Date and time of sample collection and any factors that may affect its quality
- Name of collector
- All sample identification numbers (assigned prior to sample collection)
- Description of samples, including as applicable depth at which the sample was collected, field duplicate samples collected, and/or equipment rinse blank samples collected
- Weather conditions on the day of sampling and any field observations
- Number and description of photographs taken, if any

3.7.3 Sample Labelling

Sample labels are an important part of proper documentation as their use reduces the possibility of confusing sample containers and provides the information necessary during handling to complete COC forms. The following information is required on each sample label:

- Site name or location
- Date and time collected
- Sample identification number
- Sampler's initials
- Parameter sampled
- Preservative

When possible, preprinted sample labels (i.e., preprinted with items noted above except for date and time collected) will be affixed to sample bottles prior to delivery at the sampling site and the labels themselves protected from the sample matrix with a clear-tape covering.

3.7.4 Field COC Forms

The COC form is intended as a legal record of possession of the sample. Completed COC forms will be required for all samples to be analyzed. COC forms will be initiated by the sampling crew in the field. The COC forms will contain the unique sample identification number, sample date and time, sample description, sample type, preservation, and analyses required. The original COC form will accompany the samples to the laboratory. Copies of the COC will be made prior to shipment (or multiple copy forms will be used) and placed in the project files. The COC forms will remain with the samples at all times. The samples and signed COC forms will remain in the possession of the sampling crew until the samples are delivered to the express carrier (e.g., Federal Express), hand delivered to the laboratory, picked up by a laboratory courier, or placed in secure storage.

3.7.5 Sample Custody Seals

Custody seals are narrow strips of adhesive paper or glass fiber used to demonstrate that no tampering of the shipping container has occurred. The custody seals will be signed and dated by the sampling crew and placed across the opening of the lid and body of the shipping containers and at least on one side and the front of the container. The custody seals will be covered with clear, wide tape. These custody seals shall be plainly visible.

3.7.6 Laboratory Custody

Upon sample receipt, laboratory personnel will be responsible for sample custody. The laboratory sample custodies will sign the COC form and verify the condition and receipt of all samples included on the COC form. Any discrepancies (e.g., sample container missing, sample container received broken, sample in an inappropriate container, sample has not been properly preserved) are immediately forwarded to the Arcadis Field Manager and/or QAC for resolution. The laboratory sample custodian will be responsible for logging in the samples, assigning a unique laboratory identification number to each sample, labeling the sample bottle with the laboratory identification number, and moving the sample to an appropriate storage location to await analysis. The laboratory shall also employ an internal COC procedure that minimizes any potential for tampering or adulteration of field samples prior to analysis. Samples will be kept secured in the laboratory until all stages of analysis are complete. All laboratory personnel having samples in their custody will be responsible for documenting and maintaining sample integrity.

Samples will be maintained by the laboratory for at least 1 month after the final report is delivered to Arcadis. The laboratory will be responsible for the eventual and appropriate disposal of the samples. Unused portions of the samples, sample extracts, and associated wastes will be disposed of by the laboratory in accordance with applicable rules and regulations, as specified in their standard operating procedure for waste disposal.

3.8 Field Storage and Transport Procedures

All shipping or sample transfer information will be recorded at the end of each day or collection period on COC form(s). Sample packaging and shipment procedures are designed so that the samples will arrive at the laboratory, with the COC intact. Sample preservation, packing, and shipping will follow the procedures specified in Arcadis SOP “Chain-of-Custody, Handling, Packing, and Shipping”, March 2009 (copy included in **Appendix A**).

As stated in the NJDEP SRP Data Quality Assessment and Data Usability Evaluation Technical Guidance (NJDEP, 2014) it is imperative that that all samples are submitted to the laboratory with ample time for the analysis to be completed within the method-specified holding time. It should be noted that the laboratory needs to be aware that missing a holding time is unacceptable and may result in unusable data if the holding time is missed.

General sample packaging and shipping requirements are as follows (applicable only to those samples being shipped to an offsite laboratory for analysis):

- Samples will be placed in appropriate containers provided by the laboratory.
- Securely affix the sample label to the container with clear packing tape.
- Check the cap on the sample container to confirm that it is properly sealed.
- Complete the COC form with the required sampling information and confirm that the recorded information matches the sample labels. NOTE: If the designated sampling team relinquishes the samples to another project team member for packing or other purposes, the sampling team will complete the COC prior to this transfer. The appropriate personnel will sign and date the COC form to document the sample custody transfer.
- Using duct tape, secure the outside drain plug at the bottom of the cooler.
- Wrap glass sample containers in bubble wrap or other cushioning material.

- Place 1 to 2 inches of cushioning material at the bottom of the cooler.
- Place the sealed sample containers into the cooler.
- Place ice in plastic bags, seal the bags, and place the bags loosely in the cooler.
- Fill the remaining space in the cooler with cushioning material.
- Place COC forms in a plastic bag and seal. Tape the forms to the inside of the cooler lid.
- Close the lid of the cooler and secure with duct tape.
- Wrap strapping tape (or equivalent) around both ends of the cooler at least twice.
- Mark the cooler on the outside with the shipping address and return address, affix "Fragile" labels, and draw (or affix) arrows indicating "this side up." Cover the labels with clear plastic tape. NOTE: If the samples are being delivered directly to the laboratory or will be picked up by the lab's courier service, this step is eliminated.
- Place a signed custody seal over the sample cooler lid.

Samples will be packaged by the field personnel and transported as low-concentration environmental samples. The samples will be delivered by an express carrier within 48 hours of the time of collection. In some cases, the analytical method may require analysis within a shorter holding time, and arrangements will need to be made to accommodate the laboratory requirements. Shipments will be accompanied by the COC form identifying the contents. The original form will accompany the shipment; copies will be retained by the sampler for the sampling office records. If the samples are sent by common carrier, a bill of lading will be used. Receipts or bills of lading will be retained as part of the permanent project documentation. Commercial carriers are not required to sign off on the COC form as long as the forms are sealed inside the sample cooler, and the custody seals remain intact.

Custody seals and cooler packing materials will be provided by the analytical laboratory. The filled, labeled, and sealed containers will be placed in a cooler on ice and carefully packed to eliminate the possibility of container breakage.

4 ANALYTICAL LABORATORY REQUIREMENTS

All analyses will be performed by a laboratory that has a written QA/QC program that meets USEPA quality requirements, and when a method is available the analysis has been approved by NJDEP.

4.1 Project Compounds and Analytical Summary

A summary of the analytes, applicable criteria, and laboratory-specific MDLs and RLs related to the groundwater sampling are presented in **Table 1**.

4.2 Analytical Quality Control

Internal laboratory QC checks will be used to monitor data integrity and to document the validity of the generated data. These QC checks reveal information about sampling technique, analyst technique, instrument capability, possible sources of contamination, precision of the results, and difficulties with the matrix. These checks will include method blanks, MS/MSD, and laboratory control samples (LCS). Project quality control limits are defined below and summarized in **Tables 2a** and **2b**.

4.2.1 Calibration Verification

Initial calibration of instruments will be performed as required in the method and when any ongoing calibration does not meet control criteria. The number of points used in the initial calibration is defined in each analytical method. Ongoing calibration verification will be performed as specified in the analytical methods to monitor instrument performance. In the event that an ongoing calibration does not meet control limits, analysis of samples will be suspended until the source of the control failure is either eliminated or reduced to within control specifications. Any samples analyzed while the instrument was out of control will be reanalyzed.

4.2.2 Method Blanks

Sources of contamination in the analytical process, whether specific analyses or interferences, must be identified, isolated, and corrected. A method blank is an “analyte-free” matrix that is treated exactly as the sample including exposure to all glassware, equipment, solvents, and reagents that are used with samples. The method blank is useful in identifying possible sources of contamination within the analytical process (i.e., laboratory environment, reagents, or apparatus). For this reason, it is necessary that the method blank be initiated at the beginning of the analytical process and encompasses all aspects of the analytical work. One method blank will be analyzed with each analytical series associated with no more than 20 samples. Blank corrections will not be applied by the laboratory to the original data.

4.2.3 Instrument Blanks

Instrument blanks are analyzed to verify that there is no cross contamination between sample analysis runs within the system. Instrument blanks must be analyzed following calibration verifications, before sample analysis is initiated, and after analysis of samples. The instrument blanks must not contain target analyte concentrations greater than the required RLs, and if such concentrations are consistently

observed, the laboratory must investigate and eliminate contamination sources, if possible. Blank corrections will not be applied by the laboratory to the original data.

4.2.4 Matrix Spike/Matrix Spike Duplicates

A matrix spike is an aliquot of an environmental sample to which known quantities of target analytes are added in the laboratory. A matrix spike duplicate is a second aliquot of the sample which is also spiked with identical concentrations of target analytes. The matrix spike and matrix spike duplicate are analyzed in an identical manner as the sample. The purpose of a matrix spike is to determine the accuracy of the overall analytical procedure for determining the analytes of concern in the sample. The matrix spike duplicate analysis is used to document both the precision and accuracy of the method in a given sample matrix.

To get the true benefit from MS and MSD analyses, it is necessary that the sample come from the project site so that it is possible to ascertain if the matrix itself is contributing to analytical difficulties or outliers. MS/MSD pairs will be analyzed at a 5 percent frequency (i.e., additional sample volume for MS and MSD analysis will be collected for every 20 field samples collected per matrix). When MS recoveries are outside quality control limits, associated control sample and surrogate spike recoveries will be evaluated, as applicable, to attempt to verify the reason for the deviation and determine the effect on the reported sample results.

4.2.5 Laboratory Control Samples

A LCS is a blank matrix, free from the analytes of interest, spiked with verified known amounts of analytes created from a source other than that used to make up calibration standards. The LCS is carried through the analysis along with the samples. The intent of LCS analysis is to provide insight into the intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. This includes preparation of calibration standards, validity of calibration, sample preparation, instrument set-up, and the premises inherent in quantitation. One LCS will be analyzed with each analytical series associated with no more than 20 samples.

4.3 Laboratory Deliverables

The laboratory is responsible for preparing reduced laboratory data deliverables (as defined in Appendix A of N.J.A.C. 7:26E) for all samples. Analytical results will be provided by the laboratory in a digital format (i.e., PDF), as well as an electronic data deliverable (EDD) in either an ASCII comma-separated value (CSV) format or in a Microsoft Excel worksheet.

Upon receipt, the data packages will be examined to ensure that the correct analyses requested on the COC were performed for each sample submitted. If discrepancies were noted, the quality assurance manager will be notified and will promptly follow up with the laboratory to resolve any issues. Each data package will be validated in accordance with the procedures presented in this QAPP. Data that do not meet the specified standards will be flagged. However, it should be noted that the use of flagged data may not necessarily be restricted.

Data reports for all parameters will include, at a minimum, the following items:

General Requirements:

- The data deliverable package shall be paginated and of reproduction quality such that all pages are legible.
- Title/Cover Page, including laboratory certification number, main laboratory phone number, signature of laboratory director, facility name and address, date of report preparation, date of sampling and receipt, and a summary table that cross-references the field identification numbers to the laboratory identification number for each sample.
- Table of contents.
- Chain of custody.
- Methodology review, including method numbers and revision with a detailed discussion of any method modification.
- Laboratory chronicle, including sample holding times and sample condition upon receipt at the laboratory (including sample temperature and pH when a pH adjustment is required).
- Conformance/Non-Conformance Summary which states that the laboratory has reviewed the QA/QC measures for sample analysis and has identified any deviations from the acceptable performance criteria or results.

Requirements for EPH, VOC, and SVOC Analyses:

- Analytical results summary form, including sample identification numbers, sample matrix, date sample collected, date sample received, date sample analyzed, sample moisture content, dilution factor, list of analytes, detected analyte concentrations, and method detection limits.
- Calibration blank and method blank results summary.
- Calibration summary.
- Interference check samples results summary (not required for mercury analysis).
- Spike sample results summary.
- Duplicate sample results summary.
- Laboratory control sample results summary.
- Serial dilution summary (not required for mercury analysis).
- Internal standard summary (not required for mercury analysis).
- Analysis run log.
- Digestion log.

Requirements for General Chemistry Analyses:

- Analytical results summary form, including sample identification numbers, sample matrix, date sample collected, date sample received, date sample analyzed, sample moisture content, dilution factor, list of analytes, detected analyte concentrations, and method detection limits.
- Calibration summary.
- Blank results summary.
- MS/MSD sample results summary.
- Laboratory control sample results summary.

Sample results on the report forms will be corrected for dilutions. Unless otherwise specified, all results will be reported uncorrected for blank contamination.

4.4 Laboratory Instrument/Equipment Maintenance

Laboratory instrument and equipment documentation procedures include details of any observed problems, corrective measures, routine maintenance and instrument repair (including information regarding the repair and the individual who performed the repair).

Preventive maintenance of laboratory equipment generally will follow the guidelines recommended by the manufacturer. A malfunctioning instrument will be repaired immediately by in-house staff or through a service call from the manufacturer.

Maintenance schedules for laboratory equipment adhere to each manufacturer's recommendations. Records reflect the complete history of each instrument and specify the time frame for future maintenance. Major repairs or maintenance procedures are performed through service contracts with the manufacturer or qualified contractors. Paperwork associated with service calls and preventive maintenance calls will be kept on file by the laboratory.

Laboratory personnel are responsible for the routine maintenance of instruments used in the laboratory. Any routine preventive maintenance carried out is logged into the appropriate log books. The frequency of routine maintenance is dictated by the nature of samples being analyzed, the requirements of the method used, and/or the judgment of the laboratory manager.

All major instruments are backed up by comparable (if not equivalent) instrument systems in the event of unscheduled downtime. An inventory of spare parts is also available to minimize equipment/instrument downtime.

On a daily basis, the operation of balances, incubators, ovens, refrigerators, and water purification systems will be checked and documented. Any discrepancies will be immediately reported to the appropriate laboratory personnel for resolution.

4.5 Laboratory Equipment Calibration Procedures and Frequency

Instrument calibration will follow the specifications provided by the instrument manufacturer or specific analytical method used.

Records of calibrations will be filed and maintained by the laboratory. These records will be subject to QA audit. For all instruments, the laboratory will maintain trained repair staff with in-house spare parts or will maintain service contracts with vendors.

All standards used to calibrate equipment are traceable, directly or indirectly, to the National Institute of Standards and Technology. All standards received will be logged into standard receipt logs maintained by the individual analytical groups. Each group will maintain a standards log that tracks the preparation of standards used for calibration and QC purposes.

5 DATA REVIEW AND USABILITY

5.1 Data Management

The purpose of the data management is to provide for the accuracy and ready accessibility of all of the necessary data to meet the analytical and reporting objectives of the project. The data management program established for the project includes field documentation and sample QA/QC procedures, methods for tracking and managing the data, and a system for filing all site-related information. More specifically, data management procedures will be employed to efficiently process the information collected such that the data are readily accessible and accurate. These procedures are described in detail in the following section.

The data management plan has four elements: (1) sample designation system; (2) field activities; (3) sample tracking and management; and (4) data management system.

5.1.1 Sample Designation System

A concise and easily understandable sample designation system is an important part of the project sampling activities. It provides a unique sample number that will facilitate both sample tracking and easy re-sampling of select locations to evaluate data gaps, if necessary. The sample designation system to be employed during the sampling activities will be consistent, yet flexible enough to accommodate unforeseen sampling events or conditions. A combination of letters and numbers will be used to yield a unique sample number for each field sampled collected, as outlined in **Section 7.1**.

5.1.2 Field Activities

Field activities designed to gather the information during the remedial action implementation require consistent documentation and accurate record keeping. During site activities, standardized procedures will be used for documenting field activities, data security, and QA. These procedures are described in further detail in the following subsections.

5.1.2.1 Field Documentation

Complete and accurate record keeping is a critical component of the field activities. When interpreting analytical results and identifying data trends, investigators realize that field notes are an important part of the review and validation process. To provide for the thorough documentation of the field activities, several different information records, each with its own specific reporting requirements, will be maintained, including field logs, instrument calibration records, and COC forms. A description of each of these types of field documentation is provided in other sections of this QAPP.

5.1.2.2 Data Security

Measures will be taken during the field investigation to prevent samples and records from being lost, damaged, or altered. When not in use, all field log books will be in the possession of project personnel. Access to these files will be limited to the field personnel who utilize them.

5.1.3 Sample Tracking and Management

A record of all field documentation will be maintained to provide verification of the validity of data used in the site analysis. To effectively execute such documentation, specific sample tracking and data management procedures will be used throughout the sampling program.

Sample tracking will begin with the completion of COC forms. The completed COC forms associated with samples collected will be faxed and/or scanned and emailed to the Database Administrator. Copies of all completed COC forms will be maintained in the field office. The laboratory will verify receipt of the samples electronically (via email) on the following day.

When analytical data are received from the laboratory, the QAC or his designee will review the incoming analytical data packages against the information on the COCs to confirm that the correct analyses were performed for each sample and that results for all samples submitted for analysis were received. Any discrepancies noted will be promptly followed up by the QAC.

5.1.4 Data Management System

In addition to the sample tracking system, a data management system may be implemented. The central focus of the data management system will be the development of a personal computer-based project database. The project database will combine pertinent geographical, field, and analytical data. Information that will be used to populate the database will be derived from surveying of sampling locations, field observations, and analytical results. Each of these sources is discussed in the following sections.

5.1.4.1 Computer Hardware

The database will be constructed on personal computer work stations connected through a network server. The network will provide access to various hardware peripherals, such as printers, backup storage devices, image scanners, and modems.

5.1.4.2 Survey Information

In general, each sample location will be located using a handheld GPS with sub-meter accuracy to produce documentation of sample locations for mapping and geographic information system purposes (if appropriate) to facilitate the re-sampling of select sample locations during future monitoring programs, if needed, and for any potential additional remediation activities.

5.1.4.3 Field Observations

An important part of the information that will ultimately reside in the data management system for use during the project will originate with the observations that are recorded in the field log book.

The field log book will include the locations sampled, the sampling methodologies used, QA/QC procedures, blind duplicate and MS/MSD sample identification numbers, equipment decontamination procedures, personnel involved in the activity, and any other noteworthy events that occurred. For soil samples, the field log book will present the sampling date and time, soil depth, depth of soil recovered in a given core, the depth increment submitted for analysis, and a description of the lithology.

Field log books are valuable tools to keep project personnel informed on the details of the field activities and are also invaluable during the development of the final report. Each field log book will be reviewed for accuracy and completeness by the respective sampling activity manager. As appropriate, information included in the field log book will be used to transfer field observations into the data management system.

5.1.4.4 Analytical Results

Analytical results will be provided by the laboratory in digital format. The data packages will be examined to confirm that the correct analyses were performed for each sample submitted and that all of the analyses requested on the COC form were performed. If discrepancies are noted, the QAC will be notified and will promptly follow up with the laboratory to resolve any issues.

Each data package will be validated in accordance with the procedures presented in **Section 5.2**. Any data that do not meet the specified standards will be flagged pending resolution of the issue. The flag will not be removed from the data until the issue associated with the sample results is resolved. Although flags may remain for certain data, the use of those data may not necessarily be restricted.

After entry into the database, the EDD data will be compared to the field information previously entered into the database to confirm that all requested analytical data have been received.

5.1.4.5 Data Analysis and Reporting

A valuable function of the data management system will be the manual generation of tables of analytical results during report preparation. Tables of analytical data will be produced as part of data interpretation and reporting tasks, and will include a comparison of the analytical results to the applicable remediation standards. In addition, tables manually prepared with undergo an internal QA/QC process in which tables will be reviewed by a second party (the reviewer).

5.2 Data Verification and Usability

A procedure for data verification and usability will be implemented throughout the implementation of the scope of work. The purpose of this procedure is to continuously monitor and confirm that all data generated are in compliance with the project-specific DQOs. The decision on whether data can be used will be based on the validation results. A formal validation will not be performed for this project; rather a Tier 1 data review will be performed. The review will be limited to a closer evaluation of any results flagged by the laboratory as being outside of their quality control criteria. Following review of the laboratory report, any use restrictions will be noted.

The following items were evaluated:

- COC appropriately completed;
- Requested analyses performed;
- Sample preparation and analysis occurred within holding times;
- Blank results (method blank);
- Duplicate results (MS/MSD and field duplicates);
- Spike recovery results (LCS and MS/MSD);
- Achievement of target RLs;

- Completeness (field completeness and laboratory completeness); and
- Validity and usability of data.

The field sampling has been devised so that the loss of any single data point will not hinder description of the distribution of potential constituents of concern. Given this, a reasonable decision rule would be that 90 percent of the data points not be rejected and deemed unusable.

5.2.1 Data Precision Assessment Procedures

Field precision is difficult to measure because of temporal variations in field parameters. However, precision will be controlled and quantified through the use of experienced field personnel, properly calibrated meters, and duplicate field measurements. Field duplicates will be used to assess precision for the entire measurement system, including sampling, handling, shipping, storage, preparation, and analysis.

Analytical precision will be evaluated by calculating the RPD for field duplicates and MS/MSD samples, as follows:

$$RPD = \{(abs [D1 - D2]) / [(D1 + D2)/2]\}*100$$

Where: abs = absolute value

RPD = relative percent difference

D1 = sample value

D2 = duplicate sample value

5.2.2 Data Accuracy Assessment Procedures

The accuracy of field measurements will be controlled by employing experienced field personnel, using properly calibrated field meters, and adhering to established protocols. The accuracy of field meters will be assessed by review of calibration and maintenance logs.

Laboratory accuracy will be assessed by evaluating the results of spiked samples (e.g., LCS and MS) for percent recovery (%R). %R will be calculated as follows:

$$\%R = [(A-X)/B]\times 100$$

Where: A = value measured in spiked sample or standard

X = value measured in original sample

B = amount added to sample or true value of the standard

5.2.3 Data Representativeness Assessment Procedures

Representativeness will be assessed by examining sample preservation, results of the precision and accuracy evaluation, and adherence to method holding time. Failure of field or laboratory personnel to properly handle samples may result in qualification of the data as estimated or unusable. The use of laboratory data from a sample with a failed holding time could render the data unusable. The

representativeness review will qualitatively consider whether precision and/or accuracy are sufficient to characterize the representativeness of the samples.

5.2.4 Blank Sample Assessment Procedures

Blank samples will be used to determine the existence and magnitude of contamination resulting from laboratory or field activities. The method blank is used as a check on laboratory procedures as well as possible contamination from laboratory equipment (i.e., reagents, glassware, etc.). Equipment blanks are collected in the field from the sampling equipment to check for possible residual contamination and assess potential cross-contamination during sampling tasks. Detections in any blank samples will be used to qualify similar detections in associated field samples.

5.2.5 Data Completeness Assessment Procedures

Completeness of a field or laboratory data set will be calculated by comparing the number of usable measurements (all measurements except rejected data) actually obtained to the total number of usable measurements that were planned. Completeness will be calculated as follows:

Completeness = (usable data points obtained/total data points planned)*100

As a general guideline, overall project completeness is expected to be at least 90 percent. The assessment of completeness will require professional judgment to determine data usability for the intended purposes.

5.2.6 Data Comparability Assessment Procedures

Comparability will be assessed by evaluating whether samples were collected in a manner similar to previous sampling events and analyzed using similar analytical methodology as previous events.

5.2.7 Sensitivity Assessment Procedures

Sensitivity is related to the RL. In general, RLs should be less than the applicable standard. Analytical results for samples that are reported as non-detected for a particular analyte that have RLs greater than the applicable standard cannot be used to demonstrate compliance with the applicable standard. Samples that are contaminated with sufficient quantity of material, such that dilutions are performed, are a leading cause of RLs exceeding applicable criteria. However, there may be instances where such exceedances are insignificant relative to the site specific DQOs. The sensitivity review will qualitatively consider whether the RLs are sufficiently low to compare analytical results to the applicable standards, while considering the project DQOs.

5.3 Reconciliation with User Requirements

The data results will be examined to determine the performance that was achieved for each DQI. The performance will then be compared with the project objectives and DQOs. Deviations from objectives will be noted. Additional action may be warranted when performance does not meet performance objectives for critical data. Options for corrective action relating to incomplete information, questionable results, or inconsistent data may include the following:

- Retrieval of missing information,
- Request for additional explanation or clarification,
- Reanalysis of sample from extract (when appropriate), and
- Recalculation or reinterpretation of results by the laboratory.

These actions may improve the data quality, reduce uncertainty, and eliminate the need to qualify or reject data.

If these actions do not improve the data quality to an acceptable level, the following additional actions may be taken:

- Extrapolation of missing data from existing data points,
- Use of historical data, and
- Evaluation of the critical/non-critical nature of the sample.

If the data gap cannot be resolved by these actions, an evaluation of the data bias and potential for false negatives and positives can be performed. If the resultant uncertainty level is unacceptable, additional sample collection and analysis may be required.

6 ASSESSMENTS

6.1 Performance and System Audits

Performance and system audits will be completed in the field and the laboratory during the sampling, as described below.

6.1.1 Field Audits

Field performance audit summaries will contain an evaluation of field activities to verify that the activities are performed according to established protocols. Field performance audits may be performed by a designated Arcadis Field Supervisor. The auditor(s) will observe field activities and/or review field log books and communicate concerns to the Arcadis PM, as appropriate. The observations made during field performance audits and any recommended changes/deviations to the field procedures will be recorded and documented.

In addition, systems audits comparing scheduled QA/QC activities from this QAPP with actual QA/QC activities completed will be performed. The QAC will periodically confirm that work is being performed consistent with this QAPP.

6.1.2 Laboratory Audits

Internal laboratory audits are conducted by the laboratory QA Manager. As part of the audit, the overall performance of the laboratory staff is evaluated and compared to the performance criteria outlined in the laboratory QA manual and SOPs. The results of the audits are summarized and issued to each department supervisor, the Laboratory Manager, and the Laboratory Director. A systems audit of each laboratory may be performed by the Arcadis QAC to determine whether the procedures implemented by each laboratory are in compliance with the QA manual and SOPs.

As a participant in state and federal certification programs, the laboratory is audited by representatives of the regulatory agency issuing certification in addition to the laboratory's internal audits. Audits are usually conducted on an annual basis and focus on laboratory conformance to the specific program protocols for which the laboratory is seeking certification. The auditor reviews sample handling and tracking documentation, analytical methodologies, analytical supportive documentation, and final reports. The audit findings are formally documented and submitted to the laboratory for corrective action, if necessary.

6.2 Corrective Action Processes

Corrective actions are required when field or analytical data are not within the objectives specified in this QAPP. Corrective actions include procedures to promptly investigate, document, evaluate, and correct data collection and/or analytical procedures. Field and laboratory corrective action procedures for the assessment are described below.

6.2.1 Field Procedures

If, during field work, a condition is noted by the field crew that would have an adverse effect on data quality, corrective action will be taken so as not to repeat this condition. Condition identification, cause, and corrective action implemented by the Field Manager or a designee will be documented and reported to the appropriate QAC and PM. The QAC (or designee) will be responsible for follow-up and acceptance of corrective actions.

Examples of situations that would require corrective actions are provided below:

- Protocols as defined by the QAPP and/or SOPs have not been followed.
- Equipment is not in proper working order or properly calibrated.
- QC requirements have not been met.
- Issues resulting from performance or systems audits.

Project personnel will continuously monitor ongoing work performance in the normal course of daily responsibilities.

6.2.2 Laboratory Procedures

In the laboratory, when a condition is noted to have an adverse effect on data quality, corrective action will be taken so as not to repeat this condition. Condition identification, cause, and corrective action to be taken will be documented, and reported to the laboratory PM and QA Manager.

Corrective action may be initiated, at a minimum, under the following conditions:

- Protocols as defined by this QAPP have not been followed.
- Predetermined data acceptance standards are not obtained.
- Equipment is not in proper working order or calibrated.
- Sample and test results are not completely traceable.
- QC requirements have not been met.
- Issues resulting from performance or systems audits.

Laboratory personnel will continuously monitor ongoing work performance in the normal course of daily responsibilities. Corrective action will be initiated upon identification of the problem. At whatever level this occurs (analyst, supervisor, data review, or QC), it will be brought to the attention of the laboratory QA Manager and, ultimately, the Laboratory Director. Final approval of any action deemed necessary is subject to the approval of the Laboratory Director. If previously reported data are affected by a situation requiring correction or if the corrective action impacts a project budget or schedule, the action will directly involve the laboratory PM and QA Manager.

Corrective action deemed necessary based on system or performance audits, the analytical results of split samples, or the results of data review will be implemented. The corrective action may include sample re-extraction, re-preparation, reanalysis, cleanup, dilution, matrix modification, or other activities deemed necessary to assure usable analytical data.

7 REPORTING, DOCUMENTS, AND RECORDS

7.1 Sample Designation System

Samples will be identified with a unique designation system that will facilitate sample tracking. The sample designation system to be employed during the sampling activities will be consistent, yet flexible enough to accommodate unforeseen sampling events and conditions. An alpha-numeric system is considered appropriate and will be used by field personnel to assign each sample with a unique sample identification number. Samples designated for MS and MSD analysis will be labeled with the same sample identification number as the parent sample followed by "MS" or "MSD".

QA/QC samples will be designated by a sample type code followed by the six-digit sample collection date. The sample type codes are as follows:

- Field Duplicate Sample – "DUP"

For example, a field duplicate collected on June 27, 2015 would be designated DUP(062715). The sampling point associations for field duplicates must be recorded in the field log, as they will be submitted blind to the laboratory with no indication of the parent sample location.

7.2 Field Documentation

Proper documentation of all site activities is a crucial part of the field investigation process. Documentation must be maintained to trace the possession and handling of samples from the time of collection through analysis and disposition. This documentation consists of a record that allows reconstruction of field events to aid in the data review and interpretation process. Documents, records, and information relating to the performance of the field work will be retained in the project file.

Forms of documentation to be maintained throughout the investigation include:

- Field Log Books – All pertinent information regarding the site and sampling procedures must be documented. Notations will be made in a field log book. The field log book will consist of a waterproof, bound notebook that will contain a record of all activities performed at the site. Notes will be made as to the exact sampling location, physical observations, and weather conditions (as appropriate).
- Sampling Information – Sampling points will be documented as to their location for purposes of future sampling. This is accomplished through the use of a monument, measuring tape, compass, or a hand-held GPS unit. As appropriate, sampling points may also be documented by taking a photograph.
- Sample Labels – Sample labels reduce the possibility of confusing sample containers and provide the information necessary to complete COC forms. When possible, sample containers will be pre-labeled before sample collection and the labels protected with a clear tape covering.
- Sample COC – The COC form is intended as a legal record of possession of the sample. A sample COC is included in the Arcadis SOP "Chain-of-Custody, Handling, Packing, and Shipping", March 2009 (copy included in Appendix A). COC forms will provide the record of

responsibility for sample collection, transport, and submittal to the laboratory. COC forms will be filled out at each sampling site, at a group of sampling sites, or at the end of each day of sampling by field personnel responsible for sample custody. In the event that samples are relinquished by the designated sampling team to another project team member, the COC form will be signed and dated by the appropriate personnel to document the sample transfer. The original COC form will accompany the samples to the laboratory, and copies will be forwarded to the project files. When the form is complete, it will indicate that there were no lapses in sample accountability.

Persons will have custody of samples when the samples are in their physical possession, in their view after being in their possession, or in their physical possession and secured so they cannot be tampered with. In addition, when samples are secured in a restricted area accessible only to authorized personnel, they will be deemed to be in the custody of such authorized personnel.

- Field Equipment, Calibration, and Maintenance Logs – To document the calibration and maintenance of field instrumentation, calibration, and maintenance logs will be maintained for each piece of field equipment that is not factory calibrated.

7.3 Laboratory Documentation Files

7.3.1 Laboratory Project Files

The laboratory will establish a file for pertinent data. The file will include correspondence, emailed and faxed information, phone logs, and COC forms. The laboratory will retain project files and data packages for a period not less than five years.

7.3.2 Laboratory Log Books

Workbooks, bench sheets, instrument log books, and instrument printouts will be used to trace the history of samples through the analytical process and to document important aspects of the work, including the associated quality control checks. As such, log books, bench sheets, instrument logs, and instrument printouts will be part of the permanent record of the laboratory.

Each page or entry will be dated and initialed by the analyst at the time of entry. Errors in entry will be crossed out in indelible ink with a single stroke, corrected without the use of white-out or by obliterating or writing directly over the erroneous entry, and initialed and dated by the individual making the correction. Pages of log books that are not used will be completed by lining out unused portions.

Information regarding the sample, analytical procedures performed, and the results of the testing will be recorded on laboratory forms or personal log book pages by the analyst. These notes will be dated and will also identify the analyst, the instrument used, and the instrument conditions.

Laboratory log books will be periodically reviewed by the laboratory group leaders for accuracy, completeness, and compliance with this QAPP. All entries and calculations will be verified by the laboratory group leader. If all entries on the pages are correct, the laboratory group leader will initial and date the pages. Corrective action will be taken for incorrect entries before the laboratory group leader signs.

7.3.3 Computer and Hard Copy Storage

All electronic files and deliverables will be retained by the laboratory for not less than five years; hard copy data packages (or electronic copies) will also be retained for not less than five years.

7.4 Data Reporting Requirements

7.4.1 Field Data and Sample Survey Data Reporting

Information collected in the field through visual observation, manual measurement, and/or field instrumentation will be recorded in field log books or data sheets and/or on forms. Such data will be reviewed by the appropriate field manager for adherence to the Scope of Work and for consistency. Concerns identified as a result of this review will be discussed with the field personnel, corrected if possible, and incorporated into the data evaluation process (as necessary).

Where appropriate, field data forms and calculations will be processed and included in appendices to the appropriate reports (when generated). The original field logs, documents, and data reductions will be kept in the project file at the Arcadis office.

7.4.2 Laboratory Data Reporting

Analytical results will be provided by the laboratory in a digital format. Analytical results will be provided by the laboratory in a digital format (i.e., PDF), as well as an EDD in either an ASCII CSV format or in a Microsoft Excel worksheet. The laboratory is responsible for preparing reduced laboratory data deliverables (as defined in Appendix A of N.J.A.C. 7:26E) for all samples. Specific requirements for the reduced data deliverable for each analytical group are provided in detail in **Section 4.3**.

TABLES

APPENDIX A

Field Sampling Standard Operating Procedures

Arcadis of New York, Inc.

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Table 1
Soil and Groundwater Analyses and Methods
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Parameter	Analytical Method	Technical Protocol	Lower Limit of Detection	Sample Container	Preservation Method	Holding Time	Data Use
Groundwater Field Measurements							
Turbidity	NA	Water quality meter	Range: 0-1000 NTU	NA	NA	NA	Physical parameter used to demonstrated adequate well stabilization prior to sampling
Conductivity	NA	Water quality meter	Range: 0 to 100 mS/cm	NA	NA	NA	General water quality parameter used as a marker to verify that all site samples are obtained from the same groundwater system.
Temperature	NA	Water quality meter	Range: -5 to +45 °C	NA	NA	NA	Physical parameter used to demonstrated adequate well stabilization prior to sampling
Dissolved Oxygen (DO)	NA	Water quality meter	Range: 0 to 20 mg/L	NA	NA	NA	Used in conjunction with ORP to confirm the nature of the groundwater environment.
pH	NA	Water quality meter	Range: 0 to 14 standard units	NA	NA	NA	General water quality parameter used to confirm the nature of the groundwater environment.
Oxidation/Reduction Potential (ORP)	NA	Water quality meter	Range: -999 to +999 mV	NA	NA	NA	Used in conjunction with DO to confirm the nature of the groundwater environment.

Notes:
NA – Not Applicable
NTU –
mS/cm – Microsiemens per Centimeter
mg/L – Milligrams per Liter
°C – Degrees Centigrade
mV - Millivolts

Table 1
Soil and Groundwater Analyses and Methods
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Soil – Volatile Organic Compounds	Lower Limit of Detection (micrograms per kilogram)
Acetone	<140
Benzene	<24
Bromodichloromethane	<15
Bromoform	<65
Bromomethane	<100
2-Butanone (MEK)	<440
Carbon disulfide	<65
Carbon tetrachloride	<110
Chlorobenzene	<25
Chloroethane	<100
Chloroform	<44
Chloromethane	<75
Dibromochloromethane	<52
1,1-Dichloroethane	<29
1,2-Dichloroethane	<26
1,1-Dichloroethene	<66
cis-1,2-Dichlorlethene	<37
trans-1,2-Dichloroethene	<36
1,2-Dichloropropane	<88
cis-1,3-Dichloropropene	<29
trans-1,3-Dichloropropene	<43
Ethylbenzene	<57
2-Hexanone	<110
4-Methyl-2-pentanone(MIBK)	<120
Methylene chloride	<37
Styrene	<32
1,1,2,2-Tetrachloroethane	<34
Tetrachloroethene	<43
Toulene	<23
1,1,1-Trichloroethane	<44
1,1,2-Trichloroethane	<36
Trichloroethene	<38
Vinyl chloride	<69
Xylene (total)	<42

Table 1
Soil and Groundwater Analyses and Methods
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Groundwater – Priority Pollutant Base Neutrals Plus Library Search	Lower Limit of Detection (micrograms per liter)
Acenaphthene	<0.30
Acenaphthylene	<0.35
Anthracene	<0.22
Benzo(a)anthracene	<0.27
Benzo(a)pyrene	<0.38
Benzo(b)fluoranthene	<0.37
Benzo(g,h,i)perylene	<0.50
Benzo(k)fluoranthene	<0.37
4-Bromophenyl ether	<0.54
Butyl benzyl phthalate	<0.54
2-Chloronaphthalene	<0.38
4-Chloroaniline	<0.43
Carbazole	<0.34
Chrysene	<0.26
bis(2-Chloroethoxy)methane	<0.34
bis(2-Chloroethyl)ether	<0.49
bis(2-Chloroisopropyl)ether	<0.44
4-Chlorophenyl phenyl ether	<1.0
1,2-Dichlorobenzene	<0.24
1,3-Dichlorobenzene	<0.32
1,4-Dichlorobenzene	<0.25
2,4-Dinitrotoluene	<0.78
2,6-Dimitrotoluene	<0.62
3,3'-Dichlorobenzidine	<0.39
Dibenzo(a,h)anthracene	<0.58
Dibenzofuran	<0.49
Di-n-butyl phthalate	<0.79
Di-n-octyl phthalate	<0.63
Diethyl phthalate	<1.4
Dimethyl phthalate	<0.58
bis(2-Ethylhexyl)phthalate	<0.74
Fluoranthene	<0.63
Fluorene	<0.89
Hexachlorobenzene	<1.2

Table 1
Soil and Groundwater Analyses and Methods
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Groundwater – Priority Pollutant Base Neutrals Plus Library Search	Lower Limit of Detection (micrograms per liter)
Hexachlorobutadiene	<0.41
Hexachlorocyclopentadiene	<0.45
Hexachloroethane	<0.67
Indeno(1,2,3-cd)pyrene	<1.5
Isophorone	<0.54
2-Methylnaphthalene	<0.72
2-Nitroaniline	<1.4
3-Nitroaniline	<1.2
4-Nitroaniline	<1.1
Naphthalene	<1.0
Nitrobenzene	<0.61
N-Nitroso-di-n-propylamine	<2.0
N-Nitrosodiphenylamine	<0.80
Phenanthrene	<0.23
Pyrene	<0.58
1,2,4-Trichlorobenzene	<0.32

Groundwater – Priority Pollutant Volatile Organic Compounds Plus Library Search	Lower Limit of Detection (micrograms per liter)
Acetone	<2.3
Benzene	<0.31
Bromodichloromethane	<0.11
Bromoform	<0.17
Bromomethane	<0.15
2-Butanone (MEK)	<2.5
Carbon disulfide	<0.23
Carbon tetrachloride	<0.15
Chlorobenzene	<0.23
Chloroethane	<0.73
Chloroform	<0.081
Chloromethane	<0.13
Dibromochloromethane	<0.18
1,1-Dichloroethane	<0.13
1,2-Dichloroethane	<0.35

Table 1
Soil and Groundwater Analyses and Methods
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

1,1-Dichloroethene	<0.81
cis-1,2-Dichlorlethene	<0.24
trans-1,2-Dichloroethene	<0.17
1,2-Dichloropropane	<0.11
cis-1,3-Dichloropropene	<0.071
trans-1,3-Dichloropropene	<0.080
Ethylbenzene	<0.27
2-Hexanone	<0.73
4-Methyl-2-pentanone(MIBK)	<0.59
Methylene chloride	<0.20
Styrene	<0.12
1,1,2,2-Tetrachloroethane	<0.14
Tetrachloroethene	<0.37
Toulene	<0.14
1,1,1-Trichloroethane	<0.25
1,1,2-Trichloroethane	<0.17
Trichloroethene	<0.13
Vinyl chloride	<0.66
Xylene (total)	<0.17

Table 2a
Measurement Performance Criteria and QC Samples – General Chemistry Analyses
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Data Quality Indicator	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency/ Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action	Person(s) Responsible for Corrective Action
Accuracy/ sensitivity	A	Method blank	1 per batch of up to 20 field samples (matrix-specific)	All target compounds < RL	Reanalyze and if necessary, re-extract. Report non-conformance in narrative; compounds present in blank should be flagged "B" in samples, if detected.	Analyst
Accuracy	A	MS/MSD (site-specific)	1 per ≤ 20 field samples	Must be performed on Site field sample; 75-125% recovery	Evaluate LCS, unspiked sample, reanalyze if necessary, and qualify data and narrate issue.	Analyst/Data Reviewer
Precision	A	MS/MSD (site-specific)	1 per ≤ 20 field samples	Must be performed on Site field sample; 75-125% recovery; RPD ≤ 20% for waters.	Reanalyze if necessary, qualify data and narrate issues of non-conformance.	Analyst/Data Reviewer
Precision	A	Laboratory duplicate (site-specific)	1 per ≤ 20 field samples	Must be performed on Site field sample; RPD ≤ 20% for waters; results < 5x RL absolute difference between results ≤ RL.	Qualify data.	Analyst/Data Reviewer
Accuracy	A	LCS	1 per batch of up to 20 samples	80-120% recovery	Reanalyze if necessary, qualify data and narrate issues of non-conformance.	Analyst/Data Reviewer
Accuracy	A	Initial Calibration (ICAL)	Initially and when CCV fails	Correlation coefficient ≥ 0.995	Recalibrate as required by method; analysis cannot proceed without a valid initial calibration	Analyst
Accuracy	A	Initial Calibration Verification (ICV)	Daily after calibration	90-110% recovery	Recalibrate as required by method note outliers in narrative	Analyst
Accuracy	A	Continuing Calibration Verification (CCV)	Prior to samples, every 10 samples and at the end of the analytical sequence	90-110% recovery	Recalibrate as required by method note outliers in narrative	Analyst
Sensitivity	A	Initial and Continuing Calibration Blanks (ICB and CCB)	After each CCV	All target compounds < RL	Reanalyze; if still out, recalibrate and reanalyze	Analyst
Accuracy	A	Quantitation	Every sample	RL ≤ results ≤ upper calibration range on a sample-specific basis; results reported between the MDL and RL qualified "J".	Perform dilution to bring analyte within linear range, qualify data	Analyst/Data Reviewer

Table 2a
Measurement Performance Criteria and QC Samples – General Chemistry Analyses
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Data Quality Indicator	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency/ Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action	Person(s) Responsible for Corrective Action
Sensitivity	A	Reporting of Non-Detects	Every sample	Reported at the sample-specific RL which must be ≤ PRL	Potential data usability issue	Data Reviewer
Overall Precision and Representativeness	S & A	Field Duplicate Samples	1 per 20 field samples	RPD ≤ 30% for waters with results > 2x RL; professional judgment for results < 2X RL	Potential data usability issue	Data Reviewer
Accuracy (preservation)	S	Temperature Blank or other Cooler Temperature Reading	1 Temperature reading per cooler to be recorded upon sample receipt	Cool to $4^0C \pm 2^0C$, allow for $<2^0C$ if samples intact	Potential data usability issue	Data Reviewer
Accuracy (preservation)	S & A	Sample preservation	Every field sample	Total Organic Carbon: H_2SO_4 to pH < 2 Total Dissolved Solids, pH, and Alkalinity: None	Potential data usability issue	Data Reviewer
Accuracy/Sensitivity	S&A	Holding time (HT)	Every field sample	(Note: It is imperative that all samples are submitted to the laboratory with ample time for the analysis to be completed within the HT. Missing a HT is unacceptable and may result in unusable data if the HT is missed.) Total Organic Carbon: analyze water samples within 28 days pH: analyze was samples within 24 hours Alkalinity: analyze water samples within 14 days	Potential data usability issue	Data Reviewer
Accuracy/Sensitivity	S	Equipment blank	Not required if using dedicated sampling equipment. If performing decon, collect 1 EB per 20 field samples collected by the same method.	Target analytes < RL	Potential data usability issue	Data Reviewer
Data Completeness	S&A	Calculate from valid/usable data collected	Not applicable	≥ 90% overall	Potential data usability issue/data gap issue	Data Reviewer/ Investigator
Comparability	S&A	Based on method and QAPP protocols	Not applicable	Comparison between historical data for qualitative integrity of the data. Comparison between spatially similar samples.	Potential data usability issue	Data Reviewer/ Investigator

Table 2b
Measurement Performance Criteria and QC Samples – Metals Analyses
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Measurement Performance Criteria and QC Samples[1] Metals USEPA SW-846 6010C						
Data Quality Indicator	**QC Measure for Sampling (S), Analytical (A), or both (S&A)**	**QC Sample or Activity**	**Frequency/ Number**	**QC Acceptance Limits (Measurement Performance Criteria)**	**Corrective Action**	**Person(s) Responsible for Corrective Action**
Accuracy	A	Linear Dynamic Range (LDR)	At a minimum the LDR should be checked every 6 months	A minimum of 3 difference concentration standards across the ICP range should be near the upper limit of the range.	Not applicable	Analyst
Accuracy	A	Initial Calibration (ICAL)	Daily following tuning prior to sample analysis	Minimum of a calibration blank plus a standard per manufacturing recommended procedures; RL standard may be included in multipoint calibration curve; linear curve fit with correlation coefficient ≥0.998.	Re-optimize instrument and recalibrate, repeat until successful	Analyst
Accuracy	A	Initial Calibration Verification (ICV)	Daily after calibration	Separate source from calibration standards; must contain all target analytes. ICV: 90-110% recovery.	Reanalyze; if still out, recalibrate as required by method; suspend all analysis until ICV meets criteria	Analyst
Sensitivity	A	Low Level Initial Calibration Verification	At the beginning of the run before any samples and at the end of the run	Same source as calibration standards; must contain all target analytes at the RL; 70-130% recovery.	Reanalyze; if still out, recalibrate/reanalyze; suspend all analysis until LLICV meets criteria unless all results >10x RL	Analyst
Sensitivity	A	Initial Blank (ICB)	After ICV	Must be matrix-matched; ICB: < ± RL	Recalibrate, if still out, recalibrate and reanalyze	Analyst
Accuracy	A	Continuing Calibration Verification (CCV)	1 every 10 samples and after the last sample	Same source as calibration standards; must contain all target analytes; CCV: 90-110% recovery	Reanalyze; if still out, recalibrate and reanalyze all samples since last acceptable CCV	Analyst
Sensitivity	A	Low Level Continuing Calibration Verification	At the beginning of the run before any samples and at the end of the run	Same source as initial calibration standards; must contain all target analytes at the RL; 70-130% recovery.	Reanalyze; if still out, recalibrate/reanalyze; suspend all analysis until LLCCV meets criteria unless all results >10x RL	Analyst
Sensitivity	A	Continuing Calibration Blanks (CCB)	After each CCV	Must be matrix-matched; CCB: < ± RL	Recalibrate, if still out, recalibrate and reanalyze	Analyst

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Table 2b
Measurement Performance Criteria and QC Samples – Metals Analyses
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Measurement Performance Criteria and QC Samples[1] Metals USEPA SW-846 6010C						
Data Quality Indicator	**QC Measure for Sampling (S), Analytical (A), or both (S&A)**	**QC Sample or Activity**	**Frequency/ Number**	**QC Acceptance Limits (Measurement Performance Criteria)**	**Corrective Action**	**Person(s) Responsible for Corrective Action**
Accuracy/ sensitivity	A	Method blank (MB)	1 per digestion batch not to exceed 20 field samples	MB: < RL	Reanalyze; if still out re-digest and reanalyze all samples unless all detected results > 10x MB level	Analyst
Accuracy	A	Interference Check Standards (ICSA and ICSAB)	Daily after calibration	ICSA & ICSAB: 80-120% recovery ICSA: non-spiked analytes ≤ 2x RL	Reanalyze; if still out, adjust interference and background correction, and/or linear ranges as needed and recalibrate and reanalyze all field samples since last compliant ICSA and ICSAB	Analyst/Data Reviewer
Accuracy	A	Laboratory control sample (LCS)	1 per digestion batch of up to 20 samples	Must contain all target analytes, be matrix-matched, % recovery 80-120%	Reanalyze, if still out reanalyze and re-digest LCS and all field samples in batch	Analyst/Data Reviewer
Precision	A	Sample duplicate (DUP)	1 per ≤ 20 field samples if an MS/MSD was not performed	Must be performed on a site sample, RPD ≤ 20% for waters for results > 5x RL. Results < 5x RL: absolute difference between results ≤ RL.	Reanalyze; qualify data.	Analyst/Data Reviewer
Accuracy	S & A	MS (site-specific)	1 per ≤ 20 field samples	Must contain all target analytes, performed on Site field sample; % recovery 75-125%; professional judgment if sample concentration > 4x spike level	Evaluate LCS, unspiked sample, and qualify data.	Analyst/Data Reviewer
Precision	S & A	MSD (site-specific)	1 per ≤ 20 field samples	Must contain all target analytes, performed on Site field sample; recovery criteria same as MS; RPD ≤ 20% for waters for results > 5x RL. Results < 5x RL: absolute difference between results ≤ RL.	Qualify data and narrate issues of non-conformance.	Analyst/Data Reviewer

Table 2b
Measurement Performance Criteria and QC Samples – Metals Analyses
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Measurement Performance Criteria and QC Samples[1] Metals USEPA SW-846 6010C						
Data Quality Indicator	**QC Measure for Sampling (S), Analytical (A), or both (S&A)**	**QC Sample or Activity**	**Frequency/ Number**	**QC Acceptance Limits (Measurement Performance Criteria)**	**Corrective Action**	**Person(s) Responsible for Corrective Action**
Accuracy	A	Post digestion spike	1 per ≤ 20 field samples if less than acceptable accuracy and precision data are generated	Should be performed if MS/MSD recoveries were unacceptable; 80-120% recovery	Qualify data and narrate issues of non-conformance.	Analyst/Data Reviewer
Accuracy	A	Serial Dilution	1 per ≤ 20 field samples if less than acceptable accuracy and precision data are generated	Perform 5x dilution on same sample used for MS; % Difference ≤ 10% for results > 10x RL	Qualify data and narrate issues of non-conformance.	Analyst/Data Reviewer
Accuracy	A	Quantitation	Not applicable	RL ≤ results ≤ upper calibration range on a sample-specific basis. Report all results in µg/L or mg/L.	Perform dilution to bring analyte within linear range, report from diluted analysis.	Analyst/Data Reviewer
Overall Precision and Representativeness	S & A	Field Duplicate Samples	1 per 20 field samples	RPD ≤ 30% for waters with results > 5x RL; professional judgment for results < 5X RL	Potential data usability issue; indication of sample heterogeneity	Data Reviewer
Accuracy (preservation)	S & A	Sample preservation	Every field sample	HNO_3 to pH < 2	Potential data usability issue	Data Reviewer
Accuracy/Sensitivity	S & A	Holding time (HT)	Every field sample	(Note: It is imperative that all samples are submitted to the laboratory with ample time for the analysis to be completed within the HT. Missing a HT is unacceptable and may result in unusable data if the HT is missed.) Analyses within 6 months of collection	Potential data usability issue	Data Reviewer
Accuracy/Sensitivity	S & A	Equipment blank	Not required is using dedicated sampling equipment. If performing decon, collect 1 EB per 20 field samples collected by the same method.	Target analytes < RL	Potential data usability issue	Data Reviewer
Data Completeness	S & A	Calculate from valid/usable data collected	Not applicable	≥ 90% overall	Potential data usability issue/data gap issue	Data Reviewer/ Investigator

Table 2b
Measurement Performance Criteria and QC Samples – Metals Analyses
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Measurement Performance Criteria and QC Samples[1] Metals USEPA SW-846 6010C						
Data Quality Indicator	**QC Measure for Sampling (S), Analytical (A), or both (S&A)**	**QC Sample or Activity**	**Frequency/ Number**	**QC Acceptance Limits (Measurement Performance Criteria)**	**Corrective Action**	**Person(s) Responsible for Corrective Action**
Comparability	S & A	Based on method and QAPP protocols	Not applicable	Comparison between historical data for qualitative integrity of the data. Comparison between spatially similar samples.	Potential data usability issue	Data Reviewer/ Investigator

NOTES:
[1] This table was prepared in accordance with NJDEP SRP *Quality Assurance Project Plan Technical Guidance* (April 2014) and is compliant with USEPA Region 2 guidance and meets the data quality needs of the Department.

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Table 3
Field Quality Control Checks
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Sample Parameters	Field Duplicates per Event	Rinsate Blanks per Event	Trip Blanks per Event
Soil Analyses			
Total Petroleum Hydrocarbons and Extractable Petroleum Hydrocarbons	One per day of sampling	One per day of sampling	Not Required
Volatile Organic Compounds +10 Library Search and Semi-Volatile Organic Compounds +15 Library Search	One per day of sampling	Not Required	One per day per cooler of samples
Groundwater Analyses			
Priority Pollutant Base Neutral Scan with Library Search	One per day of sampling	One per day of sampling	Not Required
Priority Pollutant Volatile Organic Compounds Scan Including Xylene with Library Search	One per day of sampling	One per day of sampling	One per day per cooler of samples

SII-SSA-0014-006713

Table 4
Sample Containers, Preservation Methods, and Laboratory Holding Times
PSEG Nuclear, LLC, Salem Generating Station, Hancocks Bridge, New Jersey
Quality Assurance Project Plan

Parameter	Analytical Method	Technical Protocol	Lower Limit of Detection	Sample Container	Preservation Method	Holding Time	Data Use
Soil Analyses and Methods							
Total Petroleum Hydrocarbons (TPHC)	418.1	USEPA	0.5 mg/kg	8 ounce amber glass	Cool 4°C	28 days for analysis	Characterize Soil Quality
Extractable Petroleum Hydrocarbons (EPH)	EPH Method Revision 3	USEPA	0.5 mg/kg	8 ounce amber glass	Cool 4°C	28 days for analysis	Characterize Soil Quality
Volatile Organic Compounds (VOCs) +10 Library Search[1]	8260B	USEPA	See Page 3	(1) 10-ml Methanol Kit	Cool 4°C	14 days for analysis	Characterize Soil Quality
Groundwater Analyses and Methods							
Priority Pollutant Base Neutral Scan with Library Search	8270	USEPA	See Page 4	(2) 950-ml amber glass	HCl; Cool 4°C	7 days for extraction; 40 days for analysis	Characterize Groundwater Quality
Priority Pollutant Volatile Organic Compounds Scan Including Xylene with Library Search	8260B	USEPA	See Page 6	(3) 40-ml glass vial	Cool 4°C	14 days for analysis	Characterize Groundwater Quality

Abbreviations:
Mg/kg – Milligrams per Kilogram
ml – Milliliter
°C – Degrees Centigrade
HCl – Hydrochloric acid
[1] VOCs + 10 analysis required on 25 percent of samples in which TPHC level in soil exceeds 1,000 parts per million (mimimum one sample; samples for VOC analyses shall be those with the highest TPHC concentration.

APPENDIX A (QAPP)

Field Sampling Standard Operating Procedures

ARCADIS
Infrastructure, environment, facilities

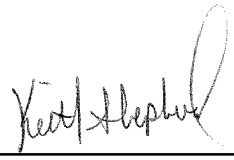
Imagine the result

Field Equipment Decontamination

Rev. #: 3

Rev Date: April 26, 2010

Approval Signatures

Prepared by:  Date: 4/26/2010

Keith Shepherd

Reviewed by: Date: 4/26/2010

Richard Murphy (Technical Expert)

I. Scope and Application

Equipment decontamination is performed to ensure that sampling equipment that contacts a sample, or monitoring equipment that is brought into contact with environmental media to be sampled, is free from analytes of interest and/or constituents that would interfere with laboratory analysis for analytes of interest. Equipment must be cleaned prior to use for sampling or contact with environmental media to be sampled, and prior to shipment or storage. The effectiveness of the decontamination procedure should be verified by collecting and analyzing equipment blank samples.

The equipment cleaning procedures described herein includes pre-field, in the field, and post-field cleaning of sampling tools which will be conducted at an established equipment decontamination area (EDA) on site (as appropriate). Equipment that may require decontamination at a given site includes: soil sampling tools; groundwater, sediment, and surface-water sampling devices; water testing instruments; down-hole instruments; and other activity-specific sampling equipment. Non-disposable equipment will be cleaned before collecting each sample, between sampling events, and prior to leaving the site. Cleaning procedures for sampling equipment will be monitored by collecting equipment blank samples as specified in the applicable work plan or field sampling plan. Dedicated and/or disposable (not to be re-used) sampling equipment will not require decontamination.

II. Personnel Qualifications

ARCADIS field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, site supervisor training, and site-specific training, as needed. In addition, ARCADIS field sampling personnel will be versed in the relevant SOPs and possess the skills and experience necessary to successfully complete the desired fieldwork. The project HASP and other documents will identify any other training requirements such as site specific safety training or access control requirements.

III. Equipment List

- health and safety equipment, as required in the site Health and Safety Plan (HASP)
- distilled water

- Non-phosphate detergent such as Alconox or, if sampling for phosphorus phosphorus-containing compounds, Luminox (or equivalent).
- tap water
- rinsate collection plastic containers
- DOT-approved waste shipping container(s), as specified in the work plan or field sampling plan (if decontamination waste is to be shipped for disposal)
- brushes
- large heavy-duty garbage bags
- spray bottles
- (Optional) – Isoprophyl alcohol (free of ketones) or methanol
- Ziploc-type bags
- plastic sheeting

IV. Cautions

Rinse equipment thoroughly and allow the equipment to dry before re-use or storage to prevent introducing solvent into sample medium. If manual drying of equipment is required, use clean lint-free material to wipe the equipment dry.

Store decontaminated equipment in a clean, dry environment. Do not store near combustion engine exhausts.

If equipment is damaged to the extent that decontamination is uncertain due to cracks or dents, the equipment should not be used and should be discarded or submitted for repair prior to use for sample collection.

A proper shipping determination will be performed by a DOT-trained individual for cleaning materials shipped by ARCADIS.

V. Health and Safety Considerations

Review the material safety data sheets (MSDS) for the cleaning materials used in decontamination. If solvent is used during decontamination, work in a well-ventilated area and stand upwind while applying solvent to equipment. Apply solvent in a manner that minimizes potential for exposure to workers. Follow health and safety procedures outlined in the HASP.

VI. Procedure

A designated area will be established to clean sampling equipment in the field prior to sample collection. Equipment cleaning areas will be set up within or adjacent to the specific work area, but not at a location exposed to combustion engine exhaust. Detergent solutions will be prepared in clean containers for use in equipment decontamination.

Cleaning Sampling Equipment

1. Wash the equipment/pump with potable water.

2. Wash with detergent solution (Alconox, Liquinox or equivalent) to remove all visible particulate matter and any residual oils or grease.

3. If equipment is very dirty, precleaning with a brush and tap water may be necessary.

4. (Optional) – Flush with isopropyl alcohol (free of ketones) or with methanol. This step is optional but should be considered when sampling in highly impacted media such as non-aqueous phase liquids or if equipment blanks from previous sampling events showed the potential for cross contamination of organics.

5. Rinse with distilled/deionized water.

Decontaminating Submersible Pumps

Submersible pumps may be used during well development, groundwater sampling, or other investigative activities. The pumps will be cleaned and flushed before and between uses. This cleaning process will consist of an external detergent solution wash and tap water rinse, a flush of detergent solution through the pump, followed

by a flush of potable water through the pump. Flushing will be accomplished by using an appropriate container filled with detergent solution and another contained filled with potable water. The pump will run long enough to effectively flush the pump housing and hose (unless new, disposable hose is used). Caution should be exercised to avoid contact with the pump casing and water in the container while the pump is running (do not use metal drums or garbage cans) to avoid electric shock. Disconnect the pump from the power source before handling. The pump and hose should be placed on or in clean polyethylene sheeting to avoid contact with the ground surface.

VII. Waste Management

Equipment decontamination rinsate will be managed in conjunction with all other waste produced during the field sampling effort. Waste management procedures are outlined in the work plan or Waste Management Plan (WMP).

VIII. Data Recording and Management

Equipment cleaning and decontamination will be noted in the field notebook. Information will include the type of equipment cleaned, the decontamination location and any deviations from this SOP. Specific factors that should be noted include solvent used (if any), and source of water.

Any unusual field conditions should be noted if there is potential to impact the efficiency of the decontamination or subsequent sample collection.

An inventory of the solvents brought on site and used and removed from the site will be maintained in the files. Records will be maintained for any solvents used in decontamination, including lot number and expiration date.

Containers with decontamination fluids will be labeled.

IX. Quality Assurance

Equipment blanks should be collected to verify that the decontamination procedures are effective in minimizing potential for cross contamination. The equipment blank is prepared by pouring deionized water over the clean and dry tools and collecting the deionized water into appropriate sample containers. Equipment blanks should be analyzed for the same set of parameters that are performed on the field samples collected with the equipment that was cleaned. Equipment blanks are collected per equipment set, which represents all of the tools needed to collect a specific sample.

X. References

USEPA Region 9, Field Sampling Guidance #1230, Sampling Equipment Decontamination.

USEPA Region 1, Low Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells.

ARCADIS

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Chain-of-Custody, Handling, Packing and Shipping

Rev. #: 2

Rev Date: March 6, 2009

Approval Signatures

Prepared by: _____ Date: 3/6/09
Caron Koll

Reviewed by: _____ Date: 3/6/09
Jane Kennedy(Technical Expert)

I. Scope and Application

This Standard Operating Procedure (SOP) describes the chain-of-custody, handling, packing, and shipping procedures for the management of samples to decrease the potential for cross-contamination, tampering, mis-identification, and breakage, and to insure that samples are maintained in a controlled environment from the time of collection until receipt by the analytical laboratory.

II. Personnel Qualifications

ARCADIS field sampling personnel will have current health and safety training, including 40-hour HAZWOPER training, Department of Transportation (DOT) training, site supervisor training, and site-specific training, as needed. In addition, ARCADIS field sampling personnel will be versed in the relevant SOPs and possess the skills and experience necessary to successfully complete the desired field work.

III. Equipment List

The following list provides materials that may be required for each project. Project documents and sample collection requirements should be reviewed prior to initiating field operations:

- indelible ink pens (black or blue);
- polyethylene bags (resealable-type);
- clear packing tape, strapping tape, duct tape;
- chain of custody
- DOT shipping forms, as applicable
- custody seals or tape;
- appropriate sample containers and labels,;
- insulated coolers of adequate size for samples and sufficient ice to maintain 4°C during collection and transfer of samples;
- wet ice;
- cushioning and absorbent material (i.e., bubble wrap or bags);

- temperature blank
- sample return shipping papers and addresses; and
- field notebook.

IV. Cautions

Review project requirements and select appropriate supplies prior to field mobilization.

Insure that appropriate sample containers with applicable preservatives, coolers, and packing material have been supplied by the laboratory.

Understand the offsite transfer requirements for the facility at which samples are collected.

If overnight courier service is required schedule pick-up or know where the drop-off service center is located and the hours of operation. Prior to using air transportation, confirm air shipment is acceptable under DOT and International Air Transport Association (IATA) regulation

Schedule pick-up time for laboratory courier or know location of laboratory/service center and hours of operation.

Understand DOT and IATA shipping requirements and evaluate dangerous goods shipping regulations relative to the samples being collected (i.e. complete an ARCADIS shipping determination). Review the ARCADIS SOPs for shipping, packaging and labeling of dangerous goods. Potential samples requiring compliance with this DOT regulation include:

- Methanol preservation for Volatile Organic Compounds in soil samples
- Non-aqueous phase liquids (NAPL)

V. Health and Safety Considerations

Follow health and safety procedures outlined in the project/site Health and Safety Plan (HASP).

Use caution and appropriate cut resistant gloves when tightening lids to 40 mL vials. These vials can break while tightening and can lacerate hand. Amber vials (thinner glass) are more prone to breakage.

Some sample containers contain preservatives.

- The preservatives must be retained in the sample container and should in no instance be rinsed out.
- Preservatives may be corrosive and standard care should be exercised to reduce potential contact to personnel skin or clothing. Follow project safety procedures if spillage is observed.
- If sample container caps are broken discard the bottle. Do not use for sample collection.

VI. Procedure

Chain-of-Custody Procedures

1. Prior to collecting samples, complete the chain-of-custody record header information by filling in the project number, project name, and the name(s) of the sampling technician(s) and other relevant project information. Attachment 1 provides an example chain-o- custody record

2. Chain-of-custody information MUST be printed legibly using indelible ink (black or blue).

3. After sample collection, enter the individual sample information on the chain-of-custody:

    a. Sample Identification indicates the well number or soil location that the sample was collected from. Appropriate values for this field include well locations, grid points, or soil boring identification numbers (e.g., MW-3, X-20, SB-30). When the depth interval is included, the complete sample ID would be “SB-30 (0.5-1.0) where the depth interval is in feet. Please note it is very important that the use of hyphens in sample names and depth units (i.e., feet or inches) remain consistent for all samples entered on the chain-of-custody form. DO NOT use the apostrophe or quotes in the sample ID. Sample names may also use the abbreviations “FB,” “TB,” and “DUP” as prefixes or suffixes to indicate that the sample is a field blank, trip blank, or field duplicate, respectively. NOTE: The sample

nomenclature may be dictated by the project database and require unique identification for each sample collected for the project. Consult the project data management plan for additional information regarding sample identification.

b. List the date of sample collection. The date format to be followed should be mm/dd/yy (e.g., 03/07/09) or mm/dd/yyyy (e.g. 03/07/2009).

c. List the time that the sample was collected. The time value should be presented using military format. For example, 3:15 P.M. should be entered as 15:15.

d. The composite field should be checked if the sample is a composite over a period of time or from several different locations and mixed prior to placing in sample containers.

e. The "Grab". field should be marked with an "X" if the sample was collected as an individual grab sample. (e.g. monitoring well sample or soil interval).

f. Any sample preservation should be noted.

g. The analytical parameters that the samples are being analyzed for should be written legibly on the diagonal lines. As much detail as possible should be presented to allow the analytical laboratory to properly analyze the samples. For example, polychlorinated biphenyl (PCB) analyses may be represented by entering "PCBs" or "Method 8082." Multiple methods and/or analytical parameters may be combined for each column (e.g., PCBs/VOCs/SVOCs or 8082/8260/8270). These columns should also be used to present project-specific parameter lists (e.g., Appendix IX+3 target analyte list. Each sample that requires a particular parameter analysis will be identified by placing the number of containers in the appropriate analytical parameter column. For metals in particular, indicate which metals are required.

h. Number of containers for each method requested. This information may be included under the parameter or as a total for the sample based on the chain of custody form used.

i. Note which samples should be used for site specific matrix spikes.

j. Indicate any special project requirements.

k. Indicate turnaround time required.

l. Provide contact name and phone number in the event that problems are encountered when samples are received at the laboratory.

m. If available attach the Laboratory Task Order or Work Authorization forms

n. The remarks field should be used to communicate special analytical requirements to the laboratory. These requirements may be on a per sample basis such as "extract and hold sample until notified," or may be used to inform the laboratory of special reporting requirements for the entire sample delivery group (SDG). Reporting requirements that should be specified in the remarks column include: 1) turnaround time; 2) contact and address where data reports should be sent; 3) name of laboratory project manager; and 4) type of sample preservation used.

o. The "Relinquished By" field should contain the signature of the sampling technician who relinquished custody of the samples to the shipping courier or the analytical laboratory.

p. The "Date" field following the signature block indicates the date the samples were relinquished. The date format should be mm/dd/yyyy (e.g., 03/07/2005).

q. The "Time" field following the signature block indicates the time that the samples were relinquished. The time value should be presented using military format. For example, 3:15 P.M. should be entered as 15:15.

r. The "Received By" section is signed by sample courier or laboratory representative who received the samples from the sampling technician or it is signed upon laboratory receipt from the overnight courier service.

3. Complete as many chain-of-custody forms as necessary to properly document the collection and transfer of the samples to the analytical laboratory.

4. Upon completing the chain-of-custody forms, forward two copies to the analytical laboratory and retain one copy for the field records.

5. If electronic chain-of-custody forms are utilized, sign the form and make 1 copy for ARCADIS internal records and forward the original with the samples to the laboratory.

Handling Procedures

1. After completing the sample collection procedures, record the following information in the field notebook with indelible ink:

   - project number and site name;
   - sample identification code and other sample identification information, if appropriate;
   - sampling method;
   - date;
   - name of sampler(s);
   - time;
   - location (project reference);
   - location of field duplicates and both sample identifications;
   - locations that field QC samples were collected including equipment blanks, field blanks and additional sample volume for matrix spikes; and
   - any comments.

2. Complete the sample label with the following information in indelible ink:

   - sample type (e.g., surface water);
   - sample identification code and other sample identification information, if applicable;
   - analysis required;
   - date;
   - time sampled; and
   - initials of sampling personnel;

- sample matrix; and
- preservative added, if applicable.

3. Cover the label with clear packing tape to secure the label onto the container and to protect the label from liquid.

4. Confirm that all caps on the sample containers are secure and tightly closed.

5. In some instances it may be necessary to wrap the sample container cap with clear packing tape to prevent it from becoming loose.

6. For some projects individual custody seals may be required. Custody seal evidence tape may be placed on the shipping container or they may be placed on each sample container such that the cooler or cap cannot be opened without breaking the custody seal. The custody seal should be initialed and dated prior to relinquishing the samples.

Packing Procedures

Following collection, samples must be placed on wet ice to initiate cooling to 4°C immediately. Retain samples on ice until ready to pack for shipment to the laboratory.

1. Secure the outside and inside of the drain plug at the bottom of the cooler being used for sample transport with "Duct" tape.

2. Place a new large heavy duty plastic garbage bag inside each cooler

3. Place each sample bottle wrapped in bubble wrap inside the garbage bag. VOC vials may be grouped by sample in individual resealable plastic bags). If a cooler temperature blank is supplied by the laboratory, it should be packaged following the same procedures as the samples. If the laboratory did not include a temperature blank, do not add one. Place 1 to 2 inches of cushioning material (i.e., vermiculite) at the bottom of the cooler.

4. Place the sealed sample containers upright in the cooler.

5. Package ice in large resealable plastic bags and place inside the large garbage bag in the cooler. Samples placed on ice will be cooled to and maintained at a temperature of approximately 4°C.

6. Fill the remaining space in the cooler with cushioning material such as bubble wrap. The cooler must be securely packed and cushioned in an upright position and be surrounded (Note: to comply with 49 CFR 173.4, filled cooler must not exceed 64 pounds).

7. Place the completed chain-of-custody record(s) in a large resealable bag and tape the bag to the inside of the cooler lid.

8. Close the lid of the cooler and fasten with packing tape.

9. Wrap strapping tape around both ends of the cooler.

10. Mark the cooler on the outside with the following information: shipping address, return address, "Fragile, Handle with Care" labels on the top and on one side, and arrows indicating "This Side Up" on two adjacent sides.

11. Place custody seal evidence tape over front right and back left of the cooler lid, initial and date, then cover with clear plastic tape.

Note: Procedure numbers 2, 3, 5, and 6 may be modified in cases where laboratories provide customized shipping coolers. These cooler types are designed so the sample bottles and ice packs fit snugly within preformed styrofoam cushioning and insulating packing material.

Shipping Procedures

1. All samples will be delivered by an express carrier within 48 hours of sample collection. Alternatively, samples may be delivered directly to the laboratory or laboratory service center or a laboratory courier may be used for sample pickup.

2. If parameters with short holding times are required (e.g., VOCs [EnCore™ Sampler], nitrate, nitrite, ortho-phosphate and BOD), sampling personnel will take precautions to ship or deliver samples to the laboratory so that the holding times will not be exceeded.

3. Samples must be maintained at 4°C±2°C until shipment and through receipt at the laboratory

4. All shipments must be in accordance with DOT regulations and ARCADIS dangerous goods shipping SOPs.

5. When the samples are received by the laboratory, laboratory personnel will complete the chain-of-custody by recording the date and time of receipt of samples, measuring and recording the internal temperature of the shipping container, and checking the sample identification numbers on the containers to ensure they correspond with the chain-of-custody forms.

Any deviations between the chain-of-custody and the sample containers, broken containers, or temperature excursions will be communicated to ARCADIS immediately by the laboratory.

VII. Waste Management

Not applicable

VIII. Data Recording and Management

Chain-of-custody records will be transmitted to the ARCADIS PM or designee at the end of each day unless otherwise directed by the ARCADIS PM. The sampling team leader retains copies of the chain-of-custody forms for filing in . the project file. Record retention shall be in accordance with project requirements.

IX. Quality Assurance

Chain-of-custody forms will be legibly completed in accordance with the applicable project documents such as Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP), Work Plan, or other project guidance documents. A copy of the completed chain-of-custody form will be sent to the ARCADIS Project Manager or designee for review.

X. References

Not Applicable

Attachment 1

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ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page ___ of ___

Lab Work Order #

Send Results to:

Contact & Company Name | Telephone

Address | Fax

City State Zip | E-mail Address

Project Name/Location (City, State) | Project #

Sampler's Printed Name | Sampler's Signature

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix

Preservative											
Filtered (✓)											
# of Containers											
Container Information											

PARAMETER ANALYSIS & METHOD

REMARKS

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil | SE - Sediment | NL - NAPL/Oil
W - Water | SL - Sludge | SW - Sample Wipe
T - Tissue | A - Air | Other: _____

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name:	Cooler Custody Seal (✓)	Printed Name:	Printed Name:	Printed Name:	Printed Name:
☐ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm:	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #	Condition/Cooler Temp: _____	Date/Time:	Date/Time:	Date/Time:	Date/Time:

20100826 Conc AR Form 01.12.2007

Distribution: **WHITE – Laboratory returns with results** **YELLOW – Lab copy** **PINK – Retained by BBL**

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Field Log Book Entries

Rev. #: 0

Rev Date: 11 August 2009

Approval Signatures

Prepared by: Andrew Kanik Date: 8/11/09

Reviewed by: Michael J. Hefley Date: 8/11/09
(Technical Expert)

I. Scope and Application

This ARCADIS Standard Operating Procedure covers the entries needed in a field log book for environmental investigations.

This SOP does not address all of the entries that may be needed for a specific project, and does not address health and safety, equipment decontamination, field parameter measurements, sample preservation, chain-of-custody, or laboratory analysis. For direction on requirements in these areas, refer to other ARCADIS SOPs, the project work plans including the quality assurance project plan, sampling plan, and health and safety plan, as appropriate.

II. Personnel Qualifications

ARCADIS personnel participating in fieldwork and making entries into the field log book should have a minimum of one (1) year of field experience (or be under the supervision and accompanied in the field by someone who does) and current health and safety training including 40-hour HAZWOPER training, site supervisor training, site-specific training, first aid, and CPR, as needed. Field personnel will also be compliant with client-specific training requirements. In addition, ARCADIS field sampling personnel will be versed in the relevant SOPs and posses the required skills and experience necessary to successfully complete the desired field work.

III. Equipment List

- Field Log Book
- Ball point (medium point) pen with blue or black ink (black preferred). A fine point Sharpie pen may be used if the ink does not bleed through the page and become visible on back side of the page. If weather conditions prevent the use of a pen, indicate so in the log and use an alternate writing instrument .
- Zip-lock baggie or other weather-proof container to protect the field log book from the elements.

IV. Cautions

All entries in the field log must be legible and archivable. Do not leave the field log book exposed to the elements or other conditions that might moisten the pages and smear/dissolve the entries. When not in the field, the log book should be stored in a location that is easily accessible to field crews.

V. Health and Safety Considerations

ARCADIS field personnel will be familiar and compliant with Client-specific health and safety requirements.

VI. Procedure

- Print legibly. Do not use cursive writing.
- The name of the project, project number and project location should be written in indelible ink on the outside of the field log book.
- On the inside of the front cover, write "If Found, Please Return to ARCADIS" and include the appropriate address and phone number, the name of the person to which the book is assigned, and the name of the project manager.
- Reserve the first page of the book for a Table of Contents.
- Reserve the last five (5) pages of the book for important contacts, notes, reminders, etc.
- Each day of field work, the following should be recorded in the field log book as applicable:

    a) Project Name

    b) Date and time arrived

    c) Work Site Location

    d) Names of people on-site related to the project including ARCADIS employees, visitors, subcontractor employees, agency personnel, client representative, etc.

    e) Describe the work to be performed briefly, and list the equipment on-site

    f) Indicate the health and safety (H&S) level to be used

    g) Record instrument calibrations and checks

    h) Record time and general content of H&S briefing

    i) Describe the weather conditions, including temperature, precipitation, and wind speed and direction

    j) List periodic time entries in the far left hand column of each page

    k) Minimize unused space on each page

- The tailgate meeting must be recorded in the log book and the tailgate form completed. If H&S monitoring is performed, record the time and results of initial and followup monitoring.

- Note factual observations including collection of QA/QC samples, delays, well damage, accidents, work plan deviations, instrument problems, and problem resolutions.

- Describe work performed and how documented such as photographs, sample core logs, water sampling logs, etc.

- Describe bases for field decisions including pertinent conversations with visitors, regulators, or project personnel.

- Note final instrument calibrations and checks.

- Sign the log book at the end of each day at a minimum. Draw a line to the end of the page to indicate no further entries on that page. Sign the bottom of each page if possible.

- If an entry to the log book is changed, strike out the deleted text or item with a single line such that the entry remains legible, and initial and date the change. Such changes should only be made by the same person that made the initial entry.

- Field log book entries must be made in the field at the site, not at a later time at a different location. Supplemental entries to the log book may be made at a later date. The supplemental entry must be clearly identified as such and the entry must be signed and dated as described in this SOP.

- Problems noted in the field log book must be brought to the attention of the project manager and task manager in a timely fashion. Problems may be reported in person, on the telephone, or in a written daily log form. If daily logs are prepared and you will not be able to personally give the daily log to the project manager, send the daily log via FAX or overnight courier to the project manager and task manager.

VII. Waste Management

Investigation-derived waste will be managed as described in the Investigation-Derived Waste Handling and Storage SOP. A drum/waste inventory should be maintained on a pre-designated page in the field log book.

VIII. Data Recording and Management

Each page of the field log book should be scanned for electronic/digital archiving at periodic intervals. This will ensure that copies of the field notes are available in the event the field book is lost or damaged, and that field data can be easily disseminated to others without the risk of physically sending the field log book. Field log books that are full should be archived with the project files, and readily retrievable.

IX. Quality Assurance

Be mindful that the field log book may be produced in court. All entries should be legible (as discussed above). Entries should also be in English, unless working in a country where English is not the predominant language or you are directed otherwise by the project manager.

X. References

Not Applicable

APPENDIX F

Classification Exception Area

New Jersey Department of Environmental Protection
Site Remediation Program

CLASSIFICATION EXCEPTION AREA / WELL RESTRICTION AREA (CEA/WRA) FACT SHEET FORM

Date Stamp
(For Department use only)

SECTION A. SITE INFORMATION

Site Name: Salem Generating Station

Program Interest (PI) Number(s): 004156

Case Tracking Number(s) for this submission: 04-08-02-2350-16 and 10-0416-1649-11

This form must be attached to the Cover / Certification Form if not submitted through the RIR Online Service

1. Indicate the reason for submission of this form *(see instructions)*:

☒ New CEA ☐ Revise CEA ☐ Reestablish CEA ☐ Existing CEA with no changes
☐ CEA for historic fill ☐ CEA lift/removal

If you are submitting this form for an existing CEA provide the CEA Subject Item ID: _____

2. Indicate the type of ground water Remedial Action (RA):

☐ Natural ☒ Active ☐ Final RA not yet selected

3. Is this form being submitted with a Remedial Action Permit (RAP) Form (for Soil or Ground Water)? ... ☐ Yes ☒ No

SECTION B. CEA COMPONENT INFORMATION

1. **Contaminant(s):** This CEA/WRA applies only to contaminants above applicable numeric values established by the Ground Water Quality Standards (GWQS), N.J.A.C. 7:9C, listed in the table below. Except for historic fill CEAs based on assumed ground water contamination, list the maximum contaminant value for all ground water data that could be representative of current conditions and is for any well or sampling point used to establish the CEA. The values listed below may or may not be appropriate for use in evaluating plume fate and transport. See form instructions.

Contaminant	Concentration (1)	GWQS (2)	SWQS(3)	GWSL(4)
Benzene	10.2	1		
Benzo(a)anthracene	0.43	0.1		
Benzo(a)pyrene	0.128	0.1		
Benzo(a)fluoranthene	0.219	0.2		
bis(2-Ethylhexyl)phthalate	3.5	3		

Notes:
(1) Maximum concentration in Micrograms Per Liter
(2) New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C
(3) Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.
(4) Current NJDEP Vapor Intrusion Ground Water Screening Levels available at http://www.nj.gov/dep/srp/guidance/vaporintrusion/

☒ Check if attaching an Addendum to list additional contaminants and associated information.

2. **CEA Boundaries:** Year of tax map used: 2014

For CEA revisions: ☐ check if CEA Boundary has changed (*See instructions*)
☐ check if Block and Lot numbers have changed (*See instructions*)

List the Block(s) and Lot(s) included in the areal extent of the Classification Exception Area:

Block(s)	Lot(s)	Check if off-site
26	4.01	☐
		☐
		☐
		☐
		☐

Block(s)	Lot(s)	Check if off-site
		☐
		☐
		☐
		☐
		☐

☐ Check if attaching an Addendum to list additional Blocks/Lots and associated information.

Narrative description of proposed CEA:

The CEA boundary has been proposed for VOCs and SVOCs associated with the presence of residual diesel fuel oil. The proposed area of the CEA will encompass 11,825 square feet and will exent to 30 ft below ground surface.

Name(s) of the affected Geologic Formation(s)/Unit(s): Structural Fill

Direction of ground water flow: West (*If multiple water bearing zones exist within the CEA and/or there is no predominant flow direction, see instructions.*)

Ground Water Classification: Class II (*See instructions and GWQS for classification area information.*)

Vertical Depth of CEA: 30 (ft bgs) **and** -22 (msl).

Horizontal Extent of CEA: 11825 Indicate units: ☐ acres or ☒ square feet

3. Projected Term of CEA: *(Based on modeling/calculations in the fate and transport description)*

Proposed Duration in Years: _____ Anticipated Expiration Date: _____

or ☒ Indeterminate (*Review instructions before selecting* "Indeterminate.")

4. <u>ATTACH AND/OR SUBMIT THE FOLLOWING</u>: (*see instructions for additional information*)

Exhibit A: Site Location Maps – USGS Quadrangle Map;

Exhibit B: CEA Map and Cross Section Figure – See N.J.A.C 7:26C- 7.3(c)1 and 2 and instructions regarding what to include on the map and the cross-section figure.

Exhibit C: GIS Deliverables – CEA Boundary Extent Map. The CEA Boundary Extent Map shall be submitted via email to srpgis_cea@dep.nj.gov. See the instructions for detailed GIS deliverable requirements.

For revisions, does the attached map differ from the CEA map on NJ-GeoWeb? ☐ Yes ☐ No ☒ N/A

If "Yes or N/A," identify the format of the CEA Boundary Extent Map: ..... ☒ Shape File ☐ CAD File

SECTION C. CURRENT GROUND WATER USE DOCUMENTATION

1. Indicate the year of the most recent well search completed per N.J.A.C. 7:26E-1.14: 2017
2. If this Fact Sheet form is for a revised CEA or an existing CEA with no changes, have new wells been installed since the CEA was established? ..... ☐ Yes ☐ No ☒ N/A
3. Are there any pumping wells (e.g., potable, industrial, irrigation or recovery wells) within the foot print of the CEA? ..... ☐ Yes ☒ No

SECTION D. WELL RESTRICTION INFORMATION

Certain well restrictions relevant to potable ground water use, such as "Double Case Wells", "Sample Potable Wells", and "Evaluate Production Wells", are consistently set within the boundaries of all CEAs established by the NJDEP in Class I and II-A areas (*see instructions*).

1. Are there any other site-specific well restrictions relevant to potable ground water use that should be set within or near the boundaries of the proposed CEA? ☐ Yes ☒ No

   If "Yes", describe below any such site-specific well restrictions proposed for this CEA:

SECTION E. PUBLIC NOTIFICATION REQUIREMENTS

See form instructions for notification procedures

1. Indicate which of the following entities have been notified pursuant to N.J.A.C. 7:26C-7.3(d). (*check all that apply*)

   ☒ Municipal and county clerk(s)
   ☒ Local, county or regional health department(s)
   ☐ Designated County Environmental Health Act agency (if applicable)
   ☒ County Planning Board
   ☐ Pinelands Commission (if applicable)
   ☒ Owners of real property overlying CEA foot print

2. **List of Names and Addresses –** List below and/or in an attachment, the names/addresses of all persons notified pursuant to N.J.A.C. 7:26C-7.3(d) based on the proposed CEA boundaries. If the site property owner differs from the person responsible for conducting the remediation, enter the site owner's name and address first in below table. See instructions for more information regarding address list and indicating if vapor intrusion was evaluated for properties over the CEA.

   ☐ Check here if no volatile contaminants are in the CEA

Entity or Owner Name	Notification Address Used (include applicable block and lot overlying CEA if owner address differs from property address)	Date notification sent	Was property evaluated for vapor intrusion? Check if "Yes"
Ms. Gilda T. Gill	Salem County Clerk's Office, 110 Fifth St., Suite 200, Salem, NJ 08079	08/15/2017	☐
Mr. Ronald L. Campbell, Sr.	Township Clerk, 501 Locust Island Road, PO Box 157, Hancock's Bridge, NJ 08038	08/15/2017	☐
Ms. Carolyn Shoemaker	Salem County Health Department, 110 Fifth Street, Suite 400, Salem, NJ 08079	08/15/2017	☐
Mr. Matthew Goff	Board Secretary, 110 Fifth Street, Suite 500, Salem, NJ 08079	08/15/2017	☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

ADDENDUM
Classification Exception Area / Well Restriction Area
Fact Sheet Form

Section B. CEA Component Information

1. **Contaminant(s):** This CEA/WRA applies only to contaminants above applicable numeric values established by the GWQS, N.J.A.C. 7:9C, listed in the table below. Except for historic fill CEAs based on assumed ground water contamination, list below the maximum contaminant value for all ground water data that could be representative of current conditions using any well or sampling point used to establish the CEA. The values listed below may or may not be appropriate for use in evaluating plume fate and transport. See form Instructions.

Contaminant	Concentration (1)	GWQS (2)	SWQS(3)	GWSL(4)
1-Methylnaphthalene	10.3	5		
Indeno(1,2,3-cd)pyrene	0.979	0.2		
Residual Product	greater than 0.1 feet	None noticeable		

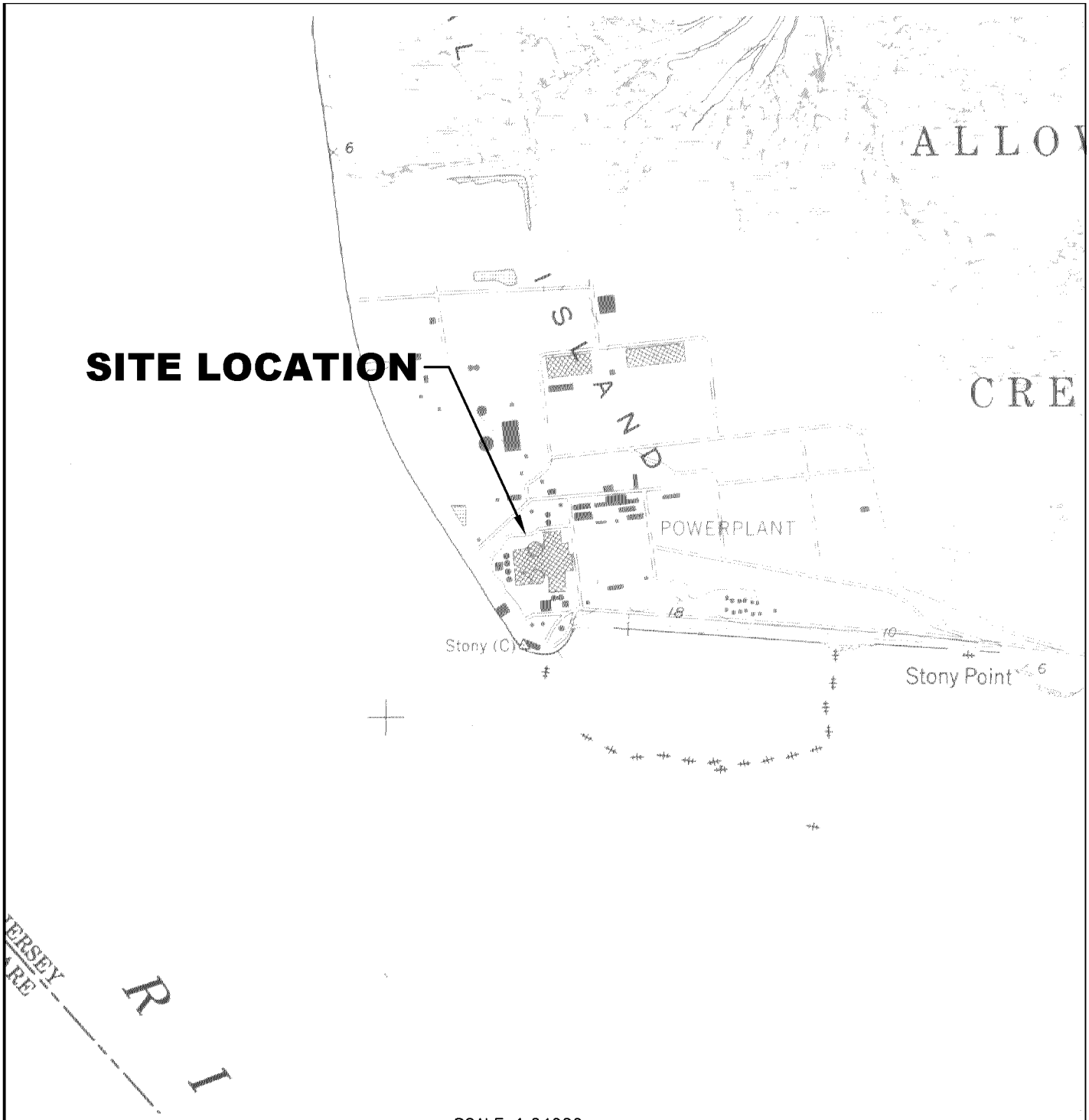
Notes:
(1) Maximum concentration in Micrograms Per Liter
(2) New Jersey Ground Water Quality Standards, N.J.A.C. 7:9C
(3) Surface Water Quality Standards, N.J.A.C. 7:9B - Applicable only where contaminants in the CEA may discharge to a surface water body.
(4) Current NJDEP Vapor Intrusion Ground Water Screening Levels

2. **CEA Boundaries:**

Blocks(s) and Lot(s) included in the areal extent of the Classification Exception Area:

Year of tax map used: _____ For CEA revisions, check here if Block and Lot numbers have changed: ☐

Block(s)	Lot(s)	Check if off-site		Block(s)	Lot(s)	Check if off-site
		☐				☐
		☐				☐
		☐				☐
		☐				☐
		☐				☐
		☐				☐
		☐				☐
		☐				☐
		☐				☐



SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

SOURCE: USGS 7.5 MIN. TOPOGRAPHICAL QUADRANGLE TAYLORS BRIDGE, DEL–N.J. 1948, PHOTOREVISED 1981.

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
CLASSIFICATION EXCEPTION AREA

SITE LOCATION

ARCADIS Design & Consultancy for natural and built assets

EXHIBIT
A-1

CITY: Newtown, Pa DIV/GROUP: Env. DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(Opt)ON=*;OFF=*REF*
G:\APROJECT\PSE&G\NP000603 - Salem - Diesel\NP000603.0007\Task 2 - RAP\Sept. 2009\Draft\Figures\Figure 01 - Station Location.dwg LAYOUT: 1 SAVED: 8/3/2009 7:16 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 11/11/2009 11:36
AM BY: WASILEWSKI, MATT
XREFS: IMAGES: PROJECTNAME: ---
taylors bridge.jpg

LEGEND:

GROUNDWATER FLOW DIRECTION

CEA BOUNDARY

PROPERTY BOUNDARY

26 BLOCK NUMBER

4.01 LOT NUMBER

0 1000' 2000'

GRAPHIC SCALE

SITE LOCATION

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
CLASSIFICATION EXCEPTION AREA

TAX PARCEL MAP

ARCADIS Design & Consultancy for natural and built assets

EXHIBIT
A-2

CITY:NEWTOWN-PA DIV/GROUP:ENVCAD DB:T.FATTO LD: PIC: PM: P.MILIONIS TM: C.SHARPE LYR: ON=*;OFF=*REF*
G:\ENVCAD\Newtown\ACTIVITY\P0006031\00140\0003\DWG\FIG-X - TAX PARCEL MAP.dwg LAYOUT: 1 SAVED: 6/10/2015 4:43 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/10/2015 4:48 PM BY: WASILEWSKI, MATT

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A18A11.sid
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A18A6.sid
A18A7.sid
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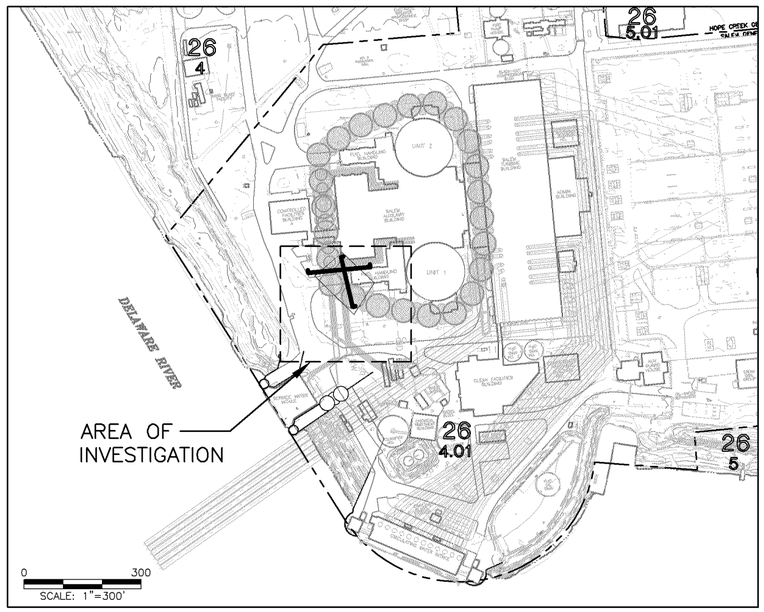
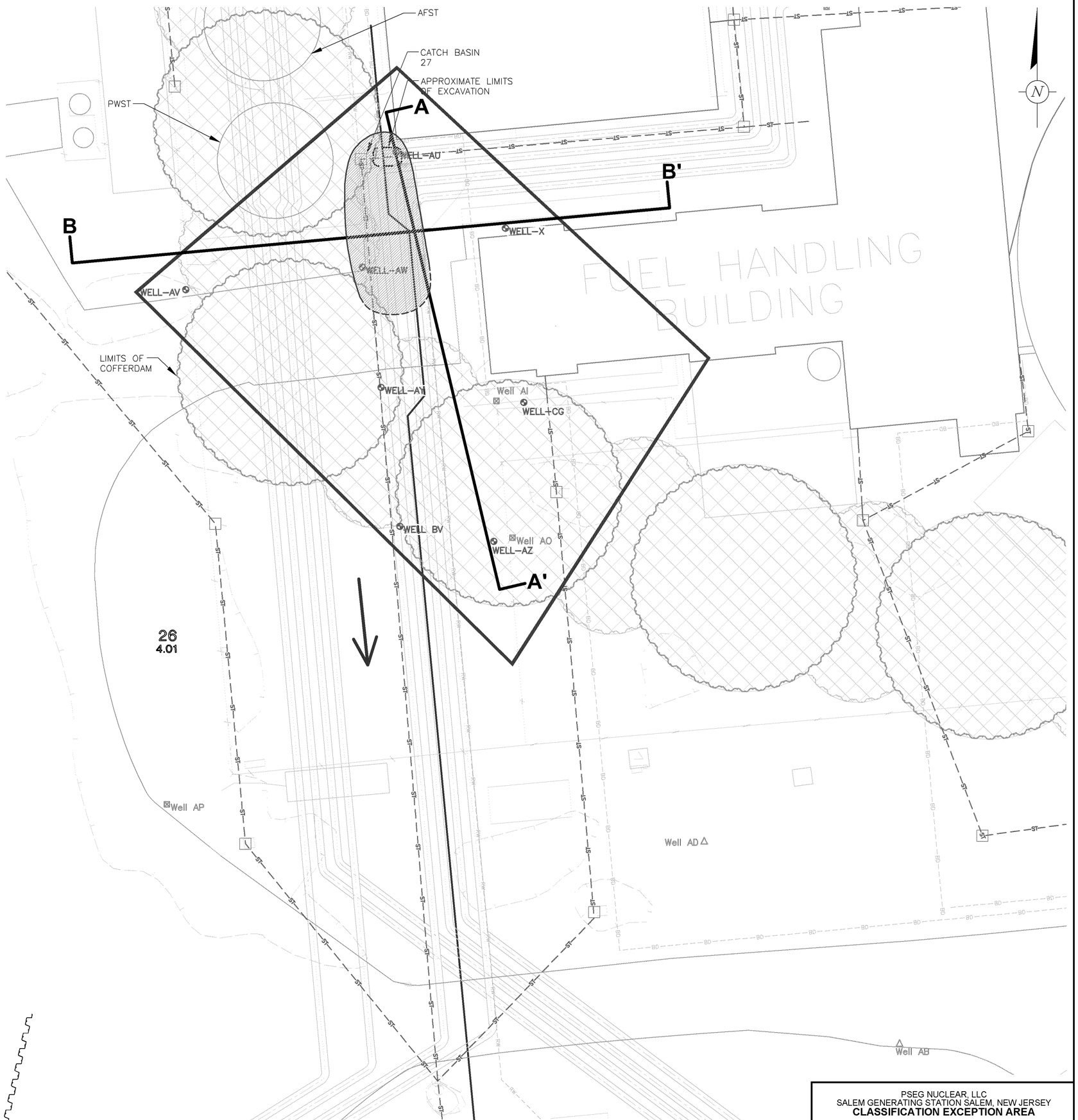


SITE LAYOUT
SCALE: 1"=300'



LEGEND:

WELL-AZ	MONITORING WELL UTILIZED IN THE DIESEL INVESTIGATION AND SCREENED ACROSS THE WATER TABLE.
WELL AO	MONITORING WELL UTILIZED IN A SEPARATE INVESTIGATION AND SCREENED BELOW THE WATER TABLE.
WELL-AT	GRS WELLS SAMPLED DURING THIS EVENT
26	BLOCK NUMBER
4.01	LOT NUMBER
	APPROXIMATE EXTENT OF SEPERATE – PHASE DIESEL FUEL
	GROUNDWATER FLOW DIRECTION
	CEA BOUNDARY
	DIESEL FUEL UNDERGROUND PIPING
	PROPERTY BOUNDARY
BD	BLOW DOWN PIPING
RW	LIQUID "RAD" WASTE LINE
	SERVICE WATER PIPING
	CIRCULATING WATER OUTLET PIPING
	CIRCULATING WATER INLET PIPING
ST	STORM SEWER PIPING
	CATCH BASIN
	MANHOLE (STORM SEWER)
	SHEET PILE
AFST	AUXILIARY FEEDWATER STORAGE TANK
PWST	PRIMARY WATER STORAGE TANK

NOTE:

1. PUMPING AT WELL AO WILL BE PERMANENTLY SUSPENDED.

0 20 20
SCALE: 1"=20'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
CLASSIFICATION EXCEPTION AREA

STATION LAYOUT

ARCADIS Design & Consultancy for natural and built assets

EXHIBIT
B-1

CITY: Newtown, Pa DIV/GROUP: Env. DB: M.Wasilewski LD: M.Wasilewski PIC: J. Balletto PM: B.Pierce TM: B. Pierce LYR:(OptION=OFF;*REF*
G:\ENVCAD\Newtown\ACTIVITY\00800300014\00003\DWG\Figure 02 - STATION LAYOUT.dwg LAYOUT: 2 SAVED: 9/10/2015 2:26 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 6/10/2015 2:29 PM BY: WASILEWSKI, MATT
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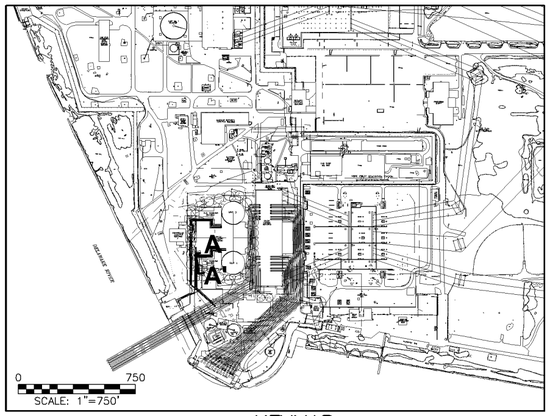
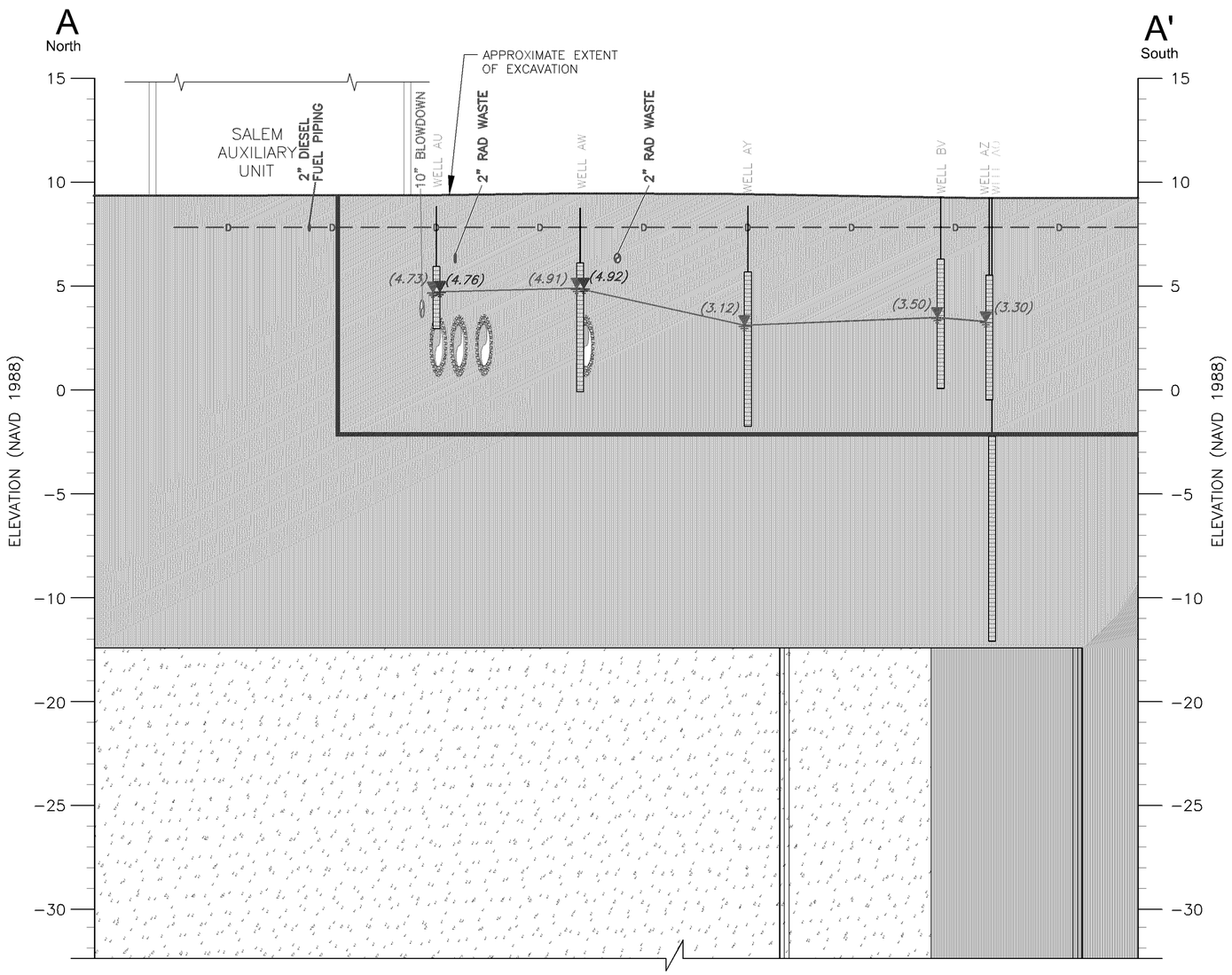
AGM-BASE_12-01-04

PLAN



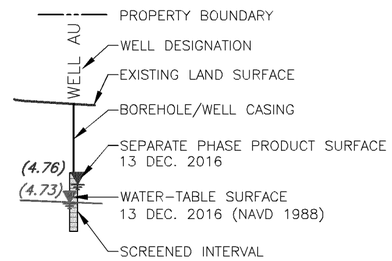
KEYMAP



SECTION

LEGEND:

- HYDRAULIC FILL
- STRUCTURAL FILL
- LEAN CONCRETE
- CEA BOUNDARY
- DIESEL FUEL LINE
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
- SHEET PILE
- SERVICE WATER PIPING
- STORM SEWER PIPING
- CATCH BASIN
- MANHOLE (STORM SEWER)
- RCP REINFORCED CONCRETE PIPE
- MTL MEAN TIDE LEVEL
- BUILDING WALL
- WELL-AO GROUNDWATER EXTRACTION WELL LOCATION
- WELL-AU MONITORING WELL LOCATION
- PROPERTY BOUNDARY



0 20
HORIZONTAL SCALE: 1"=20'

0 5
VERTICAL SCALE: 1"=5'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
CLASSIFICATION EXCEPTION AREA

FACILITY CROSS SECTION A-A'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
B-2A

CITY: Newtown, Pa DIVGROUP: Env DB: M.Wasilewski LD: M.Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(On)Off=*REF*
C:\ENVCADNEW\TOWN\ACT\2017\NP006093\0016\0004\CEA\F\G-C-2A CROSS SECTION-A-A'-CEA.dwg LAYOUT: C-2A SAVED: 7/6/2017 11:34 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: ARCADIS(SIZE A-B).CTB PLOTTED: 7/6/2017 11:34 AM BY: WASILEWSKI, MATT
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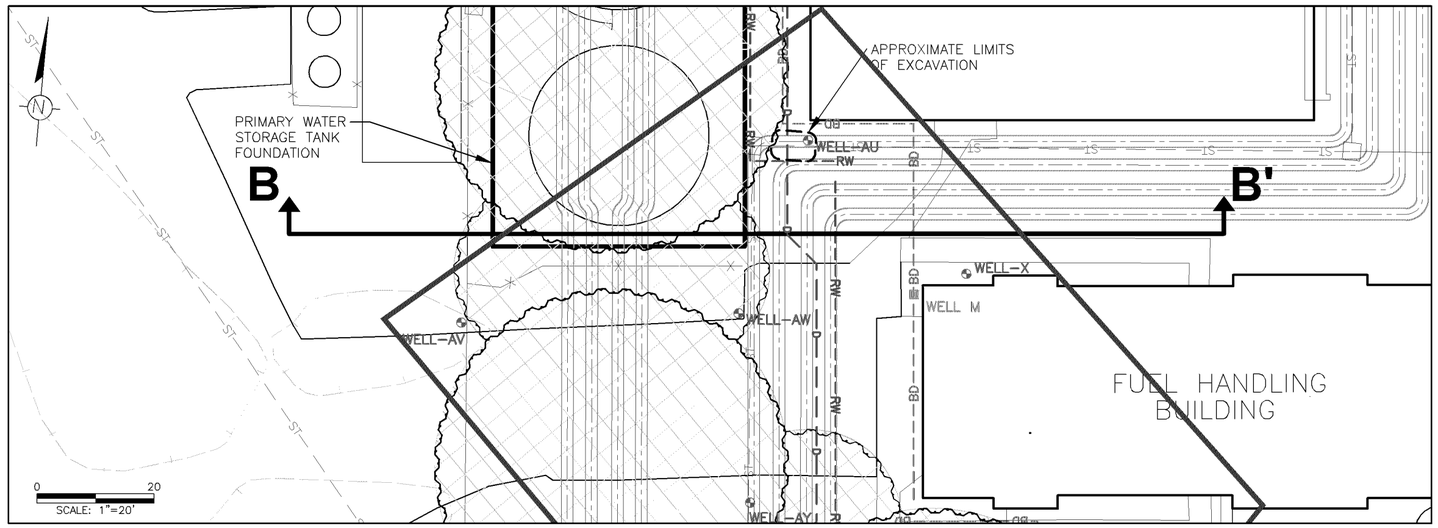
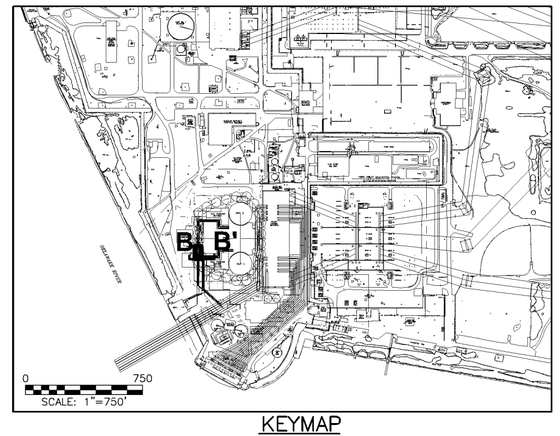
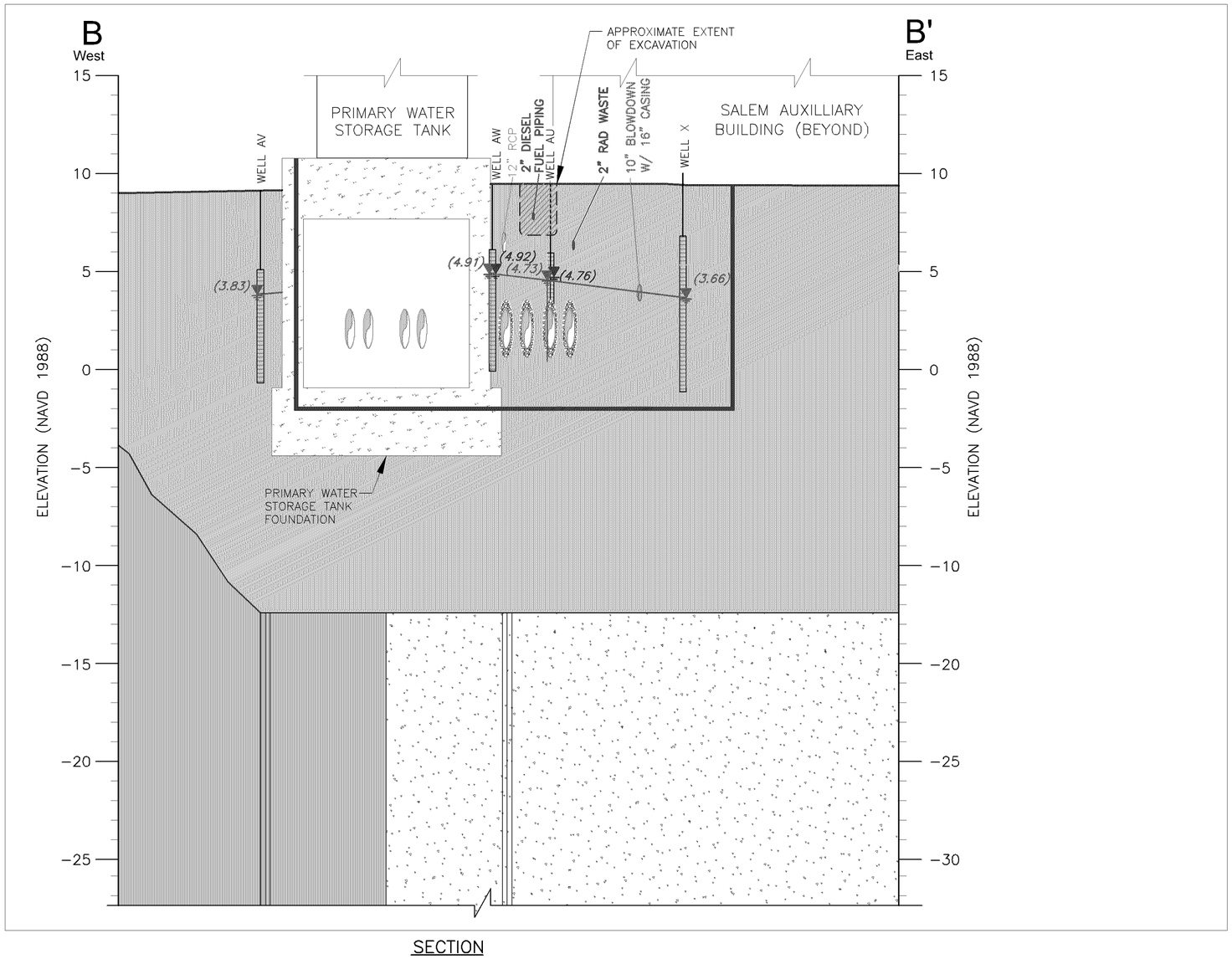
ZZXR-KEY
AGM-BASE_02-20-04
PROJECTNAME: ---



PLAN



KEYMAP



SECTION

LEGEND:

- HYDRAULIC FILL
- STRUCTURAL FILL
- LEAN CONCRETE
- CEA BOUNDARY
- DIESEL FUEL LINE
- BLOW DOWN PIPING
- LIQUID "RAD" WASTE LINE
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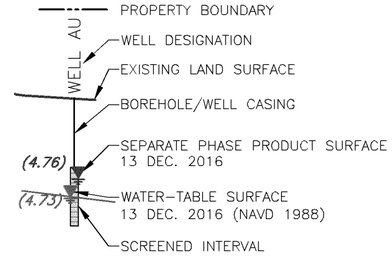
- MTL MEAN TIDE LEVEL
- BUILDING WALL
- WELL M GROUNDWATER EXTRACTION WELL LOCATION
- WELL-AU MONITORING WELL LOCATION
- PROPERTY BOUNDARY



0 20
HORIZONTAL SCALE: 1"=20'

0 5
VERTICAL SCALE: 1"=5'

PSEG NUCLEAR, LLC
SALEM GENERATING STATION SALEM, NEW JERSEY
CLASSIFICATION EXCEPTION AREA

FACILITY CROSS SECTION B-B'

ARCADIS Design & Consultancy for natural and built assets

FIGURE
B-2B

CITY: Newtown, Pa DIVGROUP: Env DB: M. Wasilewski LD: M. Wasilewski PIC: J. Balletto PM: B. Pierce TM: B. Pierce LYR:(On)Off=*REF*
CTAB: (Default) STYLETABLE: PDMVACTIVITY0508050801600004CLEAP\G-C-2B FACILITY CROSS SECTION-B-B'-DEA.dwg LAYOUT: C-2B SAVED: 7/6/2017 11:49 AM ACADVER: 19.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADISSIZE A-BW.CTB PLOTTED: 7/6/2017 11:49 AM BY: VANSILEVSKI, MATT
XREFS: IMAGES: PROJECTNAME: ----
ZZXR-KEY

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